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MIAMI-DADE
METROPOLITAN
PLANNING
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Snapper Creek Trail

SEGMENT "B" MASTER PLAN



Kimley»Horn

Miami-Dade Metropolitan Planning Organization

presents

Snapper Creek Trail Segment “B” Master Plan



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Executive Summary

Overview

Snapper Creek Trail is a proposed 10-mile greenway trail in west-central Miami-Dade County. The trail, which is designated Bike Route 3 in the County’s bike route numbering system, is generally aligned diagonally northwest/southeast and gets its name from the Snapper Creek Canal (C-2), which the trail follows from Florida



International University (FIU) to Old Cutler Trail (Bike Route 1). The concept was initiated in the 1980s and formalized in the 1998 North Dade Greenways Master Plan (NDGMP). Portions of the trail were built as far back as the 1980s, but many significant sections of the trail remain unbuilt.

Several systems planning efforts have been conducted that identify the importance of the connectivity and non-motorized transportation access provided by the proposed Snapper Creek Trail corridor, including the NDGMP, Downtown Kendall Urban Center (DKUC) District, Miami-Dade County Parks and Open Space System Master Plan (OSMP), and the Miami-Dade Metropolitan Planning Organization (MPO) Long Range Transportation Plan (LRTP). The Florida Greenways & Trails System (FGTS) Plan identifies the Snapper Creek Trail corridor as one of the state’s priority corridors based on the connectivity it provides within the FGTS Land Trails and Water Trails Opportunity Map. The Snapper Creek Canal (C-2) is also identified as part of the County’s Blueways network for paddling trail opportunities.

Planning Study Purpose

The Snapper Creek Trail Segment “B” Master Plan builds from the foundation of prior systems planning efforts and the Snapper Creek Trail Segment “A” Planning Study completed by the Miami-Dade MPO and Miami-Dade Parks, Recreation and Open Spaces (MDPROS) Department in 2008. Segment B is a proposed 5-mile trail in suburban west-central Miami-Dade County that connects the eastern end of Segment A to the Red Road Linear Park along the east side of SW 57 Avenue at SW 88 Street. The purpose of this corridor master plan is to identify an implementation plan for a non-motorized shared use path and linear park generally following the Snapper Creek Canal (C-2) right-of-way between K-Land Park and the Red Road Linear Park, determining preferred and alternative alignments, neighborhood connections, amenities, street crossings, and other trail aspects.

Snapper Creek Trail

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Objectives and Opportunities

The primary objectives of the project are to improve facilities for safe bicycling and walking, provide effective alternatives to short auto travel, improve connectivity to Metrorail and Metrobus, promote healthier lifestyles, and provide mobility options. Snapper Creek Trail Segment B will improve connectivity to various parks, trails, Metrorail stations, and points of interest.

Park Connections

- The Boys and Girls Club of Miami, Inc. / SW Langer / Kendall Unit / K-Land Park
- Kendalwood Park
- Trinity Pineland County Park
- Fuchs Park
- Dante Fascell Park
- Modera Colonnade Park
- Red Road Linear Park

Existing Trail Connections

- SW 87 Avenue between SW 96 Street to SW 88 Street/Kendall Drive (bike lanes)
- M-Path / Underline Corridor

- South Dade Trail
- Red Road Linear Park

Future Bicycle/Pedestrian Facility Connections

- Snapper Creek Trail Segment A
- The Underline
- Ludlam Trail
- SW 58 Avenue Neighborhood Greenway in the City of South Miami

Metrorail Connections

- Dadeland North Station
- Dadeland South Station

Points of Interest

- Baptist Hospital of Miami
- Dadeland Mall
- Riviera Preparatory School

Corridor Constraints

The corridor is constrained in several ways that were analyzed and helped shape the preferred alignment. One of the primary constraints is the available width of the right-of-way that is owned by the South Florida Water Management District (SFWMD). There are several locations within the study area where the SFWMD right-of-way has been consumed for other uses. Examples of right-of-way consumption for other purposes include the Dadeland Mall Circulation Road (SW 85 Street) on the south bank of the canal north of the mall and the parking lot for the Villas of Pinecrest multi-family residential community on the south bank of the canal east of U.S. 1/South Dixie Highway. A shared use path along the canal remains a long-term plan in these areas to accommodate Snapper Creek Trail within future redevelopment, such as the Downtown Kendall Urban Center District.

There are other locations where the canal right-of-way is narrow and the proximity of any shared use path in narrow right-of-way sections in residential areas would be uncomfortable for adjacent residents. Both sides of the canal bank east of SW 67 Avenue are examples of narrow canal right-of-way. The

south bank of the canal east of SW 67 Avenue appears to be completely unavailable for trail use. The north bank of the canal is somewhat wider, although still narrow especially between SW 67 Avenue and SW 62 Avenue. Between SW 62 Avenue and Dante Fascell Park, the north side right-of-way appears to be partially available for trail usage although in a narrower space than most existing canal paths. Further inspection would need to be done including detailed survey data to analyze just how close any proposed path would be.

In addition, routing the trail from one side of SR 826/Palmetto Expressway to the other represents a significant corridor constraint. Consideration of bridges or underpasses are possible in the long-term but will require further study to determine their feasibility. Given the costs and potential environmental impacts of such a crossing, the short-term strategy of routing the alignment along existing surface streets to avoid the SR 826/Palmetto Expressway crossing seems prudent.

Any section of trail along the canal right-of-way will need to undergo an environmental review or assessment to identify endangered plants or animals along the study corridor. In addition, access will need to be maintained along the canal for the SFWMD to accomplish maintenance and activities associated with managing and protecting the region's water resources.

Preferred Alignment

The preferred alignment connects SW 88 Street/Kendall Drive from The Boys and Girls Club of Miami, Inc./SW Langer/Kendall Unit/K-Land Park to Dante Fascell Park and Red Road Linear Park. It was developed to incorporate several infrastructure improvements such as shared road (neighborhood greenway) facilities on local streets, utilizing existing shared-use paths and bike lanes, and building strategic new sections of multi-use trail along the Snapper Creek Canal (C-2) associated with strategic connections to the Dadeland North Metrorail Station for multimodal connectivity. The preferred alignment makes use of the neighborhood greenway concept, which can be implemented on low volume, low speed streets through pavement markings, signage, and traffic calming to provide bike routing alternates to busier roadways and constrained sections of canal right-of-way. The alignment also would improve access to the canal for any future undertakings to build shared-use paths along the Snapper Creek Canal (C-2). A demonstration project was developed between US 1/South Dixie Highway and SW 67 Avenue for a shared-use path in one of the wider sections of canal right-of-way that significantly improves multimodal connectivity to the Dadeland North Metrorail Station and the M-Path / Underline corridor.

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Introduction

Continuous networks of bicycle facilities and trails are essential components of a multimodal transportation system. Enhancing bicycle facilities will encourage bicycling as a viable transportation mode. Bicycle facilities, such as bike paths and bike lanes, designate space for bicycle travel. The best way to attract people who ride bikes is by building infrastructure that makes it more attractive and safe for people to ride. Recreational cycling is still the primary use of bicycles in this country but the number of people using bicycles for commuting and other travel purposes has been increasing. It is always a great time to bicycle in Miami-Dade County due to the favorable weather throughout the year. Providing appropriate design of bicycle facilities and infrastructure is an integral component of encouraging the public to bicycle for short trips instead of traveling by automobile. Bicycling has many individual and community benefits; affordability, mobility, health, environmental sustainability, and community safety.

The Snapper Creek Trail is an important bicycle and pedestrian path envisioned to connect several primary destinations such as Florida International University (FIU), Dadeland, and Matheson Hammock Park, primarily along the Snapper Creek Canal (C-2) right-of-way. The Snapper Creek Trail links with the proposed Miccosukee Trail in the west and the existing Red Road Linear Park in the east, with efficient connections available to Old Cutler Trail (Bike Route 1). The proposed Snapper Creek Trail Segment B Master Plan is between the K-Land Park (9475 SW 88 Street, Miami) and the Red Road Linear Park on the east side of SW 57 Avenue at SW 88 Street.



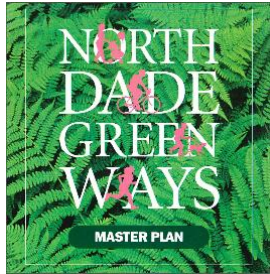
Snapper Creek Trail

SEGMENT "B" MASTER PLAN



Figure 1. County Greenway Network

North Dade Greenways Master Plan (NDGMP), 1998



In 1998, the Miami Dade County Board of County Commissioners adopted the North Dade Greenways Master plan (NDGMP), which provides for an extensive network of urban and rural greenway corridors with connections to residential neighborhoods and major activity centers. The NDGMP is an integrated system of connecting greenways and trails that comprises more than 300 miles in 24 individual trails. Snapper Creek Trail was one of the trails identified in the NDGMP.

Miami-Dade County MPO Transportation Improvement Program (TIP)

The Miami-Dade County MPO prepares the annual Transportation Improvement Program (TIP) consistent with federal guidelines. At the time of this Plan the FY 2015-16 to FY 2019-20 TIP was in effect and had been approved by the Miami Dade Governing Board on May 21, 2015. The TIP specifics proposed transportation improvements to be implemented in Miami-Dade County over the coming five years. The following projects are programmed that are of interest to this Plan.



Table 1. Transportation Improvement Program
Projects within the Snapper Creek Segment B Study Area

FM Number	Location	To	From	Improvement	Year*
431170-1	SR 94/Kendall Drive	SW 97 Avenue	SW 79 Avenue	Resurfacing	2017-18
431170-2	SR 94/Kendall Drive	SW 102 Avenue	East of SW 97 Avenue	Resurfacing	2017-18
431170-3	SR 94/Kendall Drive	SW 7500 Block/SW 73 Place	US 1/S Dixie Highway	Resurfacing	2017-18
432743-1	SR 826/Palmetto Expressway	SR 5/US 1	N of SR 878/Snapper Creek Expressway	Resurfacing	2015-16

*Project completion date

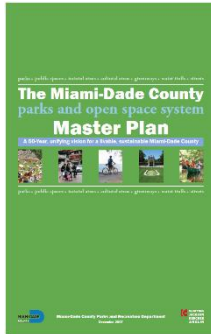


2040 Long Range Transportation Plan (LRTP), 2014

On October 23, 2014, the MPO Governing Board adopted the Miami-Dade Long Range Transportation Plan (LRTP) to the Year 2040. The 2040 LRTP update includes in-depth consideration of intermodal improvement opportunities, freight movement, Intelligent Transportation System technologies, and Congestion Management. Bicycle facilities in Miami-Dade County are comprised of two different categories: on-road facilities and off-road facilities. On-road facilities include: Bicycle Lanes, Paved Shoulders, Wide Curb Lanes, and Multi-use paths. Off-road facilities include: greenways, trails, and share-used paths. The cost feasible identified and included off-road bicycle and pedestrian facilities.



Parks Open Space System Master Plan



In early 2008, Miami-Dade County completed the Parks Open Space System Master Plan (POSSMP), which established a 50-year unifying vision for a livable, sustainable Miami-Dade County. The POSSMP envisions that great parks, public spaces, natural and cultural areas, streets, greenways, blueways, and trails can form the framework for a more livable and sustainable community. In the POSSMP, great greenways and trails form an interconnected system that provides transportation alternatives, creates new recreational opportunities, and increases property values.

Snapper Creek Trail Segment "A" Planning Study

The Snapper Creek Trail Segment "A" Planning Study was completed in October 2008 and is a 5.6-mile multi-use trail in suburban west central in Miami-Dade County. The trail meanders mainly within the Snapper Creek Canal (C-2) right-of-way with additional segments located within street right-of-way. The trail provides a route of travel from the Tamiami Canal (C-4) near FIU to SW 88 Street/Kendall Drive. The trail runs contiguous to the Snapper Creek Canal with segments that deviate through neighborhood streets and along sidewalks.



Downtown Kendall Urban Center (DKUC) District

The Downtown Kendall Urban Center (DKUC) District was adopted into the zoning code in 1999. The western area is bounded by the Palmetto Expressway on the west, the Snapper Creek Expressway on

the north and US 1/S Dixie Highway on the east. The eastern area is bounded by US 1 on the west, SW 80 Street on the north, SW 65 and SW 67 Avenues on the east, and SW 84 Street and Snapper Creek Canal on the south. The DKUC goals, objectives and policies includes the following:

- Coordinating the development intensity within the district by the proximity to mass transit;
- Organizing an interconnected network of colonnaded or tree lined streets to improve pedestrian access to transit; and
- Creating good public open space with specific square and plaza locations and by shaping the way buildings front onto the open space and street.



Figure 2. DKUC District Illustrative Plan

Florida Greenways & Trails System (FGTS) Plan, 2013-2017



Figure 3. FGTS Priority Trails

The Florida Greenways & Trails System (FGTS) Plan is made up of existing, planned, and conceptual trails and ecological greenways that form a connected, integrated statewide network. The FGTS serves as a green infrastructure plan, tying together the greenways and trails plans and planning activities of communities, agencies, and non-profit organizations throughout Florida. Figure 3 displays a snippet of the Priority Trails Map for our study area. The map encompasses the most important corridors and connections within the FGTS Land Trails and Water Trails Opportunity Map.

Miami-Dade County Bicycle Facilities

The County has more than 250 miles of paved paths and bike lanes. The graph indicates the existing and funded planned bike-supportive facilities (*unpaved trail mileage is not included*) as shown in Figure 4. Additional facilities are in all phases of project development from planning to design and construction.

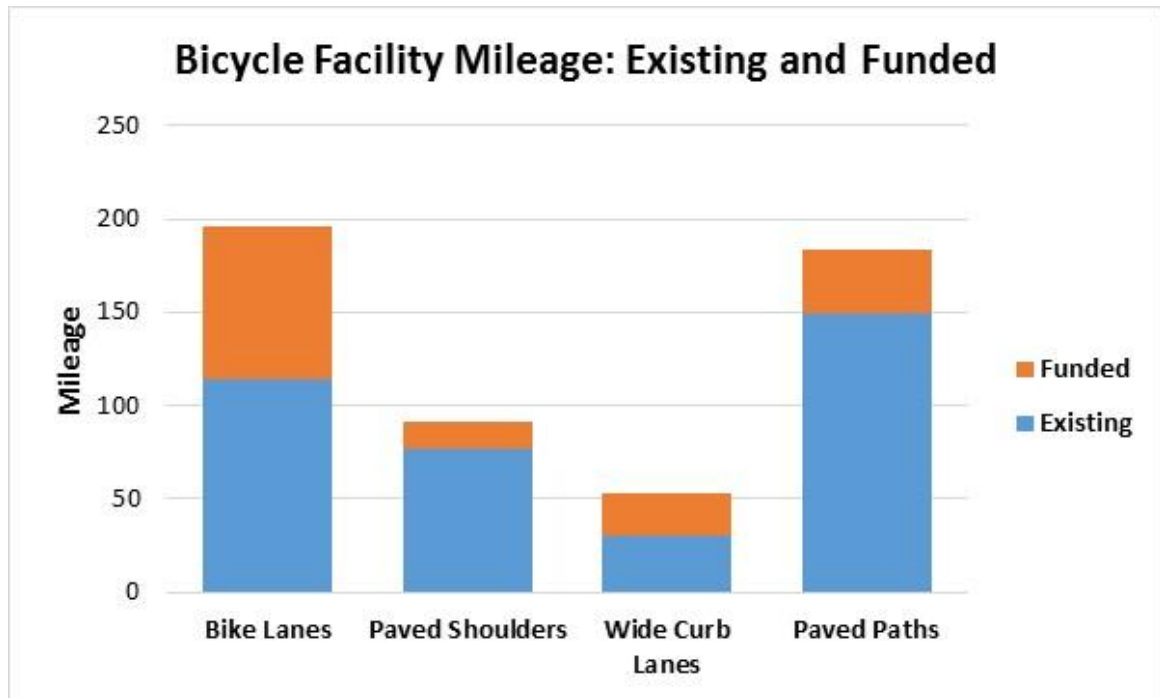


Figure 4. Bicycle Facility Mileage: Existing and Funded

Active Transportation in Miami-Dade County

The geographic location of Miami-Dade County is attractive but the quality of life for many of its residents is diminished due to the traffic congestion that results from urban development with low-density, dispersed, auto-dependent and environmentally and socially impacting characteristics. The County has many features as a typical sunbelt community: auto-oriented development patterns, segregated land uses, and a preference for low taxes have prevented the development of major bikeway and transit systems. The possibility for active transportation modes in Miami-Dade County is high because of opportunities to increase the supply of facilities and demand for better walking and bicycling conditions. The Miami-Dade County Planning conducts studies promoting smart growth and sustainability principles as one of their responsibilities. This will provide residents with the convenience of short commutes.

"Active Transportation" is a means of getting around that is powered by human energy, primarily walking and bicycling, which has the ability to drastically reduce the number of automobiles on the roadway network, given that almost fifty percent (50%) of automobiles trips are short trips under three miles. Active transportation networks connect destinations via an interconnect system of paths that enable people to get from A to B by walking and bicycling. By making active transportation, walking or biking, a viable option for everyday travel, the cost reduction of oil dependence, climate pollution, and obesity rate will decrease.

The following are some of the benefits associated with active transportation as described on the railstotrails.org website.

Active Transportation Benefits:

- **MOBILITY** "Expanding active transportation choices need to be at the heart of the nation's long-term transportation strategy. Continuing the status quo approach of building wider and wider roads further and further out into the countryside is a recipe for gridlock. By providing active transportation opportunities that link community destinations, people are given meaningful choices about how to move within their communities. In general, creating bicycle/pedestrian-friendly communities can result in a five to 15 percent reduction in overall vehicle miles traveled in a community (Litman 2007). The short walking and biking trips that become daily routines can replace many of the longer, auto trips that clog neighborhoods around the country."

- **PUBLIC HEALTH** “Less than 1/3 of Americans meet the Center for Disease Control’s (CDC) recommendation for physical activity and 40% of adults engage in no physical activity at all. CDC recommends at least 30 minutes (adults) or 60 minutes (children) of moderate activity most days of the week. The link between healthy people and accessibility to healthy places like trails is strong. Trails provide an opportunity for regular physical activity in a safe, welcoming environment. If more Americans embrace walking and biking as everyday options, we can create a healthier nation.”
- **ECONOMY** “Trails and greenways increase the natural beauty of communities and help spur economic development. From home owners choosing to live along a park-like trail to bicycle tourists making their way from small town to small town, trails are important community facilities that attract people and dollars. Trails are the number one amenity potential homeowners cite when asked what they would like to see in a new community, according to the National Association of Home Builders (The New York Times 2006). Trails are a positive community asset that people appreciate.”
- **CLIMATE** “Transportation is responsible for 1/3 of U.S. CO2 emissions and is also the fastest rising source of CO2 emissions (EPA 2007). Managing travel demand by shifting trips to active modes like walking and biking are a central part of the national strategy to manage climate control. Recent studies have shown that making communities more bike/pedestrian-friendly can make significant contribution to overall greenhouse gas emissions by driving down vehicle miles traveled (VMT). Local reductions in VMT of 20 to 30 percent result from increased transit use, walking and bicycling as modes of transportation (CCAP 2007). With most trips within a 15-20 minute bike ride, many of these trips are ripe for conversion to walking and biking.”
- **FAMILY AND COMMUNITY** “Community and family are at the heart of the American trail experience. One of the most significant benefits of trails is the sense of community and the connections they build. Active transportation choice allows people to meet their neighbors and stroll along neighborhood streets. At their most basic level, trails encourage personal interactions in a way entirely unavailable to automobile users. Well-designed trails transform “community” from an abstraction into a real place.”

Snapper Creek Canal Overview

In the cities of Sweetwater and Kendall, the Snapper Creek Canal (C-2) is located in central Miami-Dade County beginning near FIU and running southeast to Biscayne Bay. The canal flows diagonally from the northwest to the southeast through suburban Miami-Dade County with a mix of land uses adjacent to the canal bank and the Dadeland Mall and Baptist Hospital of Miami just south of the canal. The canal begins near the intersection of SR 836/Dolphin Expressway and the Florida’s Turnpike and flows south along SW 117 Avenue until it reaches North Snapper Creek Drive. It then bears southeasterly along the south side of North Snapper Creek Drive until it reaches the Don Shula Expressway. The canal then turns easterly and runs along the south side of SW 83 Street until it reaches US 1/S Dixie Highway. It then bears east southeasterly near Snapper Creek Drive towards the intersection of SW 88 Street/Kendall Drive and SW 57 Avenue. The Snapper Creek Canal then turns south following along the east side of SW 57 Avenue until it reaches SW 112 Street where it southeasterly ultimately reaching Biscayne Bay through Matheson Hammock Park.

Greenway Trails Along Snapper Creek Canal

The provision of greenway trails and linear parks along the Snapper Creek Canal have been the subject of prior efforts by local agencies as far back as the late- 1980’s. In 1975, Metropolitan Dade County prepared Design Criteria and Guidelines for Linear Park Development, which resulted in the development and implementation of several paths including Snapper Creek Linear Park in the late- 1980’s. Other paths that were developed under this initiative include Old Cutler Trail (Bike Route 1) and Snake Creek Trail (Bike Route 2).

