Kimley»Horn

August 18, 2020

City of Tarpon Springs
Planning and Zoning Division
324 East Pine Street
Tarpon Springs, FL 34689

Subject: ***Anclote Harbor – Preliminary Development Plan***
Stormwater Design Narrative
KHA Project # 145062001

To whom it may concern,

On behalf of our client, Morgan Group Development, LLC, Kimley-Horn and Associates, Inc. (Kimley-Horn) respectfully submits the following stormwater design narrative in conjunction with the Preliminary Development Plan submittal for the above-mentioned project.

The project is located on the east side of US-19 along the Anclote River, parcel ID 06-27-16-89388-000-0420. The property is ±72.62 acres in size, contains ±30.81 acres of wetlands, and is currently undeveloped. The proposed project includes 404 multifamily units, a clubhouse, and accessory garages and maintenance buildings needed to serve the property. The overall stormwater management system will consist of drainage structures, drainage conduits, shallow dry treatment ponds, one larger wet detention pond, and one or more stormwater BMPs to provide water quality treatment.

In existing conditions the project consists of undeveloped land with elevations that range from 22’ (NAVD88) to the Anclote River waterline. Approximately half of the property sheet flows to the north directly to the Anclote River while the southern half of the property sheet flows to onsite wetlands. The southern onsite wetlands are directly connected to the Anclote River via an existing 4’x7’ box culvert under US-19. The NRCS soil survey shows that the uplands consist largely of Astatula Soils (0-5% slopes, hydrologic group A) and Myakka Soils (0-2% slopes, hydrologic group A/D). Nearly the entire property is located within a tidally influenced FEMA Flood Zone AE at elevation 9’. The property also drains to an Outstanding Florida Waterbody (OFW) and is also located in the Anclote River Tidal Watershed (WBID 1440) which is listed as Waters Not Attaining Standards, impaired for total nitrogen.

In the proposed condition, the developed site will capture onsite runoff via catch basins, drainage conduits, and sheet flow and will first route runoff to shallow dry treatment retention ponds. These treatment ponds will capture and treat stormwater runoff in low storm events. In larger storm events, the treatment ponds will discharge through control structures into the larger wet detention pond on to the north along the Anclote River. The wet detention pond will provide attenuation and additional treatment. An additional nutrient removing BMP is also anticipated, likely through the use of a nutrient removing up-flow filter on the downstream end of the wet detention control structure, or via side-bank filters with nutrient removal filter media. After being

attenuated and treated in the wet detention pond, stormwater will be discharged through a control structure into the Anclote River.

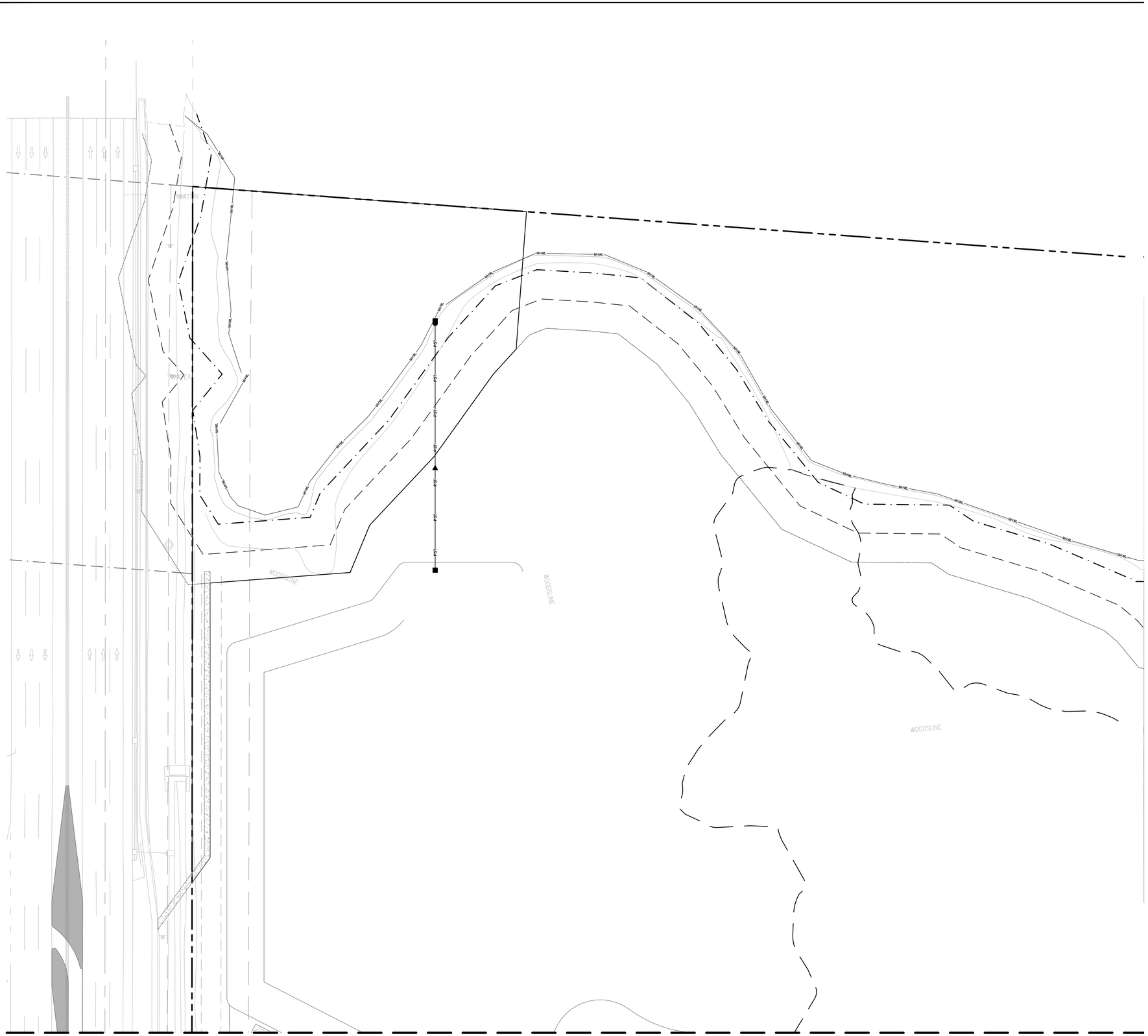
The proposed storm design will meet the requirements of the Southwest Water Management District ERP Applicant's Handbook Volume II dated June 1, 2018 and the City of Tarpon Springs Comprehensive Land Development Code. The project will provide attenuation for the post development minus the pre development peak discharge rates for the 25-year, 24-hour storm event with 6" of freeboard, provide the standard City and SWFWMD water quality treatment, an additional 50% OFW treatment, and a net improvement of total nitrogen. Since all of the proposed earthwork is located within a tidally influenced riverine floodplain, floodplain compensation is not anticipated.

Please contact me at (813) 635-5552 or ryan.p.clark@kimley-horn.com should you have any questions or desire additional information.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Ryan Clark, P.E.



MATCHLINE - SHEET C401

MATCHLINE - SHEET C404

PROPOSED STORM DRAIN

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WOODSLINE

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Drawing name: K:\TAM_Civil\145062 – Morgan\001 – Anclote Harbor\CADD\Work\PlanSheets\C300 – GRADING AND DRAINAGE PLAN.dwg Grading and Drainage Plan – 04 Aug 18, 2020 11:55am by: Brian.Naught

November 16, 2018

Kamil Salame
The Morgan Group, Inc.
2750 NW 3rd Ave, Suite 2
Miami, Florida 33127

RE: US 19/Walmart Tarpon Springs
Pinellas County, Florida
Listed Species Report
ECS Project No. 677.02.18

Dear Kamil,

On November 13, 2018 a listed species survey was conducted on the above referenced project site. The 75.14-acre subject property is located immediately north of N Jasmine Avenue, east of US Highway 19 N and west of Booth Avenue and west of Jasmine Blvd. in Tarpon Springs, Florida (Figure 1). More specifically, the project site is located in Section 6, Township 27 South and Range 16 East as well as Section 7, Township 27 South and Range 16 East of Pinellas County, Florida.

The subject property is vacant land with a large wetland on the south side of the property and a large area of open lands throughout the center of the property. A portion of the Anclote River flows through the northern portion of the property. There are two eagle nests present within the project site, one is documented, the nest ID is PI041.

A survey of the vacant lot was conducted to assess the potential occurrence of flora and fauna listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Department of Agriculture (FDA). Tables 1 and 2 provide a listing of the species known to occur within Pinellas County and their expected occurrence of the project site. The findings and conclusions of the survey are reported in this letter.

The survey was conducted by Ecological Consulting Solutions Inc (ECS) for the purpose of evaluating the site for the presence or absence of wetland habitat and protected flora and fauna or their habitat. The survey was conducted by means of pedestrian transects in the early morning to assure the potential of observing listed fauna as recommended by the FWC and the USFWS.

The survey was conducted by Ecological Consulting Solutions Inc (ECS) for the purpose of evaluating the site for the presence or absence of wetland habitat and protected flora and fauna or their habitat. The survey was conducted by means of pedestrian transects in the early morning to assure the potential of observing listed fauna as recommended by the FWC and the USFWS.

The following resources were used for supporting information during the site assessment and letter preparation:

- Color aerial photographs, 2016, Google Earth, Pinellas County, Florida.
- National Wetlands Inventory Mapping, U.S. Fish and Wildlife Service.
- United States Geological Survey (USGS) 7.5-minute quadrangle map, Pinellas County, Florida, (ArcGIS).
- Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida (USFWS and FWC).

Per the City of Tarpon Springs Ordinance 2018-27, significant upland habitat shall be defined as contiguous areas of five acres or larger of high quality Scrub and Brushlands, Pine Flatwoods, Longleaf Pine/Xeric Oak, or Hardwood Conifer Mix as defined by the Florida Land Use, Cover and Forms Classification System (FLUCCS) and as determined by a qualified professional.

ECS identified Live Oak habitat (FLUCCS 427) onsite which meets the Hardwood Conifer Mix definition as significant habitat. This area is approximately 33.48 acres and is described below.

Pedestrian and vehicular surveys of the project site were conducted in order to qualitatively document the existing vegetation and to assess the present land use patterns according to the Florida Land Use, Cover and Forms Classification System, Department of Transportation (FLUCFCS; DOT 1999). Seven (7) land use type is present (Figure 2). A brief description of the FLUCFCS community is provided below.

190 – Open Lands

This habitat type is present in the central portion of the property. This area has been historically disturbed as evidenced by the lack of canopy trees. This area was reported to have been a former mine. The area is predominately covered by open sand but there are some scattered areas of bahia grass (*Paspalum notatum*) present throughout.

310 – Herbaceous (Dry Prairie)

Found in the northern and southern portion of the project site this area is located near the onsite wetlands.

Vegetation consists of a variety of grasses and weedy species including bahia grass, natal grass (*Melinis repens*), camphorweed (*Heterotheca subaxillaris*), dogfennel (*Eupatorium capillifolium),* hairy indigo (*Indigofera hirsuta),* sedge grass (*Cyperaceae spp*.), lantana (*Lantana spp,*), common beggarticks (*Bidens alba*), bermudagrass (*Cynodon dactylon*), caesarweed (*Urena lobata*), passion vine (*Passiflora incarnate*), and ragweed (*Ambrosia artemisiifolia*).

427 - Live Oak

This community is the dominate habitat type throughout the project site. Canopy is dominated by mature live oaks (*Quercus virginiana*) with laurel oak (*Quercus hemisphaerica*), longleaf pine (*Pinus palustris*) and scattered sand pine (*Pinus clausa*) and turkey oak (*Quercus laevis*).

The understory and ground cover in these areas have been disturbed as evidenced by the numerous roads and trash debris. Understory vegetation includes beautyberry (*Callicarpa americana*), myrtle oak (*Quercus myrtifolia*), sand live oak (*Quercus geminata*), blackberry (*Rubus spp.)* and saw palmetto (*Serenoa repens*).

510 – Streams and Waterways

The Anclote River runs through the northern portion of the property. Vegetation along the river bank includes black mangrove (*Avicennia germinans*) and Brazilian pepper (*Schinus terebinthifolius*).

615 – Streams and Lake Swamps

This flow-way is located in the southern portion of the project site. It is characterized by steep side slopes. Vegetation consists of laurel oak, red maple (*Acer rubrum),* wax myrtle *(Myrica cerifera),* Carolina willow *(Salix caroliniana),* redbay (*Persea borbonia),* slash pine, Brazilian pepper with blackberry, primrose willow *Ludwigia peruviana),* swamp fern (*Blechnum serrulatum),* cattail *(Typha sp.),* redroot *(Lachnanthes caroliniana),* leather fern (*Rumohra adiantiformis)* and scattered melaleuca *(Melaleuca quinquenervia).*

617 – Mixed Wetland Hardwoods

A very small isolated wetland is located in the center of the property. The canopy consists of sweetbay (*Magnolia virginiana)* with dahoon holly (*Ilex cassine).* The shrub layer consists of Carolina willow and wax myrtle.

642 – Saltwater Marshes

Located in the northern portion of the project site within the Anclote River there are marshes that are dominated with saltwater cordgrass (*Spartina alterniflora).*

Listed Species Survey

A survey was conducted using pedestrian transects throughout the site to assess the occurrence, or potential for occurrence, of flora and fauna listed as threatened, endangered, or as species of special concern (SSC) by the Florida Fish and Wildlife Conservation Commission (FWC), United States Fish and Wildlife Service (USFWS), and Florida Department of Agriculture (FDA).

On January 11, 2017, the FWC State listing status changes, originally proposed back in 2010, became official after the approval of Florida's Imperiled Species Management Plan by FWC Commissioners.

• 15 species were removed from Florida's Endangered and Threatened Species List: Eastern chipmunk, Florida mouse, brown pelican, limpkin, snowy egret, white ibis, peninsula ribbon snake (Lower Keys population), red rat snake Lower Keys population), striped mud turtle (Lower Keys population), Suwannee cooter, gopher frog, Pine Barrens tree frog, Lake Eustis pupfish, mangrove rivulus, and Florida tree snail.

• 23 species changed from State-designated Species of Special Concern to State-designated Threatened species: Sherman's short-tailed shrew, Sanibel rice rat, little blue heron, tricolored heron, reddish egret, roseate spoonbill, American oystercatcher, black skimmer, Florida burrowing owl, Marian's marsh wren, Worthington's Marsh wren, Scott's seaside sparrow, Wakulla seaside sparrow, Barbour's map turtle, Florida Keys mole skink, Florida pine snake, Georgia blind salamander, Florida bog frog, bluenose shiner, saltmarsh top minnow, Southern tessellated darter, Santa Fe crayfish, and Black Creek crayfish.

• 14 species keep their State-designated Threatened status: Everglades mink, Big Cypress fox squirrel, Florida sandhill crane, snowy plover, least tern, white-crowned pigeon, Southeastern American kestrel, Florida brown snake (Lower Keys population), Key ringneck snake, short-tailed snake, rim rock crowned snake, Key silverside, blackmouth shiner, and crystal darter.

• Five species listed as State-designated Species of Special Concern: (list species): Homosassa shrew, Sherman's fox squirrel, osprey (Monroe County population), alligator snapping turtle, and harlequin darter.

Birds

Approximately 35 species (and sub-species) of birds found in Florida are protected by the FWC and/or the USFWS. Overall, about fifteen (15) are expected to occur in central Florida.

For Pinellas County, the USFWS federally lists four (4) bird species. No listed birds were observed at this site (Table 1).

Florida scrub jays (*Aphelocoma c. coerulescens)* were not observed on the project site. This species is listed as threatened at the state and federal levels. The property does not contain scrub habitat. Surveys were conducted for this species per the guidelines outlined in the *Ecology & Development-Related Habitat Requirements of the Florida Scrub Jay (April 1991)*. No scrub jays were observed or vocalizations heard.

Red-cockaded woodpeckers (*Picoides borealis*) are endangered (USFWS) and endangered (FWC). No red-cockaded woodpeckers were observed and the upland habitat type is not suitable. There were no open pine flatwoods with old-growth pines that characterize RCW nesting and foraging habitat.

Listed wading birds such as limpkin (*Aramus guarauna),* snowy egret (*Egretta thula),* tricolored heron (*Egretta tricolor)* white ibis (*Eudocimus albus)* and the wood stork *(Mycteria americana)* were not observed. The Anclote River and flow-way on the southern portion of the property do provide wading bird habitat.

The piping plover (*Charadrius melodus*) is a small, migratory shorebird that breeds on sandy beaches along the Atlantic Ocean. The subject site is not on or near beach habitat.

Bald Eagles

Bald eagles (*Haliaeetus leucocephalus*) or their nests were observed on the site. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS has established a 660 foot protection zone around a bald eagle nest. The bald eagle nesting season is 1 October–15 May unless the young fledge before or after 15 May.

ECS searched the FWC website to determine if any documented bald eagle nests are within 660 feet of the site. There is a FWC verified nest located on the site, the nest identification number is PI041 and it was last surveyed in 2014. It is located within the north central portion of the project site near the river bank. There is also an un-documented nest located adjacent to nest PI041. The 660ft protection zone is located almost entirely within the project site. No bald eagles were observed in either of the nest trees when ECS conducted the survey of the project site.

The U.S. Fish and Wildlife Service (USFWS) is the federal permitting agency. In 2017, the Florida Fish and Wildlife Conservation Commission (FWC - state agency) approved revisions to the state's bald eagle rule (68A-16.002, F.A.C.). The approved rule revisions eliminate the need for applicants to obtain both a state and federal permit for activities with the potential to take or disturb bald eagles or their nests. Under the approved revisions, only a federal permit is required.

A bald eagle non-purposeful nest take permit will be required for this project since development will occur within 330 feet of the nest tree. The following information will be prepared by ECS as part of the non-purposeful nest take permit application.

- Identify the specific activities that will result in take
- Quantify impacts to eagles
- Develop and document avoidance and minimization procedures
- Develop a monitoring and reporting program
- Provide compensatory mitigation, if necessary
- Submit application processing fee

Depending on the magnitude of the anticipated disturbance, you may be required to provide basic post-activity monitoring by determining whether the nest site, communal roost, or important foraging area continues to be used by eagles for up to 3 years following completion of the activity for which the permit was issued.

The USFWS requires the project to avoid and minimize the potential for take to the degree practicable. Additional compensatory mitigation may be required for: (a) programmatic take and other multiple take authorizations; (b) disturbance associated with the permanent loss of a breeding territory or important traditional communal roost site; or (c) as necessary to off-set impacts to the local area population. The USFWS generally takes 60 to 90 days to issue a non-purposeful nest take permit.

Concerning the FWC, the Bald Eagle Management Plan was drafted to be compatible with the Federal protection requirements of the Bald and Golden Eagle Protection Act. The FWC has four classifications of a nest tree;

Active Nest – shows signs of breeding by the bald eagle pair during the current or most recent nesting season.

Alternate Nest – a nest that has been used within the past 5 nesting seasons but not the current or most recent nesting season.
Abandoned Nest – a nest that has not been used for more than 5 consecutive nesting seasons.
Lost Nest – nest or tree is destroyed by natural causes and is not rebuilt within the next two nesting seasons.

For US 19/Walmart Tarpon Springs., the nest was classified as active in 2014 and has not been surveyed since 2014. The second nest would be classified as an Alternate Nest given it's close proximity to the active nest. Pages 31 and 32 of the Bald Eagle Management Plan discuss that bald eagle nests may only be removed if the nest poses a threat to human safety or a threat to the safety of bald eagles or their eggs or nestlings.

Permitting Requirement to develop within the 660-foot Setback

If the proposed site plan has development within 660 feet of the bald eagle nest, then a permit is required by the USFWS. The process is listed below;

1. The permit is needed because the current rules do not allow for development within 660 feet of a bald eagle nest. This permit will excuse you from any potential liability should the eagles abandon the nest once development occurs.

2. Implement the Bald Eagle Monitoring Guidelines (USFWS 2007d) for all site work or exterior construction activities. Avoid exterior construction activities within 330 feet of the nest during the nesting season.

3. Avoid construction activity (except those related to emergencies) within 100 feet of an eagle nest during any time of the year except for nests built on artificial structures, or when similar scope may allow construction activities to occur closer than 100 feet. This was a State requirement, the federal guidelines do not address this, but it may still apply.

4. Avoid the use or placement of heavy equipment within 50 feet of the nest tree at any time to avoid potential impacts to the tree roots. This minimization does not apply to existing roads, trails, or other linear facilities near an eagle nest or to nests built on artificial structures.

5. Schedule construction activities so that construction farther from the nest occurs before construction closer to the nest.

6. Shield new exterior lighting so that lights do not shine directly onto the nest.

7. Create, enhance, or expand the visual vegetative buffer between construction activities and the nest by planting appropriate native pines or hardwoods.

8. Design stormwater ponds no closer than 100 feet from the eagle nest, and construct them outside the nesting season. Consider planting native pines or hardwoods around the pond to create, enhance, or expand the visual buffer.

9. Incorporate industry-approved avian-safe features for all new utility construction <www.fws.gov/migratorybirds/issues/.

10. Retain the largest native pines for use as potential roost or nest sites.

Exterior construction activities and site work within 330 feet of an active or alternate bald eagle nest should be conducted during the non-nesting season (16 May–30 September). Site work and exterior construction activities between 330 and 660 feet from the nest may be conducted during the nesting season when the Bald Eagle Monitoring Guidelines (USFWS 2007d) are followed. The use of dump trucks within 660 feet of an eagle nest should occur during the nesting season only when the Bald Eagle Monitoring Guidelines (USFWS 2007d) are followed. Minimize noise and human activity associated with interior construction during the nesting season.

Construction activities may occur during the nesting season if nest monitoring, following the Bald Eagle Monitoring Guidelines (USFWS 2007d), confirms that eagles have not returned to the nest by 1 October, or that nestlings have fledged before 15 May. In either situation, the regional USFWS biologist should be notified.

Managers of any project that follows these guidelines and use nest monitoring to allow construction within 660 feet during the nesting season must provide monitoring reports to the USFWS. In addition to ensuring that the eagles are not disturbed while nesting, this will also provide data to analyze the appropriateness of the protective measures.

Amphibians and Reptiles

About thirty (30) species of Florida's amphibians and reptiles are protected. For Pinellas County, the USFWS federally lists six (6) reptile species. Four of these are species of sea turtles, which do not apply to this site. The USFWS does not list any amphibian species in Pinellas County. Only a few reptiles could occur on this site.

