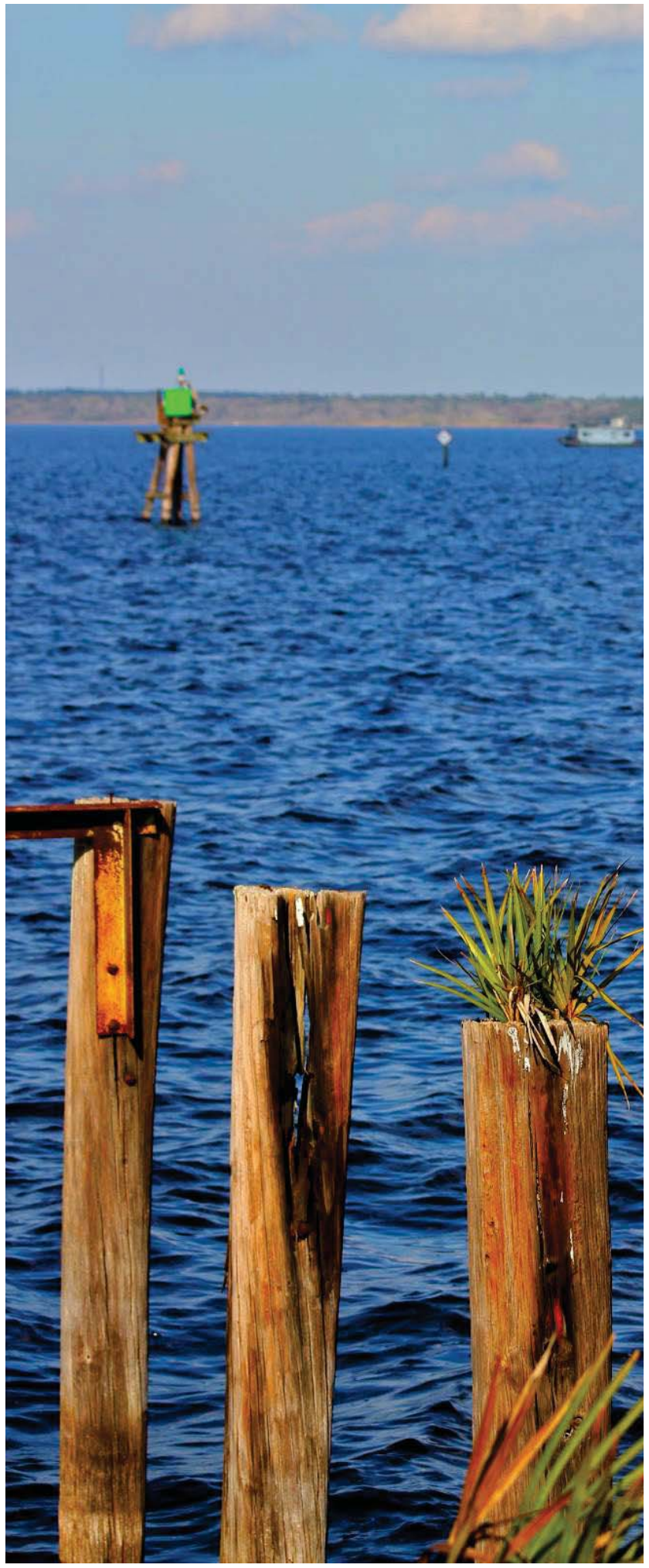

SANFORD RIVERWALK
PHASE 3

Visioning Package

March 24, 2016

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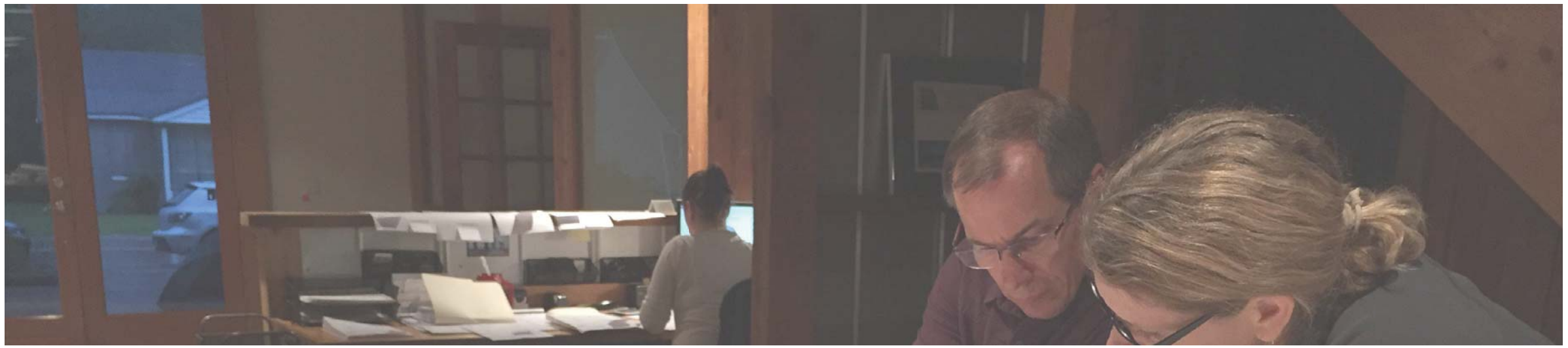
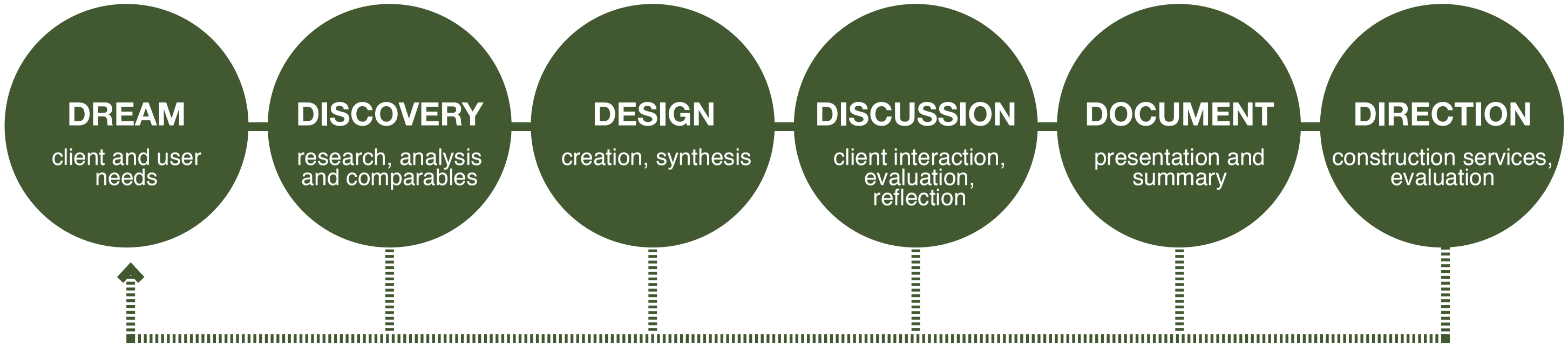
PURPOSE

The city of Sanford, Florida, defined by its showcase waterfront, extensive transportation network, distinctive cultural corridor, and historic downtown, is a significant cultural and business hub for the Central Florida region. Known as the “Historic Waterfront Gateway City,” the city draws life from Lake Monroe, creating a dynamic city center where people come and go on a daily basis. Sanford must be a source of environmental, cultural, social, and economic influence. The holistic approach of development described in this visioning book will allow Sanford to bridge a link in the Sanford Riverwalk, and help ensure its future as a great city; a place for exploration, education, enlightenment, and continued success. This vision book establishes the frame work for Phase 3 of the riverwalk extension, and explores the potential for growing as a scenic vehicular byway.



PROCESS

Our design process is designed to excite people within their community and empower them to take ownership and responsibility in the plan's vision and continued implementation. The process begins with a clear definition of the community's **DREAM** for a recognized and walkable city, and continues through **DISCOVERY** of important facts, issues, and opportunities. These steps lead to the **DESIGN** of desired outcomes and **DISCUSSION** of these designs for further evaluation. The part of this design process is to **DOCUMENT** an actionable, prioritized set of implementation plans that can help establish frameworks for future development. **DIRECTION** is then provided during the construction phase, via construction observation services



DREAM

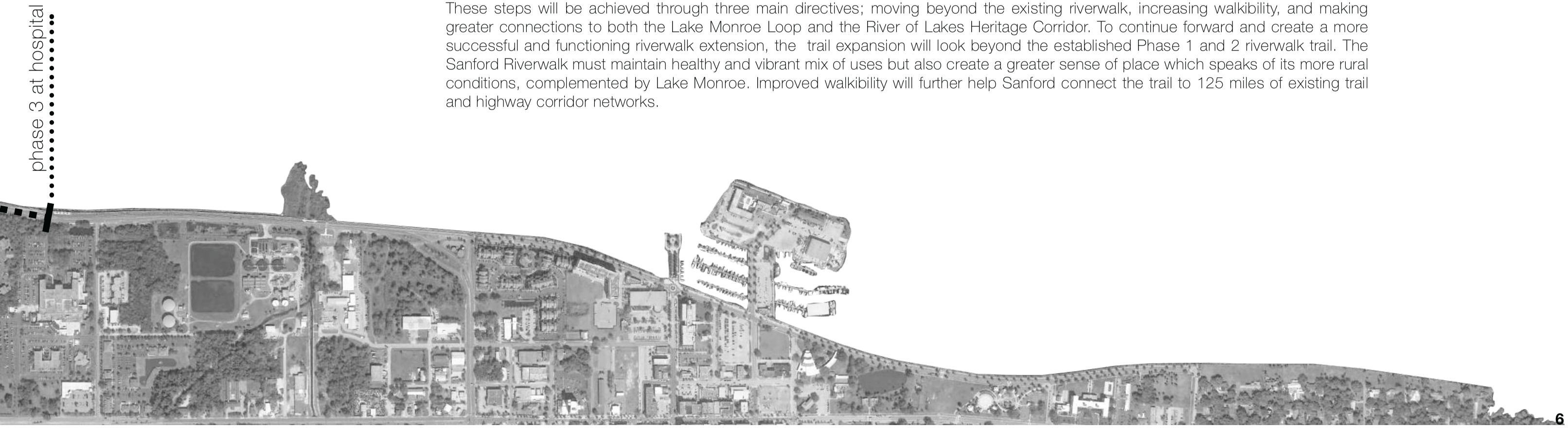
The scope for the Sanford Riverwalk Phase 3 portion of the trail was to provide a vision plan and schematic level planning and design services for the remaining 2.5 miles of the trail between the end of the existing Phase 2 portion at the Sanford Hospital and the Interstate-4 on-ramp. As a result of a need identified in the 2000 Downtown Sanford/Lake Monroe Waterfront Redevelopment Plan, the Phase 3 portion of the riverwalk trail must be developed using a set of guidelines that will allow it to better accommodate transit, pedestrians, bicyclists, parking, and landscape. Through this expansion of the trail to Interstate-4, Sanford will turn 2.5 miles of roadway corridor, hugging Lake Monroe, into an established Florida Scenic Highway and a successful trail that accommodates all users, creates a strong sense of place, fosters economic development, and improves quality of life. These combined efforts, including those in the Downtown Sanford/Lake Monroe Waterfront Redevelopment Plan and the MetroPlan Orlando Pedestrian Transportation Plan, will help create the framework necessary for a more connected Sanford.

In this process, the City of Sanford has already spent years taking a comprehensive look at its downtown and the benefits that come from a well-established riverwalk trail. With an increasingly national trend of interconnected, extensive, multi-use trails, Sanford is well positioned to tap into a greater influx of pedestrian traffic, boosting social, cultural, and economic growth. The city has built partnerships with residents, stakeholders, FDOT, and private sector developers, among others, to develop a vision for phase 3 of the riverwalk.

Through a well-developed vision, this book outlines very clear goals as a way to look to the future and ensure the success, viability, and walkability of the Sanford Riverwalk Phase 3:

- Create the rural complement of the urban downtown section through the use of trees, plantings, and hardscape elements
- Use hardscape and landscape elements to educate and entertain users about the water cycle
- Create moments along the trail for a variety of trail users: fishermen, runners, cyclists, families, etc
- Create shade for the majority of the trail through a mixture of tree species
- Create a perceptibly safe separation from the existing roadway (17-92)
- Introduce a scenic byway component

These steps will be achieved through three main directives; moving beyond the existing riverwalk, increasing walkibility, and making greater connections to both the Lake Monroe Loop and the River of Lakes Heritage Corridor. To continue forward and create a more successful and functioning riverwalk extension, the trail expansion will look beyond the established Phase 1 and 2 riverwalk trail. The Sanford Riverwalk must maintain healthy and vibrant mix of uses but also create a greater sense of place which speaks of its more rural conditions, complemented by Lake Monroe. Improved walkibility will further help Sanford connect the trail to 125 miles of existing trail and highway corridor networks.



