

Go-Forward Roadway Landscape Master Plan

April 2020

Prepared by:





Acknowledgments

The development of the City of Tamarac Master Landscape Study has been a collaborative effort between City officials, staff, and the Miller Legg team.

The project team would like to offer their deepest gratitude to those with the City of Tamarac who worked in conjunction with the Miller Legg team. Your contributions have been an integral part of the planning process.

Project Team

City Of Tamarac Staff

Robert W. Johnson III Planner

Rodney Sims Operations Manager

Levertis Byrd Landscape Supervisor

Miller Legg

Brian Shore RLA Project Landscape Architect

Liudmila Fuentes Landscape Designer / Planner

Michael Bradley Landscape Designer / Planner

City Of Tamarac Commission

Michelle J. Gomez Mayor, City of Tamarac

Marlon D. Bolton Vice Mayor, District 1

Mike Gelin Commissioner, District 2

Julie Fishman Commissioner, District 3

Debra Placko Commissioner, District 4

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EXECUTIVE SUMMARY

A. INTRODUCTION & BACKGROUND

The city of Tamarac was founded by Kenneth E. Behring, a developer, in the early 1960's. With his first development being completed in 1963, Tamarac was officially incorporated. Behring sought to create a community for active adults that brought the ideas of a condominium association and single family dwellings together for an older population. The first developments were Tamarac Lakes section one and two, east of SR-7 near Oakland Park. These developments consisted of single family houses that shared common amenities for their residents. These two areas formed the basis for Behring's future developments as he acquired more land to the west.

C. EXISTING CONDITIONS

An in depth inventory of the medians throughout the city was undertaken. All existing trees and hardscape areas within the median right-of-ways were documented with GPS coordinates and in photographs. This section of the Master Plan details these findings and is organized by roadway category. The categories are as follows: Principal Arterial, Minor Arterial, Collector Road, Local Street, Key Intersection, and Gateways. Each section breaks down the corridors into segments, contains photographs depicting the normal conditions, written descriptions, and an analysis of the planting areas' resiliency. The City of Tamarac rates at an 88% on the resiliency scale, but by removing low scoring plants and adding in a small amount of highly rated ones, the score can be raised above 90%

D. ANALYSIS OF OPPORTUNITIES & CONSTRAINTS

Following the inventory of existing conditions, an analysis of landscape opportunities and constraints was completed. The analyses in this section cover: street hierarchy, right of way jurisdiction, community and business identity, gateway and key intersections, condition of landscape and irrigation, landscape challenges, planting opportunities, hardscape, and typical micro climatic features. Overall these analyses, when used in conjunction with each other and the existing conditions inventory, create a prioritization of need for the city.

E. DESIGN GUIDELINES

Design guidelines have been designated for the installation of this project. In order to create the design guidelines for planting inside of the median, the FDOT FDM and Greenbook were consulted. This portion of the plan details the spacing of trees, their offset from the curb, as well the clear sight window and line of sight for turn lanes. Outside of these design guidelines, installation guidelines for plants and hardscape have been laid out. Plant installation includes guidelines for small, medium, and large trees and palms, as well as shrubs. These guidelines should be followed in order to ensure healthy plantings. The hardscape guidelines are put in place with regard to the pavers found throughout the city. These guidelines must be followed in order to prevent differential settling. Paver design options can also be found in this section. Lastly, the design guidelines provides a proposed planting palette consisting of small, medium, and large trees and palms, as well as shrubs and ground covers.





F. TYPICAL CONCEPTUAL LANDSCAPE CORRIDORS

Based upon the analysis of opportunities and constraints and the proposed design guidelines, typical conceptual landscapes were created per corridor. For each category of corridor, existing and proposed cross sections and plans have been rendered. These conceptual landscape drawings depict the potential changes to the landscape within the medians. The previously identified "key intersections" have also been analyzed. Each intersection is shown with potential conflicts to the landscape as well as areas of opportunity for landscape in the right of ways. These opportunities have been given a hierarchy of un-obstructed and obstructed, based on the conflicts present at each intersection.

G. IMPLEMENTATION

Based on the analyses and proposals in the Master Plan, an implementation strategy and relative cost estimate were created for the entirety of the project. The implementation strategy and cost estimate were adopted on a corridor by corridor basis. After each corridor was given a relative cost estimate, they were totaled into the four groups of corridors including Primary and Minor Arterials, Collector Roads, and Local Streets. From these estimates, the total cost estimate without accounting for inflation sits at \$36,620,218. The project cost assumes a 12.5% inflation cost anticipating an average yearly inflation of 1.25% over a ten year span. With accounting for this inflation rate, the final cost estimate is \$41,106,194.

H. RECOMMENDATIONS

Based on the implementation strategy and relative cost estimate, recommendations were made that assist with finding sources of revenue to help fund the implementations. Recommendations varied from establishing a percentage from future development activity to seeking free nursery space within the City. Figure 6.5 details areas potentially available for "free nursery space" within the City. The map depicts City owned parks with available space for tree propagation. These parks include Southgate Linear Park, Sunset Point Park, Sabal Palm Park, and the Wildlife Preserve on Prospect Road. The preferred location is Southgate Linear Park due to its large capacity and almost Citywide stretch. Although the team recommends that the city prioritizes the use of Southgate Linear Park as the primary location for "free nursery space", all parks were identified for multiple reasons. Each area is located next to a Primary or Minor Arterial, and has ample open green space available for a nursery. The locations of these parks allow for the ease of transportation when transplanting trees to any of the corridors proposed in the Master Plan. By spreading propagation to multiple areas, more of the City can be covered, ultimately saving on transportation expenditures.







HISTORY OF TAMARAC

The city of Tamarac was founded by Kenneth E. Behring, a developer, in the early 1960's. With his first development being completed in 1963, Tamarac was officially incorporated. Behring sought to create a community for active adults that brought the ideas of a condominium association and single family dwellings together for an older population. The first developments were Tamarac Lakes section one and two, east of SR-7 near Oakland Park. These developments consisted of single family houses that shared common amenities for their residents. These two areas formed the basis for Behring's future developments as he acquired more land to the west.

Throughout the expansion process and into the 1970's, the City decided it wanted to maintain its image as a residential community and portions of commercial zones were allowed to be annexed by surrounding municipalities. As the city continued to grow, it attracted various businesses and public / private attractions such as golf courses, which in turn brought more people to Tamarac. As the city went on, it began to lose its image as a retirement community for active adults and began to attract a younger population as its developments began to open up age restrictions. The city as a whole is more diverse than ever with an incredibly varied population in both age and ethnicity.

Source: https://tamarachistoricalsociety.webs.com/history-of-city-of-tamarac



Figure 1.1: 1969 Aerial view of The Mainlands neighborhood in Tamarac



Figure 1.2: 1960's picture of a drive slow sign being placed at Tamarac Lakes North neighborhood



Figure 1.3: 1968 Aerial view of Tamarac (Commercial Blvd. and Florida Turnpike).



CITY VISION, MISSION, VALUES





Vision:

The City of Tamarac, Our Community of Choice- Leading the nation in quality of life through safe neighborhoods, a vibrant economy, exceptional customer service, and recognized excellence.



Mission:

We are: "Committed to Excellence...Always" It is our job to foster and create an environment that:

- Responds to the Customer
- Creates and Innovates
- Works as a Team
- Achieves Results
- Makes a Difference



Values:

As Stewards of the public trust, we value:

- Vision
- Integrity
- Efficiency
- Quality Service



Strategic Goals:

I. INCLUSIVE COMMUNITY:

The City of Tamarac is committed to providing programs and services that meet the needs of an increasingly diverse community.

2. HEALTHY FINANCIAL ENVIRONMENT:

The City of Tamarac will utilize financial management to develop and maintain a healthy financial environment, encouraging and supporting economic development and redevelopment.

3. DYNAMIC ORGANIZATIONAL CULTURE

The City of Tamarac will create and sustain a culture conducive to development and retention of a skilled workforce.

4. CLEAR COMMUNICATION:

The City of Tamarac will ensure effective communication within the organization and throughout the City, and enhance visibility of City programs and services.

5. A VIBRANT COMMUNITY:

The City of Tamarac will provide resources, initiatives and opportunities to continually revitalize our community and preserve the environment.

The City of Tamarac Master Landscape Study works to achieve Strategic Goal 5: A Vibrant Community. The revitalization of the landscape corridors throughout the city will bring a new, cohesive image to the city. It will also promote the preservation of the natural and personal environments.







INTRODUCTION

The Tamarac Roadway Master Landscape Plan is meant to be an update of the 1996 landscape study. The main goal of the project is to provide the City a "go-forward" Master Plan for the major roadway corridors affecting the improvements performed since the 1996 study. This also includes the City's redevelopment and corridor enhancement initiatives such as the 2014 Commercial Arterial

redevelopment Study and the 2013 Major Arterial Corridor Study as well as an update upon the 2012 tree inventory and assessment.

Through multiple phases of inventory, analysis, and information gathering, the Tamarac Roadway Master Landscape Plan is able to provide conceptual designs, design guidelines, implementation guidelines, and general recommendations. The inventory and analysis phase consisted of the documentation, explanation, and categorization of existing roadway corridors and conditions. The roadways were categorized into four groups including Principal Arterial, Minor Arterial, Collector, and Local Street. These categorizations form the basis for the inventory and analysis, as well as the design guidelines and recommendations.

After the gathering information phase, opportunities and constraint analysis occurred in order to create the guidelines and recommendations. Topics included the aforementioned categorizations to create a hierarchy of streets, identifying opportunities for gateways and key intersections, "areas of identity" in the City, conditions of landscape and irrigation systems, opportunities for plant material, existing hardscape, micro climatic factors, and maintenance and safety issues.

From these various analyses, the project team created conceptual designs, design and implementation guidelines, recommendations, and a schedule of time and probable cost.



Figure 1.4: Welcome to Tamarac gateway sign.



Figure 1.5: Tephford Park at City of Tamarac





CITY WIDE MAP OF TAMARAC



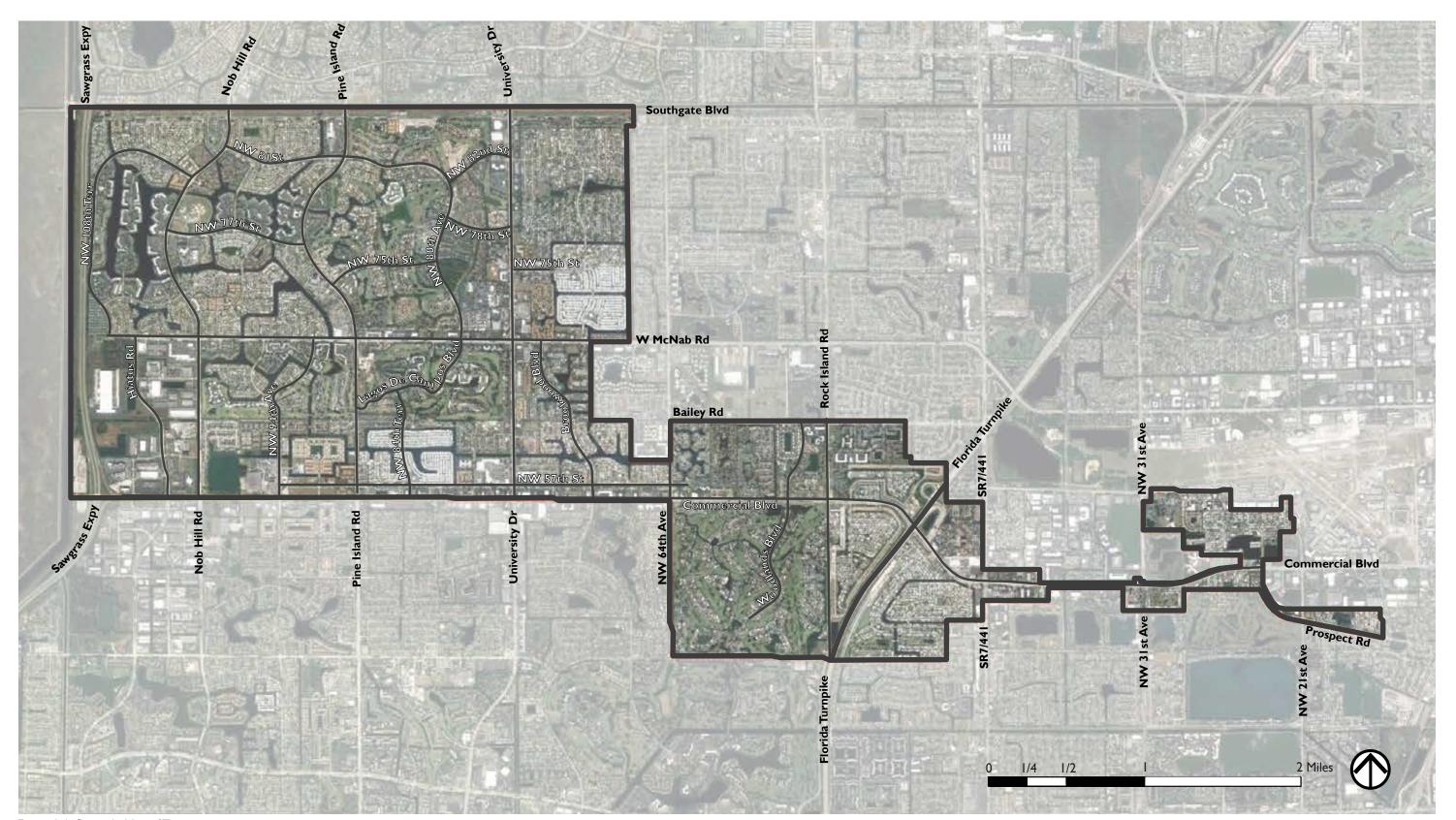


Figure 1.6: Citywide Map of Tamarac





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CORRIDOR CLASSIFICATIONS

The various corridors throughout Tamarac have been classified based on the Broward Highway Functional Classifications, and surrounding land usage. The classifications are as follows:









Principal Arterial

• "Principal Arterials" provide a high range of mobility and access through the core of the urban area. They radiate out to other arterials, collector roads, and local streets. "Principal Arterials" have the highest and most consistent traffic volumes.

Minor Arterial

• "Minor Arterials" serve the same function of "Principal Arterials" but to a lesser extent. These roads help to connect the various "Principal Arterials" to each other and residential areas to more commercial zones without interfering with the neighborhood. "Minor Arterials" still have a large traffic demand but to a lesser extent than those of "Principal Arterials.

Collector Road

• "Collector Roads" funnel traffic from high density residential areas to the system of arterials. They enter into residential neighborhoods and vary in length with low traffic needs, speed limits, and rare signalized intersections. Often "collector roads" are open to through traffic.

Local Streets

• "Local Streets" are the smallest unit in the system with direct access to specific plots of land. They provide citizens with direct access to "Collector Roads" and the system of arterials. "Local Streets" have the lowest traffic needs and are often closed to through traffic.

Key Intersections

• "Key Intersection" are where two major roadways join or cross. These intersections are found at the connections of either principal or minor arterial streets and are heavily trafficked.

Gateways

• "Gateways" are the entrances into the City. They are found along the borders of Tamarac and the surrounding cities at the intersections of Principal Arterials, Minor Arterials, and Collector Roads. They are heavily trafficked and often have signage denoting the threshold of the city.



STREET HIERARCHY, KEY INTERSECTIONS, & GATEWAYS

Depiction of classified corridors into the following 4 classifications: Principal Arterial, Minor Arterial, Collector, Local Street; plus key Intersections and gateway.

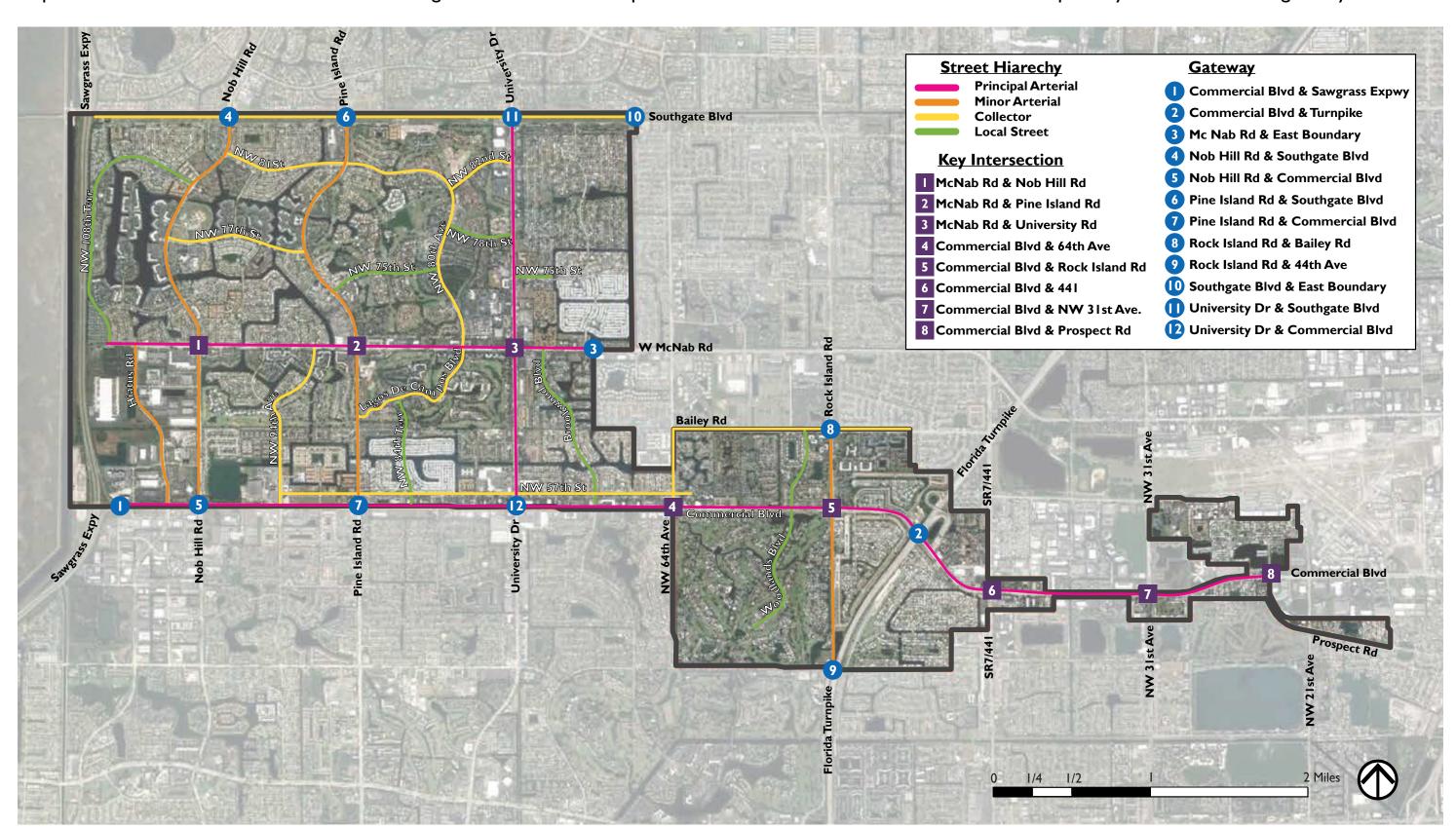


Figure 2.1: Street Hierarchy, Key Intersections, & Gateways Map







Commercial Blvd.



University Dr.



McNab Rd.









PRINCIPAL ARTERIAL

Showcase of Principal Arterial roads.



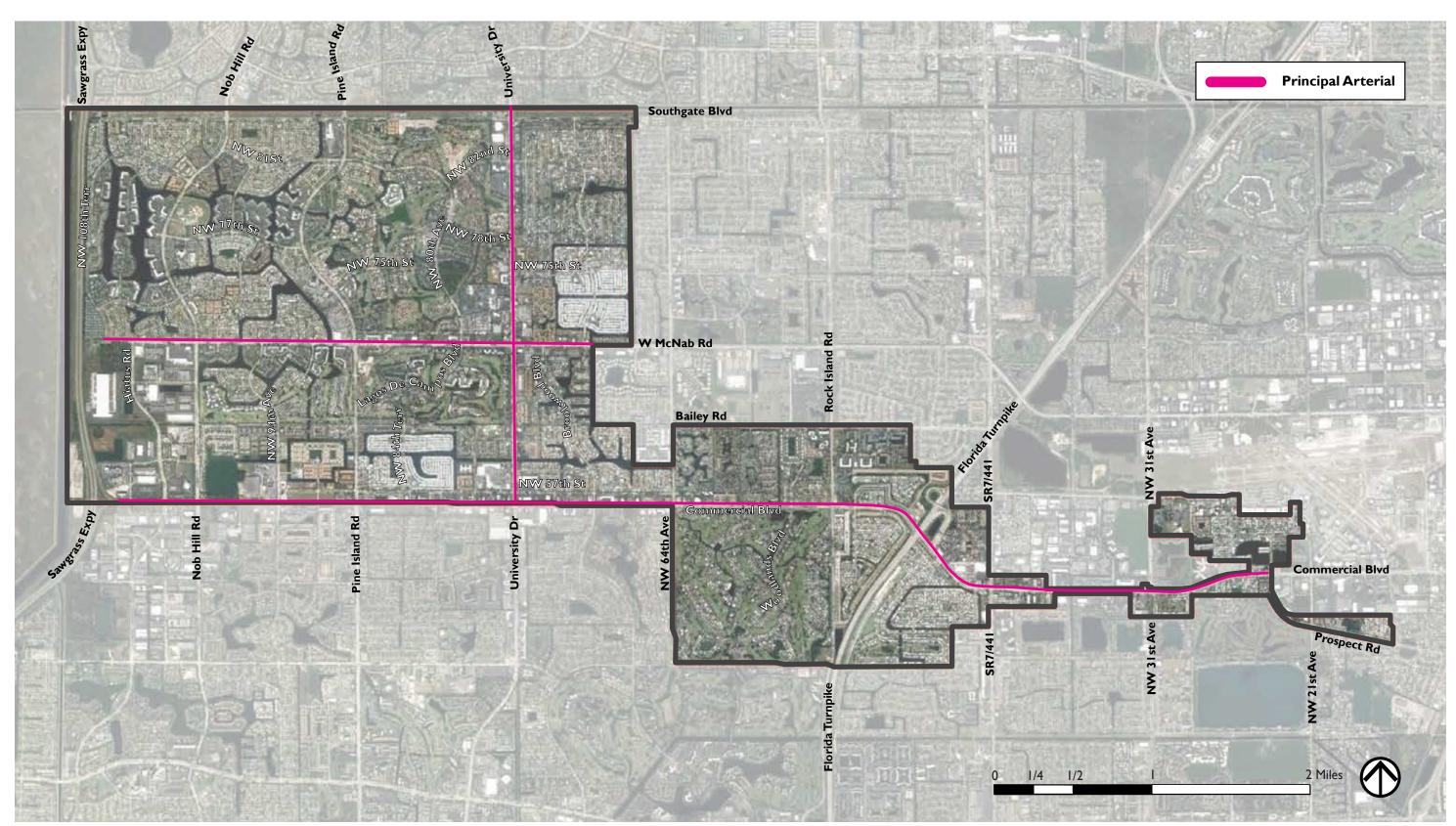


Figure 2.2: Principal Arterial Roads Map





PRINCIPAL ARTERIALS

"Principal Arterials" provide a high range of mobility and access through the core of the urban area. They radiate out to other arterials, collector roads, and local streets. "Principal Arterials" have the highest and most consistent traffic volumes.

Due to the high traffic rates of the principal arterials, traveling along these corridors can be slow. Therefore, the landscape along these arterials is highly noticeable. Unfortunately, the medians along Commercial Blvd. and University Dr. have many sections that are either missing landscape, or unmaintained. Due to the slower speeds during high traffic hours, these negative aspects become more The primary noticeable. arterials have the highest ecological diversity of all of the corridor typologies, which provides a diverse experience while driving through them. landscape areas These also have different planting schemes throughout, both as individual corridors and as a group. It is because of these factors that the corridors lack

cohesiveness in identity.



Bucida buceros
Black Olive



Bursera simaruba **Gumbo Limbo**



Caesalpinia granadillo Bridal Veil Tree



Callistemon viminalis
Weeping Bottlebrush



Clusia rosea
Pitch Apple



Cocoloba uvifera **Seagrape**



Conocarpus erectus

Green Buttonwood



Conocarpus erectus var. sericeus
Silver Buttonwood



Eriobotrya japonica **Loquat**



Jatropha integerrima **Peregrina**



Lagerstroemia indica
Crepe Myrtle



Lugustrum japonicum
Ligustrum



Lysiloma sabicu **Sabicu**



Magnolia grandifolia
Southern Magnolia



Pinus elliotii var. densa **Slash Pine**



Milletia pinnata **Pongam Tree**



Quercus Virginiana **Live Oak**



Senna surattensis Glaucous Cassia



Swietenia mahogoni **Mahogany**



Tabebuia aurea
Silver Trumpet



Tabebuia caraiba
Yellow Trumpet



Tabebuia heterophylla
Pink Trumpet



Veitchia arecina

Montgomery Palm







Adonidia merrilli **Christmas Palm**



Cocos nucifera

Coconut Palm





Roystonea regia Royal Palm





Livistonia chinensis **Chinese Fan Palm**

Sabal palmetto Cabbage Palm



Sygarus romanoffiana

Queen Palm



Veitchia winin Winin Palm



Washingtonia robusta Washington Palm



Dwarf Bougainvillea



Petra Croton



Silver Buttonwood

Purple Crinum Lily



Red Hawaiian-Ti Plant

Gold Mound



Green Island Ficus



Dwarf Fire Bush



Ilex vomitoria 'Schillings' Yaupon Holly



Dwarf Jatropha



Juniperus horizontalis **Blue Rug Juniper**



Dianella tasmanica 'Variegata' **Blueberry Flax Lily**



Var. Arbicola



Saw Palmetto

EXISTING TREES: PRINCIPAL ARTERIAL

Scientific Name	Common Name	Commercial Blvd.	University Dr.	McNab Rd.			
Adonidia merrilli	Christmas Palm			5			
Bucida buceras	Black Olive	4	I	3			
Bursera simaruba	Gumbo Limbo			6			
Caesalpinia granadillo	Bridal Veil Tree	14					
Callistemon viminalis	Weeping bottlebrush		2				
Clusia rosea	Pitch Apple		6				
Coccoloba uvifera	Seagrape	2					
Cocos nucifera	Coconut Palm	I					
Conocarpus erectus	Green Buttonwood			13			
Conocarpus erectus	Silver Buttonwood	32	3				
Eriobotrya japonica	Loquat	19		-			
Jatropha integerrima	Peregrina			4			
Lagerstroemia indica	Crepe Myrtle	23	6				
Ligustrum japonicum	Ligustrum		I				
Livistonia chinensis	Chinese fan palm	2	27				
Lysiloma sabicu	Sabicu	9					
Magnolia grandifolia	Southern Magnolia	5					
Pinus elliotii v. densa	Slash Pine	5					
Pongamia pinnata	Pongam Tree	2					
Quercus virginiana	Live Oak	43	14	24			
Roystonea regia	Royal Palm			5			
Sabal palmetto	Cabbage Palm	59	23	104			
Senna surattensis	Glaucous Cassia		3				
Swietenia mahogoni	Mahogany		5	4			
Sygarus romanzoffiana	Queen palm	8					
Tabebuia aurea	Silver Trumpet	I					
Tabebuia caraiba	Yellow Trumpet	2					
Tabebuia hetetophylla	Pink Trumpet	ı	I	2			
Veitchia arecina	Montgomery Palm	18	49	21			
Veitchia winin	Winin Palm		9				
Washingtonia robusta	Washington Palm		41				
able 1.1: Existing Trees: Principal Arterial Quantity Chart							

Table 1.1: Existing Trees: Principal Arterial Quantity Chart





COMMERCIAL BLVD (SAWGRASS EXPWY - NOB HILL RD)

Principal Arterial

Commercial Blvd between the Sawgrass Expressway and Nob Hill Rd is zoned as a mixed use corridor. The area is split between industrial on the western half of the area and commercial use on the eastern half.

The landscape on this portion of Commercial Blvd is mature and well maintained. It consists of primarily of turf, in good condition, two large trees, and a single coconut palm.

The median is curbed in concrete, with pavers in the bull noses and where landscape elements are absent.

* Note there is an approved future landscape improvement project on Commercial Blvd. from Sawgrass Expwy. to Pine Island Rd., which will impact the current conditions.

COMMERCIAL BLVD (NOB HILL RD - PINE ISLAND RD)

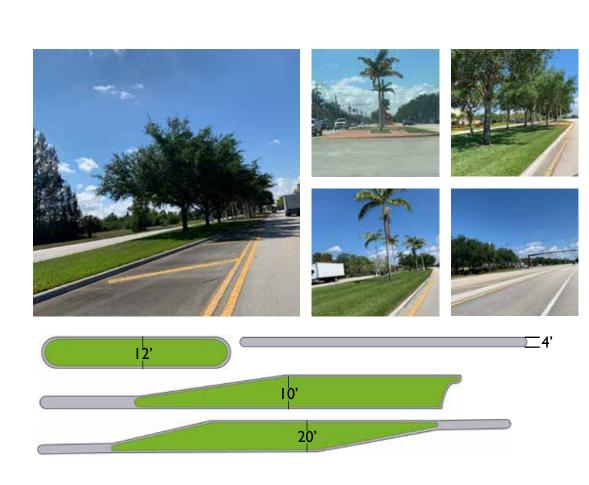
Principal Arterial

Commercial Blvd between Nob Hill Rd and Pine Island Rd is mixed use containing commercial elements and general mixed use. The Millennium 6-12 Collegiate Academy sits on the intersection of Commercial Blvd and 94th Ave.

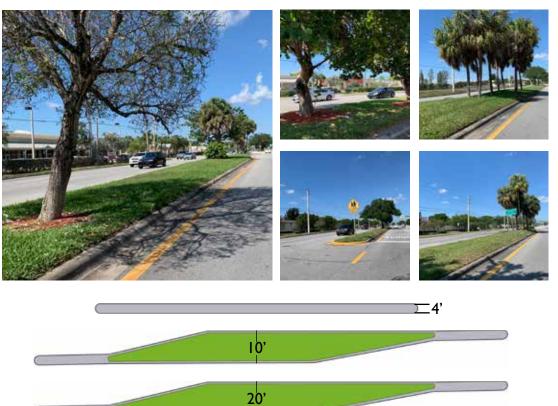
The landscape on this portion of Commercial Blvd is mature and well maintained. It consists of primarily of open turf, large trees, and various patches of designed palms.

The median is curbed in concrete, with pavers in the bull noses and where landscape elements are absent. The palm patches are surrounded by red pavers and intermittently placed between the various hardwoods.

* Note there is an approved future landscape improvement project on Commercial Blvd. from Sawgrass Expwy. to Pine Island Rd., which will impact the current conditions.









COMMERCIAL BLVD (PINE ISLAND RD - UNIVERSITY DR)

Principal Arterial

Commercial Blvd between Pine Island Rd and University Dr is fully zoned as general mixed use. There is a large Tamarac Community Center and a branch of the Broward County Library to the east of the intersection of Commercial Blvd with Pine Island Rd. General commercial entities and public amenities become most common closer to the intersection with University Dr.

The landscape on Commercial Blvd between Pine Island Rd and University Dr is mature and well maintained. It consists of primarily of turf, in good condition, large hardwoods, and cabbage palms.

The median is curbed in concrete. Pavers are only present as the medians approach the major intersections with Pine Island Rd and University Dr.



COMMERCIAL BLVD (UNIVERSITY DR - 64TH AVE)

Principal Arterial

Commercial Blvd between University Dr and 64th Ave is again zoned fully as general mixed use. The area is made up of various commercial shopping centers that front the residential behind it on NW 57th Ave.

The landscape on this portion of Commercial Blvd is a mixture of new and mature plantings. Overall it is well maintained, however, there are some patches of dead turf. The landscape includes, large oaks, pines, cabbage palms, bridal veil trees, and newly planted shrubs. The new plantings are surrounded by red mulch.

The median is curbed in concrete, with pavers in the bull noses and where landscape elements are absent.

* Note there has been recent landscape improvements on Commercial Blvd. from University Dr. to Prospect Rd., which impacts the current conditions.







COMMERCIAL BLVD (64TH AVE - ROCK ISLAND RD)

Principal Arterial

Commercial Blvd between 64th Ave and Rock Island Rd is primarily low residential with intermittent medium density residential. On the corner of 64th Ave and Commercial Blvd is a small corridor of commercial. The east side before Rock Island Road butts up directly to the Woodlands Country Club Golf Course.

The landscape in this area is a mix of new plantings and mature species. The area is well maintained and consists of various palm species and newly planted shrubs.

The medians are curbed in concrete and pavers at the end caps and where landscape elements are not present.

* Note there has been recent landscape improvements on Commercial Blvd. from University Dr. to Prospect Rd., which impacts the current conditions.

COMMERCIAL BLVD (ROCK ISLAND TO 441)

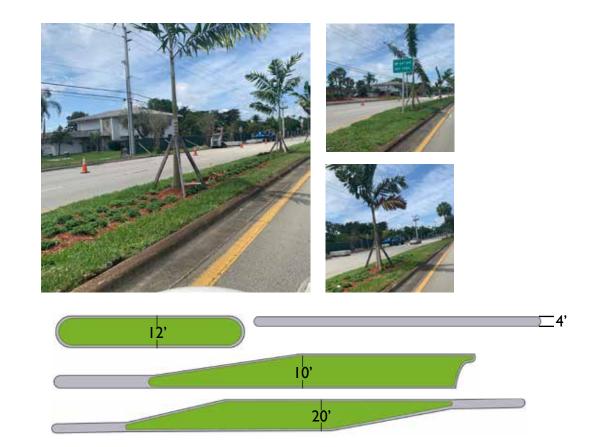
Principal Arterial

Commercial Blvd between Rock Island Rd and the Turnpike is all low density residential with intermittent medium density and a small pocket of high density residential at the intersection. East of the Turnpike and before 441 the zoning transitions to fully commercial.

The landscape in this area is a mix of new plantings and mature species. The area is well maintained and consists of various palm species, including the Medjool Date Palm, and newly planted shrubs.

The medians are curbed in concrete and pavers at the end caps and where landscape elements are not present.

* Note there has been recent landscape improvements on Commercial Blvd. from University Dr. to Prospect Rd., which impacts the current conditions.



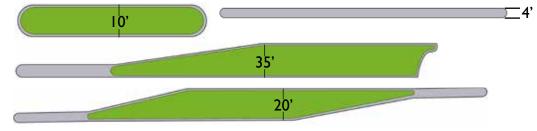






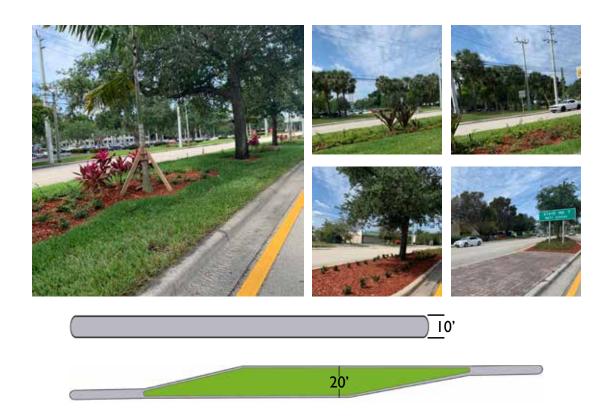














COMMERCIAL BLVD (SR 441 - NW 31ST AVE)

Principal Arterial

The entirety of Commercial Blvd from SR 441 to NW 31st Ave is zoned as commercial and has a small pocket of industrial at NW 39th Terrace.

The landscape is a mixture of new and mature species and is well maintained. Solitary trees are surrounded by red mulch as are the newly installed planting beds of various shrubs and groundcovers. Each of these elements then transition to turf.

The median is curbed in concrete and makes a transition to an alternating pattern of landscape and hardscape pavers as one approaches 441.

* Note there has been recent landscape improvements on Commercial Blvd. from University Dr. to Prospect Rd., which impacts the current conditions.

COMMERCIAL BLVD (NW 31ST AVE - PROSPECT RD)

Principal Arterial

The stretch of Commercial Blvd between NW 31st Ave and Prospect Rd is surrounded by medium density residential with a small recreational facility at its center.

The landscape is again a combination of mature species and new plantings, and the corridor is well maintained. The design varies between long stretches of dense shrubs with either palms or large trees, solitary islands of single trees surrounded by various groundcovers, and stretches of shrubs and small trees surrounded by red mulch and turf.

The median is curbed in concrete and has pavers at the end caps and intermittently throughout. On the Approach to 31st Ave, the pavers alternate with the previously mentioned tree islands.

* Note there has been recent landscape improvements on Commercial Blvd. from University Dr. to Prospect Rd., which impacts the current conditions.







UNIVERSITY DR (SOUTHGATE BLVD - MCNAB RD)

Principal Arterial

University Drive between Southgate Blvd and McNab RD is entirely commercial on its eastern side. The western side of University is also primarily commercially zoned but contains a mixture of low and high density residential between 82nd St and 78th St at the entrance to Woodman Country Club. The west side also houses University Hospital and Medical Center.

The landscape is made up of mature species and is generally well maintained. However there are some pockets that contain dead shrubs. The majority of the plantings are single palms evenly spaced with intermittent mid sized trees surrounded by shrubs. These areas are surrounded by turf.

The medians are curbed in concrete and have pavers at their end-caps.



UNIVERSITY DR (MCNAB RD - COMMERCIAL)

Principal Arterial

The east side of University Dr south of McNab Rd is again entirely commercial except for a pocket of medium density residential just south of NW 64th St. The west side of the corridor is more diverse. From McNab Rd south the NW 61st St is all medium density residential where it then transitions to commercial, ending at Commercial Blvd with a "local activity center".

The landscape is mature and well maintained throughout this portion of the corridor. A majority of the plantings are a dense mixture of various species of palms and shrubs surrounded by turf. The median is curbed in concrete with pavers at the bull noses and where landscape elements are not present.











Principal Arterial

The north side of McNab Rd between Captiva Dr and Nob Hill Rd is zoned as low and medium density residential while the entirety of the south side is industrial with a portion of commercial at the intersection with Nob Hill Rd.

The landscape along the McNab corridor contains mature species and is well maintained. It includes cabbage palms, mid size trees, and dense shrubs surrounded by red mulch and turf.

The median is curbed in concrete with pavers present at the ends and where the medians are too small for plant materials.



MCNAB RD (NOB HILL RD - PINE ISLAND RD)

Principal Arterial

McNab Rd from Nob Hill Rd is all low density residential except for a large area of commercial development at the intersection with Pine Island Rd. The south side is a mixture of low-medium and medium density residential with a area of high density residential at the intersection with Pine Island Rd.

The landscape along the McNab corridor contains mature species and is well maintained. It includes cabbage palms, large size trees, and dense shrubs surrounded by red mulch and turf.

The median is curbed in concrete with pavers present at the ends and where the medians are too small for plant materials. Occasionally these areas are concrete rather than pavers.







MCNAB RD (PINE ISLAND RD - UNIVERSITY DR)

Principal Arterial

The north side of McNab Rd between Pine Island Rd and University Dr is zoned purely as commercial that fronts the residential areas surrounding Woodman Country Club. The south side has commercial pockets at both intersections with medium density residential between the two.

The landscape along the McNab corridor contains mature species and is well maintained. It includes palms, large size trees, and dense shrubs surrounded turf.

The median is curbed in concrete with pavers present at the ends and where the medians are too small for plant materials. Some of the ends are turf rather than pavers. Areas of the curb are crumbling and in need of re-striping

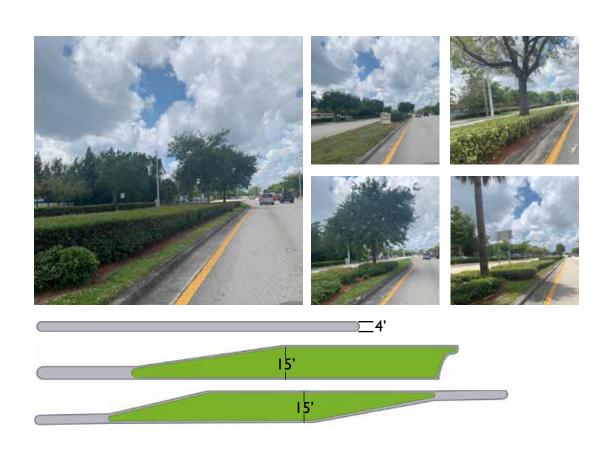


MCNAB RD (UNIVERSITY DR - SW 83RD AVE)

Principal Arterial

Commercial zoning dominates the stretch of McNab Rd between University Dr and SW 83 Ave. The entire south side and a majority of the north side of the corridor are strips of commercial entities. However the north side has a pocket of medium density residential where McNab intersects with Brookwood Blvd.

The landscape along the McNab corridor contains mature species and is well maintained. It includes cabbage palms, large size trees, and dense shrubs surrounded by red mulch and turf. The median is curbed in concrete with pavers present at the ends and where the medians are too small for plant materials.





Principal Arterial Resilience Chart														
Scientific Name	Common Name	20%	40%	50%	60%	65%	70%	75%	80%	85%	90%	100%	Florida Native	Quantity of Species
Adonidia merrilli	Christmas Palm								×				YES	5
Bucida buceras	Black Olive						X						NO	8
Bursera simaruba	Gumbo Limbo											X	YES	6
Caesalpinia granadillo	Bridal Veil Tree								X				NO	14
Callistemon viminalis	Weeping bottlebrush			X									NO	2
Clusia rosea	Pitch Apple											X	YES	6
Coccoloba uvifera	Seagrape								X				YES	2
Cocos nucifera	Coconut Palm								X				NO	I
Conocarpus erectus	Green Buttonwood						Х						YES	13
Conocarpus erectus	Silver Buttonwood								X				YES	35
Eriobotrya japonica	Loquat							X					NO	20
Jatropha integerrima	Peregrina							X					NO	4
Lagerstroemia indica	Crepe Myrtle										X		NO	29
Ligustrum japonicum	Ligustrum							X					NO	I
Livistonia chinensis	Chinese fan palm							X					NO	29
Lysiloma sabicu	Sabicu										X		YES	9
Magnolia grandifolia	Southern Magnolia					X							YES	5
Pinus elliotii v. densa	Slash Pine										X		YES	5
Pongamia pinnata	Pongam Tree			Х									NO	2
Quercus virginiana	Live Oak											Х	YES	81
Roystonea regia	Royal Palm											X	YES	5
Sabal palmetto	Cabbage Palm											Х	YES	186
Senna surattensis	Glaucous Cassia									X			NO	3
Swietenia mahogoni	Mahogany								X				YES	9
Sygarus romanzoffiana	Queen palm		Х										NO	8
Tabebuia aurea	Silver Trumpet								X				NO	I
Tabebuia caraiba	Yellow Trumpet			X									NO	2
Tabebuia hetetophylla	Pink Trumpet								X				NO	4
Veitchia arecina	Montgomery Palm							Х					NO	88
Veitchia winin	Winin Palm							Х					NO	9
Washingtonia robusta	Washington Palm	X											NO	41

Table 1.2: Principal Arterial Resilience Chart



The chart to the left describes the resilience ratings for each species of tree found within the Principal Arterial category. Each species is given a distinct value based on its potential resilience. An average value for the entire category is created from these values and the quantity of species in the corridor.