Sand Skink

The sand skink (*Neoseps reynoldsi*) is listed as threatened by both FWS and FWC. The sand skink is primarily found in rosemary scrub, sand pine and oak scrub. Sand skinks require loose sand with large area of no groundcover or canopy cover.

On April 4, 2011, the U.S. Fish and Wildlife Service published a revised sand and bluetail mole skink survey protocol, which impacts owners of properties in interior Central Florida. The known range of the sand skink now includes Highlands, Lake, Marion, Orange, Osceola, Polk, and Putnam Counties with principal populations along the Lake Wales Ridge, the Winter Haven Ridge, and the Mount Dora Ridge. The habitat of the sand skink and bluetail mole skinks is affected by the conversion of citrus groves to pasture lands as well as to residential land uses.

According to the revised protocol, if a property lies within the sand skink consultation area, has an elevation of 80 feet above sea level and contains sandy soils, the presence of sand skinks is presumed.

ECS did not observe sand skinks or their tracks. The property is not within the mapped sand skink consultation area. In addition, the property's habitat does not support sand skinks.

Gopher Tortoise

During the listed species surveys, gopher tortoise burrows (*Gopherus polyphemus*) were observed. The gopher tortoise is a species listed by the FWC as a Threatened. During the 100% survey, thirty-one (31) gopher tortoise burrows were observed (Figure 3). Several commensal species associated with gopher tortoise burrows, including the gopher frog (*Rana capito*) and eastern indigo snake (*Drymarchon corais couperi*) also receive protection, but were not observed.

Currently, there are four suitable options to conduct activities that may adversely impact tortoises. The options are to:

1. Avoid developing the area occupied by the tortoises.

2. Avoid individual burrow entrances to ensure the protection of the entire burrow, usually a distance of 50 feet.

3 Capture and relocate the tortoises to a separate onsite location.

4. Capture and relocate the tortoises to an offsite FWC-approved recipient site.

Tortoises may be relocated to an on-site preserve at a density of up to four tortoises per acre of suitable upland habitat.

Onsite recipient sites must be suitable set-aside areas that are not disturbed by construction activities, that provide a safe environment, and that exclude (through temporary fencing or other means) tortoises from development areas until such development activities have been completed.

Gopher tortoises need access to the following: 1) sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass); 2) sandy, well-drained, open (uncanopied), sunny sites for burrows and basking; 3) protection from dogs, cats, other exotic predators, human harassment, and busy roads. Such general conditions must remain after development, outside the built footprint on the site.

Small sites typically have gopher tortoises that normally "roam" between adjoining neighboring parcels to forage or burrow, so this should be considered as well. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area.

A permanent FWC-approved easement must also be placed over the onsite recipient area to be maintained in perpetuity. If the project site does not have a dedicated onsite preserve for tortoises, then offsite relocation will be necessary.

In this event, tortoises can be relocated by biologists to an FWC approved recipient site. ECS biologists are authorized by the FWC to relocate gopher tortoises by various means including backhoe extraction. ECS also manages four (4) gopher tortoise recipient sites, which are long-term protected sites.

The tasks associated with conducting an offsite relocation of tortoises would include reserving as yet to be determined number of acres at the recipient site, submitting an application to the FWC for the relocation, removing the tortoises from the donor site to the recipient site and reporting the results of the

relocation to the FWC. It typically takes 14 to 30 days to obtain the permit to relocate the onsite gopher tortoise population to an approved recipient site. Once the relocation permit is received, ECS can complete the relocation using either the backhoe or bucket trapping extraction methods.

Eastern Indigo Snake

Concerning the eastern indigo snake, ECS conducted survey transects to identify potential above-ground and underground refugia which eastern indigo snakes may inhabit. Underground refugia includes active or inactive gopher tortoise burrows, mammal burrows, hollows at the base of trees and other similar formations.

Above ground refugia includes thick shrub formations, stumps, the base of thick palmetto, ground litter, brush piles, trash piles, and abandoned structures, and crevices of rock-lined ditch walls and other similar refugia.

Surveys for eastern indigo snakes are recommended by the USFWS during the time period of October 01st through April 30th. There were little suitable refugia for the eastern indigo snake onsite. No eastern indigo snakes were observed.

The USFWS has established new programmatic effect determination key (Key) as part of the eastern indigo snake management. The Key allows the USFWS to require mitigation for eastern indigo snake habitat if 25 or more acres of suitable habitat will be impacted for development.

The mitigation fee is $7,500 for 50 acres, which equates to $150 per acre of habitat. Therefore, the acreage determined to be eastern indigo snake habitat can be multiplied by $150 to determine the mitigation fee.

The USFWS has established a fund that a developer can pay into for mitigation.

A developer can pay up front and then no surveys for the eastern indigo snakes are required. The survey is a minimum 5-day survey. To save time and monies associated with the surveys, the developer can pay a fee and expedite the permitting process.

To determine if the site has eastern indigo snake habitat will be up to the USFWS reviewer assigned to the project.

The Key only applies if a project has Army Corps of Engineers jurisdictional wetlands. It was designed to speed up the permitting process for indigo snakes when there are Army Corps of Engineers jurisdictional wetlands onsite. The idea is a developer pays into the fund and gets a permit quickly.

If a project site does not have Army Corps of Engineers jurisdictional wetlands, then the programmatic key cannot be used. Under this circumstance, formal consultation with the USFWS would have to be conducted which can take up to 6 months to obtain a permit to impact eastern indigo snake habitat.

The USFWS requires the developer to notify the local field office via email at least **30 days prior** to any clearing/land alteration activities. The notification has to include an eastern indigo snake protection/education plan. As long as the signatory of the e-mail certifies compliance with the protection/education plan (including use of the USFWS informational poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

The USFWS requires the developer to notify the local field office via email at least **30 days prior** to any clearing/land alteration activities.

The notification has to include an eastern indigo snake protection/education plan. This notification can occur via email with the protection/education plan attached. As long as the signatory of the e-mail certifies compliance with the protection/education plan (including use of the USFWS informational poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

Mammals

Thirty-three (33) mammals are currently protected in Florida. For Pinellas County, the USFWS federally lists one (1) mammal species, the West Indian Manatee. About four State-listed mammals could occur in the region of this project site. None were observed on this site.

We focused our search on fox squirrels (*Sciurus niger shermani*) and the Florida mouse (*Podomys floridanus)* and their possible den or nest sites. The presence of gopher tortoise burrows increases the likelihood for the Florida mouse. Listed mammals or their potential den sites were not observed.

Listed Plants

There were no protected plant species found on the project site (Table 2). Protected plants are not expected to occur on the project sites since the area has been previously cleared and graded.

Currently, there are no technical reports available by the state or federal agencies mentioned in this letter report for the survey of the nearly 400 protected plant species. None of the agencies require relocation or mitigation for protected plant species.

The Department of Agriculture and Consumer Services (DACS) designates and regulates plants listed as "endangered", "commercially exploited" and "threatened". There is no statutory prohibition against a landowner from harvesting an endangered or threatened plant from his property.

However, it is unlawful for an individual to harvest an endangered or threatened species from the private land of another or any public land without first obtaining written permission of that landowner and a permit from DACS. Additionally, harvesting three or more commercially exploited plants from the private land of another or any public land will also require a DACS permit.

Summary

In summary, one listed species, the gopher tortoise, was observed onsite. There are thirty-one (31) gopher tortoise burrows within the subject property.

ECS can obtain a permit to relocate the gopher tortoise population within 30 to 45 days. Once the permit is received, ECS can conduct the gopher tortoise relocation and release the gopher tortoises onto an ECS managed gopher tortoise recipient site. This is estimated to take three days to complete.

Prior to any land clearing or construction activities, the USFWS must be provided with an eastern indigo snake protection/education plan. The USFWS must approve the protection/education plan prior to construction. There were no other environmental concerns observed for this project.

ECS recommends meeting with the USFWS to discuss the proposed site plan and how it relates to the two bald eagle nests. This is important to determine how the USFWS interprets the proposed site plan, any required modifications and what, if any, mitigation may be required.

Ecological Consulting Solutions Inc. appreciates the opportunity to provide you with our services. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

ECOLOGICAL CONSULTING SOLUTIONS INC

Chris Krack

Attachments

Photos of the Property

Photo 1

Herbaceous area in the north western portion of the project site.

Photo 2

Open lands in the center of the property.

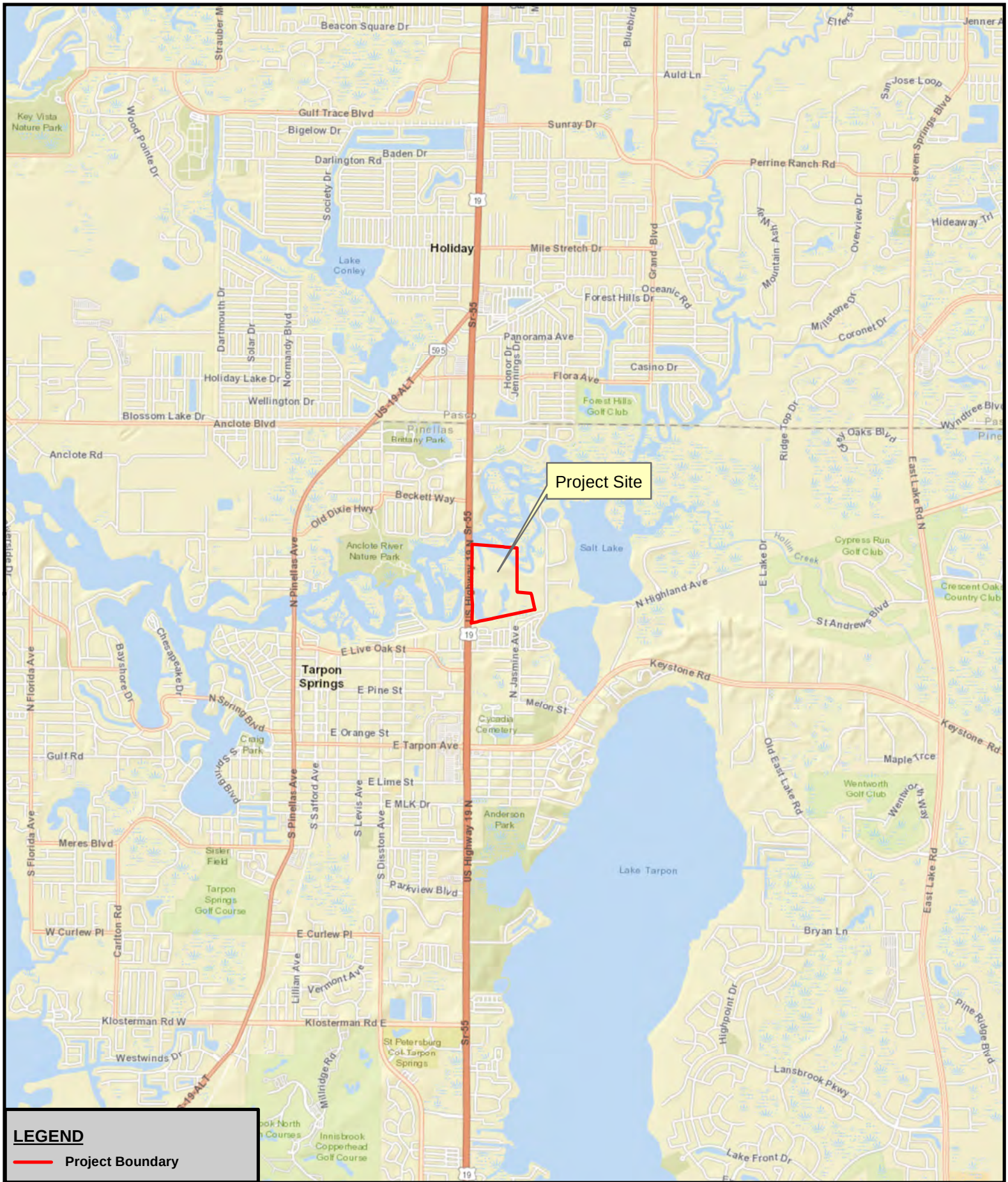
Photo 3

Anclote River in the northern portion of the project site.

Photo 4

Two bald eagle nests present on site.

FIGURES



LEGEND

Project Boundary

www.ecologicalcs.com

Ecological Consulting Solutions, Inc.

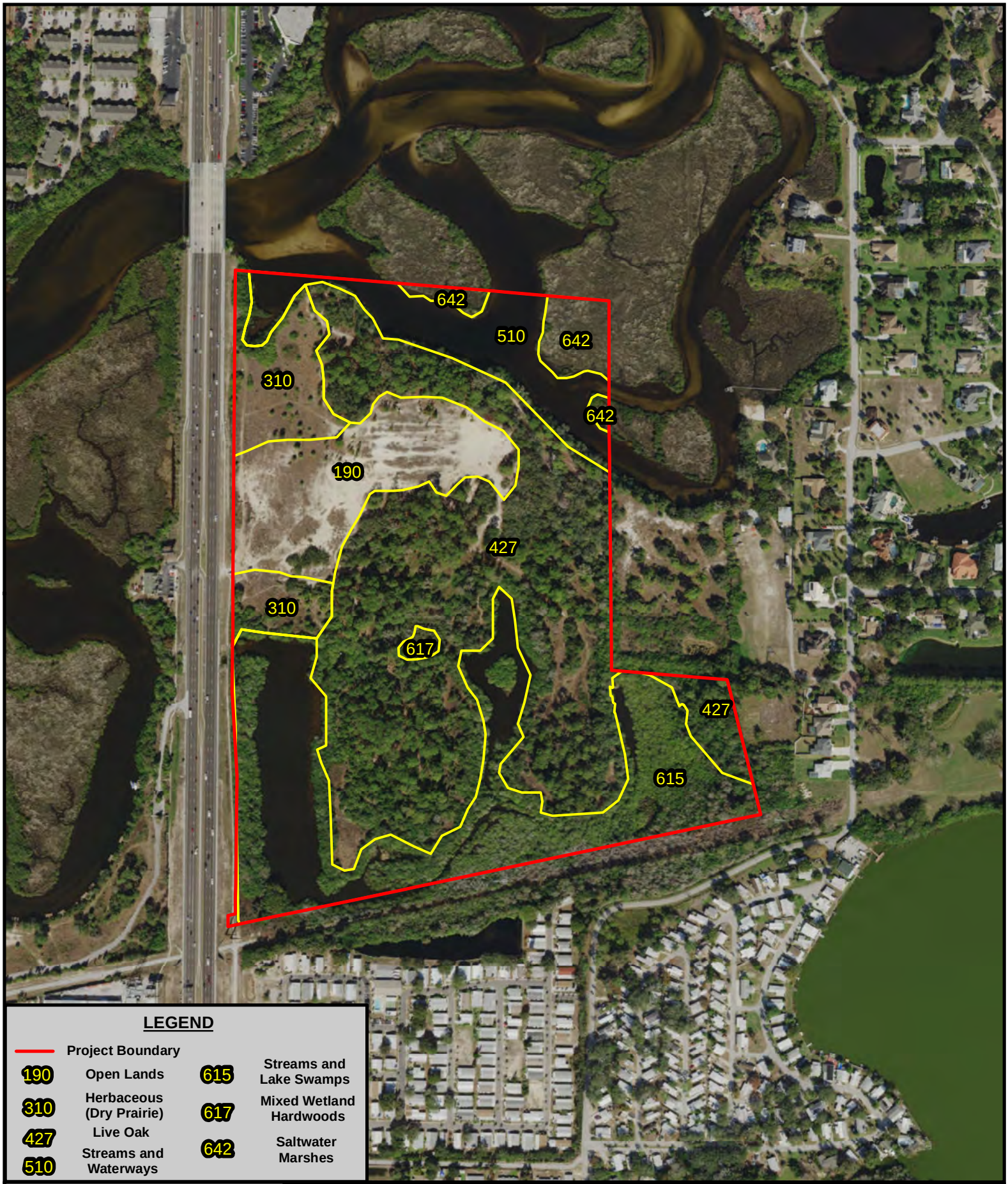
WALMART TARPON SPRINGS
PINELLAS COUNTY, FLORIDA
LOCATION MAP

PROJECT #: 677.02.18 **DATE: 09/05/18** **FIGURE #: 1**

0 1,000 2,000 4,000 6,000 8,000 Feet

N

235 N. Hunt Club Blvd. Suite 202
Longwood, Florida 32779
Office: (407) 869-9434 Fax: (407) 869-9436
CKrack@ecsfl.cc



LEGEND

	Project Boundary		
190	Open Lands	615	Streams and Lake Swamps
310	Herbaceous (Dry Prairie)	617	Mixed Wetland Hardwoods
427	Live Oak	642	Saltwater Marshes
510	Streams and Waterways		

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Ecological Consulting Solutions, Inc.

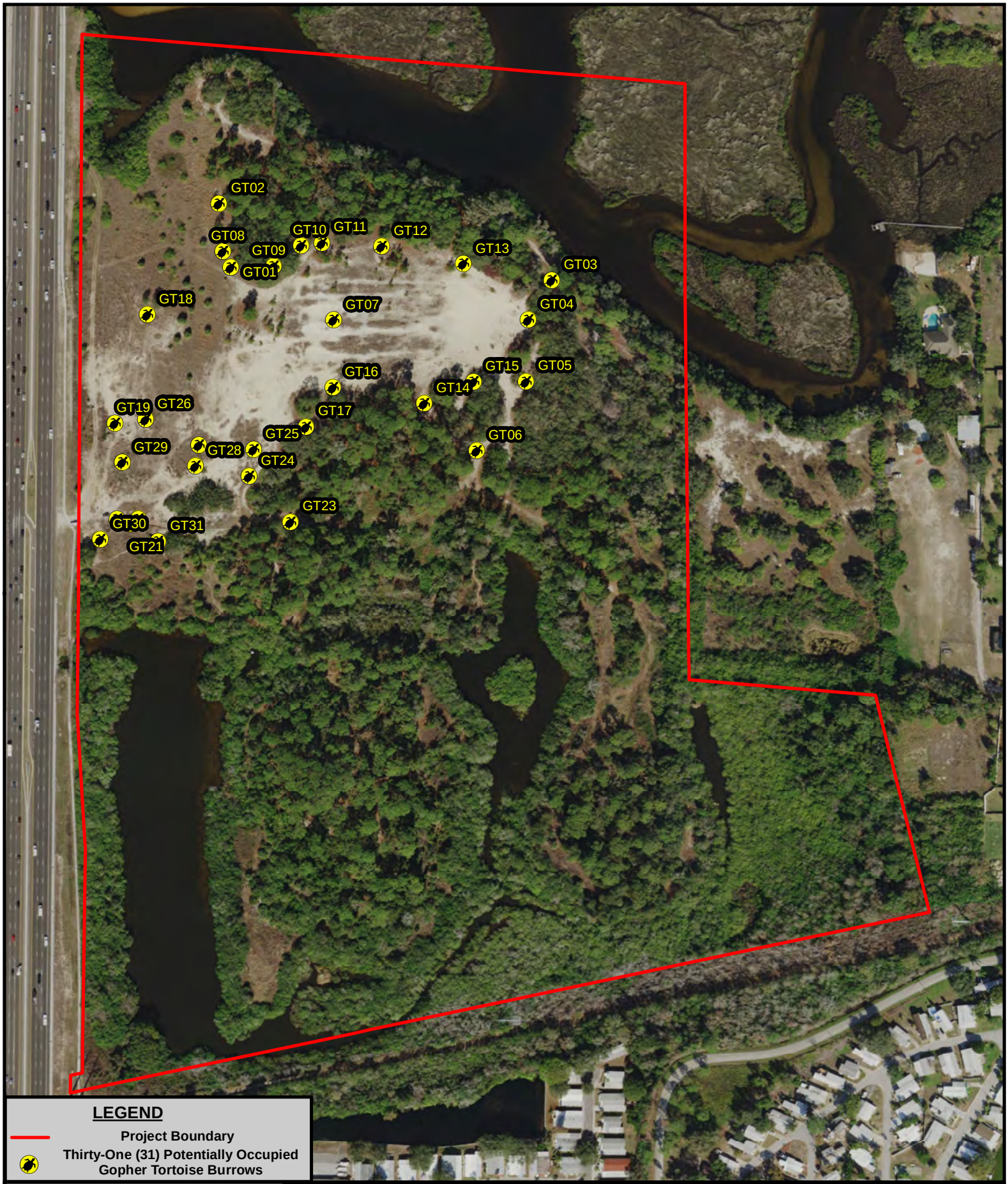
WALMART TARPON SPRINGS
PINELLAS COUNTY, FLORIDA
FLUCFCS MAP

PROJECT #: 677.02.18 **DATE: 09/05/18** **FIGURE #: 2**

0 100 200 400 600 800 1,000 Feet

N

235 N. Hunt Club Blvd. Suite 202
Longwood, Florida 32779
Office: (407) 869-9434 Fax: (407) 869-9436
CKrack@ecsfl.cc



LEGEND

Project Boundary

Thirty-One (31) Potentially Occupied Gopher Tortoise Burrows

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WALMART TARPON SPRINGS
PINELLAS COUNTY, FLORIDA
BURROW MAP

PROJECT #: 677.02.18 **DATE: 09/05/18** **FIGURE #: 3**

0 100 200 400 600 Feet

N

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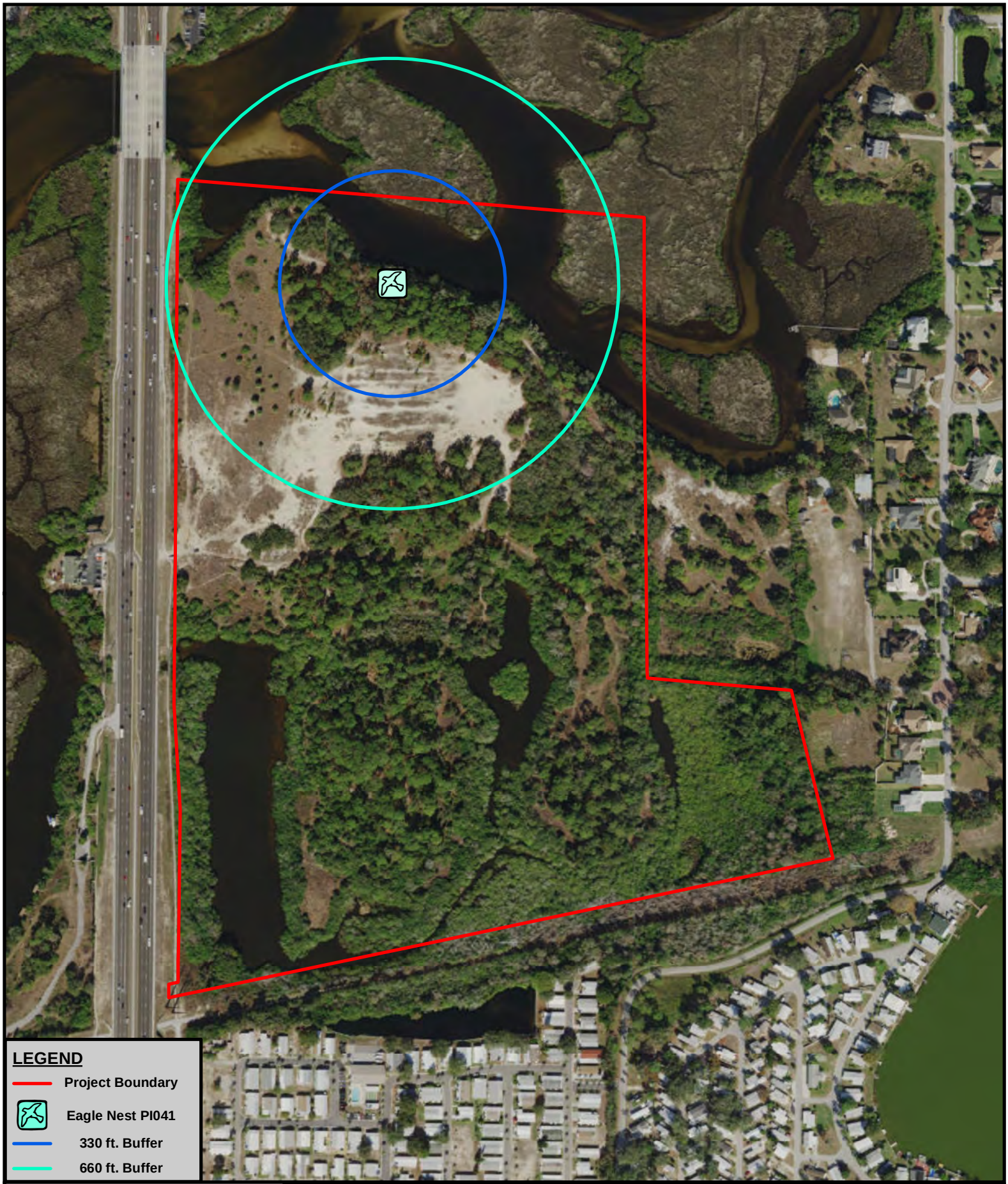

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WALMART TARPON SPRINGS
PINELLAS COUNTY, FLORIDA
EAGLE MONITORING MAP

PROJECT #: 677.02.18 **DATE: 07/08/19** **FIGURE #: 4**

0 400 800 Feet

N

235 N. Hunt Club Blvd. Suite 202
Longwood, Florida 32779
Office: (407) 869-9434 Fax: (407) 869-9436
JDunfee@ecsfl.cc

TABLES

TABLE 1: PROTECTED FAUNA FOUND IN PINELLAS COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE US 19/WALMART TARPON SPRINGS PROPERTY.