The subject of this Planning Study is Segment B of the Snapper Creek Trail, which would connect the Boys and Girls Club of Miami, Inc./SW Langer/Kendall Unit/K-Land Park to Dante Fascell Park and Red Road Linear Park. The South Florida Water Management District (SFWMD) maintains access to the canal right-of-way on at least one side of the canal for maintenance purposes throughout the entire length of the corridor.

SFWMD’s Public Recreational Access and Use Policy established a commitment to the promotion of public recreational access and use on District lands. Public recreational access and use shall be provided for and encouraged to ensure the public’s opportunity for enjoyment and appreciation of the natural

resources of South Florida. The Policy also established that trails and greenways shall be incorporated to create links or spurs with state and county greenways, trails, and blueways programs and systems.

Study Corridor

The Snapper Creek Trail Segment B originates at SW 94 Avenue near K-Land Park on the west side and continues to the Red Road Linear Park on the east side of SW 57 Avenue near Dante B. Fascell Park. This segment of the canal is critical for connectivity as it correlates with multiple bicycle facilities such as the M-Path/Underline and South Dade Trail, and proposed greenway trails such as Snapper Creek Trail Segment A, Ludlam Trail, and the SW 58 Avenue Neighborhood Greenway in the City of South Miami.

The study corridor along the canal is approximately 3.8 miles but the actual trail distance may vary from 4 to 5 miles depending on the alignment. The planning study generally is aligned west-east and follows the Snapper Creek Canal (C-2) right-of-way.

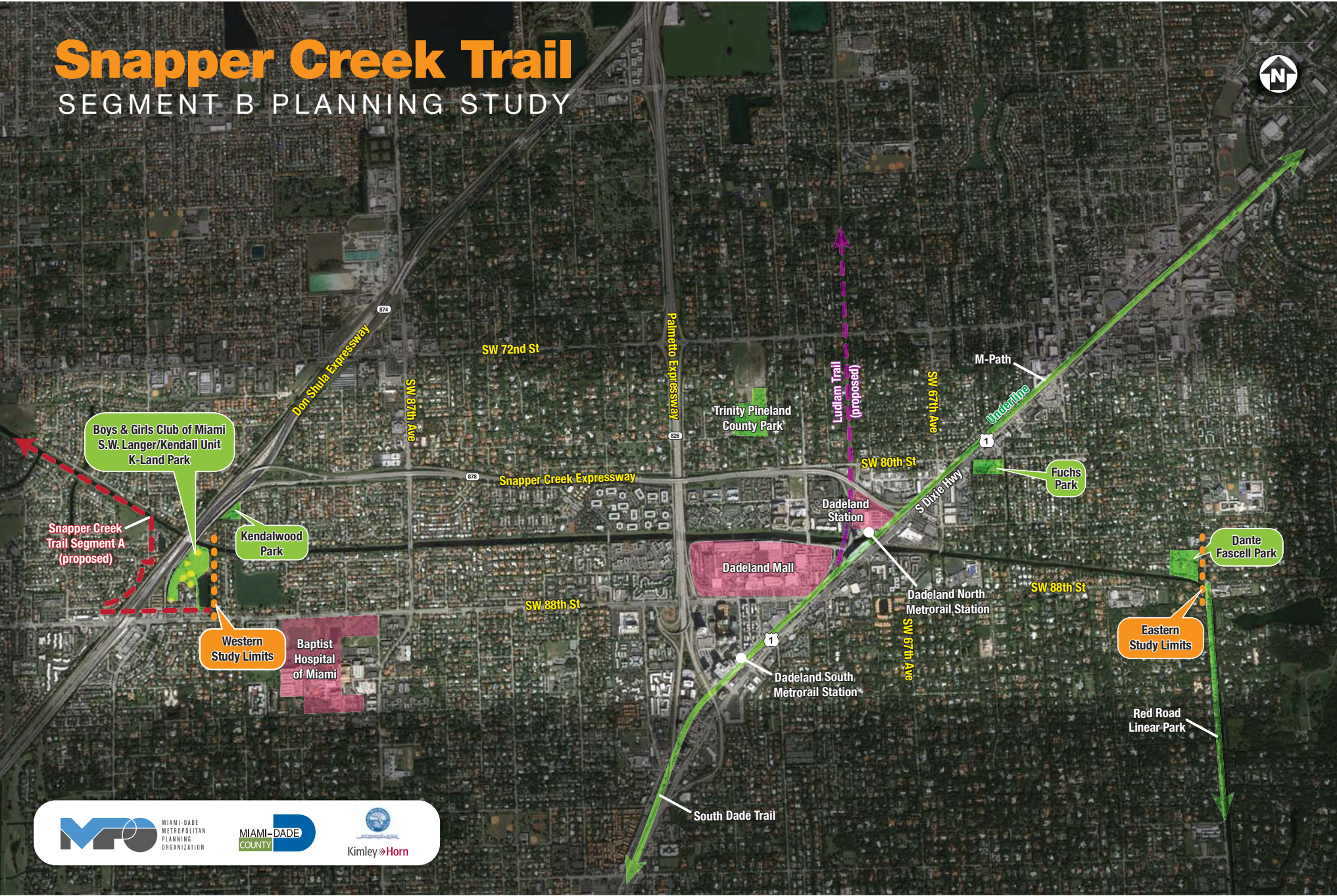
The study reviews the outlining and feasibility of providing non-motorized access to the Boys and Girls Club of Miami, Inc./SW Langer/Kendall-Unit/K-Land Park, Kendall Park, Baptist



Hospital of Miami, Dadeland Mall, Trinity Pineland County Park, Dadeland South Metrorail Station, Dadeland North Metrorail Station, Fuchs Park, Dante Fascell Park, Modera Colonnade Park, and Red Road Linear Park. Other issues to address include identifying intersection treatments as several major intersections; developing a conceptual plan consistent with SFWMD permitted public use; incorporating existing portions of maintenance paths into a cohesive trail; and developing intermodal linkages to public transit corridors.

Figure 5, which is an aerial overview of the study corridor, illustrates the strategic importance of the study segment of Snapper Creek Canal right-of-way connecting other greenway trails with parks and residential neighborhoods.

Figure 5. Aerial Map of Study Corridor



Existing Conditions Analysis Program

Analyzing the existing conditions is a critical step in a trail planning study. Other physical infrastructure may exist—both natural and man-made—that can provide opportunities or constraints to the development of a trail. Local governments, utility companies, environmental groups, and transportation authorities will have a stake in the development of a trail. Additionally, public stakeholders include residents and businesses along the trail corridor. Land ownership comprising of the trail corridor, as well as adjacent lands, is another important component to consider of an existing conditions assessment. The existing conditions analysis for the Snapper Creek Trail Segment B Planning Study included an assessment of background information, a field inventory of existing conditions, coordination with local agencies and the general public, and a corridor analysis program.

Background Information

Relevant background information was compiled and reviewed to begin assessing the feasibility and need for a trail along the Snapper Creek Canal within the study fields.

Land Ownership and Function

Land ownership for potential trail corridors can be complex and diverse. In the case of the study corridor, the proposed trail is being considered within the right-of-way of the canal or an adjacent public street. The corridor exists within the land (right-of-way) owned by SFWMD and/or Miami-Dade County. The proposed trail corridor also crosses the Miami-Dade Transit (MDT) Metrorail and crosses Dixie Highway at SW 84 Avenue. In addition, it connects to the eastern extent of Snapper Creek Segment “A”.

SFWMD owns the land being considered for an off-road multi-use trail or shared-use path along the Snapper Creek Canal. SFWMD is a regional governmental agency that manages and protects the water resources in the region by balancing and improving water quality, flood control, natural systems and water supply. Flood conveyance and drainage control in the vastly urbanized area through which it flows is the primary purpose of the Snapper Creek Canal. Access to the canal for maintenance purposes is provided along the canal right-of-way. Maintaining the drainage systems in and around the canal is essential. Blockage of the canal or its drainage systems can result in serious water backups and hinder the function of the canal in the event of an extreme weather event such as a hurricane. For that reason, one requirement of a trail plan along the Snapper Creek Canal right-of-way is to maintain access to the canal right-of-way by maintenance vehicles. Appendix A includes the land ownership along the canal.

Routine Maintenance

Typical greenway trail maintenance costs were examined for two similar trails in Miami-Dade County – the Black Creek Trail Segment A and the Snake Creek Trail Phase 1. Both similar trails consist of a 10-foot shared-use path along a canal bank. Data were provided by MDPROS. Typical maintenance costs in 2010 were \$9,210 per mile per year for all trail maintenance at sixteen (16) maintenance cycles per year. When accounting for 3% inflation over six years, the annual maintenance cost could be approximately \$11,000 per mile per year. Typical MDPROS maintenance programs include sixteen cycles per year that consist of mowing, trimming, edging, pruning, weed control, tree care, trash removal, and miscellaneous repairs as needed.

Surrounding Land Uses

Residential, commercial, educational, and recreational areas are typical land uses surrounding the Snapper Creek Canal within the study limits. Along both the north and south sides of the canal, it passes by single family and multi-family homes starting at the western limit of the study area. It continues along primarily residential areas until east of SR 826/Palmetto Expressway where on the south side of the canal is the Dadeland Mall and the north side is multi-family residential. The canal then passes the Dadeland North Metrorail Station and flows under the Metrorail and US 1/South Dixie Highway, where it passes through primarily commercial areas including a car dealership north of the canal between US 1 and SW 67 Avenue. East of SW 67 Avenue the corridor is adjacent to single family residential neighborhoods.

Existing Bicycle Facilities

The study corridor crosses the following existing bicycle lanes and shared-use paths within the study area.

- SW 87 Avenue between SW 96 Street to SW 88 Street (bike lanes)
- M-Path between the Dadeland South Metrorail Station and Brickell
- South Dade Trail between Florida City and Dadeland South Metrorail Station, a continuation of the M-Path corridor
- Red Road Linear Park along the east side of SW 57 Avenue south of SW 88 Street

Other Planned Bicycle Facilities

Additional funded bicycle lane projects identified in the MPO's Bicycle Facilities Plan in the vicinity of the proposed Snapper Creek Trail Segment B include the following.

- SW 104 Street between US 1/S Dixie Highway and SW 57 Avenue (bike lanes)
- SW 77 Avenue between SW 136 Street and SW 104 Street (bike lanes)

Proposed trails in the vicinity of the study area include the following.

- Snapper Creek Trail Segment "A"
- The Underline
- Ludlam Trail
- SW 58 Avenue Neighborhood Greenway in the City of South Miami

Key Points of Connectivity

- The Boys and Girls Club of Miami, Inc./SW Langer/Kendall Unit/K-Land Park
- Kendalwood Park
- Baptist Hospital of Miami
- Dadeland Mall
- Trinity Pineland County Park
- Fuchs Park
- Dante Fascell Park
- Modera Collonade Park
- Red Road Linear Park
- Dadeland North Station and Dadeland South Station

Multimodal Access

MDT Metrorail passes over the Snapper Creek Canal at US 1/S Dixie Highway and has two (2) stations in the study area: Dadeland North and Dadeland South. There are connecting Metrobus services available at each station. Providing connections between trail facilities and transit facilities is an important way of increasing access to transit. MDT's Bike & Ride on Transit program allows bicyclists on the Metrobus, Metrorail, and Metromover. Everybody can extend their bicycle trip on transit. The Metrobus bike racks carry three (3) bikes, the Metrorail allows bikes into any Metrorail car using the designated areas for bike and luggage storage, and the Metromover allows bikes into any Metromover car. Figure 6 is a map of Metrobus routes in the vicinity of the study corridor. Connections to Metrobus routes from the proposed Snapper Creek Trail are available at the following locations: 57, 73, 87, 88, and 104. Appendix B includes the detailed route map.

Snapper Creek Trail

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Figure 6. MDT Metrobus Routes in the Study Corridor

Blueways

The Miami-Dade County Blueways network is designed to provide residents and visitors with a fun, healthy way to explore the County's many beautiful bodies of water. Blueways add visual interest to the corridor and provide opportunities for canoeing, kayaking, fishing, and sometime swimming. FIU graduate students in landscape architecture developed a Blueways Plan in 2002, shown in Figure 7, to increase enjoyment opportunities for residents and visitors.

A portion of Snapper Creek Canal along Snapper Creek Trail Segment B is identified as a blueway between SR 874/Don Shula Expressway and the terminus near SW 57 Avenue. The Snapper Creek blueway connects to other potential blueway routes.

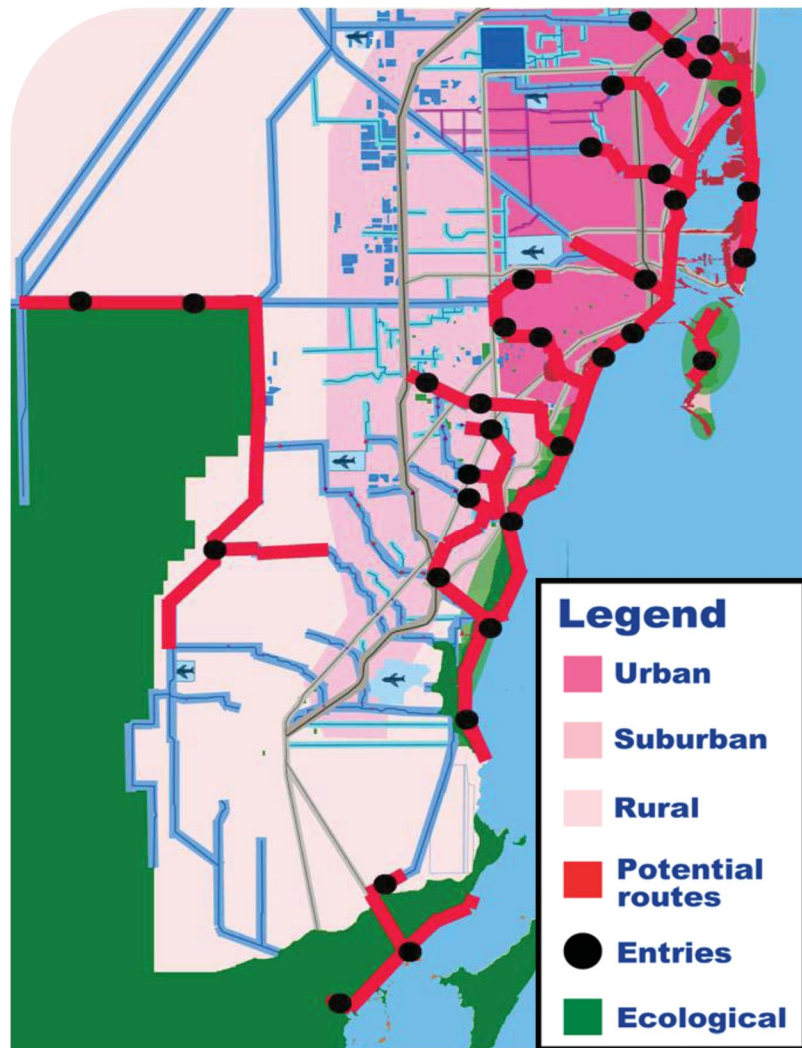


Figure 7. Potential Miami-Dade County Blueways FIU, 2002

Field Inventory of Existing Conditions

A field inventory was conducted to study the general corridor conditions and identify potential opportunities and constraints that are readily apparent. Photographs were taken during field reviews to document the existing conditions and assist during the analysis and public involvement components of this study. Appendix C includes field inventory photos.

GIS Data Map Series

Using geographic information systems (GIS), a map series was prepared to illustrate existing transportation mobility conditions and community features in the study corridor that help form the background conditions for improving the bicycle and pedestrian mobility.

Figures 8 through 13 present the GIS data map series.

- Figure 8. Community Services
- Figure 9. Bicycle Facilities
- Figure 10. Transit Services
- Figure 11. Pedestrian Crashes
- Figure 12. Bicycle Crashes
- Figure 13. Future Land Use Map



Figure 8. Community Features

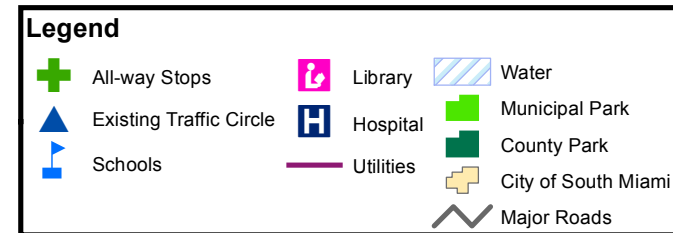
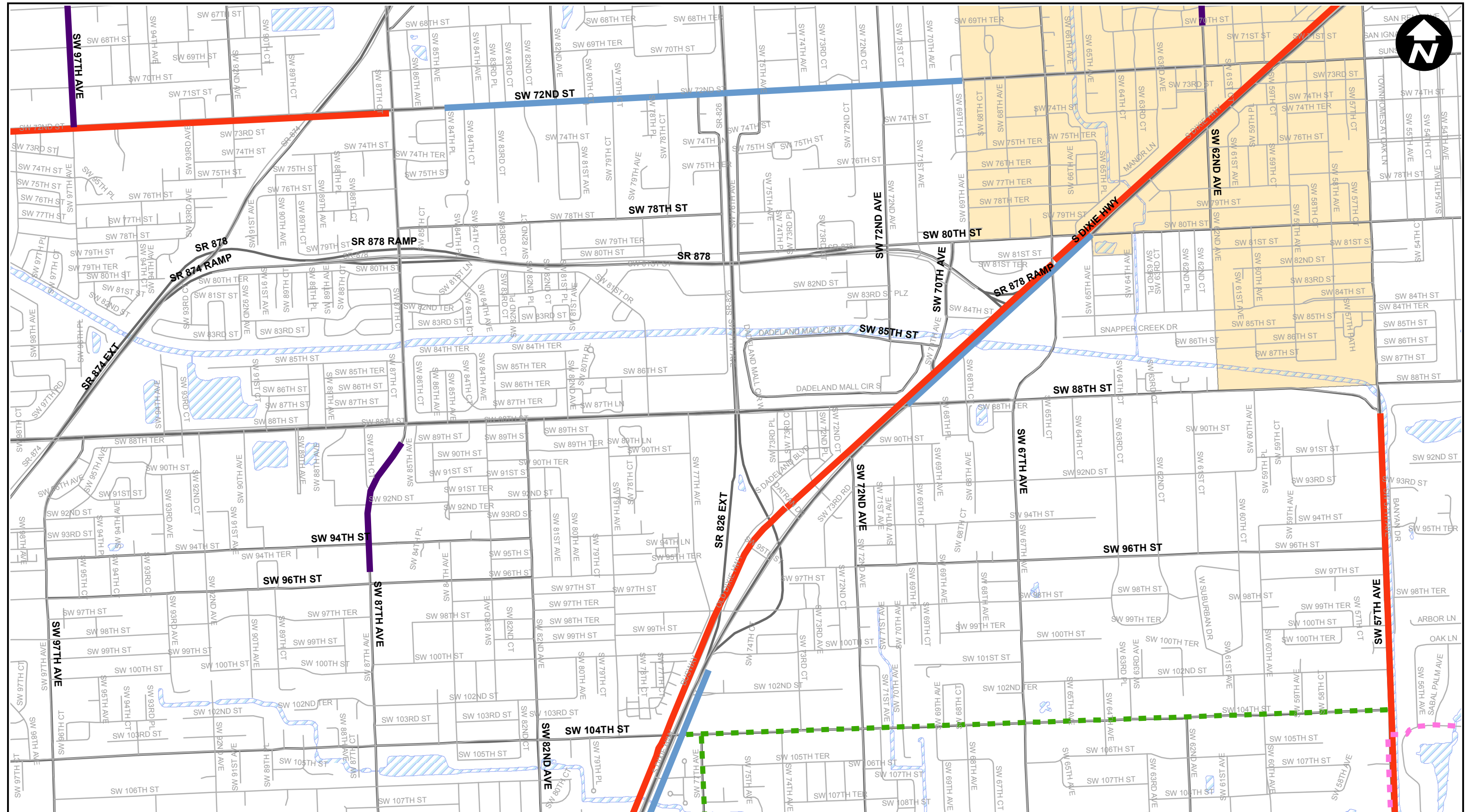