DISCOVERY

Sanford Riverwalk

The existing Sanford Riverwalk provides pedestrians with wide trails that accommodate a variety of users throughout the year.

Benefits of Trails

Source: http://www.railstotrails.org/experience-trails/benefits-of-trails/

Trails and greenways are often seen narrowly when it comes to their benefits. People tend to focus on the recreational or environmental aspects of trails and greenways, failing to see the big picture—the total package of benefits that a trail or greenway can provide to communities, including public health, economic and transportation benefits, and even the effect on community pride and identity.

When seen as a whole, the evidence about the far-reaching benefits of trails and greenways is compelling, especially given the minimal public investment involved compared to other undertakings with the same community goals.

Health

Trails and greenways create healthy recreation and transportation opportunities by providing people of all ages with attractive, safe, accessible and low- or no-cost places to cycle, walk, hike, jog or skate. Trails help people of all ages incorporate exercise into their daily routines by connecting them with places they want or need to go. Communities that encourage physical activity by making use of the linear corridors can see a significant effect on public health and wellness.

Transportation/Livability

In addition to providing a safe place for people to enjoy recreational activities, greenways and trails often function as viable transportation corridors. Trails can be a crucial element to a seamless urban or regional multi-modal transportation system. Many areas of the country incorporate trails and similar facilities into their transit plans, relying upon trail facilities to “feed” people in to and out of transit stations in a safe and efficient manner. The ability to avoid congested streets and highways, and travel through natural areas on foot or by non-motorized means, is a large factor in a community’s “livability.”

Conservation/Environment

Linear greenspaces, including trails and greenways, have all the traditional conservation benefits of preserving green space, but also have additional benefits by way of their linear nature. As tools for ecology and conservation, greenways and trails help preserve important natural landscapes, provide needed links between fragmented habitats and offer tremendous opportunities for protecting plant and animal species. They also can be useful tools for wetland preservation and the improvement of air and water quality. In addition, they can allow humans to experience nature with minimal environmental impact.

Economy/Revitalization

The economic effects of trails and greenways are sometimes readily apparent (as in the case of trailside businesses) and are sometimes more subtle, like when a company decides to move to a particular community because of amenities like trails. There is no question, however, that countless communities across America have experienced an economic revitalization due in whole or in part to trails and greenways.

Historic Preservation/Community Identity

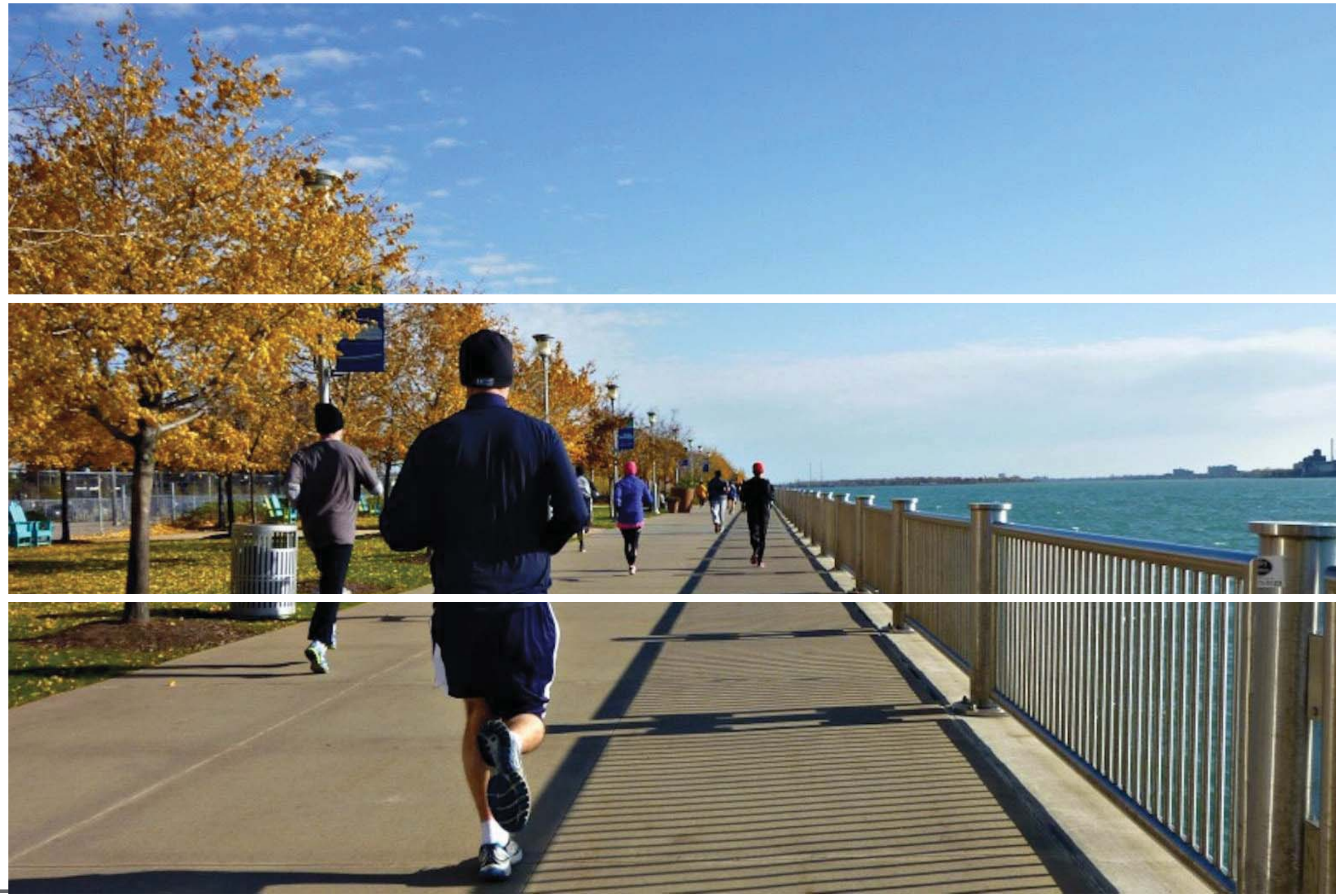
Many community leaders have been surprised at how trails have become sources of community identity and pride. These effects are magnified when communities use trails and greenways to highlight and provide access to historic and cultural resources. Many trails and greenways themselves preserve historically significant transportation corridors.

Grand Haven Waterfront Trail

Trail users can experience the waterfront up close. Integrated lighting poles create an interesting railing pattern, making for a more enjoyable experience.

Detroit Riverwalk

Wide trails with abundant tree canopy creates a more comfortable experience for the trail users.

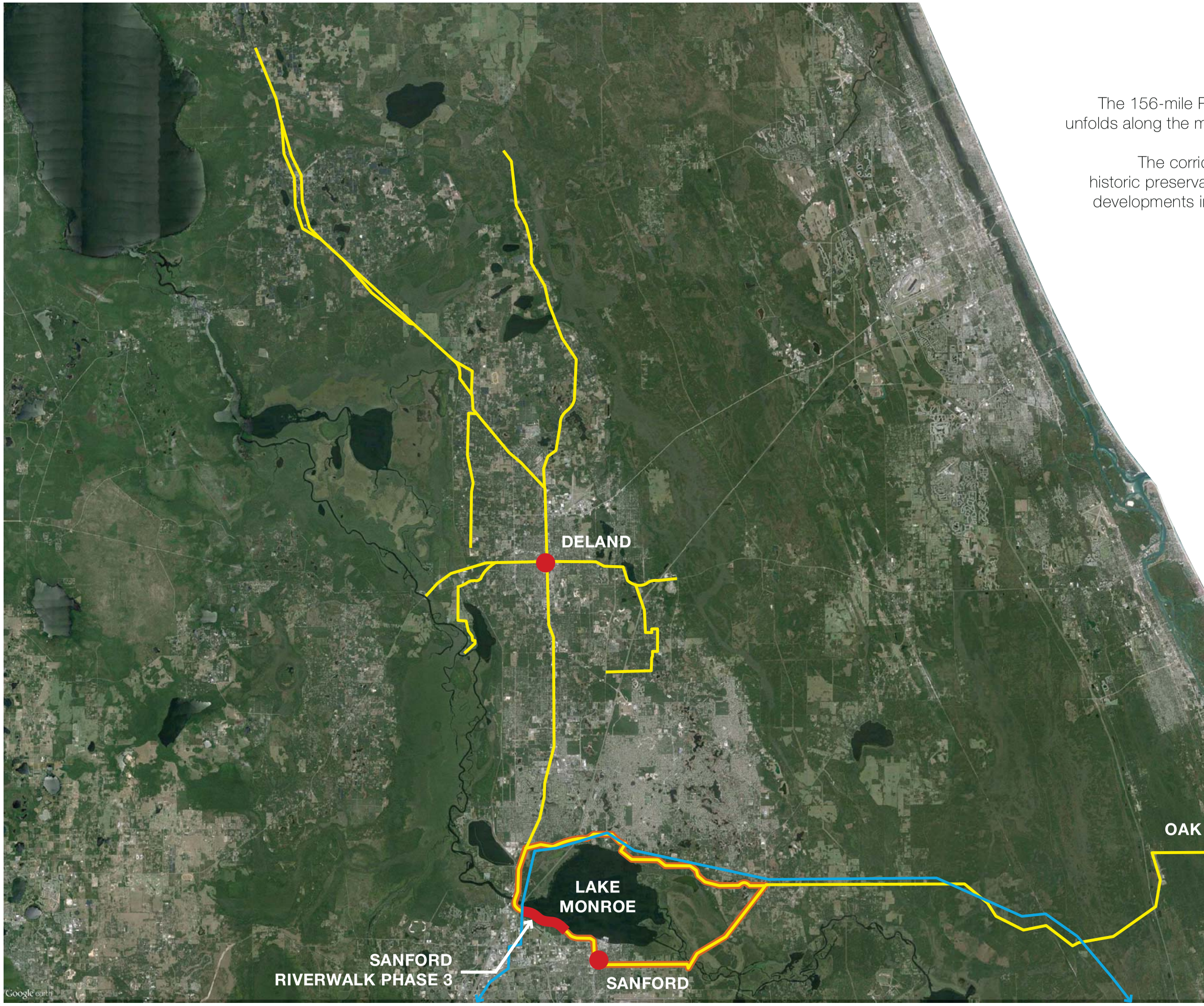


Gabriel Richard Riverwalk Park

Wide trails with interesting paving patterns help with pedestrian traffic flow by slowing down cyclists at key areas of the trail.

Tampa Riverwalk

A variety of seating options can help activate the trail and give users a chance to pause and enjoy the details in the trail experience.



The 156-mile River of Lakes Heritage Corridor is a Scenic Highway which unfolds along the magnificent and historical St. John's River in Central Florida.

The corridor embodies a unique blend of contemporary culture, rich historic preservation, and gorgeous natural Florida. It has drawn many new developments in recent decades, while preserving local interest by way of biking and kayaking along the corridor.

Sanford Riverwalk Phase 3 falls within the backbone of the River of Lakes Heritage Corridor, making it a viable portion that helps provide continuity at a pedestrian level for the local community of Sanford.

LEGEND

- River of Lakes Corridor
- Lake Monroe Loop
- Sanford Riverwalk Phase 3
- Coast to Coast Connector

River of Lakes Heritage Corridor

LEGEND

Lake Monroe Loop

The 25-mile Lake Monroe Loop is a joint multi-use trail project of Volusia and Seminole Counties.

The loop is part of the MetroPlan Orlando Pedestrian Transportation Plan, which helps establish important public trails that increases walkibility and community in Sanford.

Currently, the Phase 3 portion of the loop only allows for bicyclist use. Completing this portion of the Lake Monroe Loop will help further connect these segments of trails, providing a more intimate experience for the community of Sanford, Florida and the region.

Lake Monroe Loop

Interstate 4
phase 3 at wetland gateway

Sanford Riverwalk Experience

The assessment of the Phase 3 extension included field observations to better understand existing street character throughout the entire riverwalk, access to the waterfront, number of intersections, and the amount of separation from the sea wall to the road. The inventory and analysis included photographic inventory, property ownership data, photographic and dimensional cross-sections. Review of proposed design guidelines also helped inform a better design direction.

Reoccurring issues such as wide travel lane widths, lack of street canopy, parking, and curbs became apparent and have all been primary drivers of the design response.

The Sanford Riverwalk has four distinct experiences each with their own perceived character, canopy coverage, adjacencies and exposure to the lake. These unique experiences also create a framework of three distinct characters; **the urban**, **the fishing zone**, and **the wetland corridor**.

