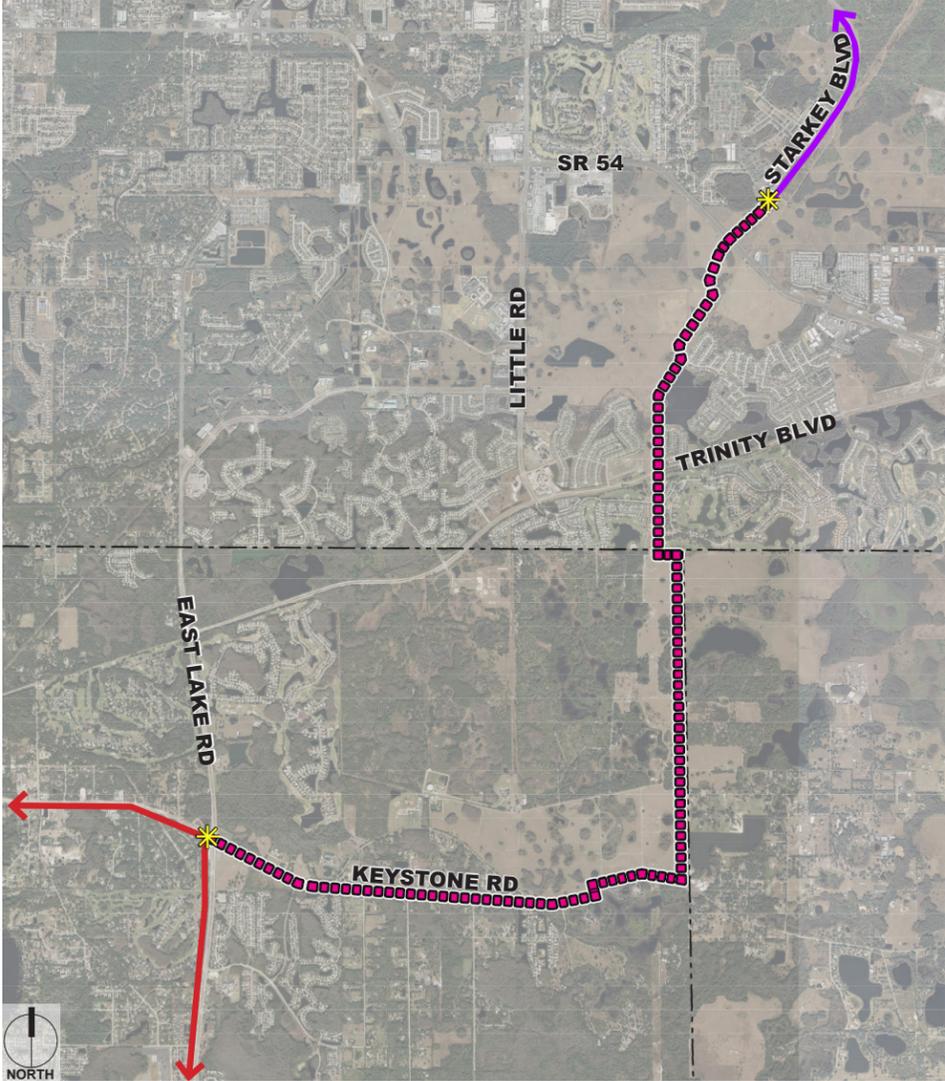


# TRI-COUNTY TRAIL CONNECTION STUDY





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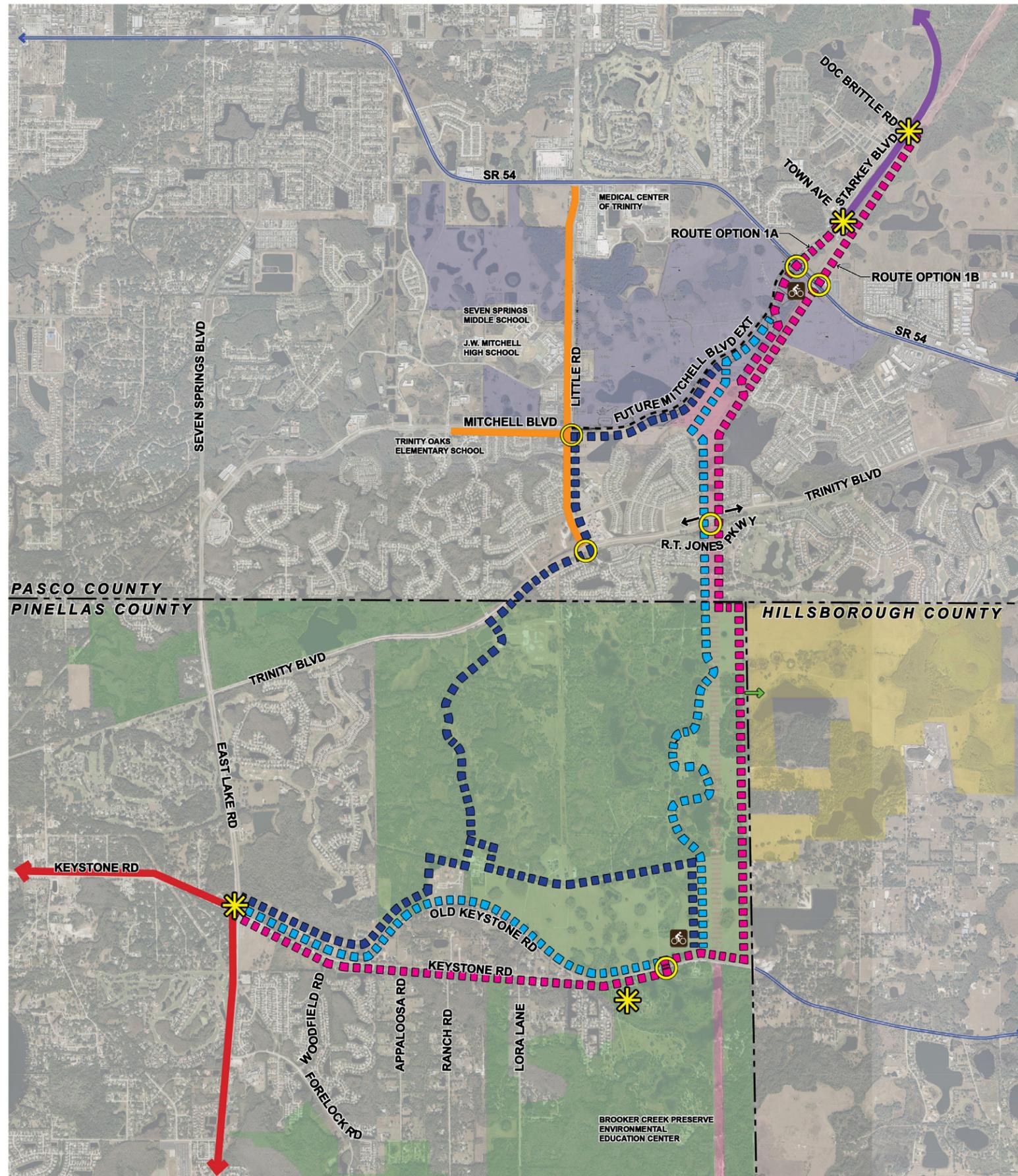
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## PROJECT OVERVIEW

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## INTRODUCTION

URS was retained by the Metropolitan Planning Organizations (MPOs) of Pasco and Pinellas Counties in the spring of 2013 to prepare a trail planning study to assist them with the development of a proposed multi-use trail. From the on-set of the study, the primary goal for the proposed trail has been to provide a link between two highly successful existing trails; the Starkey Boulevard/Wilderness Park Trail in Pasco County and the Pinellas Trail System located in Pinellas County, while satisfying the surrounding community's needs for improved bicycle and pedestrian infrastructure.

The Tri-County Trail connection study is consistent with the Pasco County Long Range Transportation Plan (LRTP) multi-use trail improvements and Greenways, Trails, and Blueways (GTB), as well as the Pinellas County Long Range Transportation Plan (LRTP) railways plan. The result of this study will lead to the identification of a preferred route that will ultimately connect the Pinellas Trail to the Starkey Boulevard Trail.

This report presents the information gathered, the analysis, the public information process and the resulting recommendations for a preferred route. Since the proposed trail will provide a connection between the existing bicycle and pedestrian infrastructure in Pinellas, Pasco and Hillsborough County, it is being called the Tri-County Trail.

When completed, the Tri-County Trail will make it possible to ride from south Pinellas County to Citrus County by linking the Pinellas Trail to the Starkey Boulevard Trail which connects with the Starkey Wilderness Park Trail and the Suncoast Trail.

## EXECUTIVE SUMMARY

This study for the Tri-County Trail examines potential alternatives for providing a trail connection between the intersection of Starkey Boulevard at State Road (SR) 54 and the intersection of East Lake Road and Keystone Road. The preferred trail width is fifteen feet and it is planned to be away from motorized traffic to the greatest extent possible. The goal for the trail is to provide non-motorized access to the surrounding communities and connect the existing Starkey and Pinellas Trails.

The study area is generally suburban in nature and is located where the southern boundary of Pasco County meets the northern boundary of Pinellas County. The land uses in the area covered by the study are rich and diverse. All inherent trail development opportunities, such as publicly owned/maintained lands and utility corridors were explored. The communities, cultural and recreational resources listed below are notable components of the study area:

- Jay B. Starkey Wilderness Park and Trail
- Brooker Creek Preserve & Environmental Educational Center
- Lake Dan Preserve in Hillsborough County
- East Lake Youth Sports Complex
- Fred Marquis Pinellas Trail
- Foxhollow Community and Foxhollow Golf Course,
- Public and Private Schools
- Trinity Community
- Keystone Community
- Mitchell Ranch Property/undeveloped planned community
- Duke Energy Corridor

After analyzing the existing land uses, environmental conditions, potential use of the power corridor, potential use of the preserve land and the existing bike/pedestrian uses on SR 54, Little Road, the future Mitchell Boulevard Extension, Trinity Boulevard and both Old Keystone Road and Keystone Road, three alternative routes were identified. The three routes include some overlapping segments but can generally be described from north to south as follows:

1. Route Option 1 - a small portion of the future Mitchell Boulevard Extension, minimized use of the Duke Energy corridor, the Brooker Creek Preserve land adjacent to the Hillsborough County line and the Lake Dan Preserve, and the south right-of-way of Keystone Road
2. Route Option 2 - the future Mitchell Boulevard Extension, the Duke Energy corridor, the Brooker Creek Preserve land on the west of the Duke Energy easement as it traverses the preserve and Keystone Road and the north side of Keystone Road and Old

Keystone Road

3. Route Option 3 - the future Mitchell Boulevard Extension between SR 54 and Little Road, Little Road to Trinity Boulevard, Trinity Boulevard to the western portion of the Brooker Creek Preserve and through the preserve to the north side of both Old Keystone Road and Keystone Road

Adjacent land uses were assessed for their compatibility with or suitability for a trail and for the opportunities and constraints they presented. Many meetings were held with individuals interested in the proposed trail system during the various stages of the study. Two public information meetings were also held to present, first, the three alternative routes and then, a preliminary preferred route. The input from these meetings helped guide the study to the refinement of the Route 1 Option as the recommended route. The positive and negative attributes of the three routes are presented in detail in this report.

The refined Route Option 1 evolved as the most appropriate route and the one having the most favorable conditions for trail construction. This route provides minimal trail contact with motorized vehicles and protected wetlands while maximizing the natural viewsheds. The foresight of Pinellas County to survey the south side of Keystone Road for a potential extension of the Pinellas Trail in 2001 was instrumental in determining the suitability of the right-of-way for accommodating the proposed trail.

The recommended route in Pasco County will contain 2.39 miles of the trail and Pinellas County will contain 5.02 miles for a total of 7.4 miles of the trail.

The Tri-County Trail will cross four arterial roadways; SR 54, Trinity Boulevard, Keystone Road and East Lake Road. It will also cross two neighborhood collectors, R. T. Jones Parkway and Woodfield Road, as well as neighborhood streets and driveways on Keystone Road. These road crossings must be carefully designed with enhanced features for pedestrian and cyclist safety. This study assumes the crossings will be at-grade and based on the current roadway configurations. However, some of the arterial roads may eventually warrant elevated crossings, especially SR 54 and East Lake Road. Improvements for consideration with the at-grade road crossings include the following:

1. SR 54 – high emphasis crosswalks, pedestrian refuge areas, pedestrian signage and signal lights
2. Trinity Boulevard – pedestrian refuge area, signalized mid-block crossing light, signage, striping, area lighting
3. Robert Trent Jones Parkway - mid-block crossing signage and

striping

4. Keystone Road – potential pedestrian refuge area and mid-block crossing signal, high emphasis crosswalks, advance warning signage/striping
5. East Lake Road – high emphasis crosswalks and pedestrian signal lights

Amenities on the trail should consist of wayfinding signage, marked mile-points, and stationing for safety. Comfort stations with benches, trash receptacles, and drinking water will be provided at trailheads. Trailheads are anticipated to be located near the north limit of the trail on the Mitchell Ranch property south of SR 54 and within the Brooker Creek Preserve north of Keystone Road and west of the Duke Energy corridor. Maintenance for the trail will be handled through agreements among the involved entities which will likely include Pinellas County, Pasco County, Florida Department of Transportation (FDOT) and Duke Energy.

The Tri-County Trail will be designed and built to minimize the impact to protected wetlands and the need for environmental permitting and mitigation. Jurisdictional areas will be avoided to the greatest extent possible. Coordination with the governing agencies such as the Department of Environmental Protection (DEP) and the Southwest Florida Water Management District (SWFWMD) will be part of the final design process.

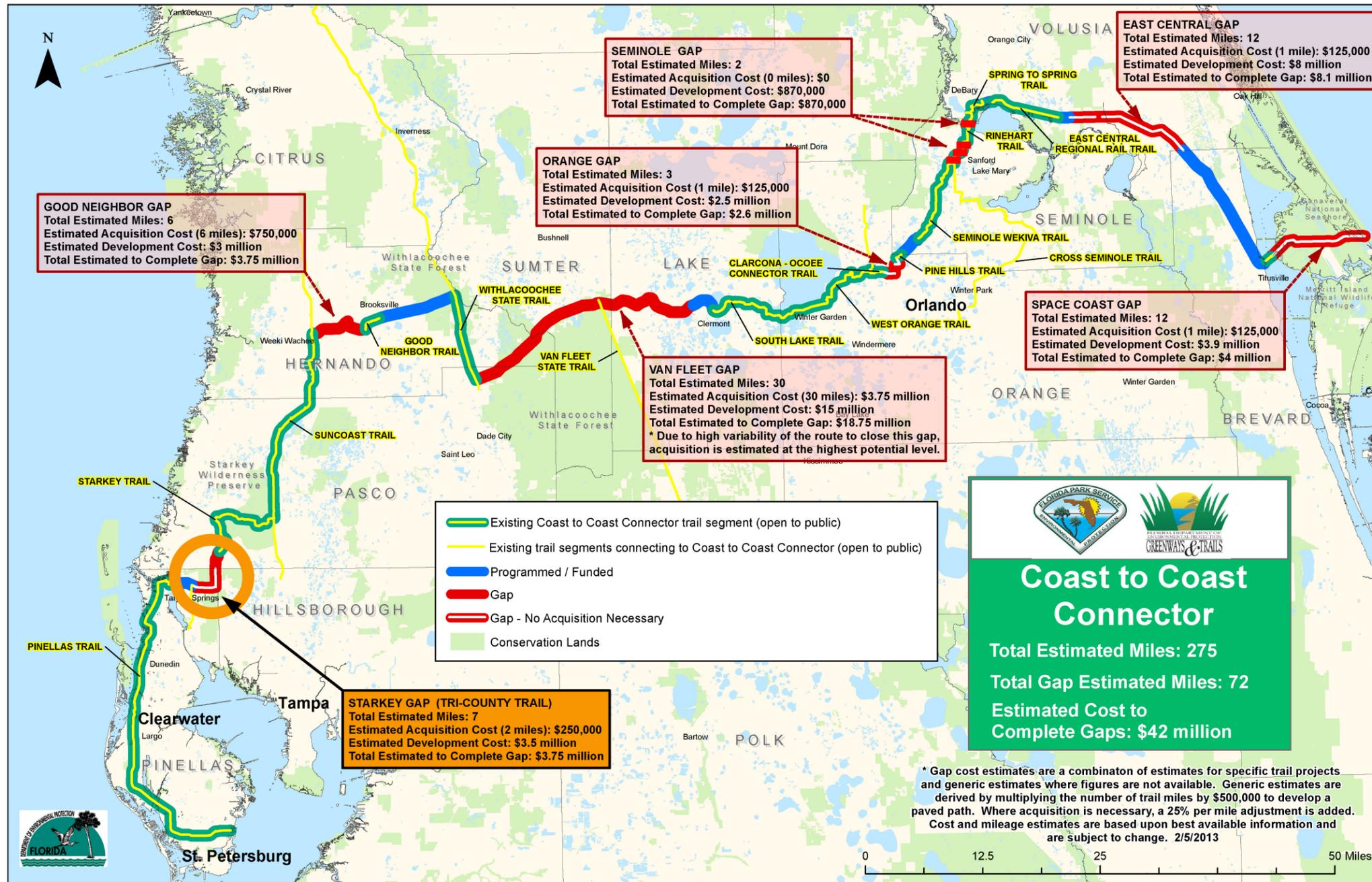
Many enthusiastic advocates of the proposed trail contributed input and support during the trail study. These contributions have been invaluable to the process of the trail's evolution. The Tri-County Trail will be an asset both locally and regionally as it fulfills the needs for multi-modal transportation, community connections, and recreation.



## CONTEXT

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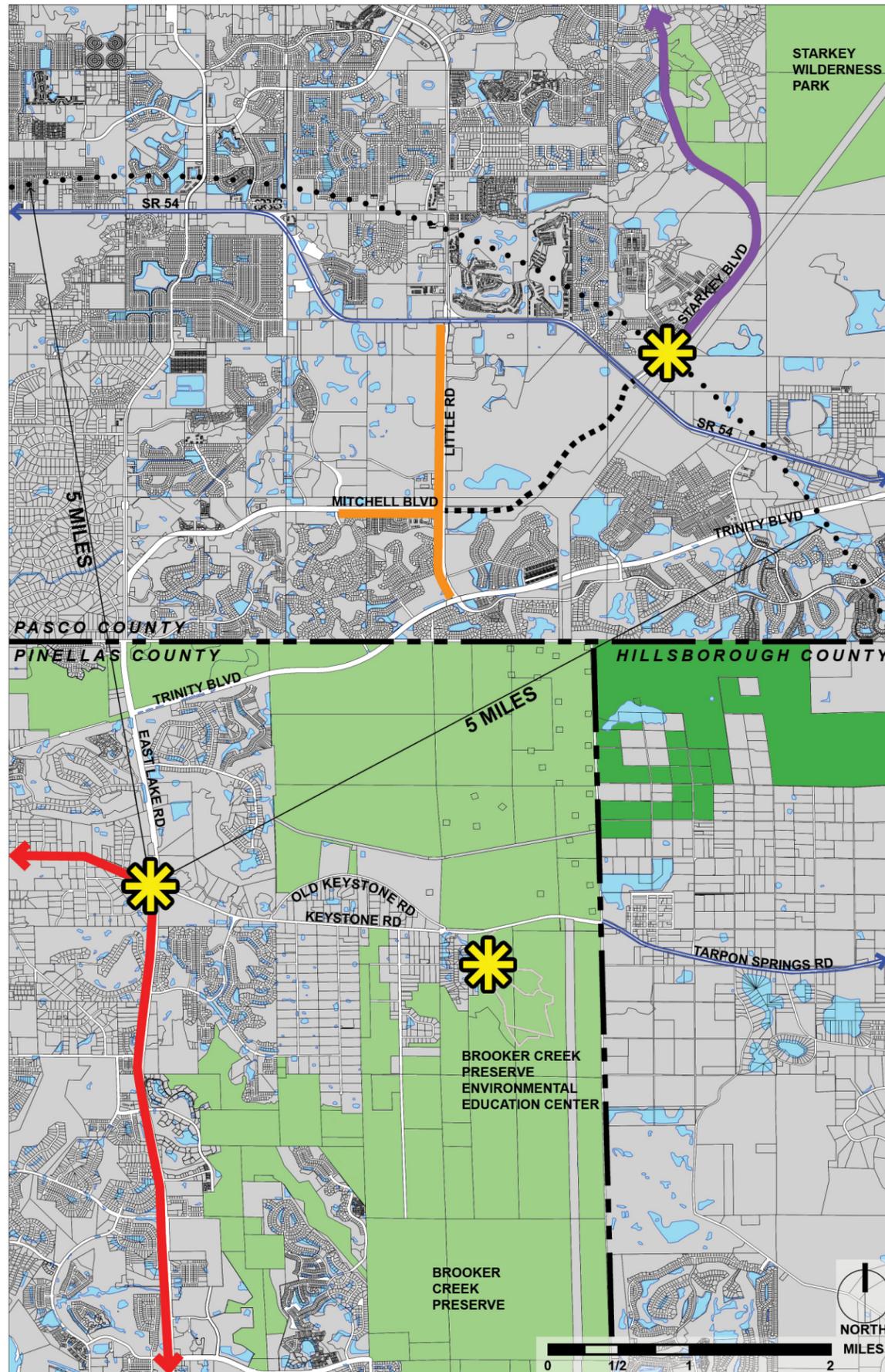




## REGIONAL & STATEWIDE CONTEXT

The Coast-to-Coast Connector Trail plan, prepared by the Office of Greenways and Trails identifies the Tri-County Trail segment as the “Starkey Gap”. Identification as one of the critical gaps in this proposed Coast-to-Coast Trail places the Tri-County Trail in the spotlight of the statewide trails system. This has advantages in terms of project prioritization and potential funding sources.