Figure 9. Bike Facilities

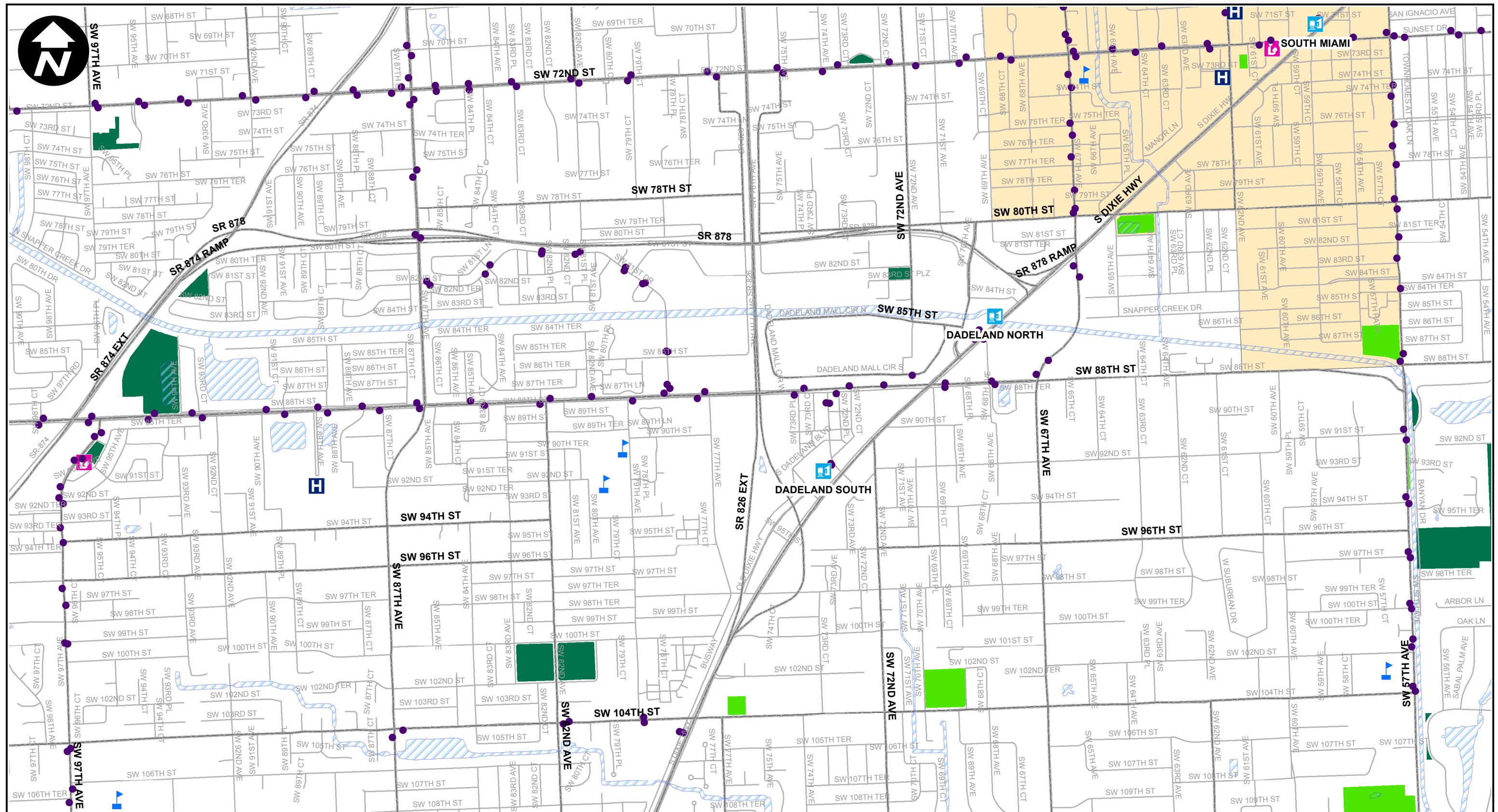


Snapper Creek Trail Segment B

Figure 10. Transit Features

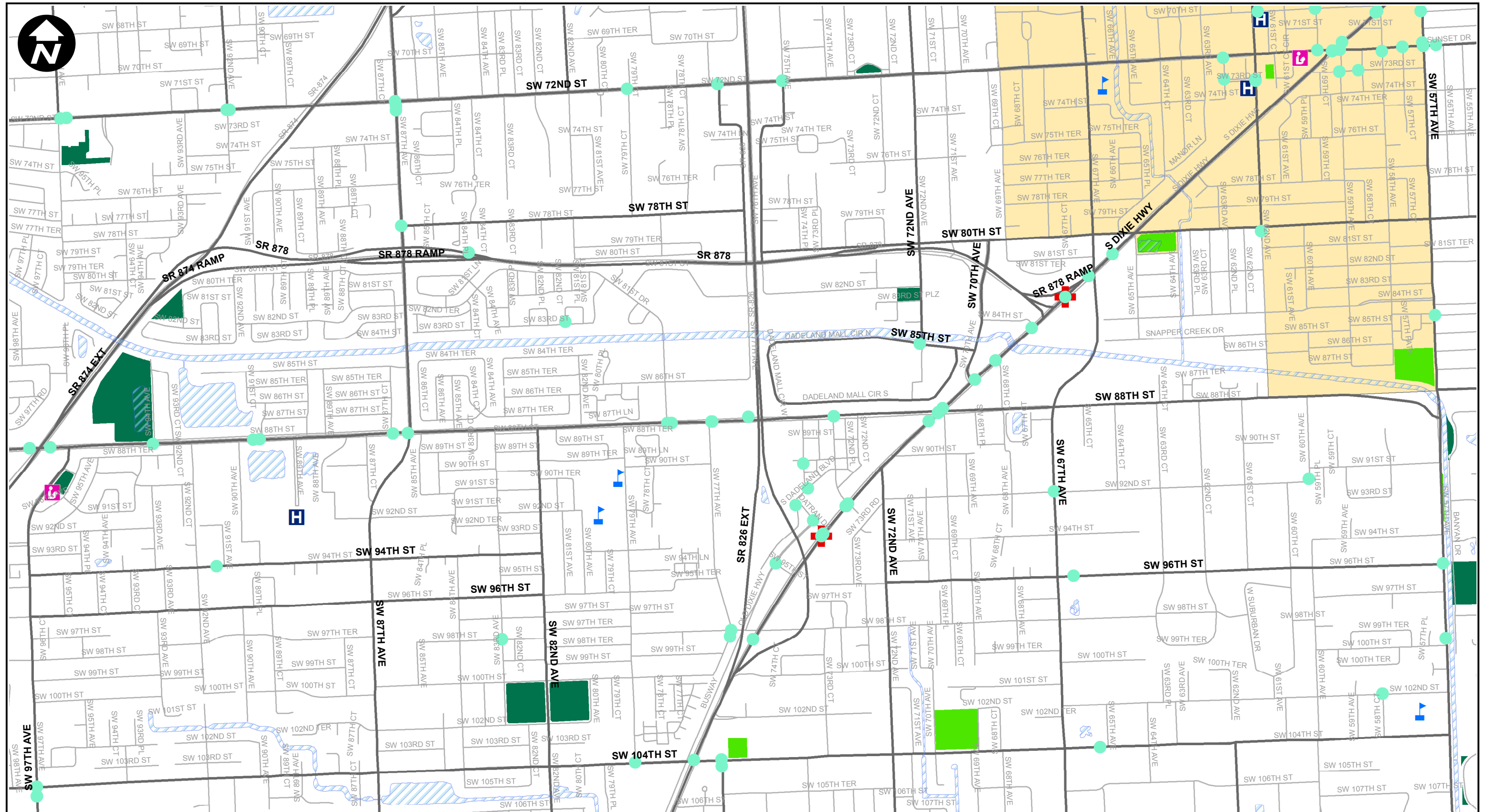
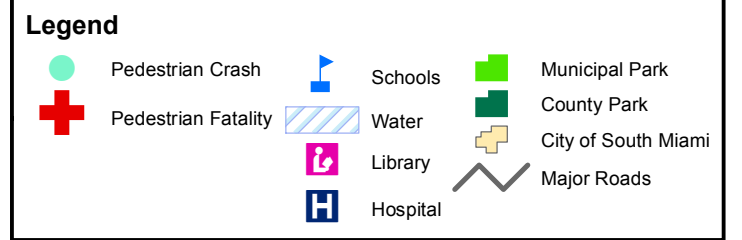
Legend

 Metro Rail Stations	 Hospital
 Bus Stops	 Major Roads
 Schools	 Municipal Park
 Water	 County Park
 Library	 City of South Miami



Snapper Creek Trail Segment B

Figure 11. Pedestrian Crashes (2008-2013)

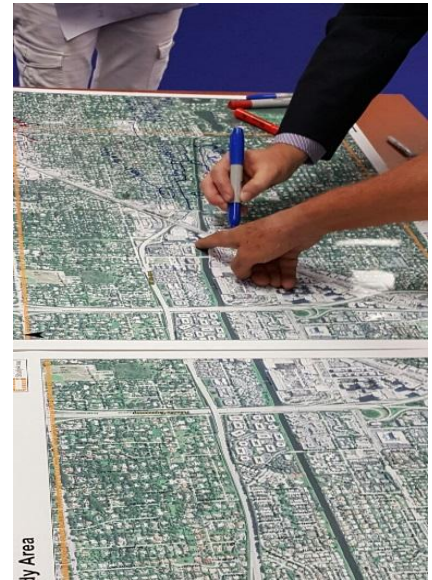


Public Involvement

Public involvement is a process where each contributor gains a better understanding of both the issues and how other participants see the issues. It is an opportunity for participants to share facts, experiences, knowledge, ideas, preferences, hopes, fears, opinions, and values. It is a process through which everyone's energy is combined to produce a better outcome. Public involvement played a vital role in the outcome of the trail plan.

Public Outreach

Two advertised public meetings were conducted for this study. A Community Information workshop was held on April 27, 2016, at South Miami City Hall (6130 SW 72 Street) to present the project and receive input from the community. The second Community Open House meeting was held on June 27, 2016, at South Miami City Hall to present the recommended alignments and answer technical questions. Both of the meetings were held in an "Open House" format, allowing the attendees to give input regarding needs and concerns along the study area. About halfway through the meeting, a formal presentation was made to provide more context and a general overview and update of the project.



The public feedback for the Snapper Creek Trail Segment B corridor was dominated by concerns regarding the canal trail portions of the proposed alignment from adjacent homeowners in single-family residential areas. Concerns ranged from loss of privacy to security/crime fears to impacts to property values caused by having a public trail in the canal right-of-way behind homes. Some of feedback was more positive including several attendees commenting on how this will improve the interconnectivity with other trails and provide a new access mode for key local destinations (Dadeland North Metrorail Station, Dadeland Mall, Baptist Hospital of Miami, etc.). Listed below are some of the general comments and feedback from the public at the workshops.

- Concerns voiced by the public were primarily focused on the proposed shared-use path alignments along the canal right-of-way. The Snapper Creek Canal runs behind many resident's properties, and raised concerns with locals over the proximity of the shared-use path to backyards and the additional pedestrian traffic they will bring.
- Concerns expressed by locals over increased pedestrian traffic included noise, garbage/waste, security, privacy, safety, property value depreciation, narrow right-of-way, and cost.
- Many of the opposed attendees expressed frustration due to the level of public notice regarding the meeting and the project.

Appendix D includes the memorandums for the Community Information Workshop and Community Open House Meeting.



Steering Committee Meetings

Three (3) Steering Committee Meetings were held through the course of the study. Steering Committee Meetings are a place to provide local municipalities such as city governments and local agencies an overview and opportunity to provide input to the project. Their cooperation allows for input on the project with public infrastructure and services in mind. Involved in this project were the SFWMD; City of South Miami; Village of Pinecrest; FDOT; Miami-Dade Department of Transportation and Public Works; and Miami-Dade Parks, and Recreation and Open Spaces Department.

Corridor Analysis Program

Based on the existing conditions, field review, and community input, an analysis was conducted that focused on the feasibility of the project. The analysis phase of the planning process considered infrastructure needs, opportunities, constraints, and supplemental amenities.

Infrastructure Needs

Due to the alternatives being routed through a wide variety of areas with varying levels of existing traffic, many forms of infrastructure will be needed to ease the traffic from bicyclists and pedestrians supplied from Snapper Creek Trail Segment B.

Shared-Use Path

Shared-use paths are non-motorized trails commonly used by both pedestrians and bicyclists. They are most commonly applied as street-adjacent sidewalks to paved trails separated from any roadway as well as in a separate right-of-way such as a canal or park. They are typically wider than an average sidewalk so that they can handle multiple forms of transportation at once. Widths for shared-use paths commonly range from 10-14 feet and permit striping that designates a direction of travel.



Neighborhood Greenways

Neighborhood Greenways operate as a shared experience between bicyclists, pedestrians, and motor vehicles. Infrastructure initiatives are taken to ensure that the former two are given equal opportunity to the right-of-way as an automobile. These initiatives include but are not limited to the following:

- Shared Lane Markings (Sharrows)
- Traffic Calming measures such as Speed Cushions, Speed Tables, and Traffic Circles
- Signage including Bikes May Use Full Lane signs, Bike Route signs, and Wayfinding signs
- Optional Use of Green Sharrows to Improve Conspicuity and Awareness of the Bike Route



These improvements create a low-stress environment that encourages non-motorized modes of transportation. Traffic circles can create limited stops allowing traffic to flow better and because of the lowered motor vehicle speeds, separate bicycle facilities are not needed. They are traffic calming measures that reduce the number of stops for both motorized and non-motorized transportation. Less intersections improves the flow of traffic, reduces collisions, and reduce speeds at and nearby the circle.

Shared-Use Bridge

When a shared-use path needs to go over a major arterial or another obstacle, a shared-use bridge is utilized. Shared-use bridge takes advantage of the same concept of non-motorized traffic that a shared-use path



does, and put that same path over an otherwise intersecting obstacle. Shared-use bridges also have great opportunity for aesthetically relevant design for the community. While being an expensive option, a shared-use bridges often creates a more direct connection than wrapping around to the nearest street crossing.

Underpass

An underpass serves the same purpose of a shared-use bridge, the only difference being the trail goes under the obstacle as opposed to going over. In some cases, going under an obstacle such as a roadway may involve an open cut trench, retaining wall, and drainage enhancements. This option can also be expensive, especially if trenching is required. However, an underpass can still provide the directness that is desired with any commuter path/road and tends to be more popular with bicyclists than long steep gradients that are sometimes required for bridging options.



Corridor Opportunities

Snapper Creek Trail Segment B provides several opportunities for interconnectivity between local points of interest. Some of these points of interests are listed below.

- Dadeland Mall
- Baptist Hospital of Miami
- Dadeland North Metrorail Station
- Dadeland South Metrorail Station
- City College of Miami
- Riviera Preparatory School
- The Boys and Girls Club of Miami, Inc./SW Langer/Kendall Unit/K-Land Park
- Dante Fascell Park
- Kendalwood Park
- Modera Collonade Park
- Red Road Linear Park
- Trinity Pineland County Park
- Fuchs Park



Supplementary to the several destinations for commuters, the trail will provide recreational uses not just for cyclists and pedestrians, but will create a mesh point between land and water recreation with the canoe/kayak launch. The trail will greatly improve the aesthetics of the canal and the surrounding neighborhoods. In addition to aesthetics, the inclusion of infrastructure such as shared-use bridges or underpasses will greatly improve safety for an area with large arterial roadways that would need to be crossed.

Existing bicycle facilities within the area surrounding Snapper Creek Trail Segment B include the following.

- M-Path
- South Dade Trail
- Red Road Linear Park



Funded projects that have not yet been constructed in the vicinity of Snapper Creek Trail Segment B include the following.

- SW 87 Avenue between SW 96 Street to SW 88 Street/Kendall Drive
- SW 104 Street between US 1/S Dixie Highway and SW 57 Avenue
- SW 77 Avenue between SW 136 Street and 104 Street

Planned trails in the vicinity of Snapper Creek Trail Segment B include the following.

- Snapper Creek Trail Segment "A"
- Ludlam Trail
- The Underline
- SW 58 Avenue Neighborhood Greenway

Corridor Constraints

The corridor is constrained in several ways that were analyzed and helped shape the preferred alignment. One of the primary constraints is the available width of the right-of-way that is owned by the South Florida Water Management District (SFWMD). There are several locations within the study area where the SFWMD right-of-way has been consumed for other uses. Examples of right-of-way consumption for other purposes include the Dadeland Mall Circulation Road (SW 85 Street) on the south bank of the canal north of the mall and the parking lot for the Villas of Pinecrest multi-family residential community on the south bank of the canal east of U.S. 1/South Dixie Highway. A shared use path along the canal remains a long-term plan in these areas to accommodate Snapper Creek Trail within future redevelopment, such as the Downtown Kendall Urban Center District.

There are other locations where the canal right-of-way is narrow and the proximity of any shared use path in narrow right-of-way sections in residential areas would be uncomfortable for adjacent residents. Both sides of the canal bank east of SW 67 Avenue are examples of narrow canal right-of-way. The south bank of the canal east of SW 67 Avenue appears to be completely unavailable for trail use. The north bank of the canal is somewhat wider, although still narrow especially



between SW 67 Avenue and SW 62 Avenue. Between SW 62 Avenue and Dante Fascell Park, the north side right-of-way appears to be partially available for trail usage although in a narrower space than most existing canal paths. Further inspection would need to be done including detailed survey data to analyze just how close any proposed path would be.

In addition, routing the trail from one side of SR 826/Palmetto Expressway to the other represents a significant corridor constraint. Consideration of bridges or underpasses are possible in the long-term but will require further study to determine their feasibility. Given the costs and potential environmental impacts of such a crossing, the short-term strategy of routing the alignment along existing surface streets to avoid the SR 826/Palmetto Expressway crossing seems prudent.

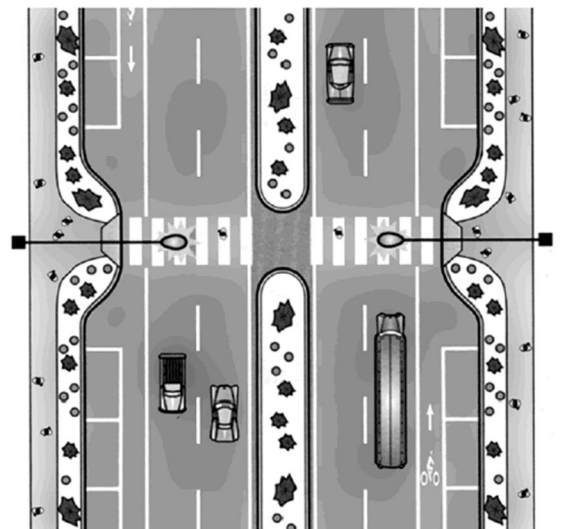
Any section of trail along the canal right-of-way will need to undergo an environmental review or assessment to identify endangered plants or animals along the study corridor. In addition, access will need to be maintained along the canal for the SFWMD to accomplish maintenance and activities associated with managing and protecting the region's water resources.

Supplemental Amenities

Based on the data and needs analysis conducted for this study, supplemental amenities were identified for the trail to enhance recreational opportunities.

Crosswalks

A marked crosswalk benefits pedestrians by directing them to cross at locations. A marked crosswalk can be located at signalized intersections or at uncontrolled crossings. Marked crosswalks are designed to minimize crossing distance. Other crosswalk enhancement can include raised median islands, curb extensions, lighting, and traffic and pedestrian signals.



Rectangular Rapid Flashing Beacon (RRFB)

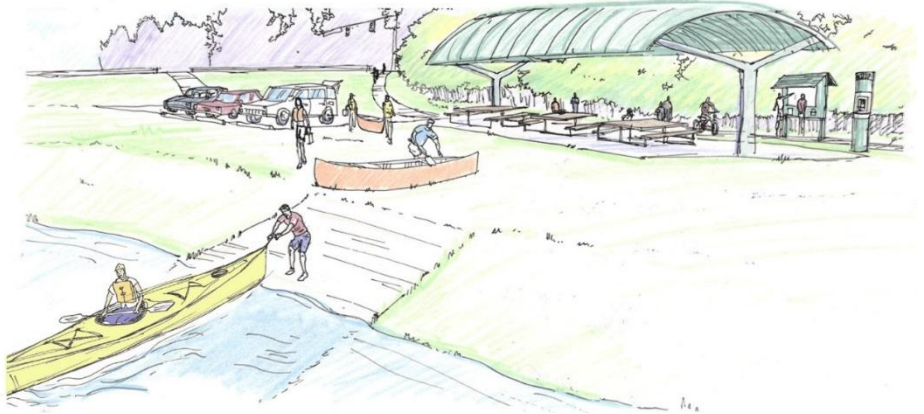


Rectangular rapid flashing beacon (RRFB) are another traffic calming measure that allow non-motorized traffic an opportunity for a safe mid-block crossing. A RRFB consists of a crosswalk with two flashing, rectangular shaped signs that light up to alert motorists when someone is using the crosswalk. In addition to the signs on either side, crossing signs shall be W11-2, S1-1, or

W11-15 per MUTCD and crossing plaques W16-7P shall accompany the crossing signs. This design makes the crosswalk signaling look similar to that of a signalized intersection, which in turn brings additional awareness to the driver that there may be slowing or a complete stop ahead. RRFB's create high amounts of yielding relative to their cost in comparison to other application, such as a fully signalized intersection.

Canoe/Kayak Launch

A canoe/kayak launch will create a unique opportunity to enhance existing recreational options along the Snapper Creek Canal (C-2) by further emphasizing healthy lifestyles though recreation. A launch site for canoes/kayaks will allow access to utilize South Florida's waterways, one of the region's biggest assets.