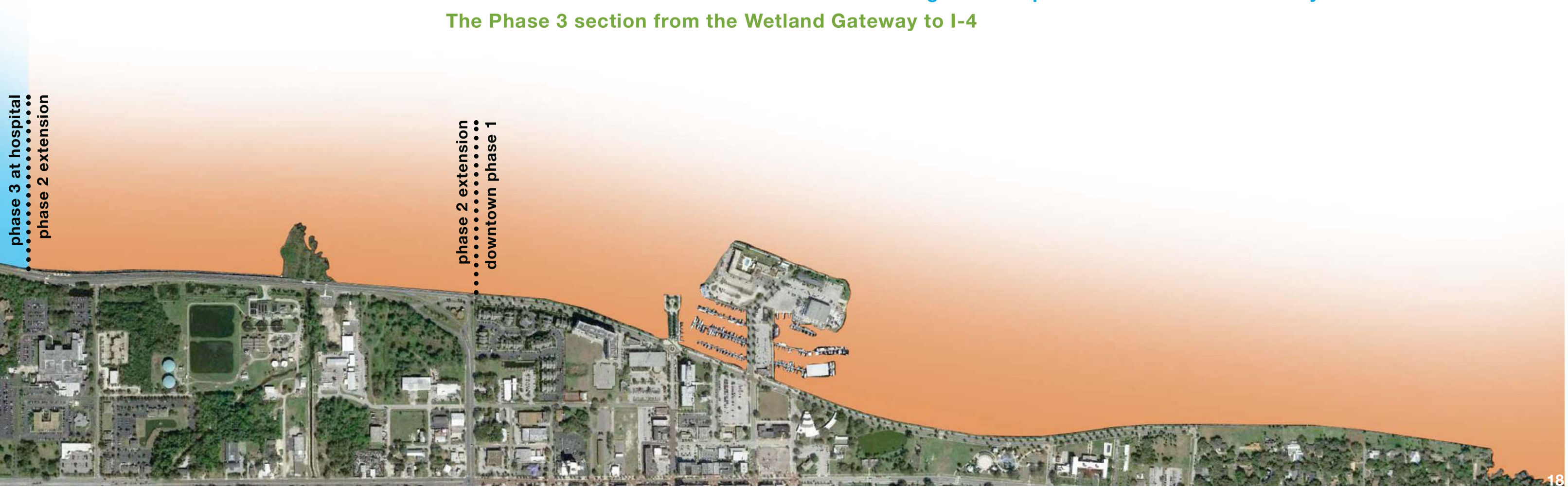
The four areas of the Lake Monroe Loop are:

The Downtown (completed in Phase 1)

The Phase 2 extension (completed in Phase 2)

The Phase 3 section from the Central Florida Regional Hospital to the Wetland Gateway

The Phase 3 section from the Wetland Gateway to I-4



WETLANDS
CENTRAL
FLORIDA ZOO
WETLANDS
WALNUT CREST RUN
RESIDENTIAL
WETLANDS
OAK DRIVE
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
WETLANDS
SUNRAIL

URBAN (existing riverwalk)

Through Downtown Sanford, the trail is incorporated into a waterfront esplanade. While this makes for a visually rich experience and highly connected by surface streets and sidewalks into the grid of Sanford, it can present more opportunities for conflict with non-trail users and decrease speed.

Through the Phase 2 extension, the riverwalk remains in the same basic alignment as the Downtown section against the seawall but is now also immediately adjacent to US 17-92. This separation occurs only by means of a FDOT guard rail/crash barrier. The entire trail section is paved with asphalt and as the trail ROW widens and moves westward, planting areas are present but provide very limited room for shade trees.

1

2

3

4

FISHING ZONE (1 mile)

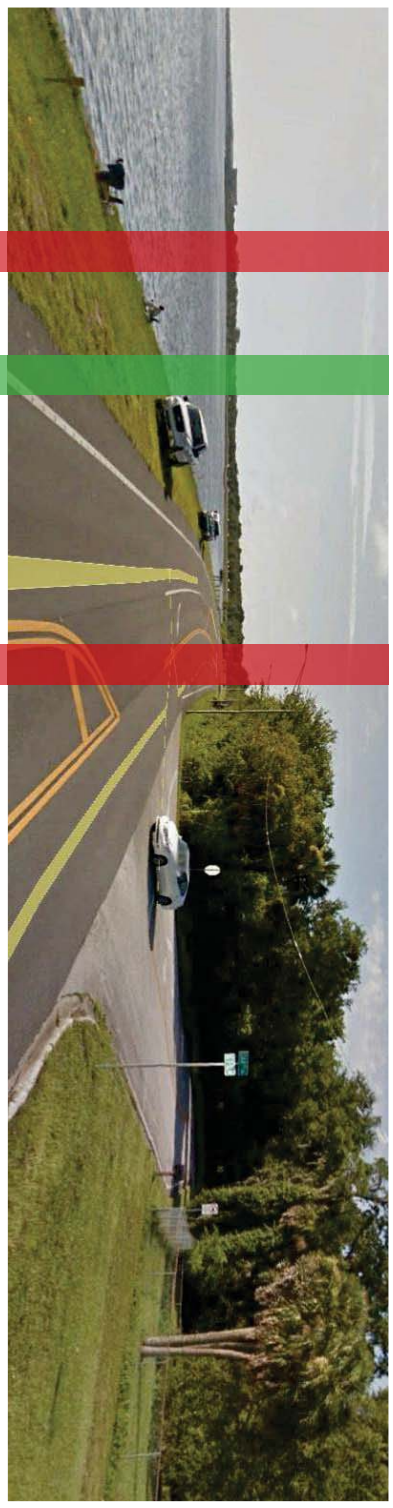
Phase 3 continues with wider planting zones and for the first 1/3 of the trail, it remains fairly open with no existing tree canopy. This area has the “legacy fishing zones” where fishermen park on the side of 17-92 and fish anywhere along the low seawall. Phase 3 proposes a new and higher seawall to make up for the significant grade change.

3

lack of tree canopy

parallel parking

roadway medians

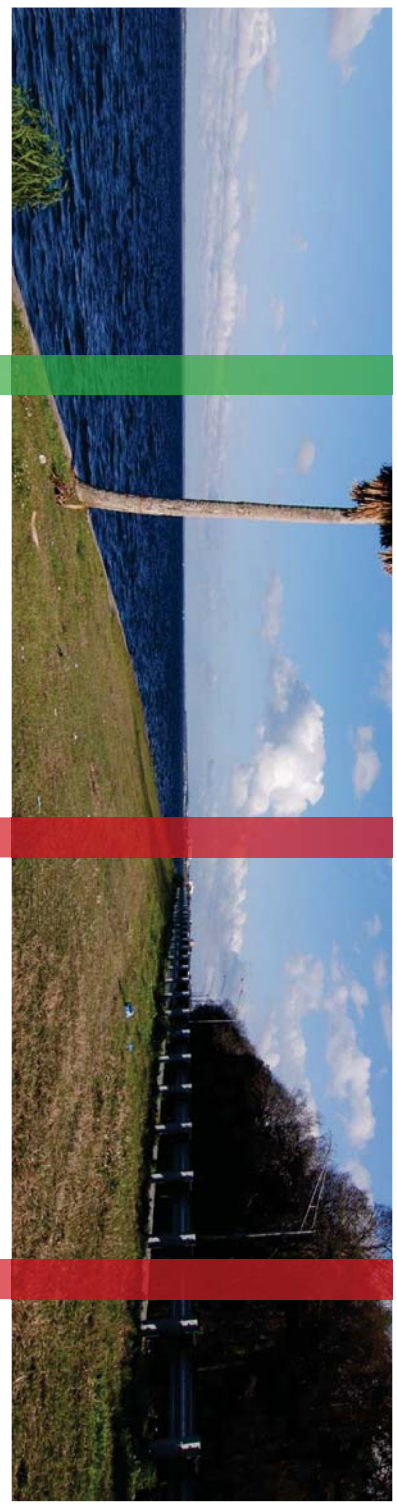


1

fishing zones

lack of tree canopy

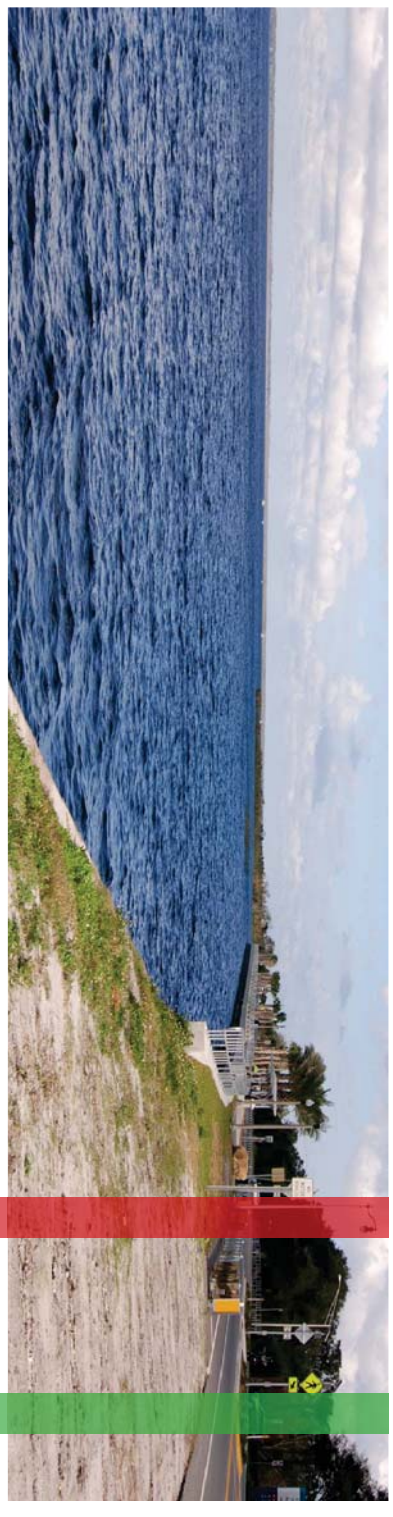
guard rails



4

lack of tree canopy

visual compression



2

parallel parking

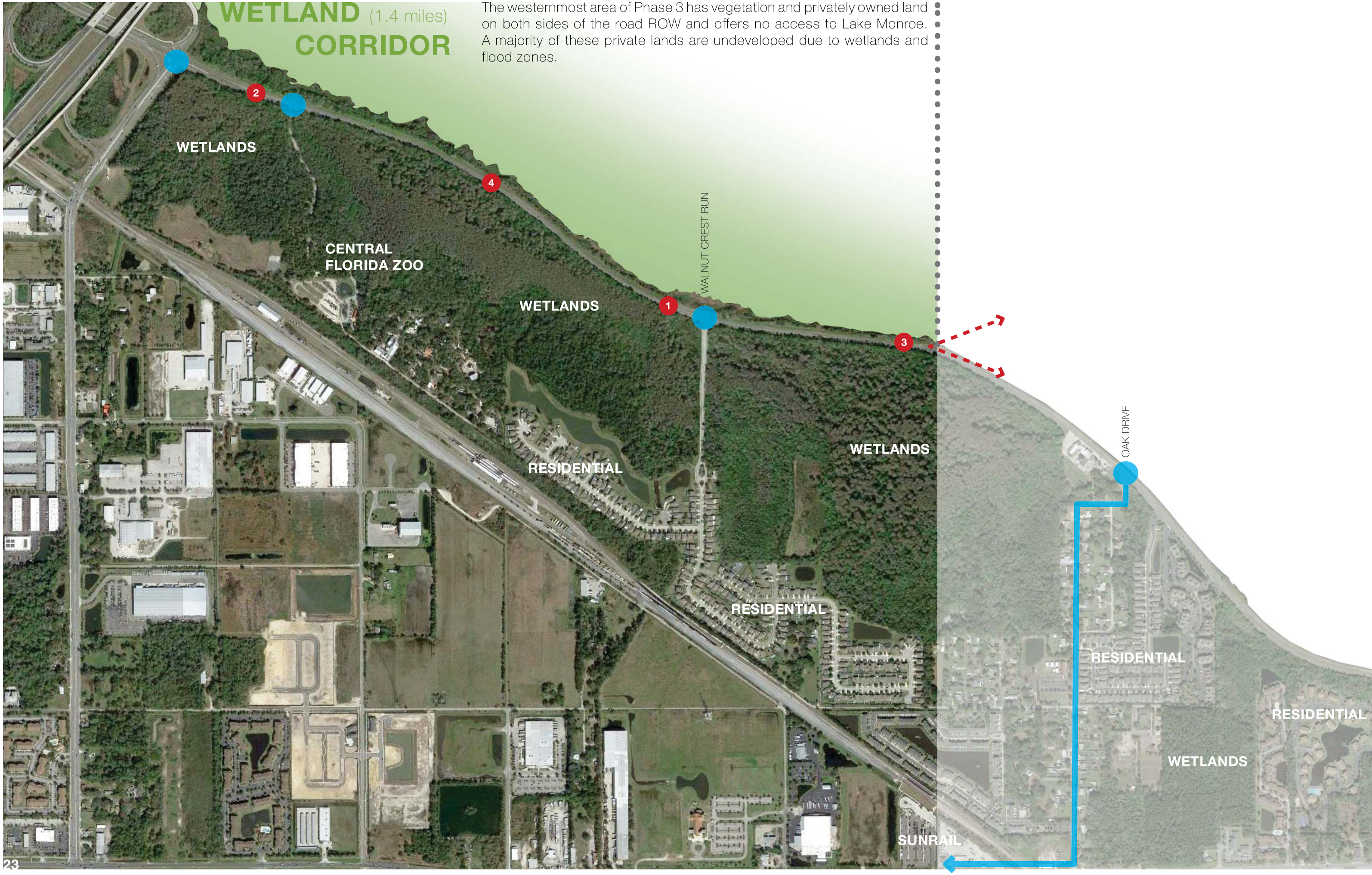
limited tree zone

lack of tree canopy

fishing zones

WETLAND (1.4 miles) CORRIDOR

The westernmost area of Phase 3 has vegetation and privately owned land on both sides of the road ROW and offers no access to Lake Monroe. A majority of these private lands are undeveloped due to wetlands and flood zones.