For more information on resilience and how these values were determined, see page 74.



Rock Island Rd.



Pine Island Rd.



Nob Hill Rd.



Hiatus Rd.











MINOR ARTERIAL

Showcase of Minor Arterial roads.



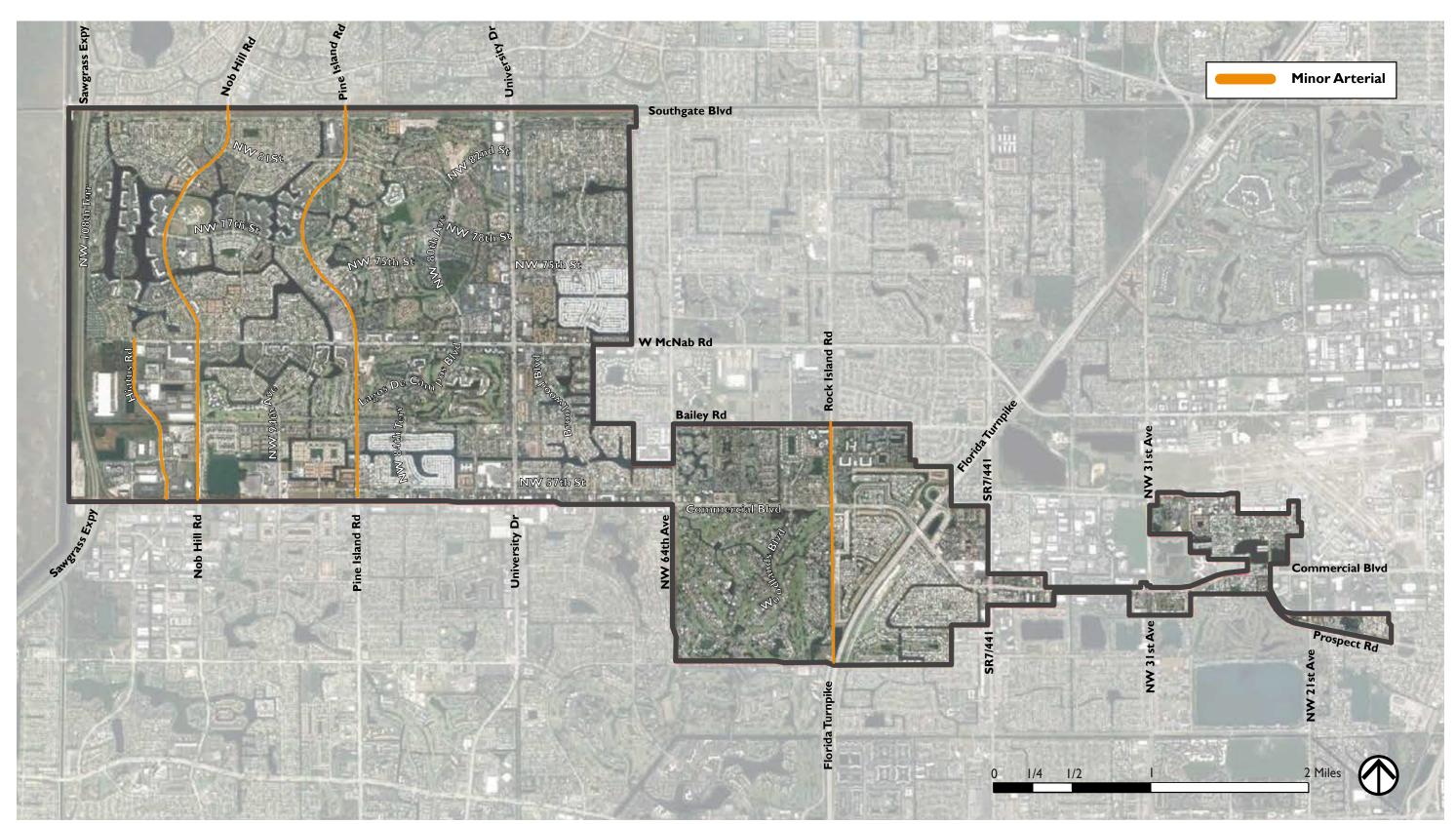


Figure 2.3: Minor Arterial Roads Map





MINOR ARTERIALS

"MinorArterials" serve the same function of "Principal Arterials" but to a lesser extent. These roads help to connect the various "Principal Arterials" to each other and residential areas to more commercial zones without interfering with the neighborhood. "Minor Arterials" still have a large traffic demand but to a lesser extent than those of "Principal Arterials.

The minor arterials are less ecologically diverse than their primary counterparts and provide a better sense of cohesive landscape identity throughout the group. Planting style and groupings are generally consistent throughout and create a pleasant experience for the user. Hiatus Rd. lacks landscape throughout its medians and does not follow the stylings of the rest of the category. Nob Hill and Pine Island Rd. have similar identities throughout each corridor. Their planting styles are extremely similar, but they interestingly change styles after crossing McNab to either the north or south. This change of planting style splits the experience into two specific characters, providing a diverse experience for the user, however it divides the overarching identity of the grouping.



Acer rubrum Red Maple



Jatropha integerrima **Peregrina**



Magnolia grandifolia Southern Magnolia



Adonidia merrilli Christmas Palm



Phoenix canariensis

Canary Island Date



Quercus Virginiana Live Oak



Senna surattensis
Glaucous Cassia



Swietenia mahogoni **Mahogany**



Phoenix canariensis **Date Palm**



Roystonea regia Royal Palm



Tabebuia heterophylla
Pink Trumpet



Sabal palmetto

Cabbage Palm



Veitchia arecina

Montgomery Palm



Veitchia winin Winin Palm



Washingtonia robusta
Washington Palm





Conocarpus erectus "sericeus"

Silver Buttonwood



Croton variegatum
Petra Croton



Cordyline fruticosa

Red Hawaiian-Ti Plant



Crinum spp.
Purple Crinum Lily



Hamelia patens

Dwarf Fire Bush



Galphinium gracilis
Thryallis



Schefflera arbicola 'Trinette Var. Arbicola



Ficus microcarpa

Green Island Ficus

Serenoa repens
Saw Palmetto



Ilex vomitoria 'Schillings' **Yaupon Holly**



Nephrolepis exaltata **Sword Fern**



Pennisetium setaceum 'Alba'
Fountain Grass

Acer rubrum Red Maple 15 5 Adonidia merrilli Christmas Palm Jatropha integerrima Peregrina Magnolia grandifolia Southern Magnolia Canary Island Date Phoenix canariensis Phoenix dactylifera Date Palm 5 Live Oak 17 18 Quercus virginiana Royal Palm 2 Roystonea regia 53 33 Cabbage Palm Sabal palmetto Glaucous Cassia 2 Senna surattensis Mahogany П Swietenia mahogoni 2 Tabebuia hetetophylla Pink Trumpet

Montgomery Palm

Washington Palm

Winin Palm

13

9

24

EXISTING TREES: MINOR ARTERIALS

Table 1.3: Existing Trees: Minor Arterial Quantity Chart

Veitchia arecina

Veitchia winin

Washingtonia robusta







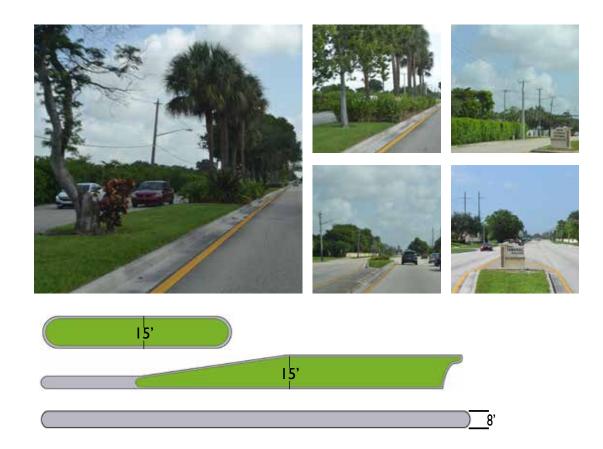
ROCK ISLAND RD (62ND ST - COMMERCIAL BLVD)

Minor Arterial

Rock Island Rd North of Commercial Blvd is primarily medium and high density residential as it is lined with apartment complexes and condos. There is a small pocket of commercial on its east side where it intersects with Bailey Rd.

The landscape is full of mature species including cabbage palms, large trees, and shrubs. The area is unkempt with overgrown shrubs, dead shrubs, large patches of dead turf, and planting areas filled with litter.

The medians are curbed in concrete and filled with concrete at the ends and where landscape elements are not present. Signage is generally visible however there is a downed sign that has been hit with a car and needs to be replaced.



ROCK ISLAND RD (COMMERCIAL BLVD - NW 44TH ST)

Minor Arterial

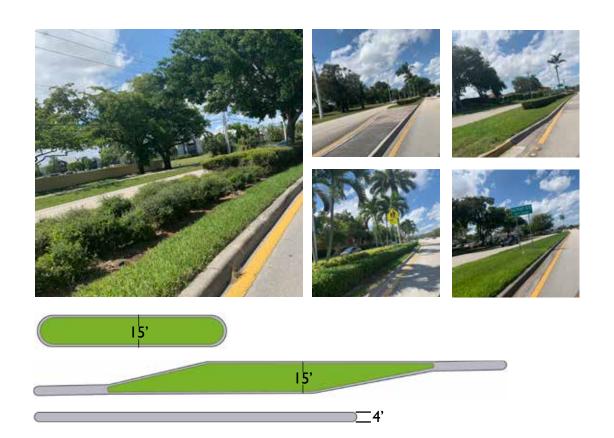
South of Commercial Blvd, Rock Island Rd continues to be residential. However it is primarily low and medium density. There is a area of commercial on its east side at the intersection of Commercial Blvd and it ends in a utility area when it intersects with NW 44th St.

The landscape on Rock Island Rd consists of mature species but is not well maintained. While the plants themselves are in good shape, the medians are filled with litter. The plantings are often surrounded by red mulch, which can trap the litter.

The medians are curbed with concrete and have concrete ends except where the turf meets the end, as seen at the Tamarac Gateway Sign.









Minor Arterial

Pine Island Rd between Southgate Blvd and Mcnab Rd is a mixture of low and medium density residential with pockets of commercial at these two intersections. There is also a small commercial entity at the intersection of Pine Island Rd and NW 77th St.

The landscape along Pine Island Rd is made up of mature species and is well maintained. The plantings include various species of palm, large trees, and dense shrubs, and the style varies from dense to more sparse plantings. These areas are surrounded by turf

The medians are curbed with concrete and have pavers as a transition from landscape elements to their concrete filled ends.

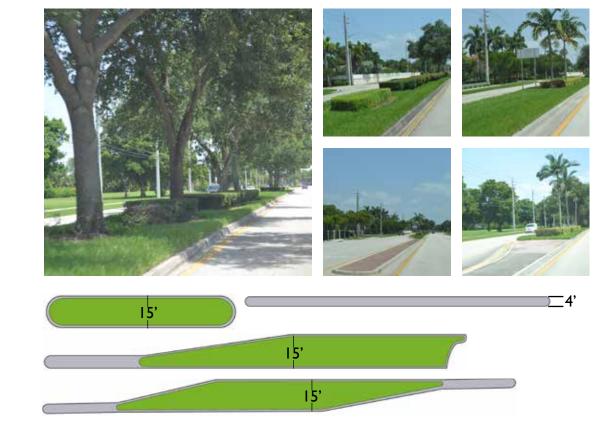
PINE ISLAND RD (MCNAB RD - COMMERCIAL BLVD)

Minor Arterial

South of McNab Rd, Pine Island Rd varies between low and medium density housing with an area of high density residential at the intersection with McNab Rd and "local activity center" commercial at the intersection with Commercial Blvd.

The landscape is mature species and well maintained. It consists of intermittent shrub hedges, large trees with shrubs, and various palms with shrubs. Turf surrounds all of these areas.

The medians are curbed with concrete and have pavers throughout. The end caps are both concrete and pavers.









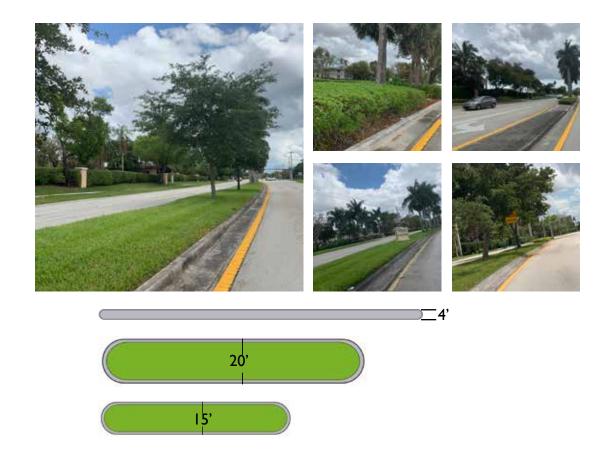
NOB HILL RD (SOUTHGATE BLVD - MCNAB RD)

Minor Arterial

The entirety of Nob Hill Rd is zoned as a mixture of low and medium density residential except for the area that intersects with NW 77th St. This area holds a massive recreational sports complex and a small pocket of commercial.

The landscape contains mature species and is generally well maintained. The medians contain various species of palm, medium to large size trees, and dense shrubs surrounded by red mulch and turf. There is a depression left over from the removal of a tree that needs to be filled.

The medians are curbed with concrete and have pavers as a transition from landscape elements to their concrete filled ends.



NOB HILL RD (MCNAB RD TO COMMERCIAL BLVD)

Minor Arterial

South of McNab Rd, Nob Hill begins to transition from a purely residential typology. The west side of Nob Hill is all industrial except at the intersections with McNab and Commercial Blvd, where it is commercially zoned. The east side of McNab varies between low and medium density residential that surrounds the Colony West Country Club. The east side ends with a strip of commercial entities at the intersection of Commercial Blvd.

The landscape contains mature species and is well maintained throughout. The area contains various species of palm, small to large size trees, and dense shrubs surrounded by red mulch and turf. The medians are curbed with concrete and have pavers at the bull noses and where landscape elements are not present.









Minor Arterial

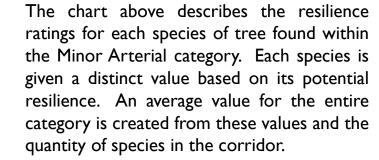
Hiatus Rd between McNab Rd and Commercial Blvd is fully industrialized. At the corner of Hiatus and Commercial Blvd are multiple shopping centers.

The landscape along Hiatus Rd contains mature species and is generally well maintained. Plantings are rare as the majority of the medians are either pavers or to small for anything besides turf. Plantings include various species of palms, including the Medjool date palm, with shrubs around their base.

The medians are curbed in concrete and have pavers at their ends and where it is too small for landscape elements.

Minor Arterial Resilience Chart														
Scientific Name	Common Name	20%	40%	50%	60%	65%	70%	75%	80%	85%	90%	100%	Florida Native	Quantity of Species
Acer rubrum	Red Maple										Х		YES	15
Adonidia merrilli	Christmas Palm								X				NO	5
Jatropha integerrima	Peregrina							X					NO	2
Magnolia grandifolia	Southern Magnolia					X							YES	9
Phoenix canariensis	Canary Island Date										X		NO	I
Phoenix dactylifera	Date Palm										X		NO	4
Quercus virginiana	Live Oak											X	YES	40
Roystonea regia	Royal Palm											X	YES	2
Sabal palmetto	Cabbage Palm											X	YES	86
Senna surattensis	Glaucous Cassia									X			NO	2
Swietenia mahogoni	Mahogany								X				YES	П
Tabebuia hetetophylla	Pink Trumpet								X				NO	2
Veitchia arecina	Montgomery Palm							X					NO	20
Veitchia winin	Winin Palm							X					NO	9
Washingtonia robusta	Washington Palm	X											NO	24
										Po	ercenta	ge of R	esiliency	84%

Table 1.4: Minor Arterial Resilience Chart



For more information on resilience and how these values were determined, see page 74.







Southgate Blvd.



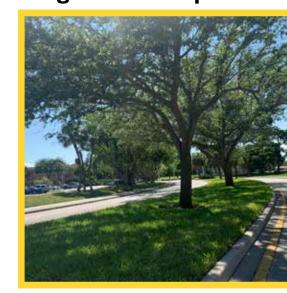
NW 81 St.



NW 77 St.



Lagos De Campo Blvd.



Prospect Rd.



NW 64th Ave.



Westwood Blvd.



NW 82 St.



NW 57 St.



Bailey Rd.



COLLECTOR

Showcase of Collector roads.



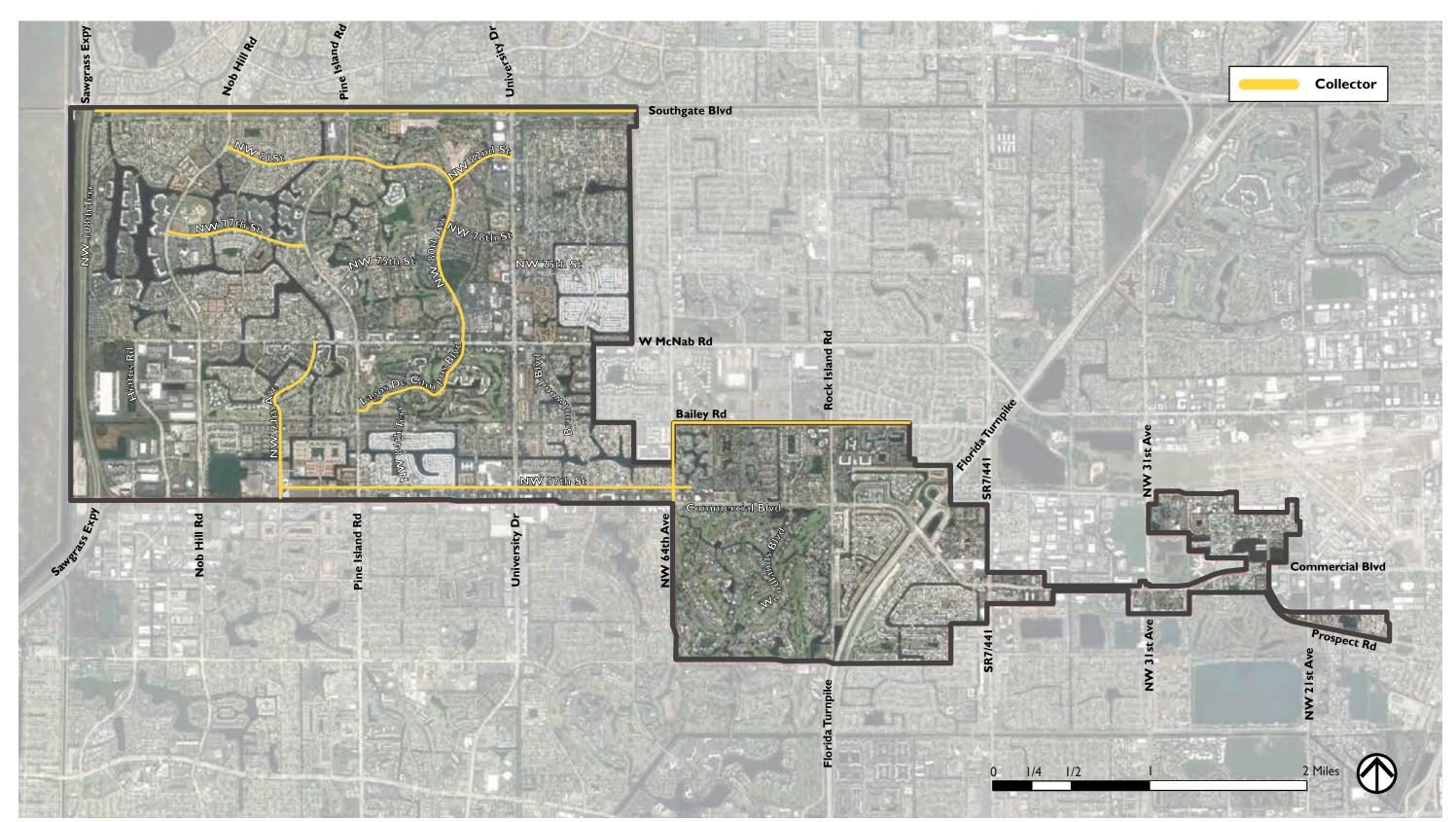


Figure 2.4: Collector Roads Map





COLLECTOR ROADS

"Collector Roads" funnel traffic from high density residential areas to the system of arterials. They enter into residential neighborhoods and vary in length with low traffic needs, speed limits, and rare signalized intersections. Often "collector roads" are open to through traffic.



Acer rubrum Red Maple



Bucida buceros
Black Olive



Bursera simaruba **Gumbo Limbo**



Calophyllum inophyllum Alexandrian Laurel



Phoenix canariensis

Canary Island Date



Cocoloba uvifera
Seagrape



Conocarpus erectus var. sericeus
Silver Buttonwood



Cordia sebestena
Orange Geiger Tree



Cupaniopsis anacardiodes

Carrotwood



Delonix regia

Royal Poinciana



Eugenia foetida

Spanish Stopper



Sabal palmetto

Cabbage Palm



llex cassine

Dahoon Holly



Jatropha integerrima
Peregrina



Juniperus sillicola
Southern Red Cedar



Koelreuteria elegans Flamegold



Lagerstroemia indica
Crepe Myrtle



Magnolia grandifolia
Southern Magnolia



Veitchia arecina

Montgomery Palm



Pinus elliotii var. densa Slash Pine



Milletia pinnata Pongam Tree



Quercus Virginiana **Live Oak**



Swietenia mahogoni **Mahogany**



Tabebuia caraiba
Yellow Trumpet



Tabebuia heterophylla
Pink Trumpet



Washingtonia robusta
Washington Palm





Roystonea regia Royal Palm



Sygarus romanoffiana

Queen Palm



Veitchia winin Winin Palm



Bougainvillea spp.
Dwarf Bougainvillea



Chrysobolanus icaco
Cocoplum



Croton variegatum
Petra Croton



Ficus microcarpa Green Island Ficus



Hamelia patens **Dwarf Fire Bush**



Nephrolepis exaltata Sword Fern



Plumbago auriculata Blue Plumbago



Schefflera arbicola 'Trinette' **Var. Arbicola**

EXISTING TREES: COLLECTOR ROADS

Scientific Name	Common Name	Southgate Blvd.	NW 81st St / NW 80th Ave.	NW 77th St.	Lagos De Cam- pos Blvd.	NW 64th Ave.	NW 94th Ave / Westwood Blvd.	NW 82nd St.	NW 57 St.	Bailey Rd.
Acer rubrum	Red Maple								3	
Bucida buceras	Black Olive	I	7	11	I	ı			18	
Bursera simaruba	Gumbo Limbo	21						2	I	
Calophyllum inophyllum	Alexandrian Laurel	23	5	I	3				9	
Coccoloba uvifera	Seagrape								7	
Conocarpus erectus	Silver Buttonwood	I								
Cordia sebestena	Orange Geiger Tree	28	2			I			48	
Cupaniopsis anacardiodes	Carrotwood	_								
Delonix regia	Royal Poinciana	I							I	
Eugenia foetida	Spanish Stopper		22							
llex cassine	Dahoon Holly	6								
Jatropha integerrima	Peregrina							3		
Juniperus sillicola	Southern red cedar	2								
Koelreuteria elegans	Flamegold	3								
Lagerstroemia indica	Crepe Myrtle	I							П	
Lagerstroemia speciosa	Queen Crepe Myrtle	14								
Magnolia grandifolia	Southern Magnolia	2	2	4						
Phoenix canariensis	Canary Island Date	2								
Pinus elliotii v. densa	Slash Pine	17								
Pongamia pinnata	Pongam Tree								I	
Quercus virginiana	Live Oak	133	38	14	8				10	
Roystonea regia	Royal Palm		3	I			10			
Sabal palmetto	Cabbage Palm	129	28	54	136	6		6	288	
Swietenia mahogoni	Mahogany	29	8	4	3		ı	4	27	
Sygarus romanzoffiana	Queen palm	5								
Tabebuia caraiba	Yellow Trumpet	3		I						
Tabebuia hetetophylla	Pink Trumpet	П	2							
Veitchia arecina	Montgomery Palm					5		5	12	4
Veitchia winin	Winin Palm							2		
Washingtonia robusta	Washington Palm	3	I							









SOUTHGATE BLVD (SANIBEL DR - NOB HILL RD)

Collector

The north side of Southgate Blvd between Sanibel Dr and Nob Hill Road is made up of Tephford Park. The south side consists entirely of low and medium density residential.

The landscape along the Southgate corridor consists of mature species and is generally well maintained. However there are some spots with dead shrubs and ground covers. Species include various palms, including the Medjool date palm, large trees, and various shrubs. These plantings are surrounded by red mulch and turf.

The medians are curbed in concrete with pavers at their ends and where landscape elements are not present.



SOUTHGATE BLVD (NOB HILL RD - PINE ISLAND RD)

Collector

The north side of Southgate Blvd between Nob Hill Rd and Pine Island Rd remains recreational as a linear park extending from Tephford Park. The south side of the corridor is entirely low density residential and a pocket of commercial at the intersection with Pine Island Rd.

The landscape along the Southgate corridor consists of mature species and is generally well maintained. However there are some spots with dead shrubs and ground covers. Species include various palms, including the Medjool date palm, large trees, and various shrubs. These plantings are surrounded by red mulch and turf. The medians are curbed in concrete with either concrete fill or turf at their ends.















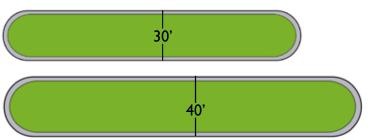












SOUTHGATE BLVD (PINE ISLAND RD - UNIVERSITY DR)

Collector

The linear park continues along the north side of Southgate Blvd but there is an above ground utility center in the center. The park ends at University Dr with Veteran Memorial Dr. The southside of the corridor begins with a commercial park at the intersection with Pine Island Rd then transitions to low and medium density residential surrounding Woodman Country Club until ending with commercial again at the intersection with University Dr.

The landscape along the Southgate corridor consists of mature species and is generally well maintained. However there are some spots with dead trees and turf throughout. Species include various palms, large trees, and various shrubs. These plantings are surrounded by red mulch and turf. The medians are curbed in concrete with pavers at their ends and where landscape elements are not present.

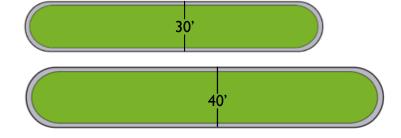












SOUTHGATE BLVD (UNIVERSITY DR - SW 83RD ST)

Collector

The north side of Southgate Blvd continues to be recreational while the south side of the corridor starts as commercial at the intersection with University and then transitions to medium density residential before SW 83rd St.

The landscape along the Southgate corridor consists of mature species and is well maintained. Species include cabbage palms, large trees, and various shrubs. These plantings are surrounded by red mulch and turf. The medians are curbed in concrete with either concrete fill or turf at their ends. The median also holds signage including the Tamarac Gateway Sign, Tree City sign, and general traffic signage.







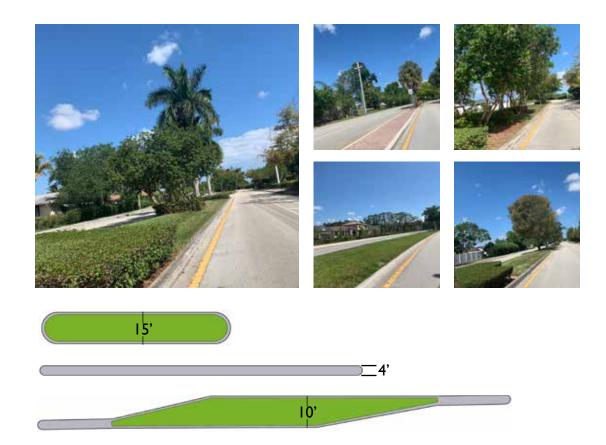
NW 81ST ST

Collector

NW 81st Street varies between low and medium density residential with recreational areas between Nobb Hill Rd and Pine Island Rd. Between Pine Island Rd and NW 80th Ave, the corridor is zoned purely as low density residential as it is surrounded by the Woodman Country Club Golf Course.

The landscape is made up of mature species and is generally well maintained. However there are dead patches of turf throughout the corridor. Plantings include cabbage palms, medium to large size trees and dense shrubs surrounded by turf.

The medians are curbed in concrete and made of pavers at the bull noses and where landscape elements are not present



NW 77TH ST

Collector

NW 77th Street cuts through a residential neighborhood consisting of low to medium density residential which becomes zoned for commercial where it intersects with both Nob Hill Rd and Pine Island Rd. A sports park sits directly adjacent to NW 77th Street at its intersection with Nob Hill Rd.

The landscape is mature and well maintained. The landscape varies between large hardwoods and cabbage palms with intermittent shrubs at the end caps of the medians.

The medians are curbed with concrete and pavers at their end points.

Signage is present throughout the medians on NW 77th Street. They include traditional traffic signs, neighborhood watch and pet usage warnings, and personal signage such as "for sale" or "open house" signs.







LAGOS DE CAMPO BLVD.

Collector

Lagos de Campo Blvd from McNab Rd to Pine Island Rd sits in the middle of the Colony West Country Club and is therefore surrounded by medium and medium high density residential at its core.

The landscape is mature and well maintained, consisting of cabbage palms and various large trees. These elements are generally single plantings or small groups surrounded by shrubs. The single plantings and some larger planting areas are lined with red mulch.

The medians are curbed in concrete and their end caps vary between concrete and pavers depending on their location.



PROSPECT RD.

Collector

Prospect Rd from Commercial Blvd to NW 17th Way has multiple uses. At the intersection with Commercial Blvd is a commercial center and community center. As the corridor approaches NW 17th Ave, it passes through and industrial center and becomes low and medium density residential with a recreational area in between the residences.

The is a mix of new and mature species and is primarily well maintained. There are patches of dead turf throughout.

The medians are curbed in concrete and filled with concrete when landscape elements are not present. The medians contain above ground utilities as well.







NW 64TH AVE.

Collector

NW 64th Ave is almost entirely high density residential from Bailey Rd to Commercial Blvd with a small pocket of commercial at this intersection. South of Commercial Blvd to 44th St transitions to low density residential with commercial recreation throughout due to the Woodlands Country Club.

The landscape is well matured and somewhat well maintained. There are areas where the shrubs are sparse and the turf has died. Otherwise, the various species of palms and hardwoods are well maintained.

The median is curbed and filled with concrete when landscape elements are not present. However portions of the median are curbless and the turf meets the street.



NW 94TH AVE. / WESTWOOD BLVD.

Collector

Westwood Blvd does not contain any medians or landscape and is zoned as low to medium density residential. There is a bus stop at the corner of Westwood Blvd and McNab Rd and bike lanes follow it in its entirety.

Halfway between McNab Rd. and Commercial Blvd, Westwood Blvd becomes NW 94th Ave. The bike lanes and lack of medians continues on 94th Ave. Multiple golf cart crossings are present due to 94th Avenue's proximity to the Colony West Country Club.

94th Avenue eventually gains a median just north of its intersection with NW 57th St. The median contains mature, well maintained palms and shrubs. It is curbed in concrete with pavers at its end caps. Portions of the curb are crumbling and in need of repair and re-striping.







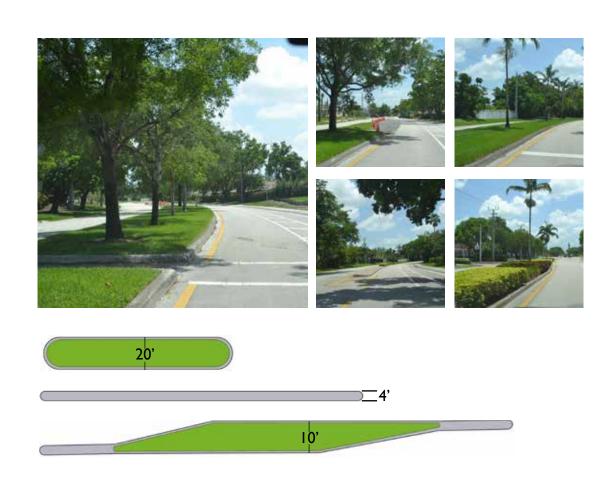














NW 82ND ST

Collector

NW 82nd Street is surrounded by low and medium density residential from NW 80th Ave to University Drive. At its intersection with University Dr are pockets of commercial and high density residential.

Due to its residential appeal, the landscape contains matured species, and is primarily well maintained. However, the medians do contain dead and brown spots in the turf, denoting potential issues with irrigation.

The medians are curbed with concrete and pavers at both bull noses and wherever landscape elements are absent. The curbs show wear and tear. Some portions are crumbling and need re-striping.

Multiple pedestrian and golf cart crossings are present. These crossings are well maintained and easily visible.

NW 57TH ST (PINE ISLAND RD - UNIVERSITY DR)

Collector

NW 57th St. from Pine Island Rd. to University Dr, is zoned as "local activity center" on the south side. It is a mixture of various commercial, civic, and public entities. The north side is medium density residential until the intersection with University Drive, where it ends with a large shopping center.

The landscape is well maintained with mature species throughout, although it does contain multiple some dead patches of turf along the corridor.

The medians are curbed in concrete with pavers at the ends and where landscape elements are absent. There are also above ground utilities and light poles within the median.







NW 57TH ST (UNIVERSITY DR - NW 62ND AVE)

Collector

NW 57th St from University Dr to NW 62nd Ave is zoned as commercial on the south side and medium density residential along the entire corridor to the north. NW 57th provides rear access to the various commercial entities that front Commercial Blvd.

The landscape is incredibly well maintained with mature species throughout. The species present primarily consist of cabbage palms, oaks, and various shrubs. These plantings are often surrounded by red mulch and turf.

The medians are curbed in concrete and end with pavers. The rest of the medians are filled with turf.













NW 57TH ST (NW 94TH AVE - PINE ISLAND RD)

Collector

NW 57th St between NW 94th Ave and Pine Island road is delegated for "local activity center". As it stands currently the entire south side of the road is fenced off for a future development, except for where it intersects with Pine Island Rd and is zoned for commercial. The north side starts with a religious institution at 94th and is open land until the commercial areas at Pine Island Rd.

The landscape is unkempt on the western half of the corridor. The few trees and palms that are present are in good condition, however the a majority of the turf surrounding them is completely dead. The eastern half of the corridor, approaching Pine Island Road is well maintained. The trees and shrubs are in good condition as is the turf.

The median at the corner of 94th Ave and NW 57th St is curbed to begin with but then becomes uncurbed. The eastern half picks up the curb again and fills the end caps with pavers.







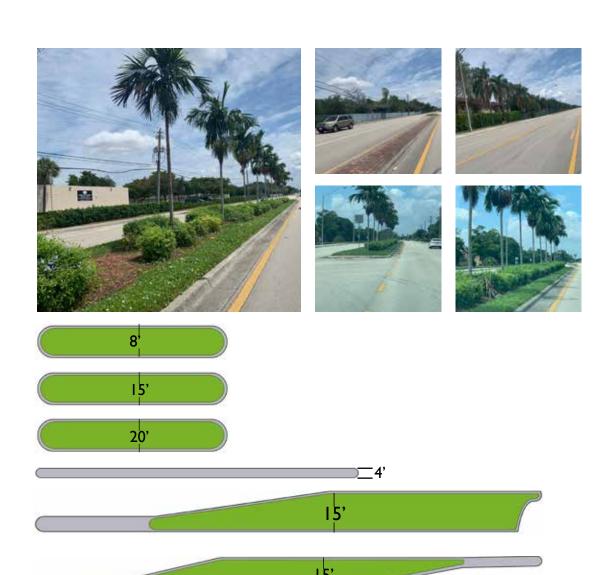
















Collector

Bailey road is completely residential ranging from medium to high density residential. Apartment complexes line the corridor and there is a small pocket of commercial where Bailey Rd intersects with Rock Island Road.

The landscape is mature and well maintained and it consists wholly of palms and shrubs. The planting areas are lined with red mulch which then meets turf. However, there are long stretches of median without landscape.

The medians are curbed in concrete with pavers at the end caps and where landscape elements are absent. There are also long stretches of the corridor that have a multi-directional middle turn lane instead of a median.







The chart to the right describes the resilience ratings for each species of tree found within the Collector Road category. Each species is given a distinct value based on its potential resilience. An average value for the entire category is created from these values and the quantity of species in the corridor.

more information on resilience and how these values were determined, see page 74.

Collector Resilience Chart Florida Quantity of Scientific Name Common Name 20% 40% 50% 60% 65% 70% **75%** 80% 85% 90% 100% **Native Species** X YES 3 Red Maple Acer rubrum Х NO 39 Bucida buceras Black Olive X 24 YES Bursera simaruba Gumbo Limbo Χ NO 41 Alexandrian Laurel Calophyllum inophyllum Х YES 7 Coccoloba uvifera Seagrape Х YES Silver Buttonwood Conocarpus erectus YES 79 X Cordia sebestena Orange Geiger Tree Χ NO Cupaniopsis anacardiodes Carrotwood X NO 2 Delonix regia Royal Poinciana YES 22 X Eugenia foetida Spanish Stopper Χ YES 6 Dahoon Holly llex cassine Χ NO 3 |atropha integerrima Peregrina X YES 2 uniperus sillicola Southern Red Cedar X NO 3 Flamegold Koelreuteria elegans X NO 12 Crepe Myrtle _agerstroemia indica X NO 14 Lagerstroemia speciosa Queen Crepe Myrtle YES X 8 Magnolia grandifolia Southern Magnolia X NO 2 Phoenix canariensis Canary Island Date Χ YES 17 Slash Pine Pinus elliotii v. densa X NO Pongam Tree Pongamia pinnata X YES 203 _ive Oak Quercus virginiana X 14 YES Royal Palm Roystonea regia Χ YES 647 Sabal palmetto Cabbage Palm YES X 76 Swietenia mahogoni Mahogany X NO 5 Sygarus romanzoffiana Queen palm NO Yellow Trumpet X 4 Tabebuia caraiba X NO 13 Tabebuia hetetophylla Pink Trumpet X NO 26 Veitchia arecina Montgomery Palm Χ NO 2 Veitchia winin Winin Palm X NO Washingtonia robusta Washington Palm 92% **Percentage of Resiliency**

Table 1.7: Collector Resilience Chart







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NW 75th St.



Brookwood Blvd



84th Terr.



NW 108 Terr



NW 78 St.



Woodlands Blvd



LOCAL STREETS

Showcase of Local Streets.



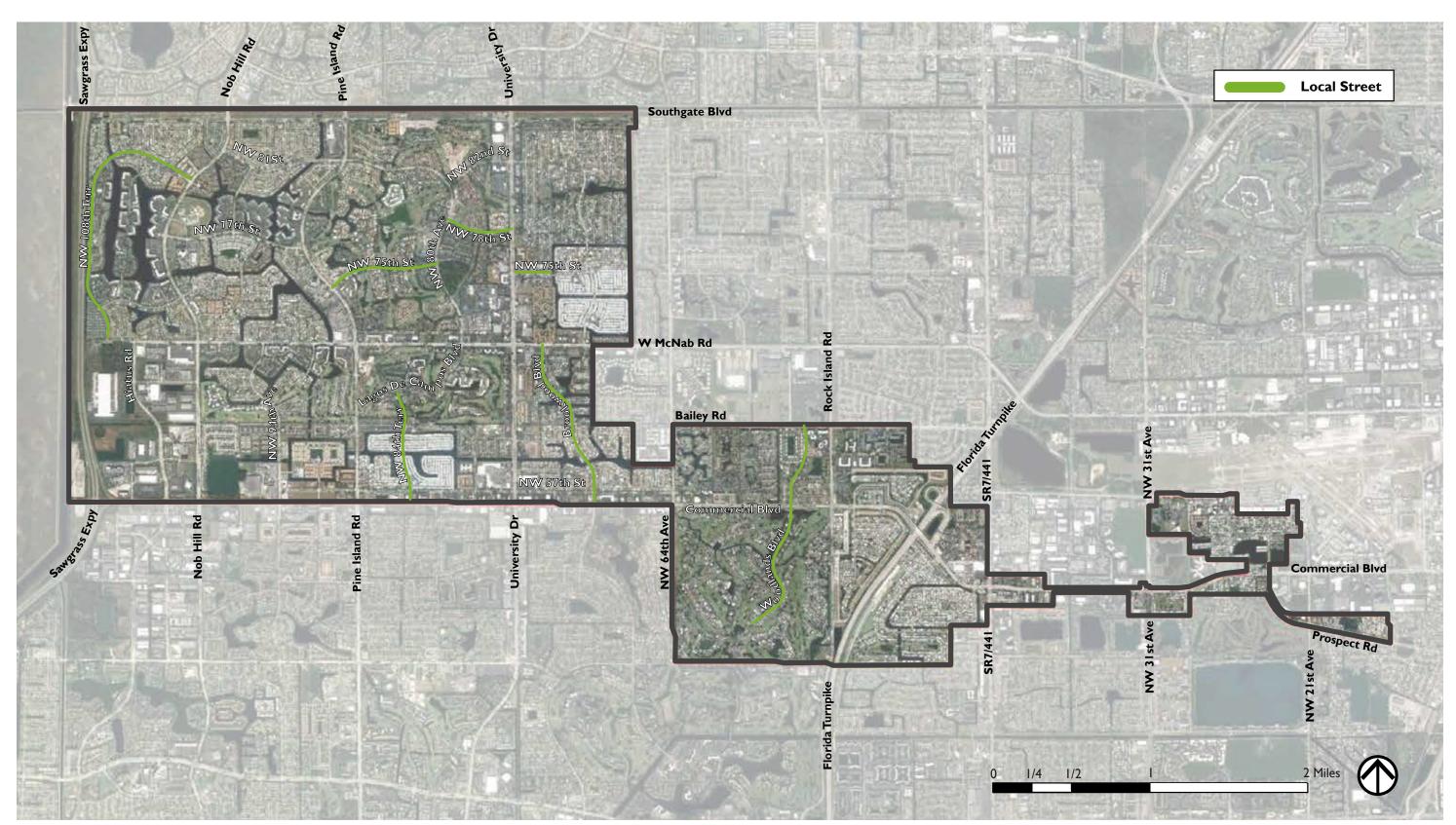


Figure 2.5: Local Streets Map





LOCAL STREETS

"Local Streets" are the smallest unit in the system with direct access to specific plots of land. They provide citizens with direct access to "Collector Roads" and the system of arterials. "Local Streets" have the lowest traffic needs and are often closed to through traffic.