SPECIES	FWC STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
REPTILES				
Drymarchon corais couperi Eastern indigo snake	T	T	Dry habitats bordered by water; often occupy *G. polyphemus* burrows	Low: habitat available, gopher tortoise burrows present
Gopherus polyphemus Gopher tortoise	SSC	_	Well drained soil; xeric pine-oak hammocks and scrub; pine flatwoods	High: habitat available, burrows observed
Neoseps reynoldsii Sand Skink	T	T	Well drained sandy soil, open areas, sand pine-rosemary scrub	Low: habitat limited, none sighted, outside known range
Pituophis melanoleucus mugitus Florida pine snake	SSC	_	Dry, sandy barrens in xeric oak and pine-wooded sandhills	Low: habitat available, none observed
Stilosoma extenuatum Short-tailed snake	T	_	Sandy upland ridges; xeric oak pine woods; xeric oak hammocks	Low: habitat not present, none sighted
AMPHIBIANS				
Rana areolata aesopus Florida gopher frog	SSC	-	Dry, xeric habitats with wetlands such as isolated permanent ponds and cypress domes	Low: habitat limited, gopher tortoise burrows observed
BIRDS				
Aphelocoma coerulescens Florida scrub jay	T	T	Level, sterile, white sand with low, xeric oak scrub	Low: no suitable scrub available on site, none sighted
Aramus guarauna Limpkin	SSC	_	Densely vegetated swamps, lakeshores and slow streams	Low: open water available, none sighted
Egretta caerulea Little blue heron	SSC	_	Lake littorus; shallow ponds and marshes	Medium: open water available, no birds sighted
Egretta thula Snowy egret	SSC	_	Lake littorus; shallow ponds and marshes	Medium: open water available, no birds sighted

TABLE 1: PROTECTED FAUNA FOUND IN PINELLAS COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE US 19/WALMART TARPON SPRINGS PROPERTY.

SPECIES	FWC STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
BIRDS (cont..)				
Egretta tricolor Tricolored heron	SSC	_	Lake littorus; shallow ponds and marshes	Medium: open water available, none sighted
Eudocimus albus White ibis	SSC	-	Beaches, mudflats, wet fields and prairies, forested wetlands and marshes	Low: habitat not available, none sighted
Falco peregrinus tundrius Peregrine falcon	E	_	Coastal beaches, prairies, and marshes	Low: no habitat available, none sighted.
Falco sparverius paulus Southeastern American kestrel	T	_	Forest edges, and clearings; nests in mature pines	Low: habitat not available, none sighted
Grus canadensis pratensis Florida sandhill crane	T	_	Marshes, wet prairies, pastures, and open herbaceous rangeland	Low: habitat not available, birds not sighted
Haliaeetus leucocephalus Bald eagle	T	T	Open (<60% canopy cover), mature pine forests < 2 km from expansive open waters	High: habitat available, nests observed, no birds sighted
Mycteria americana Wood stork	E	E	Nests is cypress swamps; forage sites range from shallow marshes to roadway borrow pits	Low: habitat not available, birds not sighted
Picoides borealis Red-cockaded Woodpecker	E	E	Old-growth pine flatwoods with regular fire occurrence are required for nesting	Low: habitat not available, none sighted
MAMMALS				
Podomys floridanus Florida mouse	SSC	_	Sand pine scrub; xeric oak-pine flatwoods; often associated with *G. polyphemus* burrows	Low: habitat / gopher tortoise burrows present, none sighted
Sciurus niger shermani Sherman's fox squirrel	SSC	_	Mature flatwoods of sandhills; occasional in tall cypress-bay forests	Low: habitat not available, none sighted
Ursus americanus floridanus Florida black bear	T	_	Nearly-impenetrable wooded thickets and swamps	Low: habitat not available, none sighted

Footnotes to Table 1

1 FWC - Florida Fish and Wildlife Conservation Commission, formerly the Florida Game and Fresh Water Fish Commission; Official Lists of Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997.

2 USFWS – United States Fish and Wildlife Service; List obtained from FWC's Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997.

(E-endangered, T-threatened, SSC-species of special concern, CE-commercially exploited). C1 (candidate for federal listing, with enough substantial information on biological vulnerability and threats to support proposals for listing) and C2 (candidate for listing, with some evidence of vulnerability, but for which not enough data exists to support listing) are no longer official categories.

3 Habitats described by:

Ashton, R.E. and P.S. Ashton. 1985 Handbook of Reptiles and Amphibians of Florida (3 vols.). Windward Publ. Inc. Miami.
Conant, R. 1975 A Field Guide to Reptiles and Amphibians of Eastern/Central North America (2nd ed.). Houghton Mifflin Co. Boston 430 pp.
Kale, H.W. 1978. Volume Two; Birds. In P.C.H. Pritchard (ed.), Rare and Endangered Biota of Florida. University Presses of Florida. Gainesville. 121 pp.
Kale, H.W. and D.S. Maehr. 1990. Florida's Birds: A Handbook and Reference. Pineapple Press. Sarasota. 288 pp.
Layne, L.N. 1978 Volume One: Mammals. In P.C.H. Pritchard (ed.), Rare and Endangered Biota of Florida. University Presses of Florida. Gainesville, 52 pp.
McLane, W.M. 1985. The Fishes of the St. Johns River, Florida. Ph.D. diss. University of Florida, Gainesville. 361 pp.
Peterson, R.T. 1980. A Field Guide to the Birds of East of the Rockies (4th ed.). Houghton Mifflin Co. Boston. 384 pp.

4 Likelihood of occurrence: Low, Moderate or High, based on the best available data and selective field observations.

TABLE 2: PROTECTED FLORA FOUND IN PINELLAS COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE US 19/WALMART TARPON SPRINGS PROPERTY.

SPECIES	FDA STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
Calopogon barbatus Bearded grass pink	T	_	Damp pinelands	Low: habitat not available, none found
Calopogon multiflorus Many-flowed grass pink	E	_	Open, damp, occasionally recently burned pinelands and meadows	Low: habitat not available, none found
Deerinfothamnus rugelii Rugel's pawpaw	E	E	Mesic flatwoods	Low: habitat not available, none found
Encyclia tampensis Butterfly orchid	CE	_	Cypress swamps, hardwood swamps and hammocks	Low: habitat not available, none found
Epidendrum conopseum Greenfly orchid	CE	_	Cypress swamps, hardwood swamps and hammocks	Low: habitat not available, none found
Hartwrightia floridiana Florida Hartwrightia	T	_	Wet, open areas, moist grasslands, and sphagnum bogs	Low: habitat not available, none found
Lilium catesbaei Southern red lily	T	_	Mesic flatwoods, wet prairies, usually in graminoid systems	Low: habitat not available, none found
Listera australis Southern tway blade	T	_	Hammocks, low moist woods in deep humus, ravines, shady stream banks, sphagnum	Low: habitat not available, none found
Nemastylis floridana Fall-flowering ixia	E	_	Marshes; grassy openings of wet hammocks moist flatwoods	Low: no habitat available, none found
Platanthera blephariglottis Large white fringed orchid	T	_	Inhabits sphagnum bogs, meadows, damp fields and woods	Low: habitat not available, none found
Platanthera cristata Golden fringed orchid	T	_	Low moist meadows and damp pine woods	Low: habitat not available, none found
Platanthera flava Southern tubercled orchid	T	_	Very wet habitats such as swamps, bogs and wet forests with thick, black mud	Low: habitat not available, none found

TABLE 2: PROTECTED FLORA FOUND IN PINELLAS COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE US 19/WALMART TARPON SPRINGS PROPERTY.

SPECIES	FDA STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
Platanthera integra Southern yellow fringeless orchid	E		Marshes and wet pine flatwoods	Low: no habitat available, none found
Platanthera nivea Snowy orchid	T	_	Open bogs and sunny, wet meadows	Low: habitat not available, none found
Pogonia ophioglossoides Rose pogonia	T	_	Open, wet meadows and sphagnum bogs, poorly drained roadside ditches	Low: habitat not available, none found
Polygala lewtonii Scrub (Lewton's) milkwort	E	E	Dry oak woodlands and scrub	Low: habitat not available, none found.
Rhapidophyluum hystrix Needle palm	CE	_	Wet to mesic woods and hammocks; spring fed stream bottoms	Low: habitat not available, none found
Spiranthes brevilabris floridana Florida Ladies' tresses	E	_	Open meadows and damp pinelands, road shoulders, ditches	Low: habitat not available, none found
Spiranthes laciniata Lace-tip ladies' tresses	T	_	Marshes and cypress swamps; road banks and ditches	Low: habitat not available, none found
Spiranthes longilabris Long-tip ladies' tresses	T	_	Marshes and wet prairies	Low: habitat not available, none found
Stenorrhynchos lanceolatus var. lanceolatus Leafless beaked orchid	T	_	Vacant lots, open pastures, pine flatwoods and mowed roadsides	Low: habitat available, none found
Tillandsia fasciculata Common wild pine	E	_	Cypress swamps and hammocks	Low: habitat not available, none found
Tillandsia utriculata Giant wild pine	E	_	Hammocks and cypress swamps	Low: habitat not available, none found
Zephyranthes simpsonii Simpson zephyr lily	T	_	Dome swamps, wet flatwoods, ditches, wet pastures, often burned-over areas	Low: habitat not available, none found

Table 2 Footnotes

1 FDA – Florida Department of Agriculture and Consumer Services; List obtained from FWC's Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997. Supporting information from FNAI - Florida Natural Inventory; Matrix of habitats and distribution by county of rare/endangered fauna and flora in Florida, published April 1990.

2 USFWS – United States Fish and Wildlife Service; List obtained from FWC's Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997.

[E-endangered, T-threatened, SSC- species of special concern, CE-commercially exploited.] C1 (candidate for federal listing, with enough substantial information on biological vulnerability and threats to support for listing) and C2 (candidate for listing with some evidence of vulnerability, but for which not enough data exist to support listing) are no longer official categories.

3 Habitats described by:

Bell, C.R. and B.J. Taylor. 1982. Florida Wild Flowers and Roadside Plants. Laurel Hill Press, Chapel Hill, NC 308pp.
FNAI - Florida Natural Inventory; Matrix of Habitats and Distribution by County of Rare/Endangered Species in Florida, published April 1990.
Godfrey, R.K. 1988. Trees, Shrubs, and Woody Vines of Northern Florida, and Adjacent Georgia and Alabama. University Georgia Press. Athens, GA 734 pp.
Ward, D.B. (publ. date not listed). Volume Five,. Plants, in P.C.H. Pritchard (ed.), Rare and Endangered Biota of Florida. University Presses of Florida, Gainesville. 175 pp.
Wunderlin, R.P. 1982. Guide to Vascular Plants of Florida. University Presses of Florida, Gainesville, FL. 472 pp.

4 Likelihood of occurrence: Low, Moderate, or High, based on the best available data and selective field observations.

Bio-Tech Consulting Inc.
Environmental and Permitting Services

info@bio-techconsulting.com
www.bio-techconsulting.com

October 15, 2020

Harvey Gonzalez
Morgan Group
2750 NW 3rd Avenue, Suite 2
Miami, FL 33127

Proj: Anclote Harbor Site – Pinellas County, Florida
(BTC File #1119-03)
Re: Proposed Wetland Impacts and Mitigation Plan

Dear Mr. Gonzalez:

Based on the site plan provided by Kimley Horn, the Anclote Harbor Project Site is proposing to impact two isolated wetland systems (0.78 acres and 0.14 acres) that total 0.91 acres. A Unified Mitigation Assessment Methodology (UMAM) evaluation has been conducted on the proposed wetland impacts, as well as the enhancement of the remaining post-development on-site wetlands (29.62 acres). The UMAM evaluation calculated a 0.53 functional loss with the proposed direct wetland impacts and a 1.80 functional gain with the on-site wetland enhancement. Therefore, the proposed wetland impacts should be adequately offset with the on-site wetland enhancement activities.

The wetland enhancement area will be monitored on a bi-annual basis so that exotic species, per the current FLEPPC list, do not exceed 5% aerial coverage in the wetlands. Maintenance will be implemented on a monthly basis with the goal of the event being the elimination the exotic component (i.e., 0% after event). Additionally, these areas will be placed under a conservation easement dedicated to the SWFWMD.

The monitoring will consist of general qualitative observations in the wetland enhancement areas. A summary of the data collected will be included in an annual report submitted to SWFWMD each year. The recorded data obtained from the vegetative monitoring will be provided to SWFWMD in report form and will be submitted on an annual basis. Reports will include the following:

A. The dates and time of the monitoring event.
B. The person responsible for performing the measurements.
C. The analytical techniques or methods utilized.

Orlando: Main Office
3025 East South Street
Orlando, FL 32803

Vero Beach Office
4445 N A1A
Suite 221
Vero Beach, FL 32963

Jacksonville Office
1157 Beach Boulevard
Jacksonville Beach, FL 32250

Tampa Office
6011 Benjamin Road
Suite 101 B
Tampa, FL 33634

Key West Office
1107 Key Plaza
Suite 259
Key West, FL 33040

Aquatic & Land
Management Operations
3825 Rouse Road
Orlando, FL 32817

407.894.5969
877.894.5969
407.894.5970 fax

D. The results of such analyses including:
   1. Status of invader species
   2. Coverage by wetland and FACW vegetation.
   3. A description of any problems encountered during evaluation and proposed solutions.
   4. Panoramic photographs of the area.

In addition to the vegetative portion of the monitoring to be conducted, wildlife information will also be gathered and described in the report.

Success Criteria

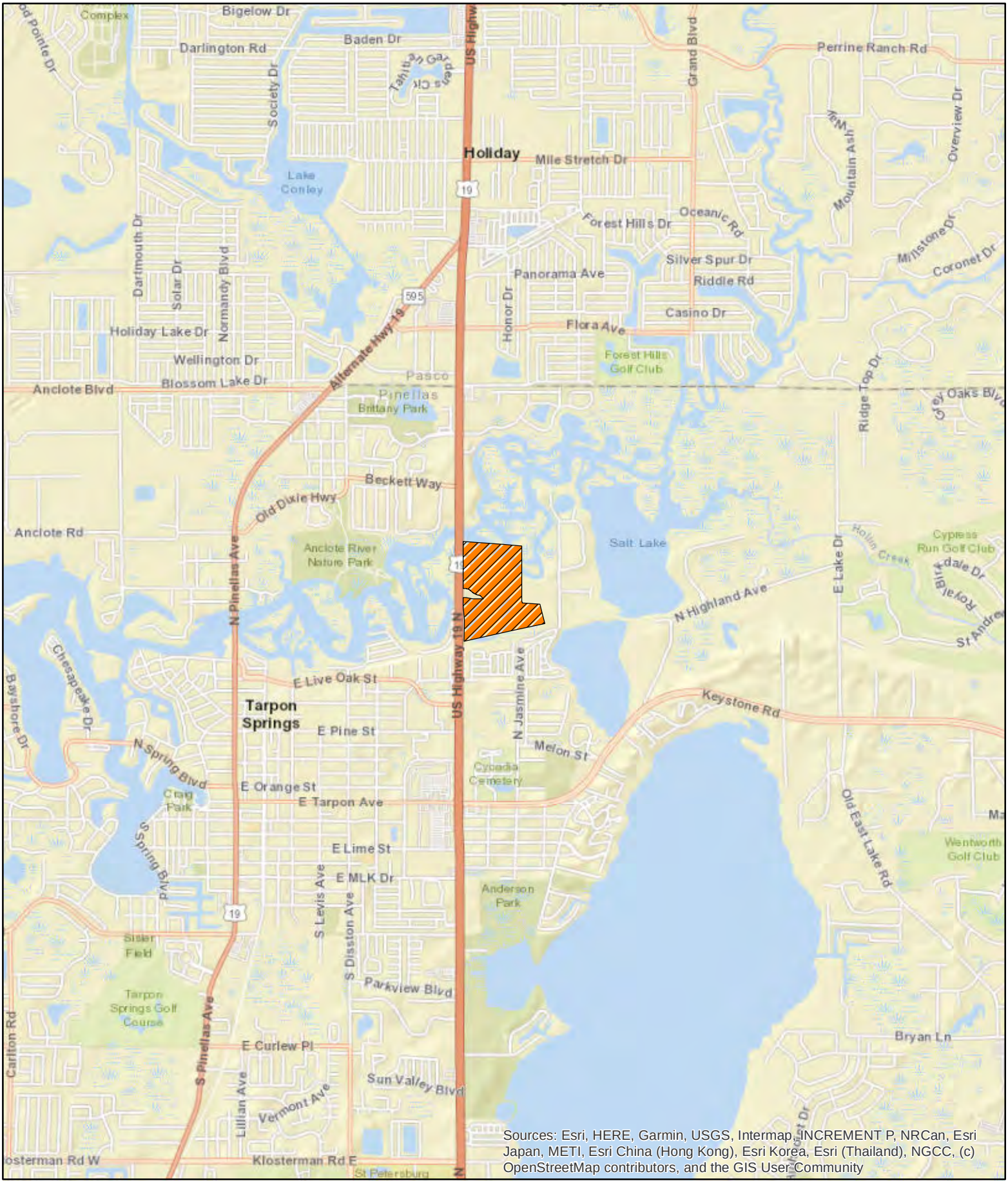
The success criteria for the wetland enhancement areas will consist of greater than 85 percent coverage by desirable species after 5 years, and less than 5 percent areal coverage by exotic species in the wetland.

Should you have any questions or require any additional information, please do not hesitate to contact our office at (407) 894-5969. Thank you.