3

fishing zone

lack of tree canopy

guard rails

1

limited tree zone

visual compression

4

existing tree canopy

visual compression

no curb requires 14’ clear zone

2

limited tree zone

visual compression

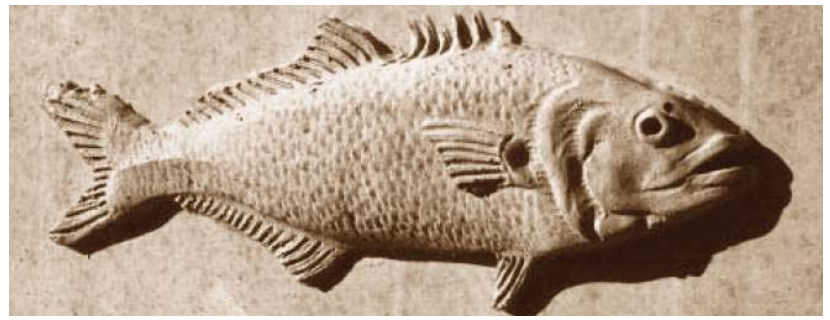
DESIGN

As part of the visioning process, it is important to note and always go back to any conclusions that grew from inventory and analysis. Phase 1 and Phase 2 of the Sanford Riverwalk responded well to the physical limitations of the trail framework, and Phase 3 must continue to do so by keeping the trail adjacent to the seawall which allows for maximum flexibility in tree placement. It must also use design detail in planting, hardscape, and road design to decrease speeds along traffic circles.

Objectives

- Introduce a scenic byway and intergrate a multi-use trail component
- Create an overall sense of identity for the corridor
- Create a complete user experience for the riverwalk, accommodating all users: fishermen, runners, cyclists, families, etc
- Create a perceptibly safe separation from the existing roadway (17-92)
- Create the rural complement of the urban downtown section through the use of trees, plantings, and hardscape elements
- Use hardscape and landscape elements to educate and entertain users about the water cycle
- Create shade for the majority of the trail through a mixture of tree species

CONNECT



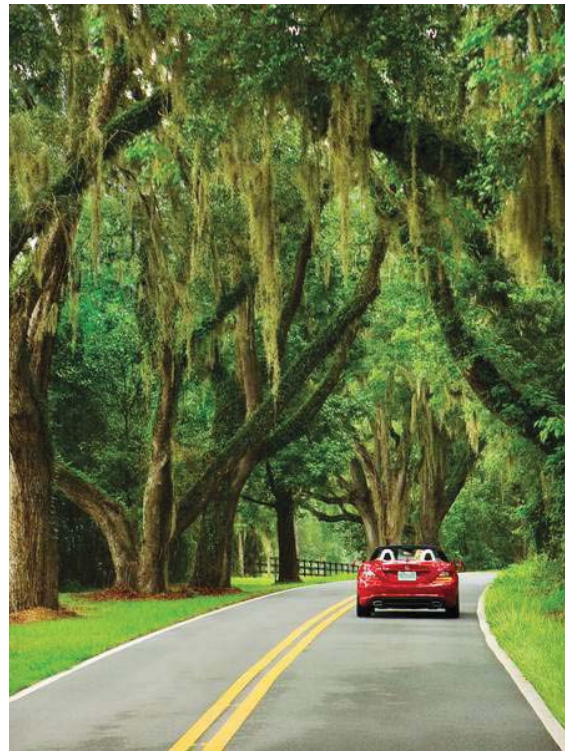
NATURE

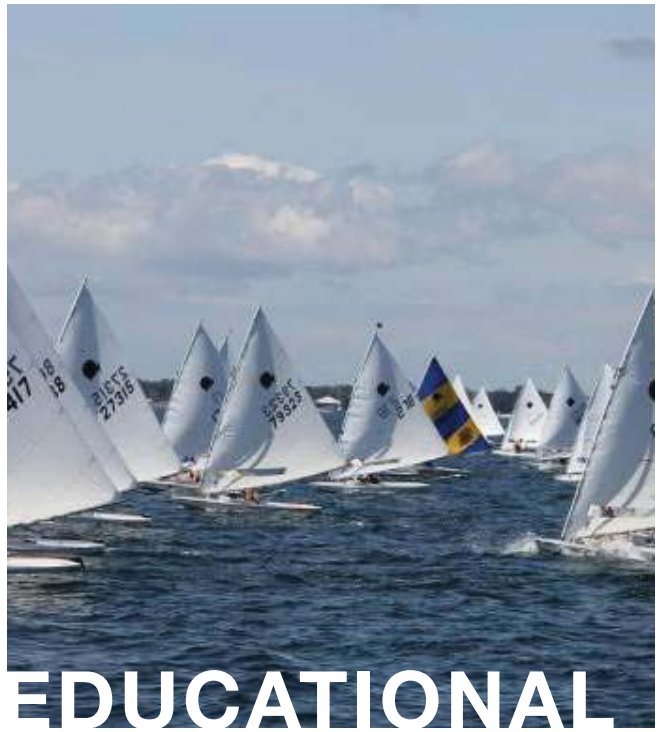
ARTFUL

EXPRESSIVE

SIMPLICITY

CULTURAL





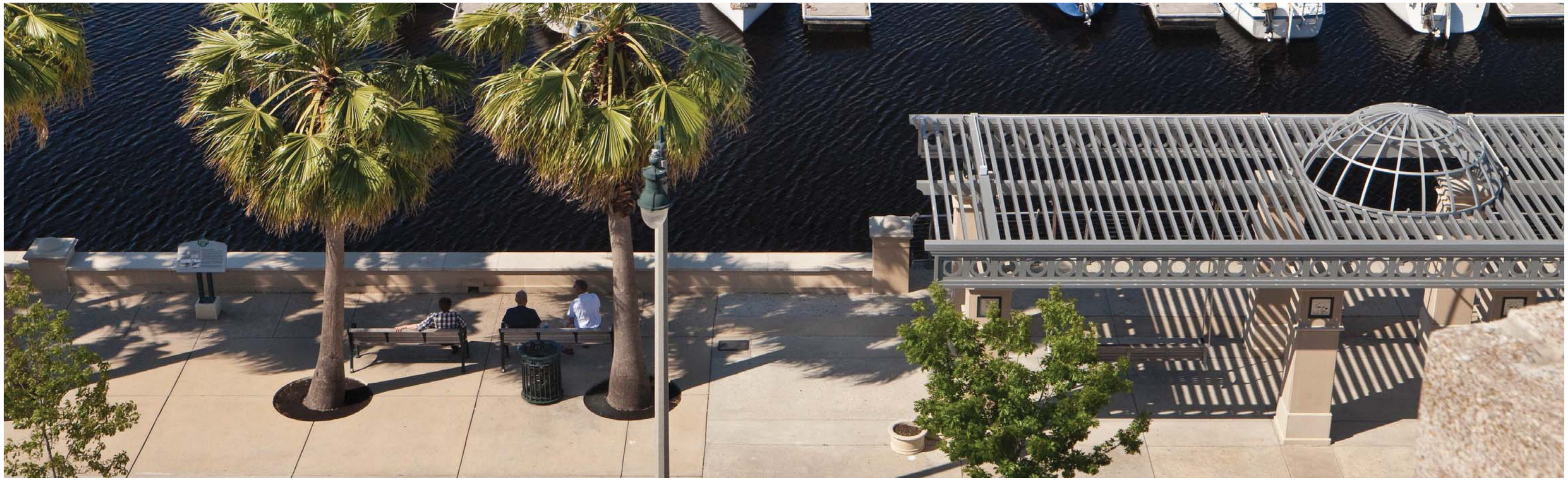
EDUCATIONAL

SANFORD'S "Sense of Place"

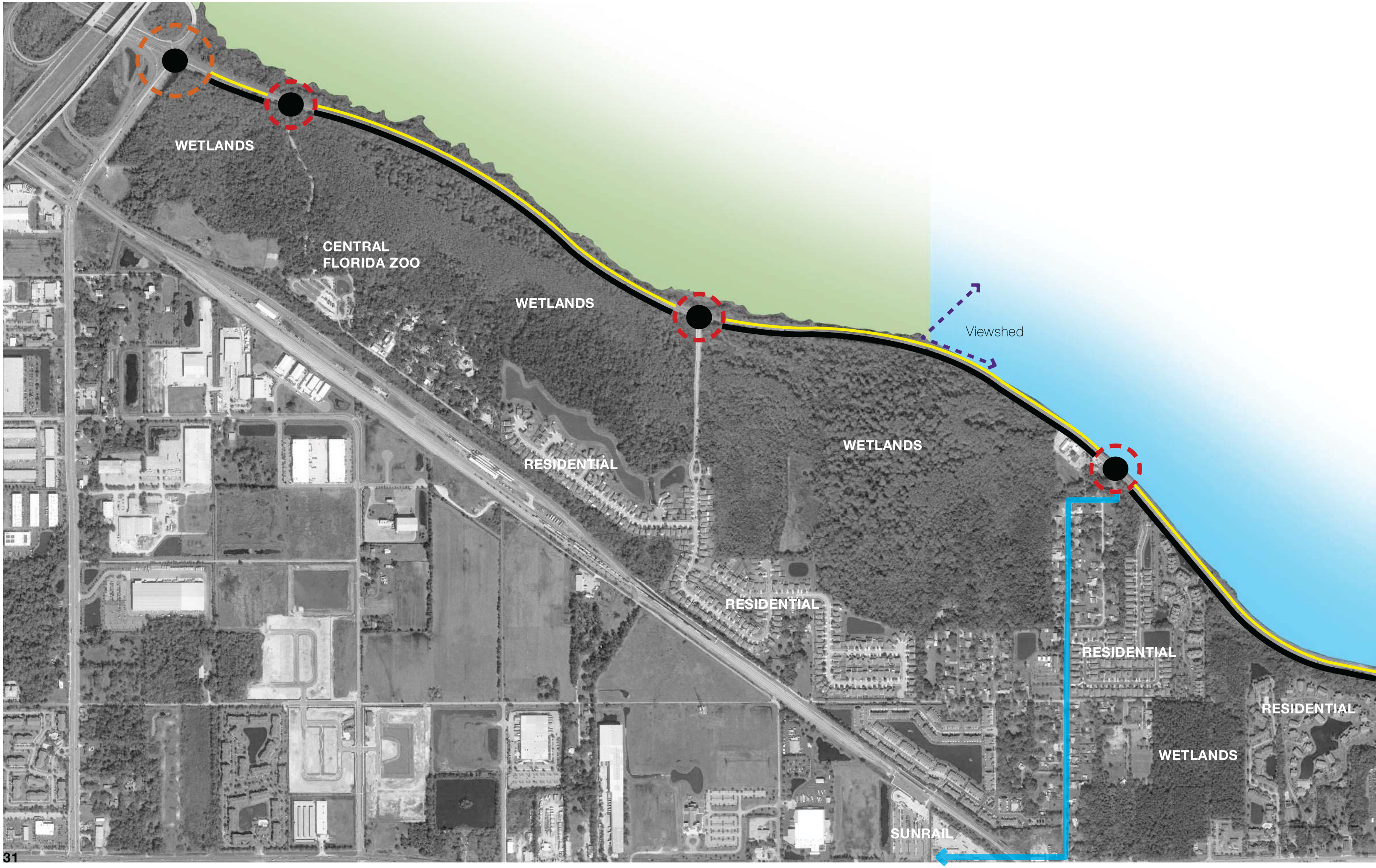
As seen in previous examples, a proper "sense of place" is developed through its scale and proportion of architectural elements (street, buildings, parks, etc.) and its individual character, derived from its natural and evolved setting. Sanford's waterfront, being composed of a series of spaces and experiences, must incorporate this idea throughout. Keeping the design objectives at the forefront, we begin to look at the spaces that will make up Phase 3 of the Sanford Riverwalk and the character that will define it.