When completed, the Tri-County Trail link will contribute to a continuous 275-mile, multi-use trail stretching through Central Florida from St. Petersburg to Titusville, from the Gulf of Mexico to the Atlantic Ocean.



### STUDY CONTEXT AREA

-  EXISTING PARK / PRESERVE
-  LAKE DAN PRESERVE (HILLSBOROUGH COUNTY)
-  PINELLAS TRAIL
-  STARKEY BLVD TRAIL
-  EXISTING SHARED PATH
-  EXISTING ON-STREET BIKE LANE
-  FUTURE MITCHELL BLVD EXT
-  CONNECTION POINT

### STUDY CONTEXT/PROJECT DESCRIPTION

The Tri-County Trail Study investigated alternative alignments through south west Pasco County and northern Pinellas County including the Trinity community, Duke Energy corridor, the Brooker Creek Preserve land north of Keystone Road and the Keystone Road corridor from the Hillsborough County line to East Lake Road. The study area can be generally described as the area bordered by SR 54 on the north, the Duke Energy corridor and Hillsborough County on the east, Little Road on the west and Keystone Road on the south. See attached Study Area Map. The study area included consideration of:

- Utilization of the right-of-way of Keystone Road from East Lake Road to the Hillsborough County line as the east-west connection between the Pinellas Trail, the Brooker Creek Education Center and the existing bike lanes along Tarpon Springs Road in Hillsborough County.
- A potential route through the Brooker Creek Preserve north of Keystone Road which provides natural character assets for the trail and enhanced access to the preserve's educational facilities for the community.
- Potential use of the Duke Energy corridor.
- The utilization of a portion of a proposed roadway corridor (future Mitchell Boulevard Extension) through the Mitchell Ranch property south of SR 54.
- Potential linkage opportunities to adjacent community assets and facilities in both Pasco and Pinellas Counties.

Existing and planned bike/pedestrian facilities in the study area were assessed for their bearing on the recommendation of a preferred route. Important criterion for selecting a recommended route for the proposed trail were that it should be off of the road right-of-way as much as possible; provide access to community assets, it should be paved and 15' wide to the greatest extent possible.

## PLANNING & DESIGN CONSIDERATIONS

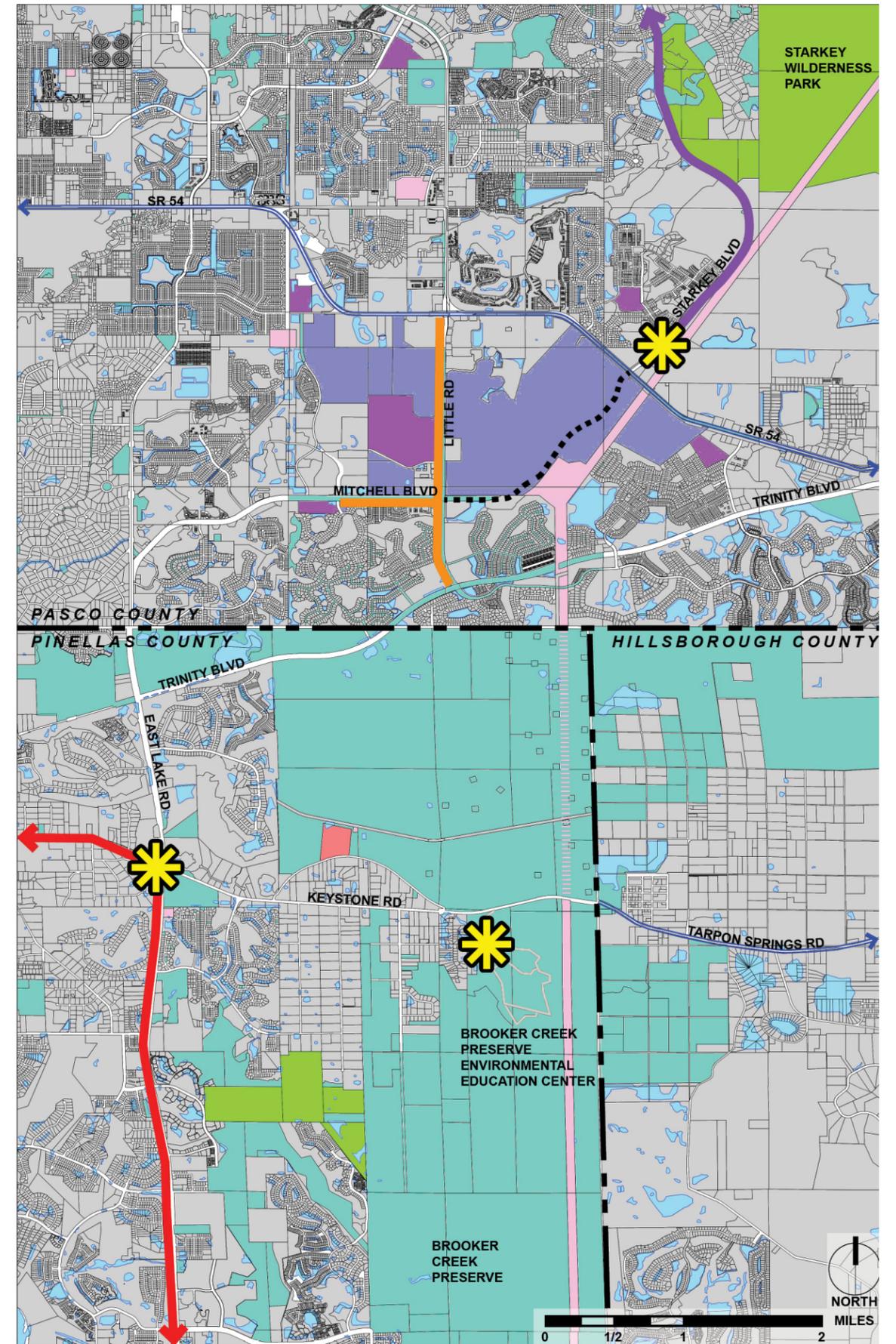
The feasibility and predicted success of route alternatives and associated costs were analyzed and evaluated by assessing the following considerations.

- Land – ownership, adjacent uses, compatibility issues
- Environmental – habitats, wetland, wildlife management
- Physical Constraints – geology, hydrology, accessibility
- Construction – materials, access, coordination, phasing
- Permitting – environmental, right-of-way, construction
- Utilities – coordination, avoid conflicts, easements, services
- Natural Assets – preserves, scenic qualities
- Safety – avoid vehicular traffic conflicts, surveillance
- Potential Trail amenities - furnishings, signage, landscaping
- Trail Access (community connection)
- Duke Energy Corridor: Electric Transmission Right-Of-Way Requirements For Shared Use Paths/Trails

### LAND OWNERSHIP

	MITCHELL PROPERTY
	SCHOOL
	DUKE ENERGY OWNED
	DUKE ENERGY EASEMENT
	S.W.F.W.M.D.
	UPPER PINELLAS YOUTH SPORTS ASSN
	COUNTY OWNED
	PINELLAS TRAIL
	STARKEY BLVD TRAIL
	EXISTING SHARED PATH
	EXISTING ON-STREET BIKE LANE
	FUTURE MITCHELL BLVD EXT
	CONNECTION POINT

SOURCE: PASCO (2012), PINELLAS (2011), & HILLSBOROUGH COUNTY (2012) GIS DATABASE





The Tri-County Trail spans two counties with proximity to a third county (Hillsborough County) and their inherent local communities' interests and jurisdictional differences. Therefore, the exploration of the route alternatives has been approached and presented herein from the perspective of each County. The Tri-County Trail holistically, will benefit from the distinct advantage of two highly engaged Metropolitan Planning Organizations (MPO), supportive trail advocates and engaged citizens who have cooperated to find the most advantageous route for the trail through both counties.

Criteria established at the on-set of the study were used to determine potential routes.

Criteria for the trail:

- 15' wide and off road to the greatest extent possible
- Make valuable connections to local communities
- The safest route with the least vehicular conflicts
- The most direct route that satisfies all other criteria
- The most attractive route with potential for varied trail experiences
- Avoid purchasing land by utilizing public or other managed lands where possible
- Avoid negative impacts to existing private property owners (i.e. Fox Hollow Golf Club) and residents.

Three potential routes were identified and explored. These will be described in this section beginning with the connection point in Pasco County at the north limit of the study area, proceeding through the Pasco-Pinellas County line to the connection points in Pinellas County.

## EXPLORATION OF ROUTE ALTERNATIVES



**1** Current terminus of the existing Starkey Boulevard Trail at Town Avenue where the proposed Tri-County Trail will connect. View looking north.



**2** View looking south at the intersection of Starkey Boulevard and SR 54. The proposed trail will need to cross SR 54 at this point.



**3** An existing Fox Hollow Golf Club service road located within the Duke Energy corridor.



**4** View looking south along the Duke Energy corridor at the Pasco County line.

## PASCO COUNTY

### ESTABLISHING THE CONNECTION POINTS

The proposed Tri-County Trail in Pasco County is to begin on Starkey Boulevard where it will connect to the existing Starkey Boulevard Trail. The Starkey Boulevard Trail ends on the north side of Town Avenue in the Longleaf community. There was initially discussion of beginning the Tri-County Trail further north, at Doc Brittle Road in hopes that it could be taken off Starkey Road sooner and utilize the Duke Energy corridor. See the two connection point symbols on the adjacent Pasco Route Alternates Map.

### ROUTE OPTIONS 1A AND 1B

Beginning at Doc Brittle Road and proceeding south through the Duke Energy corridor would have the trail proceeding across SR 54 through the Duke Energy corridor and hugging the east corridor boundary all the way to the Pasco/Pinellas County line. See Route Option 1B. After site visits and discussions with Duke Energy, it was determined that utilizing the portion of the Duke Energy corridor north of SR 54 was problematic due to excessively wet soils, ponding water, limited access space and conflict with utilities. The crossing of SR 54 would also be unsafe since there is no traffic signal there and an elevated pedestrian crossing could not be built due to conflict with the electrical transmissions lines. The connection point was relocated to the end of the Starkey Boulevard Trail at Town Avenue and the trail planned to proceed south on the east side of Starkey Boulevard. See Route Option 1A. This alignment can take advantage of the existing signalized intersection for a safer crossing of SR 54. In addition pedestrian improvements can be incorporated into the future construction of the Mitchell Boulevard Extension.

The Mitchell Ranch property south of SR 54 and the proposed Mitchell Boulevard Extension extending through this property to Little Road provides the opportunity for two additional route options. Route Option 1A, 2 and 3 all begin at SR 54 and proceed south on the east side of the Mitchell Boulevard Extension for approximately the first quarter mile.

### ROUTE OPTION 1

Option 1A leaves the future Mitchell Boulevard Extension alignment and proceeds through the undeveloped land paralleling an existing wetland and continues to the edge of the Duke Energy corridor. It then follows the corridor but on

the Mitchell property until the corridor expands. At this point the trail crosses the Duke Energy corridor to the east side and proceeds south in the corridor on the east edge as Option 1. This alignment was planned to use the corridor only where necessary. The Mitchell property owners have expressed approval of this alignment. Fox Hollow Golf Club operations will not be impacted by this route option.

### ROUTE OPTION 2

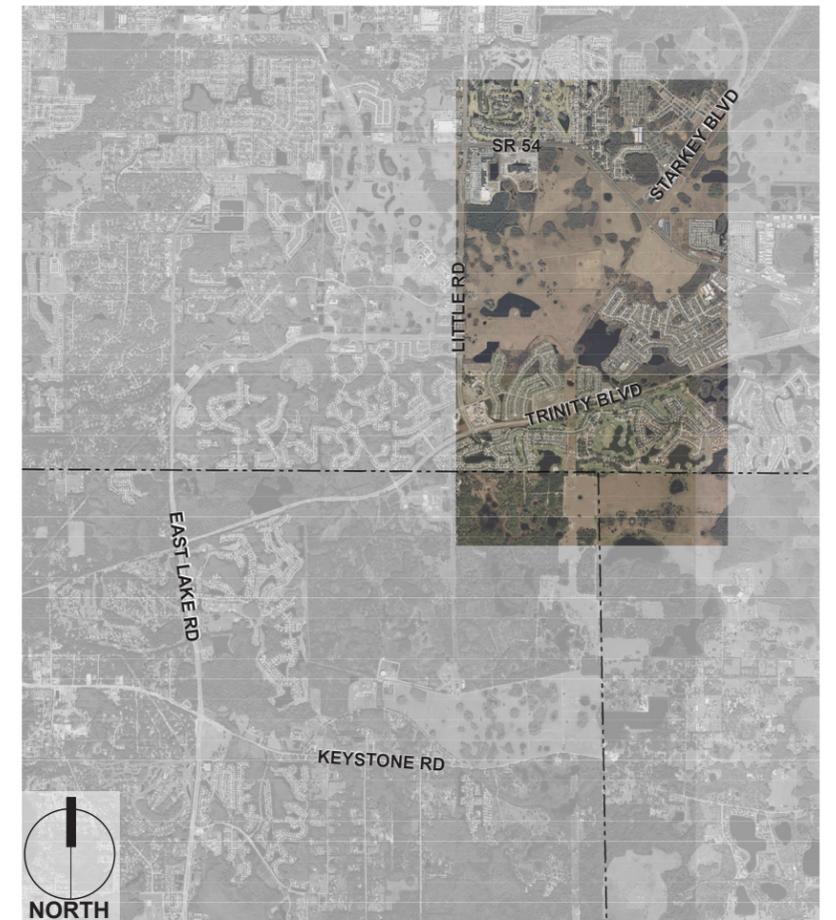
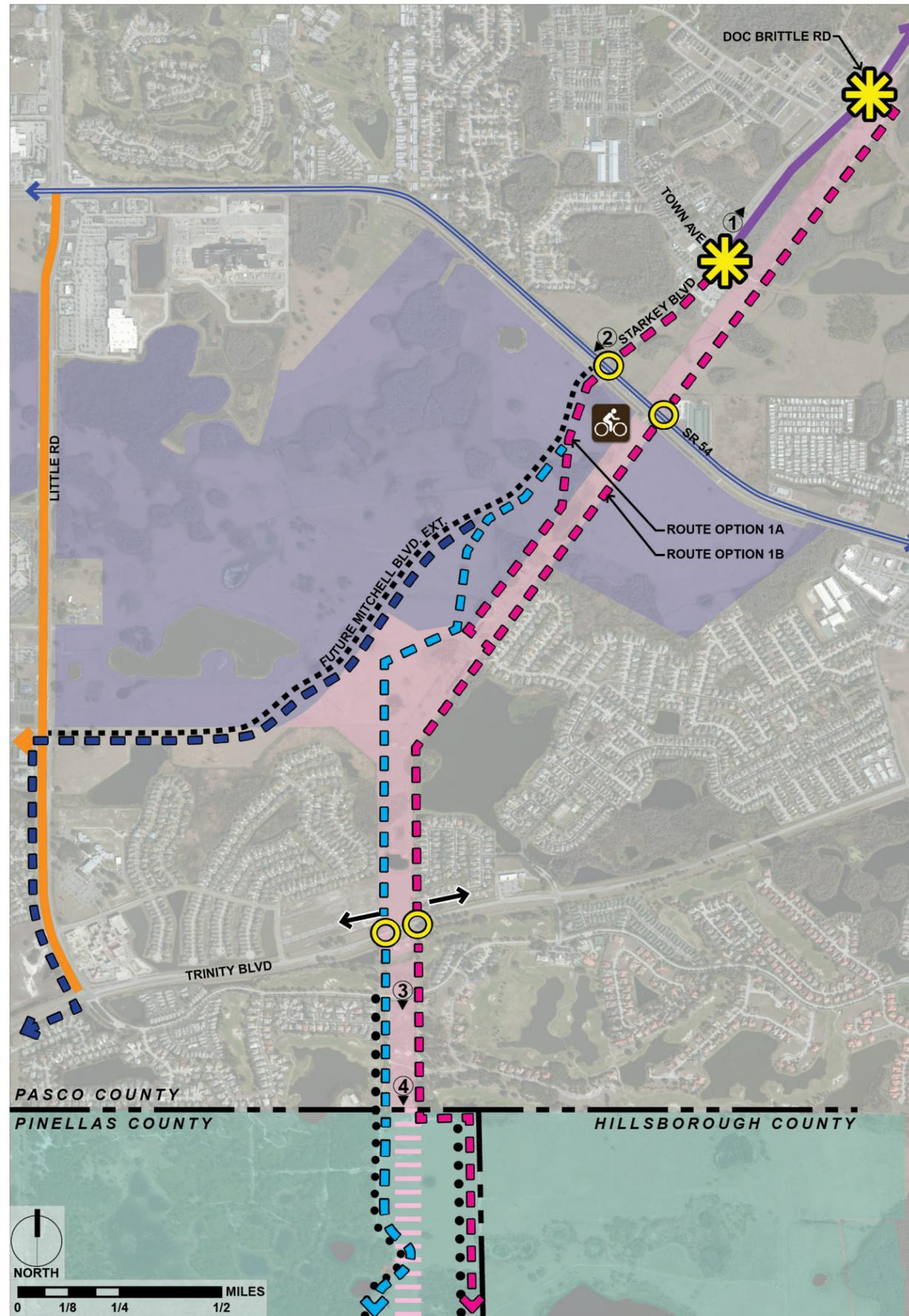
Route 2 follows the future road a little further before cutting across to the Duke Energy corridor to proceed due south on the corridors' west boundary. Routes 1 and 2 both utilize the Duke Energy corridor as the direct route south to the county line. Based on site conditions, access issues and adjacent land uses, the east edge of the corridor is more suitable for trail construction. Fox Hollow Golf Club operations will not be impacted by this route option.

### ROUTE OPTION 3

Route 3 would follow the full length of the future Mitchell Boulevard Extension corridor to connect with Little Road. On Little Road the trail would be incorporated with an existing shared path that connects to Trinity Boulevard. Option 3 would proceed west in the right-of-way of Trinity Boulevard to the north limit of the Pinellas County Brooker Creek Preserve. The trail would turn south through the Pinellas County Preserve land that abuts Trinity Boulevard. Entering the preserve through an existing driveway to a former Pinellas County facility, the trail would proceed south to Old Keystone Road and west on Keystone Road to East Lake Road and the Pinellas Trail connection point. See the Pinellas County section for further description of the trail through that area.

The issues that make Route Option 3 less desirable in Pasco are as follows:

1. The timing for the construction of the future Mitchell Boulevard Extension has not been determined.
2. There is insufficient right-of-way on Trinity Boulevard to add a separate trail so the trail becomes a side path.
3. Adding a trail or side path on Trinity Boulevard would require piping the storm water that is currently accommodated by drainage ditches paralleling the roadway.



## PINELLAS COUNTY

### ESTABLISHING THE CONNECTION POINTS

From the Pinellas County point of view, the proposed Tri-County Trail would likely be thought of as beginning at the trails' connection point with the Pinellas Trail on East Lake Road and Keystone Road. An additional connection point is desired at the Brooker Creek Environmental Education Center south of Keystone Road near the Hillsborough County line and the east limit of the study area. These two Pinellas connection points establish an important east-west orientation for part of the Tri-County Trail.

For continuity and clarity the Route Options are described here from north to south and east to west beginning at the entry of each route option into Pinellas County from Pasco County. The three route options all enter the Pinellas County Brooker Creek Preserve land from the north at the Pasco County line. In addition to the preserve land, the route options use Old Keystone and Keystone Road.