Regards,

Daniel Gough
Project Manager

John Miklos
President



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Environmental and Permitting Services
3025 E. South Street Orlando, FL 32803
Ph: 407-894-5969 Fax: 407-894-5970
www.bio-techconsulting.com

Anclote Harbor Site
Pinellas County, Florida
Fig 1
Location Map

N
W E
S

3,200
Feet

Project #: 20-383
Produced By: JDH
Date: 4/21/2020

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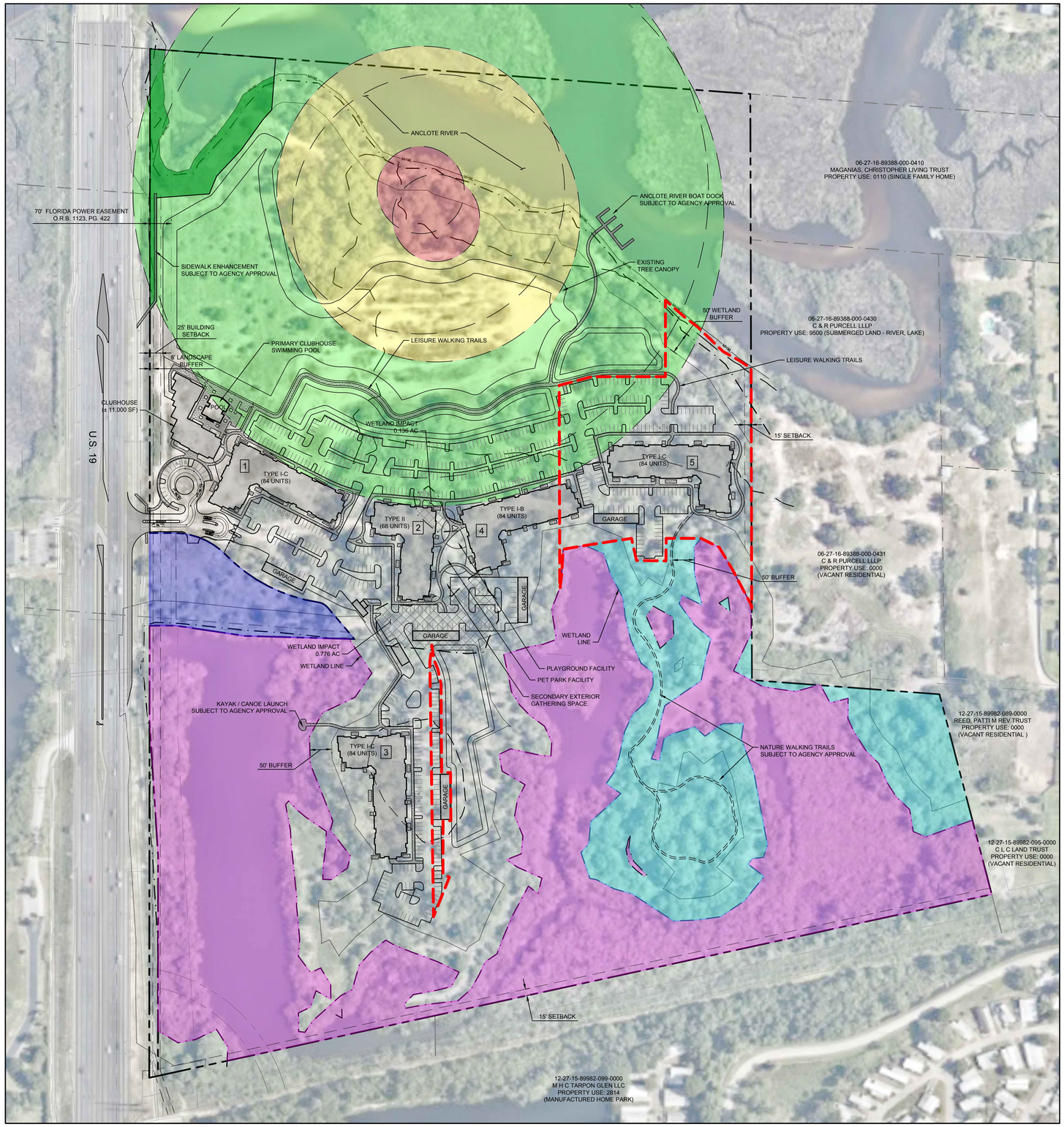
Anclote Harbor Site
Pinellas County, Florida
Figure 2
Aerial Photograph Map

770
Feet

N
W E
S

Project #: 20-383
Produced By: BTC
Date: 7/24/2020

ANCLOTE HARBOR PRELIMINARY DEVELOPMENT PLAN



NORTH

LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY LINE
- NORTH BLVD R/W
- EASEMENT LINE
- SECTION LINE
- FLOOD PLAIN LINE
- MEAN HIGH WATER LINE
- WETLAND LINE
- WETLAND BUFFER (50')
- WETLAND IMPACT AREA
- PROPOSED BUILDING
- PROVIDED RESIDENTIAL ON OFFICE LAND AREA

CONSERVATION LEGEND

- EAGLE NEST - 660' R
- EAGLE NEST - 330' R
- EAGLE NEST - 100' R
- CITY OF TARPON SPRINGS OWNED PARCEL
- WETLAND TO BE PRESERVED
- UPLANDS TO REMAIN AS OPEN SPACE
- POCKET PARK

PEDESTRIAN CIRCULATION EXHIBIT

LEGEND

1. Primary Clubhouse Swimming Pool
   - +/- 2,200 SF recreational swimming pool (per 404 units)
   - Poolside lounge cabanas and shaded community seating
   - Outdoor kitchen and grill area
   - Outdoor firepit
   - Community gathering and lounge space
2. Leisure Walking Trails
   - Circulation pathways throughout community and along retention ponds
   - Comfort stations with areas for seating and gathering
3. Secondary Exterior Gathering Space
   - Outdoor kitchen and grill area
   - Outdoor fire pit
   - Shaded community seating
   - Recreational yard games
4. Playground Facility
   - Recreational playground facilities geared towards families and young children
   - Shaded community seating
   - Water drinking fountains for residents
5. Pet Park Facility
   - Gated and fenced area for pet recreation and activity
   - Shaded community seating
   - Water drinking fountains for pets and residents
6. Kayak / Canoe Launch
   - Walking pathway with point of access for water recreation (subject to permitting / agency approval)
7. Anclote River Boat Dock
   - Walking pathway with boardwalk access for water recreation
   - Boat parking and pick-up / drop-off location (subject to permitting / agency approval)
8. Nature Walking Trails
   - Leisure pathway loop through preservation area (subject to permitting / agency approval)

Pedestrian Circulation Pathway
Nature Walking Trail (subject to permitting / agency approval)
Pinellas Trail

ANCLOTE HARBOR
PRELIMINARY DEVELOPMENT PLAN
CONSERVATION AREAS

MORGAN
ANCLOTE HARBOR

PDP-02

Kimley»Horn

October 12, 2020

Ms. Patricia L. McNeese, AICP
Principal Planner
City of Tarpon Springs
324 East Pine Street
Tarpon Springs, Florida 34688

Subject: Anclote Harbor Traffic Impact Analysis (TIA) Review
American Project No: 5169367
Response to TIA Review Comments

Dear Ms. McNeese,

On behalf of our client, Kimley-Horn, is providing you with the following responses to comments dated October 5, 2020 and as discussed with the City on October 13, 2020. One (1) copy of the updated Traffic Impact Analysis (TIA), addressing these comments, for the Anclote Harbor project will also be submitted to the City for their review.

Comment 1: In the Preliminary Development Plan (PDP-01), indicate the directional U turn arrows in the two turn lanes and site driveways.

> Response 1: Figure 9 in the report has been updated to indicate the directional U turn arrows and includes the site plan to clarify the access to/from the site.

Comment 2: Keep City and Reviewer informed on the status of the FDOT Approval of Permit Plans for the NB right turn lane into the site, and the offset median U turn lanes. Provide a copy of any plans that are provided to FDOT, to the City.

> Response 2: Another pre-application meeting was held with the FDOT staff on October 8, 2020. FDOT will review the plans in detail with the submittal of a driveway permit. During the pre-application meeting, FDOT agreed the offset left-turn lanes should be provided for access to/from the site. FDOT noted they reviewed other locations for offset left-turn lanes and generally found the turn lanes to be safer compared to full median openings.

Comment 3: On Page 3, reference was made to Highway Capacity Software (HCS). Synchro software was used (per Appendices), not Highway Capacity Software. Revise verbiage in the report.

> Response 3: Synchro software was used to provide results which are based upon the latest Highway Capacity Manual. The report has been updated to reference Synchro software.

Comment 4: General Comment on Figures. Dodecanese Blvd is a WB extension of Live Oak St., and ties in at Alt US 19 north of the Live Oak St./Alt US 19 intersection. Please show it correctly in all Figures.

> Response 4: Dodecanese Boulevard was analyzed in the analysis. The figures show the intersection of Alt US 19 & Dodecanese Boulevard as it is the signalized intersection (which provides access to Live Oak Street) and the project traffic is anticipated to utilize this intersection. The figures are not drawn to scale and indicate the general location of the intersection.

Comment 5: Comments on Figure 2,

a. Live Oak St. southbound through shows 63%, whereas Spruce Street southbound traffic shows 65%. Please clarify.
b. The Traffic Distribution at the Live Oak St/Alt US 19 does not add up at the adjacent intersections of Live Oak St/US 19 and Spruce St/US 19. Also, there is 2% distribution in NS Direction where are they leading to? Please confirm.

Response 5: The southbound volume was updated to include only 2% of traffic making the southbound right-turn movement at US 19 & Spruce Street.

As the comment requested, the project distribution was updated at Live Oak Street & Alternative US 19 to remove the northbound project traffic.

Comment 6: Comments on Figure 3,

a. Traffic volumes from Beckett Way/US 19 Intersection add up to 12 vehicles for SB direction. Figure 3 shows 13 vehicles. Please confirm.
b. Traffic volumes from Beckett Way/US 19 Intersection add up to 37 vehicles for NB direction. Figure 3 shows 38 vehicles. Please confirm.
c. See Traffic Distribution Percentages comments from Figure 2, which would affect Figure 3.

Response 6: The project traffic volumes have been updated. The volumes were generally rounded based upon the distribution percentage.

Comment 7: Comments on Figure 4,

a. Traffic volumes from Beckett Way/US 19 Intersection add up to 37 vehicles for SB direction. Figure 4 shows 38 vehicles. Please confirm.
b. The traffic volumes do not add up the driveway volumes which is 70 vehicles. Please confirm.
c. Traffic volumes for SB approach at Live Oak St/US 19 Intersection show 45 vehicles for SB direction, whereas upstream it is 46 vehicles per Figure 4. Please confirm.
d. See previous comment on Traffic Distribution Figure. The traffic assignment on Figure 4, at the Live Oak St/Dodecanese Blvd does not add up at the adjacent intersections of Live Oak St/US 19 and Spruce St/US 19. Also there is traffic volumes along N-S Direction, where are they leading to? Please confirm.
e. Traffic volumes for SB approach at Live Oak St/US 19 Intersection show 44 vehicles for SB direction, whereas downstream at Spruce St., it is 45 vehicles per Figure 4. Please confirm.
f. Traffic volumes for SB approach at Spruce St/US 19 Intersection show 41 vehicles for SB direction, whereas downstream at E Tarpon Ave., it is 42 vehicles per Figure 4. Please confirm.

Response 7: The project traffic volumes have been updated. The volumes were generally rounded based upon the distribution percentage.

Comment 8: Typical Comment - Determine if comments on Figures 2 through 4, would affect the traffic volumes shown in Figures 5 through 8, and Figures 10, 11.

Response 8: The project and total traffic volumes were updated based upon the comments.

Comment 9: Typical Comment - Add link volumes on Figures 5 through 8 between all Study Intersections.

Response 9: The volumes are summarized in the table in the report for the roadway analysis section.

Roadway volumes exiting one study area intersection may not be equivalent to the entering intersection turning movement volumes at the next intersection due to driveway locations between study intersections or minor fluctuations in travel patterns between time periods. To evaluate the study roadway segment based upon typical roadway conditions, volumes for the study roadway segment were determined as the average of entering and exiting vehicles from adjacent street intersections during the a.m. and p.m. peak hours.

Comment 10: Comments on Figure 10, 11-

a. For SB traffic at US 19/Live Oak St., traffic volumes adds up to 3720 at the intersection, whereas upstream volumes shows a lower number 3693. Please confirm why the discrepancy?
b. For NB traffic between US 19/Live Oak St., traffic volumes adds up to 1481 at the intersection, whereas downstream volumes shows a lower number 1417. Please confirm why the discrepancy?

Response 10: Traffic volumes fluctuate due to the driveway openings between the study area intersections. The median opening was estimated based upon the volumes collected at the intersection of US 19 & Live Oak Street.

Roadway volumes exiting one study area intersection may not be equivalent to the entering intersection turning movement volumes at the next intersection due to driveway locations between study intersections or minor fluctuations in travel patterns between time periods.

Comment 11: Page 22, Study Roadway Segments are anticipated to operate at LOS E. Would FDOT be okay with allowing the Applicant not to pay any impact fees for traffic added by the subject project and other future projects contributing to worsen the LOS to E? LOS D is the acceptable criteria. Please indicate in the narrative that FDOT would accept it for reasons described by Kimley Horn in last discussion with reviewer.

Response 11: The analysis will be reviewed by FDOT as part of the Driveway Permit Application process. FDOT is focused on operational and safety improvements. The applicant will coordinate with the FDOT as previously discussed with the City and the reviewer.

As stated in the City of Tarpon Springs Mobility Management section § 122.11.01, "In 2013, the Pinellas County Metropolitan Planning Organization approved the Pinellas County Mobility Plan Report. The intent of the Mobility Plan is to replace local transportation concurrency management programs with a system that provides local governments with the means to manage the traffic impacts of development projects without requiring developers to meet adopted level of service standards."

The updated analysis will be provided to FDOT for their review to receive approval for the FDOT Driveway Permit. The applicant does not propose to widen US 19 and it is our understanding that

there are not any planned roadway widenings for the adjacent section of US 19. Instead, as stated in the City of Tarpon Springs Mobility Management section § 122.11.03, "Transportation management plans are required for development applications seeking to utilize transportation management strategies/improvements to address their development impacts."

Comment 12: Tables 2 and 3, comments

a. Based on comments made on Figure 2 (Project Traffic Distribution Percentages). Confirm if Project Traffic Assignment, Peak Hour values, Project % Service Volumes, etc. in Table 3 will change and update the table.
b. Last Column under Table, should be LOS D Capacity. It was shown correctly before in the last submittal. Please change it back to LOS D. Update the last column to say YES where applicable, on any roadway segments that exceeds LOS D Service Volumes, which is the acceptable LOS. LOS E and F are unacceptable.

Response 12: Acknowledged. There is no defined unacceptable LOS for the roadway segment based upon the City of Tarpon Springs code. The analysis will be discussed with FDOT as US 19 is under FDOT jurisdiction.

Comment 13: Page 25 comment, Tables 4 and 5 too –

a. Previous comment not implemented. In addition to V/C ratios, add LOS for each of movements and overall intersection LOS and corresponding delay in vehicles/second. Mention if LOS D thresholds can be met with any countermeasures to improve the operation of the movements/overall intersection. When would the improvements be needed and who will address operational improvements? Revise narrative under Intersection Analysis, and corresponding Table 4.
b. General Comment for Tables 4 and 5 - Confirm if any of the previous comments made on the Figures would change any of the V/C ratios listed. Also include LOS. Previous comment not implemented. It was discussed during comment resolution meeting that the general public and council members do not understand what V/C ratio is. Previous comment "Include a LOS chart with LOS A thru F with corresponding delays so City staff and laymen can understand the operations. Also include the thresholds for V/C (volume/capacity) ratio (such as what is acceptable and what is failure), so it is easily understandable to City council and anyone reviewing this report."

Response 13: Additional language has been added to explain v/c ratio and acceptable thresholds. This comment was discussed with the City and reviewer previously. LOS was not included in the analysis as it is not a standard required to be upheld due to the Pinellas MPO Mobility Plan Report.

As stated in the City of Tarpon Springs Mobility Management section § 122.11.01, "In 2013, the Pinellas County Metropolitan Planning Organization approved the Pinellas County Mobility Plan Report. The intent of the Mobility Plan is to replace local transportation concurrency management programs with a system that provides local governments with the means to manage the traffic impacts of development projects without requiring developers to meet adopted level of service standards."

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there are not any planned roadway widenings for the adjacent section of US 19. Instead, as stated in the City of Tarpon Springs Mobility Management section § 122.11.03, "Transportation management plans are required for development applications seeking to utilize transportation management strategies/improvements to address their development impacts."

Comment 14: Table 6 Comments –

a. Revise NBL to NB U Turn, and SBL to SB U Turn.

Response 14: Acknowledged. This has been updated in the report.

Comment 15: Page 31 Comment

a. The Parking Waiver requested by Applicant for Parking is 46 spaces. Work with City of Tarpon Springs on this waiver. This may encourage parking outside community when events occur in the clubhouse or any guests are having parties. Clarify where would overflow parking be accommodated?

Response 15: The applicant is working with the City on the waiver. There is sufficient parking provided on site to accommodate the residents and guests; the waiver is requested for the club house space as residents can park on site and then use the pedestrian paths to access the club house.

Comment 16: Page 32, Multimodal Comment

a. Since, this is a requirement for Applicant to make Multi-modal improvements. Can it be made contingent upon Applicant to provide Design Construction Plans to City/FDOT and applicant pay for Construction of the same concurrently with the proposed development. A more detailed review will be done by City's Consultant of the Design Plans.

Response 16: The applicant has detailed the multimodal improvements they are proposing in the report. The multi-modal improvements have been approved in concept by the City. Additional details will be provided with the final design plan (SDP).

Comment 17: Page 35, Conclusion –

a. As part of the Conclusion, summarize all Recommendations of what the Applicant will provide?

Response 17: Acknowledged. This has been updated in the report.

Please contact me should you have any questions or desire additional information.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.

Christopher Hatton, P.E.
Project Manager

Kelly Fearon, P.E.
Transportation Engineer

Traffic Impact Analysis
Prepared for City of Tarpon Springs

Anclote Harbor Apartments

City of Tarpon Springs, Florida

Prepared by:

Kimley-Horn and Associates, Inc.
Tampa, Florida

October 2020

Kimley»Horn

Traffic Impact Analysis
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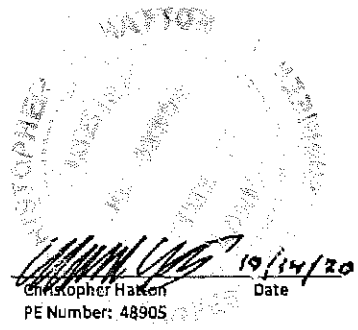

10/14/20
Christopher Haiken Date
PE Number: 48905

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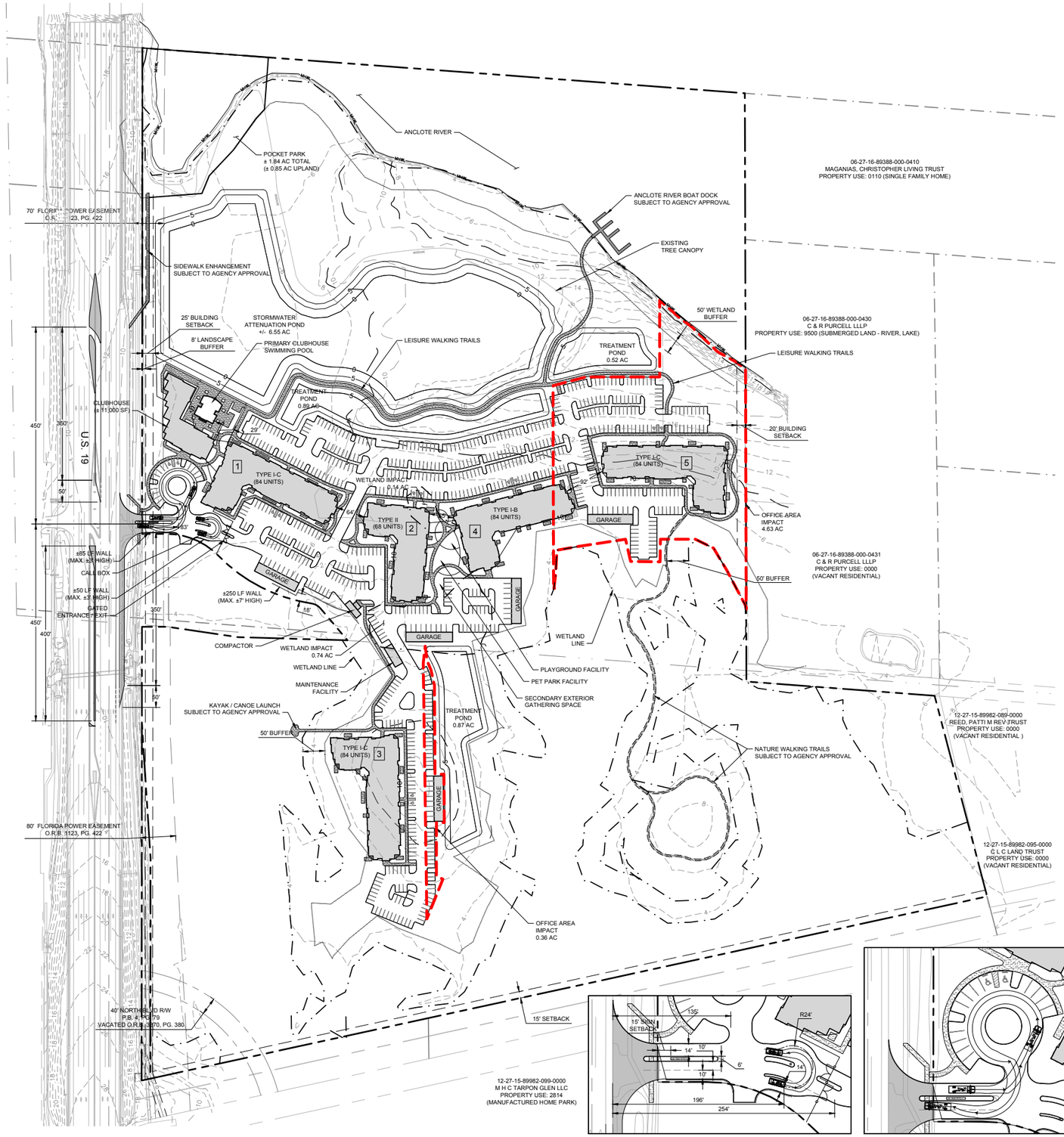
INTRODUCTION

This Traffic Impact Analysis (TIA) for the residential development of Anclote Harbor was conducted following the pre-application meeting with the Florida Department of Transportation (FDOT) on May 9, 2019 and methodology meeting and follow up discussions held on July 16, 2020 and August 7, 2020 with Patricia McNeese, Mo Gopalakrishna, and Linda Hess. Methodology comments were received and discussed on August 7, 2020. The updated methodology and comments are attached to this report. A description of the proposed land use and the results of the TIA are provided below.

The analysis is provided based upon the requirements in the Tarpon Springs Code of Ordinances Section 122.11 for Mobility Management. This project meets the criteria for a deficient road corridor and a Tier 2 project based upon Section 122.11.04 for Deficient Road Corridors, Transportation Management Plan Strategies Applied. The requirements include a traffic study and transportation management plan identifying improvements necessary to mitigate the impacts of the project. The cost of transportation management strategies implemented for tier 2 projects may be applied as credit toward the project's multimodal impact fee assessment or payment of the fee could be included as part of a transportation management plan.

The proposed residential development site is located along US 19 in Pinellas County, Florida, north of the Pinellas Trail. This development is proposed to include up to 404 mid-rise multi-family dwelling units. The project location map is illustrated in Figure 1.