Local streets wind through residential neighborhoods and connect citizen's homes to the rest of the city. The landscape along these corridors promotes a residential feel as the plant palette and style is consistent throughout. The trees often overhang the streets, creating a canopy road when they meet those in the surrounding right of ways. This slows down traffic and creates an inviting feel to the neighborhoods. The shrubs and groundcovers are consistent in style throughout this typology and only furthers the cohesive identity of the city.



Albizia julibrissin **Mimosa Silktree**



Bucida buceros
Black Olive



Bursera simaruba
Gumbo Limbo



Phoenix reclinata
Clumping Date Palm



Phoenix roebelinii
Pygmy Date Palm



Calophyllum inophyllum **Alexandrian Laurel**



Lagerstroemia indica
Crepe Myrtle



Ligustrum japonicum **Ligustrum**



Sabal palmetto

Cabbage Palm



Sygarus romanoffiana
Queen Palm



Magnolia grandifolia Southern Magnolia



Quercus Virginiana **Live Oak**



Swietenia mahogoni **Mahogany**



Veitchia arecina
Montgomery Palm



Washingtonia robusta Washington Palm



Tabebuia heterophylla **Pink Trumpet**



Wodyetia bifurcata Foxtail Palm



Bougainvillea spp.

Dwarf Bougainvillea



Chrysobolanus icaco
Cocoplum



Ficus microcarpa **Green Island Ficus**



Juniperus horizontalis **Blue Rug Juniper**



Ilex vomitoria 'Schillings'
Yaupon Holly



Schefflera arbicola 'Trinette' **Var. Arbicola**



Blueberry Flax Lily (Dianella tasmanica 'Variegata')



Washington Palm

Foxtail Palm

Table 1.8: Existing Trees: Local Streets Quantity Chart

Washingtonia robusta

Wodyetia bifurcata





2



NW 75TH ST.

Local Street

NW 75th Street sits between low and medium density residential at its intersection with Pine Island Road and low residential where it meets with NW 80th Ave. There are multiple access points along this corridor to recreational and community facilities.

The landscape is well maintained and irrigated. The area primarily consists of large hardwoods with intermittent shrubs at the ends of medians. Despite being well maintained, there are small patches of dead shrubs and turf throughout.

The medians are curbed in concrete with pavers at their end points. Due to the access to recreational and community facilities, the medians are broken at certain points to allow crossings. These crossings are well marked and clearly visible.



BROOKWOOD BLVD.

Local Street

Brookwood Blvd is primarily residential, ranging from low to mid density residential from north to south. Where it intersects with both McNab Rd and Commercial Blvd are pockets of commercial entities.

The landscape consists primarily of matured species and is well maintained for a majority of the corridor. The landscape is generally made up of single palms of varying species surrounded by shrubs spaced at an even interval. At certain spots the there are dead patches of turf or the turf has been taken over by weeds etc.

The medians are curbed in concrete with pavers at the end caps. There are above ground utilities, and the guardrails protecting them, and neighborhood signage throughout.





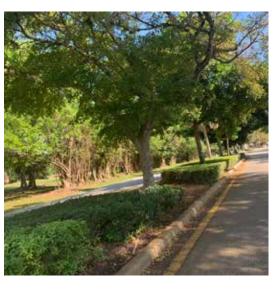










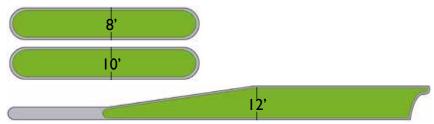


















84th Terrace between Lagos de Campo Blvd and Commercial Blvd is completely residential. The area varies from medium to medium high density residential and contains four separate recreational areas along the corridor including the Colony West Country Club.

The landscape is mature and well maintained, consisting of various large and mid-sized trees, cabbage palms, and various shrubs. The Plantings are generally surrounded by red mulch, which then leads into turf. The mulch is sparse and needs

The medians are curbed in concrete with pavers at the end caps and where landscape elements are not present.

NW 108THTERR.

Local Street

NW 108th Street is a local street that intersects both McNab Rd and Nob Hill Rd. The entirety of the corridor is zoned for low to medium density residential.

The landscape consists of mature species throughout including various palms, hardwoods, small trees, and shrubs. A majority of the landscape is well maintained however some portions are unkempt. Shrubs are overgrown, the Southern Magnolias found in the medians are sparse, and there are dead patches of turf throughout the medians.

The median is curbed in concrete with pavers at the bull noses and where landscape elements are not present. This infrastructure is intact throughout.







NW 78TH ST

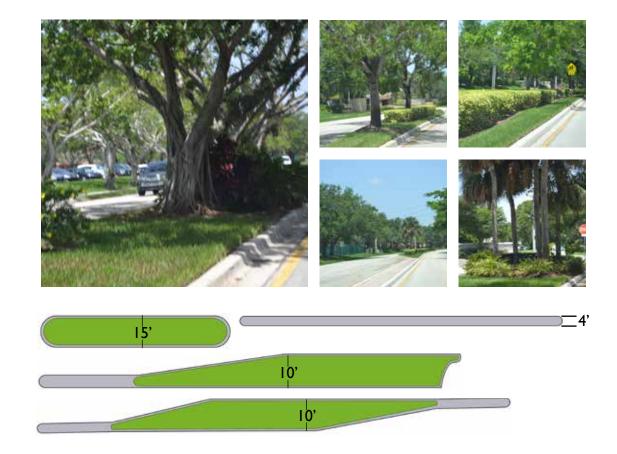
Local Street

NW 78th Street cuts through low, low medium, and medium residential areas with a pocket of commercial where it intersects with University Drive.

The landscape is mature and well maintained, containing a mixture of large hardwoods, cabbage palms, and various shrubs throughout. However, there are some dead spots in the turf at various spots throughout the length of the street.

The median is curbed in concrete with cut pavers at the bull noses and wherever landscape elements are absent.

Two bus stops are present at the intersection of NW 78th Street and University Drive, providing the residences with access to public transportation. This area is currently under construction. A new Woodmont Club House is currently under construction where NW 78th St. meets with NW 80th Ave.



WOODLANDS BLVD (COMMERCIAL BLVD - MULLBERRY DR)

Local Street

Woodlands Blvd between Commercial Blvd and Mulberry Dr is all low density residential with commercial recreation throughout as it is located at the Woodlands Golf and Country Club.

The landscape is mature and well maintained with large trees, various species of palms, and shrubs throughout. Single trees and smaller designed plantings are surrounded by red mulch while larger planting areas are bare. Turf fills in between the planted areas.

The medians are curbed in concrete with landscape on the end-caps instead of pavers. There are above ground utility boxes, street lights, and crosswalks throughout the medians in the corridor.





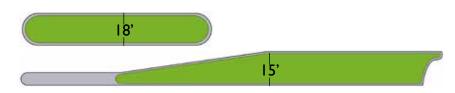












WOODLANDS BLVD (BAILEY RD - COMMERCIAL BLVD)

Local Street

Woodlands Blvd between Bailey Rd and Commercial Blvd is completely residential varying from low to medium density with a single location of high density at its intersection with Bailey Rd.

The landscape is mature and well maintained consisting of large trees, various palms, and shrubs. Single trees are surrounded by red mulch while larger planting areas are bare with turf in between designed segments.

The median is curbed in concrete with pavers at the end caps.

Local Street Resilience Chart														
Scientific Name	Common Name	20%	40%	50%	60%	65%	70%	75%	80%	85%	90%	100%	Florida Native	Quantity o Species
Albizia julibrissin	Mimosa Silktree						Х						NO	I
Bucida buceras	Black Olive						X						NO	46
Bursera simaruba	Gumbo Limbo											X	YES	2
Calophyllum inophyllum	Alexandrian Laurel							X					NO	8
Lagerstroemia indica	Crepe Myrtle										X		NO	I
Ligustrum japonicum	Ligustrum							X					NO	11
Magnolia grandifolia	Southern Magnolia					X							YES	3
Phoenix reclinata	Clumping Date Palm										X		NO	26
Phoenix roebelinii	Pygmy Date Palm							Х					NO	I
Quercus virginiana	Live Oak											X	YES	12
Sabal palmetto	Cabbage Palm											X	YES	217
Swietenia mahogoni	Mahogany								X				YES	39
Sygarus romanzoffiana	Queen palm		Х										NO	12
Tabebuia hetetophylla	Pink Trumpet								Х				NO	3
Veitchia arecina	Montgomery Palm							Х					NO	49
Washingtonia robusta	Washington Palm	Х											NO	I
Wodyetia bifurcata	Foxtail Palm							Х					NO	2

Percentage of Resiliency

The chart above describes the resilience ratings for each species of tree found within the Local Streets category. Each species is given a distinct value based on its potential resilience. An average value for the entire category is created from these values and the quantity of species in the corridor.

For more information on resilience and how these values were determined, see page 74.

Table 1.9: Local Collector Resilience Chart







McNab Rd & Nob Hill Rd.



McNab Rd & Pine Island Rd.



McNab Rd & University Dr.



Commercial Blvd & 64th Ave.



Commercial Blvd & Rock Island Rd.



Commercial Blvd & SR-7 / 441



Commercial Blvd & NW 31st Ave.



Commercial Blvd & Prospect Rd.



KEY INTERSECTIONS

Showcase of Key Intersections.



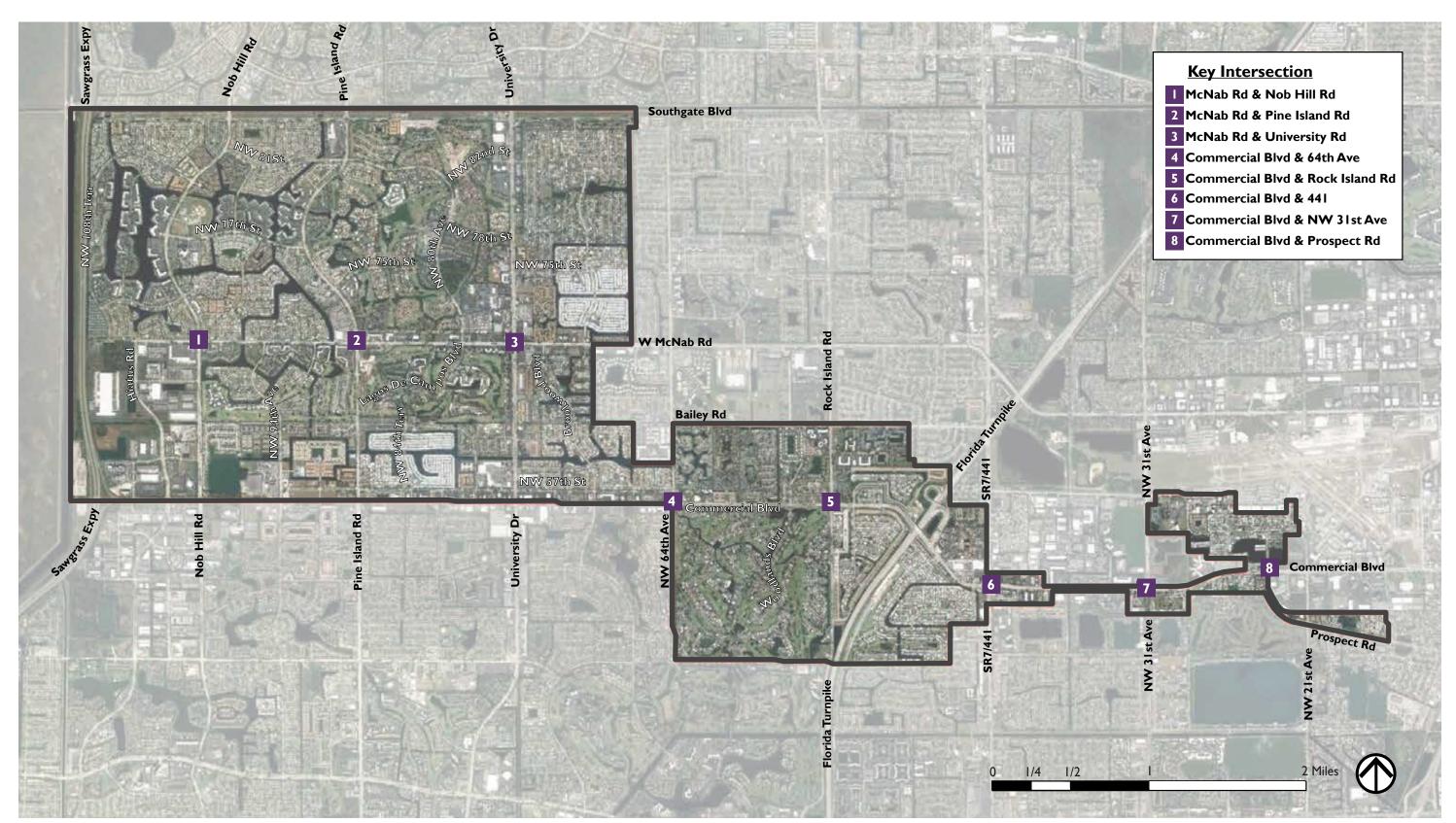


Figure 2.6: Key Intersections Map





MCNAB RD & NOB HILL

Key Intersection

The intersection of McNab Rd and Nob Hill Rd is in overall good shape. As seen with prior intersections, it lacks landscape in both the medians approaching it and the rights of way. However the right of ways are covered in turf on all corners and extending out on either street.

The interiors of the right of ways are landscaped with large trees which makes this intersection stand out in comparison to others. The medians also conform to the city standard of pavers surrounded by concrete curb, however some are purely concrete.

The sidewalks on all four corners are separated from the street but the lining of the crosswalks has deteriorated and is in need of maintenance.











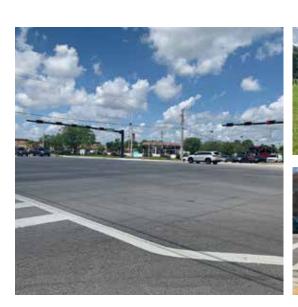
MCNAB RD & PINE ISLAND RD

Key Intersection

The intersection of McNab Rd and Pine Island Rd is in good condition. Again, the medians leading to the intersection do not contain any landscape. Two of the corners at the intersection do not have anything in the right of ways, one has large trees, and the last leads into Tamarac Commons Park.

Tamarac Commons Park can be viewed clearly from any point in the intersection. The park, the Tamarac themed electric box on the north east corner of Pine Island and McNab, and Tamarac banners hanging on the corners create an appealing identity for the intersection.

The crosswalks are in good shape, however three of them lack the parallel lines in between the boundaries. The sidewalks are curbed and abutt the side of the street. All of the pedestrian crossing signs and traffic signals are clearly visible.



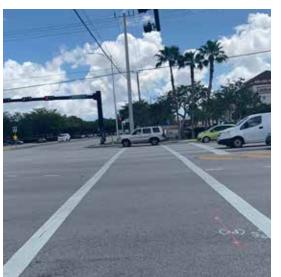




















MCNAB RD & UNIVERSITY DR



The intersection of McNab Rd and University Dr is in need of much maintenance. The area is currently undergoing construction and some of the rougher spots are due to this. However three of the corners where pedestrians wait to cross the intersection have missing turf, missing or disturbed concrete, and generally unsafe conditions. The medians and right of ways lack any landscape.

The sidewalks are curbed but lack a buffer between the themselves and the street. The crosswalks are in good condition, while the medians show striping that has deteriorated. All crosswalk signs and traffic signals are clearly visible.











COMMERCIAL BLVD & 64TH AVE

Key Intersection

Again, the intersection of Commercial Blvd and 64th Ave lacks an identity. There is nothing to associate the area with the city of Tamarac except for the consistency in hardscape that can be found throughout the city. The medians that reach the intersection end in pavers surrounded by a concrete curb, as a majority of the city's intersections do.

The medians lack landscape as do the corners in the right of way and in most cases the sidewalk connects directly to the curb which can cause safety issues.







COMMERCIAL BLVD & ROCK ISLAND

Key Intersection

The intersection of Commercial Blvd and Rock Island Rd is lacks identity again. There is nothing to relate it back to the rest of the community except for the consistent design at the ends of the medians. However, pavers are only present on Commercial Blvd and not on Rock Island Rd.

The entire intersection is in need of maintenance. Traffic signage has been knocked down, crosswalk and median striping has deteriorated, curbs are crumbling, and the turf in the right of ways has overgrown and begun reaching into the sidewalks.

The sidewalks are connected to the curb and lack any buffer for pedestrians from the street traffic.











COMMERCIAL BLVD & 441

Key Intersection

The intersection of Commercial Blvd and 441 lacks identity. Outside of the Tamarac themed electric boxes, there is little to make this intersection stand out from any other, despite it being a heavily trafficked one.

The medians lack landscape anywhere close to the intersection and even the right of ways on the corners lack definition. These areas, especially those meant for drainage are unkempt with and filled with litter.

Being such a wide street, the crosswalks could use re-striping to make them stand out more.

























The intersection of Commercial Blvd and 31st Ave lacks identity. There is nothing to relate it back to the rest of the community except for the consistent design at the ends of the medians and utility box wrapped in City design. However, pavers are only present on Commercial Blvd and not on 31st Ave.

The pavers are in need of maintenance. The crosswalks are in good condition and there is adequate signals for pedestrian crossing to be safe.

The sidewalks are connected to the curb and lack any buffer for pedestrians from the street traffic.











COMMERCIAL BLVD & PROSPECT RD

Key Intersection

The intersection at Commercial Blvd and Prospect Rd is slightly better off than those of 441 and 64th Ave. While it lacks any identifying signage and landscape in the medians, it does follow the pattern of pavers surrounded by concrete curbs.

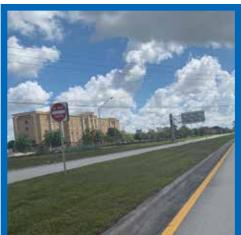
The sidewalks are set back from the road with small landscape buffers or at least a section of turf to protect pedestrians. The crosswalks are visible but only have lines perpendicular to the traffic. Parallel lines should be added as seen at the intersection of Commercial and 441.

The area is in need of maintenance as there is a depression on one corner seemingly due to erosion and a small utility pole that has been ripped from its housing.





Commercial Blvd + Sawgrass Expwy



Nob Hill Rd + Commercial Blvd

TAMARAC The City for Tour Life

Rock Island Rd +

44th Ave



Commercial Blvd +

Turnpike

Pine Island Rd + Southgate Blvd



Southgate Blvd + East Boundary



McNab Rd + East Boundary



Pine Island Rd + Commercial Blvd



University Dr + Southgate Blvd



Nob Hill Rd + Southgate Blvd.



Rock Island Rd + Bailey Rd



University Dr + Commercial Blvd



GATEWAYS

Showcase of Gateway identification.

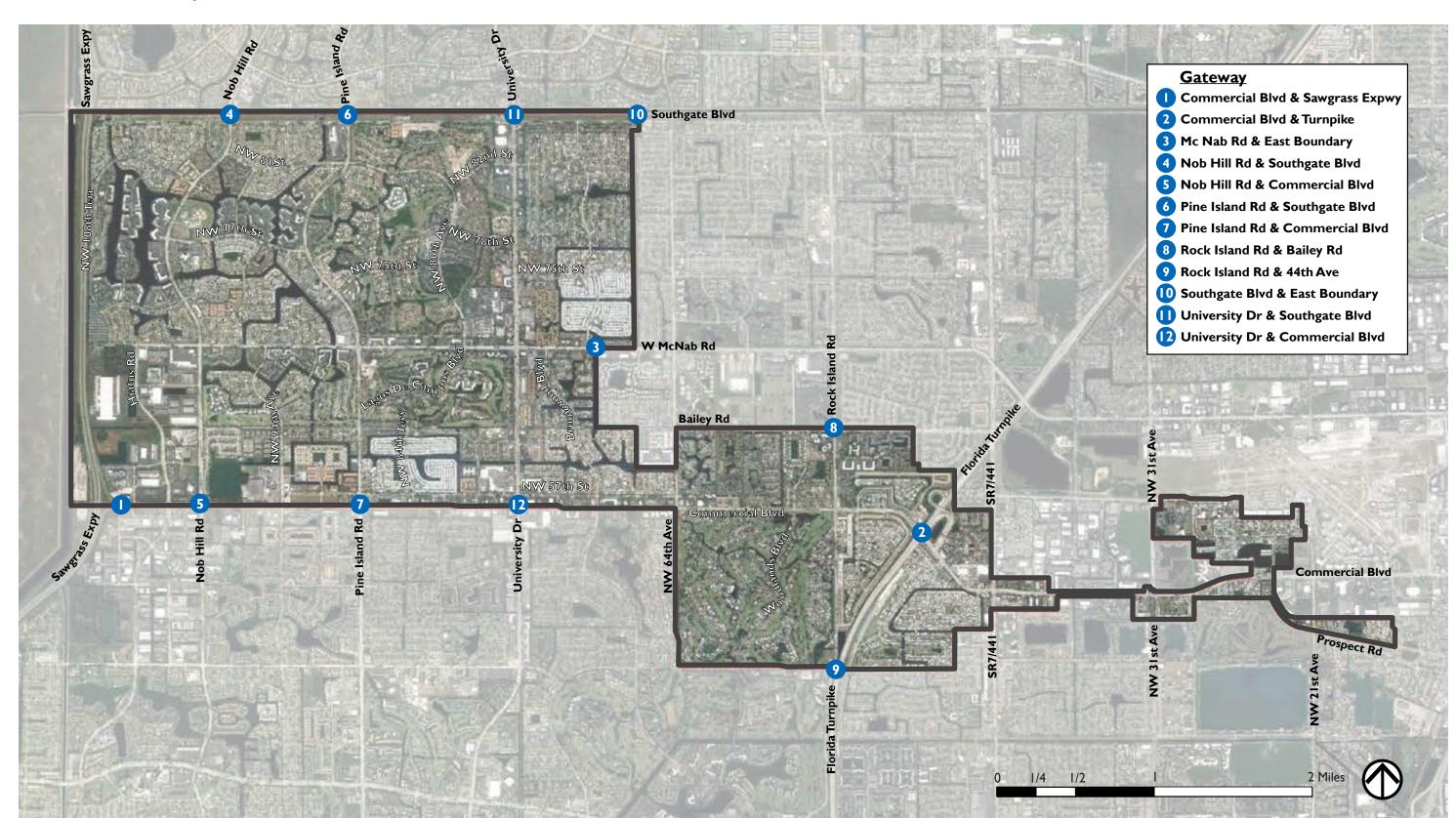


Figure 2.7: Gateway Map







COMMERCIAL BLVD + SAWGRASS EXPWY

Gateway

Where Commercial Blvd meets the Sawgrass Expressway is completely open and lacks any identification as a gateway to the city. A gateway sign is not present, and there is not landscape other than turf. The hardscape is completely concrete which does not match the traditional pavers curbed in concrete style of the rest of the city.

* Note there is an approved future landscape improvements project on Commercial Blvd. from Sawgrass Expwy. to Pine Island Rd., which will impact the current conditions.











COMMERCIAL BLVD + TURNPIKE

Gateway

The gateway at Commercial Blvd and the Turnpike is one of the most clear in the city. The entire median leading up to the gateway signage differs in landscape and hardscape than those leading up to it, which promotes the identity of the city. The sign itself is well situated in the median for clear visibility from the east.

The area is in need of maintenance though. Many of the landscape elements are dead or dying, the red mulch surrounding plantings are filled with litter, pavers have been lifted out of place, and old tree support beams have just been laid down in the median after they were no longer useful. The landscape to the west of the gateway signage, while well designed, has is overgrown and blocks the message on the rear of the sign from those leaving Tamarac.























MCNAB RD + EAST BOUNDARY



Gateway

The east boundary of McNab Rd is clearly identifiable as an entryway to the city. The gateway sign is clearly visible when entering the city from the East. The landscape and hardscape elements denote a transition into the city as they differ from those east of the boundary line. However, the area is in need of maintenance as there are large patches of dead turf and the landscape to the west of the gateway sign blocks the "thank you" message on the rear of the sign from view.

Other signage that denoted a transition into Tamarac was present at one time. However the "Kaboom Play City" sign has been knocked down, is hidden under the existing shrubs, and the turf has grown over its support pole. Replacing this sign will further promote the identity of the gateway.











NOB HILL RD + SOUTHGATE BLVD

Gateway

The gateway at Nob Hill Rd and Southgate Blvd has a clear identity as an entryway into the city. The "Welcome to Tamarac" sign is clearly visible from both directions and the surrounding landscape and hardscape elements are consistent with the style of the rest of the city.

Despite the gateway sign being set back from the intersection, both Nob Hill Rd and Southgate Blvd promote the entrance to the city. On each corner the Tamarac banner hangs from the street signal supports.







NOB HILL RD + COMMERCIAL BLVD

Gateway

The gateway at Nob Hill Rd and Commercial Blvd is set back from the intersection by over 400ft. Therefore the intersection itself does not read as a gateway. There is signage at the intersection that denotes the transition to Tamarac including a small city limit sign and the Tamarac Commercial Park entrance sign. While these are here, they are not specific to the city's image.

The "Welcome to Tamarac" sign is clearly visible from both directions on Nob Hill Rd. The landscape to the north of it denotes a transition into the city, as does the hardscape pattern of pavers curbed in concrete. However these elements are far from the intersection and do not reach as many people as they could.











PINE ISLAND RD + SOUTHGATE BLVD

Gateway

The intersection of Pine Island Rd and Southgate Blvd is considered a gateway, but despite having the regular "Welcome to Tamarac" sign it lacks the identity of a true gateway. The median and landscape are in need of maintenance due to large patches of dead turf that take away visually from the sign. The area also lacks any planting except for a single solitaire palm directly behind the sign. The only other elements that denote a transition into Tamarac are the "Tree City" sign, and traditional hardscape of pavers curbed in concrete.



























Gateway

The gateway at Pine Island Rd and Commercial Blvd is well organized. Although it lacks the standard concrete gateway signage, it has Tamarac banners hanging on each street corner and the electrical boxes also identify the city. This provides a unified intersection that clearly denotes an entrance to the city. The future park on the corner will only add to the identity.

The medians and landscape also create a unified image as they mirror each other in their composition. The plantings inside the median on North McNab Rd has dead and damaged specimens.

The medians themselves can use some maintenance as weeds are growing through the pavers, curbs are crumbling in spots, and some striping has deteriorated.











ROCK ISLAND RD + BAILEY RD

Gateway

The gateway at Rock Island Rd and Bailey Rd has the traditional "Welcome to Tamarac" sign, but does not feel like an entrance to the city. Both the front and rear of the sign are clearly visible due to a lack of any vegetation other than turf. Only one of the existing medians fits in with the consistent hardscape stylings of the city, and they are in need of maintenance. The turf has large patches missing and dead spots throughout that need to be maintained.







ROCK ISLAND RD + 44TH AVE

Gateway

The gateway to Tamarac at Rock Island Rd and 44th Ave lacks any sense of identity. Currently there is no signage promoting an entrance to the city. The landscape and hardscape do not fit in with the consistencies throughout the rest of the city. Portions of the medians are in need of maintenance due to crumbling curbs, deteriorated striping, and overgrowth of weeds.

The medians are wide enough to install the traditional "Welcome to Tamarac" signage.











SOUTHGATE BLVD + EAST BOUNDARY

Gateway

Southgate Blvd at the eastern boundary of Tamarac is one of the most clear gateways to the city. The traditional "Welcome to Tamarac" sign is massive and cannot be missed. Other street signage such at the "Tree City USA" sign also promote the transition into Tamarac.

The landscape provides a clear visual when entering Tamarac from the east, however it blocks the rear of the sign that reads "Thank You for Visiting Tamarac". The rear of the sign is just as important as the front in creating an image for the city and therefore the landscape needs to be maintained.

The hardscape matches the majority of the city with its pavers curbed in concrete, which is a clear difference from that of North Lauderdale to the east of the gateway. This further promotes the transition to Tamarac.





















UNIVERSITY DR + SOUTHGATE



Gateway

The gateway at University Dr and Southgate Blvd has a distinct identity and is a clear gateway into the city. Although it lacks the traditional "Welcome to Tamarac Sign", each corner is marked with the hanging Tamarac banners. The electrical boxes are wrapped in the Tamarac logo, and various signage promotes the identity of the city such as the "Tree City" sign. Local temporary signage near Veterans Memorial Park also promotes the entrance to the city.

The landscape and hardscape are consistent with the majority of the city, denoting a transition into Tamarac.











UNIVERSITY DR + COMMERCIAL

Gateway

The gateway at University Dr and Commercial Blvd lacks the traditional Tamarac Gateway Sign. This is due to the lack of wide medians at the intersection. Despite not having the traditional signage, it does have elements that work towards creating one such as the Tamarac themed electrical boxes. In order to create a more significant identity as a gateway, the hanging Tamarac banners could be installed on the corners.

Of the four medians at the intersection, only one has landscape elements and it only contains turf. The medians are also fully concrete as opposed to the traditional pavers curbed in concrete.







CITY-WIDE RESILIENCY RATINGS BY TREE SPECIES

The below tree species ratings are designed to help arborists complete various appraisal formulas that require a 'species rating'. This list was creating using the expertise of arborists and other tree experts throughout the State of Florida. This list is intended only as a guide. The individual appraiser's judgment is a very important consideration in making a final determination of the species percentage in valuation formulas.

Tree species were rated based on their suitability and performance as 'urban trees'. Trees were rated based on the following criteria:

- 1. Urban Tolerance: The ability for a tree to survive and thrive in the urban environment. Highly rated trees have high carbon sequestration rates, filter polluted runoff, and provide cooling shade to combat the urban heat island affect.
- 2. Structure: Tree structure plays a large role in resilience. Tree structure determines wind tolerance, drought tolerance, salt tolerance, and the all around strength of the tree.
- 3. Wind: Trees with high wind tolerance are rated higher on the scale than those with low tolerance. Wind tolerance is based on tree structure and the ability to withstand high winds without breaking or being up-rooted.
- 4. Compartmentalization: Compartmentalization refers to a tree's ability to stave off disease. Trees rated highly based on compartmentalization have the ability to "wall off" disease and compartmentalize the affected area in order to protect the rest of the tree.
- 5. Life Span: Trees with a longer life-span are rated higher on the scale than those with shorter life-spans. Trees with longer life spans do not need to be replaced barring extreme circumstances, further promoting the ecological and economical benefits of the trees.
- 6. Native: Native trees are rated higher on the resilience scale than non-native plants. This is due to their ability to thrive in the local climate.



Acer rubrum

Red Maple



Albizia julibrissin **Mimosa Silktree**



Bauhinia blakeana Hong Kong Orchid



Bucida buceros
Black Olive



Clusia rosea
Pitch Apple



Cocoloba uvifera
Seagrape



Conocarpus erectus

Green Buttonwood



Conocarpus erectus var. sericeus Silver Buttonwood



Eugenia foetida Spanish Stopper



llex cassine

Dahoon Holly



Jatropha integerrima **Peregrina**



Juniperus sillicola

Southern Red Cedar



Lugustrum japonicum **Ligustrum**



Lysiloma sabicu **Sabicu**



Magnolia grandifolia
Southern Magnolia



Pongamia pinnata
Pongam Tree



Psidium catteyanum Strawberry Guava



Quercus Virginiana **Live Oak**



Senna surattensis
Glaucous Cassia



Swietenia mahogon. **Mahogany**







Bursera simaruba **Gumbo Limbo**



Caesalpinia granadillo Bridal Veil Tree



Callistemon viminalis
Weeping Bottlebrush



Calophyllum inophyllum Alexandrian Laurel



Adonidia merrilli Christmas Palm



Bismarckia nobilis Bismark Palm



Cocos nucifera

Coconut Palm



Livistonia chinensis Chinese Fan Palm



Cordia sebestena
Orange Geiger Tree



Cupaniopsis anacardiodes

Carrotwood



Delonix regia Royal Poinciana



Eriobotrya japonica **Loquat**



Phoenix canariensis

Canary Island Date



Phoenix dactylifera **Date Palm**



Phoenix dactylifera

Medjool Date Palm



Phoenix reclinata
Clumping Date Palm



Koelreuteria elegans Flamegold



Koelreuteria spp. Goldenrain Tree



Lagerstroemia indica Crepe Myrtle



Lagerstroemia speciosa
Queen Crepe Myrtle



Phoenix roebelinii
Pygmy Date Palm



Ptychosperma elegens
Solitaire Palm



Roystonea regia Royal Palm



Sabal palmetto

Cabbage Palm



Myrcianthes fragrans
Simpson Stopper



Nerium Oleander Oleander



Nerium Oleander

Oleander White Flower



inus elliotii var. dens Slash Pine



Syagrus schizophylla Arikury Palm



Sygarus romanoffiana Queen Palm



Thatch Palm



Montgomery Palm



Tabebuia aureaTabebuia caraibaSilver TrumpetYellow Trumpet



Tabebuia heterophylla
Pink Trumpet



Veitchia winin Winin Palm



Washingtonia robusta Washington Palm



Wodyetia bifurcata Foxtail Palm







Scientific Name	Common Name	20%	40%	50%	60%	65%	70%	75%	80%	85%	90%	100%	Florida Native	Quantity of Species
Acer rubrum	Red Maple										Х		YES	27
Adonidia merrilli	Christmas Palm								Х				NO	12
Albizia julibrissin	Mimosa Silktree						Х						NO	Ī
Bauhinia blakeana	Hong Kong Orchid						X						NO	3
Bismarckia nobilis	Bismark Palm										Х		NO	I
Bucida buceras	Black Olive						X						NO	129
Bursera simaruba	Gumbo Limbo											X	YES	85
Caesalpinia granadillo	Bridal Veil Tree								X				NO	18
Callistemon viminalis	Weeping Bottlebrush			X									NO	6
Calophyllum inophyllum	Alexandrian Laurel							X					NO	51
Clusia rosea	Pitch Apple											Х	YES	8
Coccoloba uvifera	Seagrape								Х				YES	9
Cocos nucifera	Coconut Palm								Х				NO	2
Conocarpus erectus	Green Buttonwood						Х						YES	14
Conocarpus erectus	Silver Buttonwood								Х				YES	73
Cordia sebestena	Orange Geiger Tree						Х						YES	95
Cupaniopsis anacardiodes	Carrotwood	Х											NO	1
Delonix regia	Royal Poinciana								Х				NO	2
Eriobotrya japonica	Loquat							Х					NO	1
Eugenia foetida	Spanish Stopper										Х		YES	23
llex cassine	Dahoon holly							Х					YES	6
Jatropha integerrima	Peregrina							Х					NO	32
Juniperus sillicola	Southern Red Cedar								Х				YES	2
Koelreuteria elegans	Flamegold	Х											NO	3
Koelreuteria spp.	Goldenrain Tree								Х				NO	9
Lagerstroemia indica	Crepe Myrtle										Х		NO	82
Lagerstroemia speciosa	Queen Crepe Myrtle									Х			NO	3
Ligustrum japonicum	Ligustrum							Х					NO	29
Livistonia chinensis	Chinese Fan Palm							Х					NO	30
Lysiloma sabicu	Sabicu										Х		YES	12
Magnolia grandifolia	Southern Magnolia					X							YES	61
Pongamia pinnata	Pongam Tree			X									NO	3
Myrcianthes fragrans	Simpson Stopper										Х		YES	1



Scientific Name	Common Name	20%	40%	50%	60%	65%	70%	75%	80%	85%	90%	100%	Florida Native	Quantity of Species
Nerium oleander	Oleander				Х								NO	22
Nerium oleander	Oleander White Flower				Х								NO	I
Phoenix canariensis	Canary Island Date										Х		NO	4
Phoenix dactylifera	Date Palm										Х		NO	4
Phoenix dactylifera	Medjool Date Palm										X		NO	24
Phoenix reclinata	Clumping Date Palm										Х		NO	29
Phoenix roebelinii	Pygmy Date Palm							Х					NO	8
Pinus elliotii v. densa	Slash Pine										Х		YES	23
Psidium catteyanum	Strawberry Guava			Х									NO	4
Ptychosperma elegans	Solitaire Palm				Х								NO	3
Quercus virginiana	Live Oak											Х	YES	583
Roystonea regia	Royal Palm											Х	YES	186
Sabal palmetto	Cabbage Palm											Х	YES	1,456
Senna surattensis	Glaucous Cassia									X			NO	10
Swietenia mahogoni	Mahogany								Х				YES	154
Syagrus schizophylla	Arikury Palm									Х			NO	5
Sygarus romanzoffiana	Queen Palm		Х										NO	40
Tabebuia aurea	Silver Trumpet								Х				NO	I
Tabebuia caraiba	Yellow Trumpet			Х									NO	6
Tabebuia hetetophylla	Pink Trumpet								Х				NO	28
Thrinax radiata	Thatch Palm											Х	YES	I
Veitchia arecina	Montgomery palm							Х					NO	295
Veitchia winin	Winin Palm							Х					NO	27
Washingtonia robusta	Washington Palm	X											NO	87
Wodyetia bifurcata	Foxtail Palm							Х					NO	54
										C	urrent	Percenta	age of Resiliency	89%
								Percer	ntage of	Resilie	ncy (Rer	moved 2	0% Rated Trees)	90.55%
Percentage of Resiliency (Removed 40% Rated Trees)						91.22%								

Table 1.10: City-wide Resilience Chart







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Opportunities & Constraints Analysis



INTRODUCTION

After identifying the existing conditions, an in-depth analysis of the landscape opportunities and constraints was necessary in order to achieve the goals and objectives of the Master Plan. Various aspects of the roadway were examined in order to inform the design and implementation guidelines. The landscape opportunity and constraints analyses covered the below topics and their findings:

- I. Street Hierarchy: The forty-three corridor segments were grouped into a hierarchy to help identify the needs of each street typology. The categorical hierarchy was based on the Broward County Highway Functional Classifications, as well as the surrounding zoning and land usage. This classification was overlaid on top of a graphic depiction of the density of median plantings in order to show which areas had the most potential.
- 2. Jurisdiction Map: Each of the corridors was identified based upon the agency having jurisdiction over them. This identification when compiled with the rest of the analyses shows the constraint of various agencies with which coordination will be necessary.
- 3. Community and Business Identity: The level of identity analysis visualizes the different neighborhoods and key redevelopment areas throughout the city. By mapping these neighborhoods and redevelopment areas with an overlay of the corridors, a relationship is shown. Many of the streets cut through one distinct area while others vary along their path or even on either side of the road. These conflicts can influence design decisions based on creating a cohesive identity throughout. Specific streets that border two varying neighborhoods provide both an opportunity and constraint for the landscape. It offers the chance to unify the identity of the two neighborhoods or further differentiate them. As a constraint, two different entities will need to agree upon the final design.
- 4. Gateways & Key Intersections: Key intersections were identified based on their relationship between corridors in the street hierarchy. Identifying these intersections depicts areas of high concentration and the potential for landscape elements that give them distinct identities. Existing and potential gateway corridors into the city were also identified in order to find locations for further identity building for the city. Alongside the identification of these important intersections, the traffic volumes of the corridors were analyzed. These two factors create a hierarchy of need for the landscape and a prioritization of the work.
- 5. Conditions of Landscape & Irrigation Systems: The landscape and irrigation systems analysis overlays areas of well maintained or dead / in need of maintenance landscape material with the existing irrigation systems. There is a direct visual correlation between a lack of irrigation and dead or dying landscape material. These un-maintained areas are generally out of range of existing pumping stations if a new irrigation system were to be proposed. Through this

analysis new areas for potential pumping stations have been identified.

- 6. Hardscape: Analysis of the existing hardscape in the medians throughout Tamarac consisted of identifying the various types and comparing them in order to distinguish the need for a cohesive style. All of the medians with hardscape were found to be either concrete or made of pavers. In the case of the pavers, each median used the same sizes and color of paver; however their laid patterns varied from corridor to corridor. This section also visualizes the vast amount of hardscaped areas within the project limits in order to show how large this undertaking can become
- 7. Solar Micro Climatic Factors: The analysis of solar micro climatic factors looked into the experience of both the pedestrian and vehicular users. The study looked at shade coverage / sun intensity, lighting, and pedestrian connectivity. While a majority of the corridors had a moderate amount of shade, and therefore moderate heat intensity, almost half lacked shade and had high intensity heat. Only one corridor was rated has heavily shaded with a low heat intensity rating. From this analysis it can be inferred that the pedestrian experience is in need of enhancement with shade. To further illustrate the effect, a typical corridor from each intensity category was selected and analyzed for the shading effects over sidewalks throughout the day.
- 8. Landscape Challenges: When looking at constraints to the potential design guidelines, an analysis of landscape challenges was necessary. The analysis looked at existing projects throughout Tamarac that would affect the right of ways, as well as existing conditions such as overhead power lines, buffer walls, and utility outlets or traffic boxes that could interrupt design standards. When looking at this condition, potentially problematic areas are discovered.
- 9. Plant Material Opportunities: After investigating the previous analyses, potential plant material has been selected. In order to find primary locations for planting that could grow to areas of high imageability and identity, analyses of various factors was necessary. Heavily used locations such as recreational areas, shopping centers, and medical centers were identified and their proximity to key intersections along the corridor. Areas in which these factors overlap are primary planting zones.

STREET HIERARCHY

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Analysis of corridor classification overlaid with the density of median planting to create a base hierarchy of the streets throughout the city. Therefore, a Principal Arterial with a disproportionate amount of trees, such as Commercial Blvd., would be a priority area.