### GENERAL

Keystone Road is used by all three route options at the west end of the trail from the Woodfield community to East Lake Road. It has a 100' wide right-of-way with a two-lane rural road at the center. According to the Pinellas County Department of Environment and Infrastructure, there are no plans to widen the pavement on this road beyond what has occurred near the intersection of East Lake Road. The existing Keystone Road has drainage ditches on both sides of the right-of-way. There is room to place a trail in this right-of-way for the majority of the length of the roadway in the study area. However, this will require piping the storm water that currently runs off the road into the side ditches. Some sections of boardwalk may also be required where wetlands abut the right-of-way.

### ROUTE OPTION 1

Route Option 1 leaves the Duke Energy corridor immediately upon entry into Pinellas County and proceeds east to the Hillsborough County line. The Option 1 trail route then hugs the Hillsborough County line which provides for an easy future access connection to the Lake Dan area and Environmental Lands Acquisition and Protection Program (ELAPP) lands of Hillsborough County and places the trail in the middle of two managed wildlife preserves. This route option has the added benefit of the potential use of an established preserve road for approximately two-thirds of the preserve length. This road will need improvement but has the potential to serve a dual purpose for the trail and the preserve.

The east-west portion of Route Option 1 will stay within the Brooker Creek Preserve on the north side of Keystone Road, paralleling

the road right-of-way for approximately two-thirds of a mile. At this point it will cross Keystone Road and proceed west on the south side of Keystone Road continuing all the way to East Lake Road. The considerations for which side of the Keystone right-of-way to place the trail include looking at the number of times the trail would have to cross Keystone Road, the available space, the drainage considerations and the number of intersecting streets and driveways. The primary advantage of placing the trail on the south side of Keystone Road is that there is no space for a trail on the north side for approximately the first 1,000 feet where the existing paved road and a sidewalk abut a retaining wall at a stormwater pond.

The Route Option 1 crossing of Woodfield Road on the south side of Keystone will require special attention to the free flowing right turn lanes. These will need improvements such as signage and striping to make them safer for pedestrians and bikes to cross. There are three additional neighborhood streets, community entrances and individual driveways to cross on the south side of Keystone Road. The neighborhood streets would require signage to instruct trail users to stop at the intersecting streets.

### ROUTE OPTION 2

Route Option 2 enters the Brooker Creek Preserve from the west side of the Duke Energy corridor in Pasco County and follows the natural tree line south to an existing paved road. This route option follows the existing paved road as much as possible and curves through open spaces in order to add interest to the route. The difficulty with this alignment is that it encroaches in a more random way into some of the less disturbed areas of the preserve which are used for cattle grazing, well field pumps, and wildlife management. This route through the preserve was not favored by Pinellas County preserve managers.

When Route Option 2 meets Keystone Road it continues west for a short distance the same as Option 1. However, it stays on the north side of Keystone Road and continues beyond the mid-block crossing of Keystone Road that is necessary to connect the trail with the Brooker Creek Environmental Education Center entry. It then takes Old Keystone Road, continuing west to pass the East Lake Youth Sports Complex, and runs on the north or south side of Keystone Road. As described above in Option 1, there is no room to put a trail on the north side of Keystone Road for the last 1,000 feet of the route next to the stormwater pond at East Lake Road. Therefore trying to use the north side of Keystone Road would require an additional crossing of Keystone Road by trail users.

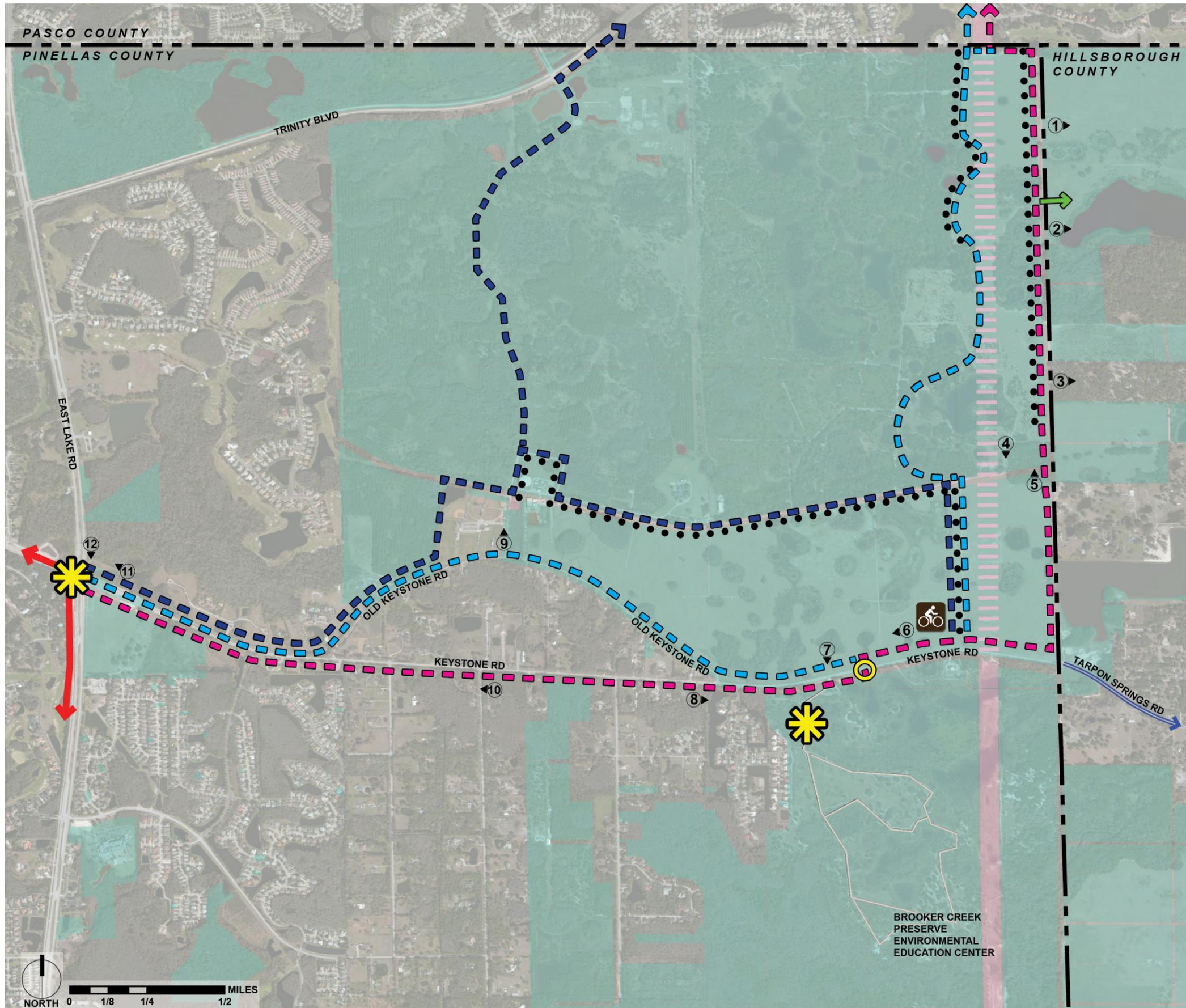
There are also two negative issues with the Keystone and Old

Keystone portion of this route option. First, although making a connection to recreation and sports fields is a positive attribute for a multi-use trail, in this case it is problematic due to the nature of the Old Keystone Road environment. The right-of-way is narrow and the area is excessively wet. There are deep roadside ditches and patrons of the sports complex park in the right-of-way. All of this limits the space for a trail, increases the cost and makes it less safe.

### ROUTE OPTION 3

Route Option 3 is envisioned through the western half of the Brooker Creek Preserve. It was thought that it could enter the preserve through a Pinellas County facility that is no longer in operation and proceed through what appeared to be more undisturbed or wild land than occurs on the east half of the preserve. We later found that the area is very much in use for Pinellas County municipal utilities and is not open for use. Comments from citizens at public involvement meetings also stated that there are equestrian trails near this vicinity and that bike trails would be in conflict with the current equestrian uses.

Option 3 explored the potential for the trail to use the existing east-west road that spans the southern portion of the preserve however, this was not favorably received by preserve management or County Utilities Departments with facilities in the area. The Keystone Road portion of Option 3 has the same issues as Option 2.



LOCATOR MAP

LEGEND

- DUKE ENERGY OWNED
- DUKE ENERGY EASEMENT
- PRESERVE LAND
- PINELLAS TRAIL
- EXISTING ON-STREET BIKE LANE
- ROUTE OPTION 1
- ROUTE OPTION 2
- ROUTE OPTION 3
- ROUTE ON EXISTING PAVED ROAD
- CONNECTION POINT
- POTENTIAL TRAIL HEAD
- MAJOR ROADWAY CROSSING
- FUTURE HILLS. CO. ELAPP LAND CONNECTION
- PICTURE LOCATION



**1** One of many cypress wetland areas that dot the landscape throughout the Hillsborough County ELAPP lands as well as in the Brooker Creek Preserve.



**2** View from proposed trail looking east at Lake Dan (part of the Hillsborough County ELAPP lands).



**3** Typical sign and fence separating Brooker Creek Preserve from the Hillsborough County ELAPP lands.



**4** Typical existing paved road that was used for accessing wells found throughout the Brooker Creek Preserve.



**5** Mature live oak stand that lies along the proposed trail route could provide shade.



**6** View looking west along the north side of Keystone Road within the Brooker Creek Preserve.



**7** View looking south at the entrance to the Brooker Creek Preserve Environmental Education Center.



**8** South side of Keystone Road looking east.



**9** View looking northwest that shows the entrance to the East Lake Sports Complex located on Old Keystone Road.



**10** View looking west on the south side of Keystone Road at the intersection of Ranch Road.

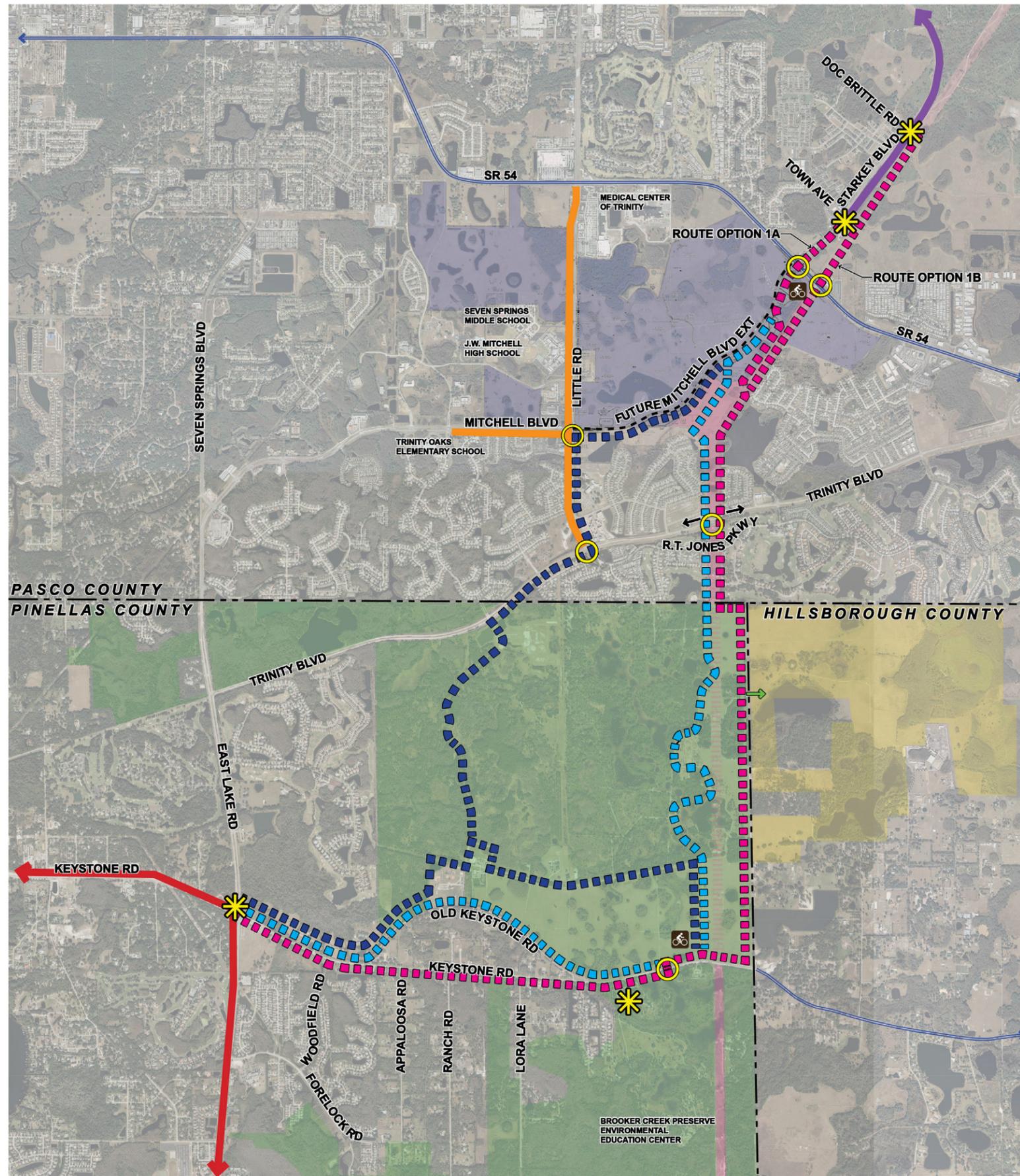


**11** View looking west along Keystone Road approaching the East Lake Road intersection. Trail would be forced to narrow at this point in order to make use of newly constructed sidepath.



**12** Intersection of Keystone Road and East Lake Road. View is looking south along East Lake Road.





## OVERALL COMPOSITE

The adjacent graphic shows the three different route options in context of the overall project study area. The map was a helpful tool for the public involvement phase and allowed the project team to discuss the various pros and cons of each option to the stakeholders and general public. The combination of the public involvement, site analysis, field observations, and stakeholder input helped direct the project team to the most appropriate route option for the Tri-County Trail.

### LEGEND

- BROOKER CREEK PRESERVE
- LAKE DAN PRESERVE
- MITCHELL PROPERTY
- DUKE ENERGY OWNED
- DUKE ENERGY EASEMENT
- PINELLAS TRAIL
- STARKEY BLVD TRAIL
- EXISTING SHARED PATH
- EXISTING ON-STREET BIKE LANE
- FUTURE MITCHELL BLVD EXT
- ROUTE OPTION 1
- ROUTE OPTION 2
- ROUTE OPTION 3
- 🚲 POTENTIAL TRAIL HEAD
- ✳️ CONNECTION POINT
- 🚲 MAJOR ROADWAY CROSSING
- ➡️ FUTURE NEIGHBORHOOD CONNECTION
- ➡️ FUTURE HILLS. CO. ELAPP LAND CONNECTION



## **PUBLIC INVOLVEMENT**

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## YOU ARE INVITED!

The Metropolitan Planning Organizations (MPOs) of Pasco and Pinellas Counties are holding a

JOINT PUBLIC INFORMATION WORKSHOP for:

### TRI-COUNTY TRAIL CONNECTION STUDY

The Tri-County Trail is a proposed Bicycle/Pedestrian Trail that will link the Pinellas Trail and the Brooker Creek Preserve with Pasco County's Starkey Boulevard/Starkey Wilderness Trail.

The WORKSHOP will be held at the

**BROOKER CREEK PRESERVE ENVIRONMENTAL EDUCATION CENTER**  
3940 Keystone Road  
Tarpon Springs, FL 34688

**April 18, 2013, 5:30 p.m. - 7:30 p.m.**

Anyone interested in this study is encouraged to attend the workshop and provide input, share information, and ask questions. This is the first of two workshops that will be held in conjunction with the project. A map of the trail study area is included with this notice. Representatives from the Pasco County MPO, the Pinellas County MPO and URS Corporation, Design and Engineering Consultants, will be in attendance to take comments, address concerns and help answer questions.

For more information contact:

**Manny Lajmiri**, Pasco MPO Project Manager, Ph. (727) 847-8140, [mlajmiri@pascocountyfl.net](mailto:mlajmiri@pascocountyfl.net)

**Susan Miller**, Pinellas MPO Project Manager, Ph. (727) 464-8200, [smiller@pinellascounty.org](mailto:smiller@pinellascounty.org)



Photos from public information workshop - April 2013 at the Brooker Creek Environmental Education Center



## YOU ARE INVITED!

The Metropolitan Planning Organizations (MPOs) of Pasco and Pinellas Counties are holding a

JOINT PUBLIC INFORMATION WORKSHOP for:

### TRI-COUNTY TRAIL CONNECTION STUDY

The Tri-County Trail is a proposed Bicycle/Pedestrian Trail that will link the Pinellas Trail and the Brooker Creek Preserve with Pasco County's Starkey Boulevard/Starkey Wilderness Trail.

The WORKSHOP will be held at the

**STARKEY ENVIRONMENTAL EDUCATION CENTER**  
Jay B. Starkey Wilderness Park  
10500 Wilderness Park Blvd.  
New Port Richey, FL 34655.

**July 18, 2013, 6:30 p.m. - 8:30 p.m.**

Anyone interested in this study is encouraged to attend the workshop and provide input, share information, and ask questions. This is the second of two workshops that are being held in conjunction with this project.

A map of the trail study area is included with this notice. Representatives from the Pasco County MPO, the Pinellas County MPO and URS Corporation, Design and Engineering Consultants, will be in attendance to take comments, address any issues, and help answer questions.

For more information or to view workshop maps, please visit the MPO websites ([www.pasco.net](http://www.pasco.net) or [www.pinellascounty.org/mpo](http://www.pinellascounty.org/mpo)) or contact:

**Manny Lajmiri**, Pasco MPO Project Manager, Ph. (727) 847-8140, [mlajmiri@pascocountyfl.net](mailto:mlajmiri@pascocountyfl.net)

**Susan Miller**, Pinellas MPO Project Manager, Ph. (727) 464-8200, [smiller@pinellascounty.org](mailto:smiller@pinellascounty.org)



Photos from public information workshop - July 2013 at the Starkey Environmental Education Center



Photos from public information workshop - April 2013 at the Brooker Creek Environmental Education Center

## PUBLIC WORKSHOPS

Participation by the general public, neighborhood groups, and stakeholders was facilitated by a series of public and small group meetings in both Pasco and Pinellas Counties held at strategic points throughout the planning process. Individual stakeholder meetings were also held for input in the initial information gathering and analysis stage and then continued throughout the process. Input from these meetings was incorporated into the preferred Tri-County Trail alignment and associated details on how the trail could be designed and constructed.

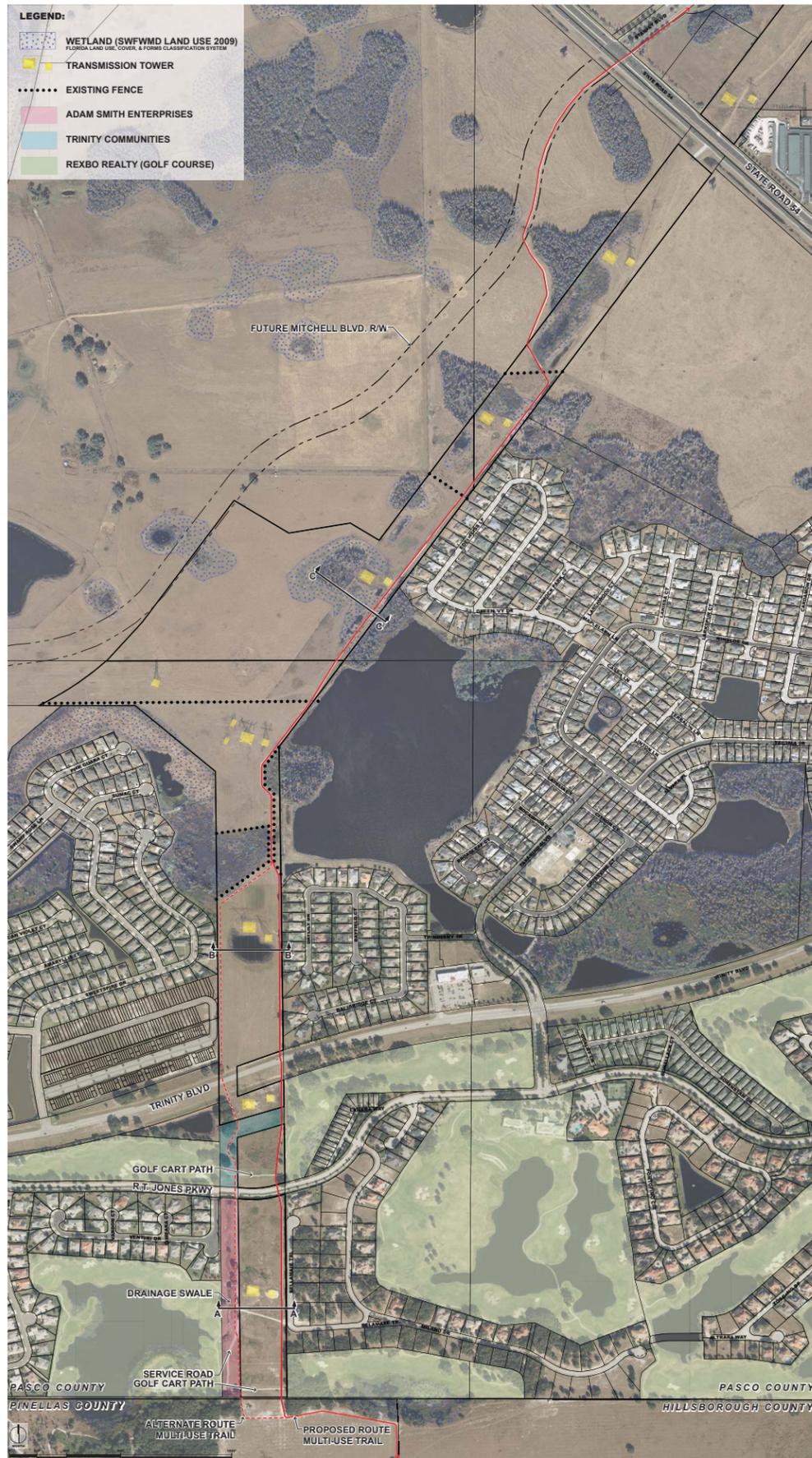
During the public involvement process it became clear that the proposed Tri-County Trail was well received by the public as well as stakeholders and agencies. Very few concerns regarding the proposed trail alignment were voiced during the public involvement process.