ANCLOTE HARBOR PRELIMINARY DEVELOPMENT PLAN



WAIVERS

APPLIED FOR	
WAIVER	DESCRIPTION
LDC SECTION 78.01(E)(7)(d) MAXIMUM ALLOWABLE HEIGHT	TO INCREASE THE ALLOWABLE MAXIMUM BUILDING HEIGHT FROM 45 FT TO 53 FT
REQUIREMENT FOR SECONDARY ACCESS POINT	TO DECREASE REQUIRED ACCESS POINTS TO ONE
REQUIREMENT FOR COMMUNITY POOL PARKING	REDUCTION OF ADDITIONAL PARKING REQUIRED FOR COMMUNITY POOL

LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY LINE
- NORTH BLVD R/W
- EASEMENT LINE
- SECTION LINE
- FLOOD PLAIN LINE
- MEAN HIGH WATER LINE (MHW)
- PROPOSED BUILDING
- PROVIDED RESIDENTIAL ON OFFICE LAND AREA - 4.99 AC (PER PINELLAS COUNTY WIDE PLAN, EFFECTIVE 10/24/2019)
- EXISTING CONTOUR (10)
- PROPOSED CONTOUR (10)

NORTH

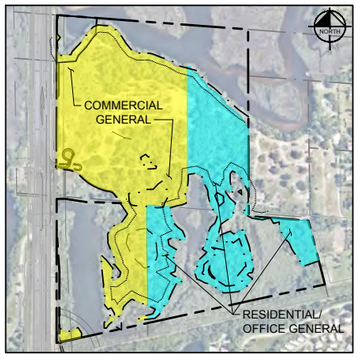
GRAPHIC SCALE IN FEET
0 60 120 240

SITE DATA TABLE

SITE SIZE			
UPLANDS	42.23 AC (27.55 RES. / 14.68 OFFICE)		
WETLANDS	30.39 AC (13.09 RES. / 17.30 OFFICE)		
TOTAL SITE	72.62 AC		
SUBMERGED LAND	8.33 AC		
PROPERTY APPRAISER PARCEL NUMBER	06-27-16-89388-000-0420		
ADDRESS	42501 U.S. HIGHWAY 19 NORTH		
PLAN CATEGORY	EAST SIDE: ROG WEST SIDE: CG		
EXISTING ZONING DISTRICT	GB, GENERAL BUSINESS		
PROPOSED ZONING DISTRICT	RPD, RESIDENTIAL PLANNED DEVELOPMENT		
EXISTING LAND USE	VACANT		
PROPOSED LAND USE	404 MULTIFAMILY RESIDENTIAL DWELLINGS, CLUBHOUSE, ACCESSORY GARAGES AND MAINTENANCE BUILDINGS		
FLOOD ZONE	ZONE AE, 9.00' FLOOD PANEL 12103C0036G, 09/02/2003		
	RPD MULTIFAMILY USE CODE REQUIREMENT	CONDITIONAL USE GENERAL BUSINESS DISTRICT	PROVIDED
DENSITY	15 DU / AC	15 DU / AC COMMERCIAL 15 DU / AC RESIDENTIAL / OFFICE GENERAL	RESIDENTIAL: 308 UNITS / 67.64 AC 4.55 DU / AC OFFICE: 96 UNITS / 4.99 AC 19.24 DU / AC SITE AVERAGE: 5.62 DU / AC
MINIMUM LOT SIZE	10,000 SF	10,000 SF	72.62 AC
MINIMUM LOT WIDTH	100'	80'	±2,000'
SETBACKS			
	REQUIRED	CONDITIONAL USE	PROVIDED
FRONT / WEST	25' MIN.	25' MIN.	25' MIN.
SIDE / NORTH & SOUTH	15' MIN.	20' MIN.	15' MIN.
REAR / EAST	15' MIN.	20' MIN.	15' MIN.
BUILDING SEPARATIONS	15' SIDE FACING SIDE 20' FRONT / REAR FACING SIDE 30' FRONT / REAR FACING FRONT / REAR +5' FOR EACH STORY ABOVE 2 STORIES FOR ALL SEPARATIONS	15' SIDE FACING SIDE 20' FRONT / REAR FACING SIDE 25' FRONT / REAR FACING FRONT / REAR +5' FOR EACH STORY ABOVE 2 STORIES FOR ALL SEPARATIONS	25' SIDE FACING SIDE 30' FRONT / REAR FACING SIDE 40' FRONT / REAR FACING FRONT / REAR
WETLAND BUFFER	50'	15'	50'
MAXIMUM HEIGHT	45'	45'	53' (WAIVER REQUESTED)
OPEN SPACE PER 147.01 (B) (TOTAL SITE)	18.16 AC (25% OF TOTAL SITE)	10% MINIMUM	22.31 AC UPLAND OPEN SPACE 9.08 AC WETLANDS / STORM (50% MAX) TOTAL 31.39 AC (43%)
OPEN SPACE AND IMPERVIOUS PER ORD 2018-27 (SIGNIFICANT UPLAND AREA)	OPEN SPACE 10.04 AC (30% OF SIGNIFICANT UPLAND AREA) MAX. IMPERVIOUS 16.74 AC (50% OF SIGNIFICANT UPLAND AREA)	MAXIMUM IMPERVIOUS RATIO: 0.90	OPEN SPACE 18.46 AC (55% OF SIGNIFICANT UPLAND AREA) PROP. IMPERVIOUS 10.09 AC (30% OF SIGNIFICANT UPLAND AREA)
PARKING	707 SPACES FOR RESIDENCES (1.75 SPACES / DU) +44 SPACES (1 SPACE / 250 SF OF 11,000 SF CLUBHOUSE BUILDING) +56 SPACES (1 SPACE / 50 SF OF COMMUNITY POOL) = 807 TOTAL SPACES	707 SPACES FOR RESIDENCES (1.75 SPACES / DU) +44 SPACES (1 SPACE / 250 SF OF 11,000 SF CLUBHOUSE BUILDING) +56 SPACES (1 SPACE / 50 SF OF COMMUNITY POOL) = 807 TOTAL SPACES	716 AT GRADE SPACES +45 GARAGE SPACES = 761 TOTAL SPACES (WAIVER REQUESTED)

ENTRANCE DETAIL
SCALE: 1" = 60'

DELIVERY CIRCULATION DETAIL
SCALE: 1" = 60'



CITY OF TARPON SPRINGS
FUTURE LAND USE MAP (ORD 2012-07)
SCALE: 1" = 500'

LOCATION MAP
SCALE: 1" = 2,000'

NO.	REVISIONS	DATE	BY

Kimley»Horn

655 NORTH FRANKLIN STREET, SUITE 150, TAMPA, FL 33602
PHONE: 813-620-1460
WWW.KIMLEY-HORN.COM CA 00000696

SCALE
DESIGNED BY RPC
DRAWN BY BFN
CHECKED BY RPC
DESIGN ENGINEER:
FLORIDA REGISTRATION NUMBER:
DATE:

ANCLOTE HARBOR
PRELIMINARY DEVELOPMENT PLAN

MORGAN
ANCLOTE HARBOR
TARPON SPRINGS FLORIDA

DATE
04/17/2020
PROJECT NO.
145062001
SHEET NUMBER
PDP-01

Access to the property will be provided at one access connection along US 19 and a pre-application meeting was held with the Florida Department of Transportation (FDOT) on May 9, 2019. A follow up pre-application meeting was held with FDOT on October 8, 2020 to discuss the proposed offset left-turn lanes. The pre-application comments are attached. Based upon comments received at the pre-application meeting, the project access is to consist of a proposed offset left-turn median opening along US 19.

Prior to undertaking this analysis, a transportation study methodology was prepared and discussed on July 16, 2020 and August 7, 2020 with Patricia McNeese, Mo Gopalakrishna, and Linda Hess (American Consulting Professionals). The approved methodology is included in Appendix A.

In general, the following procedural steps were undertaken:

- Traffic volumes anticipated to be generated by the proposed development were estimated using the Institute of Transportation Engineers', *Trip Generation Manual*, 10th Edition;
- Project traffic was distributed and assigned to the public roadway network based upon the results of a FSUTMS analysis;
- Existing a.m. and p.m. peak-hour traffic volumes in the study area were collected and adjusted to reflect the peak season conversion factor volumes, and considered in the development of future background volumes;
- Work Programs of Pinellas County and the FDOT were reviewed to identify scheduled roadway improvements in the area;
- Intersection and level of service (LOS) analyses within the study area for existing and future scenarios were completed using analytical methods using the Synchro program and the Florida Department of Transportation's "*Quality/Level of Service Handbook*."

PROJECT SITE INFORMATION

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the development. These trips were distributed and assigned throughout the study roadway network.

Trip Generation

The trip generation potential of the proposed residential development was estimated for the a.m. and p.m. peak-hours using the equations from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition, for land use code (LUC) 221: Multi-Family Housing Mid-Rise. The estimated net, new trips expected to be generated by the proposed development are 145 a.m. peak-hour trips (37 entering, 108 exiting) and 178 p.m. peak-hour trips (108 entering, 70 exiting), as shown in Table 1.

No pass-by or internal capture trips were assumed. Based upon the trip generation, this project meets the criteria for a Tier 2 project (between 51 and 300 new peak hour trips). Therefore, transportation management strategies are included in this report.

Table 1: Project Trip Generation

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS TRIPS			INTERNAL CAPTURE		PASS-BY CAPTURE		NET, NEW EXTERNAL TRIPS		
						Percent											
Land Use	Period	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	%	Trips	%	Trips	In	Out	Total
Multi-family Housing Mid-Rise	**Daily**	10	221	404	DU	50%	50%	1,100	1,100	2,200	0%	0	0%	0	**1,100**	**1,100**	**2,200**
Multi-family Housing Mid-Rise	**AM**	10	221	404	DU	26%	74%	37	108	145	0%	0	0%	0	**37**	**108**	**145**
Multi-family Housing Mid-Rise	**PM**	10	221	404	DU	61%	39%	108	70	178	0%	0	0%	0	**108**	**70**	**178**

Notes:

1. Daily Trip Generation Fitted Curve: T = 5.45(X) - 1.75
2. AM Trip Generation Average Rate: T = 0.36(X)
3. AM Trip Generation based upon average rate as $R^2 < 0.75$
4. PM Trip Generation Average Rate: T = 0.44(X)
5. PM Trip Generation based upon average rate as $R^2 < 0.75$

Trip Distribution and Assignment

New traffic expected to be generated by the proposed residential project was distributed to the roadway network based on the existing turning movement volume counts at the study intersections and the Florida Standard Urban Model Structure (FSUTMS) for District 7 (version 9.1). The model distribution is attached. Approximately 35% of the vehicles entering and exiting the site are anticipated to utilize US 19 to the north while 65% of the vehicles entering and exiting the site are anticipated to utilize US 19 to the south. The project traffic distribution calculation is attached for reference.

The resulting percentages were applied to the trip generation estimates shown in Table 1 to estimate project trips within the vicinity of the project site. The distribution of project traffic, in terms of trip percentages, is shown in Figure 2.

The a.m. peak-hour project traffic is shown in Figure 3. The p.m. peak-hour project traffic is shown in Figure 4.

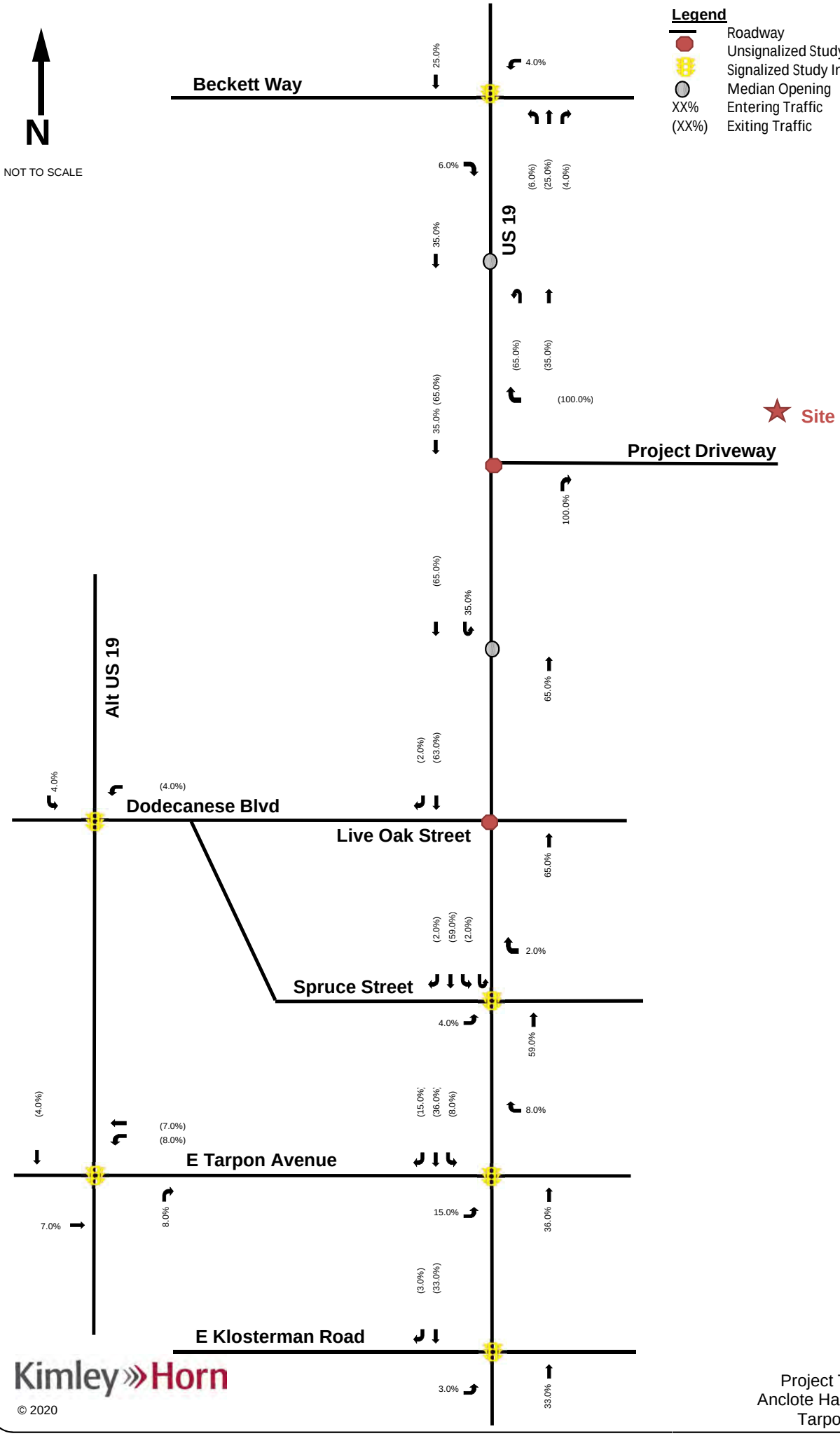


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Figure 2
Project Traffic Distribution
Anclote Harbor Development
Tarpon Springs, Florida

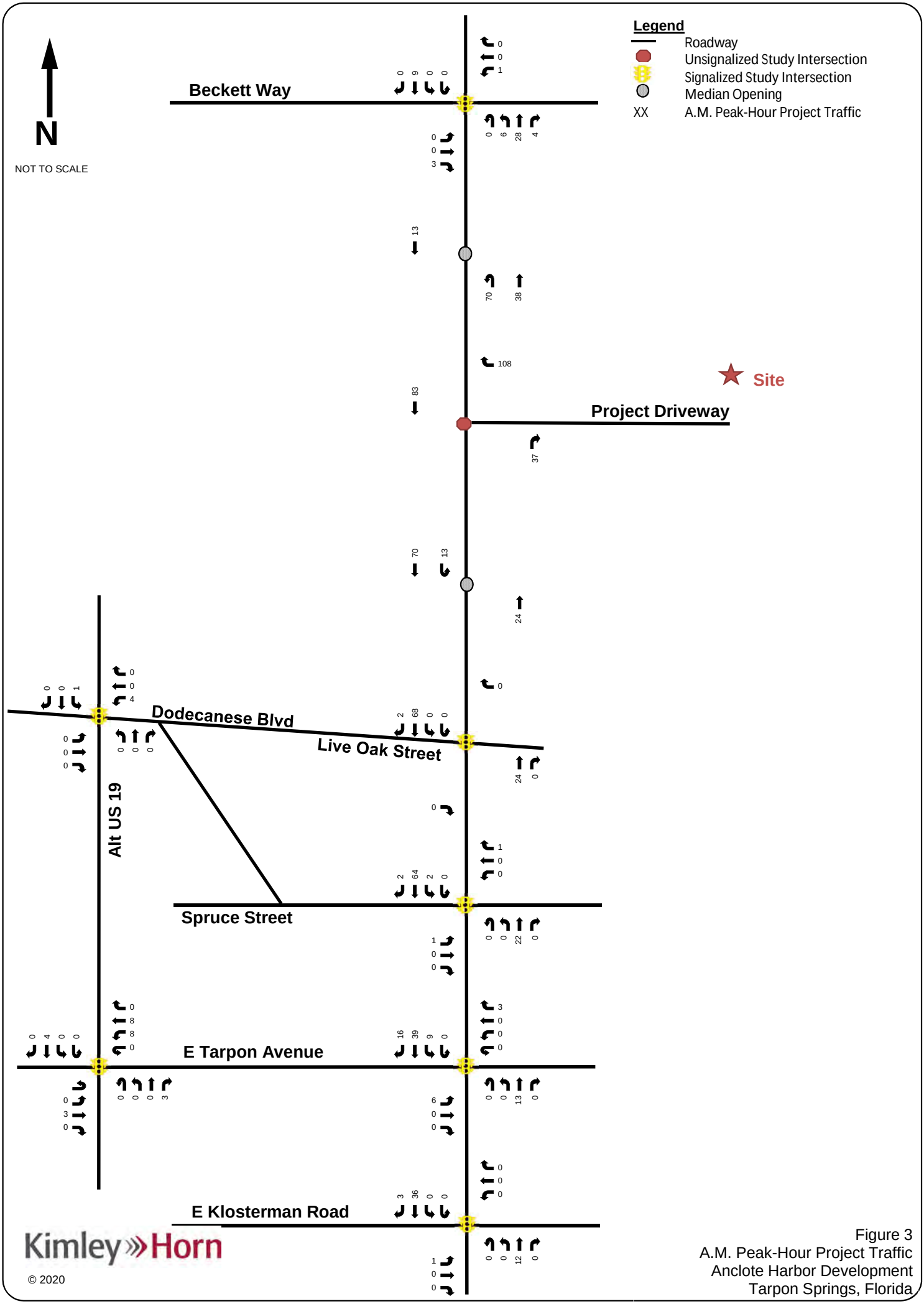


Figure 3
A.M. Peak-Hour Project Traffic
Anclote Harbor Development
Tarpon Springs, Florida

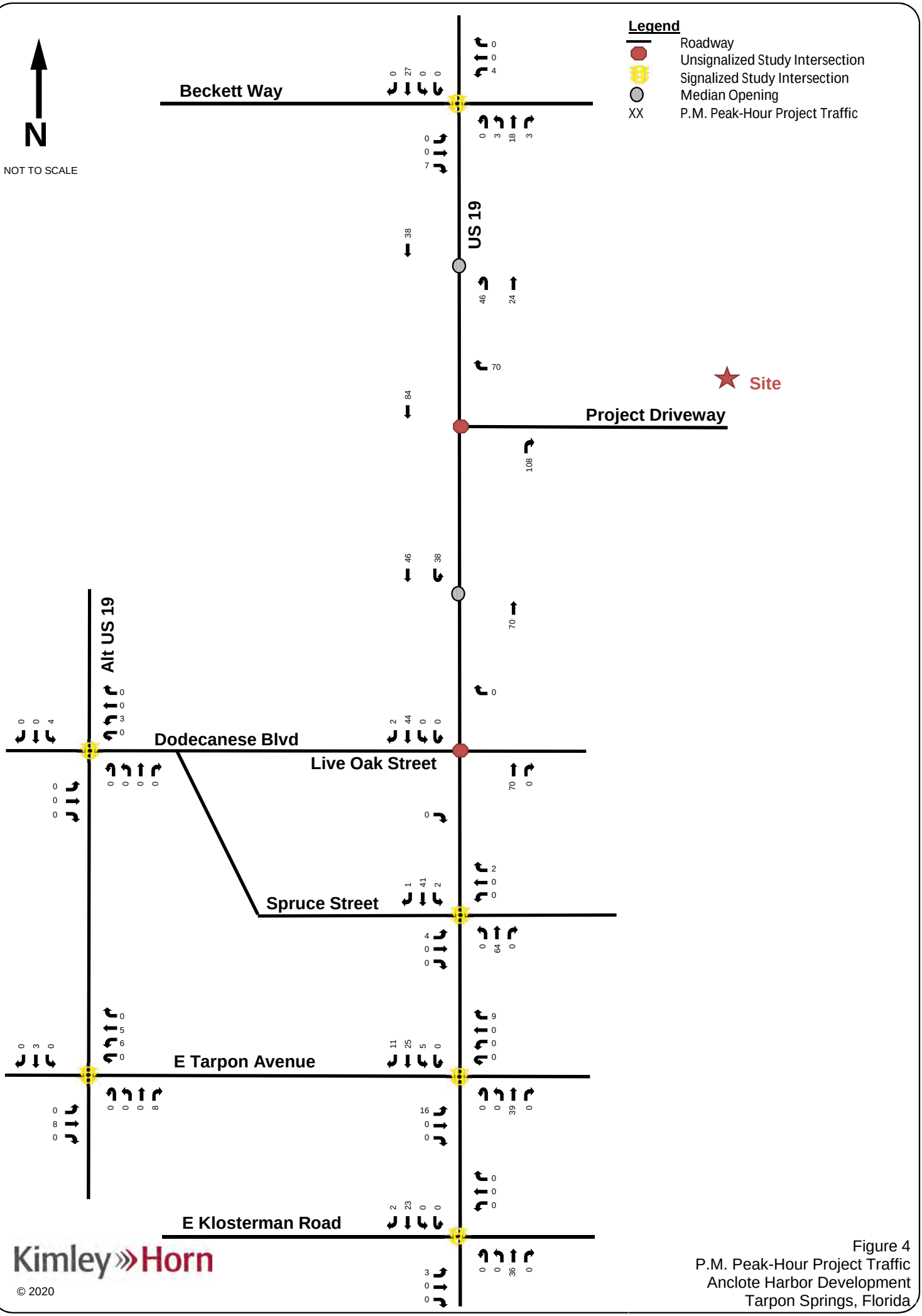


Figure 4
P.M. Peak-Hour Project Traffic
Anclote Harbor Development
Tarpon Springs, Florida

SCHEDULED IMPROVEMENTS

A review of the Five-Year Work Program for Pinellas County and FDOT District Seven revealed that there are no roadway capacity projects near the project site which are scheduled to be funded within five years.