Great Space
Riverwalk Experience

- Highest value real estate overlooking the water
- Opportunities to interact with water, trail extends to water's edge
- Continuous public edge to water
- Higher detail at intersection nodes for a safer pedestrian experience
- Shaded seating opportunities
- Adjacent parking
- Well defined edges
- Decorative elements to animate the trail and create identity



Disaster Strikes
1997

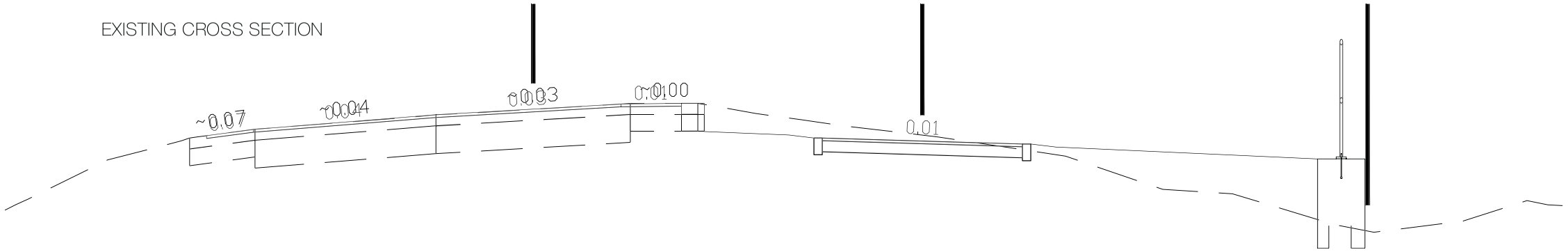

WETLANDS
CENTRAL
FLORIDA ZOO
WETLANDS
Viewshed
RESIDENTIAL
WETLANDS
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
WETLANDS
SUNRAIL

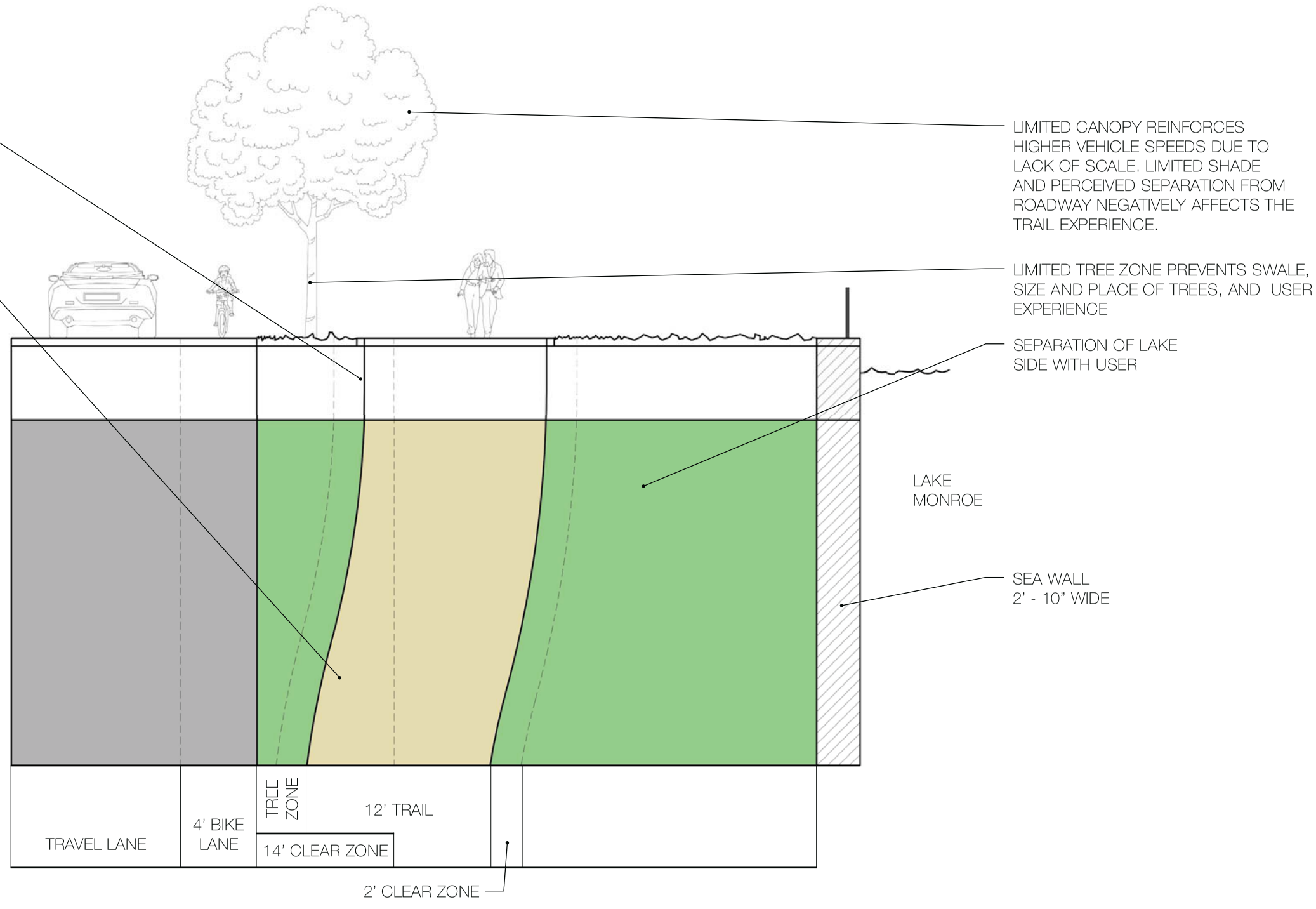
Sanford Phase 3
Concept Master Plan

LEGEND

- SR 17-92 Road
- Sanford Riverwalk Phase 3
- Access from Sunrail Station
- I-4 Gateway Traffil Circle
- Nodes/Touchpoint Traffic Circles