Participants in these meetings included the general public and representatives or members of the following stakeholders/groups/agencies who all expressed their support for the proposed route:

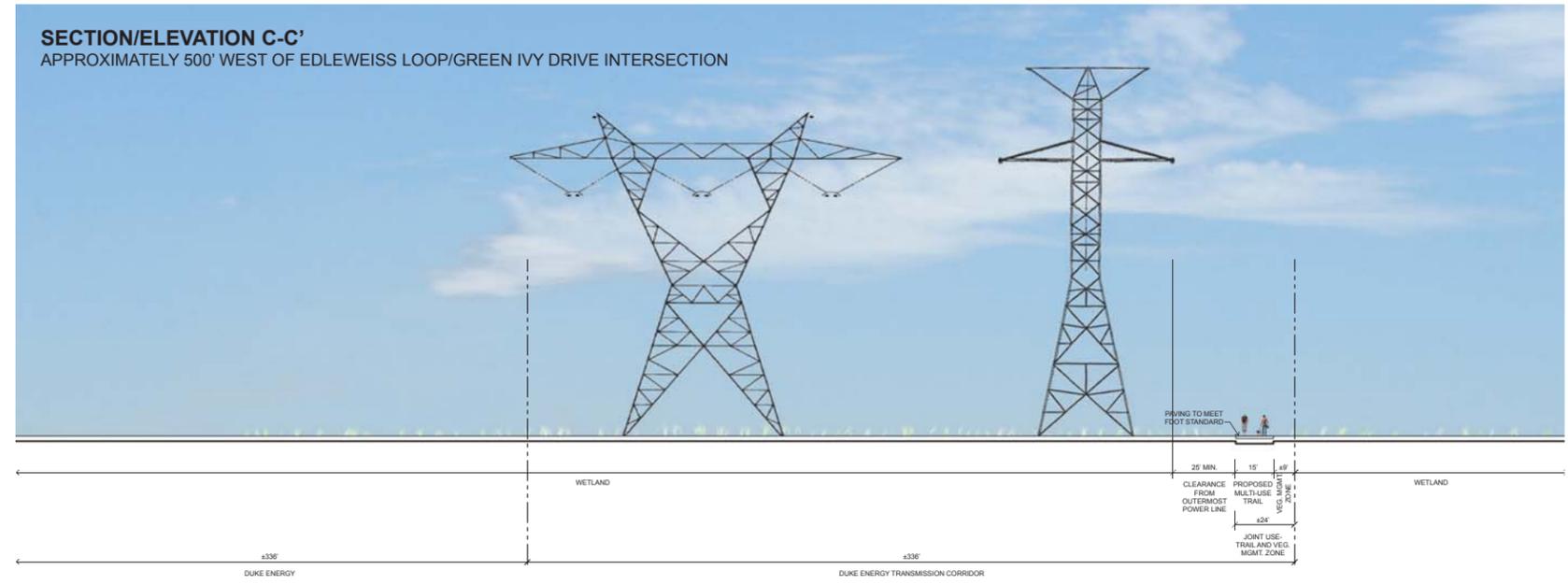
- Pasco County Metropolitan Planning Organization
- Pinellas County Metropolitan Planning Organization
- Hillsborough County Metropolitan Planning Organization
- Pasco County Bicycle and Pedestrian Advisory Committee
- Pinellas County Bicycle Advisory Committee
- Hillsborough County Bicycle and Pedestrian Advisory Committee
- Pasco County Parks and Recreation
- Pinellas County Parks and Conservation Resources
- Hillsborough County Parks and Recreation
- Pasco County Engineering
- Pasco County Tourist Development
- Pasco County Planning and Development
- Friends of Brooker Creek Preserve
- Pinellas Trails, Inc.
- Duke Energy
- Mitchell Property Development
- Council of North County Neighborhoods, Inc.



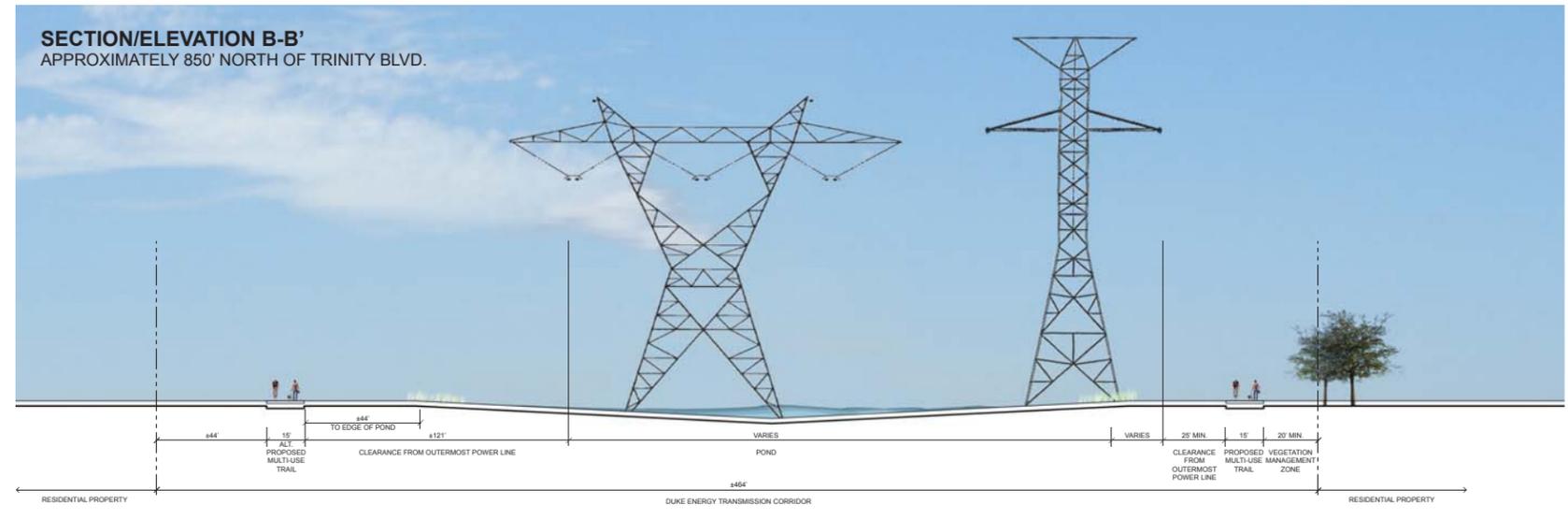
Photos from public information workshop - July 2013 at the Starkey Environmental Education Center



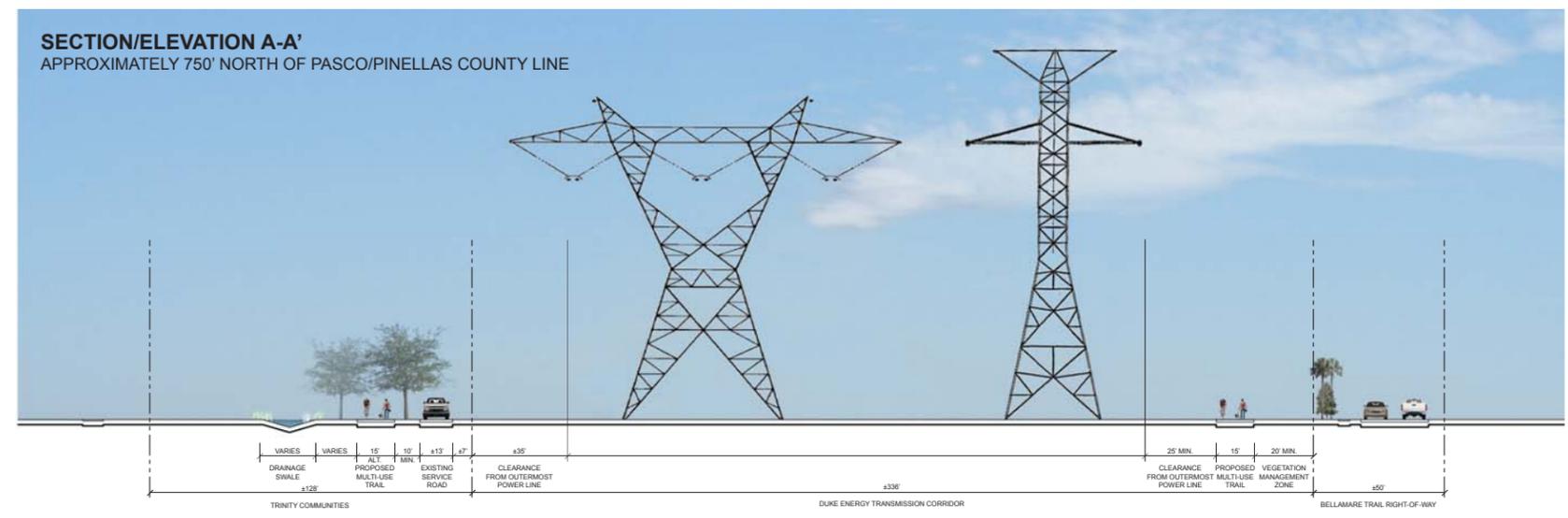
**SECTION/ELEVATION C-C'**  
APPROXIMATELY 500' WEST OF EDLEWEISS LOOP/GREEN IVY DRIVE INTERSECTION



**SECTION/ELEVATION B-B'**  
APPROXIMATELY 850' NORTH OF TRINITY BLVD.



**SECTION/ELEVATION A-A'**  
APPROXIMATELY 750' NORTH OF PASCO/PINELLAS COUNTY LINE





## STAKEHOLDER MEETINGS

There were also a series of meetings and site visits conducted with Duke Energy and Mitchell Property Development regarding the potential route of the Tri-County Trail. Various route options were studied other than using the Duke Energy corridor, but the overall analysis has revealed that the most appropriate route would be a co-location of the trail within the Duke Energy corridor and through the Mitchell Property. During a September 2013 meeting, both Duke Energy and Mitchell Property Development noted that they looked forward to partnering with the Pasco County MPO for the planning and development of this important regional and state trail connection.

Duke Energy expressed a willingness to help keep the costs of co-locating the trail in the power corridor down and noted that there will be requirements for emergency servicing and routine maintenance that must be acknowledged and planned for as part of trail alignment and construction.



Duke Energy is currently finalizing system-wide “master agreement” with requirements for Shared Use Paths/ Trails which will most likely serve as a basis for the design, construction, maintenance and use of the Tri-County Trail within the Duke Energy corridor. Mitchell Property Development stated they are happy to see the trail being done and that it would be an amenity for the Mitchell Property and expressed a desire to be kept fully updated on the trail plans for coordination purposes of the Mitchell Property development.

Graphics on the facing page were used to explore route options within the Duke Energy and Mitchell Properties. There were many factors that influenced the placement of the various route options from operation and maintenance concerns all the way to environmental challenges. All of these concerns and challenges were addressed during the stakeholder meetings with Duke Energy and Mitchell Properties. It was understood that Duke Energy will still require detailed engineering plans to properly evaluate the proposed route and ensure that there will be no conflicts with their facilities and operations.

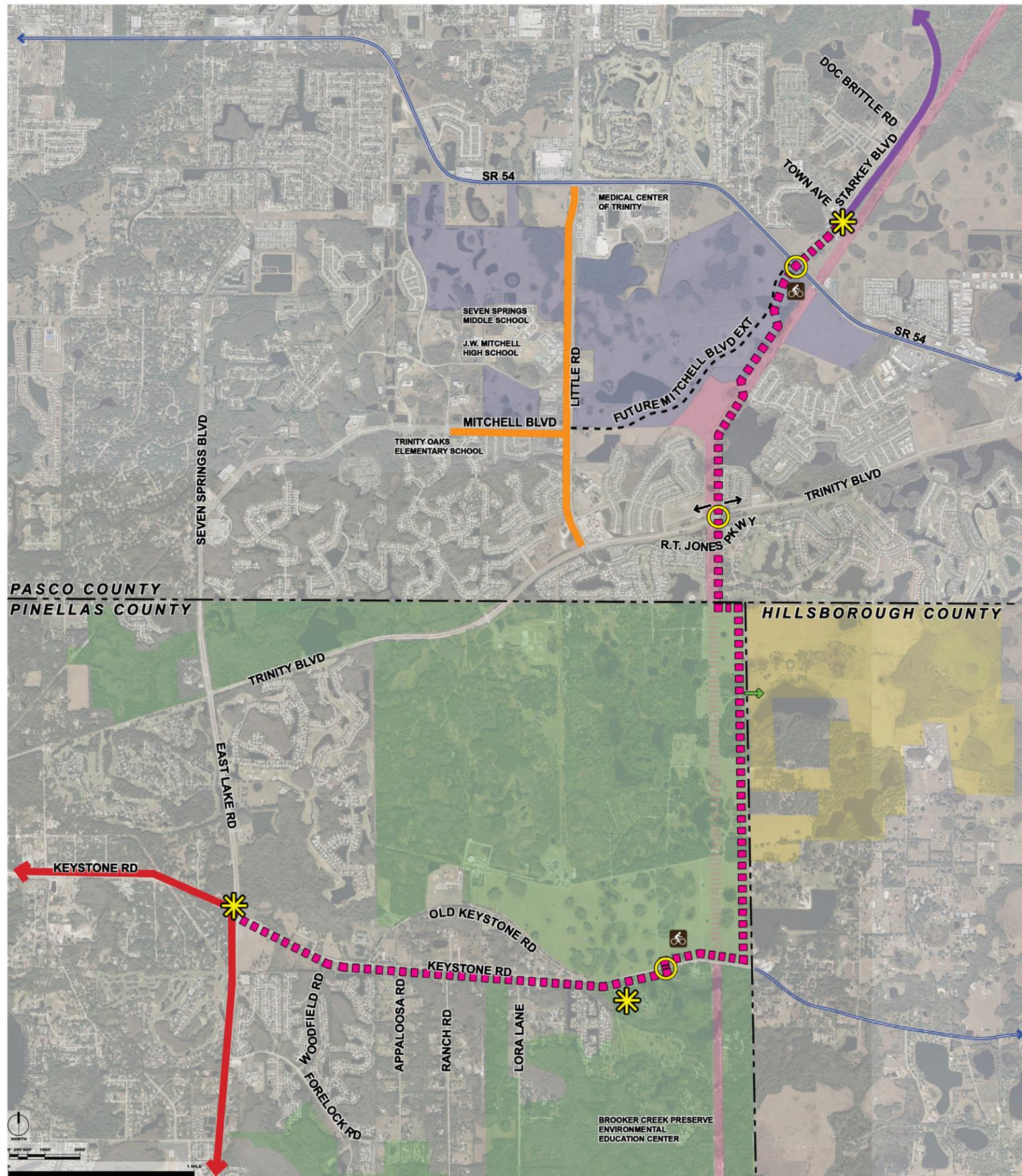
Photos of the on-site meeting with Duke Energy regarding the potential use of the power line corridor in July 2013.



## RECOMMENDATIONS

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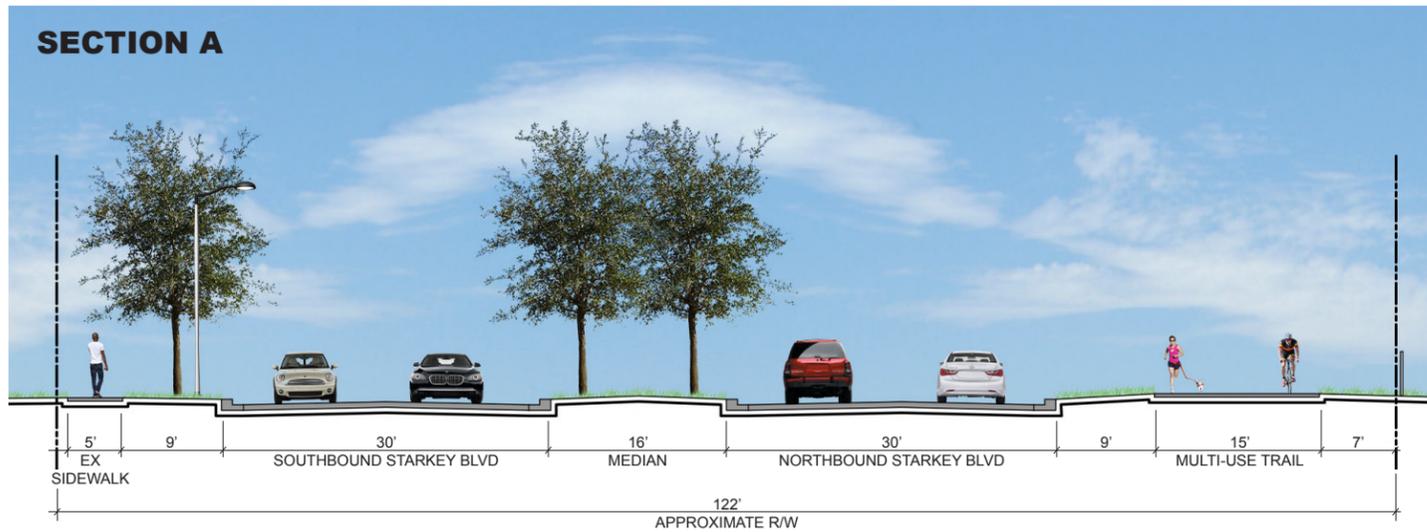


## RECOMMENDED ROUTE

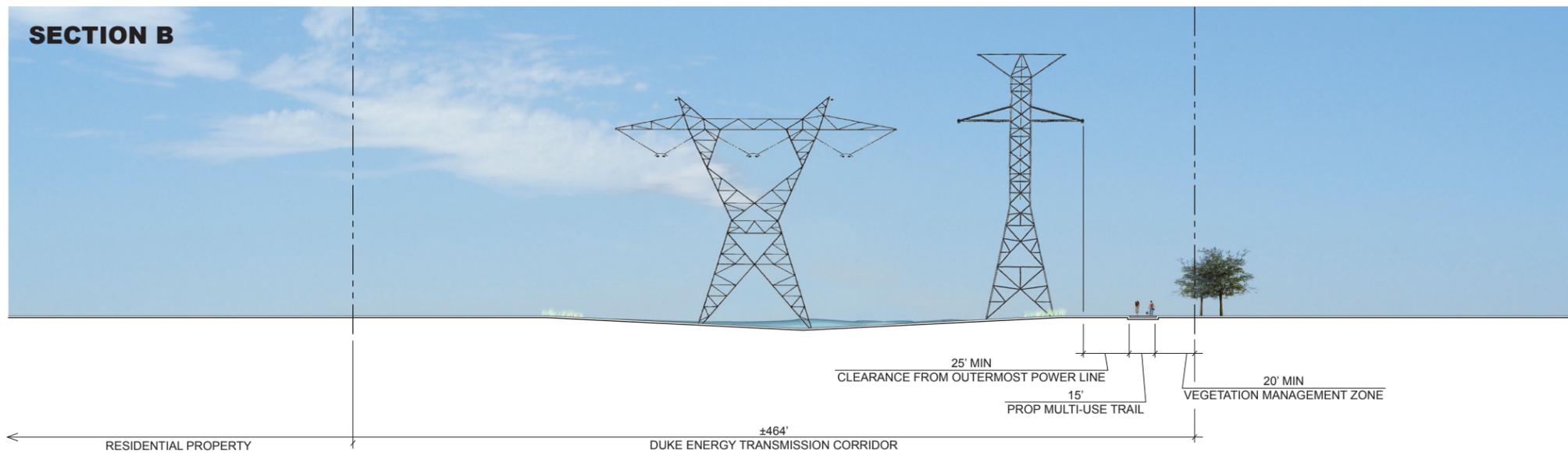
Based upon site analysis, field observations, public involvement sessions and stakeholder meetings a preferred route was determined. The route stands out as preferred for the following points:

- Offers the greatest potential for a trail away from motorized traffic (through Duke Energy corridor & Brooker Creek preserve) where the trail can be 15' wide and the safest in terms of traffic conflict avoidance.
- There are other trails through power corridors in the region (precedents for co-location) and this would seem to be a compatible use of corridor land to benefit the community.
- Has the least conflicts with other uses of managed preserve land on the preserve land north of Keystone Road. As such, it is preferred by Brooker Creek Preserve management staff and Pinellas County.
- Provides opportunity for varied trail character as it would travel through different habitats in the Brooker Creek preserve north of Keystone Road, therefore raises the quality of the trail environment and trail desirability.
- Connects to the Hillsborough ELAPP land – Lake Dan Preserve where future recreation will be developed.
- On the south side of Keystone Road at East Lake Road (for the 1,000' or so) there is space in the right-of-way for the trail. On the north side there is only a narrow sidewalk and no place for a trail.
- Avoids conflicts with equestrian trails within preserve and along Old Keystone Road.
- Avoids conflicts with active park's traffic and use of Old Keystone Road road shoulder for parking by the East Lake Youth Sports Complex users.
- Provides a highly visible easily watched extension of the Pinellas Trail.
- Limits the use of the Duke Energy corridor to only where needed.
- Connects to the Brooker Creek Preserve and Environmental Education Center.
- Allows for the location of two trailheads in desirable locations.