A drainage improvement project along US 19 from North of Anclote River Bridge to South of Brittany Park Boulevard is identified in the Five-Year Work Program (Item 434807-3).

STUDY AREA DETERMINATION

The study area was based upon the *2019 Annual Level of Service Report* for Forward Pinellas and consists of the adjacent roadway segments of US 19 from Beckett Way to Klosterman Road. The study area intersections included were discussed during the methodology phase. The study area roadway segments were determined to be the roadway segments, defined in the *2019 Annual Level of Service Report*, that were significantly impacted by the project (greater than 1% of the service volume for directional peak hour traffic).

The study area roadway segments were determined to be the adjacent roadway segments of US 19 from Beckett Way to Klosterman Road, Tarpon Avenue from US 19 to Alt US 19, and Live Oak Street from US 19 to Alt US 19.

The study intersections were determined to be the following signalized intersections:

- US 19 & Klosterman Road
- US 19 & Tarpon Avenue
- US 19 & Spruce Street
- US 19 & Live Oak Street
- US 19 & Beckett Way
- Live Oak Street & Alt US 19
- Tarpon Ave & Alt US 19

According to the *Annual Level of Service Report* for Forward Pinellas, the roadway segment of US 19 from Klosterman Road to Tarpon Avenue currently operates at Level of Service F based upon a generalized roadway analysis.

TRAFFIC VOLUMES

Existing traffic conditions were evaluated within the study network. The procedures used in this analysis are discussed below.

Vehicle turning movement volume counts were conducted at the intersections of US 19 & Klosterman Road, US 19 & Tarpon Avenue, US 19 & Spruce Street, US 19 & Live Oak Street, and US 19 & Beckett Way during the a.m. peak period (7:00 a.m. to 9:00 a.m.) and p.m. peak period (4:00 p.m. to 6:00 p.m.) on June 20, 2019 to quantify existing peak-hour conditions within the study area. The raw counts are attached for reference.

As a result of the methodology meeting an updated FSUTMS model (v 9.1), the study area was updated. Therefore, additional data was collected on August 2020 for the study area intersections of Live Oak Street & Alt US 19 and Tarpon Avenue & Alt US 19. The traffic data was reviewed based upon the volumes provided in the Forward Pinellas 2019 Level of Service Report. The p.m. peak-hour traffic counts were collected again at the intersection of US 19 & Klosterman Road and determined to be within 4% of the 2019 traffic volumes at the same intersection for the p.m. peak-hour. Therefore, the August 2020 peak-hour traffic volumes were increased by 4% to provide a conservative analysis.

The a.m. peak-hour traffic counts were collected again at the intersection of US 19 & Klosterman Road and determined to be 8% less than the 2019 traffic volumes at the same intersection for the a.m. peak-hour. The traffic volumes for the a.m. peak-hour were also compared to the peak hour volumes in the Pinellas County Level of Service Report for E Live Oak Street and Tarpon Avenue. Therefore, the a.m. peak-hour volumes were increased by 8% to account for fluctuations in normal traffic patterns due to COVID at the two study area intersections of Live Oak Street & Alt US 19 and Tarpon Avenue & Alt US 19 (the only study area intersections collected in 2020).

To provide a conservative analysis, the existing conditions were analyzed for the year 2020. The data collected at the study area intersections in 2019 was adjusted by the approved background growth rate of 2% for one year.

All of the vehicle counts at the study intersections were adjusted to reflect peak-season conditions. This modification was performed using the Florida Department of Transportation (FDOT) peak-season conversion factor (PSCF), which corresponds to the data collection date for Pinellas County. The peak-season conversion factors are attached.

The peak season conversion factors (PSCF) are provided in Appendix B and the existing seasonally adjusted traffic volumes are provided in Figure 5 and Figure 6. The traffic count data sheets are included in Appendix C.

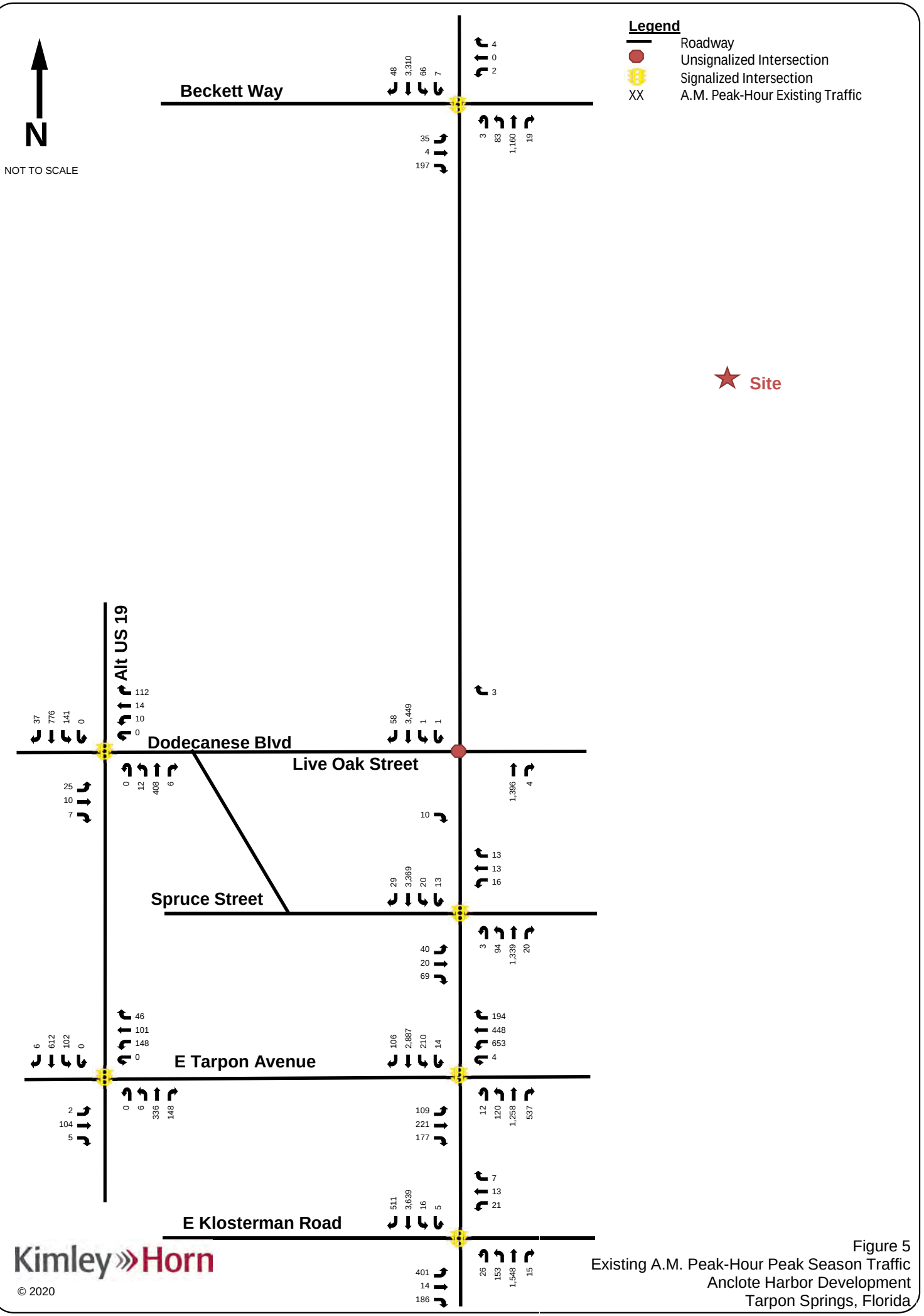


Figure 5
Existing A.M. Peak-Hour Peak Season Traffic
Anclote Harbor Development
Tarpon Springs, Florida

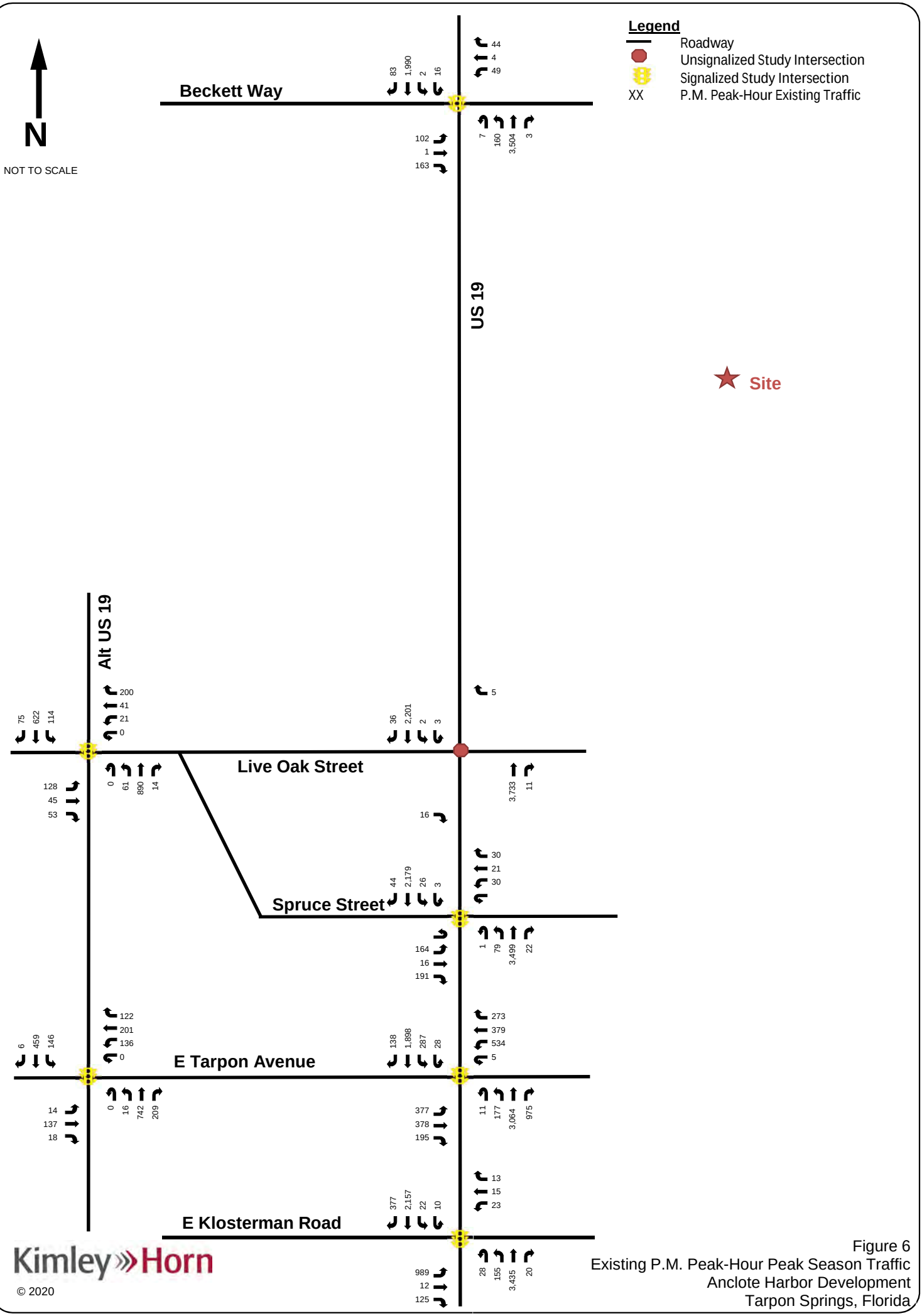


Figure 6
Existing P.M. Peak-Hour Peak Season Traffic
Anclote Harbor Development
Tarpon Springs, Florida

BUILD-OUT YEAR TRAFFIC CONDITIONS

Future traffic volumes consist of two components: project traffic and future background traffic (non-project) traffic estimates. Future background traffic is defined as expected non-project traffic on the roadway network in the future year at buildout of the proposed project. For the purposes of this analysis, it was determined that 2022 would be the buildout year of the development and, thus, 2022 conditions were evaluated as the "future" year scenario.

The future background volumes were developed by growing existing traffic 2.0% annually based upon historical Annual Average Daily Traffic (AADT) volumes along US 19. The growth rate calculations are attached. As discussed during the methodology phase, a growth rate of 1.3% was calculated. However, to account for projects in Tarpon Springs, a 2% background growth rate was used to provide a conservative estimate. The future background volumes include the 2% annual growth factor for 3 years for the data collected in 2019 and for 2 years for the data collected in 2020.

Figure 7 and Figure 8 illustrate the peak-hour background traffic volumes.

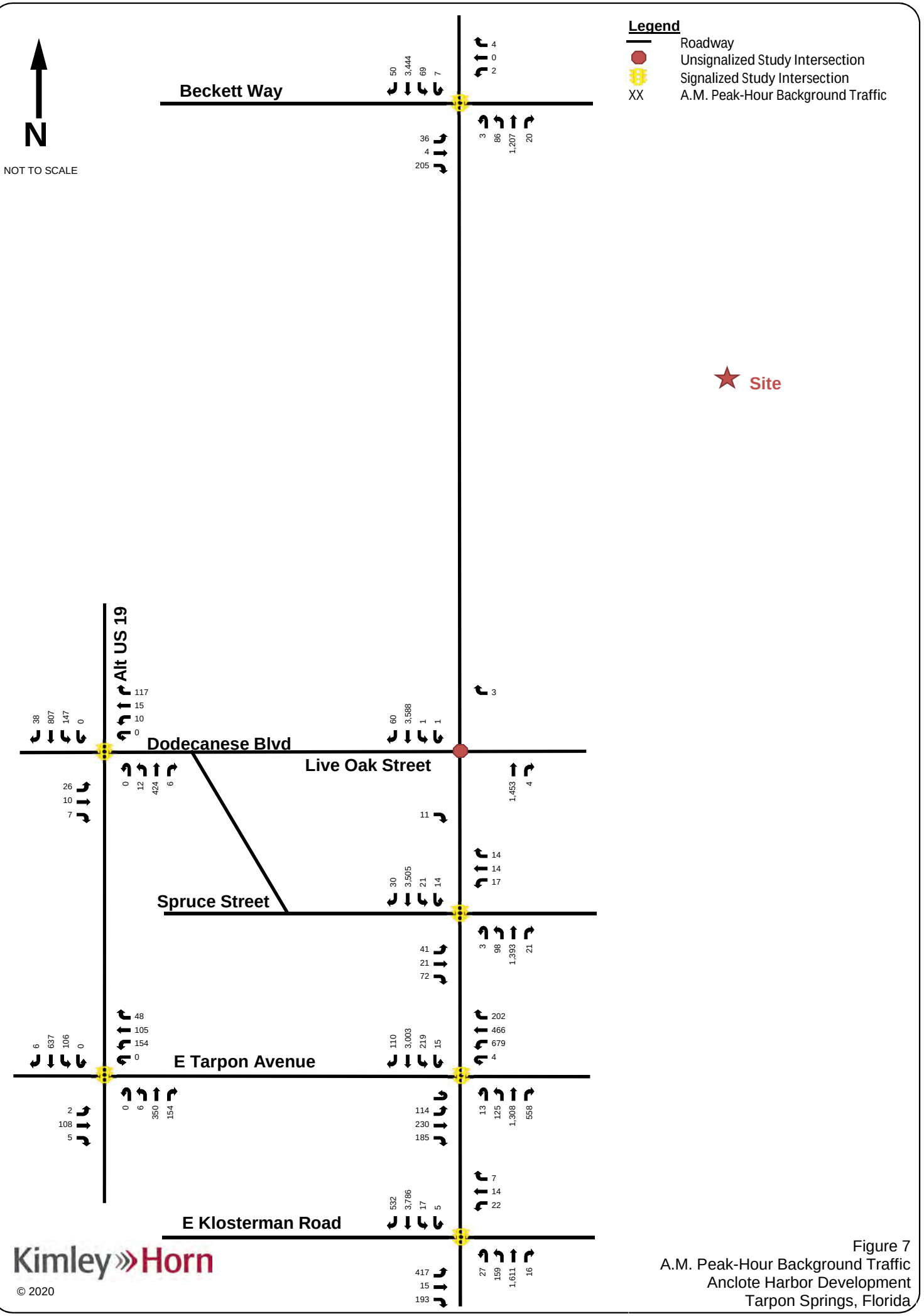


Figure 7
A.M. Peak-Hour Background Traffic
Anclote Harbor Development
Tarpon Springs, Florida

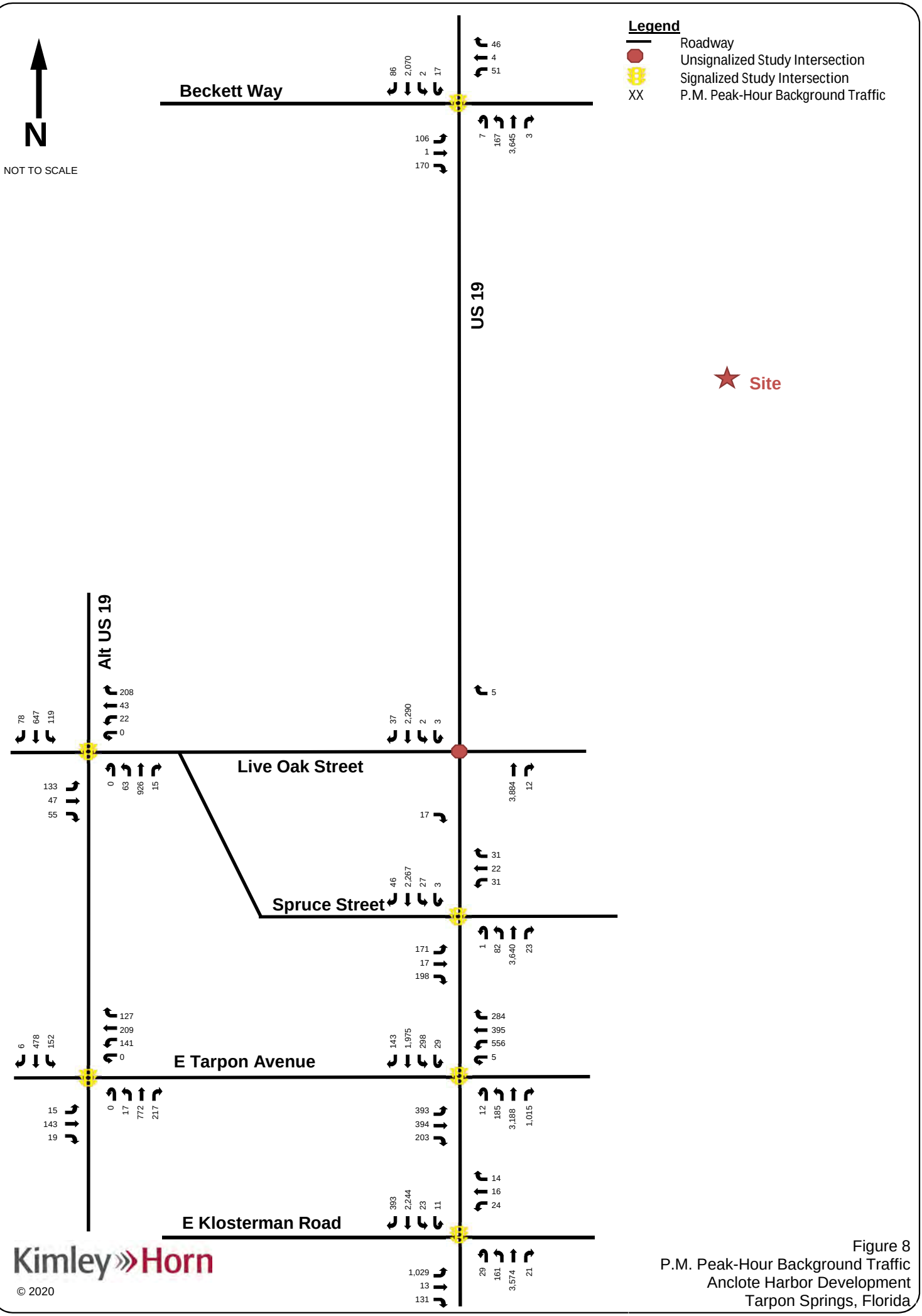


Figure 8
P.M. Peak-Hour Background Traffic
Anclote Harbor Development
Tarpon Springs, Florida

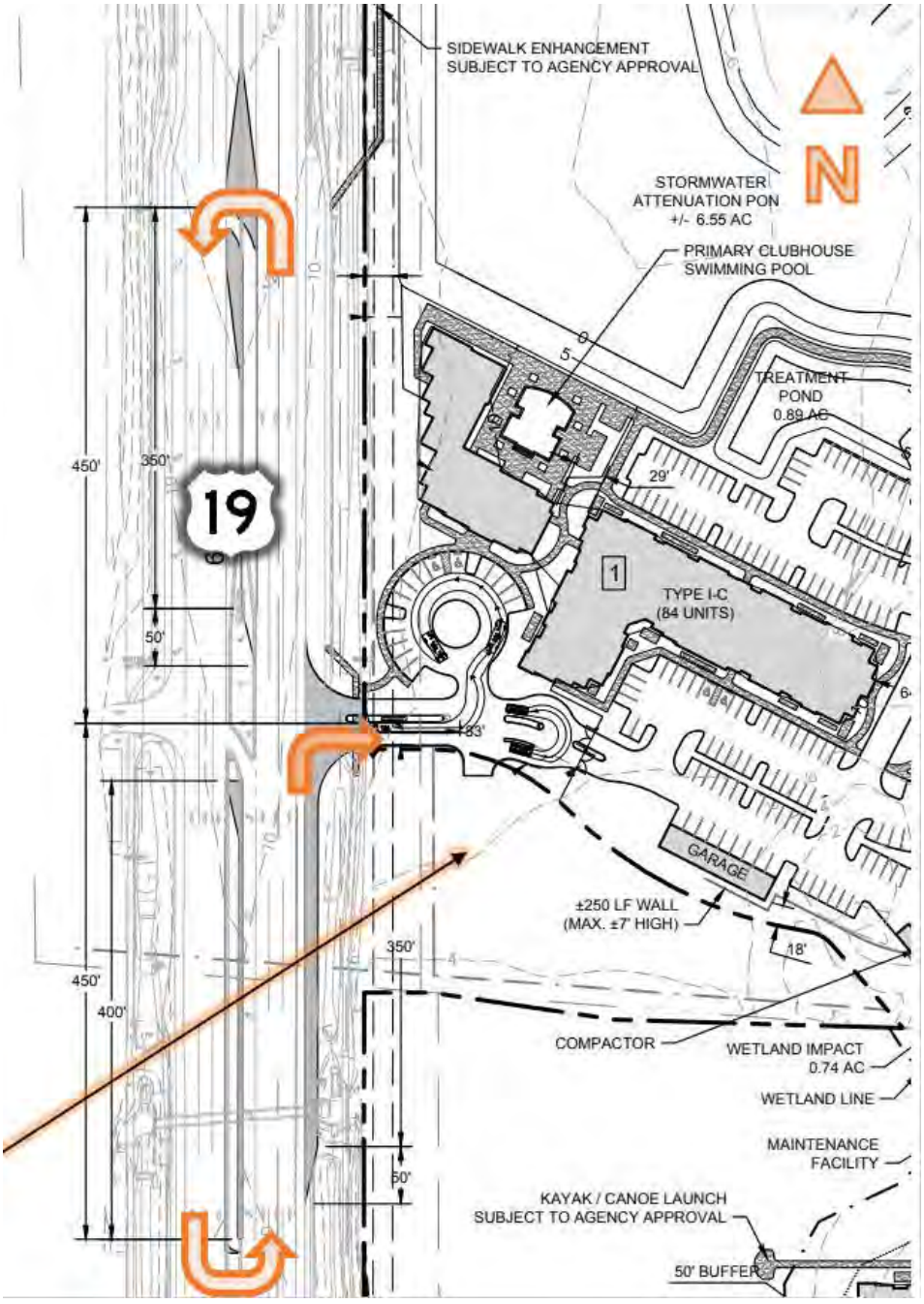
Project Trip Distribution and Assignment

The study area roadway segments were determined to be the adjacent roadway segments of US 19 from Beckett Way to Klosterman Road, Tarpon Avenue from US 19 to Alt US 19, and Live Oak Street from US 19 to Alt US 19. New traffic expected to be generated by the proposed residential project was distributed to the roadway network based on the existing turning movement volume counts at the study intersections and the Florida Standard Urban Model Structure (FSUTMS) for District 7 (version 9.1). The model distribution is attached. Approximately 35% of the vehicles entering and exiting the site are anticipated to utilize US 19 to the north while 65% of the vehicles entering and exiting the site are anticipated to utilize US 19 to the south.