EXISTING CROSS SECTION

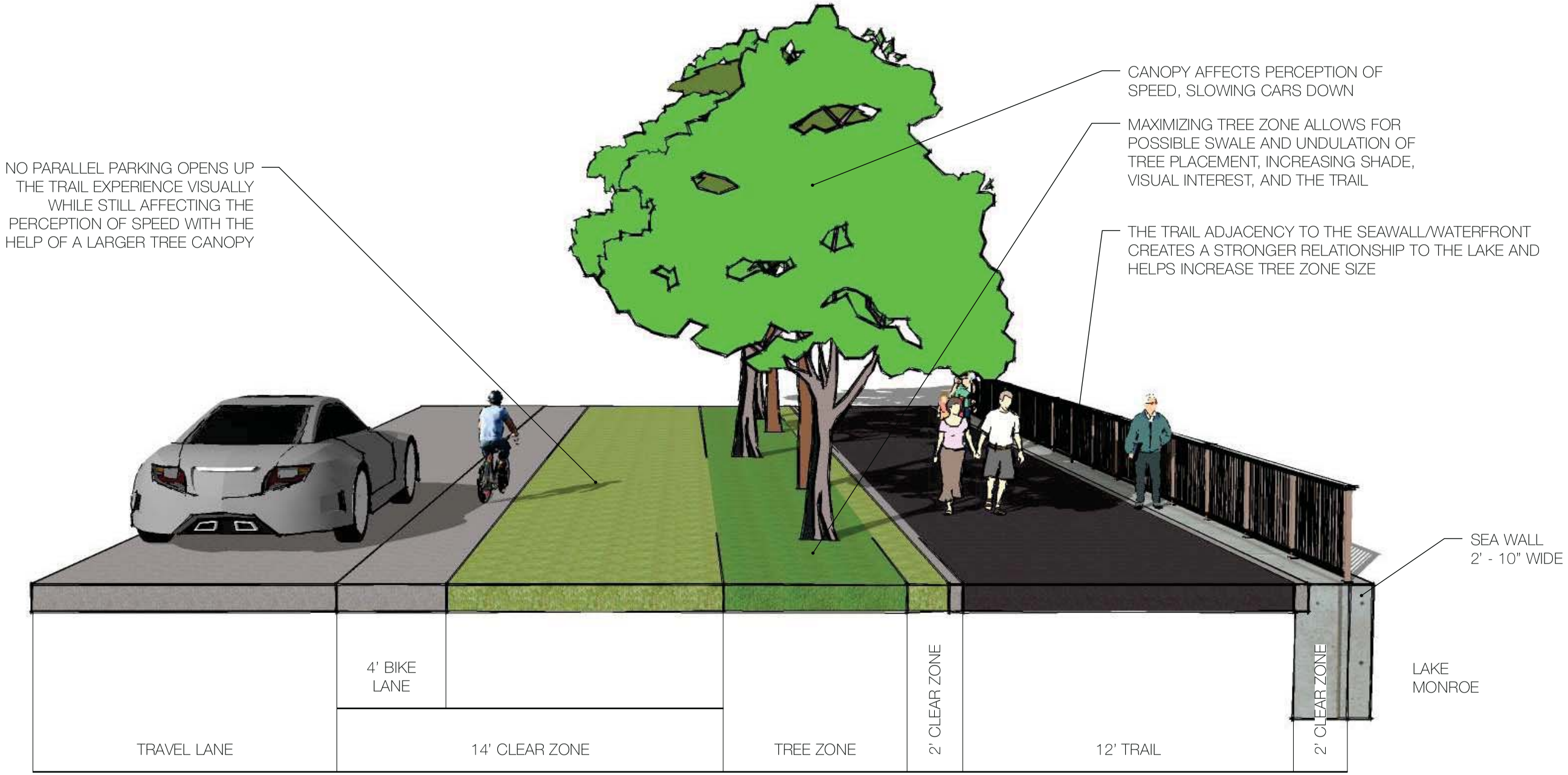




KEY MAP

PROPOSED ENGINEERING TRAIL PLAN/CROSS SECTION

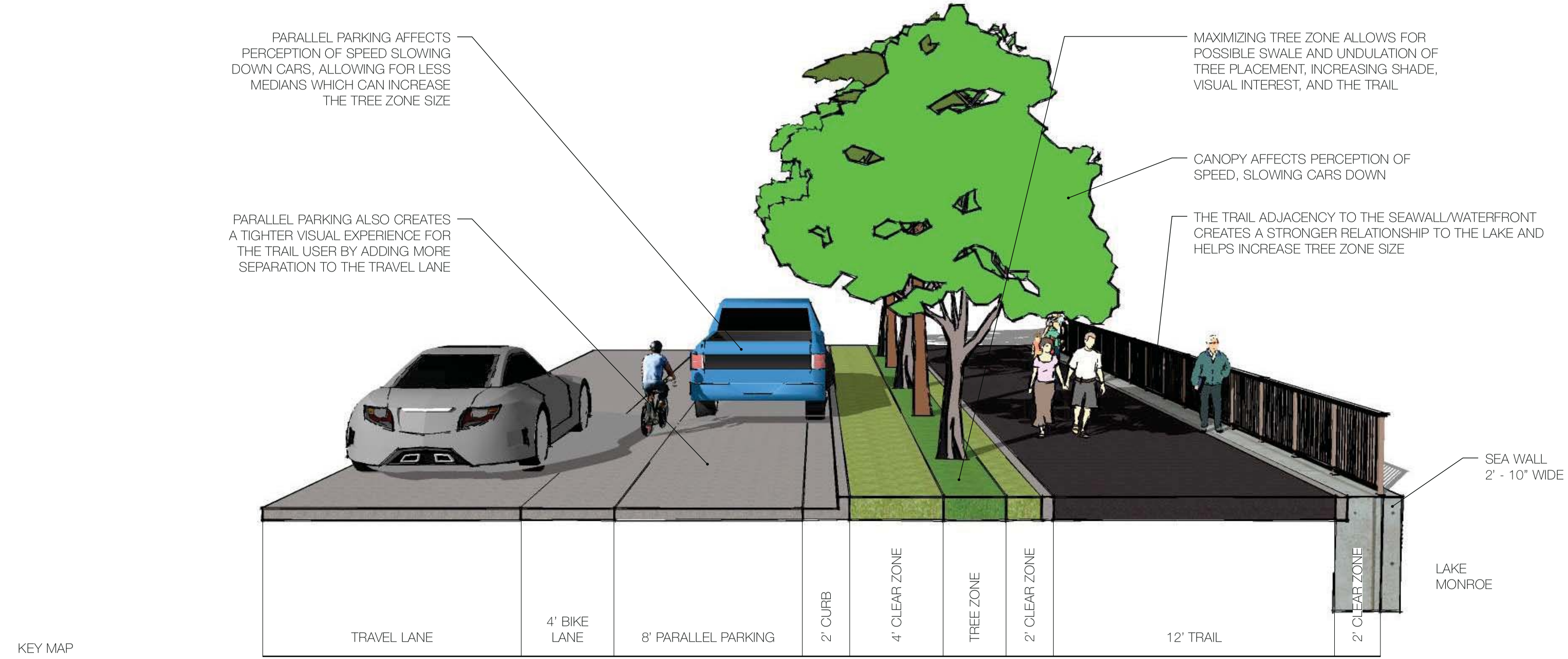
SP+156 Per CHP's 30% Plans



KEY MAP

UPDATED TRAIL CROSS SECTION/PERSPECTIVE

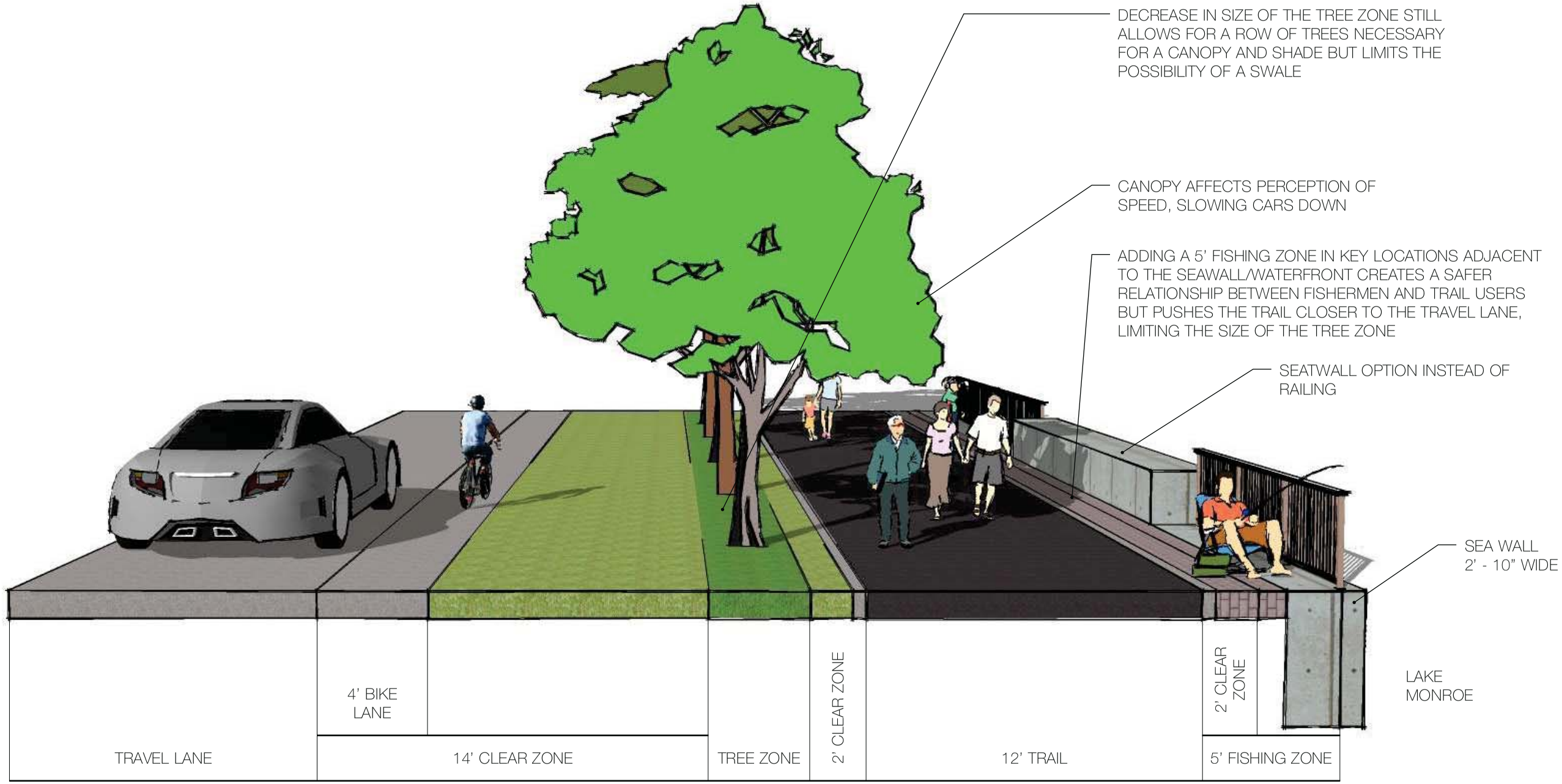
SP+88 - Fishing Zone



KEY MAP

UPDATED TRAIL CROSS SECTION/PERSPECTIVE

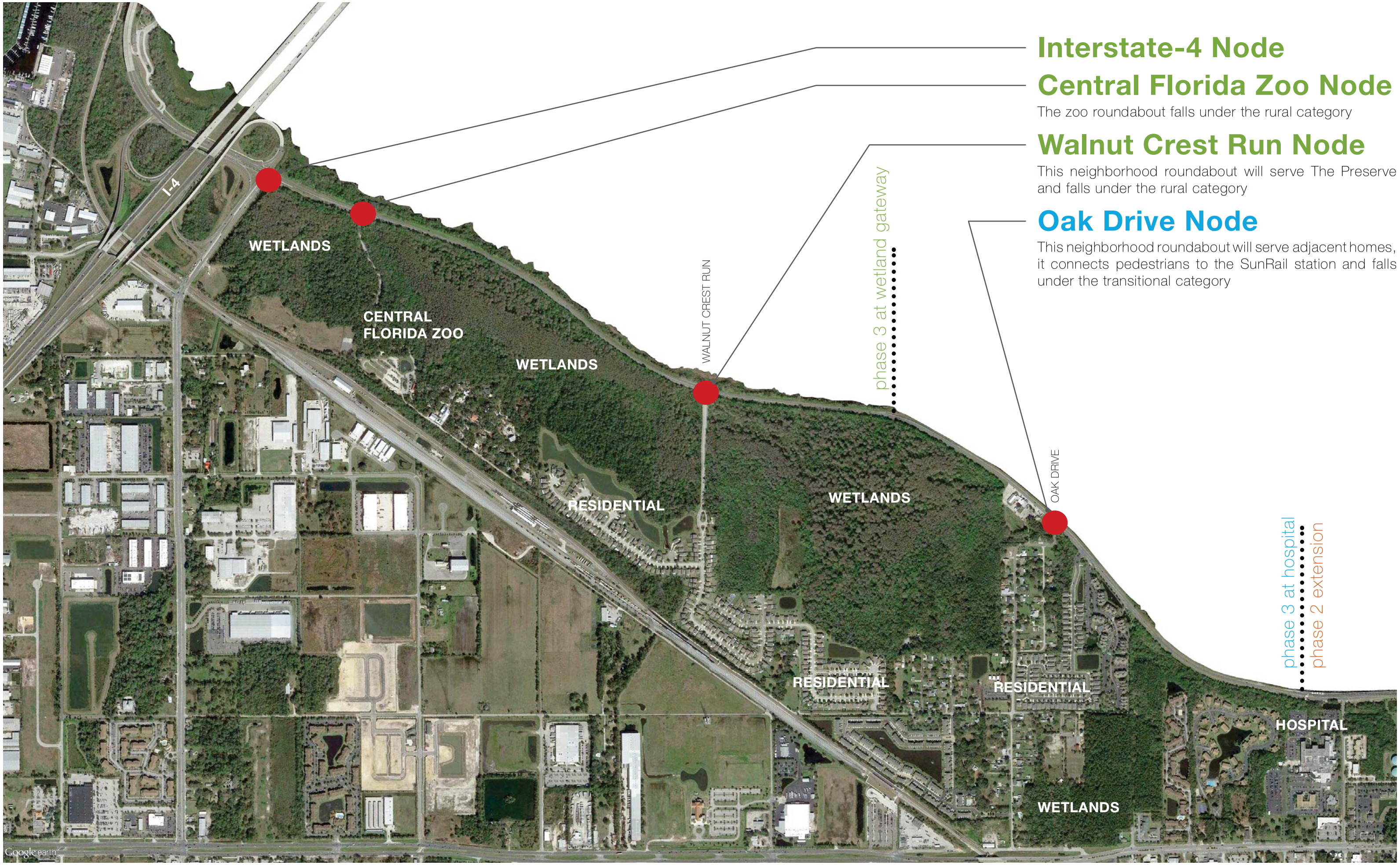
SP+92 - Fishing Zone



KEY MAP

UPDATED TRAIL CROSS SECTION/PERSPECTIVE

SP+53 - Fishing Zone



Interstate-4 Node

Central Florida Zoo Node

The zoo roundabout falls under the rural category

Walnut Crest Run Node

This neighborhood roundabout will serve The Preserve and falls under the rural category

Oak Drive Node

This neighborhood roundabout will serve adjacent homes, it connects pedestrians to the SunRail station and falls under the transitional category

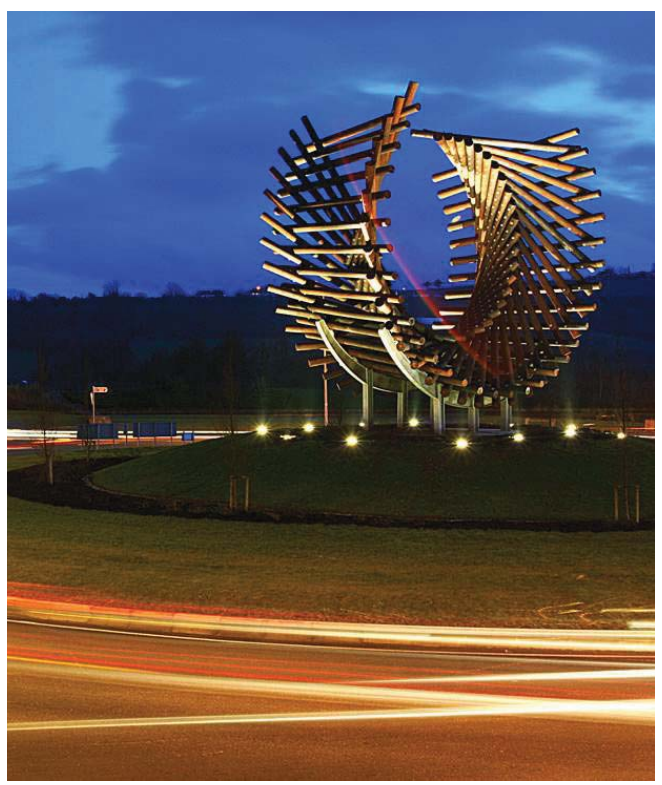
ACTIVE NODES
Creating Safe Intersections

More than just about creating safe intersections along the Sanford Riverwalk, these nodes will be moments of activity and excitement. They will help inform a sense of space through the use of increased detail and interest, while also creating a safer use for pedestrians and cyclists.