Recommendations

Several alignments were identified based on the review of the existing conditions, analysis of transportation plans, feedback from the public and local municipalities, and field reviews. These alignments were developed with an overarching principle to optimize non-motorized travel in an area otherwise dominated by motor vehicular travel. Figure 14 displays the different alternatives that were considered throughout the plan. Canal and on-roadway alignments were considered along with the use of the existing facilities and planned studies.

The NDGMP and other prior systems planning efforts identified the proposed Snapper Creek Trail as an important bicycle and pedestrian path envisioned to connect several key destinations, primarily along the Snapper Creek Canal (C-2) right-of-way. But due to the canal corridor constraints, roadway alignments were highly considered. These improvements include a preferred alignment for the Snapper Creek Trail Segment B along with what facilities will work best given the contextual surroundings. Each of these facilities has associated features for traffic calming and safety in the goal of improving the overall travel experience.



Figure 14. Alternatives



0 0.25 0.5 Miles

Preferred Alignment

The preferred alignment was designed to optimize multimodal connections along sections of the Snapper Creek Canal (C-2) with the fewest obstacles while also routing continuous bicycle facilities on low volume streets through neighborhoods to maximize accessibility. The facilities proposed by the preferred alignment will allow for improved connectivity with future projects along the Snapper Creek Canal (C-2). The preferred alignment includes shared-use paths and neighborhood greenways, all with several of the features previously discussed in the corridor analysis section and routing the trail along existing facilities where possible. Figure 15 depicts the preferred alignment.

From west to east, the Snapper Creek Trail Segment B preferred alignment proceeds as follows.

- K-Land Park to SW 87 Avenue, frontage road neighborhood greenway
 - Beginning at K-Land Park, the preferred alignment follows the north side frontage road of SW 88 Street/Kendall Drive from K-Land Park to SW 87 Avenue using neighborhood greenway improvements.
 - A short section of new shared-use path will need to be constructed at the eastern end of this segment where the frontage road does not exist between SW 87 Court and SW 87 Avenue.
- SW 87 Avenue from SW 88 Street to SW 96th Street, bike lane and shared use path
 - The preferred alignment proceeds south along SW 87th Avenue utilizing existing bike lanes.
 - In addition, the preferred alignment proposes to widen the existing west side sidewalk to shared-use path standards.
 - A roundabout is proposed at the intersection of SW 87th Avenue and SW 96th Street to promote traffic calming and opportunities for pedestrian and bicyclist crossings at this existing two-way stop-controlled intersection.
- SW 96 Street, SW 79 Avenue, and SW 98 Street, neighborhood greenway
 - The preferred alignment utilizes neighborhood greenway improvements along SW 96 Street, SW 79 Avenue, and SW 98 Street to connect from SW 87 Avenue to the South Dade Trail/Bike Route M along the Busway.
 - An existing traffic circle is already in place along SW 96 Street at SW 82 Avenue.
 - A proposed new traffic circle is recommended along SW 96 Street at the SW 79 Avenue intersection, which was the location of one of the bicyclist crashes studied in the data analysis for this project. This intersection is currently four-way stop-controlled.

Conversion of stop-controlled intersections to traffic circles is one of the best practices for neighborhood greenways.

- Intersection crossing improvements are recommended at the intersection of SW 98 Street and SW 77 Avenue to improve multimodal user comfort and safety.
- Existing shared-use path along the South Dade Trail/M-Path/Underline
 - The preferred alignment is co-located with the South Dade Trail/M-Path/Underline between SW 98 Street and SW 84 Street.
 - This north-south section of the trail provides shared-use path connectivity under the SR 826/Palmetto Expressway, which was identified as one of the primary constraints of the study corridor.
 - In addition, this section of the trail provides connectivity to Dadeland South and Dadeland North Metrorail Stations.
 - An existing section of the Snapper Creek Trail has already been constructed on the south bank of the canal behind the Dadeland North Metrorail Station parking garage.
 - Bike Route M and Bike Route 3 will be co-located in this section.
- Dadeland North/Underline connector, shared-use path
 - The preferred alignment includes a shared-use path along the north side of the Snapper Creek Canal (C-2) connecting the multi-family residential communities on the north side of the canal with the Dadeland North Metrorail Station and The Underline.
 - The proposed shared-use path would extend from the existing pedestrian bridge at the Villages of Dadeland to SW 70 Avenue along the north side of the canal.
 - An enhanced crosswalk with pedestrian-actuated rectangular rapid flashing beacons (RRFB) is recommended for the trail crossing at SW 72 Avenue.
 - The Dadeland North/Underline connector would include a shared-use path bridge over the Snapper Creek Canal (C-2) in the Ludlam Trail corridor. The bridge would serve both the Snapper Creek Trail and the Ludlam Trail. Coordination with the Ludlam Trail planning efforts is necessary.
 - A new crosswalk is proposed on the north leg of the existing signalized intersection of SW 85 Street and SW 70 Avenue, which is also the entrance to the Dadeland North Metrorail Station parking garage.
- Demonstration project, shared-use path from U.S. 1/South Dixie Highway to SW 67 Avenue
 - The preferred alignment includes a new shared-use path in the Snapper Creek Canal (C-2) right-of-way on the north side of the canal between U.S. 1/South Dixie Highway and

SW 67 Avenue, which is the section of canal behind Bomnin Chevrolet. An existing shared-use path trail turnout has already been constructed to connect from the U.S. 1/South Dixie Highway right-of-way to the canal right-of-way.

- The preferred alignment utilizes the existing shared-use path crossing built by FDOT across U.S. 1/South Dixie Highway on the south leg of the SW 84 Street signalized intersection.
- The preferred alignment utilizes the existing shared-use path on the east side of U.S. 1/South Dixie Highway adjacent to Bomnin Chevrolet.
- The demonstration project includes an enhanced crosswalk with pedestrian-actuated rectangular rapid flashing beacons (RRFB) for the trail crossing at SW 67 Avenue.
- SW 85 Street, SW 86 Street, and SW 87 Street, neighborhood greenway
 - East of SW 67 Avenue, the alignment returns to a series of neighborhood greenways primarily running west and east. The neighborhood greenways maintain their proximity to the Snapper Creek Canal (C-2) by running along the southernmost residential roads before reaching Dante Fascell Park and Red Road Linear Park at SW 57 Avenue.
 - Data from the activity app Strava demonstrate that this route is already popular with runners and recreational bicyclists.
 - This segment includes a short section of new shared-use path along the unused SW 58 Avenue right-of-way south of SW 85 Street and connecting to Dante Fascell Park along the Snapper Creek Canal (C-2) right-of-way.
 - The proposed shared-use path would connect to SW 57 Avenue at SW 88 Street (north).
 - Intersection crossing and Americans with Disabilities Act (ADA) improvements are needed on the north leg and east leg of the intersection of SW 57 Avenue and SW 88 Street (north) including upgrading the crossings to shared use path standards.

The preferred alignment will increase bicycling and walking throughout the corridor study area through improved connectivity of non-motorized transportation facilities, access to transit, and providing effective alternatives to short automobile travel. The preferred alignment makes use of several existing sections of bike lanes and shared-use paths.

Figure 16 displays the zoomed in area of SW 88 Street/Kendall Drive at SW 87 Avenue. SW 88 Street/Kendall Drive provides a frontage road on the north side from SW 94 Avenue to SW 87 Court. The frontage road will separate local traffic from through traffic therefore, a proposed neighborhood

greenway will be appropriate due to the low volume of relatively calm traffic. A short section of a shared-use path from SW 87 Court to SW 87 Avenue will continue non-motorized connectivity. There are existing bike lanes on SW 87 Avenue south of SW 88 Street to north of SW 96 Street. In addition to the existing bike lanes, an existing sidewalk on the west side is proposed to be widened to a shared-use path.

Figure 17 displays the zoomed in area of the Dadeland North/Underline Trail Connector. A proposed shared-use path to connect residents along the Snapper Creek Canal (C-2) to the Dadeland North Metrorail Station from SR 826/Palmetto Expressway to SW 70 Avenue using the north side of the canal and the planned Ludlam Trail corridor across the canal. This section of trail would also significantly improve connectivity to the M-Path/Underline.

Figure 18 displays the zoomed in area of US 1/S Dixie Highway at SW 84 Street. The Snapper Creek Trail crossing of US 1/S Dixie Highway already exists at SW 84 Street, having been recently built by FDOT as part of a separate project. Miami-Dade County, through negotiations with the auto dealer on the northeast corner of where the canal intersects US 1/S Dixie Highway has been able to have a shared-use path connector and Bike Route 3 signage implemented along the east side of US 1/S Dixie Highway connecting from SW 84 Street to the Snapper Creek Canal (C-2) right-of-way. High emphasis/ladder-style crosswalks are provided on the west and south leg. In addition, concrete curbed ramps are provided with a detectable warning surface.

Snapper Creek Trail Segment B

Figure 15. Preferred Alignment

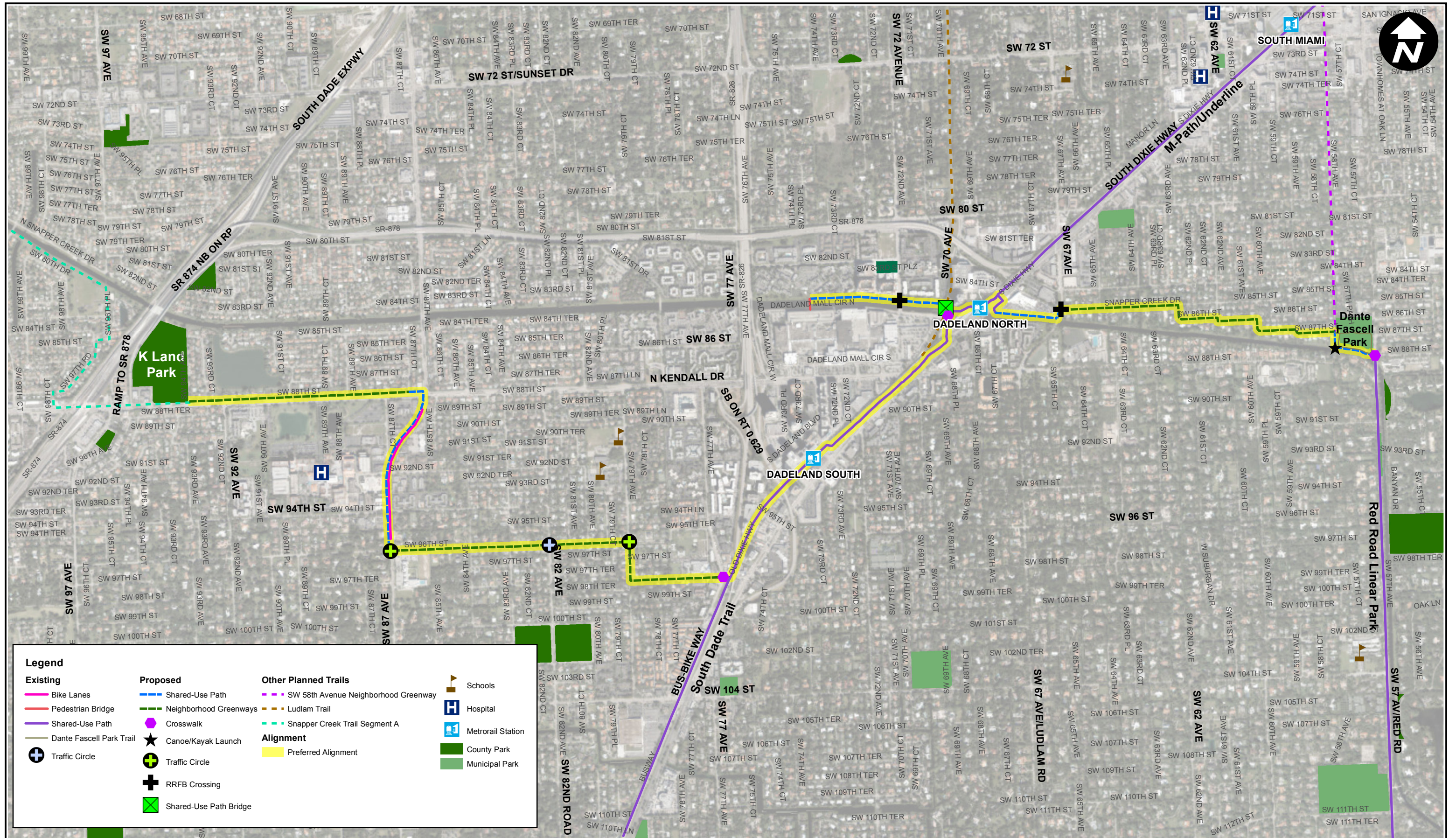




Figure 16. SW 88 Street/Kendall Drive at SW 87 Avenue



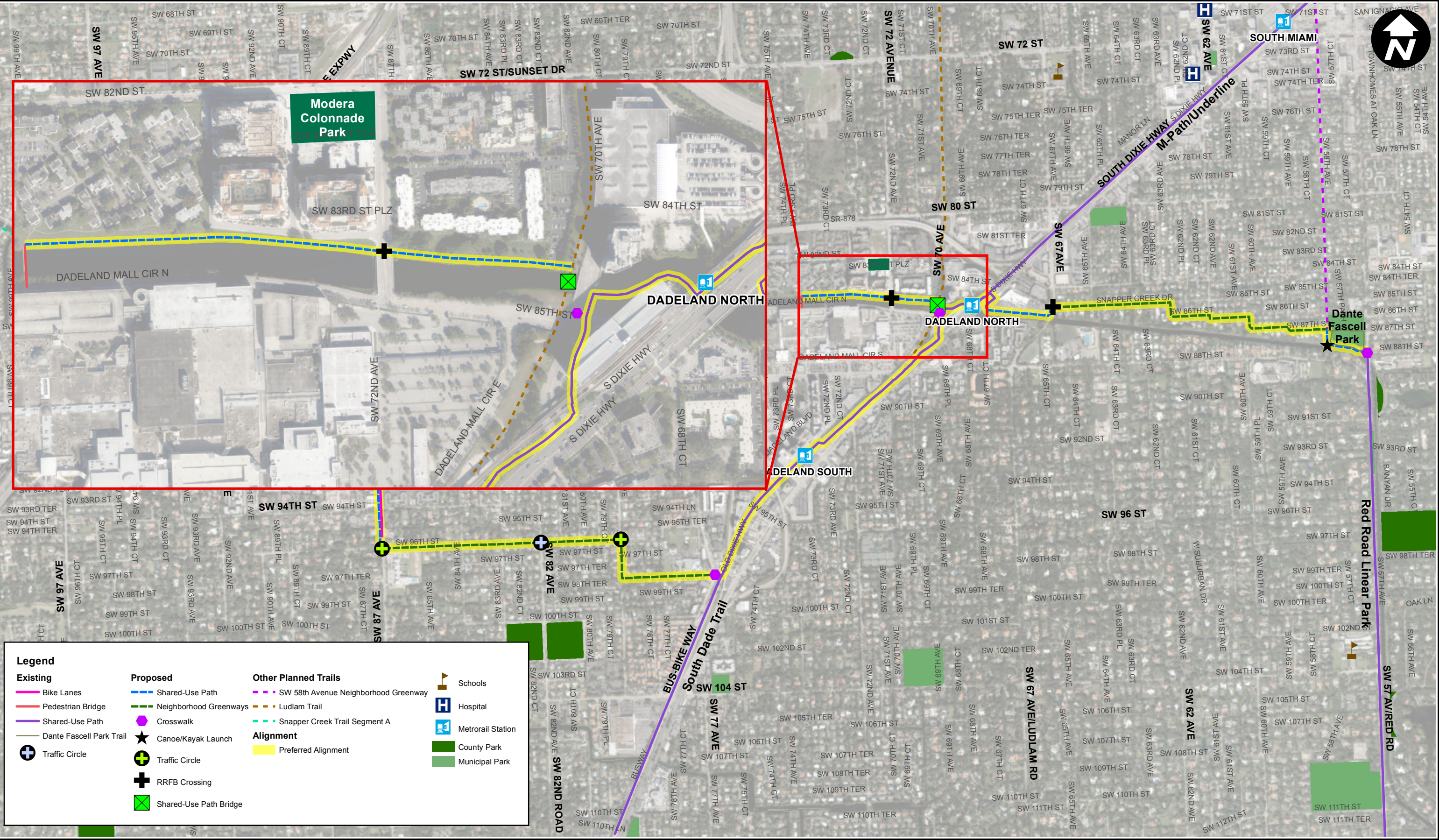
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MIAMI-DADE
METROPOLITAN
PLANNING
ORGANIZATION

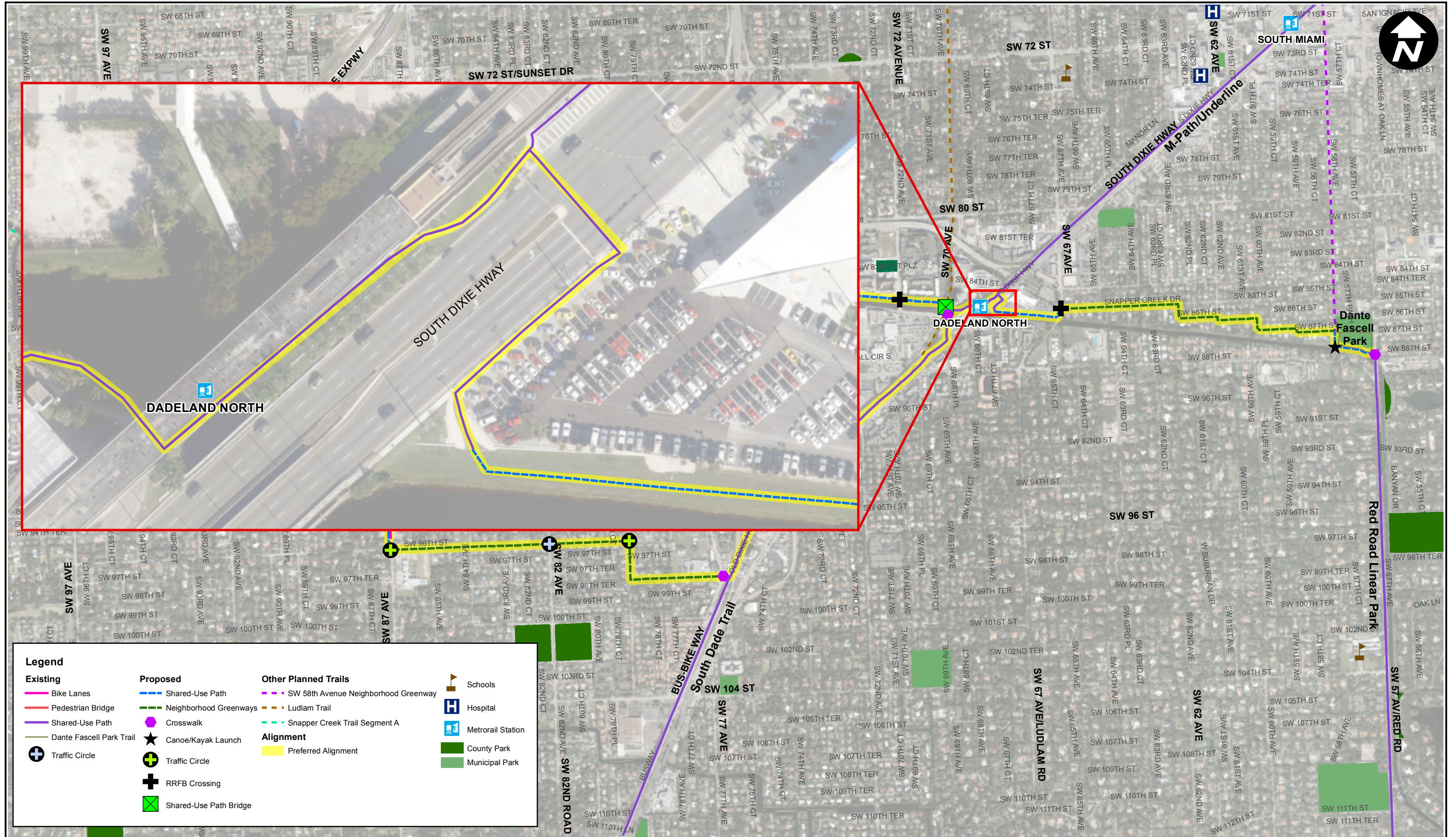
Snapper Creek Trail Segment B

Figure 17. Dadeland North Trail Connector



Snapper Creek Trail Segment B

Figure 18. US 1/S Dixie Highway at SW 84 Street



Demonstration Project

To connect the proposed Snapper Creek Trail Segment B to SW 85 Street and the residential areas to the east, a trail connection is needed. This section of canal trail seems to present the fewest obstacles to implementation, provides a much needed multimodal connection to US 1/South Dixie Highway and the Dadeland North Metrorail Station, and leverages existing shared-use path facilities built along and across US 1. SW 85 Street does not connect to SW 67 Avenue for motor vehicle traffic, as shown below, but with modifications to the guardrail could be retro-fitted to provide non-motorized connectivity.

The following are the recommendations from US 1/S Dixie Highway to SW 67 Avenue along the Snapper Creek Canal (C-2).