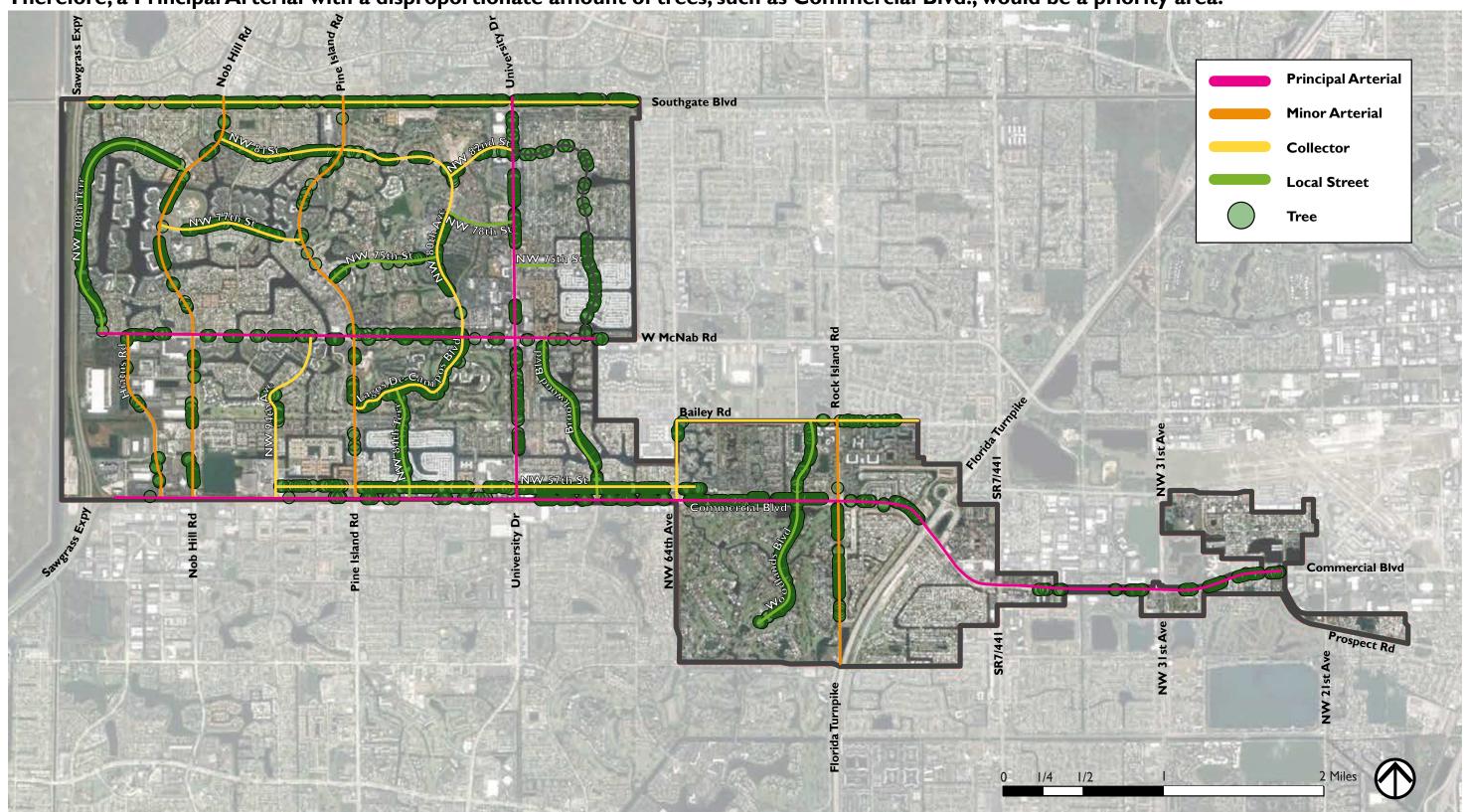


Figure 3.1: Street Hierarchy Map





JURISDICTION MAP

Identification of jurisdiction right of ways

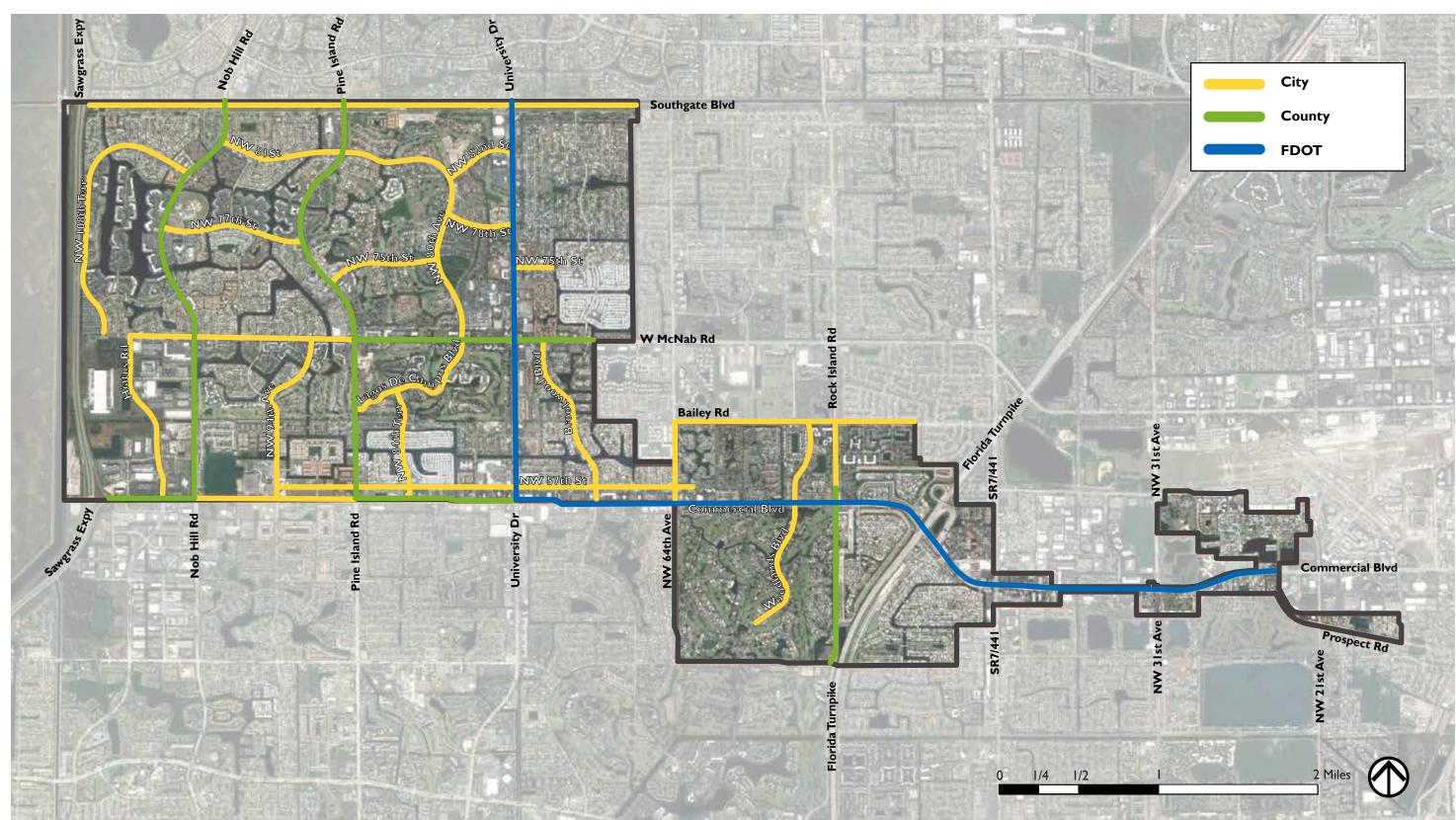


Figure 3.2: Jurisdiction Map

COMMUNITY & BUSINESS IDENTITY

Analysis of identifying qualities such as neighborhoods and themed development areas, and where they meet. The streets that border these areas present an opportunity for landscape that can build a higher sense of identity.

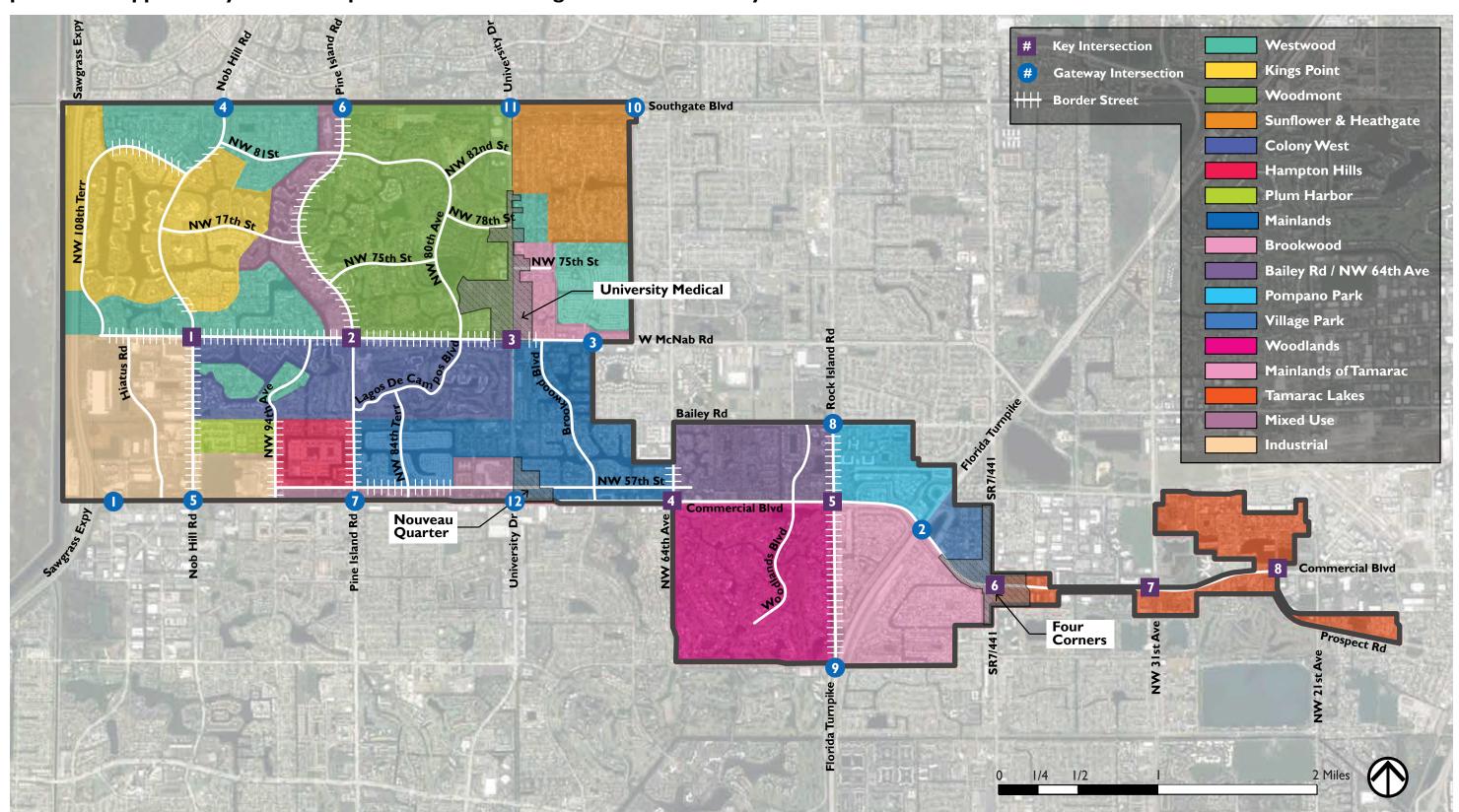


Figure 3.3: Community & Business Identity Map







GATEWAY & KEY INTERSECTIONS

Analysis of the traffic volumes at key intersections and gateways in order to create a prioritization of the most used and recognizable areas for construction.

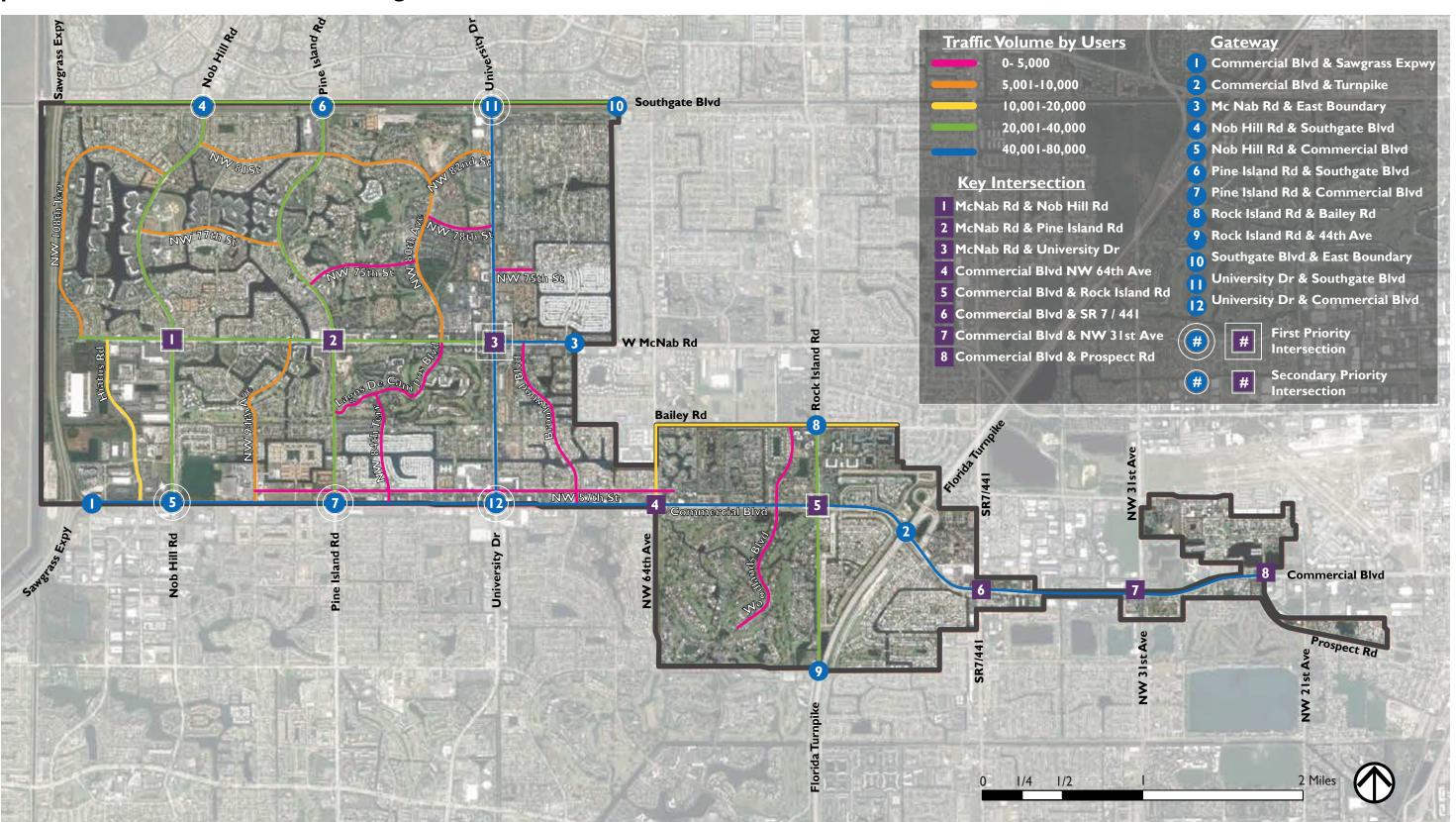


Figure 3.4: Gateway and Key Intersections



CONDITIONS OF LANDSCAPE & IRRIGATION SYSTEMS

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Identification of corridors with well maintained & adequate irrigation; as well as corridors with dead material & insufficient irrigation.

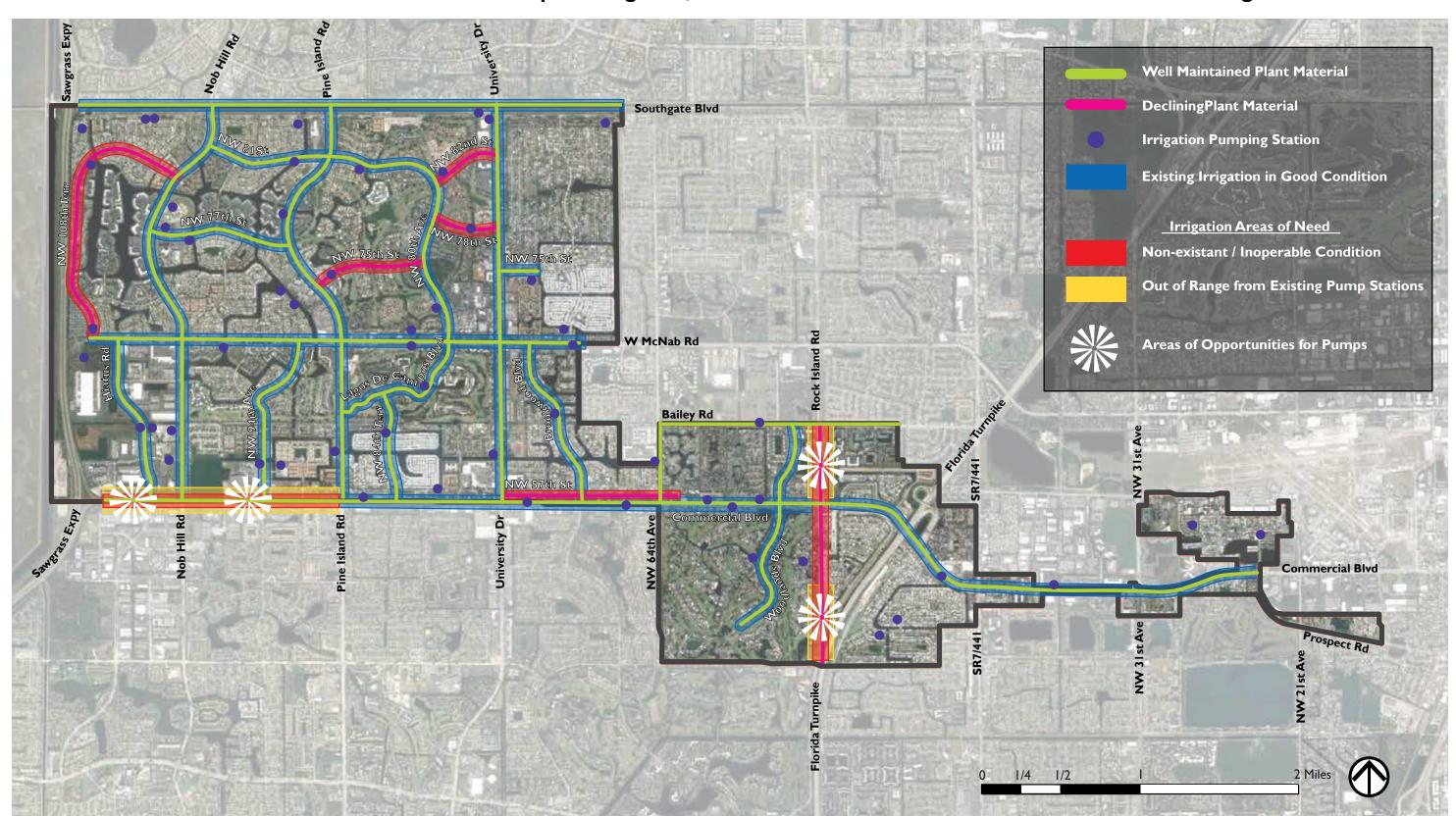


Figure 3.5: Conditions of Landscape and Irrigation Systems Map





HARDSCAPE

Existing hardscape types, shapes, and colors

Concrete:

While a majority of median end caps are pavers curbed in concrete, another common option is just concrete. Smaller endings are often uncurbed while large ones are curbed. Often these are in need of maintenance.







Alternating Horizontal:

A common hardscape is a alternating horizontal design of red pavers that alternate between 4"x4" squares and 6"x4" rectangles.







Alternating Vertical:

This hardscape typology contains the same size and shape pavers as the alternating horizontal type. They are simply laid in the opposite direction. This pattern is more common on thinner median ends or dividers that do not have any landscape.







Random Mosaic:

The third most common hardscape typology also consists of 4"x4" square and 6"x4" rectangular red pavers. In this case, the bricks are randomly laid in a mosaic pattern and cut to fit between the curbs when needed.







Outliers:

On rare occasion, the pavers in medians do not fit a standard type. A majority are 4"x4" arranged in a diamond pattern and even rarer are the 6"x4" arranged horizontally and freshly painted.









HARDSCAPE

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Locations of paver style hardscape areas

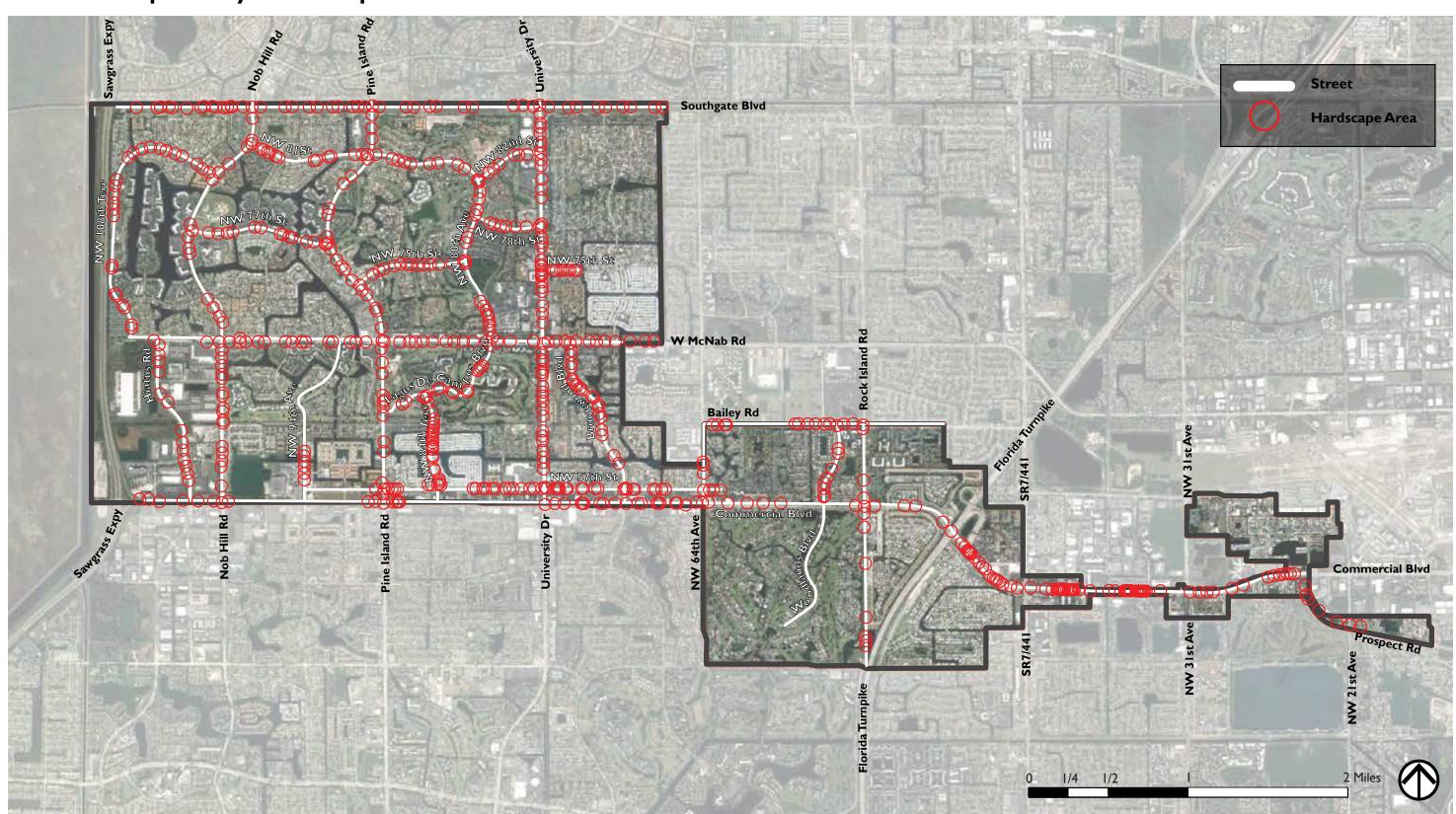


Figure 3.8: Hardscape Map





SOLAR MICRO CLIMATIC FACTORS

Solar intensity for Pedestrian Corridor: Analysis of the existing sidewalk and future proposed sidewalk connectivity areas for levels of solar intensity. Intensity levels have been categorized as high, moderate, and low, based upon existing shade availability along pedestrian paths.

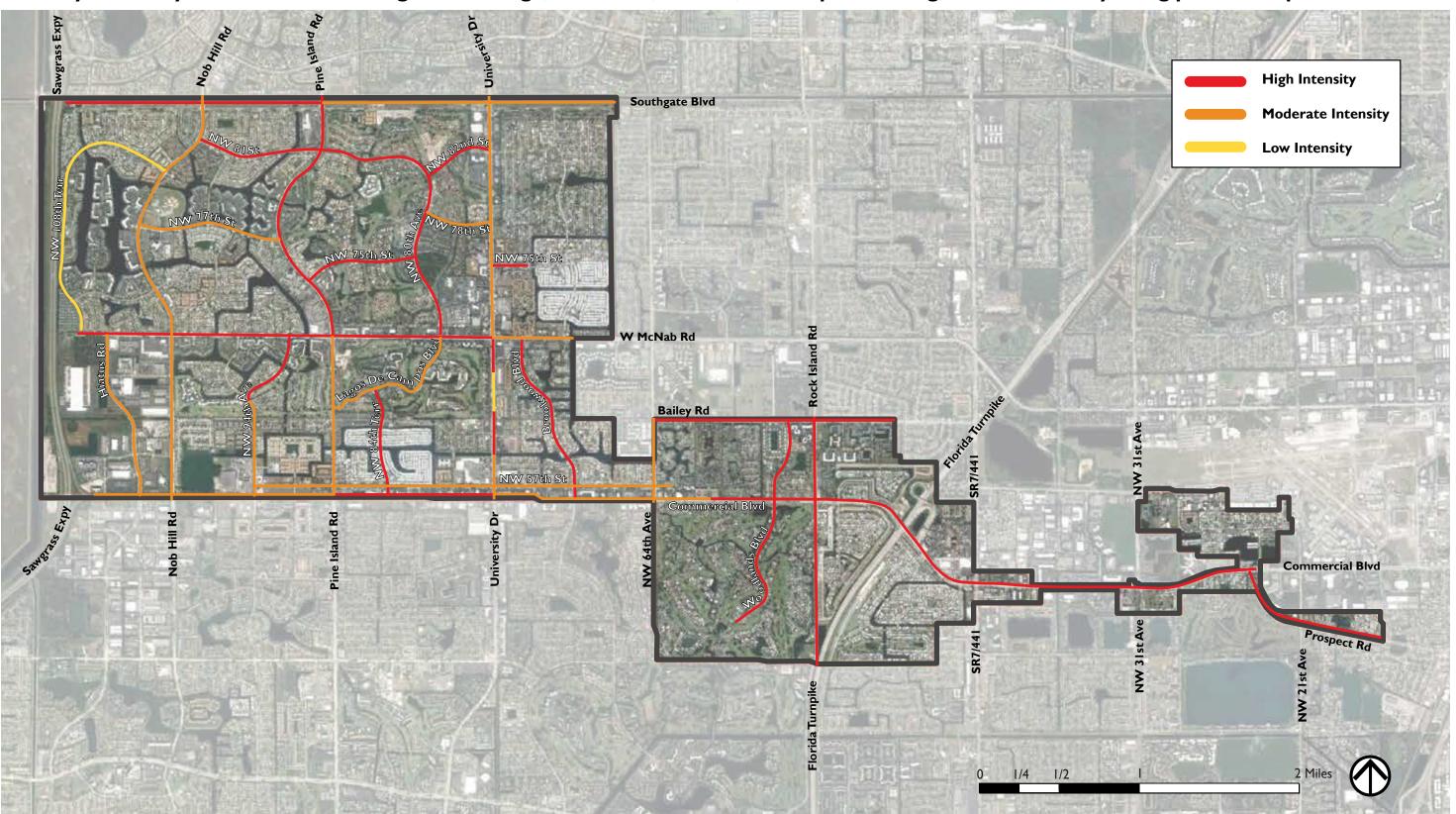


Figure 3.9: Solar Micro climatic Factors Map



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TYPICAL HIGH INTENSITY ROADWAY

TYPICAL MODERATE INTENSITY ROADWAY

TYPICAL LOW INTENSITY ROADWAY







Figure 3.10: Illustration of Typical: High Intensity Roadway, Moderate Intensity Roadway, Low Intensity Roadway







LANDSCAPE CHALLENGES

Analysis of adjacent property access issues and conditions, as well as on-going city projects, which will be a challenge to street landscape and right-of-way enhancement.

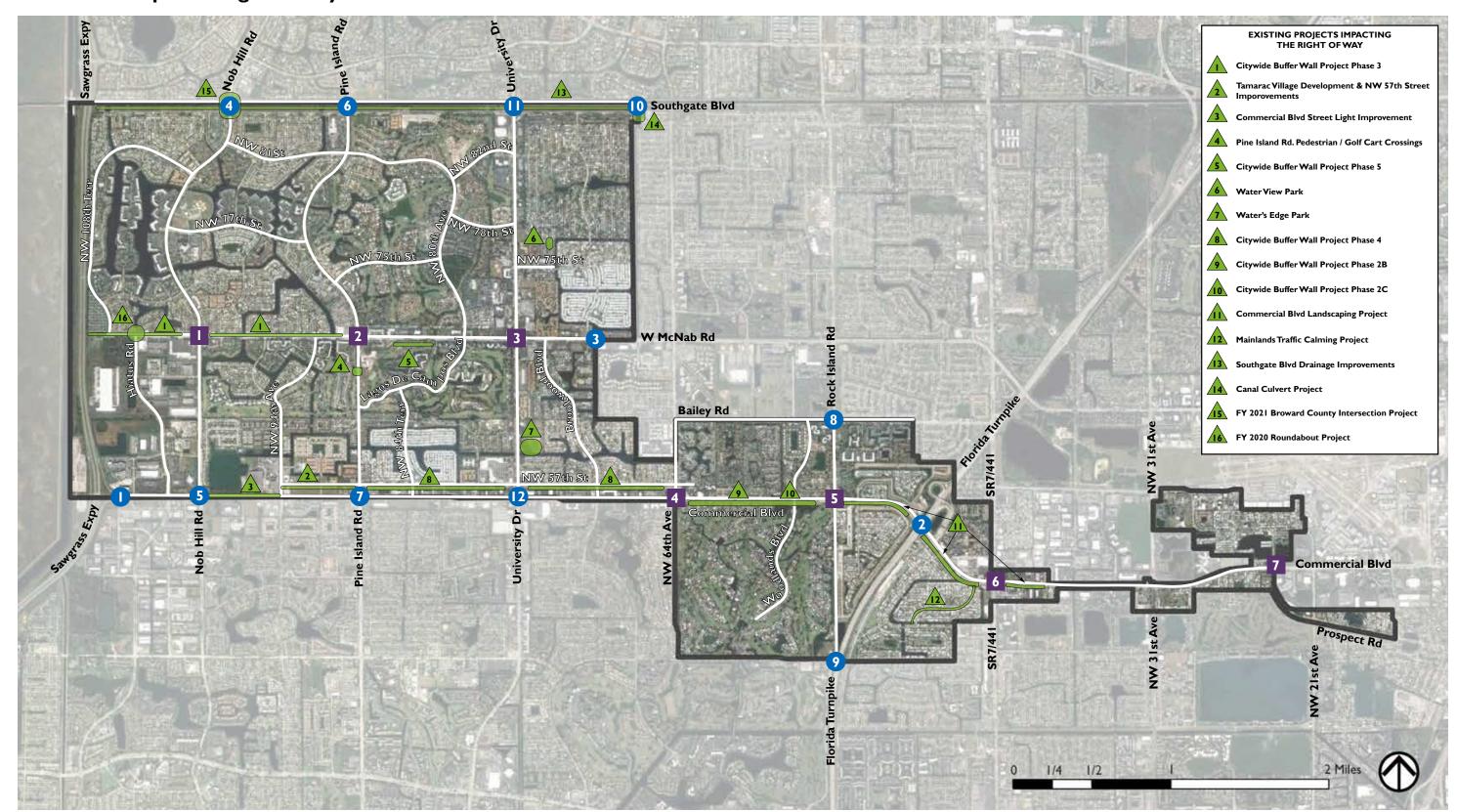


Figure 3.11: Landscape Challenges Map



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LANDSCAPE CHALLENGES

Key Intersection Right Of Way Dimensions & Conditions

•		8	,		
KEY INTERSECTION	NORTH EAST CORNER	SOUTH EAST CORNER	SOUTH WEST CORNER	NORTH WEST CORNER	CONDITIONS
1	18′	40′	45′	28′	 Sidewalk Powerlines (NW-NE Corner, NE-SE Corner) Barrier Wall North side of McNab
2	10′	35′	35′	35′	 Sidewalk Powerlines (NE-SE Corner, SE-SW Corner) Signage on SW-NW Corners
3	8′	N/A	60′	40′	 Sidewalk Powerlines (NW-SW Corner, SW-SE Corner) Traffic Box (NW Corner)
4	10'	30'	40'	10'	 Sidewalk Powerlines (SW-SE Corner) Citywide Buffer Project Phase 2 (SE Corner) Bus Stop (SW & NW Corner) Signage (SW & NW Corner) Traffic Box (NE Corner)
5	N/A	15′	N/A	40′	 Sidewalk Powerlines (All Sides) Traffic Box (NE Corner) Citywide Buffer Project Phase 2b-c (NW Corner)
6	15'-30'	25′	40'	N/A	 Sidewalks Powerlines (NW-NE Corner, NE-SW Corner) Detention Pond (SE Corner) Traffic Box (NW Corner)
7	8′	20'	8′	6'-20'	 Sidewalk Powerlines (NW-SW Corner, SW-SE Corner) Traffic Box (NE Corner) Bench (SE Corner)

Table 1.11: Key Intersection Right of Way Dimensions & Conditions

Gateway Right Of Way Dimensions & Conditions

GATEWAY	NORTH EAST CORNER	SOUTH EAST CORNER	SOUTH WEST CORNER	NORTH WEST CORNER	CONDITIONS
	10′	N/A	N/A	N/A	22' Wide Median Right of Way only on North Side of Commercial Blvd
2	N/A	10′	25′	25′	30' Wide Planted Median ROW East of Overpass meets Commercial / FDOT ROW Residential
3	15′	N/A	N/A	N/A	 20' Wide Median & Sidewalk Powerlines on Northern Edge of McNab Rd. 15' ROW before Buffer Wall on Northern Side
4	10′	20′	20′	10′	 Sidewalks & 5'-15' Median Powerlines on East Side of Nob Hill Small Gateway Sign Buffer Wall on West Side of Nob Hill
5	20′	N/A	N/A	10'	 Sidewalks Powerlines (NE-SE Corner, SE-SW Corner) Traffic Box (NE Corner) Small Gateway Sign South Side of Commercial Blvd Out of Jurisdiction 5' Median at Intersection, 30' at Widest Point
6	10'	10'-20'	30′	10'	 Sidewalks Powerlines (NW-NE Corner, NE-SE Corner) Traffic Box (NW Corner) Retail Signage (SW Corner) 30' Wide Planted Medians (East-West on Southgate) 5' Median on Pine Island (South of Intersection) Extends to 15' Wide at Small Gateway Sign
7	N/A	N/A	N/A	30′	 Sidewalk Powerlines (NE-SE Corner, SE-SW Corner) Southern Edge of Commercial Blvd out of Jurisdiction 3' Wide Medians with Pavers on All Sides New Park Being Built on NE Corner
8	N/A	15′	15′	N/A	 Sidewalk Powerlines (NE-SE, SE SW, SW-NW Corners) Bike Lanes 5' Concrete Medians Southern Medians 10' at widest point with Gateway Sign Northern Side of Bailey Rd. Out of Jurisdiction
9	N/A	N/A	N/A	N/A	 Sidewalk (West Side of Rock Island Rd) 10' Wide Semi-Planted Median Powerlines (East & West Sides)
10	10′	10′	N/A	N/A	 Sidewalk (South Side of Southgate Blvd) 40' Planted Median with Large Gateway Sign Guardrails on South and North Sides Boat Ramp / Canal Access on South Side Utilities Access on North Side
0	10′	40′	35′	10′	 Sidewalk Powerlines (NW-NE Corner, NE-SE Corner) Traffic Box (SE Corner) Utilities Box (NE Corner) Veterans Park, Signs, & Large Gateway Sign (NW Corner) 15' Wide Planted Medians (East-West) 5' Concrete Median (North-South)
12	25′	N/A	N/A	45′	 Sidewalk Powerlines (NW-SW Corner, SW-SE Corner) Traffic Box (NW Corner) 5' Concrete & Paver Medians South Edge of Commercial Blvd Out of Jurisdiction

Table 1.12: Gateway Right of Way Dimensions & Conditions







PLANT MATERIAL OPPORTUNITIES

Additional Plant Material & Medjool Date Palms

Current opportunities for enhancements throughout the city are at the identified points of interest and City Gateways. The quadrants within the city limits at city gateway points can be analyzed and enhanced with large palm groupings such as Medjool Date Palm.

Identified points of interest / major intersections have opportunities for enhancement through large Medjool Date Palm within the four quadrants of the intersection as well as the adjacent medians enhancing the existing landscape.

The majority of medians along all four categorized corridors present the opportunity for shade tree, flowering shade trees, small shrubs, and small palms. This opportunity for smaller ground cover material applies to gateway and key intersections as well

Species diversity throughout the corridors is incredibly important. If the species along the corridor are selected from a distinct few, that are overly repeated, the corridor risks becoming a mono-culture. This presents potential issues in regard to disease, pests, etc spreading quickly and easily throughout the entire area. By diversifying the plant palette, the corridors become more resilient and gain survivability.



Medjool Date Palm



Shade Trees



Flowering Shade Trees



Small Shrubs



Small Palms



PLANT MATERIAL OPPORTUNITIES

Analysis of proximity to high usage areas of interest (recreational areas, shopping centers, government buildings, etc) and "key intersections", where planting can be utilized to create areas of high imageability and identity.

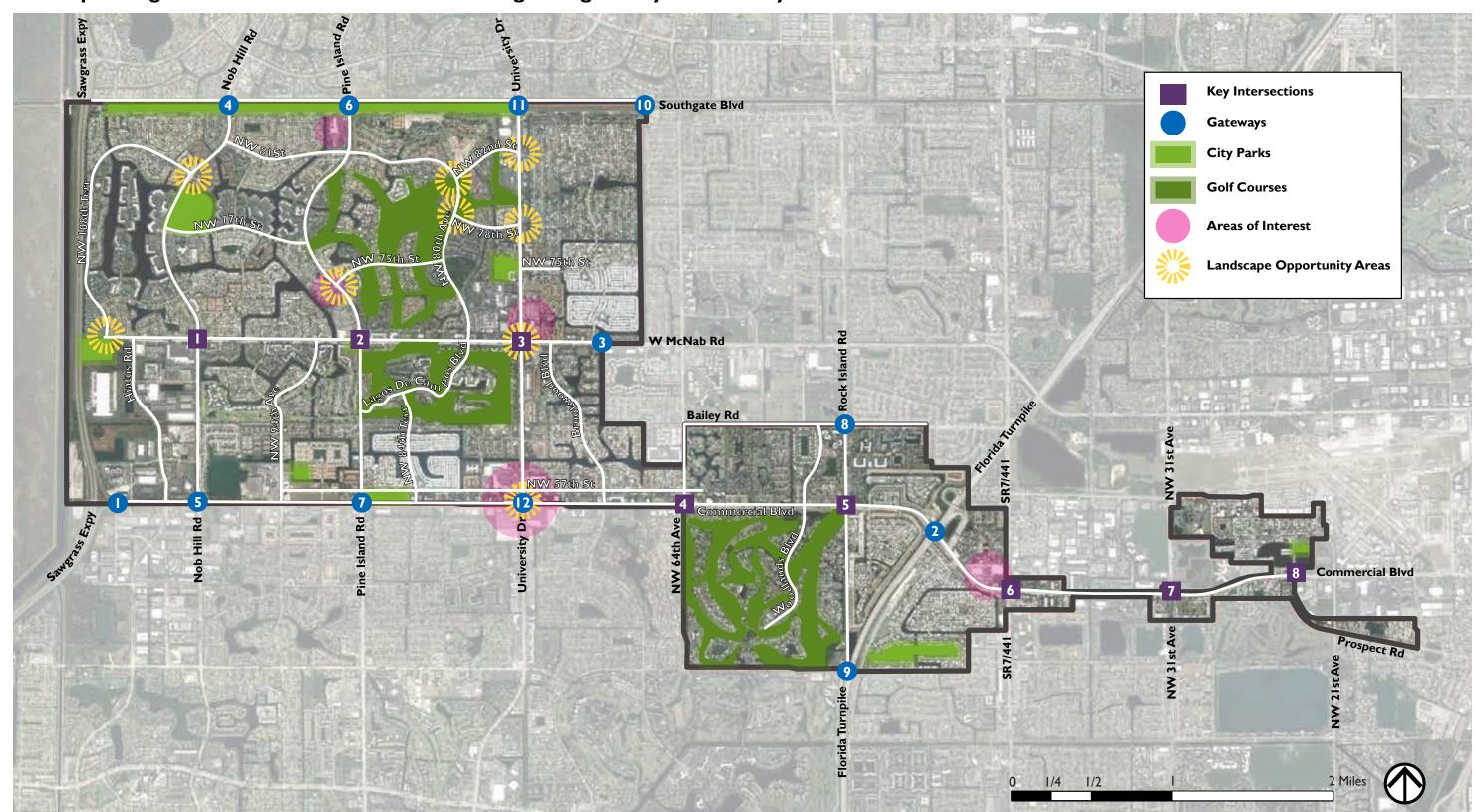


Figure 3.11: Plant Material Opportunities Map







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Design Guidelines





DESIGN GUIDELINES FOR TREES

Planting may vary from corridor to corridor, however specific spatial guidelines are necessary throughout. The most significant spatial guidelines deal with tree spacing and offset from the curb or roadway. These guidelines take sight distance, tree caliper, and roadway design speed into account. Trees of any caliper are offset from the curb based on the design speed of the road.