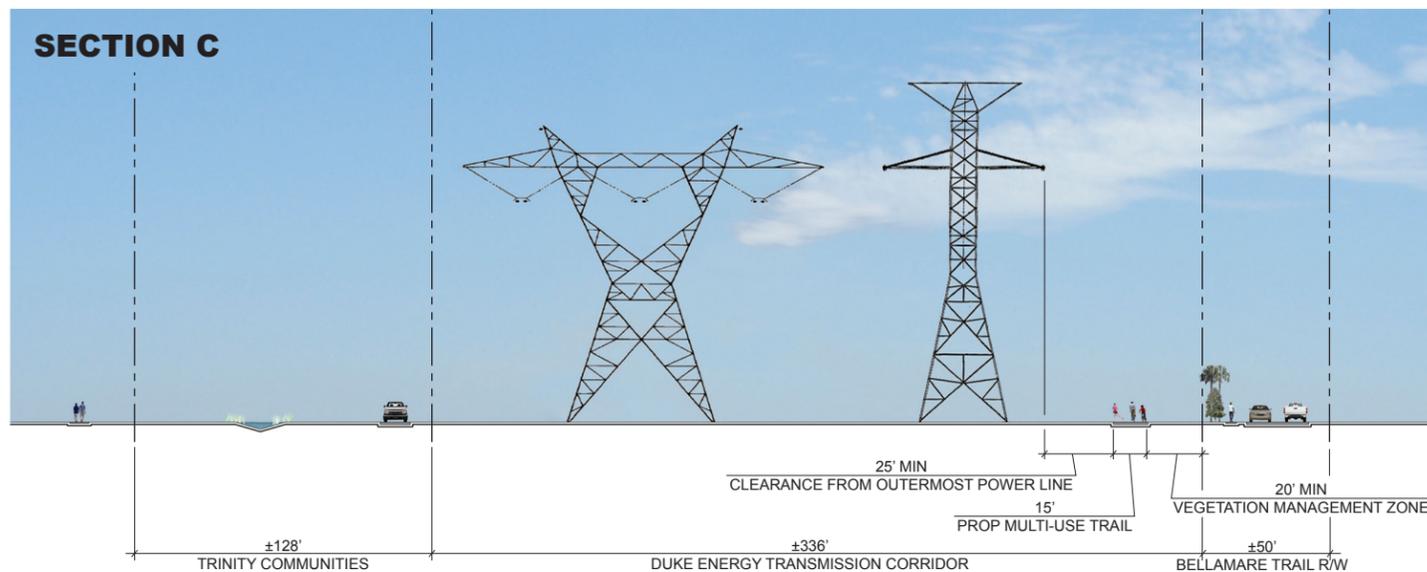
**SECTION A**



**SECTION B**



**SECTION C**



**PASCO COUNTY**

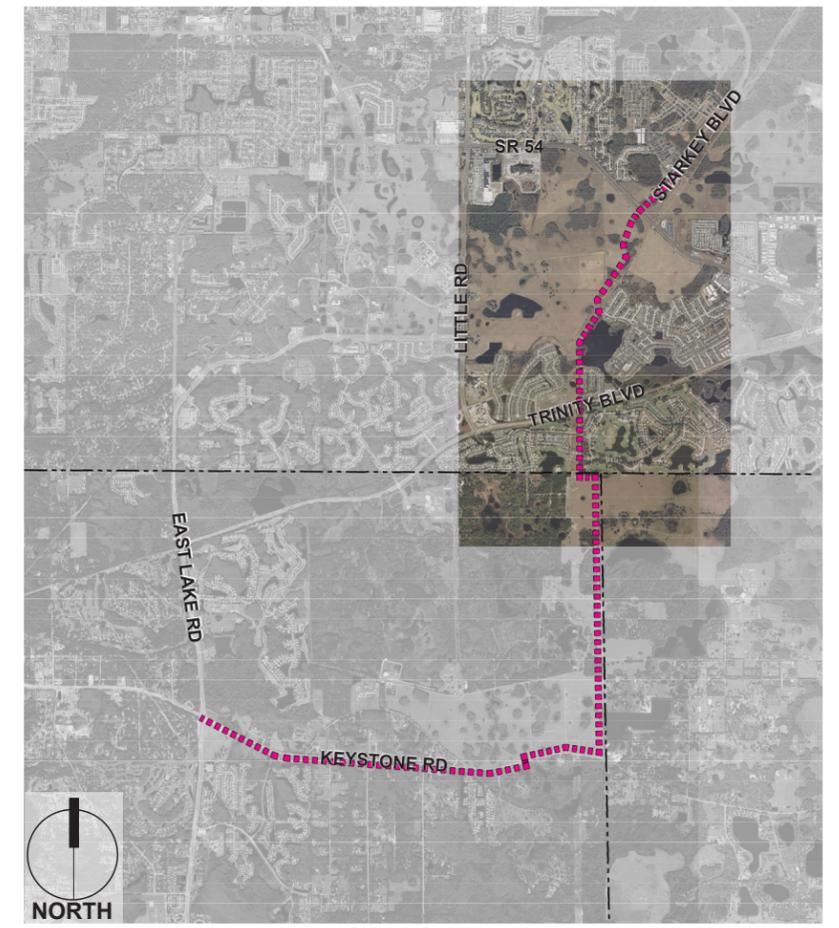
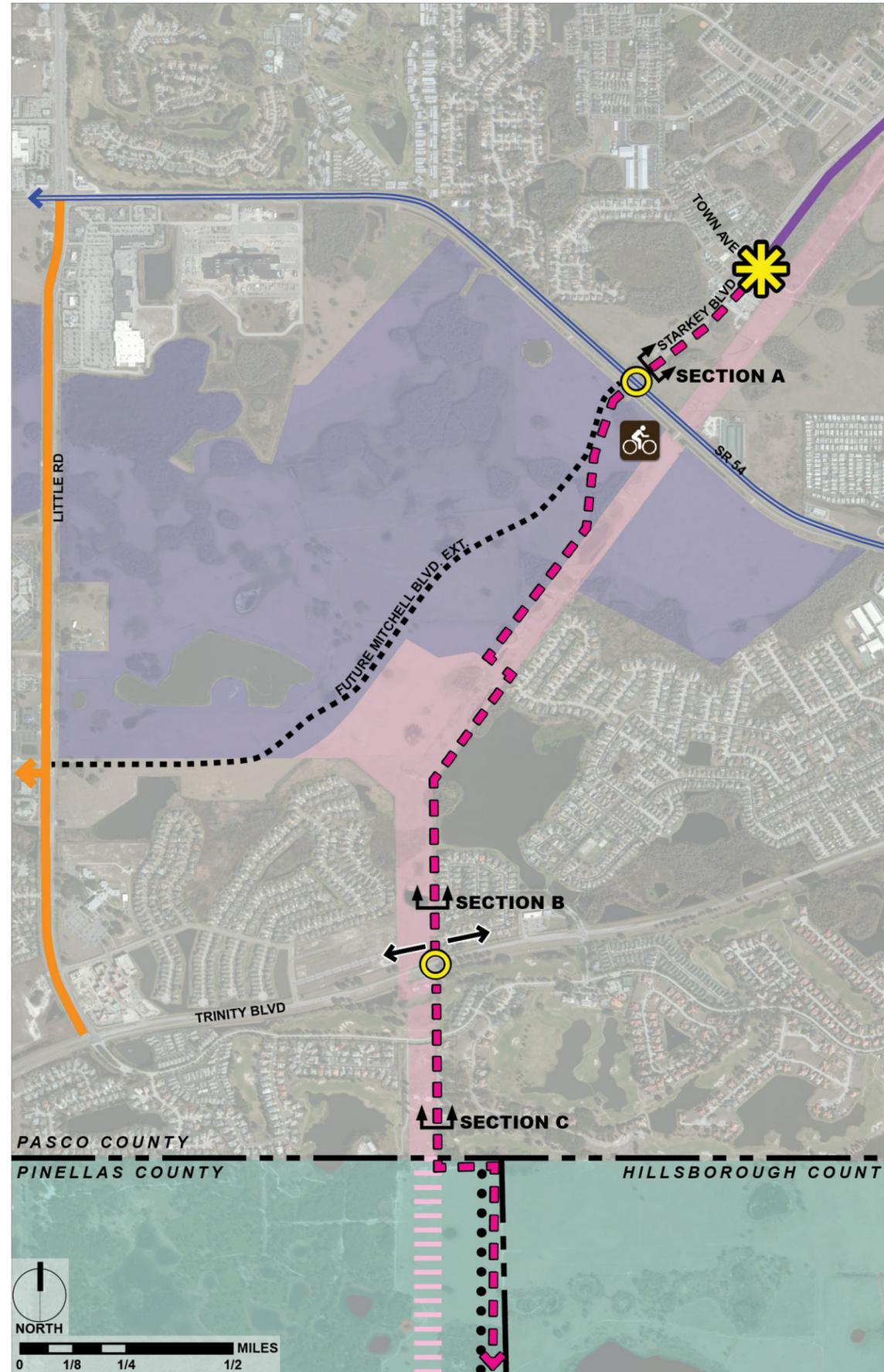
The trail would begin where the Starkey Boulevard/ Wilderness Park Trail ends on the east side of Starkey Boulevard at Town Avenue as shown by the yellow connection point symbol on the adjacent graphic. The existing 6' wide concrete sidewalk along the east side of Starkey Boulevard would be removed and replaced with a minimum 10' wide trail that would extend south to the intersection with SR 54. Due to the fact that there is already an existing traffic light at SR 54 and Starkey Boulevard a trail crossing at this intersection would provide the best location for a crossing of SR 54. Additional pedestrian signals and high emphasis crosswalks should be added to facilitate the trail crossing at this intersection. According to Pasco County, it is anticipated that turn lanes will be added to this intersection, but crossing SR 54 in this location seemed to be the safest alternative.

Once the trail crosses SR 54 it will follow the natural grade and be 15' in width and will be located within the right of way of the future Mitchell Boulevard Extension on the east side. The placement of a potential trail head that would have a small amount of parking could be located between the Duke Energy corridor and the future Mitchell Boulevard Extension just south of SR 54. This would be highly visible from SR 54. The trail would follow along the east side of the future Mitchell Boulevard Extension for approximately 1,000' to where it would head south along the west side of an existing wetland/cypress head to the edge of the Mitchell Property. This allows for maximum flexibility for potential future development within the Mitchell Property. The trail would stay on the Mitchell property as much as possible to reduce the impacts within the Duke Energy corridor.

When the trail enters the Duke Energy corridor it would continue to follow the natural grade and be 15' in width and immediately cross over to the eastern edge of the corridor taking care to be clear of any of the power structures. There are many considerations with co-locating the trail within the Duke Energy corridor and all of Duke Energy's trail guidelines will be followed. Duke Energy's trail guidelines are included in the appendix section of this document as a reference. Following the eastern edge of the property will minimize potential conflicts with Duke Energy operations and maintenance and would adhere to requested setbacks as shown in the adjacent sections. There may be areas where Duke Energy maintenance

vehicles will need to use the trail and those trail portions should be designed to accommodate the required loads of the Duke Energy vehicles. It is also understood that Duke Energy may close the trail without advance notice to facilitate repairs or other emergency operations. This will be spelled out in the Master Agreement to be provided by Duke Energy.

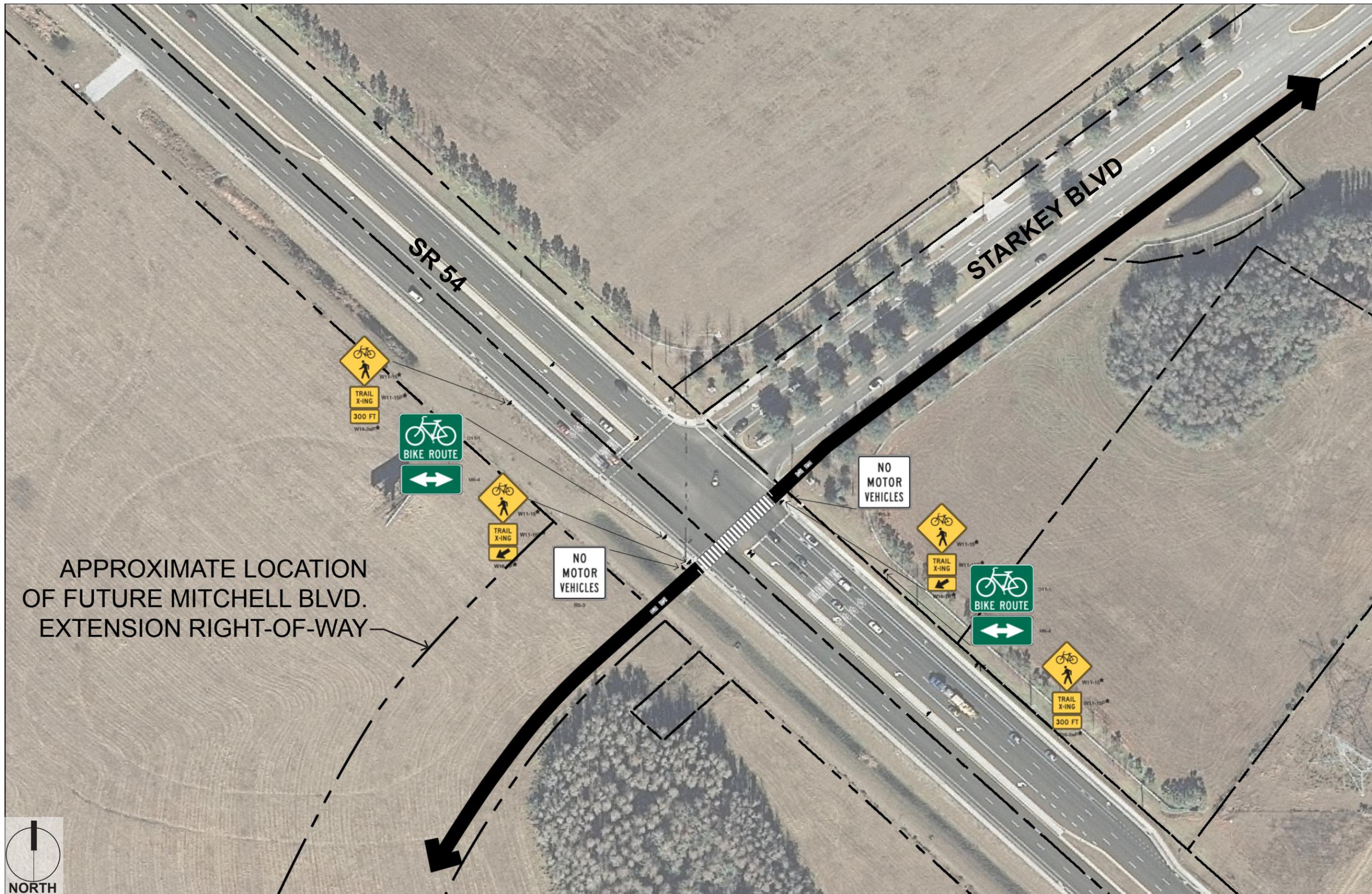
The trail will follow the eastern edge of the property until it reaches Trinity Boulevard. At that point there will need to be a mid-block crossing of the trail, as there is currently no signal or crossing at this location. Trinity Boulevard is currently a 2 lane undivided section with plans to eventually widen to a 4 lane divided section. Plans for both intersection conditions have been addressed in the following pages and both call for pedestrian signals and high emphasis crosswalks to facilitate the trail crossing at this location. Once the trail crosses Trinity Boulevard it should remain on the eastern edge of the Duke Energy corridor to the Pinellas County line. There are a few minor crossings, such as Robert Trent Jones Parkway, a sidewalk, a golf maintenance road and a golf cart path, but those can be safely negotiated with the addition of pavement markings and advance signage.