- Provide a shared-use path along the north side of the canal from US 1/S Dixie Highway to SW 67 Avenue, connecting to the existing trail turnout built on the east side of US 1.
- Modify the guardrail on the east side of SW 67 Avenue to provide non-motorized access.
- Install an enhanced crosswalk with pedestrian-actuated rectangular rapid flashing beacons (RRFB) at the trail crossing on SW 67 Avenue.
- Consider using experimental zig-zag white pavement marking lines in the travel lanes on SW 67 Avenue as advanced warning of the trail crossing. Zig-zag marking lines have been shown in experiments in Virginia to reduce motorist speeds in advance of a crossing and enhance safety at locations where there is a need to heighten motorist awareness.

http://www.viriniadot.org/vtrc/main/online_reports/pdf/11-r9.pdf

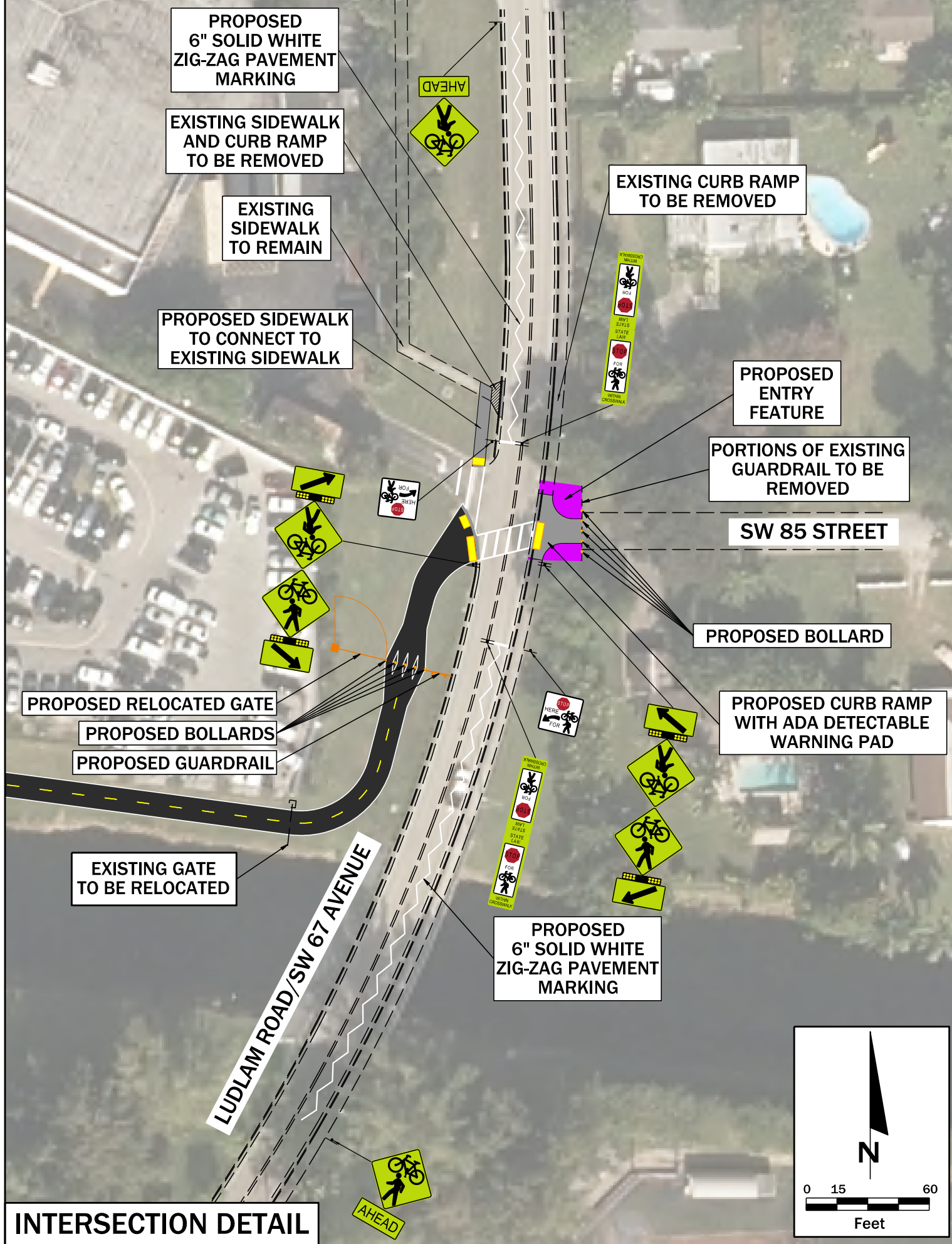
The demonstration project is shown in Figure 19 and inset in Figure 20.



Figure 19. Demonstration Project (US 1/S Dixie Highway to SW 67 Avenue)



Figure 20. Demonstration Project Inset



Opinion of Probable Costs

An opinion of probable cost (OPC) was prepared for the preferred alignment based on typical per mile costs for trails and neighborhood greenways. The OPC was developed to assist in financial planning for funding. The OPC was divided into six (6) logical segments based on the typical type of construction anticipated. Table 2 provides the summary of costs for each of the six (6) segments and Appendix E includes the detail on the OPC.

Table 2. Opinion of Probable Costs

Segments	Cost
The Boys and Girls Club of Miami, Inc./SW Langer/Kendall Unit/K-Land Park to SW 87 Avenue at SW 96 Street	\$1,319,266.47
SW 96 Street/SW 79 Avenue/SW 98 Street	\$519,127.08
South Dade Trail/M-Path/Underline	\$18,645.50
Dadeland North/Underline Connector Trail	\$1,525,044.66
Demonstration Project (US 1/S Dixie Highway to SW 67 Avenue)	\$404,732.44
SW 67 Avenue at SW 85 Street to Dante Fascell Park/SW 57 Avenue	\$376,743.85
Total	\$4,163,560.00

Conclusion

Snapper Creek Trail is a proposed 10-mile greenway trail in west-central Miami-Dade County. The concept was initiated in the 1980s and formalized in the 1998 North Dade Greenways Master Plan (NDGMP). The proposed Snapper Creek Trail is included in the NDGMP, Downtown Kendall Urban Center (DKUC) District, Miami-Dade County Parks and Open Space System Master Plan (OSMP), the Miami-Dade Metropolitan Planning Organization (MPO) Long Range Transportation Plan (LRTP) and the Florida Greenways & Trails System (FGTS) Plan. Portions of the trail were built as far back as the 1980s, but many significant sections of the trail remain unbuilt.

The Snapper Creek Trail Segment “B” Master Plan builds from the foundation of prior systems planning efforts and the Snapper Creek Trail Segment “A” Planning Study completed by the Miami-Dade MPO and Miami-Dade Parks, Recreation and Open Spaces (MDPROS) Department in 2008. Segment B is a proposed 5-mile trail in suburban west-central Miami-Dade County that links the eastern end of Segment A to the Red Road Linear Park along the east side of SW 57 Avenue at SW 88 Street. Segment B is centered around connectivity to the Dadeland North Metrorail Station and the M-Path/Underline corridor.

The Master Plan included a detailed identification and review of corridor opportunities and corridor constraints. An inter-agency project steering committee met periodically throughout the study to provide information, guidance, and begin discussing and coordinating project implementation. Two advertised public workshops were held to solicit community input and present the proposed trail concepts. The Snapper Creek Trail Segment B corridor presents numerous positive opportunities to leverage existing shared-use path facilities, connect to key destinations, and provide area residents with enhanced recreation opportunities.

The study developed a preferred alignment to provide a continuous facility along the study corridor, which includes a combination of shared-use paths and neighborhood greenways. A demonstration project was developed in a section of canal right-of-way that seems to present the fewest obstacles to implementation, provides a much needed multimodal connection to US 1/South Dixie Highway and the Dadeland North Metrorail Station, and leverages existing shared-use path facilities built along and across US 1. Snapper Creek Trail Segment B will likely be implemented through a variety of strategies potentially including Transportation Alternatives Program (TAP) funding or local County funding.

Appendix A

Land Ownership



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Summary Report

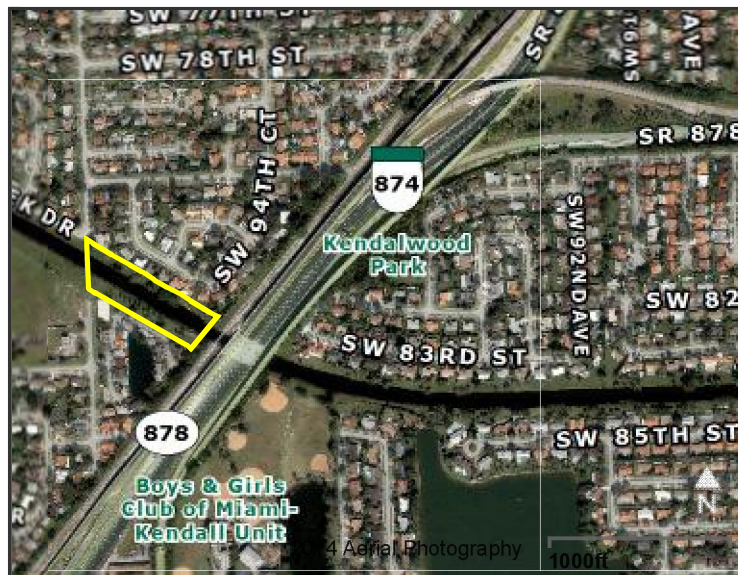
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Property Information	
Folio:	30-4033-000-0010
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	8900 INTERIM-AWAIT SPECIFIC ZO
Primary Land Use	9585 RIVER LAKE OR SUBMERGED LAND : SO FLORIDA WATER MGMT DIST
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	902,998.8 Sq.Ft
Year Built	0

Assessment Information			
Year	2014	2013	2012
Land Value	\$10,365	\$10,365	\$10,365
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$10,365	\$10,365	\$10,365
Assessed Value	\$10,365	\$10,365	\$10,365

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$10,365	\$10,365	
Submerged Lands	Exemption			\$10,365
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description
33 54 40 20.73 AC SNAPPER CREEK CANAL R/W THRU SEC LOT SIZE IRREGULAR



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$10,365	\$10,365	\$10,365
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$10,365	\$10,365	\$10,365
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$10,365	\$10,365	\$10,365
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description
10/01/1973	\$70,000	00000-00000	2008 and prior year sales; Qual by exam of deed

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Version:



OFFICE OF THE PROPERTY APPRAISER

Summary Report

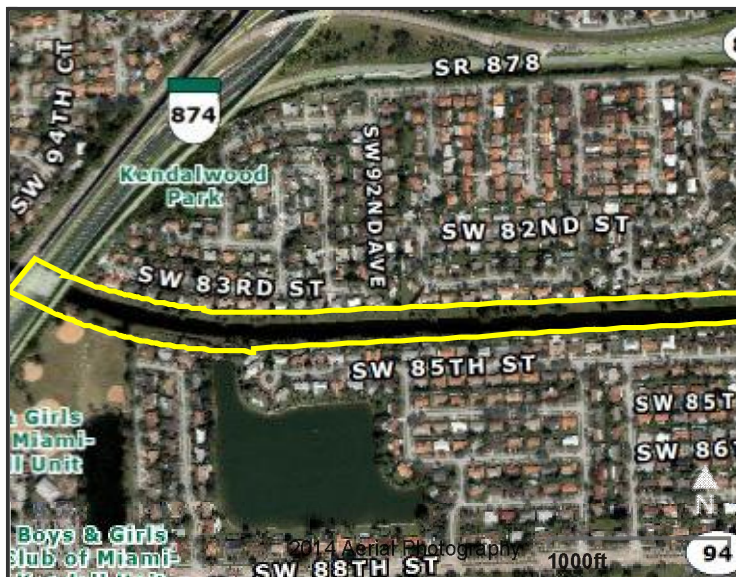
Generated On : 5/18/2015

Property Information	
Folio:	30-4033-000-0010
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	8900 INTERIM-AWAIT SPECIFIC ZO
Primary Land Use	9585 RIVER LAKE OR SUBMERGED LAND : SO FLORIDA WATER MGMT DIST
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	902,998.8 Sq.Ft
Year Built	0

Assessment Information			
Year	2014	2013	2012
Land Value	\$10,365	\$10,365	\$10,365
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$10,365	\$10,365	\$10,365
Assessed Value	\$10,365	\$10,365	\$10,365

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$10,365	\$10,365	
Submerged Lands	Exemption			\$10,365
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description
33 54 40 20.73 AC SNAPPER CREEK CANAL R/W THRU SEC LOT SIZE IRREGULAR



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$10,365	\$10,365	\$10,365
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$10,365	\$10,365	\$10,365
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$10,365	\$10,365	\$10,365
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description
10/01/1973	\$70,000	00000-00000	2008 and prior year sales; Qual by exam of deed

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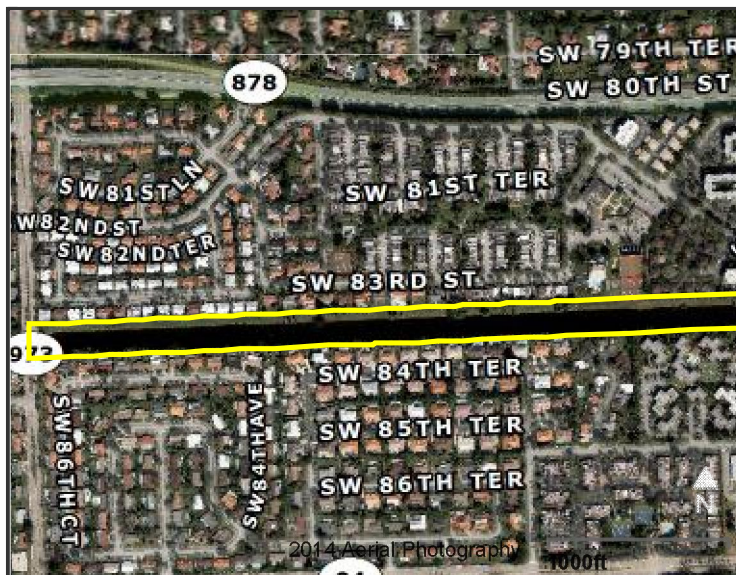
Generated On : 5/18/2015

Property Information	
Folio:	30-4034-000-0501
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	9000 AGRICULTURE
Primary Land Use	0081 VACANT RESIDENTIAL : VACANT LAND
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	995,346 Sq.Ft
Year Built	0

Assessment Information			
Year	2014	2013	2012
Land Value	\$11,425	\$11,425	\$11,425
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$11,425	\$11,425	\$11,425
Assessed Value	\$11,425	\$11,425	\$11,425

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$11,425	\$11,425	
Submerged Lands	Exemption			\$11,425
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description
34 54 40 22.85 AC STRIP OF LND RUNNING E & W ACROSS SEC FOR SNAPPER CREEK CANAL R/W LOT SIZE IRREGULAR



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$11,425	\$11,425	\$11,425
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$11,425	\$11,425	\$11,425
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$11,425	\$11,425	\$11,425
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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Version:



OFFICE OF THE PROPERTY APPRAISER

Summary Report

Generated On : 5/18/2015

Property Information	
Folio:	30-4035-000-0200
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	8900 INTERIM-AWAIT SPECIFIC ZO
Primary Land Use	9981 ACREAGE NOT CLASSIFIED AG : VACANT LAND
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	429,724 Sq.Ft
Year Built	0



Assessment Information				
Year	2014	2013	2012	
Land Value	\$429,724	\$429,724	\$429,724	
Building Value	\$0	\$0	\$0	
XF Value	\$0	\$0	\$0	
Market Value	\$429,724	\$429,724	\$429,724	
Assessed Value	\$429,724	\$429,724	\$429,724	

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$429,724	\$429,724	
Submerged Lands	Exemption			\$429,724
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description	
35 54 40 SNAPPER CREEK CANAL R/W LESS LEASED PORTION & LESS S1/2 LYG SELY OF STATE RD 5 LOT SIZE 429724 SQ FT	

Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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Version:

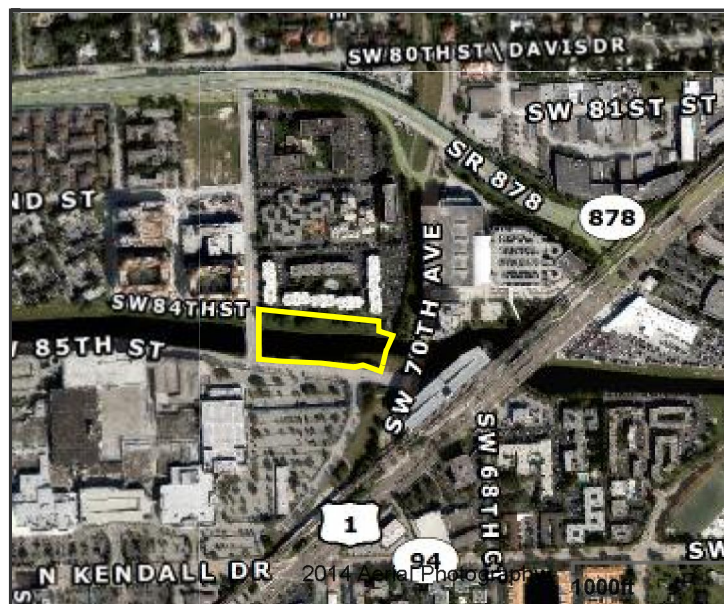


OFFICE OF THE PROPERTY APPRAISER

Summary Report

Generated On : 5/18/

Property Information	
Folio:	30-4035-000-0200
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	8900 INTERIM-AWAIT SPECIFIC ZO
Primary Land Use	9981 ACREAGE NOT CLASSIFIED AG : VACANT LAND
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	429,724 Sq.Ft
Year Built	0



Assessment Information			
Year	2014	2013	2012
Land Value	\$429,724	\$429,724	\$429,724
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$429,724	\$429,724	\$429,724
Assessed Value	\$429,724	\$429,724	\$429,724

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$429,724	\$429,724	
Submerged Lands	Exemption			\$429,724
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description
35 54 40 SNAPPER CREEK CANAL R/W LESS LEASED PORTION & LESS S1/2 LYG SELY OF STATE RD 5 LOT SIZE 429724 SQ FT

Taxable Value Information			
	2014	2013	2
County			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	
School Board			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	
City			
Exemption Value	\$0	\$0	
Taxable Value	\$0	\$0	
Regional			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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Version:

<http://www.miamidade.gov/propertysearch/>

5/18/2015



OFFICE OF THE PROPERTY APPRAISER

Summary Report

Generated On : 5/18/2015

Property Information	
Folio:	30-4035-000-0200
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	8900 INTERIM-AWAIT SPECIFIC ZO
Primary Land Use	9981 ACREAGE NOT CLASSIFIED AG : VACANT LAND
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	429,724 Sq.Ft
Year Built	0

Assessment Information				
Year	2014	2013	2012	
Land Value	\$429,724	\$429,724	\$429,724	
Building Value	\$0	\$0	\$0	
XF Value	\$0	\$0	\$0	
Market Value	\$429,724	\$429,724	\$429,724	
Assessed Value	\$429,724	\$429,724	\$429,724	

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$429,724	\$429,724	
Submerged Lands	Exemption			\$429,724
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description	
35 54 40 SNAPPER CREEK CANAL R/W LESS LEASED PORTION & LESS S1/2 LYG SELY OF STATE RD 5 LOT SIZE 429724 SQ FT	



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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Generated On : 5/18/2015

Property Information	
Folio:	20-4035-000-0200
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	2300 ESTATES - 1 ACRE
Primary Land Use	9585 RIVER LAKE OR SUBMERGED LAND : SO FLORIDA WATER MGMT DIST
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	110,250 Sq.Ft
Year Built	0

Assessment Information			
Year	2014	2013	2012
Land Value	\$192,938	\$192,938	\$192,938
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$192,938	\$192,938	\$192,938
Assessed Value	\$192,938	\$192,938	\$192,938

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$192,938	\$192,938	
Submerged Lands	Exemption			\$192,938
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description	
35 54 40 2.53 AC M/L	
S1/2 OF SNAPPER CREEK CANAL R/W	
LYG SELY OF STATE RD 5 LESS	
LEASED PORTION	
LOT SIZE 110250 SQ FT	



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$192,938	\$192,938	\$192,938
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$192,938	\$192,938	\$192,938
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$192,938	\$192,938	\$192,938
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$192,938	\$192,938	\$192,938
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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Generated On : 5/18/2015

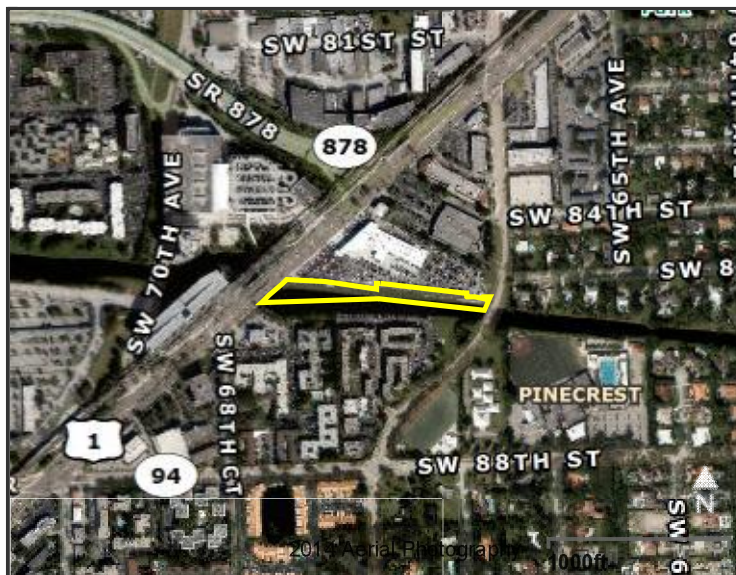
Property Information	
Folio:	30-4035-000-0200
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	8900 INTERIM-AWAIT SPECIFIC ZO
Primary Land Use	9981 ACREAGE NOT CLASSIFIED AG : VACANT LAND
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	429,724 Sq.Ft
Year Built	0

Assessment Information				
Year	2014	2013	2012	
Land Value	\$429,724	\$429,724	\$429,724	
Building Value	\$0	\$0	\$0	
XF Value	\$0	\$0	\$0	
Market Value	\$429,724	\$429,724	\$429,724	
Assessed Value	\$429,724	\$429,724	\$429,724	

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$429,724	\$429,724	
Submerged Lands	Exemption			\$429,724

Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).