For corridors with posted speeds less than 35mph, trees must be offset from the curb 1.5ft. For corridors with a 40-45mph limit, trees must be offset from the curb 4ft. The distance between trees is based on the diameter at breast height (dbh) and the designed speed of the corridor. For trees with a dbh of 4"-11" on a corridor designed at 30mph, trees must be spaced 25' apart. For each 5mph increase, the distance grows 5'. For trees with a dbh of 11" or greater, on a corridor designed for 30mph, the trees must be planted 90' apart. With each increase of 5mph, trees must be placed an extra 15' apart.

Additional spatial guidelines to consider are power line set-backs. These set-backs mainly apply to side of road right-of-way areas. Large trees of 50 feet or taller have a set-back of 50' minimum, medium trees of 14 to 49 feet tall have a set-back of 30' minimum, and large palms have a set-back of maximum palm frond length plus 20'. Small trees less than 14 feet tall and shrubs may be planted adjacent to power lines.

Sources: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/fdm/2019/2019fdm215roadsidesafety.pdf?s-fvrsn=f02156e0-4

https://www.fpl.com/reliability/pdf/fpl-right-tree-right-place.pdf

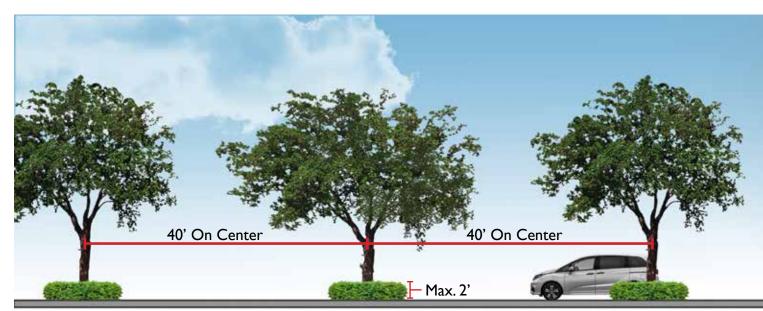


Figure 4.1: Illustration of Typical: Distance between plantings and shrub neight

Curb Offset						
Designed Road Speed	Offset from Curb					
25-35mph	1.5 ft					
40-45mph	4 ft					

 $Source: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/fdm/2019/2019fdm215roadside-safety.pdf?sfvrsn=f02156e0_4$

Table 1.13: Curb Offset Chart

Distance Between Plantings								
Speed:	4"-11" DBH	11"- 18+" DBH						
30mph	25'	90'						
35mph	30'	105'						
40mph	35'	120'						
45mph	40'	135'						

 $Source: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/fdm/2019/2019fdm215roadside-safety.pdf?sfvrsn=f02156e0_4$

Table 1.14: Distance Between Plantings Chart

FPL Landscape Requirements						
Tree Size (HT'):	Setback From Powerlines					
Large Trees (50' +)	50' minimum					
Medium (14' - 49')	30' minimum					
Small (less than 14')	Can be adjacent to power lines					
Large Palms	Maximum palm frond length plus 20'					

Source: https://www.fpl.com/reliability/pdf/fpl-right-tree-right-place.pdf Table 1.15: FPL Right-Tree-Right-Place Chart





OTHER LIMITING FACTORS TO BE CONSIDERED



Clear Sight Diagram

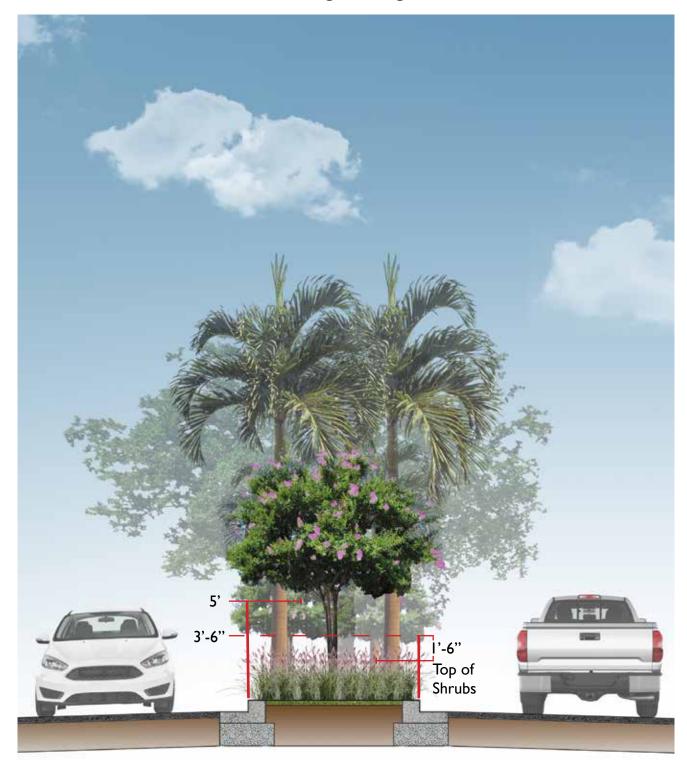


Figure 4.2: Illustration of Typical Clear Sight Diagram

Other limiting factors include the "clear sight window" and the planting design of the bull noses or end caps of the medians. Having hardscape or turf on the end caps also facilitates the maintenance of planting beds. Due to the linear thin nature of medians having shrubs planted center of median, it also facilitates the maintenance of planting beds.

The "clear sight window" determines the maximum height of ground cover and the minimum height of the lowest branches for trees, in relation to the vehicular clear line of sight Groundcover can be a maximum height of 2', and must be maintained to be 1.5' below the clear sight line of 3.5'. Trees branches must not be lower than 5' or intrude on the clear line of sight.

When medians end at intersections or turn lanes, the design must also meet line of sight standards. For corridors with design speeds of less than 50mph, no trees are allowed within 100' of the nose of the median, or from the beginning of the turn lane; whichever is the longer distance.. Low groundcovers can be used throughout if they meet the requirements of "clear sight window" seen above.

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/sm/accman/fdot-median-handbook-sept-2014-edits-10-25-2017.pdf?s-fvrsn=401841d5 2

Arterial (FDOT) Design Criteria

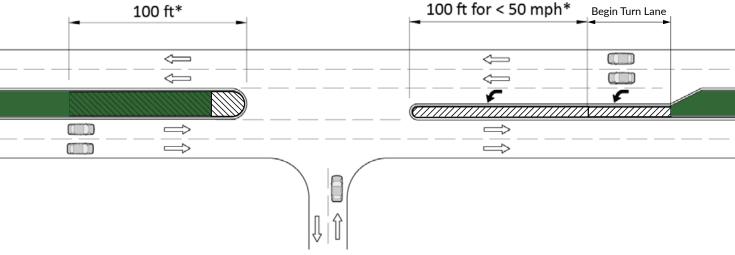


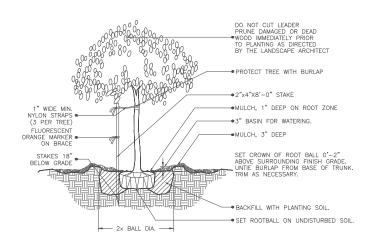
Figure 4.3: Illustration of Arterial (FDOT) Design Criteria



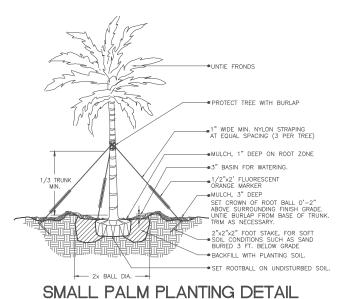


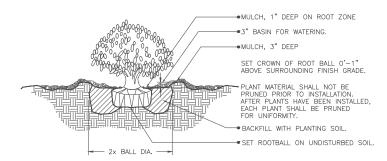


PLANT INSTALLATION GUIDELINES

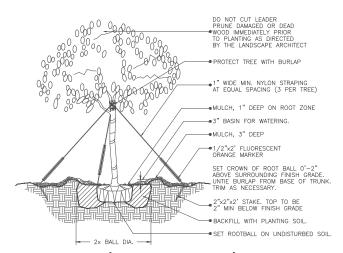


(2" cal. and under) SMALL TREE PLANTING DETAIL



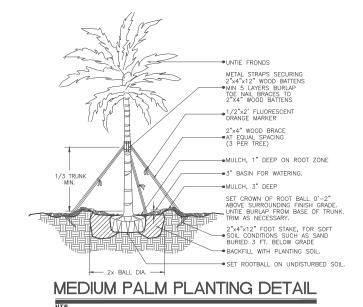


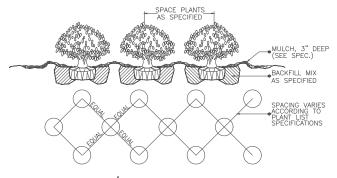
SHRUB PLANTING DETAIL



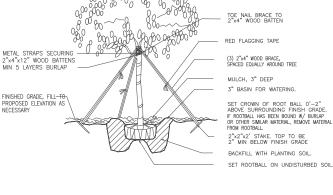
(2" cal. to 6" cal.)

MEDIUM TREE PLANTING DETAIL

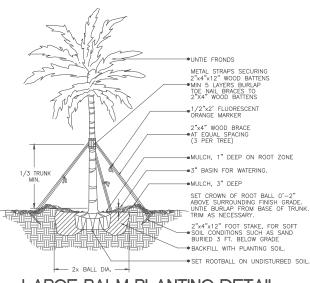




SHRUB / GROUNDCOVER SPACING / PLANTING DETAIL



(6" cal. and over) LARGE TREE PLANTING DETAIL



LARGE PALM PLANTING DETAIL





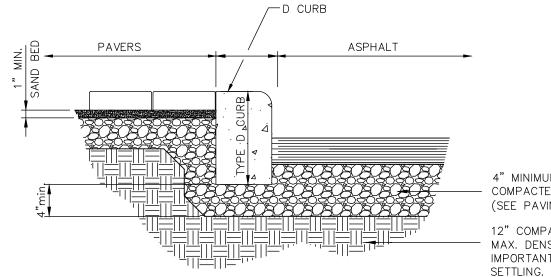
The City For Your Life



Design Guidelines

HARDSCAPE GUIDELINES

The hardscape areas throughout the various corridors were installed at different times and therefore their style is very diverse. Although the pavers used are consistent in material, size, and color, their designed placement varies. There are more than four different styles of paver installation in the city. One distinct paving pattern needs to be chosen and installed throughout the city in order to create a unified identity. A herringbone pattern has been proposed as the main pattern throughout the city.



4" MINIMUM COMPACTED LIMEROCK BASE (SEE PAVING SPECIFICATIONS)

12" COMPACTED SUBGRADE TO 98% MAX. DENSITY (AASHTO-T99) MIN. IMPORTANT TO REDUCE DIFFERENTIAL SETTLING.

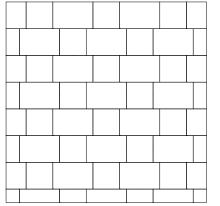
CONCRETE PAVERS AT TYPE D CURB

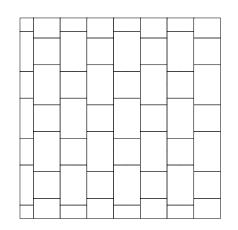
TYP. PAVER INSTALL

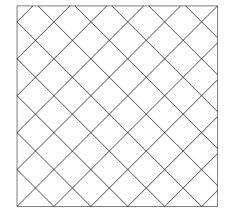
N.T.S

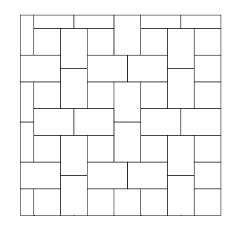
Figure 4.5: Illustration of concrete Pavers Typ. Paver Install

Existing Paver Design

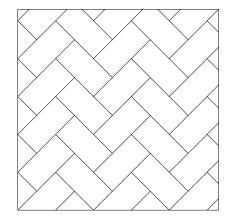








Proposed Paver Design









PRINCIPAL ARTERIAL RECOMMENDED TREE SPECIES LIST

Large Trees:



Bursera simaruba
Gumbo Limbo*



Caesalpinia granadillo Bridal Veil Tree



Delonix regia Royal Poinciana



Koelreuteria spp. Goldenrain Tree



Lagerstroemia speciosa

Queen Crepe Myrtle



Quercus Virginiana Live Oak*



Swietenia mahogoni **Mahogany***

Medium Trees:



Lysiloma sabicu **Sabicu**



Tabebuia aurea
Silver Trumpet



Tabebuia heterophylla
Pink Trumpet



Senna surattensis
Glaucous Cassia

Small Trees:



Clusia rosea
Pitch Apple*



Cocoloba uvifera **Seagrape***



Conocarpus erectus var. sericeus Silver Buttonwood*



Cordia sebestena
Orange Geiger Tree*



Jatropha integerrima **Peregrina**



Lagerstroemia indica
Crepe Myrtle



Large Palms:



Roystonea regia Royal Palm*



Sabal palmetto
Cabbage Palm*



Phoenix dactylifera **Date Palm**



Phoenix dactylifera

Medjool Date Palm

Medium Palms:



Livistonia chinensis
Chinese Fan Palm



Phoenix reclinata
Clumping Date Palm



Veitchia arecina Montgomery Palm

Small Palms:



Adonidia merrilli Christmas Palm



Phoenix roebelinii
Pygmy Date Palm

Shrubs:



Bougainvillea spp.

Dwarf Bougainvillea



Cordyline fruticosa

Red Hawaiian-Ti Plant



Crinum spp.

Purple Crinum Lily



Croton variegatum
Petra Croton



Hamelia patens **Dwarf Fire Bush***



Plumbago auriculata

Blue Plumbago



Groundcovers:

Stenotaphrum secundatum St. Augustine Grass*







MINOR ARTERIAL RECOMMENDED TREE SPECIES LIST

Large Trees:



Bursera simaruba
Gumbo Limbo*



Calophyllum inophyllum Alexandrian Laurel



Delonix regia **Royal Poinciana**



llex cassine

Dahoon Holly*



Lagerstroemia speciosa

Queen Crepe Myrtle



Quercus Virginiana Live Oak*



Swietenia mahogoni **Mahogany***

Medium Trees:



Acer rubrum
Red Maple*



Lysiloma sabicu **Sabicu**



Tabebuia aurea
Silver Trumpet



Tabebuia heterophylla Pink Trumpet



Senna surattensis
Glaucous Cassia

Small Trees:



Clusia rosea
Pitch Apple*



Cocoloba uvifera **Seagrape***



Conocarpus erectus var. sericeus Silver Buttonwood*



Cordia sebestena
Orange Geiger Tree*



Jatropha integerrima **Peregrina**



Lagerstroemia indica
Crepe Myrtle



Lugustrum japonicum **Ligustrum**





Large Palms:



Bismarckia nobilis Bismark Palm



Roystonea regia Royal Palm*



Phoenix canariensis

Canary Island Date



Phoenix dactylifera **Date Palm**



Sabal palmetto

Cabbage Palm*

Medium Palms:



Phoenix reclinata
Clumping Date Palm



Veitchia arecina Montgomery Palm



Wodyetia bifurcata Foxtail Palm

Small Palms:



Adonidia merrilli Christmas Palm



Phoenix roebelinii Pygmy Date Palm

Shrubs:



Cordyline fruticosa

Red Hawaiian-Ti Plant



Croton variegatum
Petra Croton



Ficus microcarpa **Green Island Ficus**



Hamelia patens **Dwarf Fire Bush***



Plumbago auriculata
Blue Plumbago

Groundcovers:



Stenotaphrum secundatum
St.Augustine Grass*







COLLECTOR ROAD RECOMMENDED TREE SPECIES LIST

Large Trees:



Bursera simaruba
Gumbo Limbo*



Calophyllum inophyllum Alexandrian Laurel



Lagerstroemia speciosa

Queen Crepe Myrtle



Quercus Virginiana Live Oak*



Swietenia mahogoni **Mahogany***

Medium Trees:



Acer rubrum Red Maple*



Lysiloma sabicu **Sabicu**



Myrcianthes fragrans
Simpson Stopper*



Senna surattensis
Glaucous Cassia

Small Trees:



Clusia rosea
Pitch Apple*



Cocoloba uvifera **Seagrape***



Conocarpus erectus var. sericeus Silver Buttonwood*



Eriobotrya japonica **Loquat**



Eugenia foetida
Spanish Stopper*



Lagerstroemia indica
Crepe Myrtle



Large Palms:



Bismarckia nobilis
Bismark Palm*



Roystonea regia Royal Palm*



Phoenix canariensis

Canary Island Date



Phoenix dactylifera **Date Palm**



Sabal palmetto

Cabbage Palm*

Medium Palms:



Archontophoenix alexandrae

Alexander Palm



Cocos nucifera

Coconut Palm



Ptychosperma elegens
Solitaire Palm



Veitchia arecina

Montgomery Palm



Wodyetia bifurcata Foxtail Palm

Small Palms:



Coccothrinax argentata
Silver Palm*



Thrinax radiata
Thatch Palm*

Groundcovers:

Shrubs:



Chrysobolanus icaco
Cocoplum*



Conocarpus erectus "sericeus"

Silver Buttonwood*



Hamelia patens **Dwarf Fire Bush***



llex vomitoria 'Schillings'

Yaupon Holly*



Schefflera arbicola 'Trinette'

Var. Arbicola



Serenoa repens
Saw Palmetto*



Stenotaphrum secundatum **St. Augustine Grass***







LOCAL STREET RECOMMENDED TREE SPECIES LIST

Large Trees:



Bursera simaruba
Gumbo Limbo*



Calophyllum inophyllum Alexandrian Laurel



Juniperus sillicola
Southern Red Cedar*



Quercus Virginiana Live Oak*



Swietenia mahogoni **Mahogany***

Medium Trees:



Acer rubrum
Red Maple*



Lysiloma sabicu **Sabicu**



Myrcianthes fragrans
Simpson Stopper*

Small Trees:



Clusia rosea
Pitch Apple*



Cocoloba uvifera
Seagrape*



Conocarpus erectus var. sericeus Silver Buttonwood*



Eriobotrya japonica **Loquat**



Eugenia foetida

Spanish Stopper*



Lagerstroemia indica
Crepe Myrtle



Large Palms:



Roystonea regia Royal Palm*



Phoenix dactylifera **Date Palm**



Sabal palmetto

Cabbage Palm*

Medium Palms:



Archontophoenix alexandrae
Alexander Palm



Cocos nucifera

Coconut Palm



Ptychosperma elegens
Solitaire Palm



Veitchia arecina
Montgomery Palm



Veitchia winin Winin Palm

Small Palms:



Coccothrinax argentata
Silver Palm*



Thrinax radiata
Thatch Palm*

Shrubs:



Chrysobolanus icaco
Cocoplum*



Conocarpus erectus "sericeus"

Silver Buttonwood*



Ilex vomitoria 'Schillings'
Yaupon Holly*



Schefflera arbicola 'Trinette'

Var. Arbicola



Serenoa repens
Saw Palmetto*

Groundcovers:



Stenotaphrum secundatum
St.Augustine Grass*







KEY INTERSECTION RECOMMENDED TREE SPECIES LIST

Large Trees:



Delonix regia Royal Poinciana



Koelreuteria spp.
Goldenrain Tree



Lagerstroemia speciosa

Queen Crepe Myrtle



Quercus Virginiana
Live Oak*

Medium Trees:



Lysiloma sabicu **Sabicu**



Tabebuia aurea
Silver Trumpet



Tabebuia heterophylla
Pink Trumpet



Senna surattensis Glaucous Cassia

Small Trees:



Conocarpus erectus var. sericeus Silver Buttonwood*



Cordia sebestena
Orange Geiger Tree*



Jatropha integerrima **Peregrina**



Lagerstroemia indica **Crepe Myrtle**



Large Palms:



Bismarckia nobilis
Bismark Palm*



Roystonea regia Royal Palm*



Phoenix dactylifera **Date Palm**



Phoenix dactylifera

Medjool Date Palm

Medium Palms:



Livistonia chinensis
Chinese Fan Palm



Phoenix reclinata
Clumping Date Palm



Veitchia arecina Montgomery Palm

Small Palms:



Adonidia merrilli Christmas Palm



Phoenix roebelinii Pygmy Date Palm

Shrubs:



Bougainvillea spp.

Dwarf Bougainvillea



Cordyline fruticosa

Red Hawaiian-Ti Plant



Crinum spp.

Purple Crinum Lily



Croton variegatum
Petra Croton



Hamelia patens **Dwarf Fire Bush***



Plumbago auriculata

Blue Plumbago



Stenotaphrum secundatum St. Augustine Grass*







GATEWAY RECOMMENDED TREE SPECIES LIST

Large Trees:



Delonix regia Royal Poinciana



Koelreuteria spp.
Goldenrain Tree



Lagerstroemia speciosa

Queen Crepe Myrtle



Quercus Virginiana
Live Oak*

Medium Trees:



Lysiloma sabicu **Sabicu**



Tabebuia aurea
Silver Trumpet



Tabebuia heterophylla Pink Trumpet



Senna surattensis Glaucous Cassia

Small Trees:



Conocarpus erectus var. sericeus Silver Buttonwood*



Cordia sebestena
Orange Geiger Tree*



Jatropha integerrima **Peregrina**



Lagerstroemia indica **Crepe Myrtle**



Large Palms:



Bismarckia nobilis
Bismark Palm*



Roystonea regia Royal Palm*



Phoenix dactylifera **Date Palm**



Phoenix dactylifera

Medjool Date Palm

Medium Palms:



Livistonia chinensis
Chinese Fan Palm



Phoenix reclinata
Clumping Date Palm



Veitchia arecina Montgomery Palm

Small Palms:



Adonidia merrilli Christmas Palm



Phoenix roebelinii
Pygmy Date Palm

Shrubs:



Bougainvillea spp.

Dwarf Bougainvillea



Cordyline fruticosa

Red Hawaiian-Ti Plant



Crinum spp.

Purple Crinum Lily



Croton variegatum
Petra Croton



Hamelia patens **Dwarf Fire Bush***



Plumbago auriculata

Blue Plumbago



Groundcovers:

Stenotaphrum secundatum
St. Augustine Grass*







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Typical Conceptual Landscape Corridor





TYPICAL PRINCIPAL ARTERIAL

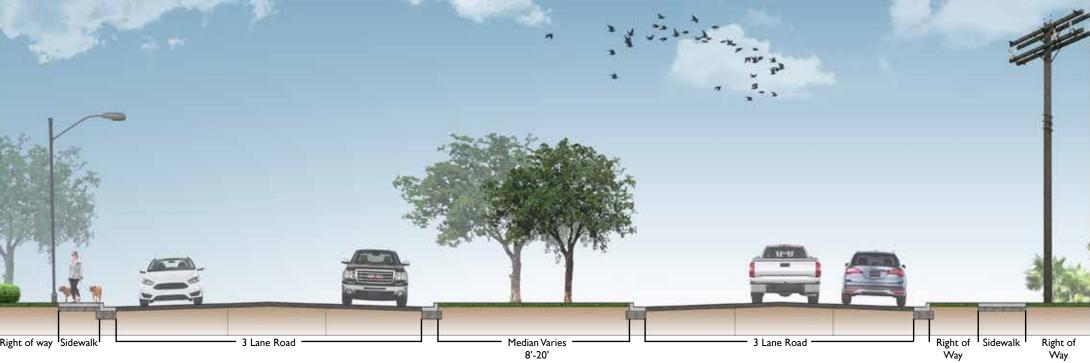


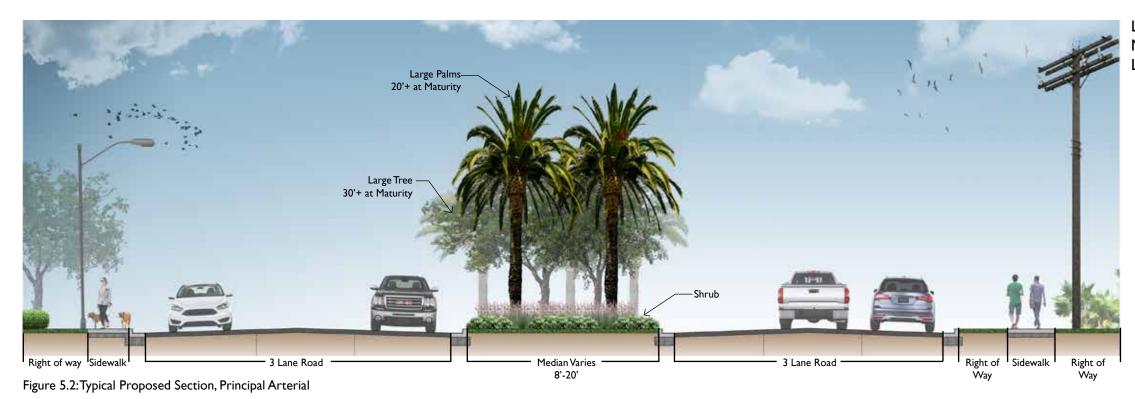
Figure 5.0: Typical Existing Section, Principal Arterial



Figure 5.1: Typical Existing Plan, Principal Arterial



TYPICAL PRINCIPAL ARTERIAL



Large Tree: Medium Tree: Large Palms:



Figure 5.3:Typical Proposed Plan, Principal Arterial







MINOR ARTERIAL



Figure 5.5: Typical Existing Plan, Minor Arterial



MINOR ARTERIAL



Figure 5.6: Typical Proposed Section, Minor Arterial



Figure 5.7:Typical Proposed Plan, Minor Arterial







TYPICAL COLLECTOR ROAD

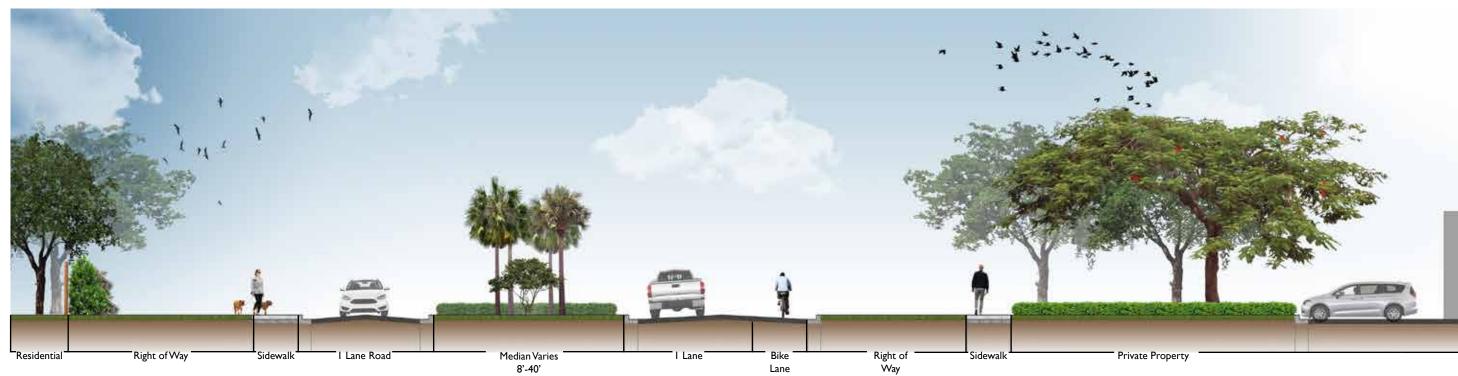


Figure 5.8: Typical Existing Section, Collector



Figure 5.9: Typical Existing Plan, Collector



TYPICAL COLLECTOR ROAD

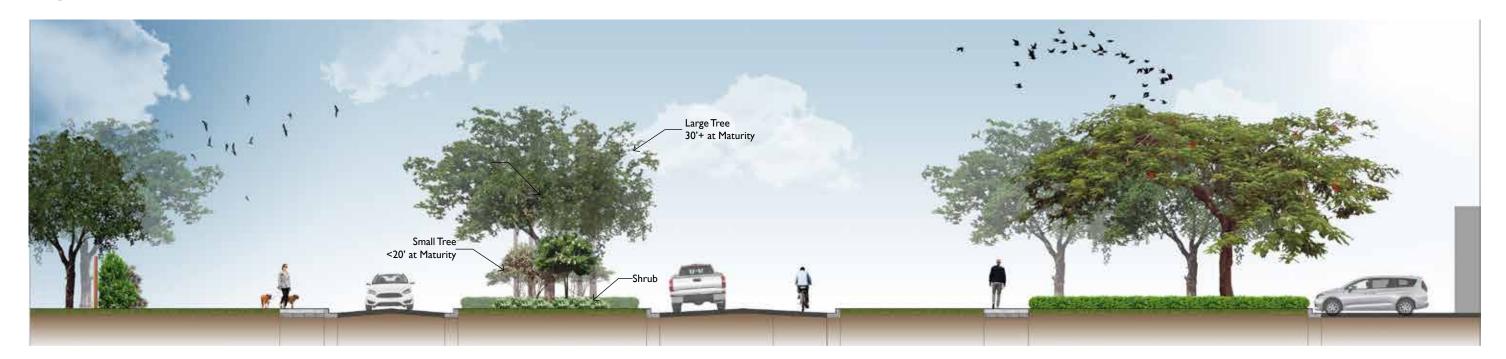


Figure 5.10: Typical Proposed Section, Collector



Figure 5.11:Typical Proposed Plan, Collector







TYPICAL LOCAL STREET

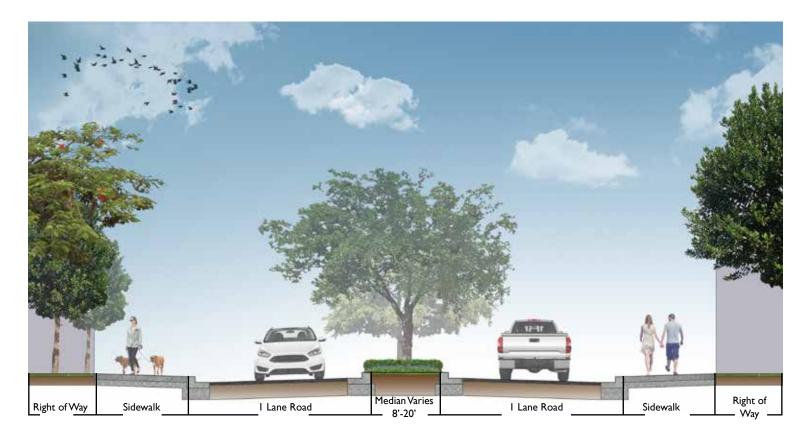


Figure 5.12:Typical Existing Section, Local Street



Figure 5.13: Typical Existing Plan, Local Street



TYPICAL LOCAL STREET

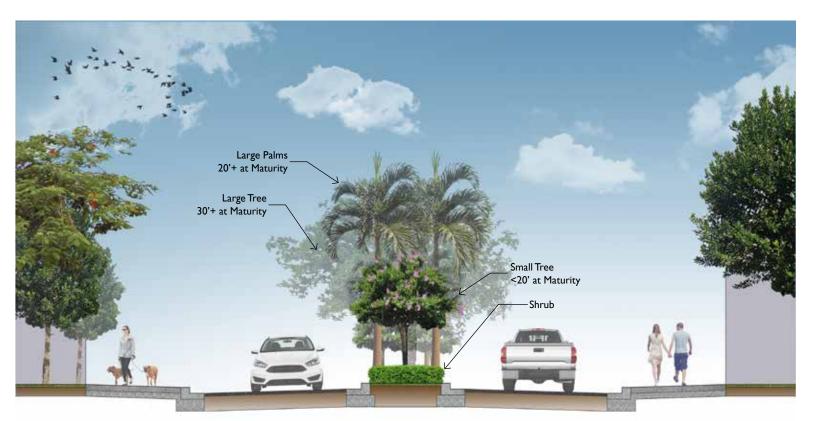


Figure 5.14: Typical Proposed Section, Local Street



Figure 5.15:Typical Proposed Plan, Local Street







TYPICAL GATEWAY (LARGE SIGN)



Figure 5.16: Typical Existing Section, Gateway (Large)



Figure 5.17:Typical Existing Plan, Gateway (Large)





TYPICAL GATEWAY (LARGE SIGN)



Figure 5.18:Typical Proposed Section, Gateway (Large)



Figure 5.19: Typical Proposed Plan, Gateway (Large)







TYPICAL GATEWAY (SMALL SIGN)

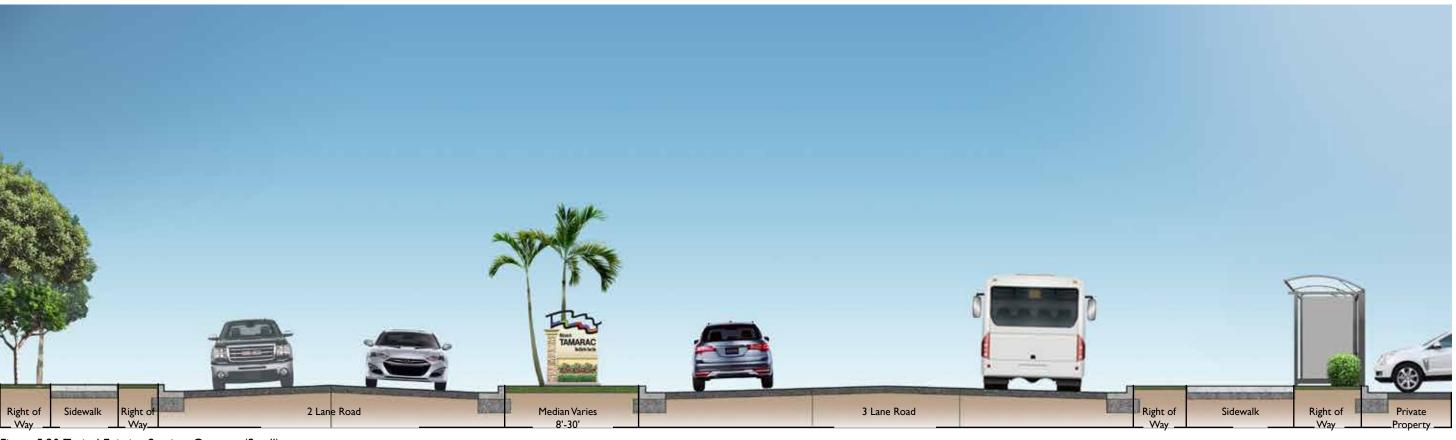


Figure 5.20: Typical Existing Section, Gateway (Small)



Figure 5.21: Typical Existing Plan, Gateway (Small)





TYPICAL GATEWAY (SMALL SIGN)



Figure 5.22: Typical Proposed Section, Gateway (Small)



Figure 5.23: Typical Proposed Plan, Gateway (Small)







KEY INTERSECTIONS: MCNAB RD. / NOB HILL RD.

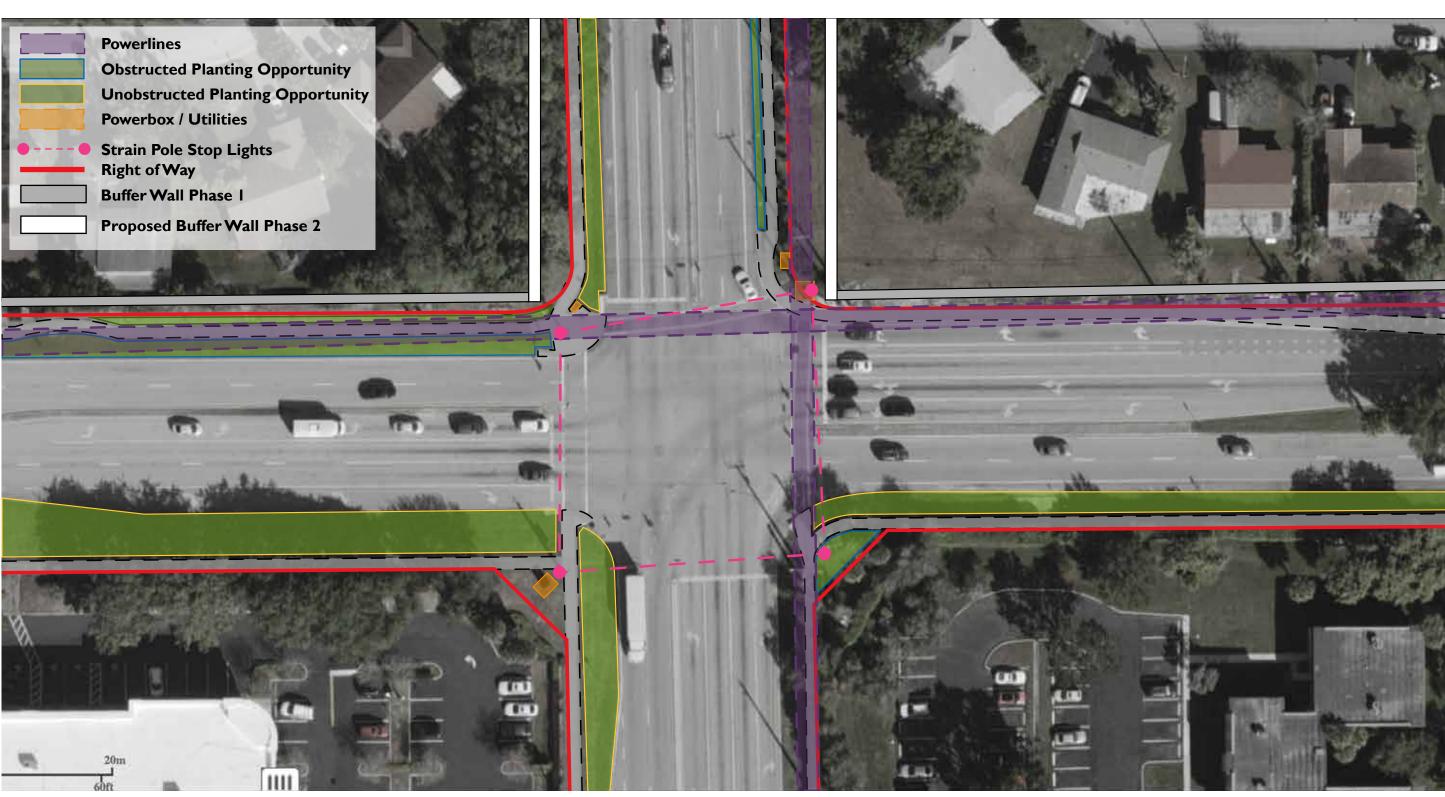


Figure 5.24: Existing Key Intersection: McNab Rd. & Nob Hill Rd



KEY INTERSECTIONS: MCNAB RD. / NOB HILL RD.

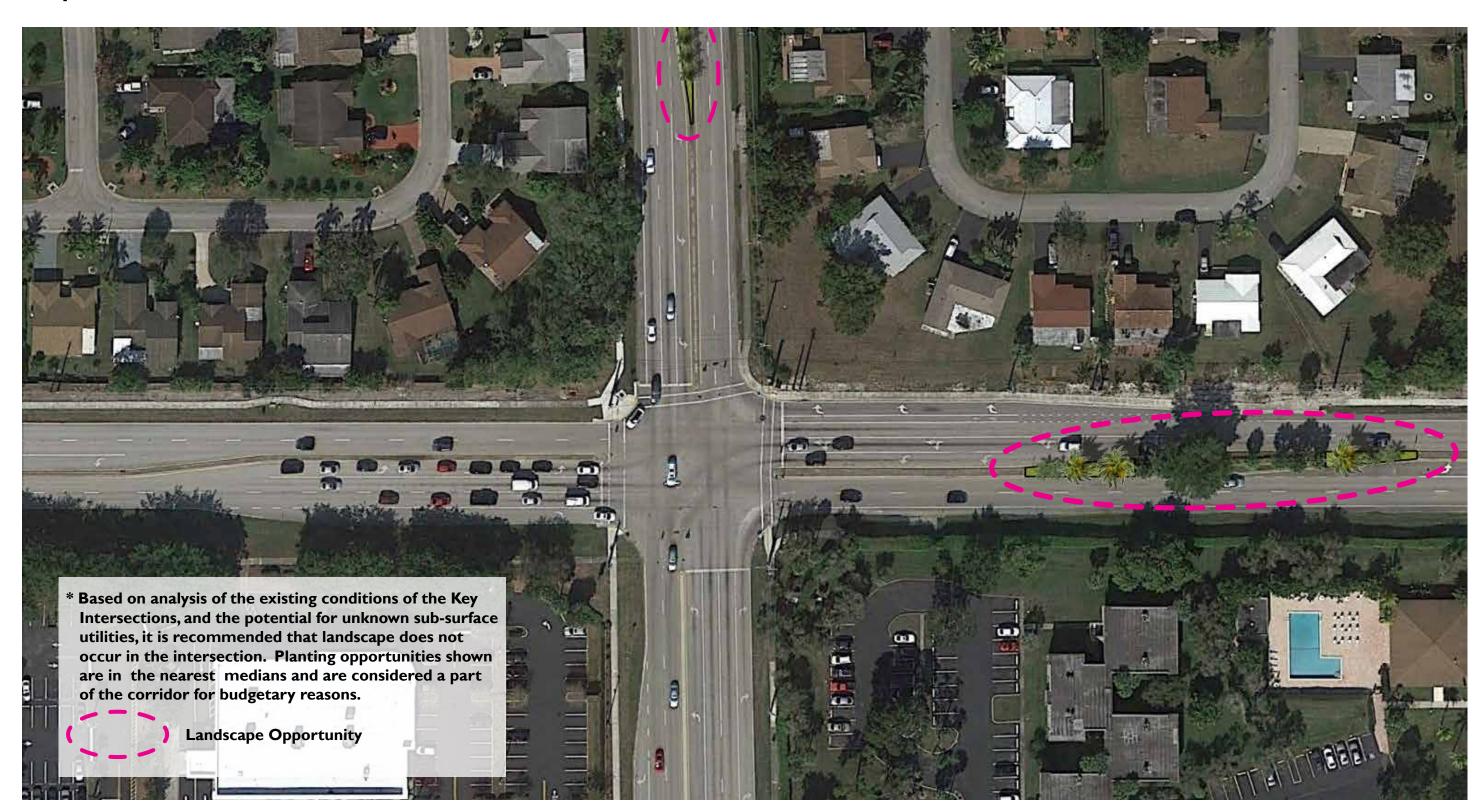


Figure 5.25: Proposed Key Intersection: McNab Rd. & Nob Hill Rd







KEY INTERSECTIONS: MCNAB RD. / PINE ISLAND RD.