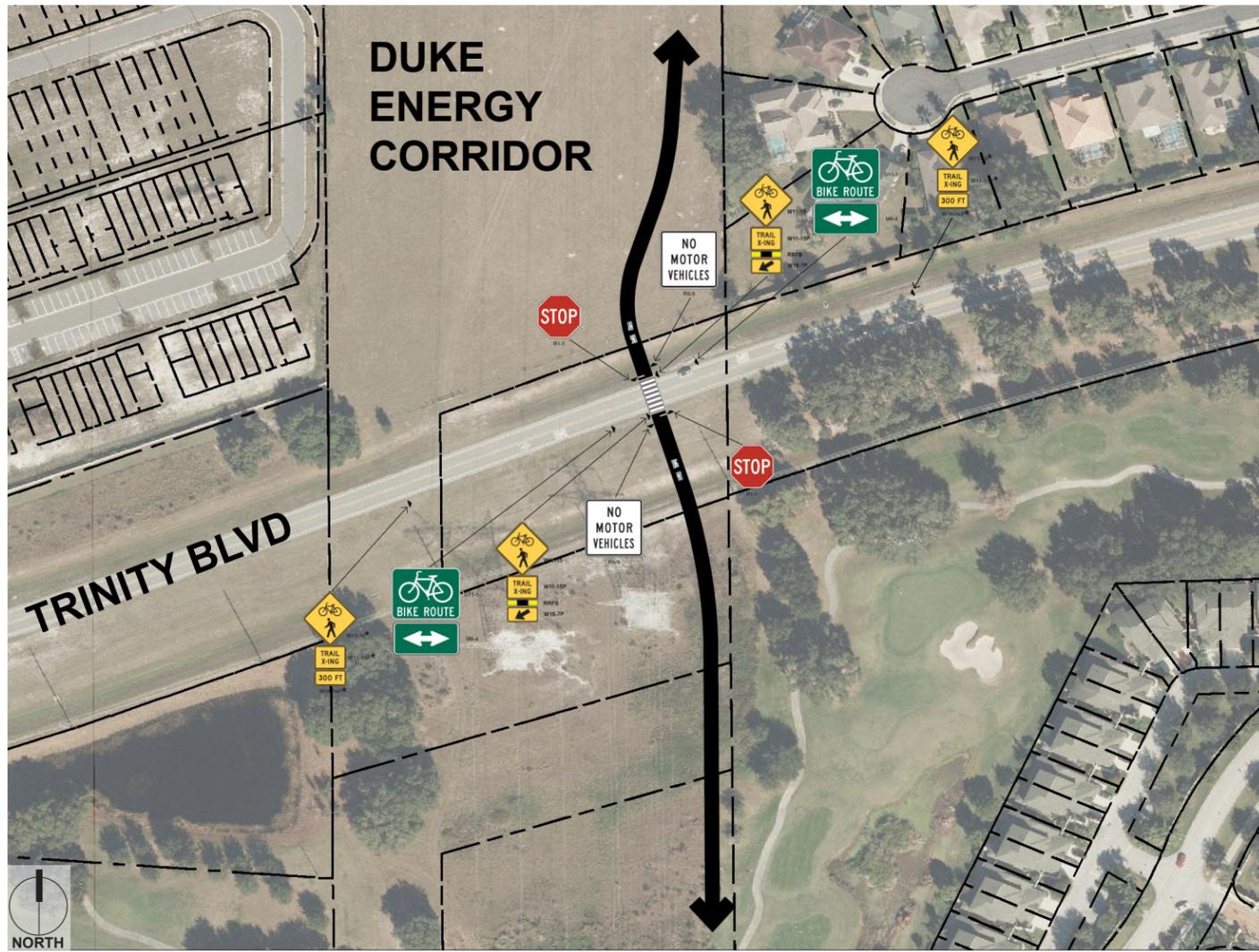
LOCATOR MAP

LEGEND

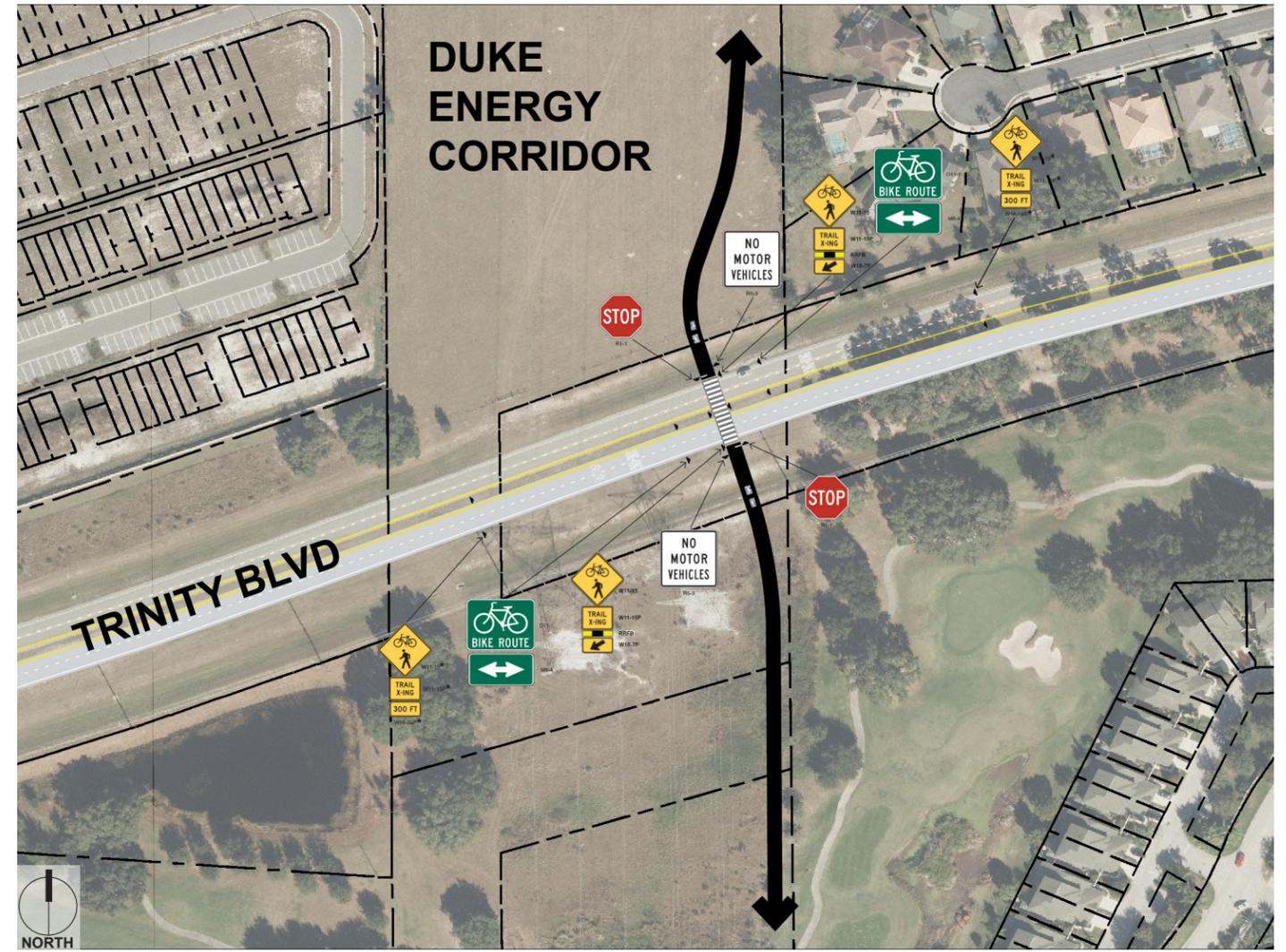
- DUKE ENERGY OWNED
- DUKE ENERGY EASEMENT
- PRESERVE LAND
- MITCHELL PROPERTY
- STARKEY BLVD TRAIL
- EXISTING SHARED PATH
- EXISTING ON-STREET BIKE LANE
- FUTURE MITCHELL BLVD EXT
- RECOMMENDED ROUTE
- ROUTE ON EXISTING PAVED ROAD IN PRESERVE
- CONNECTION POINT
- 🚲 POTENTIAL TRAIL HEAD
- MAJOR ROADWAY CROSSING
- FUTURE NEIGHBORHOOD CONNECTION



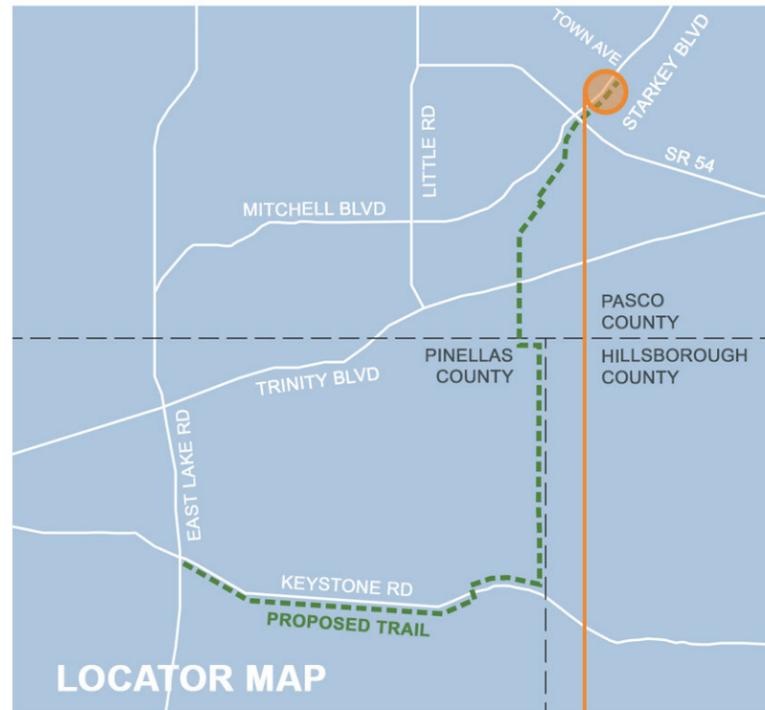
**TRAIL CROSSING SAFETY IMPROVEMENTS PROPOSED AT SR 54 AND STARKEY BOULEVARD**



TRINITY BLVD PROPOSED TRAIL CROSSING (FOR EXISTING 2-LANE ROAD)



TRINITY BLVD PROPOSED TRAIL CROSSING (FOR FUTURE 4-LANE ROAD)



LOCATOR MAP



EXISTING

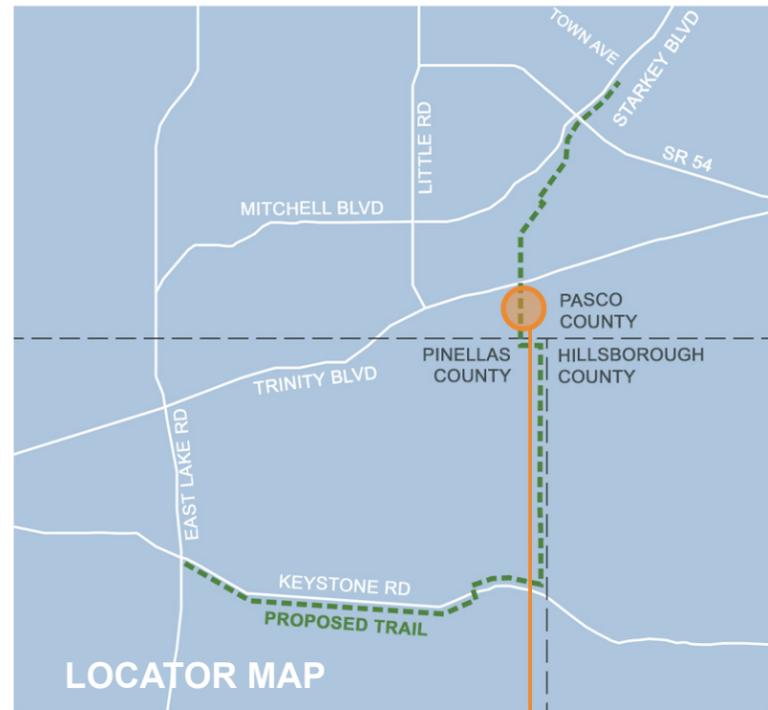


PROPOSED

MINIMUM 3' OFFSET FROM CURB

12' MULTI-USE TRAIL

# STARKEY BOULEVARD - LONGLEAF COMMUNITY



MINIMUM 25' OFFSET FROM TOWERS

15' MULTI-USE TRAIL

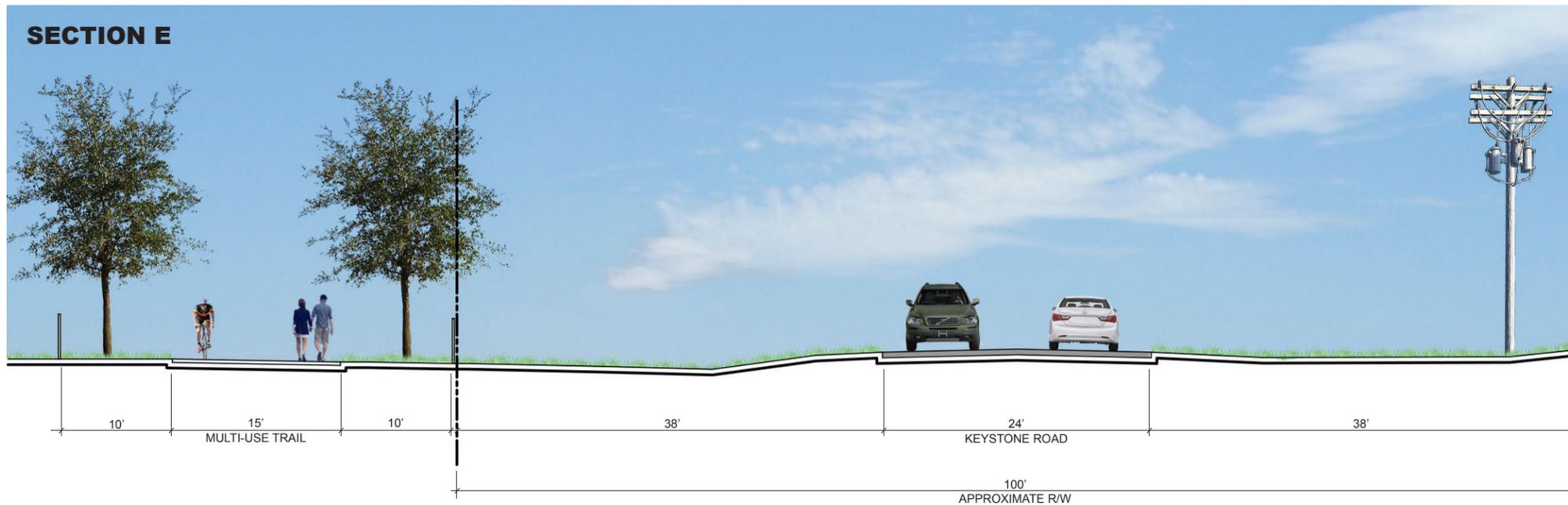
20' OFFSET FROM PROPERTY LINE

# DUKE ENERGY CORRIDOR

**SECTION D**



**SECTION E**

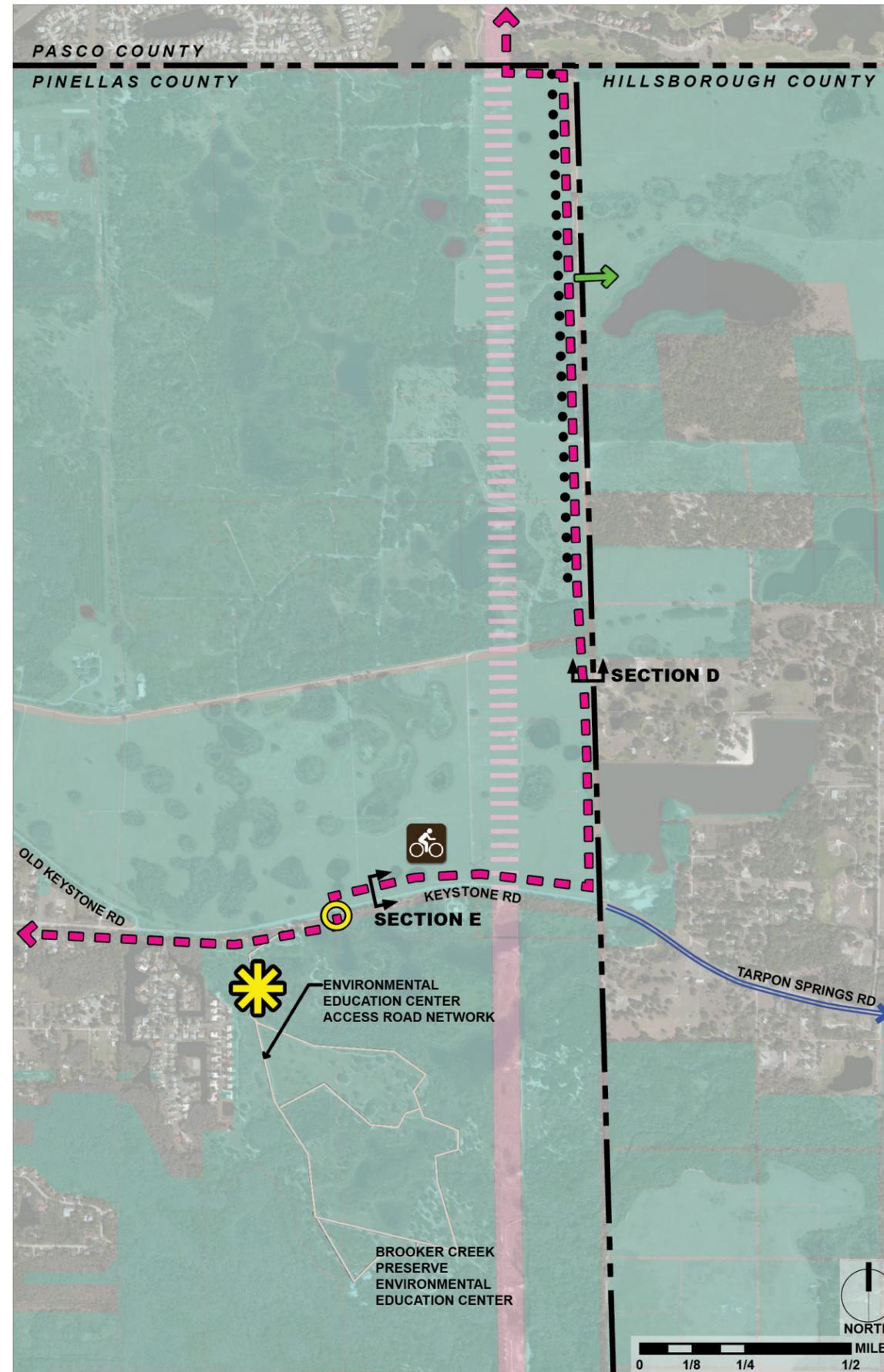


**PINELLAS/HILLSBOROUGH COUNTIES**

Once the trail leaves Pasco County and enters into Pinellas County (Brooker Creek Preserve) it would continue to follow the natural grade and be 15' in width and turn immediately to the east to extend towards the Hillsborough County Line. The trail would have a fence on the south side that has the same rural character (3-wire cattle fence) as some of the existing fences within the Preserve. This would physically separate the trail from the existing uses on the Preserve, such as Tampa Bay Water wellheads, cattle grazing, and other agricultural or County/Preserve activities. Once the trail extends to the Hillsborough County line, it would turn to the south and stay within Pinellas County and the Preserve. There would also need to be a fence on the west side of the trail that separates it from other Preserve uses. There is currently an existing paved road that roughly runs along the edge of the preserve in this area. The intent would be for the trail to follow this alignment to the greatest extent possible to minimize disturbance of the Preserve. The existing road would be improved and widened as necessary to accommodate a 15' wide trail. This section of the trail will be adjacent to the Lake Dan property owned by Hillsborough County. There could be a pedestrian connection to that property, but it would most likely be primitive in nature and subject to the ELAPP policies governing trails and use. The trail would continue south along the east side of the Preserve until it reaches Keystone Road at which point it will transition to the west along the north side of the road. Again a fence will be required to separate the trail from the Preserve. Once the trail crosses the Duke Energy easement there is a grouping of mature shade trees that could potentially serve as a trail head for public access within the preserve and there is already an existing paved road in this area. There would be a minimal number of parking spaces that could be used while ensuring that the existing trees are protected. It should also be noted that activities along the trail are subject to the Brooker Creek Preserve Management Plan. The trail would continue along the north side of Keystone Road for approximately 2,000' to where there would be a mid-block crossing of Keystone Road. Since the speed limit along Keystone Road is 45 mph, it would be safest to utilize a pedestrian activated crossing signal with the associated striping and advance signage. A graphic is included in the following pages that shows how this crossing would be addressed. It was discussed during the stakeholder meetings that this crossing may also be able to serve as a future grade separated wildlife crossing

for the Preserve.

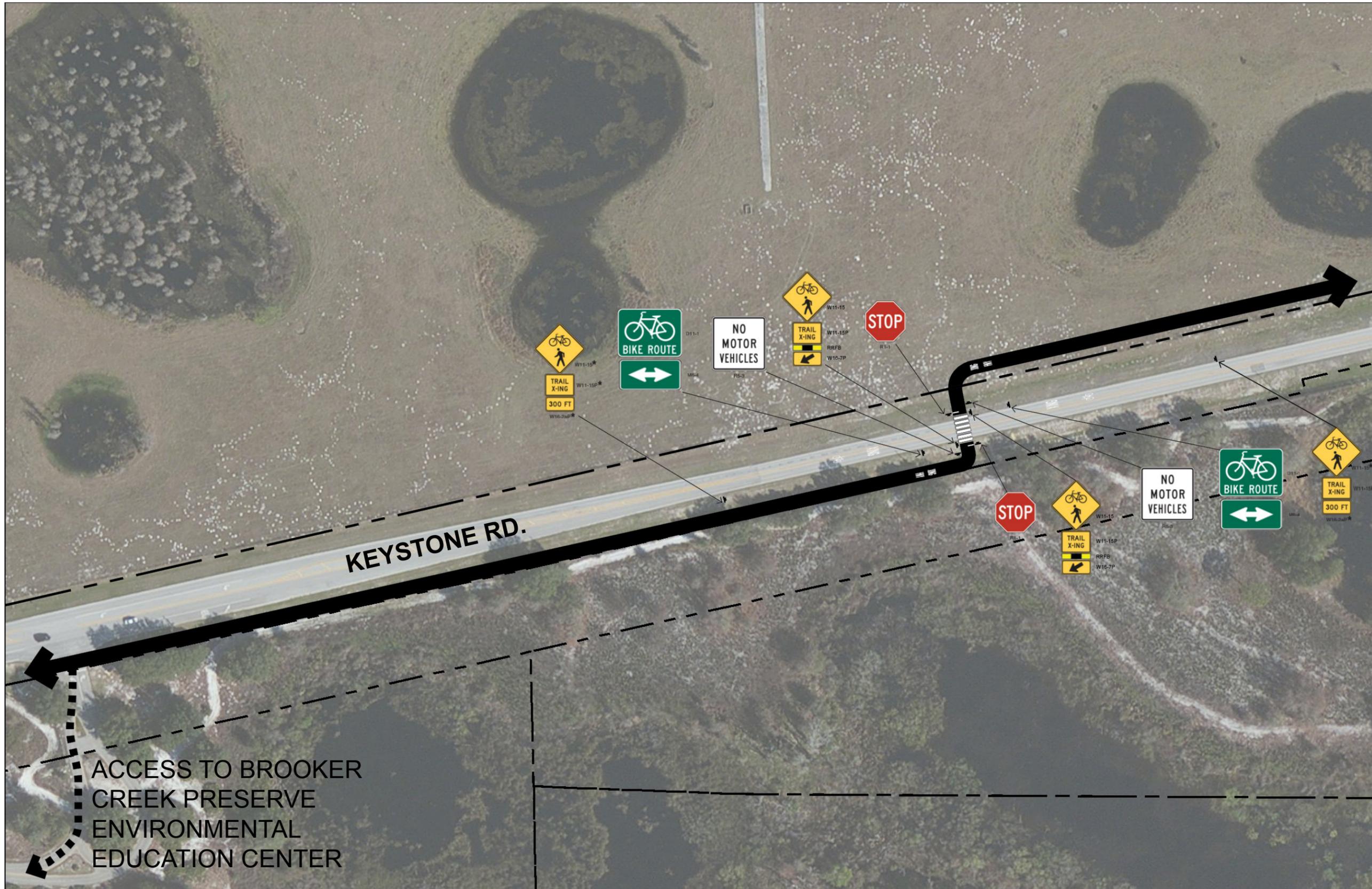
Once the trail crosses Keystone Road it would turn to the west and run along the south side. The trail would be located within the Keystone Road right-of-way until the entrance to the Brooker Creek Environmental Education Center and would be 12' to 15' in width depending upon the site conditions. There is an existing paved roadway that could be used to access the Preserve and Environmental Education Center. The access road is primarily a one-way system and has a posted speed limit of 15 mph and would be shared with bikes and pedestrians. The trail would continue past the entrance to the Preserve westbound along the south side of Keystone Road.