Short Legal Description	
35 54 40 SNAPPER CREEK CANAL R/W LESS LEASED PORTION & LESS S1/2 LYG SELY OF STATE RD 5 LOT SIZE 429724 SQ FT	



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$429,724	\$429,724	\$429,724
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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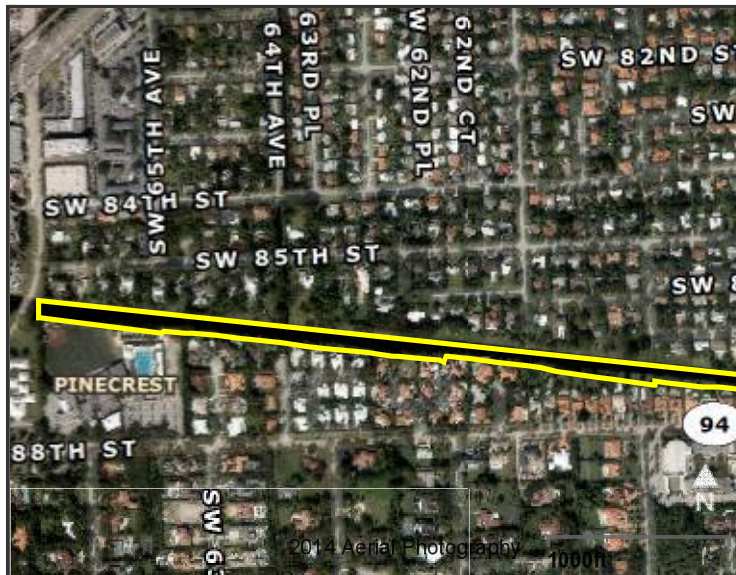
Generated On : 5/18/2015

Property Information	
Folio:	20-4036-000-0010
Property Address:	
Owner	SO FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	2100 ESTATES - 15000 SQFT LOT
Primary Land Use	9585 RIVER LAKE OR SUBMERGED LAND : SO FLORIDA WATER MGMT DIST
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	130,200.84 Sq.Ft
Year Built	0

Assessment Information			
Year	2014	2013	2012
Land Value	\$71,288	\$71,288	\$71,288
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$71,288	\$71,288	\$71,288
Assessed Value	\$71,288	\$71,288	\$71,288

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$71,288	\$71,288	
Submerged Lands	Exemption			\$71,288
Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).				

Short Legal Description
36 54 40 2.989 AC M/L S1/2 OF SNAPPER CREEK CANAL LYG IN SW1/4 OF SEC



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$71,288	\$71,288	\$71,288
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$71,288	\$71,288	\$71,288
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$71,288	\$71,288	\$71,288
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$71,288	\$71,288	\$71,288
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

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Summary Report

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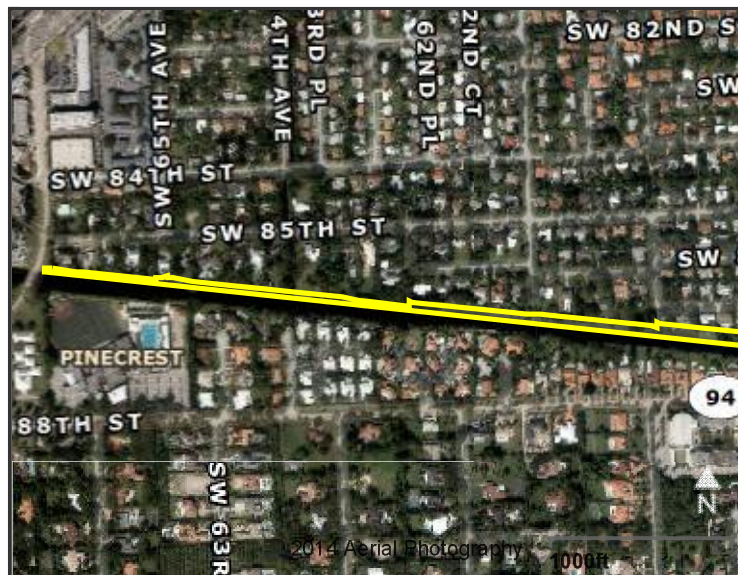
Property Information	
Folio:	30-4036-005-0270
Property Address:	
Owner	SOUTH FLA WATER MANAGEMENT DIST ATTN: REAL ESTATE MGNT SECTION
Mailing Address	3301 GUN CLUB RD WEST PALM BEACH , FL 33406
Primary Zone	2100 ESTATES - 15000 SQFT LOT
Primary Land Use	9592 RIVER LAKE OR SUBMERGED LAND : LAKE
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0 Sq.Ft
Living Area	0 Sq.Ft
Adjusted Area	0 Sq.Ft
Lot Size	353,721.72 Sq.Ft
Year Built	0

Assessment Information			
Year	2014	2013	2012
Land Value	\$137,478	\$137,042	\$137,042
Building Value	\$0	\$0	\$0
XF Value	\$0	\$0	\$0
Market Value	\$137,478	\$137,042	\$137,042
Assessed Value	\$137,478	\$137,042	\$137,042

Benefits Information				
Benefit	Type	2014	2013	2012
Water Management	Exemption	\$137,478	\$137,042	
Submerged Lands	Exemption			\$137,042

Note: Not all benefits are applicable to all Taxable Values (i.e. County, School Board, City, Regional).

Short Legal Description
36 54 40 8.20 AC M/L
SNAPPER CREEK GROVES PB 44-88
SNAPPER CREEK CANAL LYG ACROSS
SEC LESS S1/2 OF CANAL LYG IN
SW1/4 & LESS PORT OF LOT 6 & PORT



Taxable Value Information			
	2014	2013	2012
County			
Exemption Value	\$137,478	\$137,042	\$137,042
Taxable Value	\$0	\$0	\$0
School Board			
Exemption Value	\$137,478	\$137,042	\$137,042
Taxable Value	\$0	\$0	\$0
City			
Exemption Value	\$0	\$0	\$0
Taxable Value	\$0	\$0	\$0
Regional			
Exemption Value	\$137,478	\$137,042	\$137,042
Taxable Value	\$0	\$0	\$0

Sales Information			
Previous Sale	Price	OR Book-Page	Qualification Description

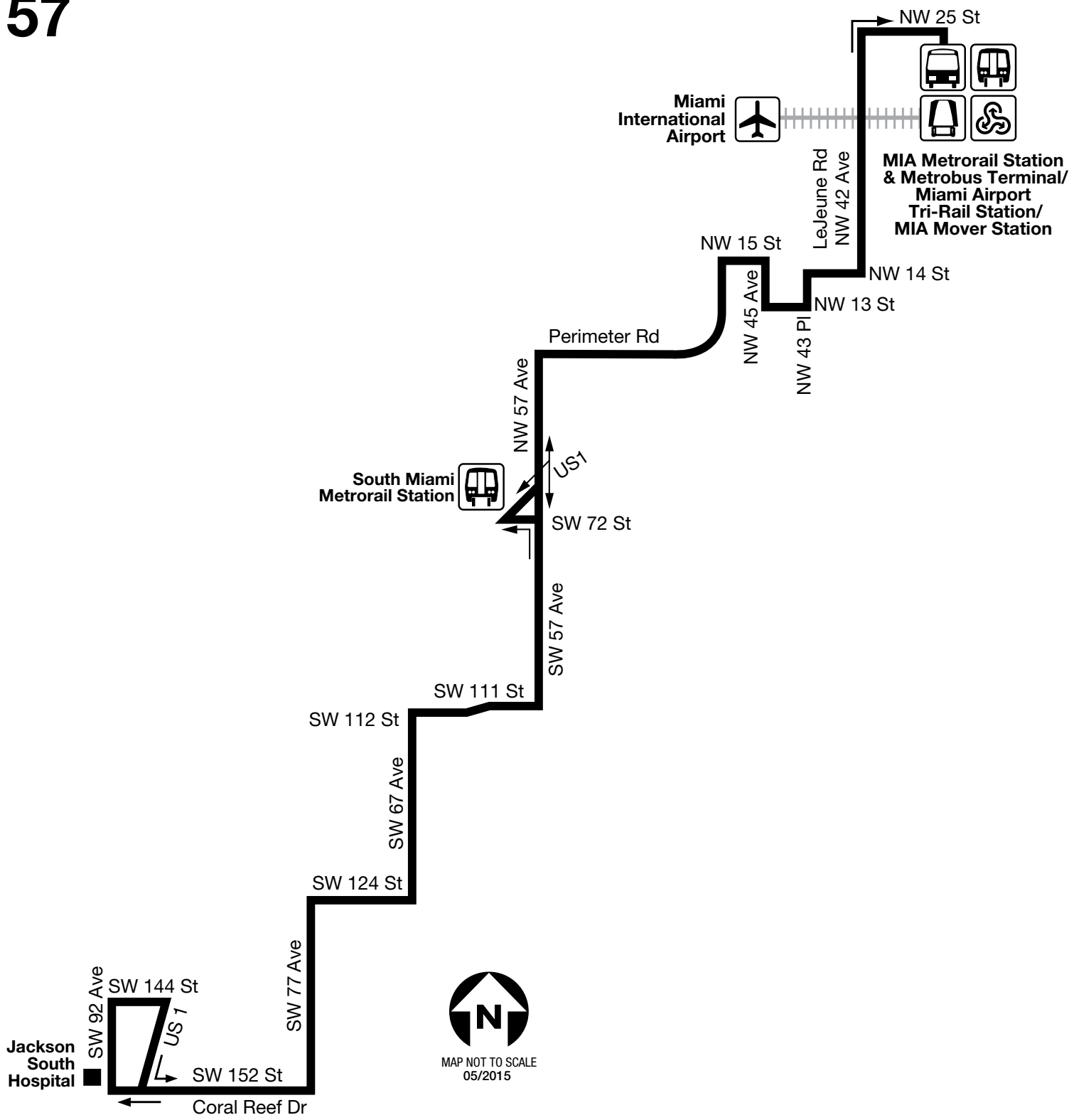
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Version:

Appendix B

MDT Metrobus Routes

Route 57

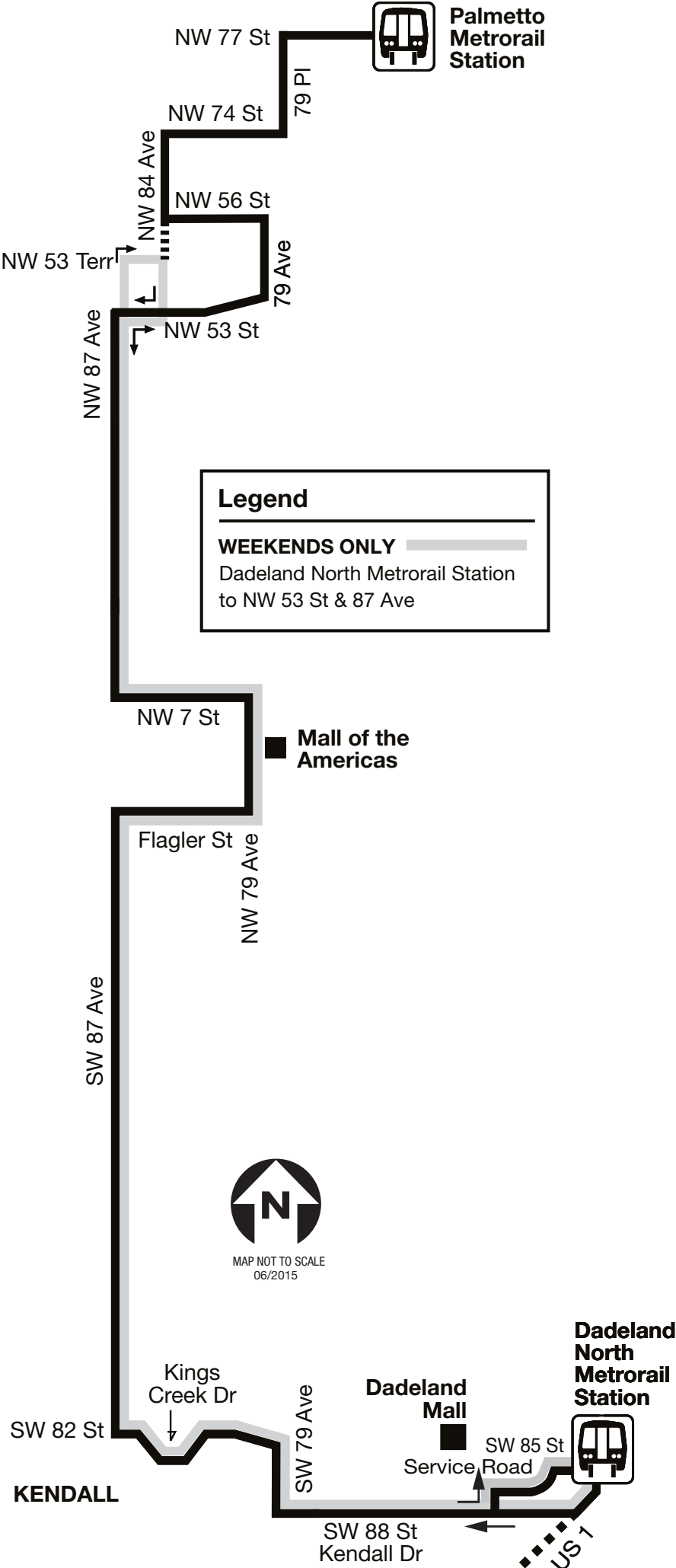


This map illustrates the proposed Metrorail route from Miami Lakes to Kendall. The route is shown as a thick black line with arrows indicating the direction of travel. Key locations and streets along the route include:

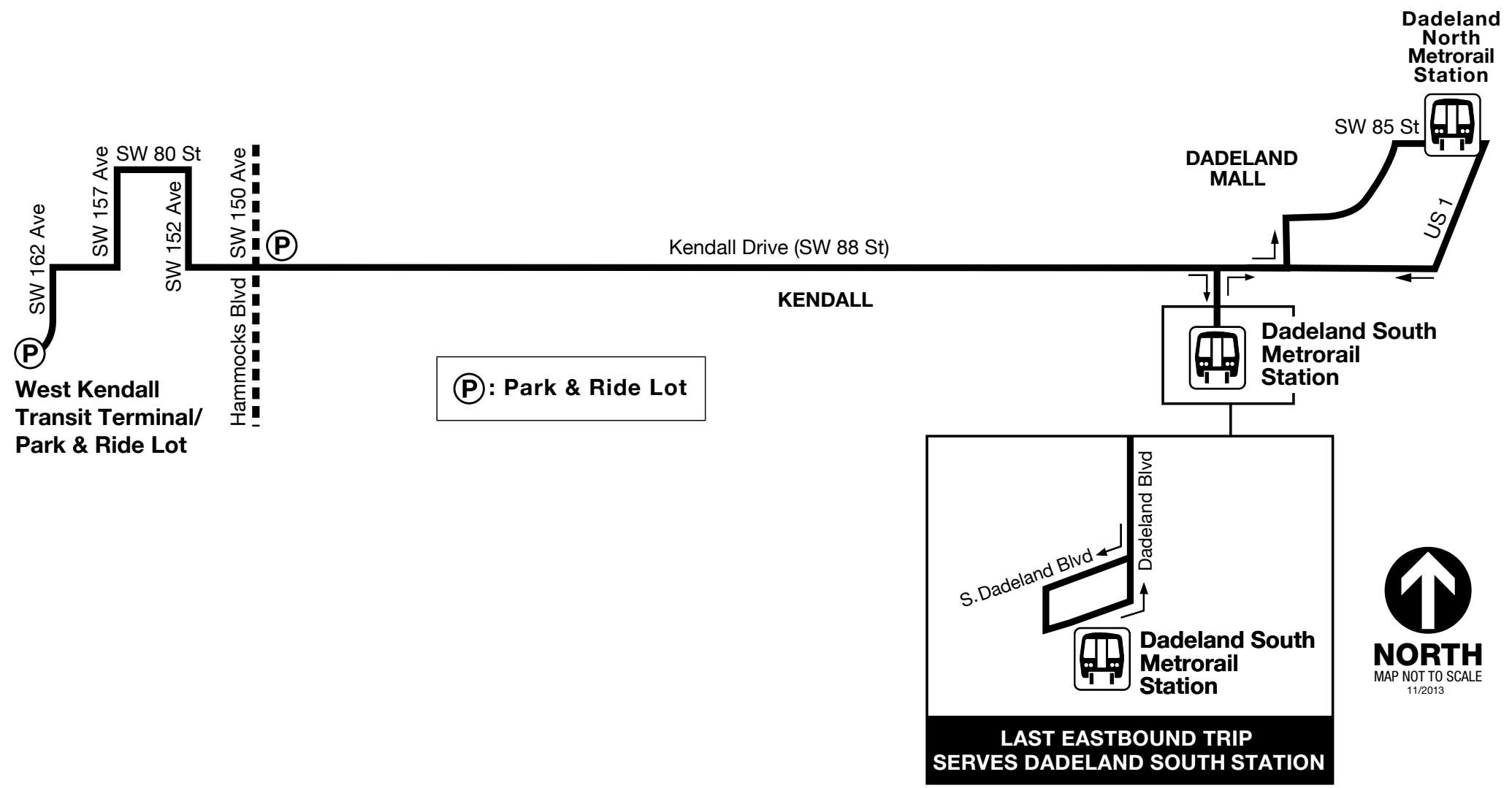
- Miami Lakes:** Starting near NW 186 St and NW 73 Ave, passing NW 179 St, NW 174 St, NW 68 Ave, NW 67 Ave, and Miami Lakes Dr.
- Hialeah:** Passing NW 138 St, NW 60 Ave, W 49 St, and NW 74 St.
- Okeechobee Metrorail Station:** Located near W 19 St and Okeechobee Rd.
- US Post Office General Mail Facility:** Located near Milam Dairy Rd (NW 72 Ave) and NW 12 St.
- Kendall:** Passing W Flagler St, SW 67 Ave, 88 St, and Dadeland Blvd.
- Dadeland Mall:** Located near Dadeland Blvd and Kendall Dr.
- Dadeland Metrorail Station:** Located near Dadeland Blvd and US 1.

A north arrow and the text "NORTH MAP NOT TO SCALE 07/2011" are provided for orientation. A legend indicates that the thick black line represents the "Proposed Metrorail Line" and the dashed line represents the "Proposed Metrorail Station".