Figure 5.26: Existing Key Intersection: McNab Rd. & Pine Island



KEY INTERSECTIONS: MCNAB RD. / PINE ISLAND RD.

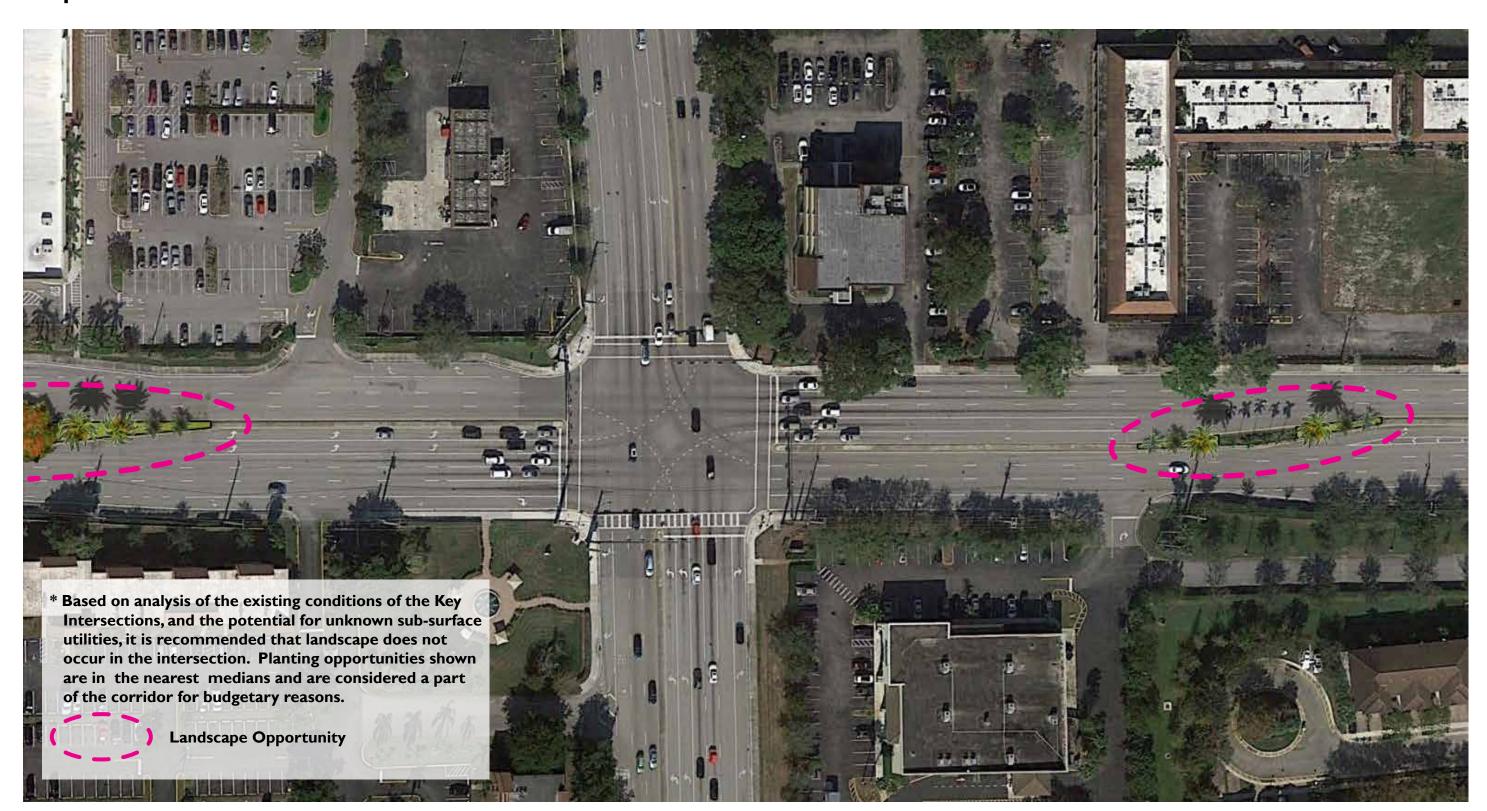


Figure 5.27: Proposed Key Intersection: McNab Rd. & Pine Island







KEY INTERSECTIONS: MCNAB RD. / UNIVERSITY DR.

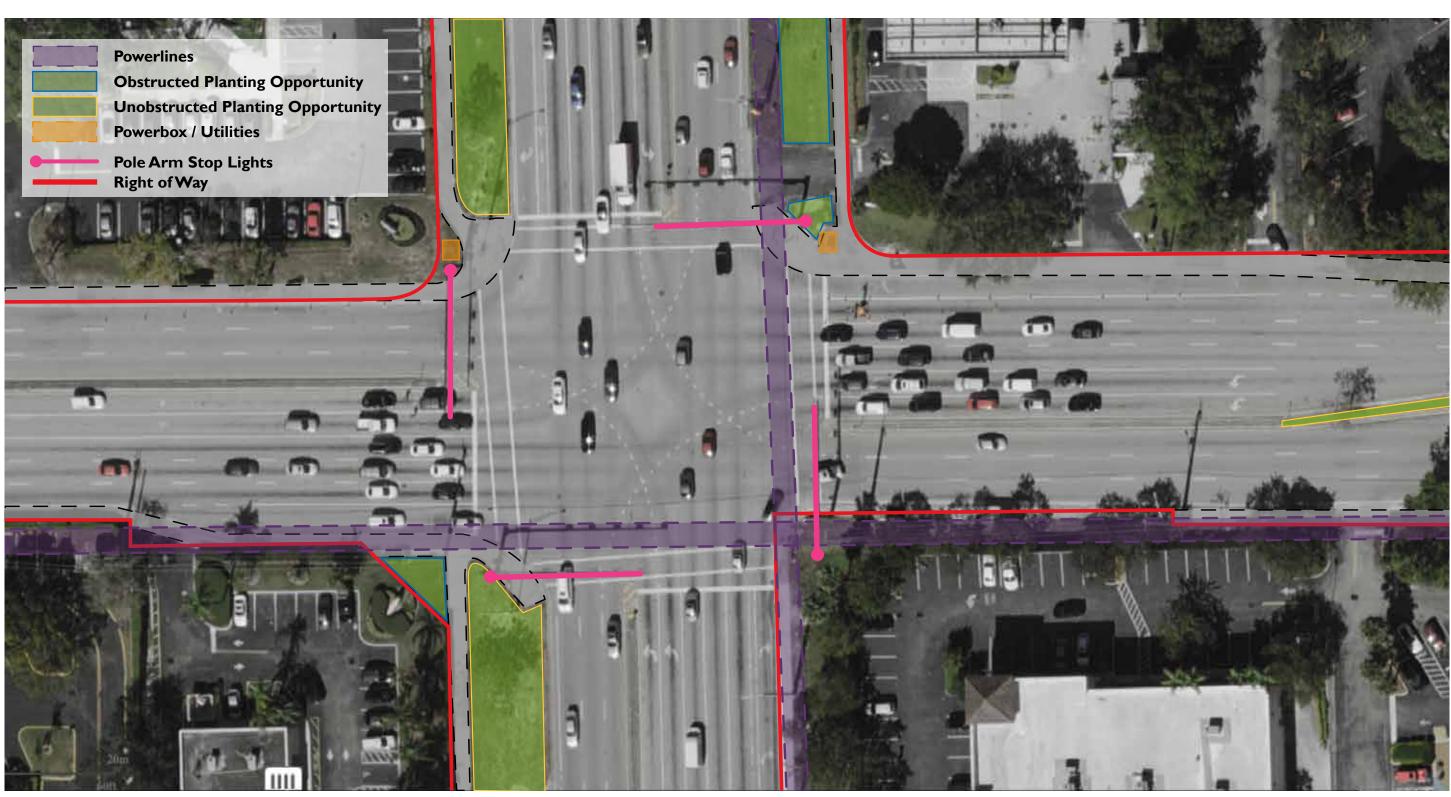


Figure 5.28: Existing Key Intersection: McNab Rd. & University Dr

KEY INTERSECTIONS: MCNAB RD. / UNIVERSITY DR.

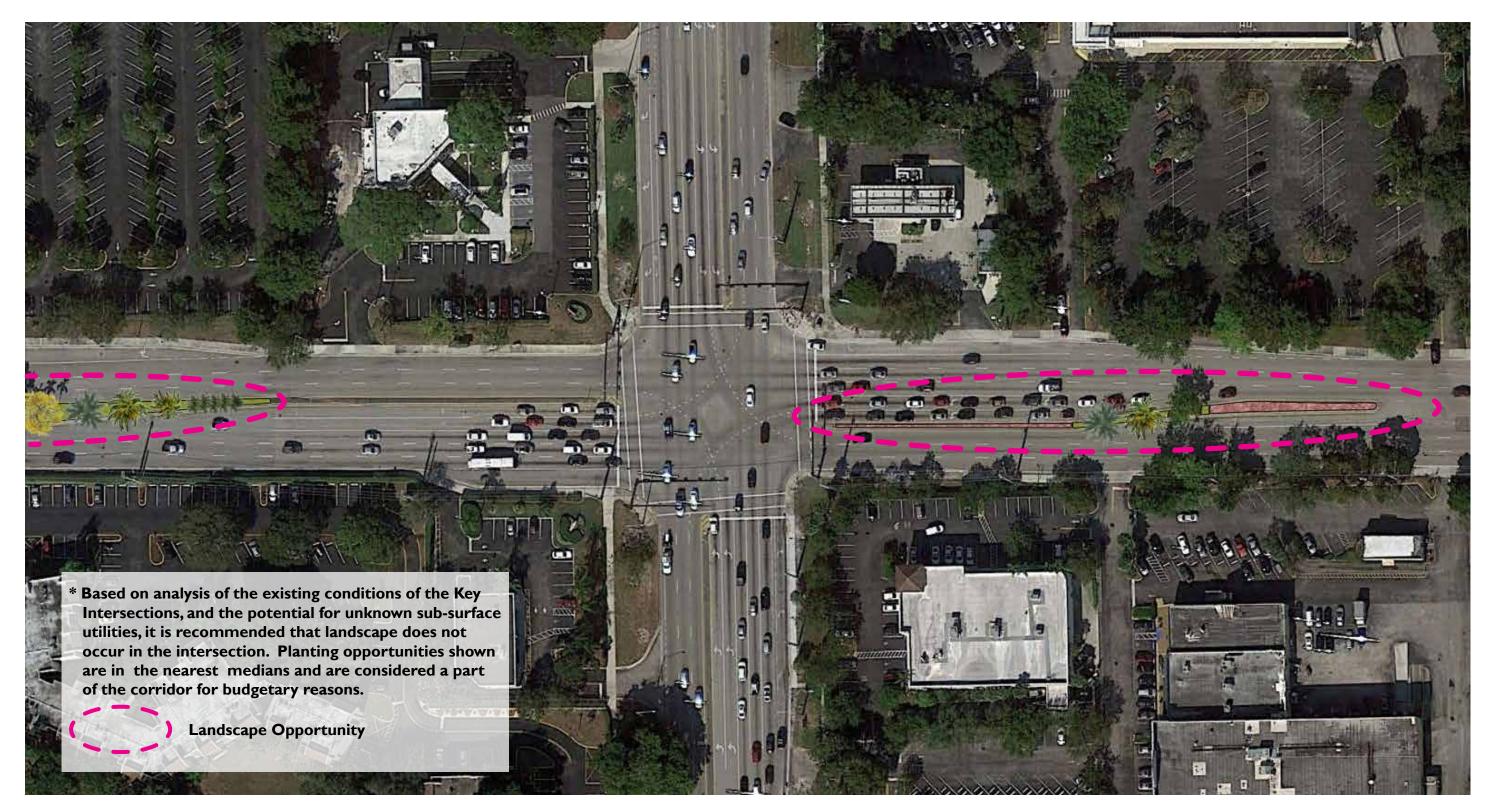


Figure 5.29: Proposed Key Intersection: McNab Rd. & University Dr







KEY INTERSECTIONS: COMMERCIAL BLVD / 64TH AVE.



Figure 5.30: Existing Key Intersection: Commercial Blvd & 64th Ave

* Note there has been recent landscape improvements on the intersection of Commercial Blvd. and 64th Ave., which impacts the current conditions.





KEY INTERSECTIONS: COMMERCIAL BLVD / 64TH AVE.

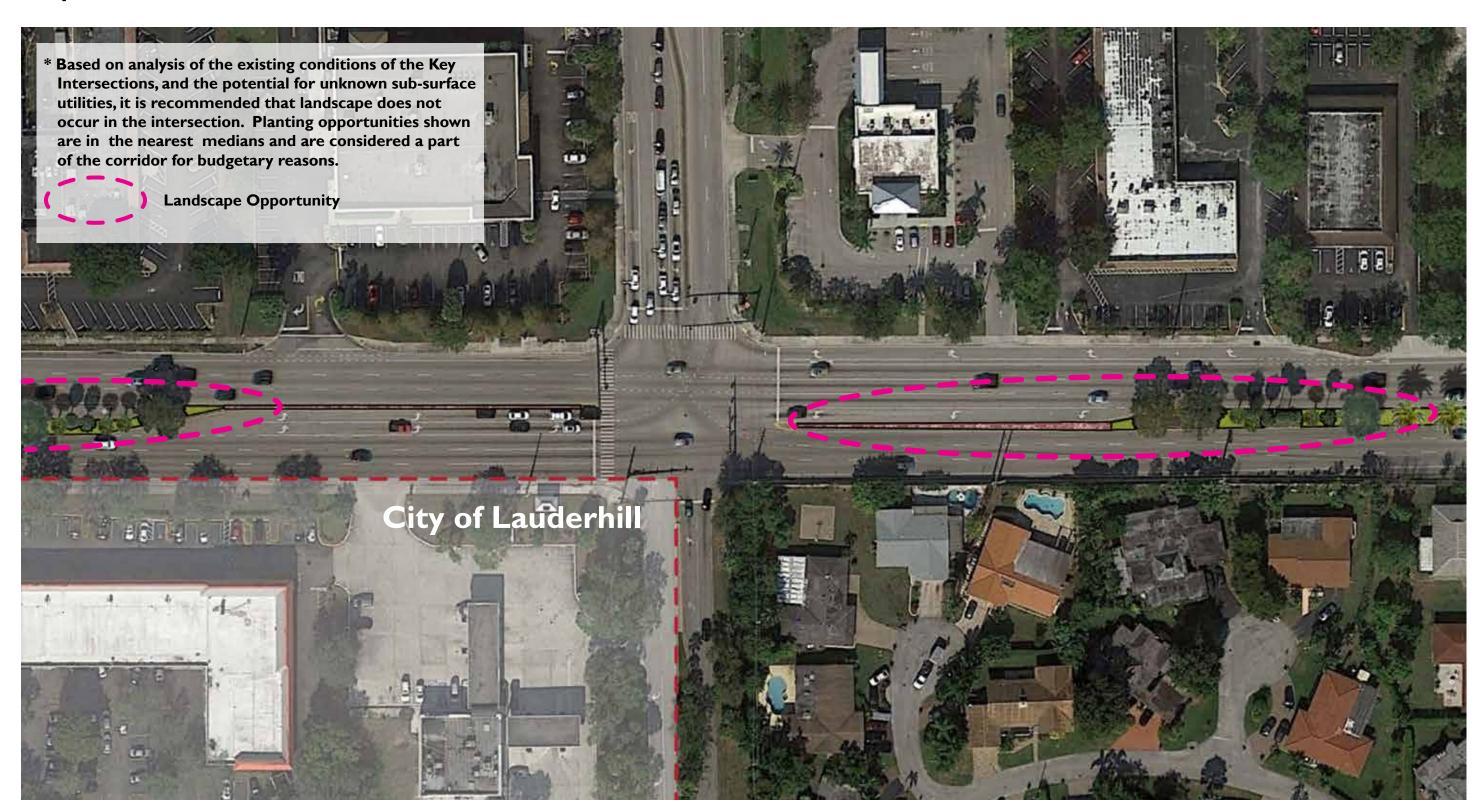


Figure 5.31: Proposed Key Intersection: Commercial Blvd & 64th Ave

* Note due to recent landscape improvements this intersection is of low priority for future landscape improvements.







KEY INTERSECTIONS: COMMERCIAL BLVD / ROCK ISLAND RD.

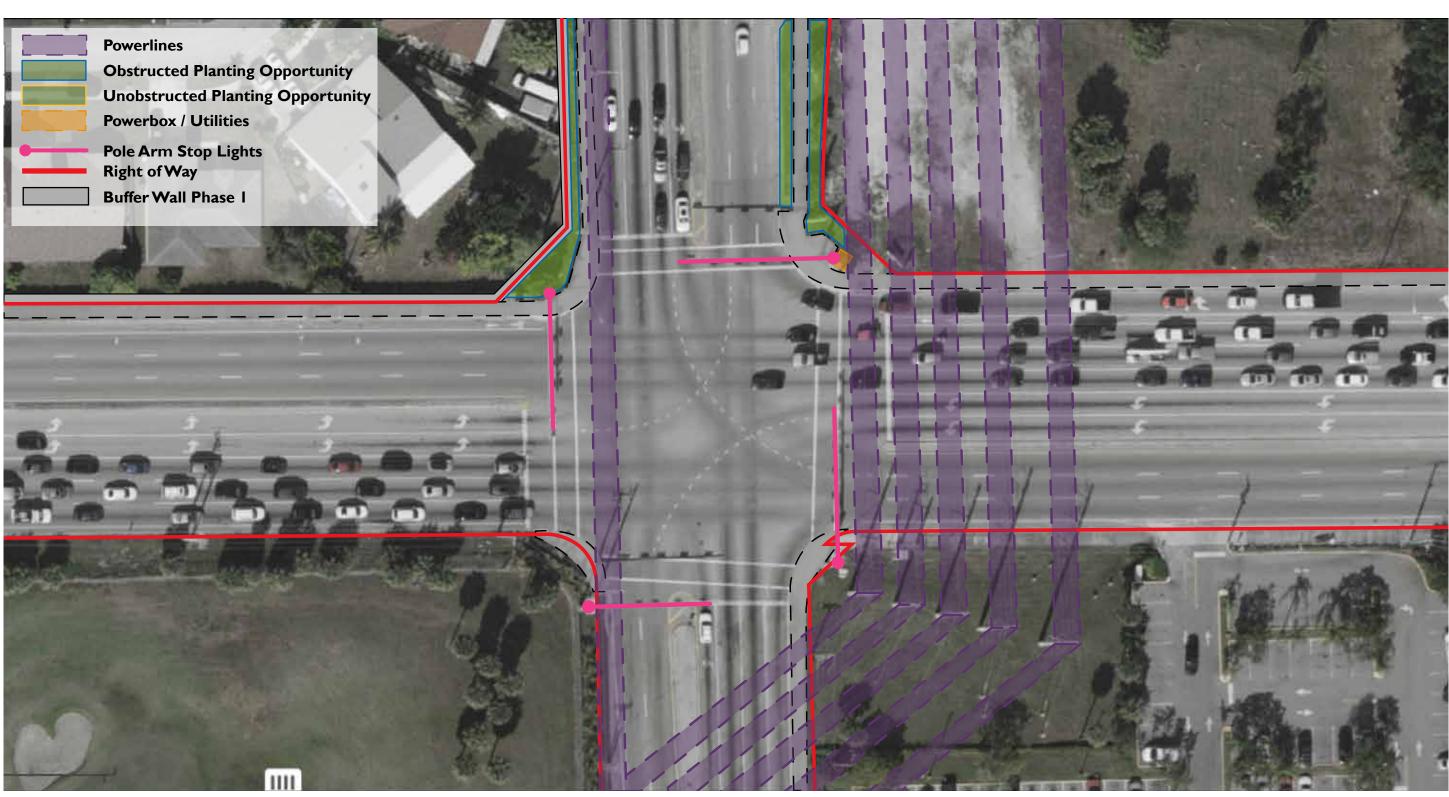


Figure 5.32: Existing Key Intersection: Commercial Blvd & Rock Island Rd

^{*} Note there has been recent landscape improvements on the intersection of Commercial Blvd. and Rock Island Rd., which impacts the current conditions.





KEY INTERSECTIONS: COMMERCIAL BLVD / ROCK ISLAND RD.

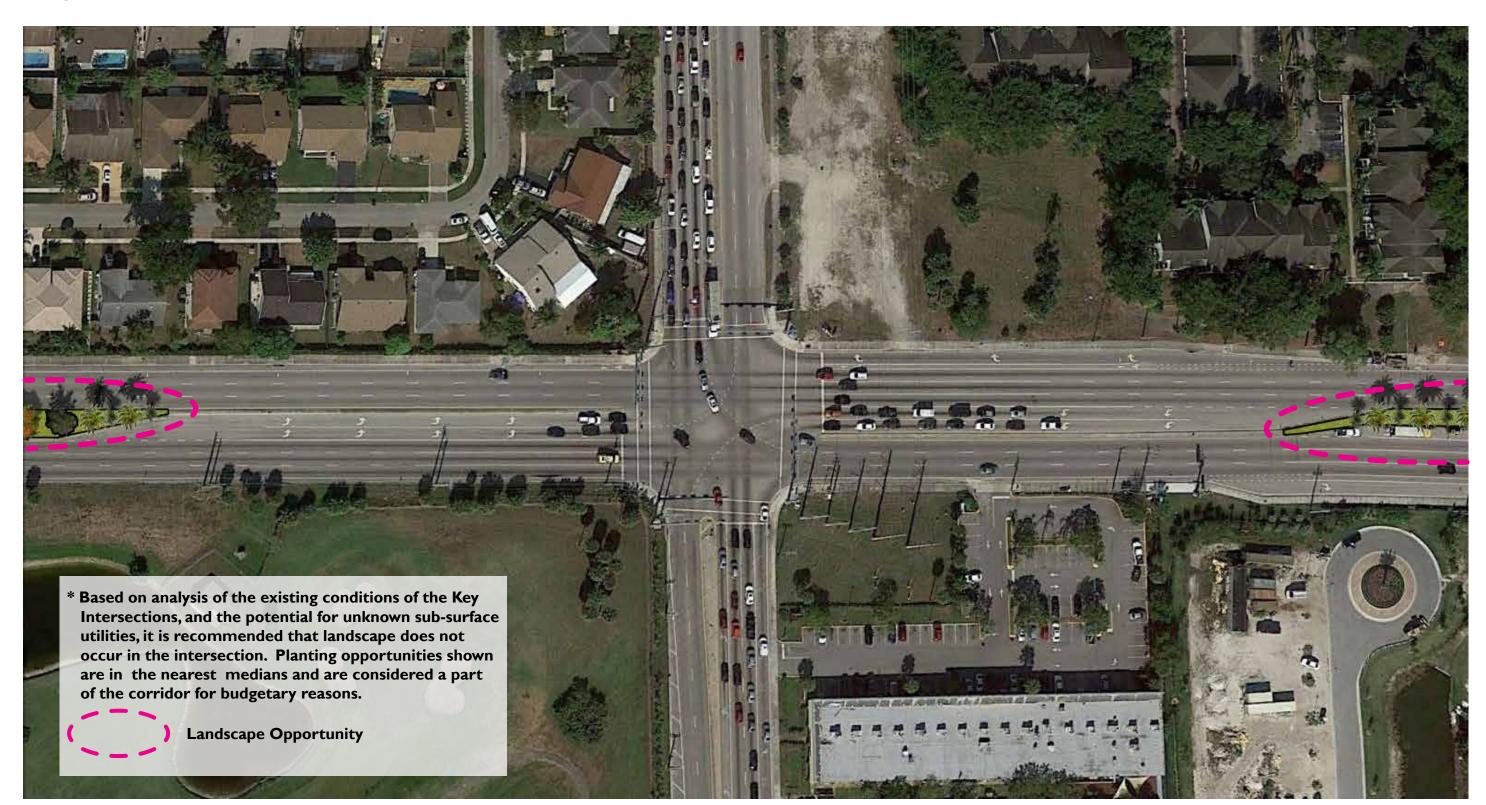


Figure 5.33: Proposed Key Intersection: Commercial Blvd & Rock Island Rd

* Note due to recent landscape improvements this intersection is of low priority for future landscape improvements.







KEY INTERSECTIONS: COMMERCIAL BLVD / 441



Figure 5.34: Existing Key Intersection: Commercial Blvd & 441

^{*} Note there has been recent landscape improvements on the intersection of Commercial Blvd. and 441, which impacts the current conditions.





KEY INTERSECTIONS: COMMERCIAL BLVD / 441

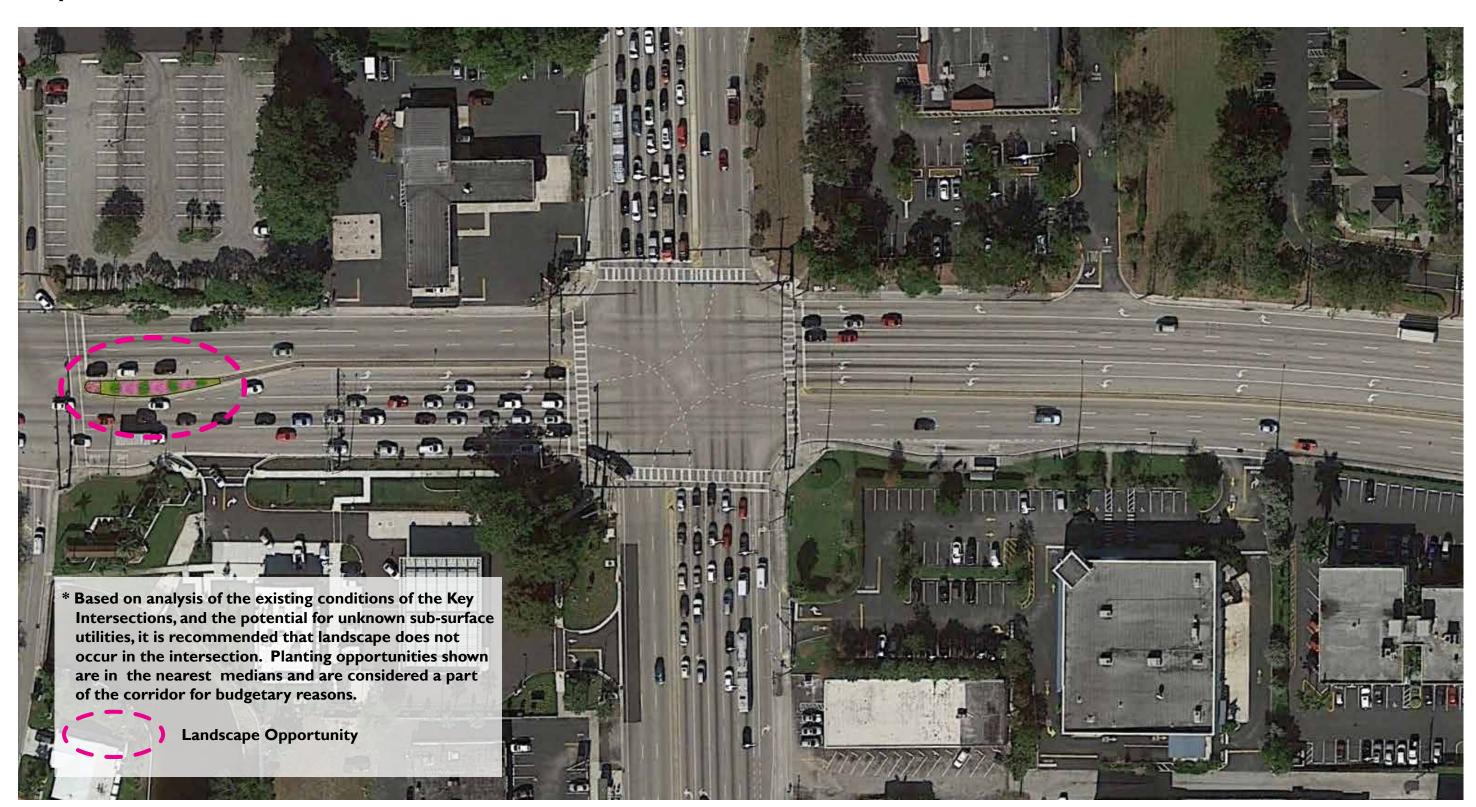


Figure 5.35: Proposed Key Intersection: Commercial Blvd & 441

* Note due to recent landscape improvements this intersection is of low priority for future landscape improvements.







KEY INTERSECTIONS: COMMERCIAL BLVD. / 3 I ST AVE.



Figure 5.36: Existing Key Intersection: Commercial Blvd & 31st Ave

* Note there has been recent landscape improvements on the intersection of Commercial Blvd. and 3 lst Ave., which impacts the current conditions.



KEY INTERSECTIONS: COMMERCIAL BLVD. / 3 IST AVE.

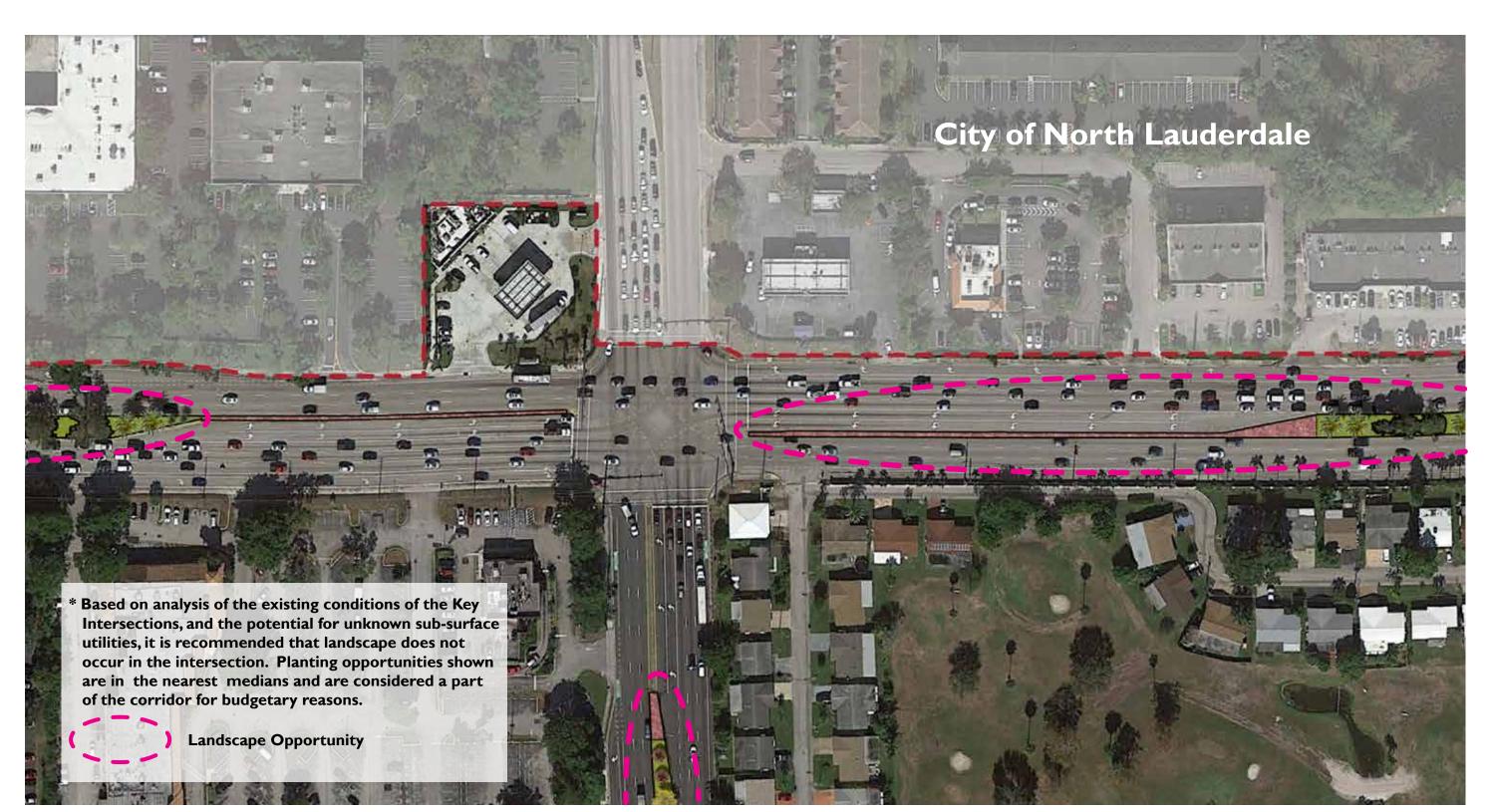


Figure 5.37: Proposed Key Intersection: Commercial Blvd & 31st Ave

* Note due to recent landscape improvements this intersection is of low priority for future landscape improvements.







KEY INTERSECTIONS: COMMERCIAL BLVD. / PROSPECT RD.

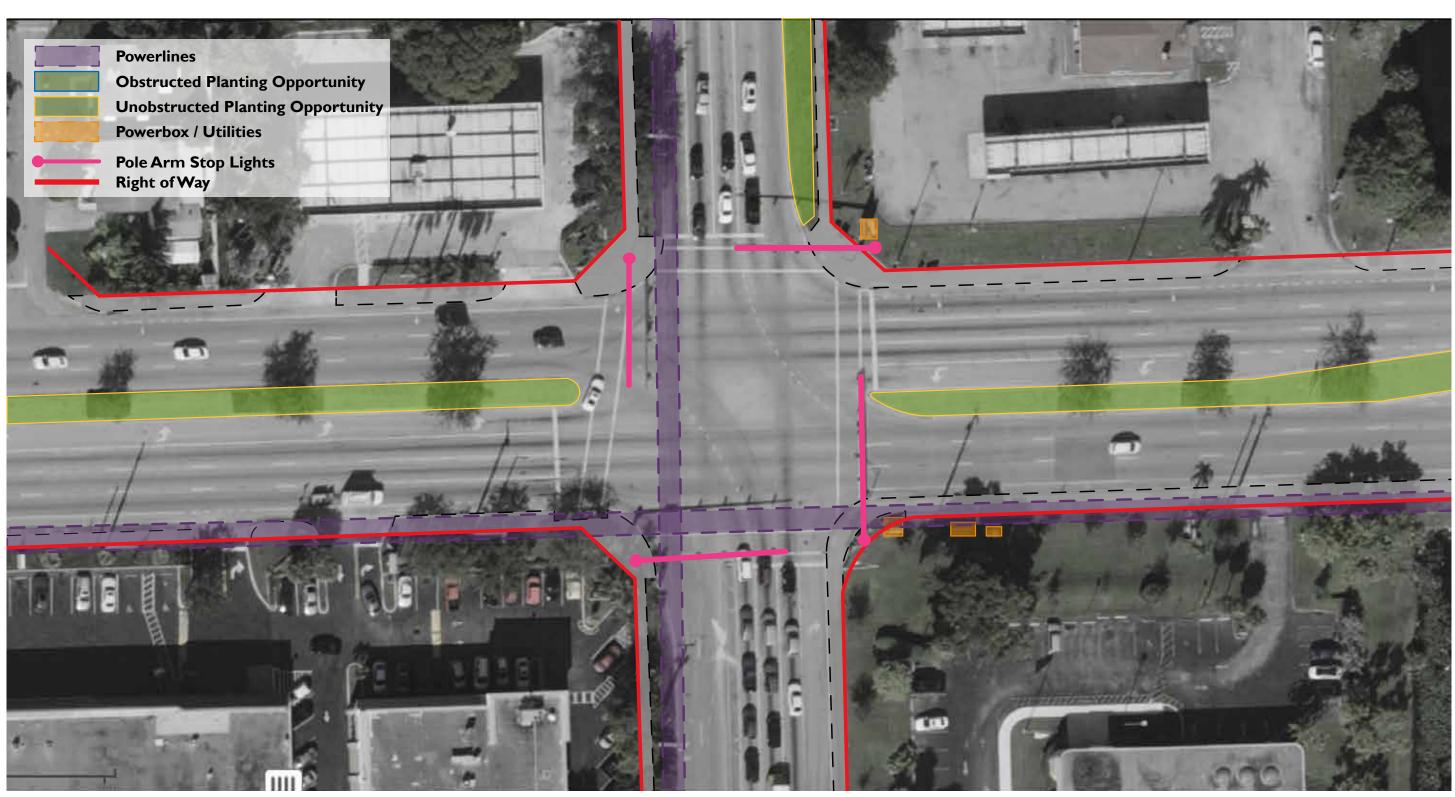


Figure 5.38: Existing Key Intersection: Commercial Blvd & Prospect Rd

* Note there has been recent landscape improvements on the intersection of Commercial Blvd. and Pros-pect Rd., which impacts the current conditions.



KEY INTERSECTIONS: COMMERCIAL BLVD. / PROSPECT RD.

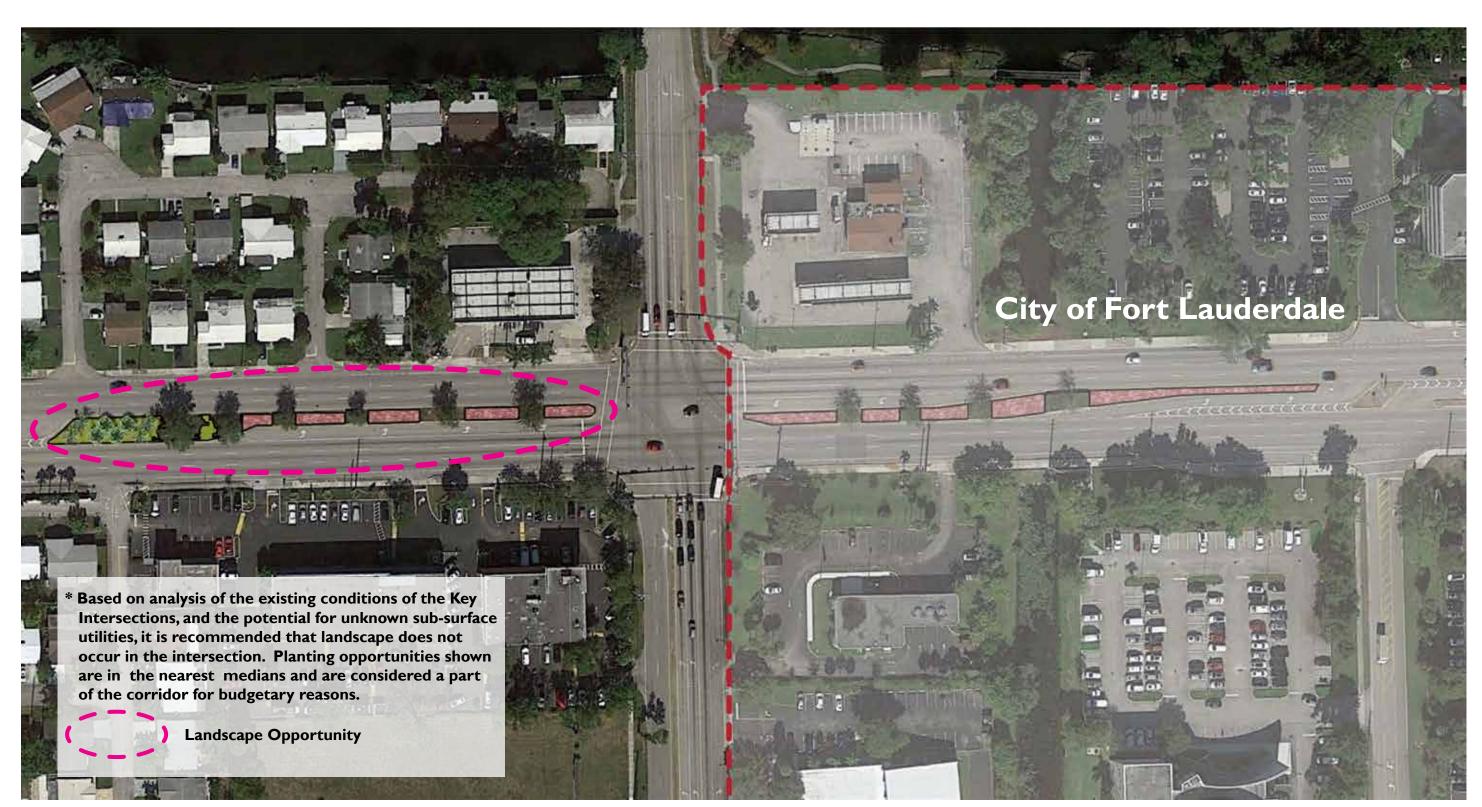


Figure 5.39: Proposed Key Intersection: Commercial Blvd & Prospect Rd

* Note due to recent landscape improvements this intersection is of low priority for future landscape improvements.









IMPLEMENTATION INTRODUCTION

Based on the analyses and proposals in the Master Plan, an implementation strategy and relative cost estimate were created for the entirety of the project. The implementation strategy and cost estimate were adopted on a corridor by corridor basis and include the overarching groups of: Canopy Material, Understory Material, Irrigation, and Hardscape. Each of these groups was then broken down further. Canopy Material consisted of additional large, medium, and small trees and palms, while Understory Material grouped together proposed shrubs and sod. The Irrigation group included new pump stations and irrigation components such as length of pipe and the amount of heads needed. The Hardscape group looked at the amount of pavers needed.

Once these categories had been delineated, each corridor found in the Master Plan underwent a cost estimate that came from a detailed measurement of each median within the corridor. For irrigation and hardscape, costs were based upon the total square footage and linear footage of the medians accordingly. Sod was based upon a full replacement of the existing square footage as well. Canopy and Understory Materials were chosen based on typical designs and overall resiliency of the identified corridor. Any existing trees with a resiliency rating of less than 40% were removed and replaced with a similar species with a higher resiliency rating. Additional proposed trees and shrubs were calculated based on the typical planting interventions seen in the chapter entitled "Typical Conceptual Landscape Corridor" and the average sizes of the existing medians.

After each corridor was given a relative cost estimate, they were totaled into the four groups of corridors including Primary and Minor Arterials, Collector Roads, and Local Streets. From these estimates, the total cost estimate without accounting for inflation sits at \$36,620,218. The project cost assumes a 12.5% inflation cost anticipating an average yearly inflation of 1.25% over a ten year span. With accounting for this inflation rate, the final cost estimate is \$41,106,194.