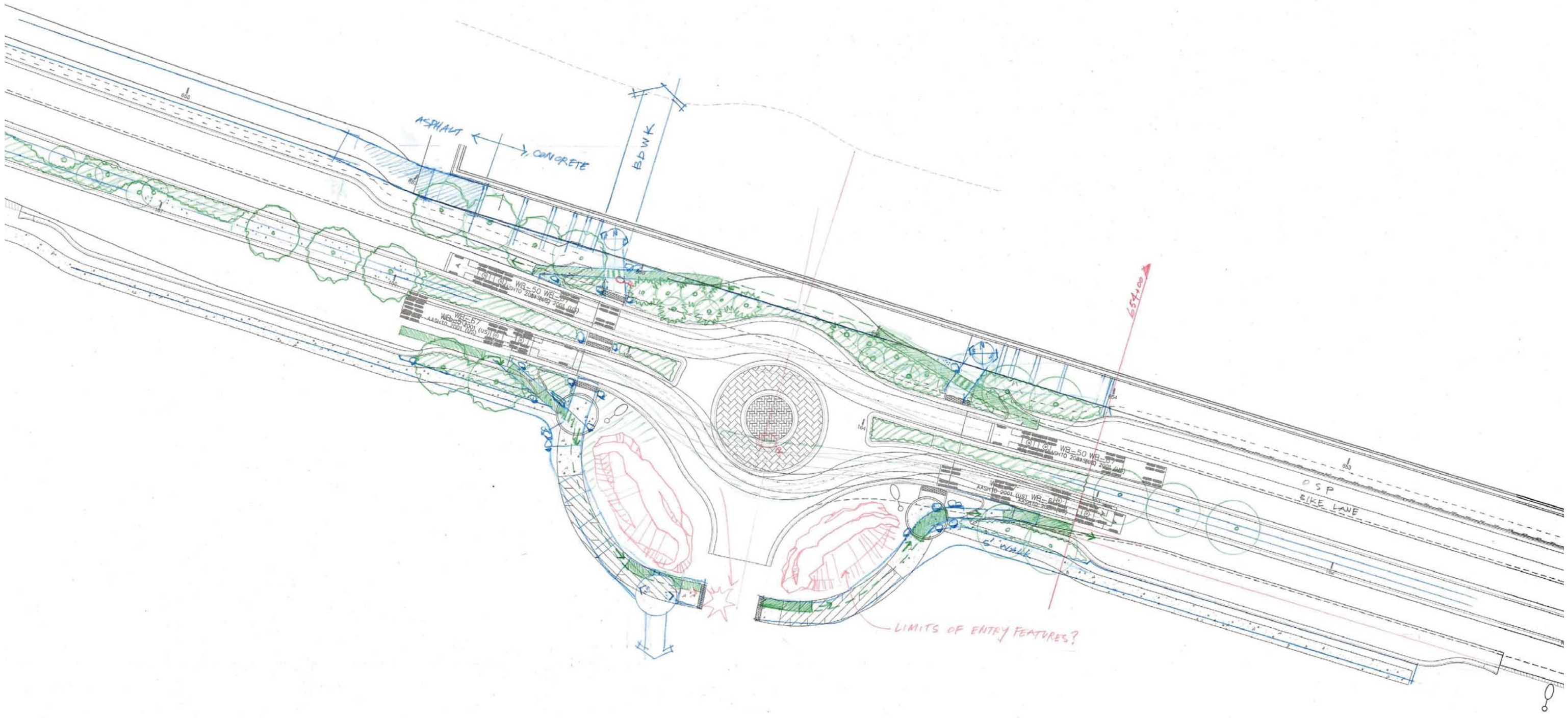
Modern roundabouts by their design require motorists to slow down typically to less than 25 mph, and preferably 15 mph to proceed through the intersection. The literature shows that, given a properly designed single-lane roundabout, motorist and pedestrian safety is almost always improved when compared to conventional intersections. Roundabouts have fewer conflict points and lower speeds compared to conventional intersections, resulting in a significant overall reduction in the severity of crashes for all users.

Source: www.pedbikeinfo.org

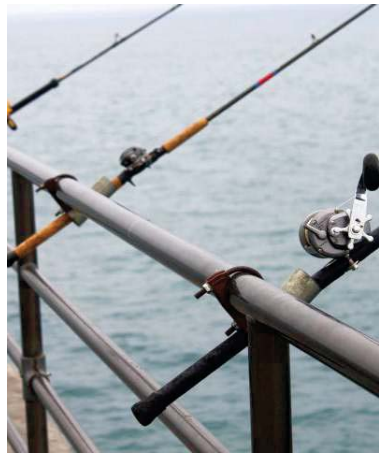
- Spatial compression and intensity of detail increases as cue to decrease speed
- Paving bands denote intersections for pedestrians and cyclists
- Bike path is aligned to provide ease of entry/exit into the trail, but cyclists can also use the road
- Splitter islands allow pedestrians to cross one direction of traffic as a time



WALNUT CREST RUN NODE

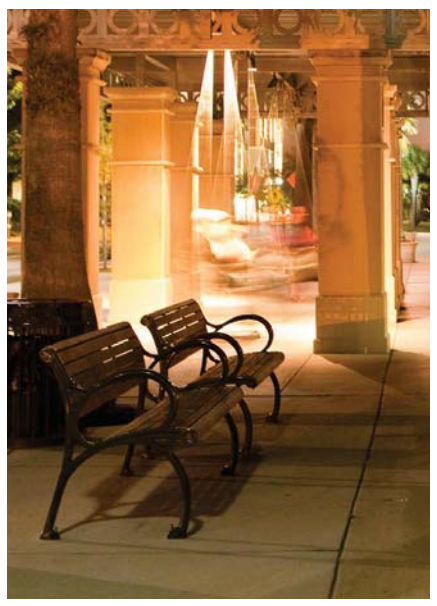


CENTRAL FLORIDA ZOO NODE



MATERIALS

Materials and finishes are one of the many elements that help define a space through their quality and character. The context of the area and region define the materials and help inform the user.



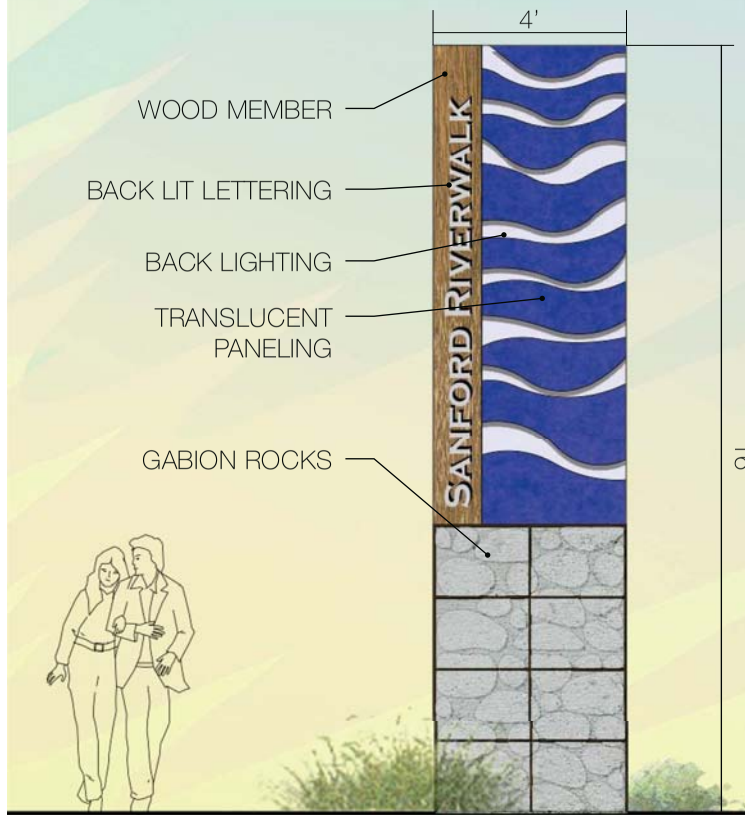
MATERIALS INSPIRATION

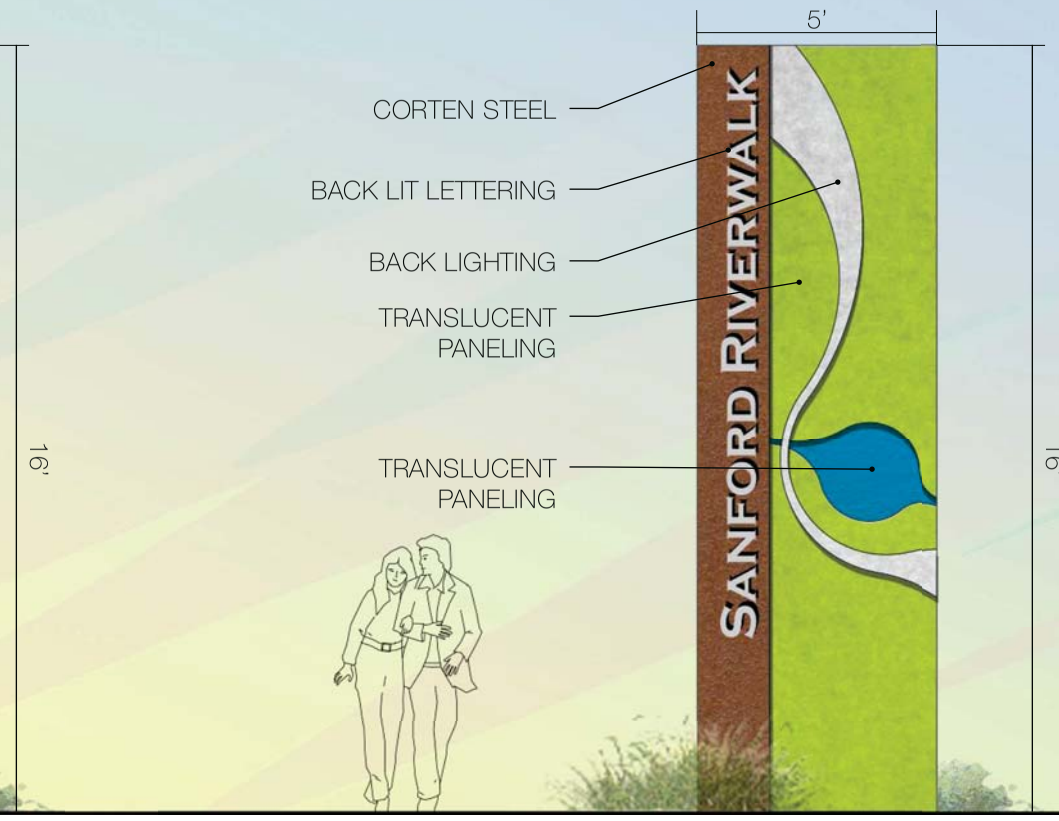
A riverwalk consists of a variety of components, that when combined properly create a dynamic and engaging space. Understanding and providing space for various components is essential in creating a successful trail experience. These components consist of the pedestrian realm along the trail, providing space for walking, talking and fishing, cycling, as well as furnishings, lighting, landscape and canopy trees. On-street parking, bicycle lanes, and travel lanes all make up the vehicular realm of the street. The two areas of the pedestrian realm and vehicular realm, and their associated materials and finishes should seamlessly fuse to create a thriving public space.

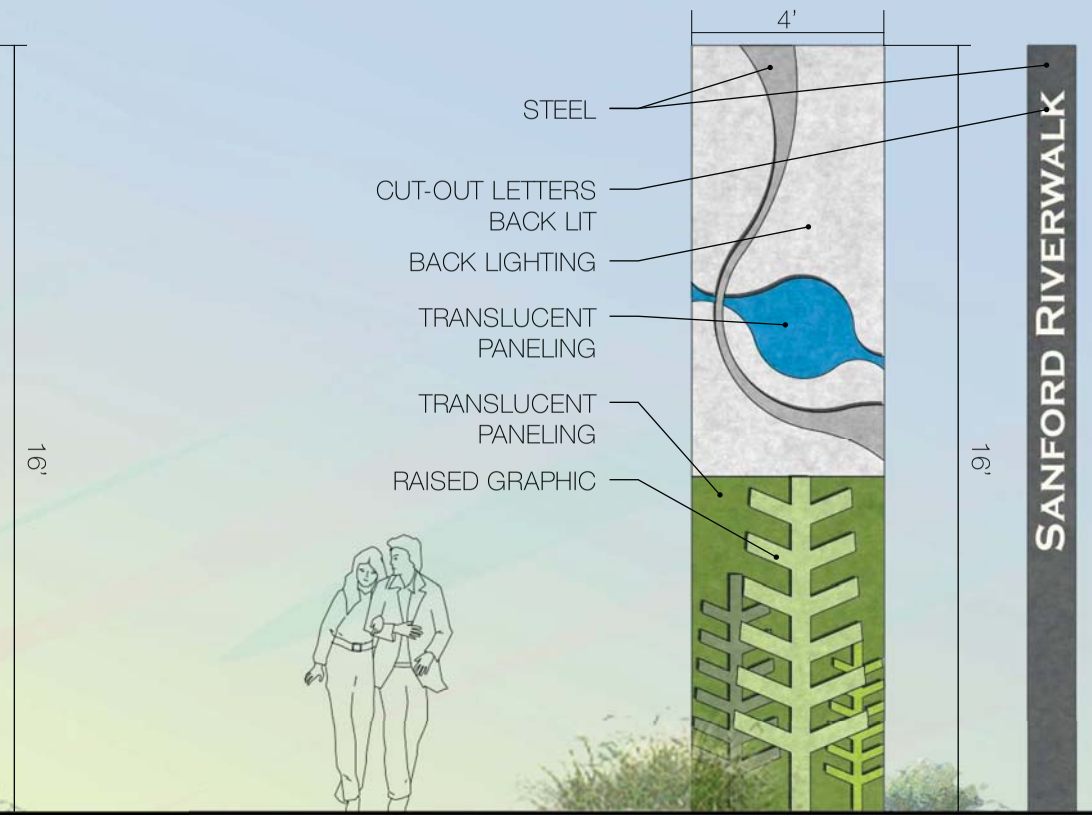
1. Broad Multi-use Trails
2. Tree Canopy
3. Lighting
4. Seating
5. Materials and Finishes
6. Appropriate Separation from Travel Lanes
7. Interest in Railings
8. Landscaping
9. Adjacency to Waterfront