Route 87

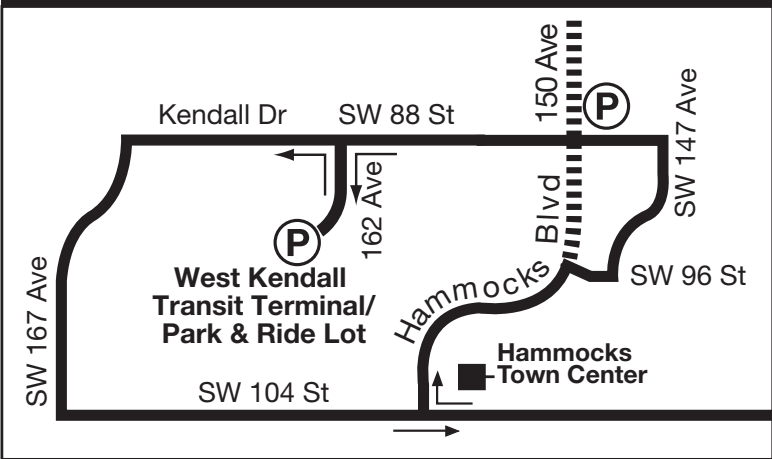


Route 88

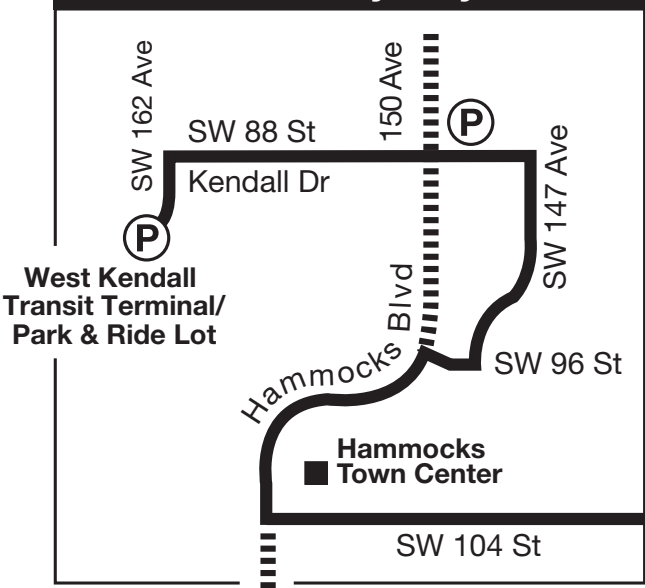


Route 104

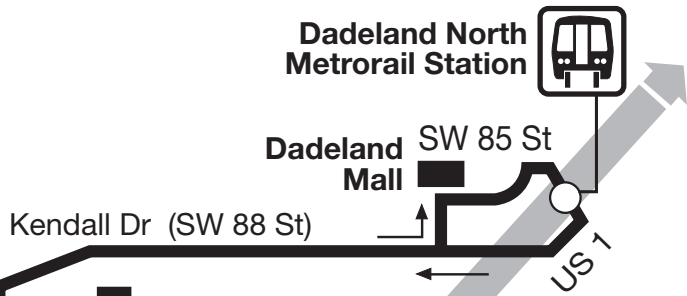
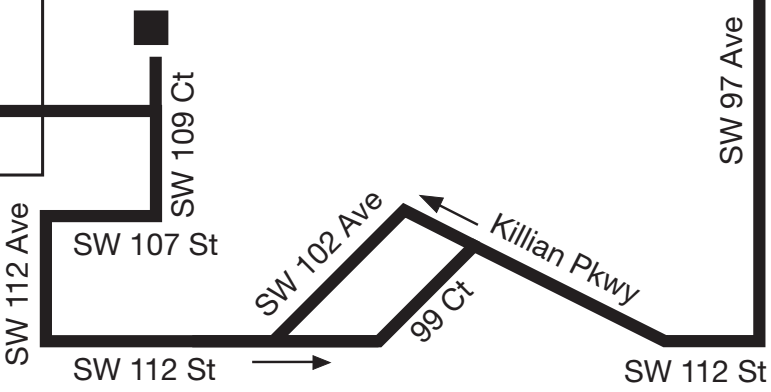
Weekends Only



Weekday Only



Miami Dade College Kendall Campus

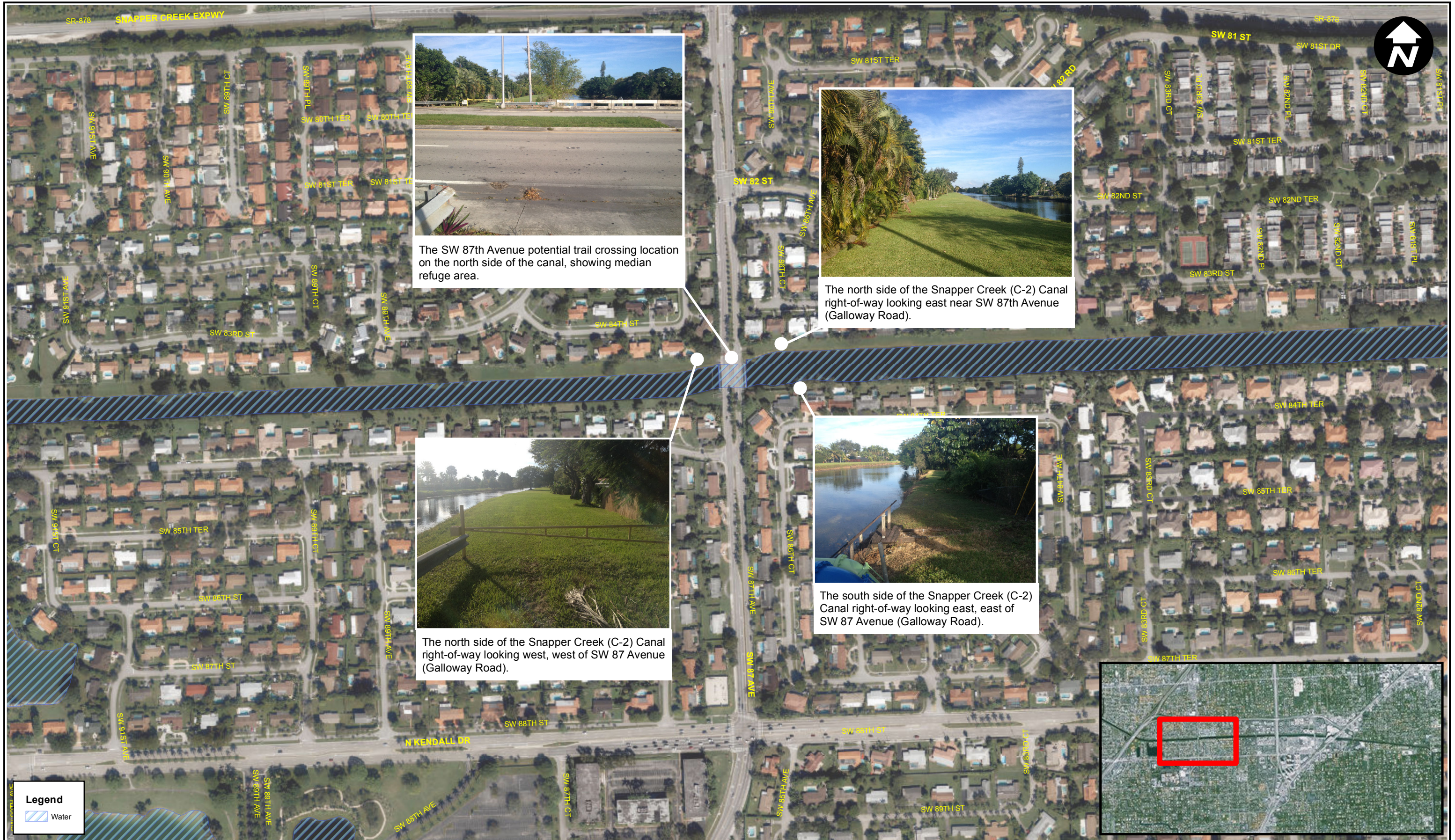


NORTH
MAP NOT TO SCALE
02/11

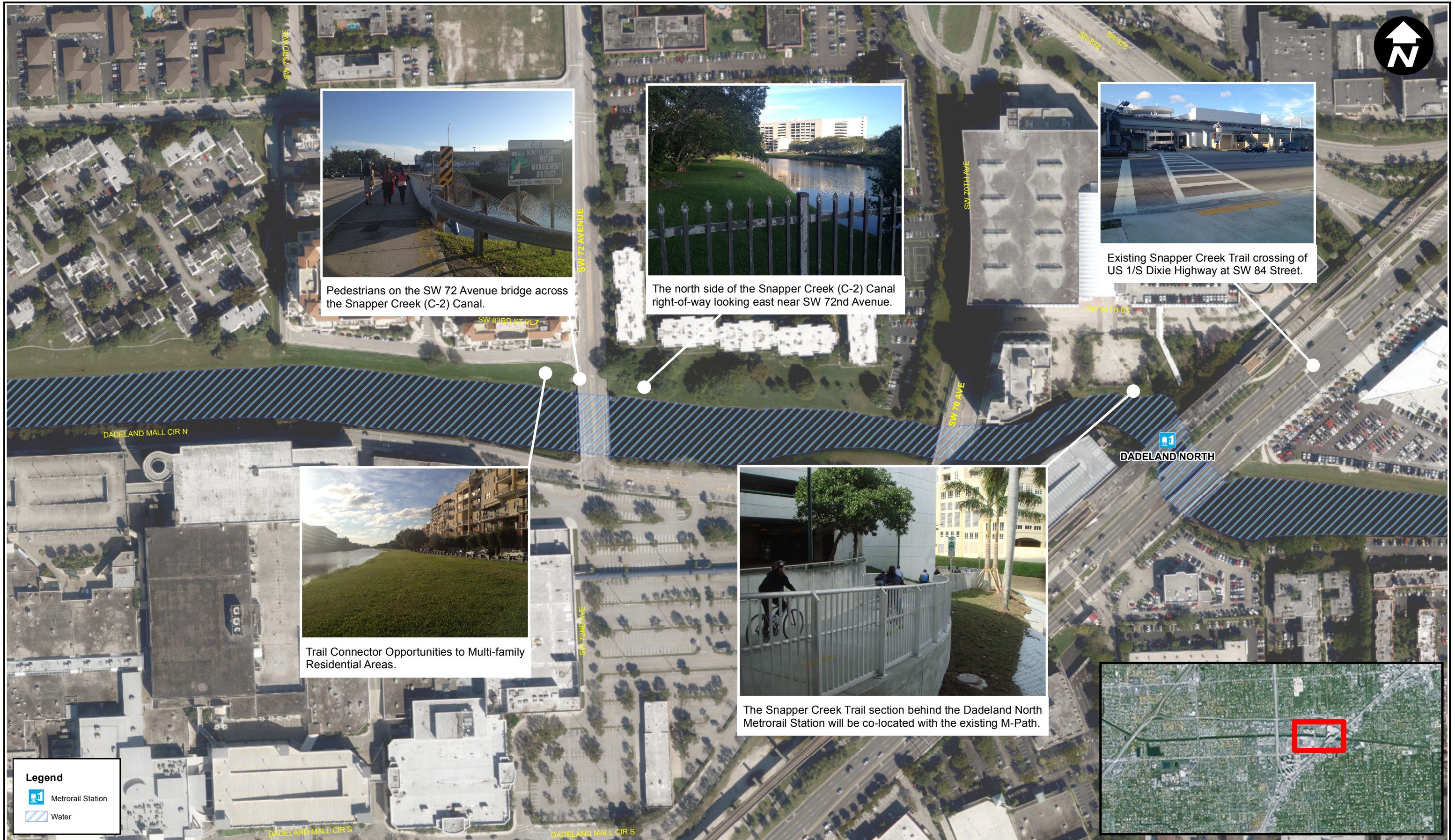
Appendix C

Field Inventory Photos













Appendix D

Public Meeting

Summary Memoranda

Snapper Creek Trail

SEGMENT B MASTER PLAN

Public Workshop

The Miami-Dade Metropolitan Planning Organization invites area residents to attend a public workshop for the Snapper Creek Trail Segment "B" Master Plan from K-Land Park (9475 SW 88 Street) to Dante Fascell Park (8600 SW 57 Ave).

This meeting is for the public to learn about and give input on pedestrian and bicycle improvements within the study corridor. As part of the meeting, County staff will answer questions about the plan. The meeting will be held at:

South Miami City Hall
6130 SW 72nd Street, South Miami, FL 33143

Wednesday, April 27, 2016 | 4:00 to 7:00 p.m.

For further information, requests for language interpreters or questions prior to the meeting contact David Henderson, Miami-Dade MPO at dhenderson@miamidademppo.org.

Hosted by



MIAMI-DADE
METROPOLITAN
PLANNING
ORGANIZATION

in conjunction with

Kimley»Horn

MEMORANDUM

To: David Henderson Miami-Dade County Metropolitan Planning Organization (MPO)	Date: May 6, 2016
From: Stewart Robertson, P.E. Kimley-Horn and Assoc (KH)	Subject: Community Information Workshop
Project: Snapper Creek Trail Segment B Master Plan	Job No.: 040829043

The Community Information Workshop to present the project for the Snapper Creek Trail Segment B Master Plan was held on Wednesday, April 27, 2016 at South Miami City Hall (6130 SW 72nd Street) from 4:00 PM to 7:00 PM. The Community Information Workshop was held as an Open House format and a formal presentation was given approximately halfway through the Workshop to provide the public with a project overview and context. The purpose of the Open House was to present the project and receive input about non-motorized mobility needs, opportunities, and constraints along Snapper Creek Trail Segment B from K-Land Park (9475 SW 88th Street) to the Red Road Linear Park on the east side of SW 57th Avenue at SW 88th Street.

The workshop attracted 29 workshop attendees, of which seven are part of the Steering Committee listed below.

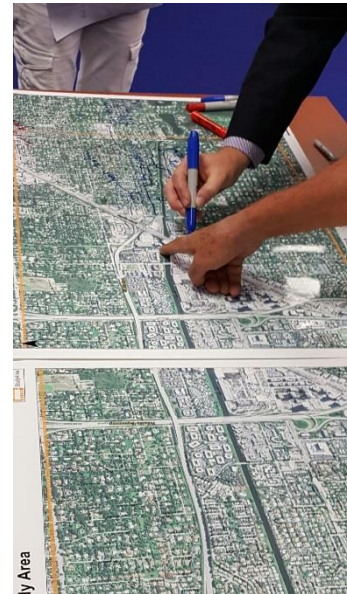
- David Henderson, Project Manager – Miami-Dade County MPO
- Napoleon Somoza – Miami-Dade Regulatory and Economic Resources (RER)
- Mark Heinicke – Miami-Dade Parks, Recreation and Open Spaces (MDPROS)
- Armando Vilaboy – South Florida Water Management District (SFWMD)
- Shari Kamali – City of South Miami
- Stewart Robertson – Kimley-Horn and Associates, Inc. (KH)
- Lisa Juan – Kimley-Horn and Associates, Inc. (KH)

This memorandum presents the notes and comments that were recorded by KH staff. Figures 1 and 2 depict the alignments that were drawn at the workshop.

Snapper Creek Trail Segment B Community Information Workshop Public Comments

- Snapper Creek Trail Segment B is a crucial part of the needed bike/walk infrastructure network especially since it's an east-west corridor. There are many existing north-south trails around the study area such as the M-Path/South Dade Trail, Red Road Linear Park, and Ludlam Trail. This trail supports the east-west connectivity between these trails.

- Some attendees were concerned about the level of announcement for public workshops.
- Investigate the placement of legal property lines/right-of-way lines to determine how much space is available within public right-of-way for the trail and which developments may have an official agreement for maintenance.
- Bicycling on the proposed on-street alignments could dissuade some riders if bicyclists are not comfortable riding on the road. Shared-use paths attract bicyclists with a wider range of skill levels, including children.
- An elevated bridge crossing or depressed tunnel crossing of the Palmetto Expressway at Snapper Creek Canal is needed if the alignment crosses the expressway at the canal.
- Add a canoe/kayak launch site south of SW 87th Street and SW 58th Avenue, just west of Dante Fascell Park.
- SW 85th Street, SW 86th Street, and SW 87th Street are low traffic roads and can be considered as attractive neighborhood greenways alignments.
- SW 84th Street has cut-through and relatively high traffic levels.
- Need to consider short trips/connections within the study area.
- Several residents who live adjacent to the north bank of the canal between SW 57th Avenue and SW 67th Avenue are concerned with the proximity of the proposed trail to residential property.
- Proximity of trail along the canal concerns include the following.
 - Garbage/Waste
 - Noise
 - Security
 - Privacy
 - Cost
 - Safety
 - Property Value Depreciation
 - Narrow Right-of-Way
- In addition to the existing facilities that were presented at the workshop, there is an existing path on SW 72nd Street/Sunset Drive from SW 87th Avenue to SW 107th Avenue that could be considered as part of an alternate alignment.
- Some attendees commented that the proposed Snapper Creek Trail Segment B brings positive impacts to the surrounding communities, connections to community health, recreation, numerous destinations, and other regional trails.
- Several attendees stated that they ride an east-west alignment that includes SW 94th Street, SW 96th Street, and SW 98th Street to go between the K-Land Park/Baptist Hospital area and Pinecrest/Old Cutler Road. SW 98th Street was stated to be busy, but considered to be a better alternative to crossing the Palmetto Expressway on SW 88th Street/Kendall Drive, which is much busier.



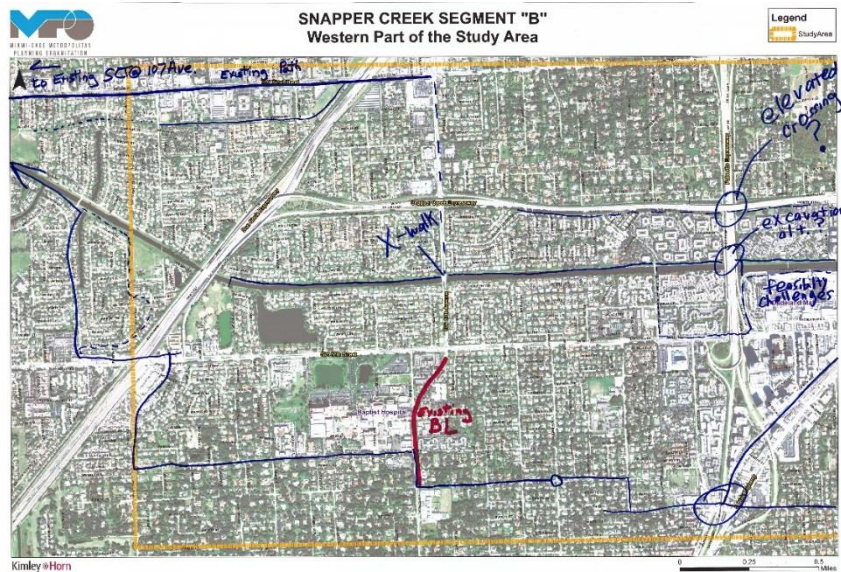


Figure 1. Western Part of the Study Area Aerial

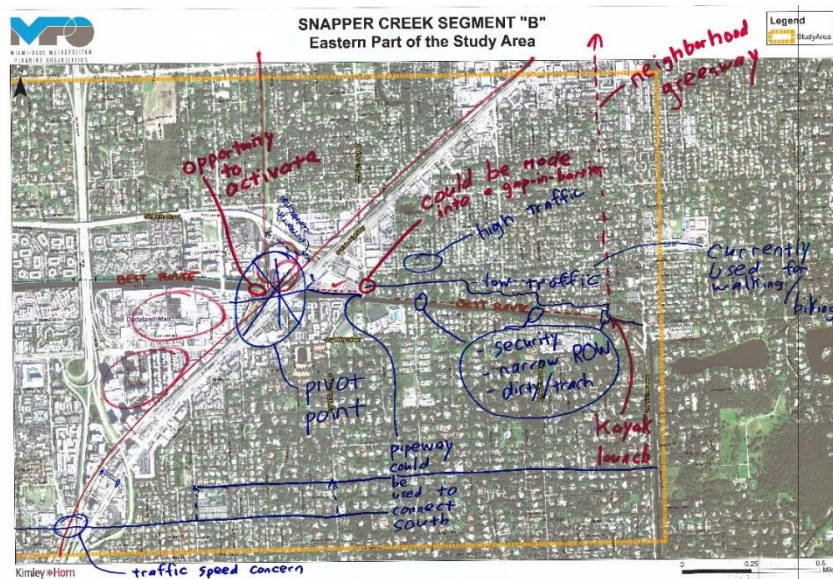


Figure 2. Eastern Part of the Study Area Aerial

Sincerely,

Stewart E. Robertson

Stewart E. Robertson, P.E.

Snapper Creek Trail

SEGMENT B MASTER PLAN

Public Workshop

The Miami-Dade Metropolitan Planning Organization invites area residents to attend a public workshop for the Snapper Creek Trail Segment "B" Master Plan from K-Land Park (9475 SW 88 Street) to Dante Fascell Park (8600 SW 57 Ave).

This meeting is for the public to learn about and give input on pedestrian and bicycle improvements within the study corridor. As part of the meeting, County staff will answer questions about the plan. The meeting will be held at:

South Miami City Hall
6130 SW 72nd Street, South Miami, FL 33143

Monday, June 27, 2016 | 4:00 to 7:00 p.m.

For further information, requests for language interpreters or questions prior to the meeting contact David Henderson, Miami-Dade MPO at dhenderson@miamidademp.org.

Hosted by



MIAMI-DADE
METROPOLITAN
PLANNING
ORGANIZATION

in conjunction with

Kimley»Horn

MEMORANDUM

To: David Henderson Miami-Dade County Metropolitan Planning Organization (MPO)	Date: June 27, 2016
From: Stewart Robertson, P.E. Kimley-Horn and Assoc (KH)	Subject: Community Open House Meeting
Project: Snapper Creek Trail Segment B Master Plan	Job No.: 040829043

The Community Open House Meeting to present the project for the Snapper Creek Trail Segment B Master Plan was held on Monday, June 27, 2016 at South Miami City Hall (6130 SW 72nd Street) from 4:00 PM to 7:00 PM. The Community Information Workshop was held as an Open House format and a formal presentation was given approximately halfway through the Workshop to provide the public with a project overview, recommendations, and context. The purpose of the meeting was to present the project and receive input about non-motorized mobility needs, opportunities, and constraints along Snapper Creek Trail Segment B from K-Land Park (9475 SW 88th Street) to the Red Road Linear Park on the east side of SW 57th Avenue at SW 88th Street. Additional objectives included to learn about the proposed short-term and long-term alignments, to allow residents to voice potential concerns and input regarding the project, and to help shape future plans for the Snapper Creek Trail Segment B corridor.