CONCEPTUAL COST - PRINCIPAL ARTERIALS

COMMERCIAL BLVD					
PROPOSED	QTY.	AVERAGE COST	SUB TOTAL		
ITEM		PER UNIT	COST		
Canopy Plant Material					
Large Trees	8	\$1,000.00	\$8,000.00		
Medium Trees	10	\$800.00	\$8,000.00		
Small Trees	10	\$600.00	\$6,000.00		
Large Palms	8	\$5,000.00	\$40,000.00		
Medium Palms	10	\$2,000.00	\$20,000.00		
Small Palms	15	\$800.00	\$12,000.00		
Ca	nopy Plan	t Material Sub Total:	\$94,000.00		
Understory Plant	Material				
Shrubs (S.F.)	149587	\$18.00	\$2,692,566.00		
		Shrubs Sub Total:	\$2,692,566.00		
Sod (S.F.)					
8'	2536	\$0.50	\$1,268.00		
10'	4800	\$0.50	\$2,400.00		
12'	9876	\$0.50	\$4,938.00		
15'	9750	\$0.50	\$4,875.00		
16'	20480	\$0.50	\$10,240.00		
18'	16884	\$0.50	\$8,442.00		
20'	84620	\$0.50	\$42,310.00		
22'	55770	\$0.50	\$27,885.00		
24'	77208	\$0.50	\$38,604.00		
25'	17250	\$0.50	\$8,625.00		
		Sod Sub Total:	\$149,587.00		
Irrigation (L.F.)			. ,		
Pump Stations 3 hp	2	\$7,000.00	\$14,000.00		
Pump Stations 5 hp	7	\$14,800.00	\$103,600.00		
т штор отшести от тр		p Stations Sub Total:	\$117,600.00		
8'	317	\$12.00	\$3,804.00		
10'	480	\$15.00	\$7,200.00		
12'	823	\$18.00	\$14,814.00		
15'	650	\$22.50	\$14,625.00		
16'	1280	\$24.00	\$30,720.00		
18'	938	\$27.00	\$25,326.00		
20'	4231	\$30.00	\$126,930.00		
22'	2535	\$33.00	\$83,655.00		
24'	3217	\$36.00	\$115,812.00		
25'	690	\$37.50	\$25,875.00		
		mponents Sub Total:	\$448,761.00		
L Irri	gation Col	inponents sub local:	рч40,/01.00		

C	COMMERCIAL BLVD CONT.				
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST		
		TER OINT	<u> </u>		
Hardscape					
Pavers (S.F.)					
5'	3100	\$20.00	\$62,000.00		
8'	8760	\$20.00	\$175,200.00		
10'	22850	\$20.00	\$457,000.00		
12'	18396	\$20.00	\$367,920.00		
20'	1700	\$20.00	\$34,000.00		
25'	1125	\$20.00	\$22,500.00		
	\$1,118,620.00				
	Sub Total:				
Construction Mobilization and Administration (15%):			\$693,170.10		
Design and Construction Administration (20%):			\$924,226.80		
Grand Total: \$6,238,530.9					
	A	verage cost per (L.F.):	\$154.90		

^{*} Note there has been recent landscape improvements on Commercial Blvd. from University Dr. to Prospect Rd., which impacts the current conditions. Due to these improvements those portions of Commercial Blvd. should be considered low priority for future landscape improvements.

UNIVERSITY DR			
PROPOSED	OTV	AVERAGE COST	SUB TOTAL
ITEM	QTY.	PER UNIT	COST
Canopy Plant Materi	al		
Large Trees	20	\$1,000.00	\$20,000.00
Medium Trees	15	\$800.00	\$12,000.00
Small Trees	15	\$600.00	\$9,000.00
Large Palms	20	\$5,000.00	\$100,000.00
Medium Palms	15	\$2,000.00	\$30,000.00
Small Palms	30	\$800.00	\$24,000.00
С	anopy Plan	t Material Sub Total:	\$195,000.00
Understory Plant Mat	erial		
Shrubs (S.F.)	23026	\$18.00	\$414,468.00
		Shrubs Sub Total:	\$414,468.00
Sod (S.F.)			
8'	8744	\$0.50	\$4,372.00
10'	12800	\$0.50	\$6,400.00
12'	6960	\$0.50	\$3,480.00
15'	8100	\$0.50	\$4,050.00
18'	5400	\$0.50	\$2,700.00
20'	50100	\$0.50	\$25,050.00
Sod Sub Total: \$46,052.0			\$46,052.00
Irrigation (L.F.)			
Pump Stations 5 hp	2	\$14,800.00	\$29,600.00
	Pum	p Stations Sub Total:	\$29,600.00
8'	1093	\$12.00	\$13,116.00
10'	1280	\$15.00	\$19,200.00
12'	580	\$18.00	\$10,440.00
15'	540	\$22.50	\$12,150.00
16'	0	\$25.00	\$0.00
18'	300	\$27.00	\$8,100.00
20'	2505	\$30.00	\$75,150.00
Irr	igation Co	mponents Sub Total:	\$138,156.00







CONCEPTUAL COST - PRINCIPAL ARTERIALS CONT.

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11	MIVEDO	TITY DR CONT	i e
U	MIVERS	SITY DR CONT	•
PROPOSED ITEM	QTY.	AVERAGE COST	SUB TOTAL
PROPOSED ITEM	Q11.	PER UNIT	COST
Hardscape			
Pavers (S.F.)			
4'	120	\$20.00	\$2,400.00
8'	1160	\$20.00	\$23,200.00
10'	5750	\$20.00	\$115,000.00
12'	900	\$20.00	\$18,000.00
15'	4350	\$20.00	\$87,000.00
18'	1170	\$20.00	\$23,400.00
20'	3600	\$20.00	\$72,000.00
	ŀ	lardscape Sub Total:	\$341,000.00
		Sub Total:	\$1,164,276.00
Construction Mobilization and Administration (15%):			\$174,641.40
Design and Construction Administration (20%):			\$232,855.20
Grand Total: \$1,571,772.60			\$1,571,772.60
	A	verage cost per (L.F.):	\$121.56

MCNAB RD			
PROPOSED	ОТУ	AVERAGE COST	SUB TOTAL
ITEM	QTY.	PER UNIT	COST
Canopy Plant Material			
Large Trees	15	\$1,000.00	\$15,000.00
Medium Trees	10	\$800.00	\$8,000.00
Small Trees	10	\$600.00	\$6,000.00
Large Palms	16	\$5,000.00	\$80,000.00
Medium Palms	10	\$2,000.00	\$20,000.00
Small Palms	20	\$800.00	\$16,000.00
Ca	nopy Plar	nt Material Sub Total:	\$145,000.00
Understory Plant Mate	rial		
Shrubs (S.F.)	15540	\$18.00	\$279,720.00
		Shrubs Sub Total:	\$279,720.00
Sod (S.F.)			
10'	1500	\$0.50	\$750.00
12'	13680	\$0.50	\$6,840.00
15'	28800	\$0.50	\$14,400.00
16'	4480	\$0.50	\$2,240.00
18'	2700	\$0.50	\$1,350.00
20'	11000	\$0.50	\$5,500.00
		Sod Sub Total:	\$31,080.00
Irrigation (L.F.)			
Pump Stations 5 hp	I	\$18,000.00	\$18,000.00
Pump Stations 7.5 hp	I	\$14,800.00	\$14,800.00
Pump Stations 10 hp	l	\$15,000.00	\$15,000.00
	Pum	p Stations Sub Total:	\$47,800.00
10'	150	\$15.00	\$2,250.00
12'	1140	\$18.00	\$20,520.00
15'	1920	\$22.50	\$43,200.00
16'	280	\$24.00	\$6,720.00
18'	150	\$27.00	\$4,050.00
20'	550	\$30.00	\$16,500.00
Irri	gation Co	mponents Sub Total:	\$93,240.00

N	MCNAB RD CONT.			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Hardscape				
Pavers (S.F.)				
4'	3540	\$20.00	\$70,800.00	
5'	5300	\$20.00	\$106,000.00	
6'	1290	\$20.00	\$25,800.00	
8'	3960	\$20.00	\$79,200.00	
Hardscape Sub Total: \$281,800.00				
Sub Total: \$878,640.00				
Construction Mobilization and Administration (15%): \$131,796.00				
Design and Construction Administration (20%): \$175,728.00				
Grand Total: \$1,186,164.00				
	Д	verage cost per (L.F.):	\$71.13	

Table 1.16: Conceptual Cost Estimate - Principal Arterials







CONCEPTUAL COST ESTIMATE - MINOR ARTERIALS

RC	OCK I	SLAND R	D
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant M	aterial		
Large Trees	35	\$1,000.00	\$35,000.00
Medium Trees	25	\$800.00	\$20,000.00
Small Trees	40	\$600.00	\$24,000.00
Large Palms	35	\$5,000.00	\$175,000.00
Medium Palms	25	\$2,000.00	\$50,000.00
Small Palms	40	\$800.00	\$32,000.00
Canopy Plan	nt Mate	rial Sub Total:	\$336,000.00
Understory Plan	nt Mate	rial	
Shrubs (S.F.)	19500	\$18.00	\$351,000.00
	Shru	ıbs Sub Total:	\$351,000.00
Sod (S.F.)			
12'	39120	\$0.50	\$19,560.00
	S	od Sub Total:	\$19,560.00
Irrigation (L.F.)			
Pump Stations 2 hp	I	\$7,000.00	\$7,000.00
Pum	p Statio	ons Sub Total:	\$7,000.00
12'	3260	\$18.00	\$58,680.00
Irrigation Co	mpone	nts Sub Total:	\$58,680.00
Hardscape			
Pavers (S.F.)			
12'	2880	\$20.00	\$57,600.00
	Hardsca	pe Sub Total:	\$57,600.00
		Sub Total:	\$829,840.00
Construction Mobilization and Administration (15%):			\$124,476.00
Design and Construction Administration (20%): \$165,968.00			\$165,968.00
		Grand Total:	\$1,120,284.00
Д	\$140.74		

	INIE L	SLAND RI	
P	INE I		
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant M	aterial		
Large Trees	45	\$1,000.00	\$45,000.00
Medium Trees	30	\$800.00	\$24,000.00
Small Trees	50	\$600.00	\$30,000.00
Large Palms	35	\$5,000.00	\$175,000.00
Medium Palms	25	\$2,000.00	\$50,000.00
Small Palms	50	\$800.00	\$40,000.00
Canopy Plar	nt Mate	rial Sub Total:	\$364,000.00
Understory Plan	nt Mate	rial	
Shrubs (S.F.)	19413	\$18.00	\$349,434.00
	Shru	ıbs Sub Total:	\$349,434.00
Sod (S.F.)			
2'	425	\$0.50	\$212.50
12'	6840	\$0.50	\$3,420.00
15'	29925	\$0.50	\$14,962.50
16'	27520	\$0.50	\$13,760.00
	S	od Sub Total:	\$32,355.00
Irrigation (L.F.)			
Pump Stations 5 hp	I	\$14,800.00	\$14,800.00
Pum	p Statio	ons Sub Total:	\$14,800.00
2'	213	\$3.00	\$639.00
12'	570	\$18.00	\$10,260.00
15'	1995	\$22.50	\$44,887.50
16'	1720	\$24.00	\$41,280.00
Irrigation Co	mpone	nts Sub Total:	\$97,066.50
Hardscape			
Pavers (S.F.)			
4'	800	\$20.00	\$16,000.00
5'	1700	\$20.00	\$34,000.00
6'	480	\$20.00	\$9,600.00
8'	3240	\$20.00	\$64,800.00
12'	2280	\$20.00	\$45,600.00
	Hardsca	pe Sub Total:	\$170,000.00
		Sub Total:	\$1,027,655.50
Constr		lobilization and istration (15%):	\$154,148.33
D	esign and	d Construction	\$205,531.10
	Admin	istration (20%):	
	Admin	Grand Total:	\$1,387,334.93

	NC	B HILL RD	
PROPOSED	QTY.	AVERAGE COST	SUB TOTAL
ITEM	Q11.	PER UNIT	COST
Canopy Plant Ma	terial		
Large Trees	35	\$1,000.00	\$35,000.00
Medium Trees	30	\$800.00	\$24,000.00
Small Trees	40	\$600.00	\$24,000.00
Large Palms	35	\$5,000.00	\$175,000.00
Medium Palms	30	\$2,000.00	\$60,000.00
Small Palms	40	\$800.00	\$32,000.00
Canop	y Plant	Material Sub Total:	\$350,000.00
Understory Plan	t Mater	ial	
Shrubs (S.F.)	29121	\$18.00	\$524,178.00
		Shrubs Sub Total:	\$524,178.00
Sod (S.F.)			
12'	26340	\$0.50	\$13,170.00
14'	13580	\$0.50	\$6,790.00
15'	9450	\$0.50	\$4,725.00
20'	11000	\$0.50	\$5,500.00
25'	27250	\$0.50	\$13,625.00
30'	9450	\$0.50	\$4,725.00
		Sod Sub Total:	\$48,535.00
Irrigation (L.F.)			
12'	2195	\$18.00	\$39,510.00
14'	970	\$25.00	\$24,250.00
15'	630	\$22.50	\$14,175.00
20'	550	\$30.00	\$16,500.00
25'	1090	\$37.50	\$40,875.00
30'	315	\$45.00	\$14,175.00
Irrigati	on Con	nponents Sub Total:	\$149,485.00
Hardscape			
Pavers (S.F.)			
6'	540	\$20.00	\$10,800.00
8'	400	\$20.00	\$8,000.00
10'	500	\$20.00	\$10,000.00
12'	2280	\$20.00	\$45,600.00
15'	750	\$20.00	\$15,000.00
25'	2750	\$20.00	\$55,000.00
30'	1800	\$20.00	\$36,000.00
	H:	ardscape Sub Total:	\$180,400.00
		Sub Total:	\$1,252,598.00
		ction Mobilization and Administration (15%):	\$187,889.70
Design and Cons	truction	Administration (20%):	\$250,519.60
		Grand Total:	\$1,691,007.30
	Ave	erage cost per (L.F.):	\$122.09

	HIA	TUS RD	
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant M	laterial		
Large Trees	35	\$1,000.00	\$35,000.00
Medium Trees	20	\$800.00	\$16,000.00
Small Trees	35	\$600.00	\$21,000.00
Large Palms	35	\$5,000.00	\$175,000.00
Medium Palms	20	\$2,000.00	\$40,000.00
Small Palms	35	\$800.00	\$28,000.00
Canopy Pla	nt Mate	rial Sub Total:	\$315,000.00
Understory Pla	nt Mate	rial	
Shrubs (S.F.)	13700	\$18.00	\$246,600.00
	Shr	ubs Sub Total:	\$246,600.00
Sod (S.F.)			
8'	3440	\$0.50	\$1,720.00
10'	2000	\$0.50	\$1,000.00
16'	21920	\$0.50	\$10,960.00
	•	Sod Sub Total:	\$13,680.00
Irrigation (L.F.)			
Pump Stations 5 hp	I	\$14,800.00	\$14,800.00
Pun	np Stati	ons Sub Total:	\$14,800.00
8'	430	\$12.00	\$5,160.00
10'	200	\$15.00	\$3,000.00
16'	1370	\$24.00	\$32,880.00
Irrigation C	ompone	nts Sub Total:	\$41,040.00
Hardscape			
Pavers (S.F.)			
4'	7240	\$20.00	\$144,800.00
8'	4024	\$20.00	\$80,480.00
10'	1100	\$20.00	\$22,000.00
	Hardsc	ape Sub Total:	\$247,280.00
		Sub Total:	\$878,400.00
		Sub lotal.	\$676, 4 00.00
Const		10bilization and histration (15%):	\$131,760.00
	Admir Design an	10bilization and	
	Admir Design an	10bilization and histration (15%): d Construction	\$131,760.00

Table 1.17: Conceptual Cost Estimate - Minor Arterials





CONCEPTUAL COST ESTIMATE - COLLECTOR ROADS

SOUTHGATE BLVD			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	t Ma teria	al	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	5	\$800.00	\$4,000.00
Small Trees	5	\$600.00	\$3,000.00
Medium Palms	5	\$2,000.00	\$10,000.00
Small Palms	5	\$800.00	\$4,000.00
Canopy Plai	nt M ater	rial Sub Total:	\$21,000.00
Understory F	Plant Ma	terial	
Shrubs	111500	\$18.00	\$2,007,000.00
Shrubs Sub Total: \$2,007,000.00			
Sod (S.F.)			
12'	4440	\$0.50	\$2,220.00
15'	6600	\$0.50	\$3,300.00
25'	11750	\$0.50	\$5,875.00
30'	15000	\$0.50	\$7,500.00
35'	20300	\$0.50	\$10,150.00
40'	379800	\$0.50	\$189,900.00
45'	8100	\$0.50	\$4,050.00
Sod Sub Total: \$222,995.00			

SOU	THGA	TE BLVD	CONT.
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Irrigation (L.F	Ξ)		
Pump Stations 15 hp	2	\$25,000.00	\$50,000.00
Pum	np Statio	ons Sub Total:	\$50,000.00
12'	370	\$18.00	\$6,660.00
15'	440	\$22.50	\$9,900.00
25'	470	\$37.50	\$17,625.00
30'	500	\$45.00	\$22,500.00
35'	580	\$52.50	\$30,450.00
40'	9495	\$60.00	\$569,700.00
45'	180	\$67.50	\$12,150.00
Irrigation Components Sub Total:			\$668,985.00
Hardscape			
Pavers (S.F.)			
8'	80	\$20.00	\$1,600.00
10'	800	\$20.00	\$16,000.00
15'	300	\$20.00	\$6,000.00
20'	2700	\$20.00	\$54,000.00
25'	13500	\$20.00	\$270,000.00
	Hardsca	pe Sub Total:	\$347,600.00
Sub Total:			
		Sub Total:	\$3,317,580.00
Constr		Sub Total: obilization and istration (15%):	\$3,317,580.00 \$497,637.00
	Admini Design and	obilization and	
	Admini Design and	obilization and stration (15%): d Construction	\$497,637.00
D	Admini Design and Admini	obilization and istration (15%): d Construction (stration (20%):	\$497,637.00 \$663,516.00

	NW	/ 8IST ST		
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant Material				
Large Trees	0	\$1,000.00	\$0.00	
Medium Trees	5	\$800.00	\$4,000.00	
Small Trees	5	\$600.00	\$3,000.00	
Large Palms	0	\$5,000.00	\$0.00	
Medium Palms	5	\$2,000.00	\$10,000.00	
Small Palms	5	\$800.00	\$4,000.00	
Canor	y Plant	Material Sub Total:	\$21,000.00	
Understory Plan	t Materia	al		
Shrubs (S.F.)	23500	\$18.00	\$423,000.00	
		Shrubs Sub Total:	\$423,000.00	
Sod (S.F.)				
10'	1600	\$0.50	\$800.00	
12'	8760	\$0.50	\$4,380.00	
15'	68025	\$0.50	\$34,012.50	
		Sod Sub Total:	\$39,192.50	
Irrigation (L.F.)				
Pump Stations 10 hp	3	\$18,000.00	\$54,000.00	
	Pump	Stations Sub Total:	\$54,000.00	
10'	160	\$15.00	\$2,400.00	
12'	730	\$18.00	\$13,140.00	
15'	4535	\$22.50	\$102,037.50	
Irrigat Hardscape	ion Com	ponents Sub Total:	\$117,577.50	
Pavers (S.F.)				
4'	2440	\$20.00	\$48,800.00	
8'	4440	\$20.00	\$88,800.00	
15'	1680	\$20.00	\$33,600.00	
	Ha	rdscape Sub Total:	\$171,200.00	
	Constant	Sub Total:	\$825,970.00	
		Administration (15%):	\$123,895.50	
Design and Cons	struction A	Administration (20%):	\$165,194.00	
Grand Total: \$1,115,059.50 Average cost per (L.F.): \$82.44				

NW 77TH ST						
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST			
Canopy Plant Mate	erial					
Large Trees	0	\$1,000.00	\$0.00			
Medium Trees	5	\$800.00	\$4,000.00			
Small Trees	5	\$600.00	\$3,000.00			
Large Palms	0	\$5,000.00	\$0.00			
Medium Palms	5	\$2,000.00	\$10,000.00			
Small Palms	5	\$800.00	\$4,000.00			
Can	ору Р	lant Material Sub Total:	\$21,000.00			
Understory Plant I	Mater	ial				
Shrubs (S.F.)	11900	\$18.00	\$214,200.00			
		Shrubs Sub Total:	\$214,200.00			
Sod (S.F.)						
10'	1350	\$0.50	\$675.00			
12'	8820	\$0.50	\$4,410.00			
15'	29415	\$0.50	\$14,707.50			
		Sod Sub Total:	\$19,792.50			
Irrigation (L.F.)						
Pump Stations 7.5 hp	I	\$15,000.00	\$15,000.00			
	Pı	ımp Stations Sub Total:	\$15,000.00			
10'	135	\$15.00	\$2,025.00			
12'	735	\$18.00	\$13,230.00			
15'	1961	\$22.50	\$44,122.50			
	ation	Components Sub Total:	\$59,377.50			
Hardscape						
Pavers (S.F.) 4'	1980	\$20.00	\$39,600.00			
<u> </u>	880	\$20.00	\$17,600.00			
12'	4010	\$20.00	\$80,200.00			
15'	450	\$20.00	\$9,000.00			
13	730	Hardscape Sub Total:	\$146,400.00			
		Sub Total:	\$475,770.00			
Construction Mobil	ization	and Administration (15%):	\$71,365.50			
		` '	\$95,154.00			
Design and Construction Administration (20%): \$95,154.00 Grand Total: \$642,289.50						
Average cost per (L.F.): \$135.08						

Table 1.18: Conceptual Cost Estimate - Collector Roads







CONCEPTUAL COST ESTIMATE - COLLECTOR ROADS CONT.

LA			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant Materia	I		
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	5	\$800.00	\$4,000.00
Small Trees	5	\$600.00	\$3,000.00
Large Palms	0	\$5,000.00	\$0.00
Medium Palms	5	\$2,000.00	\$10,000.00
Small Palms	5	\$800.00	\$4,000.00
С	anopy Pla	ant Material Sub Total:	\$21,000.00
Understory Plant Mat	erial		·
Shrubs (S.F.)	22900	\$18.00	\$412,200.00
,		Shrubs Sub Total:	\$412,200.00
Sod (S.F.)			·
16'	7040	\$0.50	\$3,520.00
18'	7380	\$0.50	\$3,690.00
20'	61880	\$0.50	\$30,940.00
		Sod Sub Total:	\$38,150.00
Irrigation (L.F.)	. ,		
Pump Stations 10 hp	ı	\$18,000.00	\$18,000.00
r r sans s r r	Pui	mp Stations Sub Total:	\$18,000.00
16'	440	\$24.00	\$10,560.00
18'	410	\$27.00	\$11,070.00
20'	3094	\$30.00	\$92,820.00
Irr		Components Sub Total:	\$114,450.00
Hardscape			
Pavers (S.F.)			
12'	1320	\$20.00	\$26,400.00
16'	736	\$20.00	\$14,720.00
20'	2240	\$20.00	\$44,800.00
		Hardscape Sub Total:	\$85,920.00
		Sub Total:	\$689,720.00
Construction Mo	bilization a	and Administration (15%):	\$103,458.00
Design and	Design and Construction Administration (20%):		
		Grand Total:	\$931,122.00
	\$181.68		

	NW	64TH AVE	
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant Mater	ial		
Large Trees	5	\$1,000.00	\$5,000.00
Medium Trees	5	\$800.00	\$4,000.00
Small Trees	8	\$600.00	\$4,800.00
Large Palms	5	\$5,000.00	\$25,000.00
Medium Palms	5	\$2,000.00	\$10,000.00
Small Palms	8	\$800.00	\$6,400.00
		nt Material Sub Total:	\$55,200.00
		in Platerial Sub Total.	\$33,200.00
Understory Plant M		* 10.00	#20.240.00
Shrubs (S.F.)	1626	\$18.00 Shrubs Sub Total:	\$29,268.00
	\$29,268.00		
Sod (S.F.)			
14'	3500	\$0.50	\$1,750.00
16'	1920	\$0.50	\$960.00
		Sod Sub Total:	\$2,710.00
Irrigation (L.F.)			
Pump Stations 10 hp	ı	\$18,000.00	\$18,000.00
	Pun	np Stations Sub Total:	\$18,000.00
14'	250	\$21.00	\$5,250.00
16'	120	\$24.00	\$2,880.00
Irri	igation Co	omponents Sub Total:	\$8,130.00
Hardscape			
Pavers (S.F.)			
4'	1480	\$20.00	\$29,600.00
6'	240	\$20.00	\$4,800.00
8'	1200	\$20.00	\$24,000.00
		Hardscape Sub Total:	\$58,400.00
		Sub Total:	\$171,708.00
		nd Administration (15%):	\$25,756.20
Design and 0	Construction	on Administration (20%):	\$34,341.60
		Grand Total:	\$231,805.80
	A	Average cost per (L.F.):	\$90.90

NW 94TI	HAVE	/WESTWOOD	BLVD
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant Materia	ıl		
Large Trees	6	\$1,000.00	\$6,000.00
Medium Trees	5	\$800.00	\$4,000.00
Small Trees	8	\$600.00	\$4,800.00
Large Palms	6	\$5,000.00	\$30,000.00
Medium Palms	5	\$2,000.00	\$10,000.00
Small Palms	8	\$800.00	\$6,400.00
Ca	nopy Pla	nt Material Sub Total:	\$61,200.00
Understory Plant Mat	terial		
Shrubs (S.F.)	2100	\$18.00	\$37,800.00
	l	Shrubs Sub Total:	\$37,800.00
Sod (S.F.)			· · · ·
10'	750	\$0.50	\$375.00
14'	6230	\$0.50	\$3,115.00
Sod Sub Total:			\$3,490.00
Irrigation (L.F.)	. ,		
Pump Stations 2 hp	l ı	\$7,000.00	\$7,000.00
. F F	Pun	np Stations Sub Total:	\$7,000.00
10'	75	\$15.00	\$1,125.00
14'	445	\$21.00	\$9,345.00
Irri	gation Co	omponents Sub Total:	\$10,470.00
Hardscape			
Pavers (S.F.)			
14'	900	\$20.00 Hardscape Sub Total:	\$18,000.00
	\$18,000.00		
		Sub Total:	\$137,960.00
Construction Mobilization and Administration (15%):			\$20,694.00
Design and Construction Administration (20%):			\$27,592.00
		Grand Total: Average cost per (L.F.):	\$186,246.00
	\$32.59		

Table 1.18: Conceptual Cost Estimate - Collector Roads





CONCEPTUAL COST ESTIMATE - COLLECTOR ROADS CONT.

NW 82ND ST				
	INV			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant Materia	İ			
Large Trees	0	\$1,000.00	\$0.00	
Medium Trees	5	\$800.00	\$4,000.00	
Small Trees	5	\$600.00	\$3,000.00	
Large Palms	0	\$5,000.00	\$0.00	
Medium Palms	5	\$2,000.00	\$10,000.00	
Small Palms	5	\$800.00	\$4,000.00	
C	anopy Pla	ant Material Sub Total:	\$21,000.00	
Understory Plant Mat	erial			
Shrubs (S.F.)	4800	\$18.00	\$86,400.00	
	l	Shrubs Sub Total:	\$86,400.00	
Sod (S.F.)				
10'	2160	\$0.50	\$1,080.00	
15'	9000	\$0.50	\$4,500.00	
16'	8000	\$0.50	\$4,000.00	
	l	Sod Sub Total:	\$9,580.00	
Irrigation (L.F.)				
Pump Stations 5 hp	ı	\$14,800.00	\$14,800.00	
<u> </u>	Pu	mp Stations Sub Total:	\$14,800.00	
10'	216	\$15.00	\$3,240.00	
15'	600	\$22.50	\$13,500.00	
16'	500	\$24.00	\$12,000.00	
	igation C	Components Sub Total:	\$28,740.00	
Hardscape				
Pavers (S.F.) 5'	1500	#20.00	#20,000,00	
8'	2600	\$20.00 \$20.00	\$30,000.00 \$52,000.00	
16'	320	\$20.00	\$6,400.00	
10	1 320	Hardscape Sub Total:	\$88,400.00	
		Sub Total:	\$248,920.00	
Construction Mo	bilization	and Administration (15%):	\$37,338.00	
		ion Administration (20%):	\$49,784.00	
Grand Total: \$336,042.0				
		Average cost per (L.F.):	\$145.47	
Average cost per (L.r.): \$145.47				

NW 57TH ST				
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant Materia				
Large Trees	0	\$1,000.00	\$0.00	
Medium Trees	5	\$800.00	\$4,000.00	
Small Trees	5	\$600.00	\$3,000.00	
Large Palms	0	\$5,000.00	\$0.00	
Medium Palms	5	\$2,000.00	\$10,000.00	
Small Palms	5	\$800.00	\$4,000.00	
Ca	nopy Plai	nt Material Sub Total:	\$21,000.00	
Understory Plant Ma			, ,	
Shrubs (S.F.)	59900	\$18.00	\$1,078,200.00	
S 423 (S)	37700	Shrubs Sub Total:	\$1,078,200.00	
Sod (S.F.)		Sili ubs Sub Total.	ψ1,070,200.00	
	4705	#0.F0	#2.3/2.F0	
15'	4725	\$0.50	\$2,362.50	
20'	186100	\$0.50	\$93,050.00	
25'	8625	\$0.50 Sod Sub Total:	\$4,312.50	
	\$99,725.00			
Irrigation (L.F.)				
15'	315	\$22.50	\$7,087.50	
20'	9305	\$30.00	\$279,150.00	
25'	345	\$37.50	\$12,937.50	
Irri	gation Co	omponents Sub Total:	\$299,175.00	
Hardscape		-		
Pavers (S.F.)				
8'	880	\$20.00	\$17,600.00	
10'	750	\$20.00	\$15,000.00	
15'	1500	\$20.00	\$30,000.00	
20'	12160	\$20.00	\$243,200.00	
25'	750	\$20.00	\$15,000.00	
		Hardscape Sub Total:	\$320,800.00	
		Sub Total:	\$1,818,900.00	
		nd Administration (15%):	\$272,835.00	
Design and C	Construction	on Administration (20%):	\$363,780.00	
		Grand Total:	\$2,455,515.00	
	A	Average cost per (L.F.):	\$178.58	

	BAILEY RD			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant Materia				
Large Trees	6	\$1,000.00	\$6,000.00	
Medium Trees	5	\$800.00	\$4,000.00	
Small Trees	8	\$600.00	\$4,800.00	
Large Palms	6	\$5,000.00	\$30,000.00	
Medium Palms	5	\$2,000.00	\$10,000.00	
Small Palms	8	\$800.00	\$6,400.00	
Ca	nopy Plar	nt Material Sub Total:	\$61,200.00	
Understory Plant Mat	erial			
Shrubs (S.F.)	2900	\$18.00	\$52,200.00	
		Shrubs Sub Total:	\$52,200.00	
Sod (S.F.)				
10'	2050	\$0.50	\$1,025.00	
12'	1080	\$0.50	\$540.00	
14'	2240	\$0.50	\$1,120.00	
16'	4160	\$0.50	\$2,080.00	
	I.	Sod Sub Total:	\$4,765.00	
Irrigation (L.F.)				
10'	205	\$15.00	\$3,075.00	
12'	90	\$18.00	\$1,620.00	
14'	160	\$21.00	\$3,360.00	
16'	260	\$24.00	\$6,240.00	
Irri	gation Co	mponents Sub Total:	\$14,295.00	
Hardscape			· · ·	
Pavers (S.F.)				
4'	4000	\$20.00	\$80,000.00	
6'	1560	\$20.00	\$31,200.00	
10'	160	\$20.00	\$3,200.00	
16'	4160	\$20.00	\$83,200.00	
		Hardscape Sub Total:	\$197,600.00	
		Sub Total:	\$330,060.00	
		d Administration (15%):	\$49,509.00	
Design and Construction Administration (20%):			\$66,012.00	
	Grand Total: \$445,581.0			
Average cost per (L.F.): \$55.				

Table 1.18: Conceptual Cost Estimate - Collector Roads







CONCEPTUAL COST ESTIMATE - LOCAL STREETS

NW 108TH TERR					
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST		
Canopy Plant Mater	ial				
Large Trees	15	\$1,000.00	\$15,000.00		
Medium Trees	10	\$800.00	\$8,000.00		
Small Trees	20	\$600.00	\$12,000.00		
Large Palms	10	\$5,000.00	\$50,000.00		
Medium Palms	15	\$2,000.00	\$30,000.00		
Small Palms	20	\$800.00	\$16,000.00		
Ca	nopy Pla	nt Material Sub Total:	\$131,000.00		
Understory Plant Ma	aterial				
Shrubs (S.F.)	22050	\$18.00	\$396,900.00		
		Shrubs Sub Total:	\$396,900.00		
Sod (S.F.)			· · · · · · · · · · · · · · · · · · ·		
10'	4100	\$0.50	\$2,050.00		
14'	2520	\$0.50	\$1,260.00		
15'	10875	\$0.50	\$5,437.50		
16'	56000	\$0.50	\$28,000.00		
Sod Sub Total:			\$36,747.50		
Irrigation (L.F.)					
Pump Stations 2 hp	ı	\$7,000.00	\$7,000.00		
	Pun	np Stations Sub Total:	\$7,000.00		
10'	410	\$15.00	\$6,150.00		
14'	180	\$21.00	\$3,780.00		
15'	725	\$22.50	\$16,312.50		
16'	3500	\$24.00	\$84,000.00		
Irri	gation Co	omponents Sub Total:	\$110,242.50		
Hardscape					
Pavers (S.F.)					
		Sub Total:	\$681,890.00		
		nd Administration (15%):	\$102,283.50		
Design and Construction Administration (20%): \$136,378.0			\$136,378.00		
Grand Total: \$920,551.50					
Average cost per (L.F.): \$98.98					

	NV	V 75TH ST			
PROPOSED ITEM	QTY.	AVERAGE COST	SUB TOTAL		
PROPOSED ITEM	Q11.	PER UNIT	COST		
Canopy Plant Materi	al				
Large Trees	20	\$1,000.00	\$20,000.00		
Medium Trees	10	\$800.00	\$8,000.00		
Small Trees	25	\$600.00	\$15,000.00		
Large Palms	15	\$5,000.00	\$75,000.00		
Medium Palms	15	\$2,000.00	\$30,000.00		
Small Palms	30	\$800.00	\$24,000.00		
Ca	nopy Pla	nt Material Sub Total:	\$172,000.00		
Understory Plant Ma			· ,		
Shrubs (S.F.)	6800	\$18.00	\$122,400.00		
		Shrubs Sub Total:	\$122,400.00		
Sod (S.F.)					
12'	4020	\$0.50	\$2,010.00		
14'	15750	\$0.50	\$7,875.00		
16'	7360	\$0.50	\$3,680.00		
	Sod Sub Total:				
Irrigation (L.F.)					
Pump Stations 3 hp	I	\$7,000.00	\$7,000.00		
Pump Stations 7.5 hp	1	\$15,000.00	\$15,000.00		
	Pun	np Stations Sub Total:	\$22,000.00		
12'	335	\$18.00	\$6,030.00		
14'	1125	\$21.00	\$23,625.00		
16'	460	\$24.00	\$11,040.00		
Irri	gation Co	omponents Sub Total:	\$40,695.00		
Hardscape					
Pavers (S.F.)					
4'	1000	\$20.00	\$20,000.00		
8'	960	\$20.00	\$19,200.00		
12'	4620	\$20.00	\$92,400.00		
14'	3500	\$20.00	\$70,000.00		
16'	720	\$20.00	\$14,400.00		
		Hardscape Sub Total:	\$216,000.00		
		Sub Total:	\$586,660.00		
		nd Administration (15%):	\$87,999.00		
Design and C	onstruction	on Administration (20%):	\$117,332.00		
		Grand Total:	\$791,991.00 \$216.98		
	Average cost per (L.F.):				

		KWOOD BLVD	
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant Materia	al		
Large Trees	20	\$1,000.00	\$20,000.00
Medium Trees	10	\$800.00	\$8,000.00
Small Trees	25	\$600.00	\$15,000.00
Large Palms	15	\$5,000.00	\$75,000.00
Medium Palms	15	\$2,000.00	\$30,000.00
Small Palms	25	\$800.00	\$20,000.00
Car	nopy Pla	nt Material Sub Total:	\$168,000.00
Understory Plant Ma	terial		
Shrubs (S.F.)	22700	\$18.00	\$408,600.00
	\$408,600.00		
Sod (S.F.)		-	
8,	13360	\$0.50	\$6,680.00
12'	31962	\$0.50	\$15,981.00
	\$22,661.00		
Irrigation (L.F.)			
Pump Stations 5 hp	2	\$14,800.00	\$29,600.00
	Pun	np Stations Sub Total:	\$29,600.00
8'	1670	\$12.00	\$20,040.00
12'	2626	\$18.00	\$47,268.00
Irrig	ation Co	omponents Sub Total:	\$67,308.00
Hardscape			
Pavers (S.F.)			
8'	288	\$20.00	\$5,760.00
12'	3805	\$20.00	\$76,100.00
	Hardscape Sub Total:	\$81,860.00	
Construction Mobi	Sub Total:	\$778,029.00 \$116,704.35	
		` ′	\$155,605.80
Design and et	Design and Construction Administration (20%): Grand Total:		
		Average cost per (L.F.):	\$1,0 5 0,3 39 .1 5 \$179.39

Table 1.19: Conceptual Cost Estimate - Local Streets





CONCEPTUAL COST ESTIMATE - LOCAL STREETS CONT.