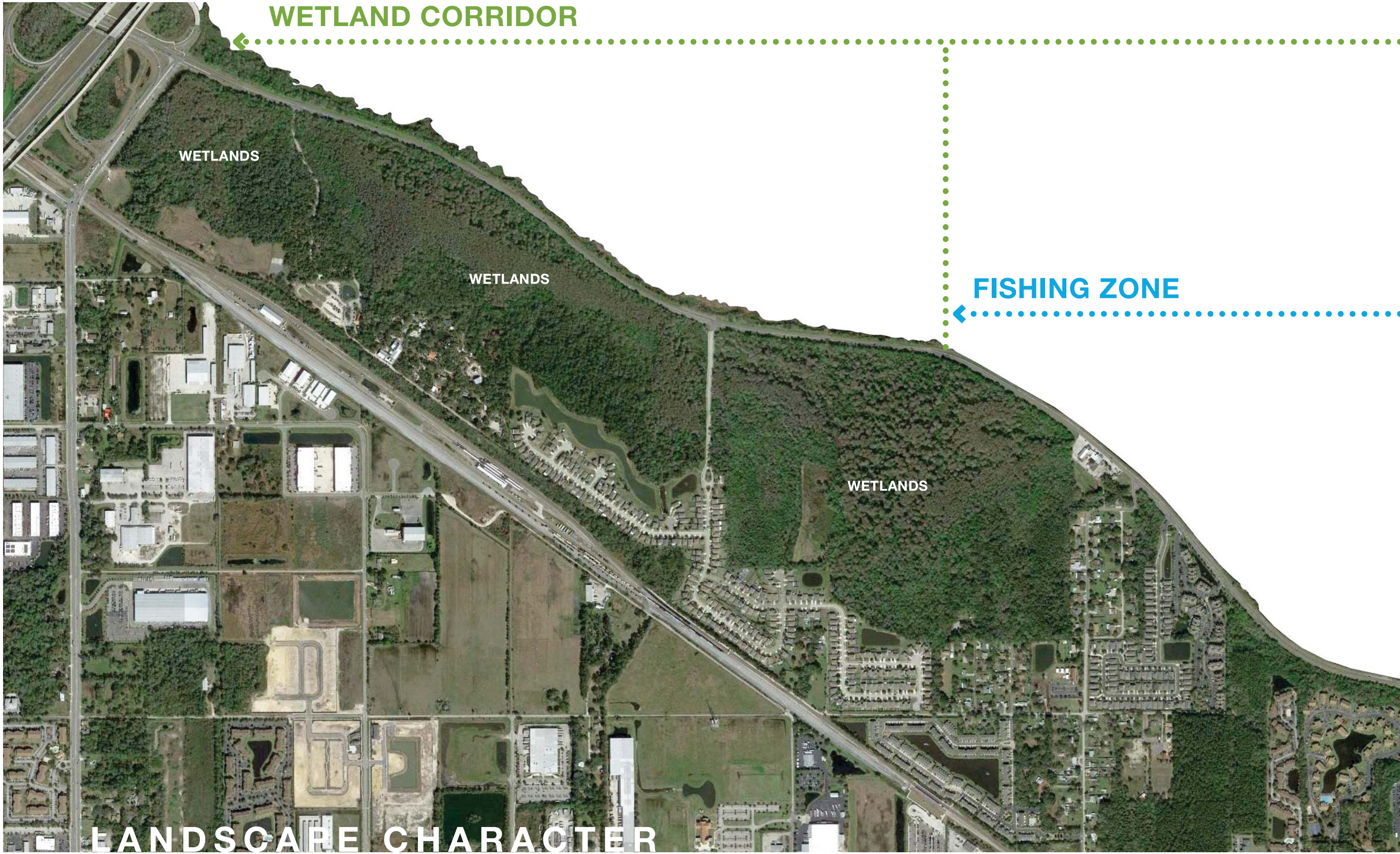
COMPONENTS OF A SCENIC BYWAY

WAYFINDING INSPIRATION


4'
WOOD MEMBER
BACK LIT LETTERING
BACK LIGHTING
TRANSLUCENT PANELING
GABION ROCKS
SANFORD RIVERWALK
16'


5'
CORTEN STEEL
BACK LIT LETTERING
BACK LIGHTING
TRANSLUCENT PANELING
TRANSLUCENT PANELING
SANFORD RIVERWALK
16'


4'
STEEL
CUT-OUT LETTERS BACK LIT
BACK LIGHTING
TRANSLUCENT PANELING
TRANSLUCENT PANELING
RAISED GRAPHIC
SANFORD RIVERWALK
16'



LANDSCAPE CHARACTER

SWEET BAY MAGNOLIA

BALD CYPRESS

SABAL MINOR

SANDCORD GRASS

BAHIA SOD

LIVE OAK

SABAL PALMETTO

RED MAPLE

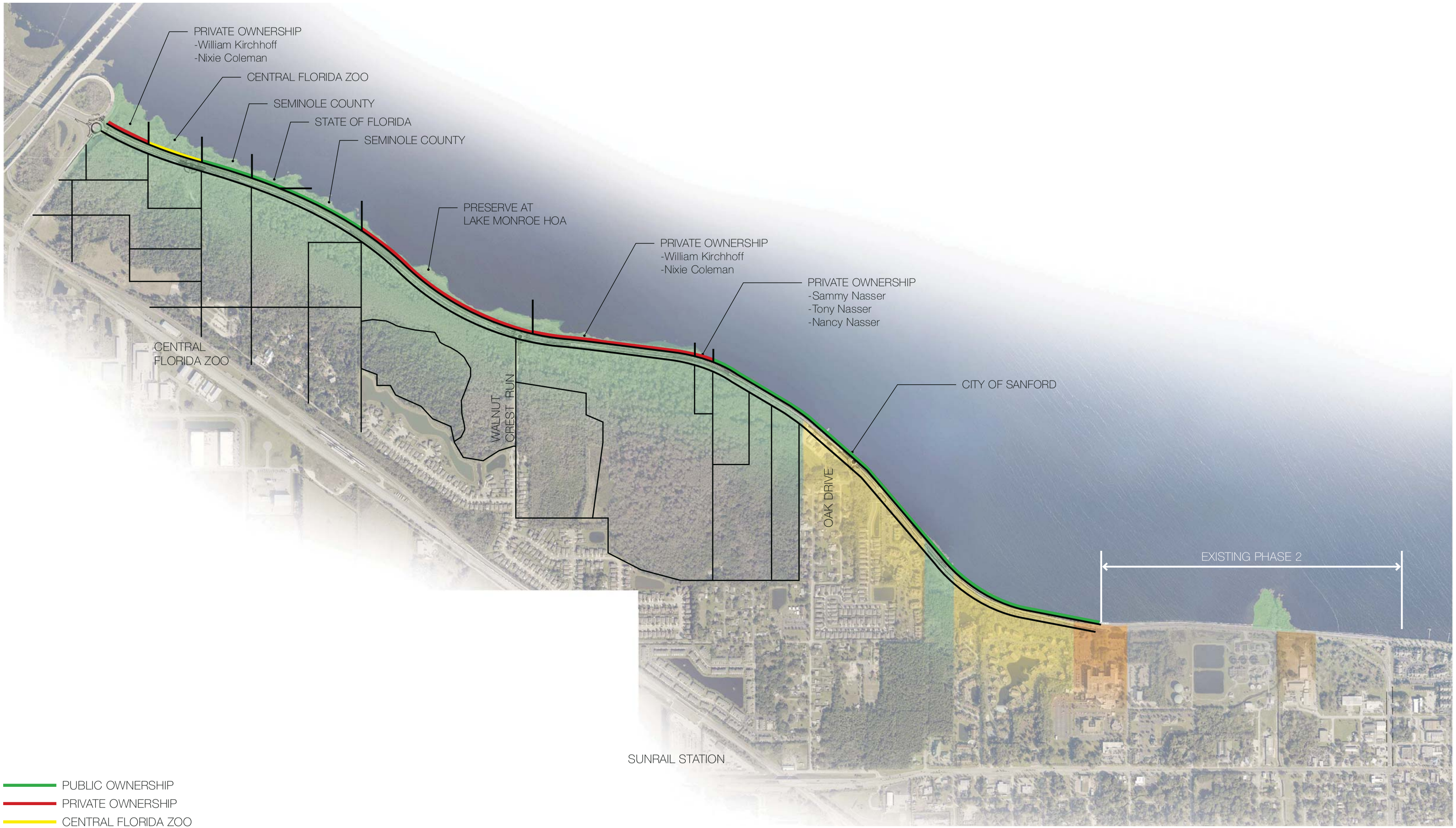
SAW PALMETTO

SILVER SAW PALMETTO

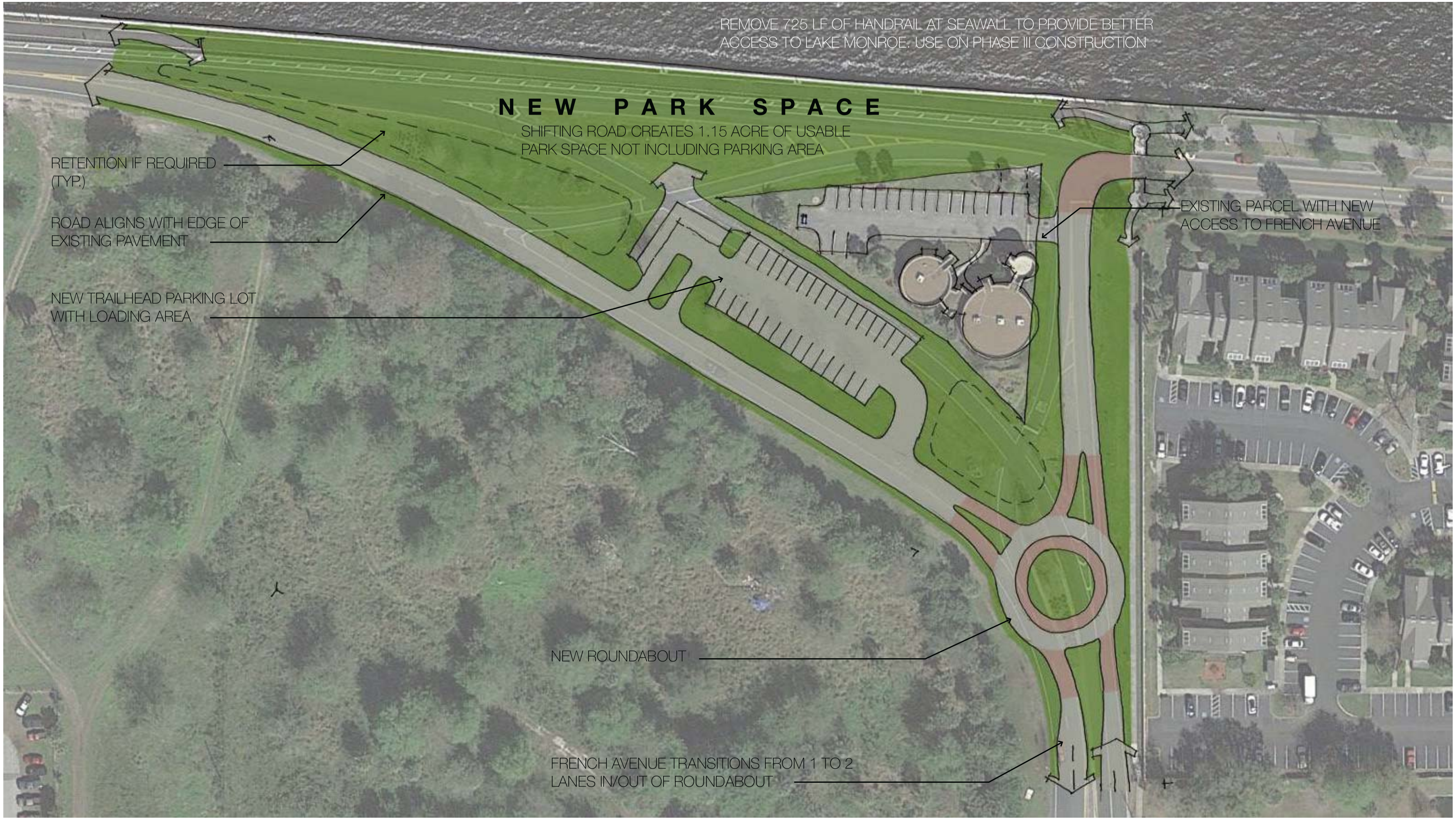
COONTIE

BEAUTYBERRY

MUHLY GRASS



PARCEL OWNERSHIP & DEVELOPMENT FEASIBILITY



SR 17-92 GATEWAY REDESIGN OPTION