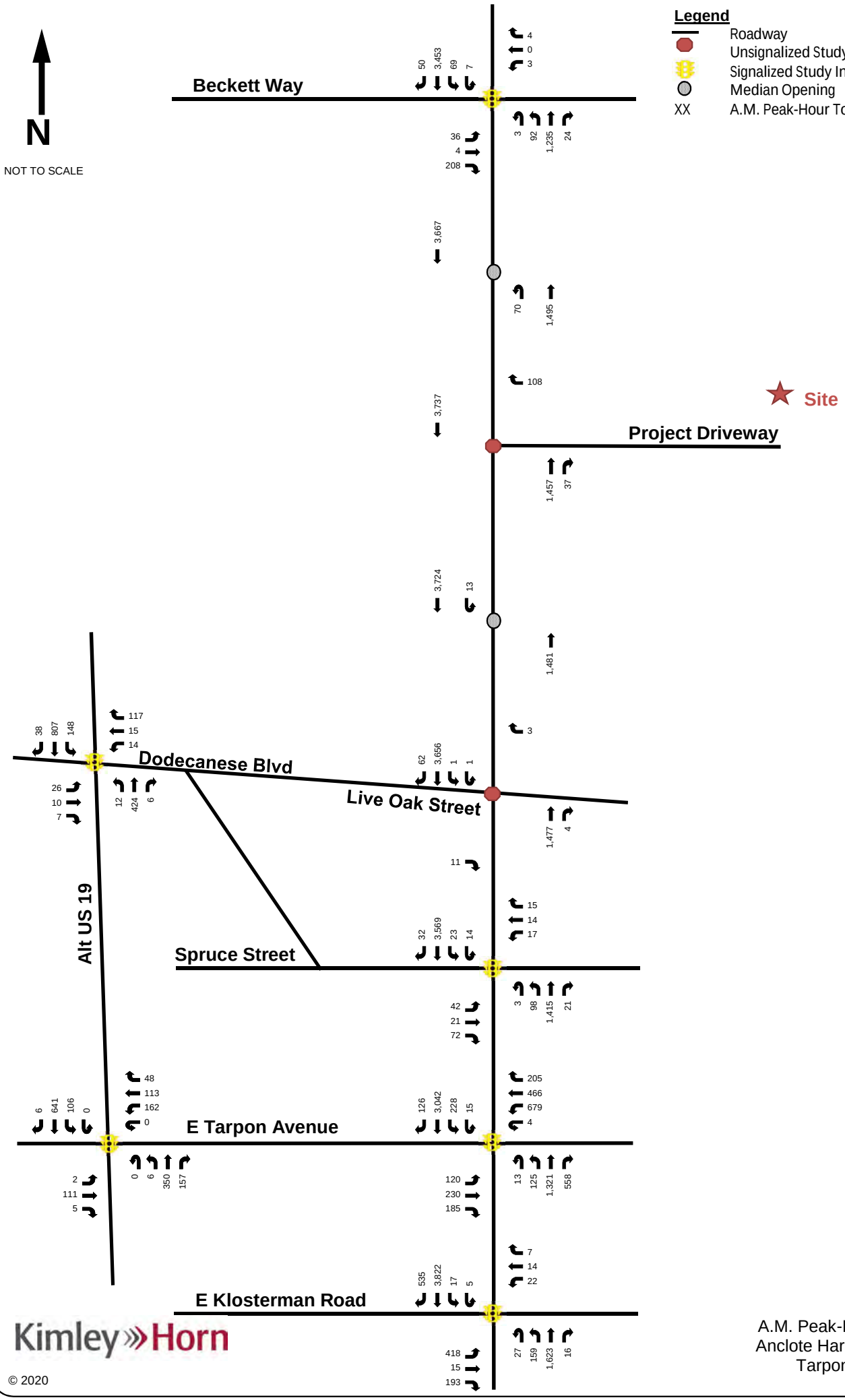
Project Access

An example of the project access, off-set left-turn median opening, is included in Figure 9 and was provided by the FDOT to illustrate the offset left-turn lane median opening at the project access connection. The driveway allows for only right-in/right-out access. Vehicles entering from the southbound approach make a u-turn at the median opening and then a right-in at the driveway. Vehicles leaving the site would make a westbound right-turn and then a u-turn to travel south at the median opening. The median locations and turn lane lengths will be coordinated and reviewed by FDOT.

Figure 9: Offset Left-Turn Median Opening Example



The build-out year (2022) traffic conditions were evaluated within the study network. The intersection analyses were performed using *Synchro*. Figure 10 and Figure 11 illustrate the total traffic volumes (2022 background traffic volumes + project traffic) for the a.m. peak-hour and p.m. peak-hour, respectively.



Kimley»Horn

Figure 10
A.M. Peak-Hour Total Traffic
Anclote Harbor Development
Tarpon Springs, Florida

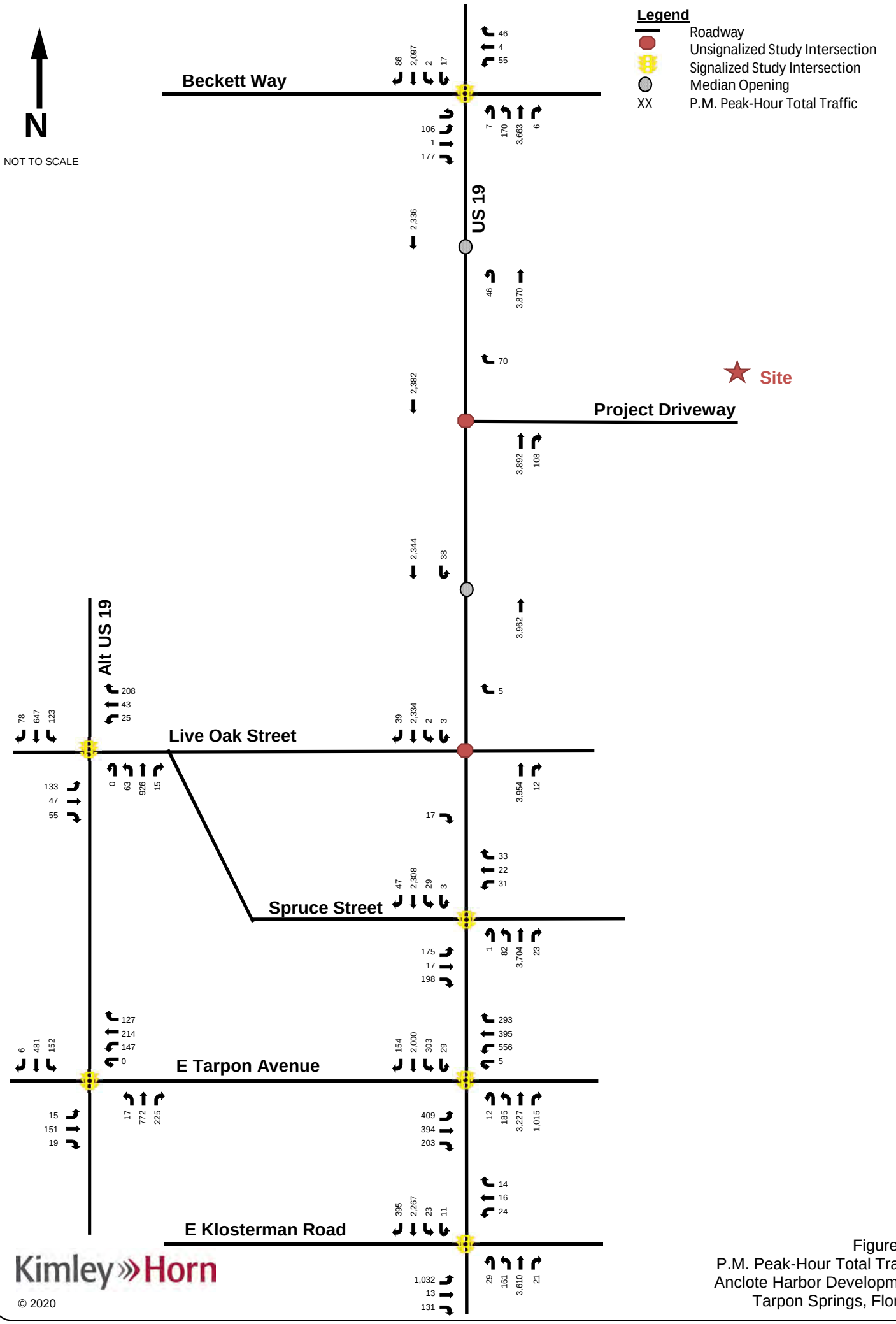


Figure 11
P.M. Peak-Hour Total Traffic
Anclote Harbor Development
Tarpon Springs, Florida

Kimley»Horn

Roadway Capacity Analysis

Roadway volumes exiting one study area intersection may not be equivalent to the entering intersection turning movement volumes at the next intersection due to driveway locations between study intersections or minor fluctuations in travel patterns between time periods. To evaluate the study roadway segment based upon typical roadway conditions, volumes for the study roadway segment were determined as the average of entering and exiting vehicles from adjacent street intersections during the a.m. and p.m. peak hours.

US 19 is a six-lane divided roadway from Tarpon Avenue to Beckett Way and an eight-lane divided roadway from Klosterman Road to Tarpon Avenue. As indicated in Table 2, an analysis was provided for existing (year 2020) and future total (year 2020 with project) traffic.

As stated in the City of Tarpon Springs Mobility Management section § 122.11.01, "In 2013, the Pinellas County Metropolitan Planning Organization approved the Pinellas County Mobility Plan Report. The intent of the Mobility Plan is to replace local transportation concurrency management programs with a system that provides local governments with the means to manage the traffic impacts of development projects without requiring developers to meet adopted level of service standards."

The updated analysis will be provided to FDOT for their review to receive approval for the FDOT Driveway Permit. Instead, as stated in the City of Tarpon Springs Mobility Management section § 122.11.03, "Transportation management plans are required for development applications seeking to utilize transportation management strategies/improvements to address their development impacts."

Table 2: Roadway Analysis (A.M. Peak-Hour)

Roadway	From	To	Direction	Road Laneage	Adopted LOS D Service Volumes[1]	PSCF	Year 2020 Existing Peak Season Directional Volume[2]	Year 2022 Background Peak-Hour Volumes	Project Traffic Assignment	Peak-Hour Project Volumes	Project % of Service Volume	Year 2022 Total P.M. Peak-Hour Traffic Volume
US 19	Klosterman Road	Tarpon Avenue	NB	8D	4,040	1.09	1,333	2,022	36%	13	0.32%	2,035
			SB	8D	4,040	1.09	3,511	4,110	36%	39	0.97%	4,149
	Tarpon Avenue	Live Oak Street	NB	6D	3,020	1.09	1,488	1,548	59%	22	0.73%	1,570
			SB	6D	3,020	1.09	3,338	3,473	59%	68	2.25%	3,541
	Live Oak Street	Project Access	NB	6D	3,020	1.09	1,944	1,387	100%	37	1.23%	1,424
			SB	6D	3,020	1.09	3,950	3,652	100%	108	3.58%	3,760
	Project Access	Beckett Way	NB	6D	3,020	1.09	1,944	1,387	100%	108	3.58%	1,495
			SB	6D	3,020	1.09	3,950	3,652	65%	83	2.78%	3,735
E Live Oak St	US 19	Alt US 19	EB	2D	572	1.13	143	140	6%	1	0.17%	141
			WB				136	134	6%	4	1.05%	138
E Tarpon Ave	US 19	Alt US 19	EB	2D	792	1.13	431	423	15%	6	0.70%	429
			WB				485	474	15%	16	2.02%	490

Notes:

1. Based on Forward Pinellas LOS Report and FDOT QLOS Tables
2. Based on turning movement counts collected

Table 3: Roadway Analysis (P.M. Peak-Hour)

Roadway	From	To	Direction	Road Laneage	Adopted LOS D Service Volumes[1]	PSCF	Year 2020 Existing Peak Season Directional Volume[2]	Year 2022 Background Peak-Hour Volumes	Project Traffic Assignment	Peak-Hour Project Volumes	Project % of Service Volume	Year 2022 Total P.M. Peak-Hour Traffic Volume
US 19	Klosterman Road	Tarpon Avenue	NB	8D	4,040	1.09	4,337	4,514	36%	39	0.97%	4,553
			SB	8D	4,040	1.09	2,602	2,709	36%	25	0.62%	2,734
	Tarpon Avenue	Live Oak Street	NB	6D	3,020	1.09	3,743	3,895	59%	64	2.12%	3,959
			SB	6D	3,020	1.09	2,284	2,376	59%	41	1.36%	2,417
	Live Oak Street	Project Access	NB	6D	3,020	1.09	3,708	3,857	100%	108	3.58%	3,965
			SB	6D	3,020	1.09	2,226	2,315	100%	70	2.32%	2,385
	Project Access	Beckett Way	NB	6D	3,020	1.09	3,708	3,857	100%	70	2.32%	3,927
			SB	6D	3,020	1.09	2,226	2,315	65%	84	2.78%	2,399
E Live Oak St	US 19	Alt US 19	EB	2D	572	1.13	272	284	6%	4	1.05%	288
			WB				203	212	6%	3	0.70%	216
E Tarpon Ave	US 19	Alt US 19	EB	2D	792	1.13	721	751	15%	16	2.02%	767
			WB				577	600	15%	11	1.39%	611

Notes:

1. Based on Forward Pinellas LOS Report and FDOT QLOS Table
2. Based on turning movement counts collected

Intersection Analysis

Synchro (v10) software was used to determine existing and future total peak-hour operational conditions for the study area intersections.

The intersection movements were evaluated based upon the volume to capacity ratio (v/c ratio). The volume to capacity ratio is a measure of traffic congestion on a roadway which is calculated by dividing the traffic volume by the capacity for a system element. A v/c ratio greater than or equal to 1.0 indicates that the approach is operating above capacity.

A v/c ratio for each movement that is less than 1.0 is considered to operate acceptably.

The following movements are anticipated to operate with v/c ratios greater than 1.0 during the a.m. peak-hour periods in background conditions as indicated in Table 4.

- US 19 & Beckett Way
    - Southbound left-turn
- US 19 & Spruce Street
    - Southbound through
- US 19 & Tarpon Avenue
    - Westbound left-turn
    - Southbound through
- US 19 & Klosterman Road
    - Northbound left-turn
    - Southbound right-turn

The following movements are anticipated to operate with v/c ratios greater than 1.0 during the p.m. peak-hour periods in background conditions as indicated in Table 5.

- US 19 & Spruce Street
  - Northbound through
- US 19 & Tarpon Avenue
  - Eastbound left-turn
  - Westbound left-turn
  - Northbound through
- US 19 & Klosterman Road
  - Southbound left-turn

As stated in the Tarpon Spring's Land Development Code:

> "In 2013, the Pinellas County Metropolitan Planning Organization approved the Pinellas County Mobility Plan Report. The intent of the Mobility Plan is to replace local transportation concurrency management programs with a system that provides local governments with the means to manage the traffic impacts of development projects without requiring developers to meet adopted level of service standards.
>
> The transportation element of the comprehensive plan identifies a number of highway system facilities operating under deficient level of service conditions. These require the application of Mobility Plan provisions in order to manage transportation impacts and to increase mobility through the use of multimodal impact fees to fund transportation improvements."

Therefore, based upon House Bill 7207, as these are existing and background deficiencies, no roadway capacity improvements are identified. The access improvements, construction of offset left-turn lanes, are proposed along US 19.

Table 4: Intersection Analysis (A.M. Peak)

Existing Conditions (2020) v/c Ratio[1] {Background Conditions (2022) v/c Ratio}[2] [Total Conditions (2022) v/c Ratio][3]														
Intersection	Peak Hour	Eastbound			Westbound			Northbound			Southbound			
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
US 19 & Beckett Way	AM	0.29	0.86		0.06			0.85	0.30	0.01	1.34	0.88	0.04	
		{0.29}	{0.87}		{0.06}			{0.85}	{0.31}	{0.01}	{1.40}	{0.92}	{0.04}	
		[0.26]	[0.87]		[0.09]			[0.86]	[0.32]	[0.02]	[1.40]	[0.93]	[0.04]	
US 19 & E Live Oak Street	AM	--	--	0.17	--	--	0.01	--	--	--	0.01	--	--	
		--	--	{0.20}	--	--	{0.01}	--	--	--	{0.01}	--	--	
		--	--	[0.21]	--	--	[0.01]	--	--	--	[0.01]	--	--	
US 19 & Spruce Street	AM	0.56		0.15	0.46		0.04	0.26	0.42	0.02	0.13	1.19	0.02	
		{0.56}		{0.17}	{0.47}		{0.04}	{0.28}	{0.44}	{0.02}	{0.15}	{1.24}	{0.02}	
		[0.56]		[0.17]	[0.47]		[0.05]	[0.28]	[0.44]	[0.02]	[0.15]	[1.26]	[0.03]	
US 19 & E Tarpon Avenue	AM	0.79	0.50	0.91	1.79	0.66	0.64	0.82	0.48	0.65	0.91	1.04	0.12	
		{0.79}	{0.50}	{0.91}	{1.86}	{0.68}	{0.66}	{0.82}	{0.51}	{0.69}	{0.95}	{1.09}	{0.13}	
		[0.80]	[0.50]	[0.91]	[1.86]	[0.68]	[0.67]	[0.82]	[0.51]	[0.69]	[0.99]	[1.10]	[0.15]	
US 19 & E Klosterman Road	AM	0.84	0.00	0.57	--	0.78	--	1.07	0.34	--	0.63	0.94	1.01	
		{0.85}	{0.00}	{0.59}	--	{0.79}	--	{1.12}	{0.36}	--	{0.65}	{0.98}	{1.06}	
		[0.85]	[0.00]	[0.59]	--	[0.79]	--	[1.12]	[0.36]	--	[0.65]	[0.99]	[1.06]	
E Live Oak Street/ Dodecanese Blvd & Alt US 19	AM	0.17	0.12		0.06	0.09	0.82	0.03	0.29		0.21	0.63		
		{0.17}	{0.12}		{0.06}	{0.09}	{0.83}	{0.03}	{0.31}		{0.22}	{0.66}		
		[0.17]	[0.11]		[0.08]	[0.09]	[0.82]	[0.03]	[0.30]		[0.22]	[0.64]		
E Tarpon Ave & Alt US 19	AM	0.65			0.51	0.39		0.01	0.46		0.20	0.48		
		{0.66}			{0.53}	{0.40}		{0.01}	{0.48}		{0.21}	{0.51}		
		[0.66]			[0.54]	[0.40]		[0.01]	[0.49]		[0.22]	[0.52]		

1. Existing Conditions: Year 2020 Traffic volumes
2. Background Conditions: Year 2022 Traffic volumes = Existing Traffic Volumes + 2% annual growth
3. Total Conditions: Background + Project Traffic Volumes: Year 2022 Traffic Volumes + Project Traffic

Table 5: Intersection Analysis (P.M. Peak)

Existing Conditions (2020) v/c Ratio[1] {Background Conditions (2022) v/c Ratio}[2] [Total Conditions (2022) v/c Ratio][3] (Total Conditions with Signal Timing Adjustment (2022) v/c Ratio)[4]													
Intersection	Peak Hour	Eastbound			Westbound			Northbound			Southbound		
		EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
US 19 & Beckett Way	PM	0.71	0.33		0.59			0.90	0.89	0.00	0.50	0.57	0.04
		{0.72}	{0.36}		{0.62}			{0.91}	{0.94}	{0.00}	{0.51}	{0.60}	{0.04}
		[0.69]	[0.39]		[0.67]			[0.91]	[0.94]	[0.00]	[0.51]	[0.61]	[0.04]
US 19 & E Live Oak Street	PM	--	--	0.10	--	--	0.11	--	--	--	0.40	--	--
		--	--	{0.11}	--	--	{0.12}	--	--	--	{0.47}	--	--
		--	--	[0.12]	--	--	[0.13]	--	--	--	[0.52]	--	--
US 19 & Spruce Street	PM	0.74		0.17	0.60		0.02	0.50	1.05	0.02	0.67	0.73	0.03
		{0.78}		{0.19}	{0.73}		{0.02}	{0.52}	{1.09}	{0.02}	{0.69}	{0.75}	{0.03}
		[0.78]		[0.19]	[0.76]		[0.02]	[0.52]	[1.11]	[0.02]	[0.72]	[0.77]	[0.03]
US 19 & E Tarpon Avenue	PM	1.10	0.89	0.00	1.46	0.84	0.00	0.85	1.21	0.00	0.84	0.69	0.00
		{1.15}	{0.89}	{0.00}	{1.52}	{0.85}	{0.00}	{0.86}	{1.26}	{0.00}	{0.91}	{0.72}	{0.00}
		[1.20]	[0.89]	[0.00]	[1.52]	[0.85]	[0.00]	[0.86]	[1.27]	[0.00]	[0.92]	[0.73]	[0.00]
US 19 & E Klosterman Road	PM	1.01	0.00	0.14	--	0.78	--	0.84	0.83	--	0.77	0.66	
		{1.05}	{0.00}	{0.16}	--	{0.78}	--	{0.84}	{0.87}	--	{0.77}	{0.69}	
		[1.05]	[0.00]	[0.16]	--	[0.78]	--	[0.84]	[0.88]	--	[0.77]	[0.70]	
E Live Oak Street/ Dodecanese Blvd & Alt US 19	PM	0.66	0.37		0.12	0.14	0.82	0.15	0.70		0.39	0.62	
		{0.67}	{0.37}		{0.12}	{0.14}	{0.82}	{0.17}	{0.74}		{0.46}	{0.64}	
		[0.67]	[0.37]		[0.13]	[0.14]	[0.82]	[0.17]	[0.74]		[0.47]	[0.66]	
E Tarpon Ave & Alt US 19	PM	0.76			0.51	0.78		0.03	0.92		0.77	0.37	
		{0.77}			{0.52}	{0.79}		{0.03}	{0.98}		{0.98}	{0.39}	
		[0.78]			[0.54]	[0.78]		[0.03]	[1.00]		[1.07]	[0.40]	
		(0.91)			(0.73)	(0.79)		(0.03)	(0.98)		(0.96)	(0.39)	

1. Existing Conditions: Year 2020 Traffic volumes
2. Background Conditions: Year 2022 Traffic volumes = Existing Traffic Volumes + 2% annual growth
3. Total Conditions: Background + Project Traffic Volumes: Year 2022 Traffic Volumes + Project Traffic
4. Total Conditions: Background + Project Traffic Volumes: Year 2022 Traffic Volumes + Project Traffic

The following movements are anticipated to operate with v/c ratios greater than 1.0 during the p.m. peak-hour periods in total conditions as indicated in Table 5.