The workshop attracted 110 attendees, of which six are part of the Steering Committee listed below.

- David Henderson, Project Manager – Miami-Dade County MPO
- Mark Heinicke – Miami-Dade Parks, Recreation and Open Spaces (MDPROS)
- Armando Vilaboy – South Florida Water Management District (SFWMD)
- Shari Kamali – City of South Miami
- Stewart Robertson – Kimley-Horn and Associates, Inc. (KH)
- Lisa Juan – Kimley-Horn and Associates, Inc. (KH)



This memorandum presents the notes and comments that were recorded by KH staff. Figure 1 depicts a display board that was used at the Community Information Workshop.

Snapper Creek Trail Segment B Community Open House Meeting Public Comments

Most of the meeting attendees consistently expressed opposition to the portion of the proposed trail project along canal rights-of-way adjacent to single family residential neighborhoods. Concerns ranged from privacy to security to property values for homes adjacent to the canal. Some of the more specific comments are described below.

- Many attendees expressed that they purchased their property for the privacy that a canal-front home provides. Residents already ride bicycles on the neighborhood streets. Many were in favor of more bike infrastructure, but “completely opposed” to the impact of the proposed canal trail on their backyards. It was expressed as an invasion of privacy, would bring security/crime concerns, attract the homeless, and would create trash and safety issues. Many mentioned that they would have to install fences if the project were to take place, thus losing their view and comfort of the canal.
- Many also stated concerns regarding the safety issues due to the steep banks of the canal. If a trail user were to slip onto the steep embankment, he or she would get injured and not be able to exit the water.
- Some attendees mentioned that a canoe or kayak launch on the canals along the alignment of the proposed path is not appropriate as there are no parking spaces from which to access the canal, and the canal itself if not connected to other bodies of water.
- Many attendees emphasized the opinion that SFWMD has done a poor job in maintaining the conditions of the right-of-way along the canal. Many expressed that after decades of personally maintaining the land along the canal, it would be unfair to now give up the privacy and serenity that the canal banks currently have to offer.
- Several residents of the western area stated the opinion that flashing beacons to cross SW 87 Avenue will not be effective as drivers tend to be careless and aggressive.
- Many of the opposed attendees expressed frustration due to the level of public notice regarding the meeting and the project.

Some attendees offered opinions on the routing of the alignment as described below.

- It was mentioned that using existing streets as neighborhood greenways would be cheaper and would avoid the negative impact on homeowner’s privacy and safety.
- A facility along the canal would give direct access to Dadeland North and K-Land Park. A pedestrian bridge over SR 826 would mitigate the barrier created by the expressway. Metrorail would greatly benefit from a project such as this.
- The short-term alternative is too circuitous and would not be used. Please keep the alignment as close to Snapper Creek as possible. The meeting was full of residents who live along the canal and do not want it, but do not reflect the true needs of the collective Miami-Dade. Homes in the region would greatly benefit from added connectivity. Please move forward with this project.
- Consider SW 87 Ave to SW 72 St, where there is already a bike path from SW 87 Ave to SW 107 St, close to where section bends. It is very difficult to get across SR 874 at K-Land.

Some attendees expressed support for enhanced multimodal connectivity as described below.

- Snapper Creek Trail Segment B is essential. Alternative modes of transport are key to the success of the future of Miami. Traffic is only going to get worse. Car ownership and dependence are expensive; a large part of affordable housing is the cost of transportation.
- An attendee mentioned that bicycle is his primary mode of transportation. This project would bring much needed connectivity to a network that really needs better connectivity. This project would benefit a greater population than the few residents who oppose it.
- Demonstration project east of US 1 is a good idea.
- The biking community in Miami-Dade is eager to see the gaps in the system closed. Thank you for your work, very professional meeting!
- This project is greatly needed in order to provide the west side connectivity to Metrorail and eastward.
- One hit-and-run survivor expressed support for multi-use paths that connect commuters to destinations such as Dadeland Mall, Metrorail, and FIU.

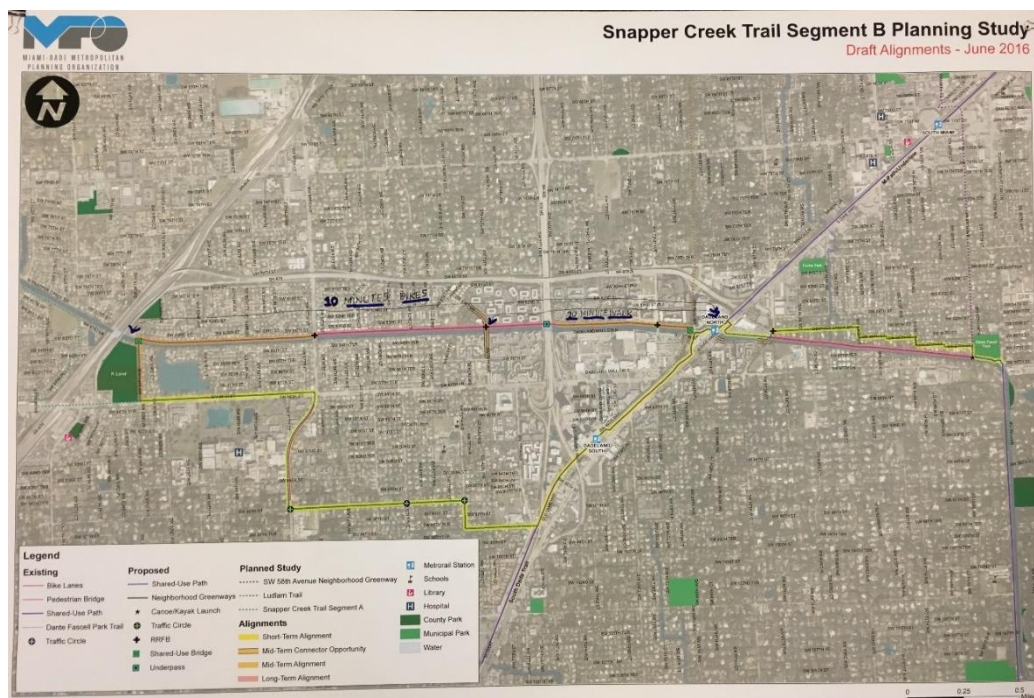


Figure 1. Board depicting alignment options

Sincerely,

Stewart E. Robertson

Stewart E. Robertson, P.E.

Appendix E

Project Cost Estimates

Snapper Creek Trail, Segment B

Opinion of Probable Cost for Trail Elements

Segment 1: The Boys and Girls Club of Miami, Inc./SW Langer/Kendall Unit/K-Land Park to SW 87 Avenue at SW 96 Street

Pay Item Number	Pay Item Description	Length/ Amount	Units	Cost
110 1 1	CLEARING AND GRUBBING	1	AC	\$ 18,500.00
0162 1 11	FINISH SOIL LAYER, 6"	3,400	EA	\$ 3,400.00
0527 1	ADA DETECTABLE WARNING	22	EA	\$ 6,600.00
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	4,889	SY	\$ 171,110.94
0520 1 10	CONCRETE CURB, TYPE F	500	LF	\$ 7,500.00
0520 2 4	CONCRETE CURB, TYPE D		LF	\$ -
630 2 11	CONDUIT, DIRECTIONAL BORE		LF	\$ -
632 7 1	SIGNAL CABLE		LF	\$ -
635 2 11	PULL BOX		EA	\$ -
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST		EA	\$ -
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS		EA	\$ -
665 1 11	PEDESTRIAN DETECTOR		EA	\$ -
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, SINGLE SIDED		EA	\$ -
	PARK KIOSK SIGNS		EA	\$ -
	KAYAK/CANOE LAUNCH		EA	\$ -
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	300	LF	\$ 675.00
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)	450	LF	\$ 1,575.00
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)		EA	\$ -
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)	32	EA	\$ 19,200.00
	ROUNDBABOUT SW 87TH AVE AT SW 96TH ST	1	EA	\$ 500,000.00
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	36	EA	\$ 12,600.00
SubTotal				\$ 741,160.94

Design and Construction Administration	18%	\$ 133,408.97
Survey	3%	\$ 22,234.83
Project Management	12%	\$ 88,939.31
General Requirements	6%	\$ 44,469.66
Bond and Insurance	2%	\$ 14,823.22
MOT	5%	\$ 37,058.05
CEI	12%	\$ 88,939.31
Contingency	20%	\$ 148,232.19
Soft Costs		\$ 578,105.53
Grand Total		\$ 1,319,266.47

Snapper Creek Trail, Segment B

Opinion of Probable Cost for Trail Elements

Segment 2: SW 96 Street/SW 79 Avenue/SW 98 Street

Pay Item Number	Pay Item Description	Length/ Amount	Units	Cost
110 1 1	CLEARING AND GRUBBING		AC	\$ -
0162 1 11	FINISH SOIL LAYER, 6"		EA	\$ -
0527 1	ADA DETECTABLE WARNING	12	EA	\$ 3,600.00
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	556	SY	\$ 19,444.43
0520 1 10	CONCRETE CURB, TYPE F	100	LF	\$ 1,500.00
0520 2 4	CONCRETE CURB, TYPE D		LF	\$ -
630 2 11	CONDUIT, DIRECTIONAL BORE		LF	\$ -
632 7 1	SIGNAL CABLE		LF	\$ -
635 2 11	PULL BOX		EA	\$ -
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST		EA	\$ -
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS		EA	\$ -
665 1 11	PEDESTRIAN DETECTOR		EA	\$ -
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, SINGLE SIDED		EA	\$ -
	PARK KIOSK SIGNS		EA	\$ -
	KAYAK/CANOE LAUNCH		EA	\$ -
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	200	LF	\$ 450.00
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)	300	LF	\$ 1,050.00
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)		EA	\$ -
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)	58	EA	\$ 34,800.00
	TRAFFIC CIRCLE SW 79TH AVE AT SW 96TH ST	1	EA	\$ 200,000.00
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	88	EA	\$ 30,800.00
SubTotal				\$ 291,644.43

Design and Construction Administration	18%		\$ 52,496.00
Survey	3%		\$ 8,749.33
Project Management	12%		\$ 34,997.33
General Requirements	6%		\$ 17,498.67
Bond and Insurance	2%		\$ 5,832.89
MOT	5%		\$ 14,582.22
CEI	12%		\$ 34,997.33
Contingency	20%		\$ 58,328.89
Soft Costs			\$ 227,482.65
Grand Total			\$ 519,127.08

Snapper Creek Trail, Segment B
Opinion of Probable Cost for Trail Elements
Section 3: South Dade Trail/M-Path/Underline

Pay Item Number	Pay Item Description	Length/ Amount	Units	Cost
110 1 1	CLEARING AND GRUBBING		AC	\$ -
0162 1 11	FINISH SOIL LAYER, 6"		EA	\$ -
0527 1	ADA DETECTABLE WARNING		EA	\$ -
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK		SY	\$ -
0520 1 10	CONCRETE CURB, TYPE F		LF	\$ -
0520 2 4	CONCRETE CURB, TYPE D		LF	\$ -
630 2 11	CONDUIT, DIRECTIONAL BORE		LF	\$ -
632 7 1	SIGNAL CABLE		LF	\$ -
635 2 11	PULL BOX		EA	\$ -
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST		EA	\$ -
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS		EA	\$ -
665 1 11	PEDESTRIAN DETECTOR		EA	\$ -
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, SINGLE SIDED		EA	\$ -
	PARK KIOSK SIGNS		EA	\$ -
	KAYAK/CANOE LAUNCH		EA	\$ -
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	300	LF	\$ 675.00
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)		LF	\$ -
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)		EA	\$ -
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)		EA	\$ -
	MISC		EA	\$ -
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	28	EA	\$ 9,800.00
SubTotal				\$ 10,475.00

Design and Construction Administration	18%	\$ 1,885.50
Survey	3%	\$ 314.25
Project Management	12%	\$ 1,257.00
General Requirements	6%	\$ 628.50
Bond and Insurance	2%	\$ 209.50
MOT	5%	\$ 523.75
CEI	12%	\$ 1,257.00
Contingency	20%	\$ 2,095.00
Soft Costs		\$ 8,170.50
Grand Total		\$ 18,645.50

Snapper Creek Trail, Segment B
Opinion of Probable Cost for Trail Elements
Segment 4: Dadeland North/Underline Connector Trail

Pay Item Number	Pay Item Description	Length/ Amount	Units	Cost
110 1 1	CLEARING AND GRUBBING	2	AC	\$ 27,750.00
0162 1 11	FINISH SOIL LAYER, 6"	5,100	EA	\$ 5,100.00
0527 1	ADA DETECTABLE WARNING	16	EA	\$ 4,800.00
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	3,333	SY	\$ 116,666.67
0520 1 10	CONCRETE CURB, TYPE F	350	LF	\$ 5,250.00
0520 2 4	CONCRETE CURB, TYPE D		LF	\$ -
630 2 11	CONDUIT, DIRECTIONAL BORE		LF	\$ -
632 7 1	SIGNAL CABLE		LF	\$ -
635 2 11	PULL BOX		EA	\$ -
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST		EA	\$ -
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS	2	EA	\$ 2,400.00
665 1 11	PEDESTRIAN DETECTOR	2	EA	\$ 400.00
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, DOUBLE SIDED	3	EA	\$ 60,000.00
	PARK KIOSK SIGNS	1	EA	\$ 10,000.00
	KAYAK/CANOE LAUNCH		EA	\$ -
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	1,200	LF	\$ 2,700.00
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)	1,800	LF	\$ 6,300.00
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)		EA	\$ -
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)		EA	\$ -
	SHARED-USE PATH BRIDGE AT LUDLAM TRAIL CORRIDOR	1	EA	\$ 600,000.00
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	44	EA	\$ 15,400.00
SubTotal				\$ 856,766.67

Design and Construction Administration	18%		\$ 154,218.00
Survey	3%		\$ 25,703.00
Project Management	12%		\$ 102,812.00
General Requirements	6%		\$ 51,406.00
Bond and Insurance	2%		\$ 17,135.33
MOT	5%		\$ 42,838.33
CEI	12%		\$ 102,812.00
Contingency	20%		\$ 171,353.33
Soft Costs			\$ 668,278.00
Grand Total			\$ 1,525,044.66

Snapper Creek Trail, Segment B**Opinion of Probable Cost for Trail Elements**

Segment 5: Demonstration Project (US 1/S Dixie Highway to SW 67 Avenue)

Pay Item Number	Pay Item Description	Length/ Amount	Units	Cost
110 1 1	CLEARING AND GRUBBING	1	AC	\$ 18,500.00
0162 1 11	FINISH SOIL LAYER, 6"	3,300	EA	\$ 3,300.00
0527 1	ADA DETECTABLE WARNING	6	EA	\$ 1,800.00
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	2,222	SY	\$ 77,777.78
0520 1 10	CONCRETE CURB, TYPE F	400	LF	\$ 6,000.00
0520 2 4	CONCRETE CURB, TYPE D		LF	\$ -
630 2 11	CONDUIT, DIRECTIONAL BORE		LF	\$ -
632 7 1	SIGNAL CABLE		LF	\$ -
635 2 11	PULL BOX		EA	\$ -
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST		EA	\$ -
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS		EA	\$ -
665 1 11	PEDESTRIAN DETECTOR		EA	\$ -
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, DOUBLE SIDED	2	EA	\$ 40,000.00
	PARK KIOSK SIGNS	1	EA	\$ 10,000.00
	KAYAK/CANOE LAUNCH		EA	\$ -
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	5,000	LF	\$ 11,250.00
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)	100	LF	\$ 350.00
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)		EA	\$ -
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)		EA	\$ -
	CONNECTIVITY TO SW 85 STREET	1	EA	\$ 50,000.00
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	24	EA	\$ 8,400.00
SubTotal				\$ 227,377.78

Design and Construction Administration	18%	\$ 40,928.00
Survey	3%	\$ 6,821.33
Project Management	12%	\$ 27,285.33
General Requirements	6%	\$ 13,642.67
Bond and Insurance	2%	\$ 4,547.56
MOT	5%	\$ 11,368.89
CEI	12%	\$ 27,285.33
Contingency	20%	\$ 45,475.56
Soft Costs		\$ 177,354.67
Grand Total		\$ 404,732.44

Snapper Creek Trail, Segment B**Opinion of Probable Cost for Trail Elements**

Segment 6: SW 67 Avenue at SW 85 Street to Dante Fascell Park/SW 57 Avenue

Pay Item Number	Pay Item Description	Length/ Amount	Units	Cost
110 1 1	CLEARING AND GRUBBING	0.5	AC	\$ 9,250.00
0162 1 11	FINISH SOIL LAYER, 6"	890	EA	\$ 890.00
0527 1	ADA DETECTABLE WARNING	10	EA	\$ 3,000.00
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	1,111	SY	\$ 38,888.85
0520 1 10	CONCRETE CURB, TYPE F	100	LF	\$ 1,500.00
0520 2 4	CONCRETE CURB, TYPE D		LF	\$ -
630 2 11	CONDUIT, DIRECTIONAL BORE		LF	\$ -
632 7 1	SIGNAL CABLE		LF	\$ -
635 2 11	PULL BOX		EA	\$ -
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST		EA	\$ -
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS	3	EA	\$ 3,600.00
665 1 11	PEDESTRIAN DETECTOR		EA	\$ -
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, SINGLE SIDED		EA	\$ -
	PARK KIOSK SIGNS	1	EA	\$ 10,000.00
	KAYAK/CANOE LAUNCH	1	EA	\$ 50,000.00
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	100	LF	\$ 225.00
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)	200	LF	\$ 700.00
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)		EA	\$ -
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)	40	EA	\$ 24,000.00
	INTERSECTION CROSSING IMPROVEMENTS SW 57 AVENUE AT SW 88 STREET	1	EA	\$ 50,000.00
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	56	EA	\$ 19,600.00
SubTotal				\$ 211,653.85

Design and Construction Administration	18%	\$ 38,097.69
Survey	3%	\$ 6,349.62
Project Management	12%	\$ 25,398.46
General Requirements	6%	\$ 12,699.23
Bond and Insurance	2%	\$ 4,233.08
MOT	5%	\$ 10,582.69
CEI	12%	\$ 25,398.46
Contingency	20%	\$ 42,330.77
Soft Costs		\$ 165,090.00
Grand Total		\$ 376,743.85

Snapper Creek Trail, Segment B

Opinion of Probable Cost for Trail Elements

Total Summary

Pay Item Number	Pay Item Description	Length/A mount	Units	Cost
110 1 1	CLEARING AND GRUBBING	4	AC	74,000
0162 1 11	FINISH SOIL LAYER, 6"	12,690	EA	12,690
0527 1	ADA DETECTABLE WARNING	66	EA	19,800
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	12,111	SY	423,889
0520 1 10	CONCRETE CURB, TYPE F	1,450	LF	21,750
0520 2 4	CONCRETE CURB, TYPE D	-	LF	-
630 2 11	CONDUIT, DIRECTIONAL BORE	-	LF	-
632 7 1	SIGNAL CABLE	-	LF	-
635 2 11	PULL BOX	-	EA	-
646 1 12	ALUMINUM SIGNALS POLE, PEDESTRIAN DETECTOR POST	-	EA	-
065 3192	PEDESTRIAN SIGNAL, COUNT DOWN, 2 DIRECTIONS	5	EA	6,000
665 1 11	PEDESTRIAN DETECTOR	2	EA	400
0654 2 21	RECTANGULAR RAPID FLASHING BEACON, SOLAR POWERED, GROUND MOUNTED, SINGLE SIDED	5	EA	100,000
	PARK KIOSK SIGNS	3	EA	30,000
	KAYAK/CANOE LAUNCH	1	EA	50,000
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" (Crosswalks)	7,100	LF	15,975
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" (Stop bars and Crosswalk)	2,850	LF	9,975
0711 11170	THERMOPLASTIC, STD, WHITE, ARROW (SHARED LANE MARKING)	-	EA	-
	THERMOPLASTIC, STD, WHITE, ARROW (GREEN-BACKED SHARED LANE MARKING)	130	EA	78,000
	MISC ITEMS ON INDIVIDUAL SEGMENTS	5	EA	1,400,000
0700 1 11	SINGLE POST SIGN, GROUND MOUNT	276	EA	96,600
		Sub-Total		2,339,079
Design and Construction Administration		18%		421,034
Survey		3%		70,172
Project Management		12%		280,689
General Requirements		6%		140,345
Bond and Insurance		2%		46,782
MOT		5%		116,954
CEI		12%		280,689
Contingency		20%		467,816
				-
Soft Costs				1,824,481
Grand Total				4,163,560

WORK ORDER
#GPC V-30



MIAMI-DADE
METROPOLITAN
PLANNING
ORGANIZATION

Snapper Creek Trail

SEGMENT "B" MASTER PLAN



Kimley»Horn