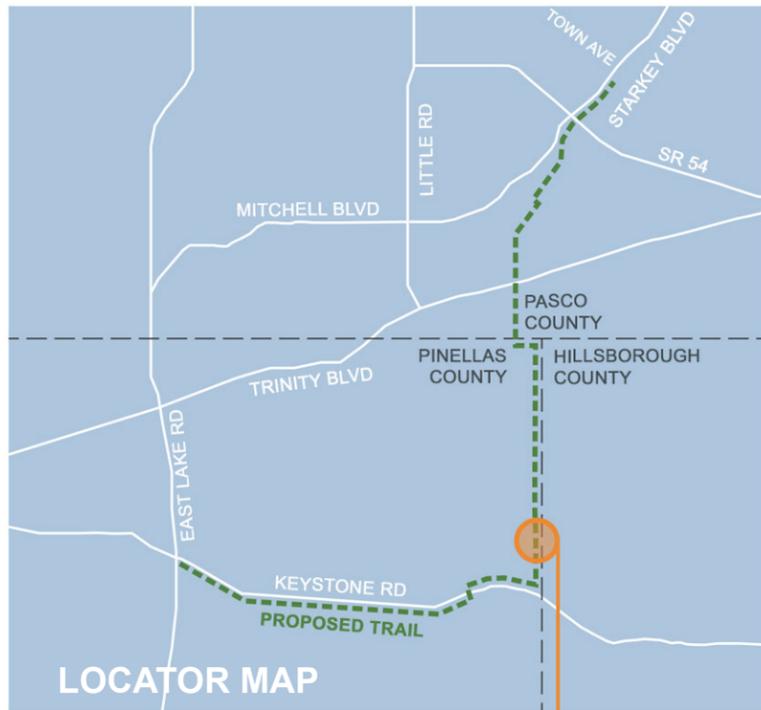
LOCATOR MAP

LEGEND

- DUKE ENERGY OWNED
- DUKE ENERGY EASEMENT
- PRESERVE LAND
- EXISTING ON-STREET BIKE LANE
- RECOMMENDED ROUTE
- ROUTE ON EXISTING PAVED ROAD IN PRESERVE
- CONNECTION POINT
- 🚲 POTENTIAL TRAIL HEAD
- MAJOR ROADWAY CROSSING
- FUTURE HILLS. CO. ELAPP LAND CONNECTION



**KEYSTONE ROAD PROPOSED TRAIL CROSSING**



LOCATOR MAP



EXISTING



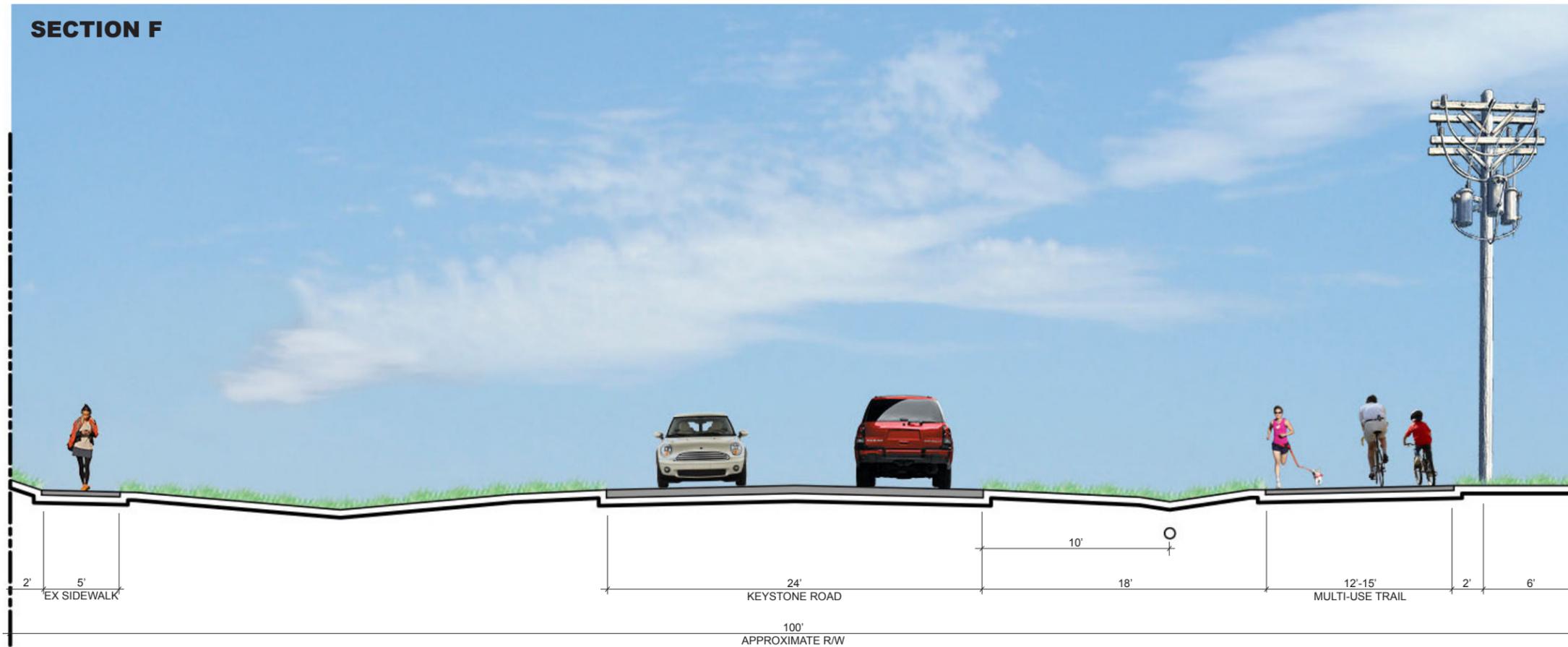
**PROPOSED**

15' MULTI-USE TRAIL

10' OFFSET FROM FENCE  
BOTH SIDES

# BROOKER CREEK PRESERVE

**SECTION F**



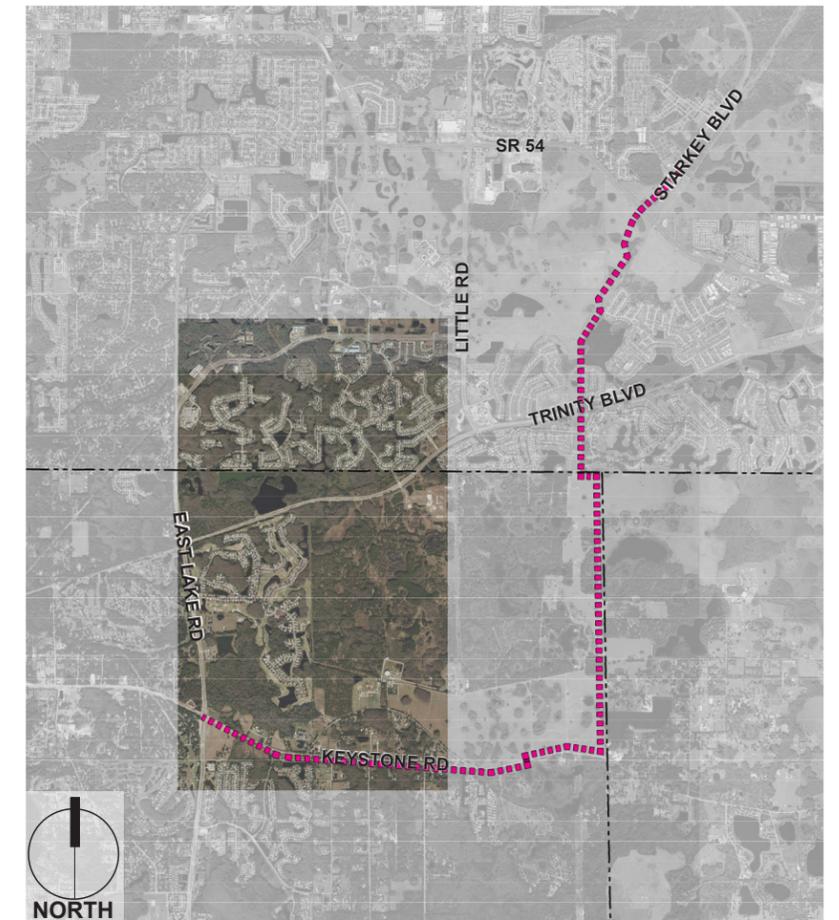
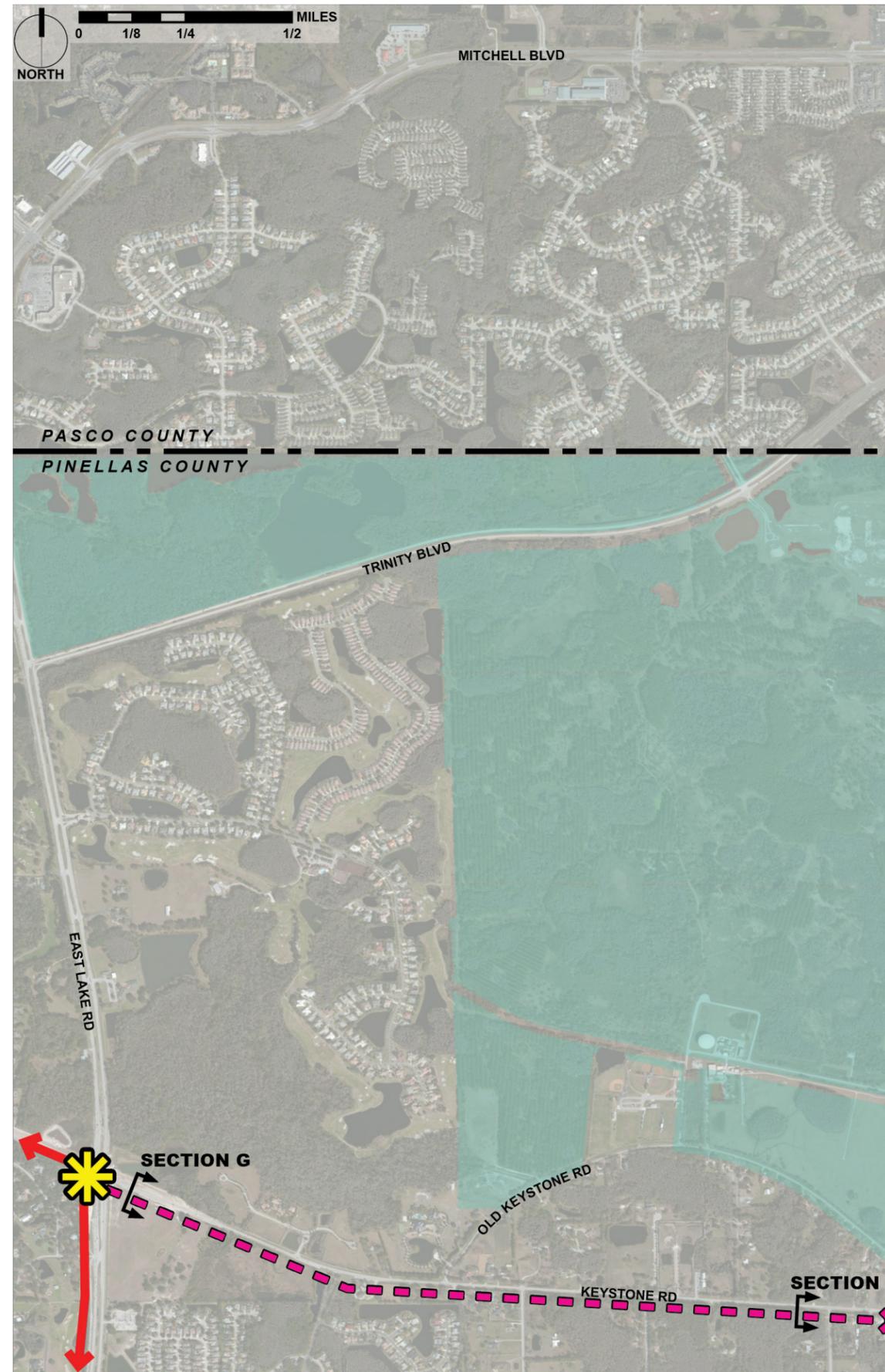
**SECTION G**



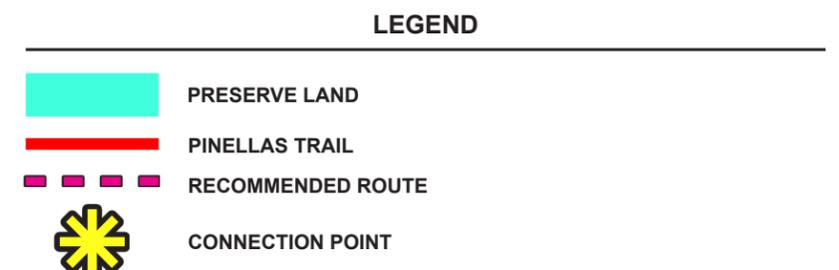
## PINELLAS COUNTY

The trail would continue along the south side of Keystone Road and be 12' to 15' in width depending upon the specific site conditions. It is intended that the trail would be located as far as possible from the edge of the roadway to minimize potential conflicts with vehicles. Keystone Road is currently a rural 2 lane undivided section of roadway with a right of way that varies in width but is generally around 100' wide. According to Pinellas County there are no plans to widen the roadway in the future. Locating the trail adjacent to the right of way line would mean an impact to a portion of the existing storm water/swale system along the roadside to accommodate the proposed trail. This would most likely involve filling in the swales and utilizing underground storm water pipes and ditch bottom inlets to accommodate the storm water to comply with any necessary permitting requirements.

The trail would continue along the south side of Keystone Road past both intersections with old Keystone Road until the intersection with Woodfield Boulevard. At this point there would need to be pavement markings and advance signage installed where the trail crosses Woodfield Boulevard and the associated entry and exit drives. Since there are additional turn lanes there will be less area for the trail and it may need to be narrowed down, but would not be less than 10' wide at any point. At roughly 500' past the entrance to Woodfield, the trail would then widen back to a 15' width and continue on the south side of Keystone until the roadway divides about 1,300' from the intersection with East Lake Road. The trail in this section would follow the natural grade and be 15' in width, as the right of way widens out to approximately 160'. This would allow the trail to again be as close as possible to the right of way line and away from the roadway. Due to the fact that there is already an existing traffic light at Keystone Road and East Lake Road, a trail crossing would potentially be safer in this location than at any other point along East Lake Road. Additional pedestrian signals and high emphasis crosswalks should be added to facilitate the trail crossing at this intersection. A graphic on the following pages depict the condition at this intersection.



LOCATOR MAP





MINIMUM 24' OFFSET FROM ROAD

15' MULTI-USE TRAIL

# KEYSTONE ROAD WESTERN END



LOCATOR MAP



EXISTING

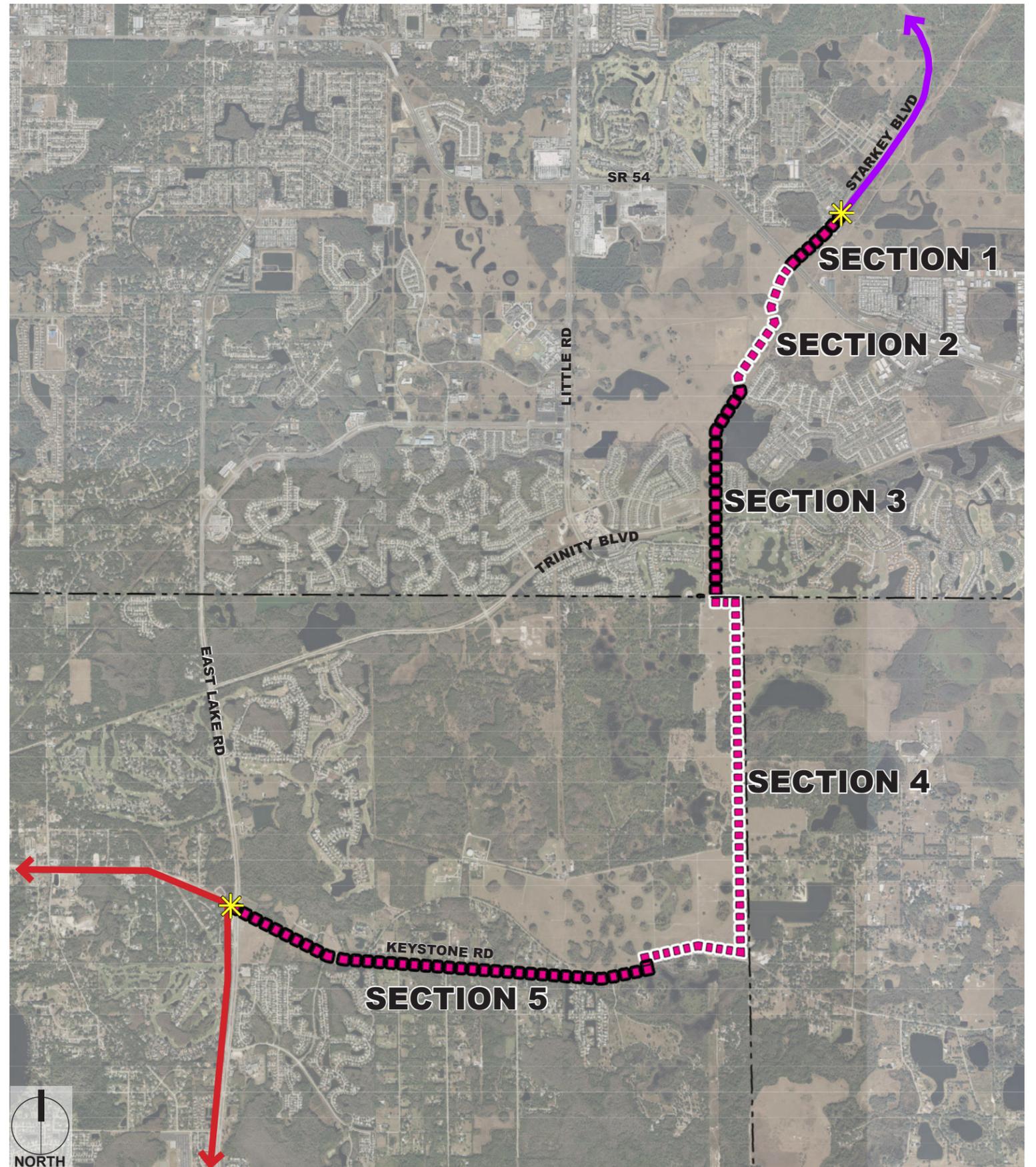
# PROPOSED



MINIMUM 18' OFFSET FROM ROAD

12-15' MULTI-USE TRAIL

# KEYSTONE ROAD EASTERN END



**Section 1 – Starkey Boulevard (Pasco County)**

This section would include the following items:

• Approximately 1,900 linear feet (0.36 miles) of trail at \$80 a linear foot.....	\$152,000
• Improvements associated with the crossing on SR 54 at \$50,000 lump sum.....	<u>\$50,000</u>
<b>Subtotal Section 1</b>	<b>\$202,000</b>