84TH TERR				
PROPOSED ITEM	QTY.	AVERAGE COST	SUB TOTAL	
TROTOSED TIETT	Q11.	PER UNIT	COST	
Canopy Plant Materi	ial			
Large Trees	10	\$1,000.00	\$10,000.00	
Medium Trees	8	\$800.00	\$6,400.00	
Small Trees	15	\$600.00	\$9,000.00	
Large Palms	8	\$5,000.00	\$40,000.00	
Medium Palms	10	\$2,000.00	\$20,000.00	
Small Palms	15	\$800.00	\$12,000.00	
Ca	nopy Pla	nt Material Sub Total:	\$97,400.00	
Understory Plant Ma	aterial			
Shrubs (S.F.)	5100	\$18.00	\$91,800.00	
		Shrubs Sub Total:	\$91,800.00	
Sod (S.F.)				
8'	3720	\$0.50	\$1,860.00	
10'	13100	\$0.50	\$6,550.00	
12'	780	\$0.50	\$390.00	
15'	2850	\$0.50	\$1,425.00	
		Sod Sub Total:	\$10,225.00	
Irrigation (L.F.)				
Pump Stations 5 hp	I	\$14,800.00	\$14,800.00	
	Pun	np Stations Sub Total:	\$14,800.00	
8'	465	\$12.00	\$5,580.00	
10'	1310	\$15.00	\$19,650.00	
12'	65	\$18.00	\$1,170.00	
Irri	gation C	omponents Sub Total:	\$26,400.00	
Hardscape				
Pavers (S.F.)				
8'	576	\$20.00	\$11,520.00	
10'	2400	\$20.00	\$48,000.00	
12'	288	\$20.00	\$5,760.00	
15'	300	\$20.00 Hardscape Sub Total:	\$6,000.00 \$71,280.00	
•				
Construction Mob	\$311,905.00 \$46,785.75			
	\$62,381.00			
Design and Construction Administration (20%): \$62,381.0 Grand Total: \$421,071.7				
		Average cost per (L.F.):	\$118.28	

	NV	W 78TH ST	
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant Mater	ial		
Large Trees	10	\$1,000.00	\$10,000.00
Medium Trees	8	\$800.00	\$6,400.00
Small Trees	15	\$600.00	\$9,000.00
Large Palms	8	\$5,000.00	\$40,000.00
Medium Palms	10	\$2,000.00	\$20,000.00
Small Palms	15	\$800.00	\$12,000.00
Ca	nopy Pla	nt Material Sub Total:	\$97,400.00
Understory Plant Ma	aterial		
Shrubs (S.F.)	2900	\$18.00	\$52,200.00
	l	Shrubs Sub Total:	\$52,200.00
Sod (S.F.)			
12'	3300	\$0.50	\$1,650.00
15'	2715	\$0.50	\$1,357.50
16'	5344	\$0.50	\$2,672.00
18'	8154	\$0.50	\$4,077.00
		Sod Sub Total:	\$9,756.50
Irrigation (L.F.)			<u>_</u>
Pump Stations 5 hp	ı	\$14,800.00	\$14,800.00
	Pun	np Stations Sub Total:	\$14,800.00
12'	275	\$18.00	\$4,950.00
15'	181	\$22.50	\$4,072.50
16'	334	\$24.00	\$8,016.00
18'	453	\$27.00	\$12,231.00
Irri	gation C	omponents Sub Total:	\$29,269.50
Hardscape			
Pavers (S.F.)			
4'	800	\$20.00	\$16,000.00
12'	4800	\$20.00	\$96,000.00
18'	360	\$20.00	\$7,200.00
		Hardscape Sub Total:	\$119,200.00
		Sub Total:	\$322,626.00
Construction Mob	ilization a	nd Administration (15%):	\$48,393.90
Design and C	Construction	on Administration (20%):	\$64,525.20
		Grand Total:	\$435,545.10
		Average cost per (L.F.):	\$193.15

	MOOF	OL ANDC DIVID			
	WOOL	DLANDS BLVD			
PROPOSED ITEM	QTY.	AVERAGE COST	SUB TOTAL		
G DI (M)	• •	PER UNIT	COST		
Canopy Plant Mater					
Large Trees	0	\$1,000.00	\$0.00		
Medium Trees	8	\$800.00	\$6,400.00		
Small Trees	10	\$600.00	\$6,000.00		
Large Palms	0	\$5,000.00	\$0.00		
Medium Palms	8	\$2,000.00	\$16,000.00		
Small Palms	10	\$800.00	\$8,000.00		
Ca	nopy Plai	nt Material Sub Total:	\$36,400.00		
Understory Plant M	aterial				
Shrubs (S.F.)	37600	\$18.00	\$676,800.00		
		Shrubs Sub Total:	\$676,800.00		
Sod (S.F.)					
15'	26100	\$0.50	\$13,050.00		
20'	51000	\$0.50	\$25,500.00		
22'	5390	\$0.50	\$2,695.00		
25'	42825	\$0.50	\$21,412.50		
		Sod Sub Total:	\$62,657.50		
Irrigation (L.F.)					
Pump Stations 10 hp	I	\$18,000.00	\$18,000.00		
	Pum	p Stations Sub Total:	\$18,000.00		
15'	1740	\$22.50	\$39,150.00		
20'	2550	\$30.00	\$76,500.00		
22'	245	\$33.00	\$8,085.00		
25'	1713	\$37.50	\$64,237.50		
Irri	Irrigation Components Sub Total:				
Hardscape					
Pavers (S.F.)	140		42.000.00		
2'	160	\$20.00	\$3,200.00		
15'	5730	\$20.00 Hardscape Sub Total:	\$114,600.00		
	\$117,800.00				
Construction Mob	\$1,099,630.00				
Design and C	\$219,926.00				
2 551,617 41114	\$1,484,500.50				
		Grand Total: verage cost per (L.F.):	\$185.56		
	Ţ183.30				







CONCEPTUAL COST ESTIMATE - KEY INTERSECTIONS

MCNAB RD & NOB HILL RD				
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant	t Mate	erial		
Large Trees	4	\$1,000.00	\$4,000.00	
Medium Trees	3	\$800.00	\$2,400.00	
Small Trees	12	\$600.00	\$7,200.00	
Large Palms	6	\$5,000.00	\$30,000.00	
Medium Palms	4	\$2,000.00	\$8,000.00	
Small Palms	8	\$800.00	\$6,400.00	
Canopy	Plant	Material Sub Total:	\$58,000.00	
Understory F	Plant I	Material		
Shrubs (S.F.)	5800	\$18.00	\$104,400.00	
	ı	Shrubs Sub Total:	\$104,400.00	
Sod (S.F.)				
14'	7420	\$0.50	\$3,710.00	
15'	4200	\$0.50	\$2,100.00	
Sod Sub Total: \$5,810.				
Irrigation (L.F	.)			
14'	530	\$21.00	\$11,130.00	
15'	280	\$22.50	\$6,300.00	
Irrigation	Com	ponents Sub Total:	\$17,430.00	
Hardscape				
Pavers (S.F.)				
4'	1960	\$20.00	\$39,200.00	
5'	1700	\$20.00	\$34,000.00	
14'	210	\$20.00	\$4,200.00	
Hardscape Sub Total: \$77,400.00				
		Sub Total:	\$263,040.00	
Construction Mobilization and Administration (15%): \$39,456.				
Design and Construction Administration (20%): \$52,608.00				
Grand Total: \$355,104.00				

	M	CNAB RD &		
	PIN	IE ISLAND RE		
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plan	t Mate	erial		
Large Trees	4	\$1,000.00	\$4,000.00	
Medium Trees	4	\$800.00	\$3,200.00	
Small Trees	10	\$600.00	\$6,000.00	
Large Palms	6	\$5,000.00	\$30,000.00	
Medium Palms	8	\$2,000.00	\$16,000.00	
Small Palms	15	\$800.00	\$12,000.00	
Canopy	Plant	Material Sub Total:	\$71,200.00	
Understory I	Plant I	Material		
Shrubs (S.F.)	6400	\$18.00	\$115,200.00	
		Shrubs Sub Total:	\$115,200.00	
Sod (S.F.)				
10'	1900	\$0.50	\$950.00	
12'	5400	\$0.50	\$2,700.00	
15'	5700	\$0.50	\$2,850.00	
20'	8200	\$0.50	\$4,100.00	
		Sod Sub Total:	\$10,600.00	
Irrigation (L.I				
10'	190	\$15.00	\$2,850.00	
12'	450	\$18.00	\$8,100.00	
15'	380	\$22.50	\$8,550.00	
20'	410	\$30.00	\$12,300.00	
Irrigation	Com	ponents Sub Total:	\$31,800.00	
Hardscape				
Pavers (S.F.)				
		Sub Total:	\$228,800.00	
Construction Mobilization and Administration (15%): \$34,320.00				
Design and Construction \$45,760.00				
		Grand Total:	\$308,880.00	

MCNAB RD & UNIVERSITY DR			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plan	t Mate	rial	
Large Trees	4	\$1,000.00	\$4,000.00
Medium Trees	4	\$800.00	\$3,200.00
Small Trees	10	\$600.00	\$6,000.00
Large Palms	5	\$5,000.00	\$25,000.00
Medium Palms	10	\$2,000.00	\$20,000.00
Small Palms	16	\$800.00	\$12,800.00
Сапору	Plant I	Material Sub Total:	\$71,000.00
Understory I	Plant N	1aterial	
Shrubs (S.F.)	4200	\$18.00	\$75,600.00
		Shrubs Sub Total:	\$75,600.00
Sod (S.F.)			
6'	690	\$0.50	\$345.00
16'	9760	\$0.50	\$4,880.00
18'	3420	\$0.50	\$1,710.00
	<u> </u>	Sod Sub Total:	\$6,935.00
Irrigation (L.F	 :)		
6'	115	\$9.00	\$1,035.00
16'	610	\$24.00	\$14,640.00
18'	190	\$27.00	\$5,130.00
Irrigation	Com	ponents Sub Total:	\$20,805.00
Hardscape			
Pavers (S.F.)			
8'	2880	\$20.00	\$57,600.00
12'	1680	\$20.00	\$33,600.00
	на	rdscape Sub Total: Sub Total:	\$ 91,200.00 \$265,540.00
Construction Mobilization and Administration (15%):			\$39,831.00
Design and Construction Administration (20%):			\$53,108.00
		Grand Total:	\$358,479.00

COMMERCIAL BLVD & 64TH AVE				
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plan	t Mate	erial		
Large Trees	8	\$1,000.00	\$8,000.00	
Medium Trees	6	\$800.00	\$4,800.00	
Small Trees	8	\$600.00	\$4,800.00	
Large Palms	6	\$5,000.00	\$30,000.00	
Medium Palms	12	\$2,000.00	\$24,000.00	
Small Palms	20	\$800.00	\$16,000.00	
Canopy	Plant	Material Sub Total:	\$87,600.00	
Understory I	Plant I	M aterial		
Shrubs (S.F.)	2000	\$18.00	\$36,000.00	
		Shrubs Sub Total:	\$36,000.00	
Sod (S.F.)				
10'	5000	\$0.50	\$2,500.00	
12'	3120	\$0.50	\$1,560.00	
	Sod Sub Total:	\$4,060.00		
Irrigation (L.I	- .)			
10'	500	\$15.00	\$7,500.00	
12'	260	\$18.00	\$4,680.00	
Irrigatio	n Com	ponents Sub Total:	\$12,180.00	
Hardscape				
Pavers (S.F.)	·			
2'	560	\$20.00	\$11,200.00	
4'	1040	\$20.00	\$20,800.00	
8'	1920	\$20.00 ardscape Sub Total:	\$38,400.00	
	\$70,400.00			
	Sub Total: \$210,240.00 Construction Mobilization and			
Co	\$31,536.00			
Design and Construction Administration (20%): \$42,048.0				
Grand Total: \$283,824.00				

Table 1.20: Conceptual Cost Estimate - Key Intersections





CONCEPTUAL COST ESTIMATE - KEY INTERSECTIONS CONT.



C		MERCIAL BLV CK ISLAND R			
PROPOSED ITEM	QTY.	AVERACE COST	SUB TOTAL COST		
Canopy Plan	t Mate	rial			
Large Trees	8	\$1,000.00	\$8,000.00		
Medium Trees	6	\$800.00	\$4,800.00		
Small Trees	10	\$600.00	\$6,000.00		
Large Palms	6	\$5,000.00	\$30,000.00		
Medium Palms	10	\$2,000.00	\$20,000.00		
Small Palms	15	\$800.00	\$12,000.00		
Сапору	Plant	Material Sub Total:	\$80,800.00		
Understory I	Plant M	1aterial			
Shrubs (S.F.)	8300	\$18.00	\$149,400.00		
		Shrubs Sub Total:	\$149,400.00		
Sod (S.F.)					
12'	3600	\$0.50	\$1,800.00		
18'	3600	\$0.50	\$1,800.00		
25'	20500	\$0.50	\$10,250.00		
		Sod Sub Total:	\$13,850.00		
Irrigation (L.F	.)				
12'	300	\$18.00	\$5,400.00		
18'	200	\$27.00	\$5,400.00		
25'	820	\$37.50	\$30,750.00		
	n Com	ponents Sub Total:	\$41,550.00		
•	Hardscape				
Pavers (S.F.)	2880	\$20.00	\$57,600.00		
14		urdscape Sub Total:	\$57,600.00		
	Sub Total: \$343,200.00				
Construction Mobilization and Administration (15%):			\$51,480.00		
Design and Construction Administration (20%):			\$68,640.00		
	Grand Total:				

CC	MMC	ERCIAL BLVI 441	D &	
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plan	t Mate	rial		
Large Trees	4	\$1,000.00	\$4,000.00	
Medium Trees	4	\$800.00	\$3,200.00	
Small Trees	8	\$600.00	\$4,800.00	
Large Palms	6	\$5,000.00	\$30,000.00	
Medium Palms	8	\$2,000.00	\$16,000.00	
Small Palms	32	\$800.00	\$25,600.00	
Сапору	Plant I	Material Sub Total:	\$83,600.00	
Understory I	Plant M	1aterial		
Shrubs (S.F.)	3700	\$18.00	\$66,600.00	
	l.	Shrubs Sub Total:	\$66,600.00	
Sod (S.F.)				
4'	1152	\$0.50	\$576.00	
12'	1200	\$0.50	\$600.00	
20'	5040	\$0.50	\$2,520.00	
	\$3,696.00			
Irrigation (L.F	.)			
4'	288	\$6.00	\$1,728.00	
12'	100	\$18.00	\$1,800.00	
20'	252	\$30.00	\$7,560.00	
	Com	ponents Sub Total:	\$11,088.00	
Hardscape				
Pavers (S.F.)	4440		***	
4'	4440	\$20.00	\$88,800.00	
	Ha	rdscape Sub Total:	\$88,800.00	
<u> </u>	netro	Sub Total:	\$253,784.00	
Co		Administration (15%):	\$38,067.60	
Design and Construction \$50,756				
		Grand Total:	\$342,608.40	

С		MERCIAL BLV W 31ST AVE	D &
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plan	t Mat e	rial	
Large Trees	8	\$1,000.00	\$8,000.00
Medium Trees	6	\$800.00	\$4,800.00
Small Trees	10	\$600.00	\$6,000.00
Large Palms	9	\$5,000.00	\$45,000.00
Medium Palms	6	\$2,000.00	\$12,000.00
Small Palms	18	\$800.00	\$14,400.00
Сапору	Plant	Material Sub Total:	\$90,200.00
Understory I	Plant M	laterial	
Shrubs (S.F.)	16700	\$18.00	\$300,600.00
<u> </u>		Shrubs Sub Total:	\$300,600.00
Sod (S.F.)			
20'	16200	\$0.50	\$8,100.00
24'	6120	\$0.50	\$3,060.00
30'	11100	\$0.50	\$5,550.00
		Sod Sub Total:	\$16,710.00
Irrigation (L.F	 :)		<u> </u>
20'	810	\$30.00	\$24,300.00
24'	255	\$36.00	\$9,180.00
30'	370	\$45.00	\$16,650.00
		ponents Sub Total:	\$50,130.00
Hardscape			•
Pavers (S.F.)			
8'	400	\$20.00	\$8,000.00
12'	10260	\$20.00	\$205,200.00
14'	11200	\$20.00 ardscape Sub Total:	\$224,000.00
	\$437,200.00		
		Sub Total:	\$894,840.00
C		tion Mobilization and Administration (15%):	\$134,226.00
		gn and Construction Administration (20%):	\$178,968.00
		Grand Total:	\$1,208,034.00

COMMERCIAL BLVD & PROSPECT RD				
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant	t Mate	rial		
Large Trees	I	\$1,000.00	\$1,000.00	
Medium Trees	2	\$800.00	\$1,600.00	
Small Trees	2	\$600.00	\$1,200.00	
Large Palms	4	\$5,000.00	\$20,000.00	
Medium Palms	2	\$2,000.00	\$4,000.00	
Small Palms	6	\$800.00	\$4,800.00	
Canopy	Plant l	Material Sub Total:	\$32,600.00	
Understory F	Plant M	laterial		
Shrubs (S.F.)	1600	\$18.00	\$28,800.00	
		Shrubs Sub Total:	\$28,800.00	
Sod (S.F.)				
24'	6240	\$0.50	\$3,120.00	
Sod Sub Total: \$3,120.00				
Irrigation (L.F.)				
24'	260	\$36.00	\$9,360.00	
Irrigatio	n Com	ponents Sub Total:	\$9,360.00	
Hardscape				
Pavers (S.F.)		r		
15'	2250	\$20.00	\$45,000.00	
Hardscape Sub Total: \$45,000.00				
Sub Total: \$118,880.00				
Construction Mobilization and Administration (15%): \$17,832.0				
Design and Construction \$23,776.00 Administration (20%):				
Grand Total: \$160,488.00				

^{*} Note there has been recent landscape improvements on the intersections of Commercial Blvd./64th Ave., Commercial Blvd/Rock Island Rd., Commercial Blvd/441, Commercial Blvd/NW 31st Ave., and Commercial Blvd/Prospect Rd which impacts the current conditions. Due to these recent landscape improvements these intersections are of low priority for future landscape improvements.





Table 1.20: Conceptual Cost Estimate - Key Intersections



CONCEPTUAL COST ESTIMATE - GATEWAYS

COMMERCIAL BLVD & SAWGRASS EXPWY				
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST	
Canopy Plant	Mater	ial		
Large Trees	3	\$1,000.00	\$3,000.00	
Medium Trees	2	\$800.00	\$1,600.00	
Small Trees	4	\$600.00	\$2,400.00	
Large Palms	8	\$5,000.00	\$40,000.00	
Medium Palms	4	\$2,000.00	\$8,000.00	
Small Palms	10	\$800.00	\$8,000.00	
Сапору	Plant N	1aterial Sub Total:	\$63,000.00	
Understory P	lant M	aterial		
Shrubs (S.F.)	15750	\$18.00	\$283,500.00	
		Shrubs Sub Total:	\$283,500.00	
Sod (S.F.)				
12'	1440	\$0.50	\$720.00	
20'	30040	\$0.50	\$15,020.00	
		Sod Sub Total:	\$15,740.00	
Irrigation (L.F.	.)			
12'	120	\$18.00	\$2,160.00	
20'	1502	\$30.00	\$45,060.00	
Irrigation Components Sub Total: \$47,220.				
Hardscape				
Pavers (S.F.)				
Sub Total: \$409,460.00				
Construction Mobilization and Administration (15%): \$61,419.00				
Design and Construction Administration (20%): \$81,892.00				
		Grand Total:	\$552,771.00	

COMMERCIAL BLVD & TURNPIKE			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	t Mate	rial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	I	\$800.00	\$800.00
Small Trees	2	\$600.00	\$1,200.00
Large Palms	4	\$5,000.00	\$20,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	6	\$800.00	\$4,800.00
Сапору	Plant N	Material Sub Total:	\$30,800.00
Understory F	Plant M	laterial	
Shrubs (S.F.)	2000	\$18.00	\$36,000.00
		Shrubs Sub Total:	\$36,000.00
Sod (S.F.)			
25'	8000	\$0.50	\$4,000.00
		Sod Sub Total:	\$4,000.00
Irrigation (L.F	:)		•
25'	320	\$37.50	\$12,000.00
Irrigation	Com	onents Sub Total:	\$12,000.00
Hardscape			
Pavers (S.F.)			
12'	4800	\$20.00	\$96,000.00
	Hardscape Sub Total: \$96,000.00		
_		Sub Total:	\$178,800.00
Co	Α	ion Mobilization and dministration (15%):	\$26,820.00
		gn and Construction dministration (20%):	\$35,760.00
		Grand Total:	\$241,380.00

		NAB RD &	_
		BOUNDARY	
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	M ater	ial	
Large Trees	I	\$1,000.00	\$1,000.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	3	\$600.00	\$1,800.00
Large Palms	3	\$5,000.00	\$15,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	6	\$800.00	\$4,800.00
Canopy	Plant M	laterial Sub Total:	\$28,200.00
Understory P	lant M	aterial	
Shrubs (S.F.)	1400	\$18.00	\$25,200.00
		Shrubs Sub Total:	\$25,200.00
Sod (S.F.)			
14'	5460	\$0.50	\$2,730.00
		Sod Sub Total:	\$2,730.00
Irrigation (L.F.	(.)		
14'	390	\$21.00	\$8,190.00
Irrigation	Comp	onents Sub Total:	\$8,190.00
Hardscape			
Pavers (S.F.)			
		Sub Total:	\$64,320.00
Co		on Mobilization and dministration (15%):	\$9,648.00
		n and Construction dministration (20%):	\$12,864.00
		Grand Total:	\$86,832.00

NOB HILL & SOUTHGATE BLVD			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	M ater	ial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	4	\$600.00	\$2,400.00
Large Palms	5	\$5,000.00	\$25,000.00
Medium Palms	3	\$2,000.00	\$6,000.00
Small Palms	9	\$800.00	\$7,200.00
Canopy	Plant N	1aterial Sub Total:	\$42,200.00
Understory P	lant M	aterial	
Shrubs (S.F.)	3700	\$18.00	\$66,600.00
		Shrubs Sub Total:	\$66,600.00
Sod (S.F.)			
15'	7350	\$0.50	\$3,675.00
		Sod Sub Total:	\$3,675.00
Irrigation (L.F.	i.)		
15'	490	\$22.50	\$11,025.00
Irrigation	Comp	onents Sub Total:	\$11,025.00
Hardscape			
Pavers (S.F.)		Г	
8'	800	\$20.00	\$16,000.00
Hardscape Sub Total:		\$16,000.00	
Sub Total:		\$139,500.00	
Construction Mobilization and Administration (15%):		\$20,925.00	
		gn and Construction dministration (20%):	\$27,900.00
		Grand Total:	\$188,325.00

Table 1.21: Conceptual Cost Estimate - Gateways



CONCEPTUAL COST ESTIMATE - GATEWAYS CONT.



NOB HILL & COMMERCIAL BLVD			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	Mate	rial	
Large Trees	1	\$1,000.00	\$1,000.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	4	\$600.00	\$2,400.00
Large Palms	5	\$5,000.00	\$25,000.00
Medium Palms	3	\$2,000.00	\$6,000.00
Small Palms	12	\$800.00	\$9,600.00
Сапору	Plant l	Material Sub Total:	\$45,600.00
Understory F	Plant M	laterial	
Shrubs (S.F.)	5400	\$18.00	\$97,200.00
	•	Shrubs Sub Total:	\$97,200.00
Sod (S.F.)			
25'	18000	\$0.50	\$9,000.00
	•	Sod Sub Total:	\$9,000.00
Irrigation (L.F	.)		
25'	720	\$25.00	\$18,000.00
Irrigatio	1 Com	ponents Sub Total:	\$18,000.00
Hardscape			
Pavers (S.F.)	l		
15'	1950	\$20.00	\$39,000.00
	Hardscape Sub Total: \$39,000.00		
Construction Mobilization and		\$208,800.00	
Design and Construction Administration (20%): \$41,760.00		\$41,760.00	
		Grand Total:	\$281,880.00

PINE ISLAND RD & SOUTHGATE BLVD			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	
Canopy Plant	: M ater	ial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	4	\$600.00	\$2,400.00
Large Palms	4	\$5,000.00	\$20,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	9	\$800.00	\$7,200.00
Canopy	Plant I	Material Sub Total:	\$35,200.00
Understory P	lant M	aterial	'
Shrubs (S.F.)	2400	\$18.00	\$43,200.00
		Shrubs Sub Total:	\$43,200.00
Sod (S.F.)			
12'	4800	\$0.50	\$2,400.00
		Sod Sub Total:	\$2,400.00
Irrigation (L.F.	.)		
12'	400	\$18.00	\$7,200.00
Irrigatio	n Com	ponents Sub Total:	\$7,200.00
Hardscape			
Pavers (S.F.)		Γ	
6'	270	\$20.00	\$5,400.00
Hardscape Sub Total: \$5,400.00			
		Sub Total:	\$93,400.00
C		tion Mobilization and Administration (15%):	\$14,010.00
		gn and Construction Administration (20%):	\$18,680.00
		Grand Total:	\$126,090.00

		ISLAND RD	
PROPOSED ITEM		AVERAGE COST PER UNIT	
Canopy Plant	Mater	ial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	0	\$800.00	\$0.00
Small Trees	2	\$600.00	\$1,200.00
Large Palms	0	\$5,000.00	\$0.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	6	\$800.00	\$4,800.00
Сапору	Plant N	1aterial Sub Total:	\$10,000.00
Understory F	Plant M	aterial	
Shrubs (S.F.)	300	\$18.00	\$5,400.00
		Shrubs Sub Total:	\$5,400.00
Sod (S.F.)			<u> </u>
6'	1056	\$0.50	\$528.00
		Sod Sub Total:	\$528.00
Irrigation (L.F			
6'	176	\$9.00	\$1,584.00
Irrigation	Comp	onents Sub Total:	\$1,584.00
Hardscape			
Pavers (S.F.)	1	·	r
4'	1740	\$20.00	\$34,800.00
	Hai	rdscape Sub Total:	\$34,800.00
		Sub Total:	\$52,312.00
Co		ion Mobilization and dministration (15%):	\$7,846.80
		gn and Construction dministration (20%):	\$10,462.40
		Grand Total:	\$70,621.20

ROCK ISLAND RD & BAILEY RD			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	Mater	ial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	I	\$800.00	\$800.00
Small Trees	2	\$600.00	\$1,200.00
Large Palms	2	\$5,000.00	\$10,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	6	\$800.00	\$4,800.00
Canopy	Plant N	1aterial Sub Total:	\$20,800.00
Understory P	lant M	aterial	
Shrubs (S.F.)	500	\$18.00	\$9,000.00
		Shrubs Sub Total:	\$9,000.00
Sod (S.F.)			
10'	1050	\$0.50	\$525.00
		Sod Sub Total:	\$525.00
Irrigation (L.F.)		
10'	105	\$15.00	\$1,575.00
	Comp	onents Sub Total:	\$1,575.00
Hardscape			
Pavers (S.F.)			
		\$31,900.00	
Construction Mobilization and Administration (15%): \$4,785.0		\$4,785.00	
		gn and Construction dministration (20%):	\$6,380.00
		Grand Total:	\$43,065.00

Table 1.21: Conceptual Cost Estimate - Gateways







CONCEPTUAL COST ESTIMATE - GATEWAYS CONT.

ROCK ISLAND RD & 44TH AVE			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	Mater	ial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	I	\$800.00	\$800.00
Small Trees	2	\$600.00	\$1,200.00
Large Palms	2	\$5,000.00	\$10,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	6	\$800.00	\$4,800.00
Canopy	Plant I	Material Sub Total:	\$20,800.00
Understory P	lant M	aterial	
Shrubs (S.F.)	900	\$18.00	\$16,200.00
		Shrubs Sub Total:	\$16,200.00
Sod (S.F.)			
10'	1800	\$0.50	\$900.00
		Sod Sub Total:	\$900.00
Irrigation (L.F.	.)		
10'	180	\$15.00	\$2,700.00
Irrigation	Com	ponents Sub Total:	\$2,700.00
Hardscape			
Pavers (S.F.)			
		Sub Total:	\$40,600.00
Co		tion Mobilization and Administration (15%):	\$6,090.00
		gn and Construction Administration (20%):	\$8,120.00
		Grand Total:	\$54,810.00

SOUTHGATE BLVD & EAST BOUNDARY			
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	Mate	rial	
Large Trees	3	\$1,000.00	\$3,000.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	4	\$600.00	\$2,400.00
Large Palms	6	\$5,000.00	\$30,000.00
Medium Palms	4	\$2,000.00	\$8,000.00
Small Palms	10	\$800.00	\$8,000.00
Canopy	Plant I	Material Sub Total:	\$53,000.00
Understory F	Plant M	laterial	
Shrubs (S.F.)	25000	\$18.00	\$450,000.00
Shrubs Sub Total:			
Sod (S.F.)			
40'	50000	\$0.50	\$25,000.00
		Sod Sub Total:	\$25,000.00
Irrigation (L.F	.)		
40'	1250	\$60.00	\$75,000.00
Irrigatio	1 Com	ponents Sub Total:	\$75,000.00
Hardscape			
Pavers (S.F.)			
25'	1250	\$20.00	\$25,000.00
	Hardscape Sub Total: \$25,000.00		
		Sub Total:	\$628,000.00
Construction Mobilization and Administration (15%): \$94,200.00		\$94,200.00	
		gn and Construction Administration (20%):	\$125,600.00
		Grand Total:	\$847,800.00

		ERSITY DR 8	
S	OUT	HGATE BLVI	D
PROPOSED ITEM	QTY.	AVERAGE COST PER UNIT	SUB TOTAL COST
Canopy Plant	Mate	rial	
Large Trees	0	\$1,000.00	\$0.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	4	\$600.00	\$2,400.00
Large Palms	3	\$5,000.00	\$15,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	9	\$800.00	\$7,200.00
Canopy	Plant I	Material Sub Total:	\$30,200.00
Understory F	Plant M	laterial	
Shrubs (S.F.)	750	\$18.00	\$13,500.00
	I.	Shrubs Sub Total:	\$13,500.00
Sod (S.F.)			
10'	3000	\$0.50	\$1,500.00
	I.	Sod Sub Total:	\$1,500.00
Irrigation (L.F	:)		
10'	300	\$15.00	\$4,500.00
Irrigatio	n Com	ponents Sub Total:	\$4,500.00
Hardscape			
Pavers (S.F.)		,	
10'	900	\$20.00	\$18,000.00
	Ha	rdscape Sub Total:	\$18,000.00
		Sub Total:	\$67,700.00
Co		tion Mobilization and Administration (15%):	\$10,155.00
		gn and Construction Administration (20%):	\$13,540.00
		Grand Total:	\$91,395.00

UNIVERSITY DR & COMMERCIAL BLVD			
PROPOSED ITEM		AVERAGE COST PER UNIT	
Canopy Plant	Mater	rial	
Large Trees	3	\$1,000.00	\$3,000.00
Medium Trees	2	\$800.00	\$1,600.00
Small Trees	6	\$600.00	\$3,600.00
Large Palms	4	\$5,000.00	\$20,000.00
Medium Palms	2	\$2,000.00	\$4,000.00
Small Palms	16	\$800.00	\$12,800.00
Сапору	Plant I	Material Sub Total:	\$45,000.00
Understory P	lant M	aterial	Į.
Shrubs (S.F.)	5550	\$18.00	\$99,900.00
		Shrubs Sub Total:	\$99,900.00
Sod (S.F.)			l .
15'	11100	\$0.50	\$5,550.00
		Sod Sub Total:	\$5,550.00
Irrigation (L.F.)		I.
15'	740	\$22.50	\$16,650.00
Irrigatio	n Com	ponents Sub Total:	\$16,650.00
Hardscape			
Pavers (S.F.)			
8'	800	\$20.00	\$16,000.00
	Ha	rdscape Sub Total:	\$16,000.00
		Sub Total:	\$183,100.00
Co		tion Mobilization and Administration (15%):	\$27,465.00
		gn and Construction Administration (20%):	\$36,620.00
		Grand Total:	\$247,185.00

Table 1.21: Conceptual Cost Estimate - Gateways





CONCEPTUAL COST ESTIMATE SUMMARY

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311

CLASSIFICATION		PROJECT COST	
PRINCIPAL ARTERIALS	Commercial Blvd	\$6,238,530.90	
	University Dr	\$1,571,772.60	
	McNab Rd	\$1,186,164.00	
	Principal Arterials Sub Total:	\$8,996,467.50	
10	Rock Island Rd	\$1,120,284.00	
ALS	Pine Island Rd	\$1,387,334.93	
NO ERI,	Nob Hill Rd	\$1,691,007.30	
Σ	Hiatus Rd	\$1,185,840.00	
∢	Minor Arterials Sub Total:	\$5,384,466.23	
	Southgate Blvd	\$4,478,733.00	
	NW 81st St	\$1,115,059.50	
	NW 77th St	\$642,289.50	
COLLECTORS	Lagos De Campo Blvd	\$931,122.00	
СТС	NW 64th Ave	\$231,805.80	
Ë	NW 94th Ave	\$186,246.00	
Į.	NW 82nd St	\$336,042.00	
O	NW 57th St	\$2,455,515.00	
	Bailey Rd	\$445,581.00	
	Collectors Sub Total:	\$10,822,393.80	
	NW 108th Terr	\$920,551.50	
LOCAL STREETS	NW 75th St	\$791,991.00	
	Brookwood Blvd	\$1,050,339.15	
	NW 84th Terr	\$421,071.75	
AL	NW 78th St	\$435,545.10	
100 100	Woodlands Blvd	\$1,484,500.50	
	Local Streets Sub Total:	\$5,103,999.00	

CLASSIFICATION		PROJECT COST
KEY INTERSECTIONS	McNab Rd & Nob Hill Rd	\$355,104.00
	McNab Rd & Pine Island Rd	\$308,880.00
	McNab Rd & University Dr	\$358,479.00
I.	Commercial Blvd & NW 64th Ave	\$283,824.00
RSI	Commercial Blvd & Rock Island Rd	\$463,320.00
Ë	Commercial Blvd & 441	\$342,608.40
€	Commercial Blvd & 31st Ave	\$1,208,034.00
KE	Commercial Blvd & Prospect Rd	\$160,488.00
	Key Intersections Sub Total:	\$3,480,737.40
	Commercial Blvd & Sawgrass Expwy	\$552,771.00
	Commercial Blvd & Turnpike	\$241,380.00
	McNab Rd & East Bndry	\$86,832.00
	Nob Hill Rd & Southgate Blvd	\$188,325.00
10	Nob Hill Rd & Commercial Blvd	\$281,880.00
AXS	Pine Island Rd & Southgate Blvd	\$126,090.00
X	Pine Island Rd & Commercial Blvd	\$70,621.20
GATEWAYS	Rock Island Rd & Bailey Rd	\$43,065.00
G	Rock Island Rd & 44th St	\$54,810.00
	Southgate Blvd & East Bndry	\$847,800.00
	University Dr & Southgate Blvd	\$91,395.00
	University Dr & Commercial Blvd	\$247,185.00
	Gateways Sub Total:	\$2,832,154.20
	Grand Total:	\$36,620,218.13

Table 1.22: Conceptual Cost Estimate Summary







CONCEPTUAL INFLATION COST ESTIMATE SUMMARY

	CLASSIFICATION	PROJECT COST	INFLATION 12.25%	SUBTOTAL
PRINCIPAL ARTERIALS	Commercial Blvd	\$6,238,530.90	\$764,220.04	\$7,002,750.94
	University Dr	\$1,571,772.60	\$192,542.14	\$1,764,314.74
	McNab Rd	\$1,186,164.00	\$145,305.09	\$1,331,469.09
PR	Principal Arterials Sub Total:			\$10,098,534.77
	Rock Island Rd	\$1,120,284.00	\$137,234.79	\$1,257,518.79
ALS	Pine Island Rd	\$1,387,334.93	\$169,948.53	\$1,557,283.45
N N N	Nob Hill Rd	\$1,691,007.30	\$207,148.39	\$1,898,155.69
MINOR ARTERIALS	Hiatus Rd	\$1,185,840.00	\$145,265.40	\$1,331,105.40
⋖		Minor Ar	terials Sub Total:	\$6,044,063.34
	Southgate Blvd	\$4,478,733.00	\$548,644.79	\$5,027,377.79
	NW 81st St	\$1,115,059.50	\$136,594.79	\$1,251,654.29
	NW 77th St	\$642,289.50	\$78,680.46	\$720,969.96
ORS	Lagos De Campo Blvd	\$931,122.00	\$114,062.45	\$1,045,184.45
H	NW 64th Ave	\$231,805.80	\$28,396.21	\$260,202.01
COLLECTORS	NW 94th Ave	\$186,246.00	\$22,815.14	\$209,061.14
, j	NW 82nd St	\$336,042.00	\$41,165.15	\$377,207.15
U	NW 57th St	\$2,455,515.00	\$300,800.59	\$2,756,315.59
	Bailey Rd	\$445,581.00	\$54,583.67	\$500,164.67
		Colle	ectors Sub Total:	\$12,148,137.04
	NW 108th Terr	\$920,551.50	\$112,767.56	\$1,033,319.06
TS	NW 75th St	\$791,991.00	\$97,018.90	\$889,009.90
LOCAL STREETS	Brookwood Blvd	\$1,050,339.15	\$128,666.55	\$1,179,005.70
	NW 84th Terr	\$421,071.75	\$51,581.29	\$472,653.04
	NW 78th St	\$435,545.10	\$53,354.27	\$488,899.37
	Woodlands Blvd	\$1,484,500.50	\$181,851.31	\$1,666,351.81
		Local S	treets Sub Total:	\$5,729,238.88

Table 1.23: Cor	centual Inflation	Cost Estima	te Summary
Table 1.23. Col	iceptuai iiiiiatioii	i Cost Estilla	te Summa y

	CLASSIFICATION	PROJECT COST	INFLATION 12.25%	SUB TOTAL
SZ	McNab Rd & Nob Hill Rd	\$355,104.00	\$43,500.24	\$398,604.24
	McNab Rd & Pine Island Rd	\$308,880.00	\$37,837.80	\$346,717.80
<u> </u>	McNab Rd & University Dr	\$358,479.00	\$43,913.68	\$402,392.68
CT	Commercial Blvd & NW 64th Ave	\$283,824.00	\$34,768.44	\$318,592.44
KEY INTERSECTIONS	Commercial Blvd & Rock Island Rd	\$463,320.00	\$56,756.70	\$520,076.70
E	Commercial Blvd & 441	\$342,608.40	\$41,969.53	\$384,577.93
=	Commercial Blvd & 31st Ave	\$1,208,034.00	\$147,984.17	\$1,356,018.17
KE	Commercial Blvd & Prospect Rd	\$160,488.00	\$19,659.78	\$180,147.78
		Key Intersections Sub Total:		\$3,907,127.73
	Commercial Blvd & Sawgrass Expwy	\$552,771.00	\$67,714.45	\$620,485.45
	Commercial Blvd & Turnpike	\$241,380.00	\$29,569.05	\$270,949.05
	McNab Rd & East Bndry	\$86,832.00	\$10,636.92	\$97,468.92
	Nob Hill Rd & Southgate Blvd	\$188,325.00	\$23,069.81	\$211,394.81
10	Nob Hill Rd & Commercial Blvd	\$281,880.00	\$34,530.30	\$316,410.30
AYS	Pine Island Rd & Southgate Blvd	\$126,090.00	\$15,446.03	\$141,536.03
ATEWAYS	Pine Island Rd & Commercial Blvd	\$70,621.20	\$8,651.10	\$79,272.30
AT	Rock Island Rd & Bailey Rd	\$43,065.00	\$5,275.46	\$48,340.46
Ö	Rock Island Rd & 44th St	\$54,810.00	\$6,714.23	\$61,524.23
	Southgate Blvd & East Bndry	\$847,800.00	\$103,855.50	\$951,655.50
	University Dr & Southgate Blvd	\$91,395.00	\$11,195.89	\$102,590.89
	University Dr & Commercial Blvd	\$247,185.00	\$30,280.16	\$277,465.16
	Gateways Sub Total:		\$3,179,093.09	
			Grand Total:	\$41,106,194.85

^{*} Project cost assumes a 12.5% inflation cost anticipating an average yearly inflation of 1.25% over a 10 year span. This inflation cost estimate summary does not consider prioritization of project line items. Once project line items are given prioritization the inflation cost estimate summary will be recalculated and updated.





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OVERALL RECOMMENDATIONS

- Adopt a balanced revenue generation strategy that seeks 25% of the funding by future development activity, and 75% by a combination of grants; City issued bonds and redevelopment activity.
- Establish pre-approved landscape concepts for work within the FDOT and County controlled streetscape corridors. These repetitive type submittals will simplify the permitting processes.
- Develop R.O.W. maps for each corridor that are to be kept as AUTO CAD master files for easy reference. Identify clear sight zones, roadside recovery areas, and minimum setbacks in the base file before preparing any design plans for construction.
- Encourage private partnership in completing the streetscape improvements by providing impact fee credits for those properties completing portions of the streetscape in conjunction with their development.
- Seek use of "free nursery" space for tree cultivation along the corridors where both private and public open space or recreational uses are adjacent.

- Consider tree space allocations when granting variances to minimum parking requirements.
- Encourage enhanced property frontage requirements in relation to site plan approvals.
- Consider signage bonus in conjunction with improved frontage treatment or partial streetscape completion.
- Consider appointment/selection of City Urban Forester or Landscape Architect to
 oversee implementation of Master Plan, supervised by Commercial Development
 Manager. This employee or consultant would also have responsibilities related to
 the review of submitted streetscape plans and final site plans which include frontage
 improvements.







IDENTIFICATION OF FUTURE OR REPLACEMENT VEGETATION PROPAGATION AND STORAGE

Figure 6.5 below details areas potentially available for "free nursery space" within the City. The map depicts City owned parks with available space for tree propagation. These parks include Southgate Linear Park, Sunset Point Park, Sabal Palm Park, and the Wildlife Preserve on Prospect Road.

These four parks have been identified for multiple reasons. Each area is located next to a Primary or Minor Arterial, and has ample open green space available for a nursery. The locations of these parks allow for the ease of transportation when transplanting trees to any of the corridors proposed in the Master Plan. By spreading propagation to multiple areas, more of the City can be covered, ultimately saving on transportation expenditures.

The team recommends that the city prioritizes the use of Southgate Linear Park as the primary location for "free nursery space". A majority of the Southgate Linear Park is unplanted and the park experience can be amplified by the additional trees, even if they are only temporary. The space between the existing pathway and the powerlines is large enough to account for large species of trees, while the space underneath the lines can be utilized for shrubs and groundcovers. The length of available space at this park traverses the entirety of the Western half of the City of Tamarac and allows for easy access to all corridors.

If this option cannot be accomplished, the team would recommend the Sabal Palm park as a secondary option. Sabal Palm park sits in the middle of the Eastern half of the City, providing further access. The park is currently undeveloped and provides an opportunity to create a segmented nursery area while undergoing its design process. A third option would be the Wildlife Preserve. The wildlife preserve is a passive park with much open space that can be utilized for "free nursery space". The addition of new trees, if only temporary will enhance the theme of the wildlife preserve, while providing access to the eastern portion of the city.



Figure 6.1: Southgate Linear Trail



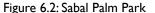




Figure 6.3: Wildlife Preserve



Figure 6.4: Sunset Point Park



IDENTIFICATION OF FUTURE OR REPLACEMENT VEGETATION PROPAGATION AND STORAGE



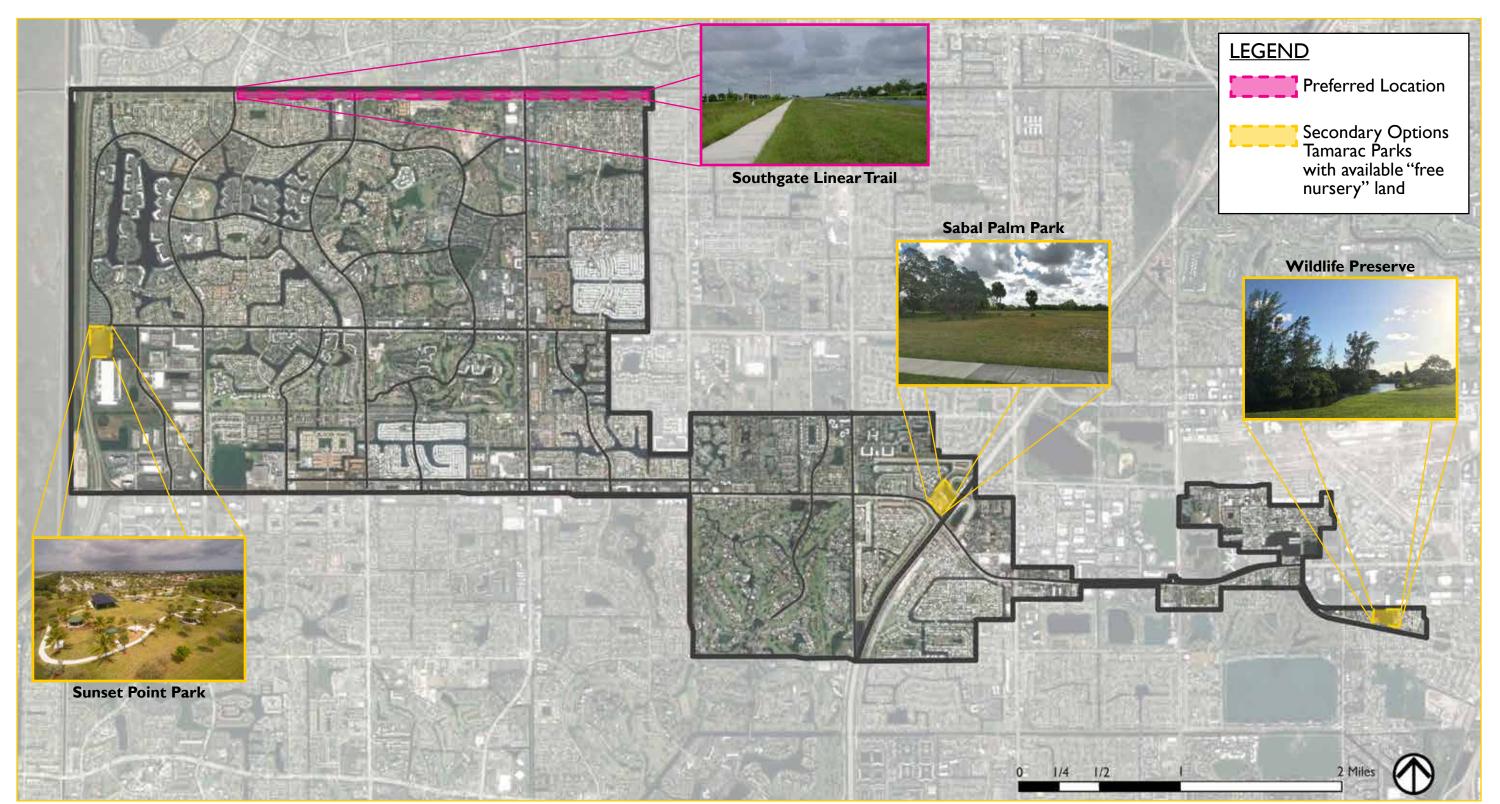


Figure 6.5: Identification of Future or Replacement Vegetation Propagation and Storage Map