**Section 2 – Mitchell Property (Pasco County)**

This section would include the following items:

• Approximately 4,000 linear feet (0.76 miles) of trail at \$75 a linear foot.....	\$300,000
• Trailhead and associated improvements and amenities at \$100,000 lump sum.....	<u>\$100,000</u>
<b>Subtotal Section 2</b>	<b>\$400,000</b>

**Section 3 – Duke Energy Corridor (Pasco County)**

This section would include the following items:

• Approximately 6,700 linear feet (1.27 miles) of trail at \$100 a linear foot.....	\$670,000
• Improvements associated with the crossing of existing Trinity Boulevard at \$25,000 lump sum.....	\$25,000
• Improvements associated with the crossing of Robert Trent Jones Parkway at \$25,000 lump sum.....	\$25,000
• Improvements associated with the 2 crossings of the golf cart path at \$5,000 per crossing (lump sum).....	\$10,000
• Improvements associated with the crossing of the golf course maintenance road at \$5,000 lump sum.....	<u>\$5,000</u>
<b>Subtotal Section 3</b>	<b>\$735,000</b>

**Section 4 – Brooker Creek Preserve (Pinellas County)**

This section would include the following items:

• Approximately 13,500 linear feet (2.56 miles) of trail at \$70 a linear foot.....	\$945,000
• Trailhead and associated improvements and amenities at \$100,000 lump sum.....	<u>\$100,000</u>
<b>Subtotal Section 4</b>	<b>\$1,045,000</b>

**Section 5 – Keystone Road (Pinellas County)**

This section would include the following items:

• Approximately 13,000 linear feet (2.46 miles) of trail at \$100 a linear foot.....	\$1,300,000
• Improvements associated with the crossing of Keystone Road at \$25,000 lump sum.....	\$25,000
• Improvements associated with the crossing of Woodfield Boulevard at \$20,000 lump sum.....	\$20,000
• Improvements associated with the crossing of East Lake Road at \$50,000 lump sum.....	<u>\$50,000</u>
<b>Subtotal Section 5</b>	<b>\$1,395,000</b>

<b>SUBTOTAL SECTIONS 1-5.....</b>	<b>\$3,777,000</b>
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Design (10% ).....	\$377,700
Contingency (15% ).....	\$566,550
Construction Engineering and Inspection (5% ).....	\$188,850

<b>GRANDTOTAL.....</b>	<b>\$4,910,100</b>
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**NOTE: These costs are generic in nature and not based on actual construction drawings. They are for reference purposes only. The costs also do not take into account any right-of-way taking or additional drainage improvements that may be required based on a comprehensive drainage analysis.**

# OPINION OF PROBABLE CONSTRUCTION COST



The Tri-County Trail will provide a critical link between the Pinellas Trail and the Starkey Boulevard/Wilderness Park Trail. Once constructed, it will allow users to travel from St. Petersburg to the Suncoast Trail corridor and eventually to the east coast of Florida via the Coast to Coast Connector. Multi-use trails have a track record of providing opportunities for economic growth for communities as well as providing an alternate mode of transportation. Increased property values and tourism and recreation-related spending on items such as bicycles, in-line skates, lodging, and dining are just a few of the ways trails and greenways positively impact community economies. The Tri-County Trail will also provide a safe, inexpensive avenue for regular exercise for people living in the surrounding communities. The Tri-County Trail will provide what many Americans seek; close-to-home recreational opportunities, educational experiences, natural landscapes and beautification. The trail will help the surrounding communities build pride by ensuring that their neighborhoods are good places to live, so that children can safely walk or bike to a park, school, or to a neighbor's home.

In December of 2013, the plan gained approval from both the Pinellas County and Pasco County MPO Boards on the recommended route. The next step will be to produce detailed engineering plans that will be used to construct the trail. Additional coordination with Duke Energy and Mitchell Properties will need to occur to facilitate the co-location of the trail within their respective properties. Potential funding sources will also need to be identified. These sources could potentially include state level funding, such as those being proposed for use on the Coast to Coast Connector project

It is anticipated that Pasco County will begin preparation of detailed engineering plans in 2014 and that a dedicated funding stream for construction will be available starting in 2015. At this time, Pinellas County is in the process of determining a schedule for preparation of detailed engineering plans and construction. Pasco and Pinellas Counties will continue to coordinate with each other on design and construction to ensure the success of the Tri-County Trail.

**“Find a path or make one.” –SENECA, Roman statesman, 4 BC—65 AD**



# APPENDIX

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## Electric Transmission Right of Way Requirements for Shared-Use Paths/Trails

This list of Duke Energy's transmission right of way requirements for the co-location of shared-use paths/trails has been developed as a guideline to answer the most frequently asked questions. This should not be considered a comprehensive list of all requirements or factors that may need to be addressed. You should contact the Asset Protection Right of Way Specialist if you have additional questions or concerns. This list of requirements and guidelines is subject to change at any time and without notice. Duke Energy reserves all rights conveyed to it by the right of way agreement applicable to the subject property. An engineering drawing, including topographic grade changes, location of Duke Energy structures and paths/trails must be approved by an Asset Protection Specialist.

Compliance with these Duke Energy Shared-Use Path/Trails requirements, or approval of any such plans by Duke Energy, does not guarantee that other applicable requirements imposed by any local, county, state, federal or other applicable regulatory agency have been satisfied.

Definition: For purposes of this document the term "trail(s)" shall be used to refer to Multi-Use Paths or Shared-Use Paths as defined by the American Association of State Highway and Transportation Officials (ASHTO).

1. The trails must not exceed a total of 10 feet in width, regardless of the surface construction material.
2. A minimum separation of 25 feet is required between the trail and its associated easement, to any Duke Energy electrical facility. This includes, but is not limited to, poles, towers, guy anchor(s), equipment, etc. If the owner of the trail is not the current owner of the fee simple title to the lands underlying Duke Energy's easement, the trail owner shall obtain a legally sufficient easement from the current fee simple title owner and produce said easement to Duke Energy prior to commencing activities within the Duke Energy easement. In the event a private easement is not required, no portion of the trail or shoulder, or associated grading, shall be located within 25 feet of any electrical facility.
3. The owner of the trail shall be responsible for safety and liability associated with its construction or use thereof.
4. Bollards shall be installed per Duke Energy specifications, with Duke Energy locks, where the trailheads connect with roads/streets as to prevent vehicular traffic. Duke Energy may require reinforcement of the trail at specified access points along the corridor for Duke Energy heavy equipment crossings. These trail reinforcement areas shall consist of a 20-foot-long, 10-foot-wide paved area capable of supporting 80,000 pounds with pavement markings indicating "heavy equipment crossing."
5. Culverts shall be installed where the trails cross creeks, ditches, etc. These culverts shall be capable of supporting 80,000 pounds, and shall be a minimum of 20 feet wide. Signage must indicate the maximum load of the crossing at culvert approach.
6. No structures including, but not limited to, lights, signs, benches, exercise equipment, and irrigation systems shall be located within the Duke Energy easement.
7. Planting of vegetation shall adhere to the Right of Way (RW) Restrictions Guidelines for the specific Duke Energy territory. A copy of the RW Restrictions/Guidelines can be obtained from your Asset Protection Specialist.
8. Duke Energy reserves the right to close, without notice, all or a portion of the trail located within the transmission line easement, for any length of time, for construction, maintenance or emergency line operations.
9. Duke Energy will not be held responsible for any damages to the trails due to its operations or any liability based on the use of the trail. Prior to the installation of a shared-use trail, a "Trail Encroachment Agreement", which includes "hold harmless" language, shall be executed with Duke Energy. In addition, deed information of all property owners that the trail affects must be supplied to Duke Energy. Proof that the property owners have signed an easement agreement with the owner of the trail will be required, as applicable.
10. All other Duke Energy electric transmission right of way restrictions/guidelines shall apply to the installation of trails.

We hope this is useful information. If you have additional questions or plan any activity not mentioned above, please contact:

Tim Mumford  
Duke Energy Representative

727-893-9250  
Phone Number



**ELECTRIC TRANSMISSION RIGHTS-OF-WAY  
GUIDELINES/RESTRICTIONS  
VALID FOR  
FLORIDA**

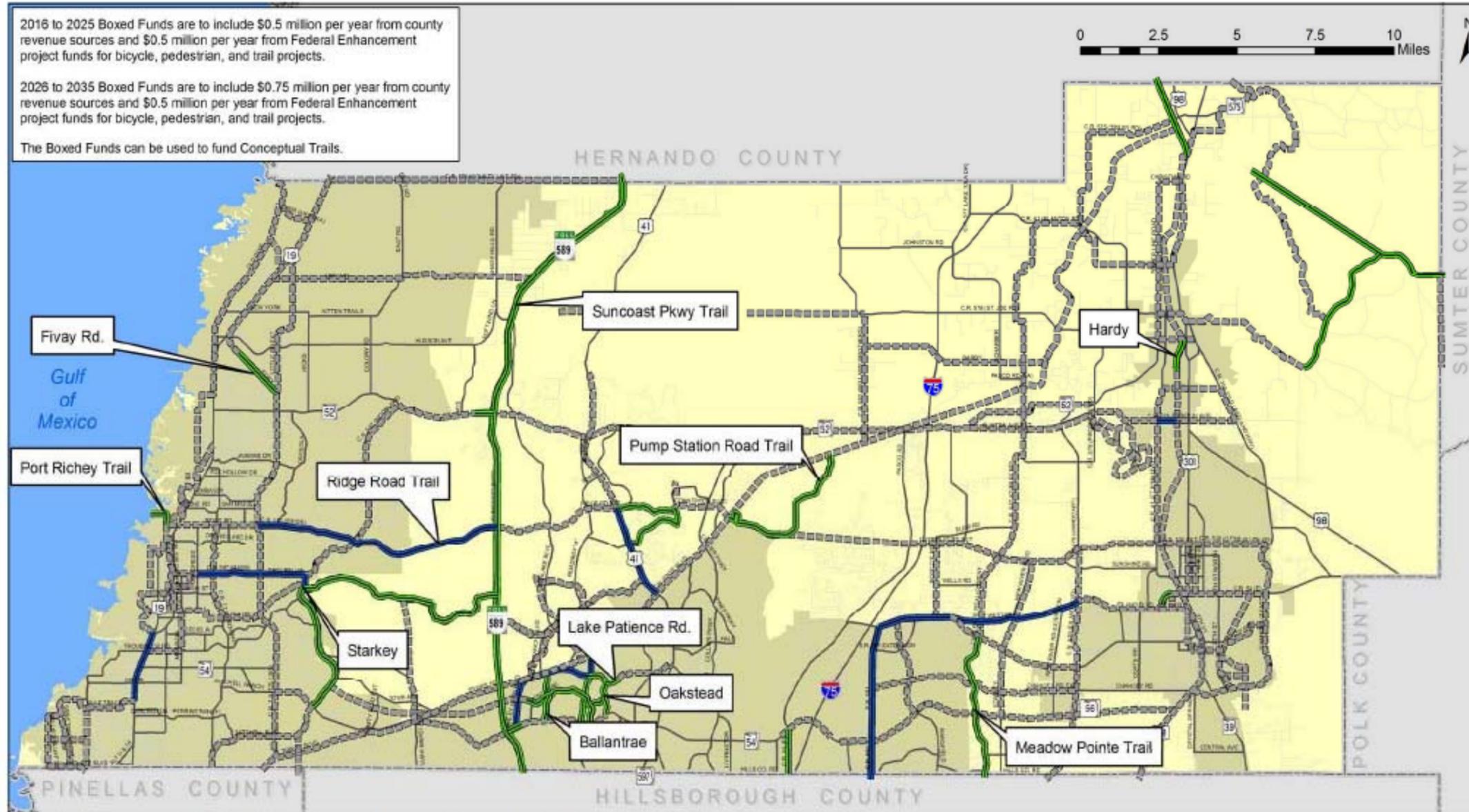
This list of rights-of-way restrictions has been developed to answer the most frequently asked questions about property owner use of Duke Energy's electric transmission rights of way. This list does not cover all restrictions or all possible situations. You should contact the Asset Protection Right-of-Way Specialist if you have additional concerns about the rights of way. This list of restrictions is subject to change at any time and without notice. Duke Energy reserves all rights conveyed to it by the right-of-way agreement applicable to the subject property. All activity within the rights of way shall be reviewed by an Asset Protection Right-of-Way Specialist to obtain prior written approval. Engineering plans may be required. Compliance with the Duke Energy Right-of-Way Guidelines/Restrictions or approval of any plans by Duke Energy does not mean that the requirements of any local, county, state, or federal government or other applicable agency with governing authority have been satisfied.

1. Structures, buildings, manufactured/mobile homes, satellite systems, swimming pools (and any associated equipment and decking), graves, billboards, dumpsters, signs, wells, deer stands, retaining walls, septic systems or tanks (whether above or below ground), debris of any type, flammable material, building material, wrecked or disabled vehicles and all other objects (whether above or below ground) which, in Duke Energy's opinion interferes with the electric transmission right of way, are not allowed within the right-of-way limits. Transformers, telephone/cable pedestals (and associated equipment), and fire hydrants are not allowed. Manholes, water valves, water meters, backflow preventers and irrigation heads are not permitted. Attachments to Duke Energy structures are prohibited.
2. Fences and gates shall not exceed 10 feet in height and shall be installed greater than 25 feet from poles, towers and guy anchors. Fences shall not parallel the centerline within the rights of way but may cross from one side to the other at any angle not less than 30 degrees with the centerline. If a fence crosses the rights of way, a gate (16 foot wide at each crossing) shall be installed by the property owner, per Duke Energy's specifications. The property owner is required to install a Duke lock on the gate to insure access. Duke will supply a lock.
3. Grading (cuts or fill) shall be no closer than 25 feet from poles, towers, guys and anchors (except for parking areas, see paragraph 7) and the slope shall not exceed 12:1. Grading or filling near Duke Energy facilities which will prevent free equipment access, or creates ground to conductor clearance violations, will not be permitted. Storage or stockpiling of dirt or any construction material is prohibited. Sedimentation control, including re-vegetation, is required per state regulations.
4. Streets, roads, driveways, sewer/water lines, other utility lines or any underground facilities shall not parallel the centerline within the rights of way, but may cross, from one side to the other, at any angle not less than 30 degrees with the centerline. No portion of such facility or corresponding easement shall be located within 25 feet of Duke Energy's facilities. Roundabouts, cul-de-sac, intersections (roads, driveways and alleyways) are not permitted.
5. Any drainage feature that allows water to pond, causes erosion, directs storm water toward the rights of way, or limits access to or around Duke Energy facilities is prohibited.
6. Construction of lakes, ponds, retention, or detention facilities are prohibited within the rights-of-way limits.
7. Parking may be permitted within the rights of way, provided that:
  - a. Prior to grading, concrete barriers shall be installed at a minimum of 9 feet from the Duke Energy facilities. During construction, grading shall be no closer than 10 feet to any Duke Energy facility.
  - b. After grading/paving activity is complete a Duke Energy approved barrier, sufficient to withstand a 15 mph vehicular impact, shall be installed 9 ft. from any Duke Energy facility.
  - c. Any access areas, entrances, or exits shall cross (from one side to the other) the right of way at any angle not less than 30 degrees with the centerline, and shall not pass within 25 feet of any structure. Parking lot entrances/exits cannot create an intersection within the right of way.
  - d. Lighting structures within the rights-of-way limits must be approved by Duke Energy before installing. Due to engineering design standards, total height of lighting structures may not exceed 12 ft.
  - e. Lighting structures are not permitted within the wire zone. Contact your Asset Protection Specialist as wire zones vary for the different lines.
8. Duke Energy will not allow trees or landscape planting within the transmission right of way without prior approval.
  - a. Duke Energy may exercise the right to cut "danger trees" outside the rights of way limits as required to properly maintain and operate the transmission line.

We hope this is useful information. If you have additional questions or plan any activity not mentioned above, please contact the Asset Protection Specialist for your area.

Duke Energy Representative: Tim Mumford  
Telephone Number: 727-893-9250  
Form 02191 (REV. 3/24/2013)

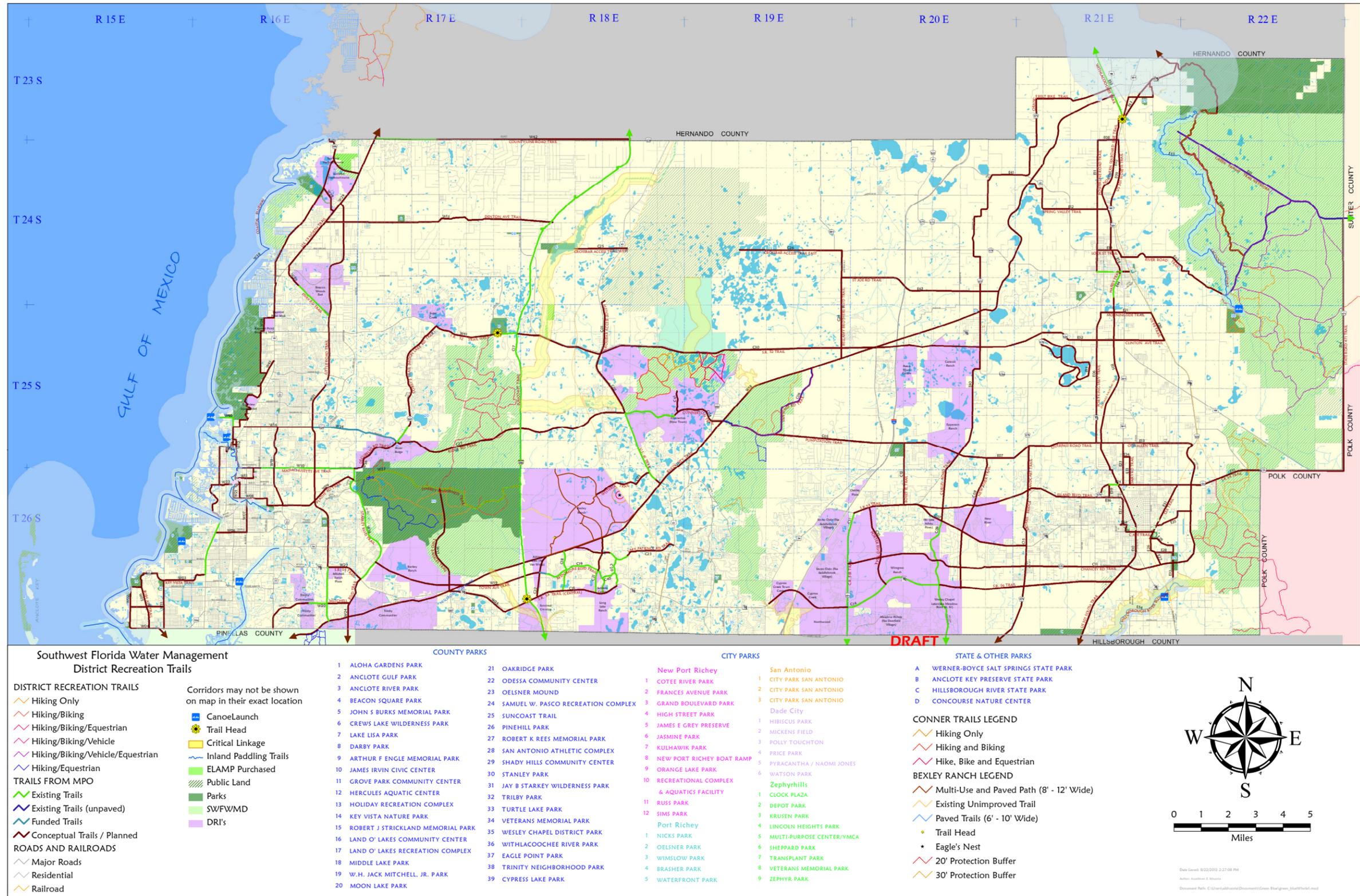
# DUKE ENERGY: ELECTRIC TRANSMISSION RIGHT-OF-WAY INFORMATION



**Map 11: Pasco County 2035 LRTP - 2035 Cost Affordable Plan Multi-Use Trail Facilities**  
 The map displays existing multi-use trails as well as trails to be built by 2014. Boxed revenues can be used to build desired trails from the Conceptual Trails identified in grey.

- Cost Affordable Multi-Use Trails**
- Existing Multi-Use Trails
  - Committed Multi-Use Trails by 2014
  - Conceptual Trails
  - Urbanized Areas

# LONG RANGE TRANSPORTATION PLAN (LRTP) - PASCO COUNTY



# GREENWAYS, TRAILS, & BLUEWAYS (GTB) - PASCO COUNTY



# LONG RANGE TRANSPORTATION PLAN (LRTP) - PINELLAS COUNTY