- Alternative US 19 & Tarpon Avenue
  - Southbound left-turn

Future signal timing adjustments are recommended with the addition of the project. With additional green time for the southbound left-turn, the intersection of Alternative US 19 & Tarpon Avenue can operate acceptably (all v/c ratios for all movements less than 1.0).

Project Access Analysis

Per discussion with the FDOT, the project access location is required to consist of offset left-turn median openings along US 19. The approved pre-application notes from FDOT are provided in the approved methodology in the appendix. Another pre-application meeting was held with the FDOT staff on October 8, 2020. FDOT will review the plans in detail with the submittal of a driveway permit. During the pre-application meeting, FDOT agreed the offset left-turn lanes should be provided for access to/from the site. FDOT noted they reviewed other locations for offset left-turn lanes and generally found the off-set turn lanes to be safer compared to full median openings.

A queue analysis was performed for the median openings north and south of the project driveway. The results are summarized in Table 6.

The median opening for the project northbound u-turn lane (at the median north of the project driveway) is anticipated to require 605 feet. This includes the 200 feet of queue storage and 405 feet for deceleration/taper based upon FDOT Standard Index 711-001. The southbound u-turn lane (at the median south of the project driveway) is anticipated to require 520 feet. This includes the 115 feet of queue storage and 405 feet for deceleration/taper based upon FDOT Standard Index 711-001.

Table 6: Intersection Queue Analysis

Total Conditions (2022) Queue Analysis (feet)[1,2]													
Intersection	Peak Hour	Eastbound			Westbound			Northbound			Southbound		
		EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBT	NBR	SBU	SBT	SBR
US 19 & North Median	AM	--			--			191	--		--		
	PM	--			--			28	--		--		
US 19 & Project Driveway	AM	--			--		23	--			--		
	PM	--			--		75	--			--		
US 19 & South Median	AM	--			--			--			3	--	
	PM	--			--			--			112	--	

1. 95th Percentile Queue from Synchro
2. Total Conditions: Background + Project Traffic Volumes: Year 2022 Traffic Volumes + Project Traffic

An analysis based on FDOT's *Access Management Guidebook (2019)* was performed for northbound right-turn volumes at the driveway access connection along US 19 to determine if a right-turn lane may be warranted for the proposed development. A right-turn lane may be warranted for a roadway with a speed limit over 45 miles per hour if the number of right-turns per hour is between 35 to 55 vehicles. The p.m. peak-hour project traffic right-turn volume is 108 vehicles. Therefore, a northbound right-turn lane of 405 feet (based upon a design speed of 55 miles per hour and FDOT Standard Index 711-001) is warranted at this location and the turn radii for the project site shall be designed accordingly with respect to FDOT turn lane specifications.

Parking

Parking will be provided on-site. The total number of proposed parking spaces is 761 spaces which includes 45 spaces in the garage and 716 at grade spaces. The number of required spaces is 807 which includes 56 spaces for the community pool, 44 spaces for the clubhouse, and 707 parking spaces for the residential units. A waiver has been requested for a reduction for the number of required parking spaces for the pool area. Pedestrian connections will be provided from the residential parking spaces to the club house.

MULTIMODAL ANALYSIS

Sidewalks and bicycle lanes currently exist along both sides of US 19. The Fred Marquis Pinellas trail is south of the site and will be connected to the site. The sidewalk connection will be provided from the site to the existing sidewalk along US 19. A map illustrating the existing multi-modal including transit stops and routes is attached in the appendix.

A circulation exhibit will be provided with the site plan showing the proposed sidewalk connections on site. Pedestrian facilities will be provided on site as well as additional gathering spaces including a pocket park, playground and pet park.

TRANSPORTATION MANAGEMENT STRATEGIES

As required by the City of Tarpon Springs, transportation management strategies are included for this project. The project is proposing an intensity reduction as the current zoning is commercial. The project is also proposing a density reduction since the density allows for the development of 499 units but the applicant is seeking approval for 404 dwelling units.

To provide access to the site, offset left-turn lanes will be constructed along US 19. This improvement will allow vehicles traveling on US 19 to make a southbound or northbound u-turn movement and will improve existing conditions as it provides an opportunity for vehicles to make a u-turn in both directions prior to the existing northbound and southbound left-turn lanes at the intersections of US 19 & E Live Oak Street and US 19 & Beckett Way. This will reduce the northbound and southbound u-turns at the adjacent signalized intersections and existing median openings and improve their intersection operations for these movements.

Additionally, coordination with the FDOT for access management and review will be required. The project is requesting only one access connection on US 19 to reduce impacts to the overall network. It is proposed to construct a northbound right-turn lane at the project entrance to reduce impacts to the existing network and improve safety.

Anclote Harbor Apartments will encourage traffic reduction by promoting a livable community through site design features. The apartments will enable a live-work-play lifestyle and promote a pedestrian friendly design with connected walking paths.

Residents will enjoy access to recreational amenities such as resort style pool, fitness center with yoga, cardio and strength training studios, dog park, grill stations, on-site boat dock access, kayak/canoe launch areas, and walking paths with sidewalk connection to the Pinellas trail. The project will also enable working-from-home by featuring a co-working inspired business center with large collaborative spaces, private conference room, and private office spaces. The

community will feature electric car chargers and foster multimodal transportation by providing bike storage and encouraging ride sharing and resident carpooling programs.

CONCLUSION

The proposed residential development, Anclote Harbor Apartments, is proposed to be located in the City of Tarpon Springs, Florida, east of US 19. The residential development is proposed to include up to 404 multi-family dwelling units.

As required by the City of Tarpon Springs in section § 122.11.03 of their Land Development Code:

> *"Transportation management plans are to be submitted by applicants of development projects in conjunction with their site plans. Transportation management plans are required for development applications seeking to utilize transportation management strategies/improvements to address their development impacts."*

The applicant is proposing several transportation management strategies/improvements to address the development impacts, including:

- Intensity reduction: The current zoning is commercial, and the project is proposing residential units which generate fewer peak-hour trips.
- Density reduction: Although the density would allow the development of 499 units, the applicant is seeking approval for 404 dwelling units.
- Access management strategies:
    - Anclote Harbor Apartments will construct a northbound deceleration turn lane into the proposed project.
    - Anclote Harbor Apartments, as agreed upon with the FDOT, will construct an "Offset Left-Turn Median Opening" on US 19 with a corresponding right-in/right-out only project driveway access connection (in lieu of a full access median opening adjacent to the project site) in order to enhance safety for the ingress and egress of project traffic.

  - The applicant is proposing only one access connection to minimize impacts to the roadway network.
- Demand management/commuter assistance: Anclote Harbor Apartment community will feature electric car chargers and foster multimodal transportation by providing bike storage and encouraging ride sharing and resident carpooling programs.
- Bicycle/pedestrian improvements: Anclote Harbor Apartments will promote traffic reduction by enabling a live-work-play lifestyle, including walking paths with sidewalk connection to the Pinellas Trail.
- Livable community site design features: Anclote Harbor Apartments will promote traffic reduction by enabling a live-work-play lifestyle. Residents will enjoy access to recreational amenities such as resort style pool, fitness center with yoga, cardio and strength training studios, dog park, grill stations, on-site boat dock access, kayak/canoe launch areas, and walking paths with sidewalk connection to the Pinellas trail. The project will also enable working-from-home by featuring a co-working inspired business center with large collaborative spaces, private conference room, and private office spaces.

Per discussion with the FDOT, the project access location is required to consist of offset left-turn median openings along US 19. FDOT noted they reviewed other locations for offset left-turn lanes and generally found the off-set turn lanes to be safer compared to full median openings. This improvement will allow vehicles traveling on US 19 to make a southbound or northbound u-turn movement and will improve existing conditions as it provides an opportunity for vehicles to make a u-turn in both directions prior to the existing northbound and southbound left-turn lanes at the intersections of US 19 & E Live Oak Street and US 19 & Beckett Way. This will reduce the northbound and southbound u-turns at the adjacent signalized intersections and existing median openings and improve the intersection operations for these movements.

ANCLOTE HARBOR
HURRICANE SHELTER IMPACT STUDY

I. INTRODUCTION

The Morgan Group, the Applicant, has submitted a Rezoning Application from GB, General Business, to RPD, Residential Planned Development, and an application for Preliminary Development Plan for Anclote Harbor. Anclote Harbor is a new multifamily development located on the east side of U.S. Highway 19 and approximately one mile north of Tarpon Avenue. The Anclote Harbor site is currently undeveloped and is proposed for a total of 404 multifamily residential units.

The City's *Land Development Code* requires that a Hurricane Shelter Impact Study be prepared if a rezoning request proposes to develop 50 or more units in a Category 3 Storm evacuation area. Anclote Harbor has submitted a rezoning application, is proposing more than 50 residential units and is in the Category 3 Storm Evacuation Area. Therefore, this Hurricane Shelter Impact Study has been prepared to meet the City's requirements.

II. SHELTER SPACE DEMAND FOR PROJECT

Section 122.12 of the City's *Land Development Code* prescribes the following methodology for calculating the shelter space demand for a project:

- The shelter space demand for a project is determined to be 25% of the total population of the development.
- The total population of a project is calculated as the total number of residential units times the Persons Per Household (PPH) in Pinellas County.
- The Persons Per Household shall be based on the most recent U.S. Census, Florida Statistical Abstract or other acceptable documented source.

Based on the City's methodology, the shelter space demand for Anclote Harbor is calculated as follows:

- Total Number of Residential Units X 2.14 PPH X 0.25 = Residents seeking use of Public Shelter

- 404 du X 2.14 = 865 persons X 0.25 = 216 persons

In summary, of the total population of 865 persons residing in Anclote Harbor, the City's methodology estimates that 216 persons will seek a public shelter. The balance of the Anclote Harbor residents will seek shelter with family, friends or hotel accommodations. The source for the Persons Per Household ratio of 2.14 in Pinellas County is the "Households and Average

Household Size in Florida: April 1, 2019," Bureau of Economic and Business Research, University of Florida, December 2019 (Excerpt attached as **Exhibit 1**). It should be noted that the 2020 Census data is not yet available so the 2019 estimates of Persons Per Household prepared by the Bureau of Economic and Business Research is the most current data available. It should also be noted that the Bureau has been known for decades as a credible and professionally researched entity that produces a wide variety of population data for Florida.

III. AVAILABLE SHELTER SPACE IN NORTH PINELLAS COUNTY

Hurricane shelters are located throughout Pinellas County and are operated and managed by the County's Emergency Management Department. The County's website for Evacuation Zones & Shelters includes a map and list of 36 shelters at various locations throughout the County. For the purposes of this Study, it is assumed that residents who decide to use a public shelter will seek a shelter in proximity to their homes in the City of Tarpon Springs. Based on this assumption, there are five public shelters in proximity to the City of Tarpon Springs. A sixth shelter located at Tarpon Springs Middle School was recently removed by the County as a shelter for the 2020 hurricane season due to the potential for flooding in the area of the School. Therefore, this School was not included in this analysis as an available shelter for Anclote Harbor residents.

Tarapani Planning Strategies requested the capacity and most recent usage for the five public shelters near the City of Tarpon Springs. The Emergency Management Department provided the capacity for each shelter but only had recent usage data for two of the five shelters (**Exhibit 2**, Letter from Pinellas County Emergency Management to Cyndi Tarapani, November 5, 2019). The five shelters that may be used by Anclote Harbor residents, their capacity and usage if available, is shown in **Table 1** below.

Table 1
Summary of Available Public Shelters

Shelter Name	**Capacity (Persons)**	**Usage (Hurricane Irma) (Persons)**
Brooker Creek Elementary School	869	N.A.
East Lake High School	2,855	N.A.
Carwise Middle School	2,373	1,734
Palm Harbor University High School	3,600	1,800
Palm Harbor Middle School	1,743	N.A.
TOTAL	**11,440 Persons**	

The average usage for the two shelters for which usage data is available results in an average usage proportion of 59%. This usage data means that there is an estimated 41% capacity remaining at the five shelters for persons who wish to use the public shelters. When the 41% availability ratio is applied to the total capacity of these five shelters, there is an estimated space available for 4,686 persons that can be sheltered at the five shelters in the vicinity of the City.

Based on the calculations in **Section II** above, it is estimated that 216 residents of Anclote Harbor would seek public shelter as opposed to other shelter methods (i.e., family, friends, or hotel accommodations). Based on Pinellas County data, there is available capacity in the five shelters in proximity to the City of Tarpon Springs of an estimated total amount of 4,686 persons. The estimated 216 Anclote Harbor residents who would seek public shelter is a very small proportion of the estimated available capacity of 4,686 persons at the five shelters in proximity to the City. Therefore, the Anclote Harbor residents can be accommodated by the existing available capacity at the public shelters. Since there is available shelter capacity in the event of a hurricane for the Anclote Harbor residents, no further analysis or mitigation is required.

IV. SUMMARY

1. The estimated population of Anclote Harbor's 404 residential units is 865 persons, based on the most recent Persons Per Household data for Pinellas County as prepared by the Bureau of Economic Business Research, University of Florida.

2. Of the total 865 persons residing in Anclote Harbor, the City's *LDC* estimates that 25% of the total residents or 216 residents would seek to stay in a public shelter with the balance of the residents seeking shelter with family, friends or hotel accommodations.

3. Pinellas County Emergency Management Department operates and manages 36 shelters at various locations throughout the County.

4. There are five public shelters located in proximity to the City of Tarpon Springs that are available to the City's residents needing public shelter.

5. According to Pinellas County Emergency Management Department, these five shelters have a total capacity of 11,440 persons with space available for an estimated 4,686 persons, based on the County's usage data.

6. Therefore, there is more than adequate capacity of an estimated 4,686 persons available at five shelters in the vicinity of the City's residents to house the estimated 216 Anclote Harbor residents that may seek public shelter.

7. Since there is available shelter capacity in the event of a hurricane for the Anclote Harbor residents, no further analysis or mitigation is required.

8. Based on the results of this Hurricane Shelter Study, the proposed Anclote Harbor development is in compliance with the City's *Land Development Code* Section 122.12.

ANCLOTE HARBOR
HURRICANE SHELTER IMPACT STUDY

EXHIBITS

Exhibit 1 Excerpt of "Households and Average Household Size in Florida, April 1, 2019," Bureau of Economic and Business Research, University of Florida, December, 2019.

Exhibit 2 Letter from Pinellas County Emergency Management to Cyndi Tarapani, November 5, 2019.

Prepared by: Cynthia Tarapani, Owner/ Authorized Member
Tarapani Planning Strategies, LLC

ANCLOTE HARBOR
HURRICANE SHELTER IMPACT STUDY

EXHIBIT 1

Excerpt of "Households and Average Household Size in Florida, April 1, 2019,"
Bureau of Economic and Business Research, University of Florida,
December, 2019.

College of Liberal Arts and Sciences
Bureau of Economic and Business Research
Florida Population Studies
BEBR
Volume 53, Bulletin 185, December 2019

Households and Average Household Size in Florida: April 1, 2019

Stefan Rayer, Population Program Director
Ying Wang, Research Demographer
Richard Doty, GIS Coordinator/Research Demographer
Suzanne Roulston-Doty, GIS Project Manager/Research Demographer
Stanley K. Smith, Professor Emeritus

The Bureau of Economic and Business Research (BEBR) at the University of Florida produces population estimates for Florida and each of its cities and counties using the housing unit method. In this method, changes in population are based on changes in occupied housing units (or households), average household size, and the group quarters population. This is the most commonly used method for making local population estimates in the United States, because it can utilize a wide variety of data sources, can be applied at any level of geography, and can produce estimates that are at least as accurate as those produced by any other method.

In most places, the two primary components of the housing unit method are the number of households and average household size. In this report, we provide estimates of these two components for Florida and each of its counties for April 1, 2019. For purposes of comparison, we also provide estimates of households and average household size for 2000 and 2010, based on decennial census data.

Households are defined as housing units occupied by permanent residents. They should not be confused with total housing units, which include vacant and seasonally occupied units as well as units occupied by permanent residents. According to Census Bureau guidelines, a person's permanent residence is the place that person lives and sleeps most of the time. Because we follow these guidelines, temporary residents such as tourists and snowbirds are not included in the estimates shown here.

Households

We estimate that here were 8,427,696 households in Florida on April 1, 2019, an increase of 1,006,894 (13.6%) since April 1, 2010. Miami-Dade County had the largest increase in households between 2010 and 2019, growing by 118,801. Other large increases occurred in Orange (88,203), Hillsborough (83,513), Broward (65,769), Palm Beach (54,064), Lee (49,980), and Duval (47,425) counties. In percentage terms, the largest increases occurred in Sumter (49.1 percent), Osceola (36.3 percent), St. Johns (35.0 percent), Walton (28.9 percent), Orange (20.9 percent), Manatee (20.7 percent), and Lake (20.4 percent) counties. In the following three counties we estimated a small net loss of households between 2010 and 2019: Calhoun (–1.0 percent), Jackson (–0.8 percent), and Putnam (–0.3 percent).

(Continued on Page 6)

Table 1. Number of Households and Average Household Size in Florida and Its Counties 2019, 2010, and 2000

State and County	Estimates, April 1, 2019		Census, April 1, 2010		Census, April 1, 2000	
	Households	Average Household Size	Households	Average Household Size	Households	Average Household Size
FLORIDA	8,427,696	2.46	7,420,802	2.48	6,338,075	2.46
Alachua	109,920	2.30	100,516	2.32	87,509	2.34
Baker	9,305	2.73	8,772	2.82	7,043	2.86
Bay	68,575	2.38	68,438	2.41	59,597	2.43
Bradford	9,784	2.50	9,479	2.53	8,497	2.58
Brevard	255,527	2.30	229,692	2.33	198,195	2.35
Broward	751,816	2.53	686,047	2.52	654,445	2.45
Calhoun	5,010	2.48	5,061	2.52	4,468	2.53
Charlotte	84,833	2.11	73,370	2.14	63,864	2.18
Citrus	66,997	2.17	63,304	2.20	52,634	2.20
Clay	79,059	2.70	68,792	2.76	50,243	2.77
Collier	157,483	2.36	133,179	2.38	102,973	2.39
Columbia	26,519	2.46	24,941	2.52	20,925	2.56
DeSoto	11,956	2.70	11,445	2.71	10,746	2.70
Dixie	6,455	2.29	6,316	2.37	5,205	2.44
Duval	389,875	2.43	342,450	2.47	303,747	2.51
Escambia	127,165	2.38	116,238	2.41	111,049	2.45
Flagler	45,713	2.40	39,186	2.42	21,294	2.32
Franklin	4,660	2.26	4,254	2.29	4,096	2.28
Gadsden	17,184	2.50	16,952	2.61	15,867	2.69
Gilchrist	6,616	2.53	6,121	2.58	5,021	2.61
Glades	4,723	2.47	4,533	2.52	3,852	2.51
Gulf	5,615	2.26	5,335	2.33	4,931	2.42
Hamilton	4,820	2.47	4,617	2.54	4,161	2.60
Hardee	8,316	3.10	8,245	3.12	8,166	3.06
Hendry	12,728	3.10	12,025	3.09	10,850	3.09
Hernando	78,718	2.37	71,745	2.38	55,425	2.32
Highlands	45,062	2.26	42,604	2.28	37,471	2.30
Hillsborough	557,543	2.55	474,030	2.55	391,357	2.51
Holmes	7,480	2.44	7,354	2.47	6,921	2.43
Indian River	68,483	2.24	60,176	2.26	49,137	2.25
Jackson	17,273	2.36	17,417	2.40	16,620	2.44
Jefferson	5,900	2.29	5,646	2.38	4,695	2.53
Lafayette	2,785	2.59	2,580	2.63	2,142	2.66

Table 1. Number of Households and Average Household Size in Florida and Its Counties 2019, 2010, and 2000 (Continued)

State and County	Estimates, April 1, 2019 Households	Estimates, April 1, 2019 Average Household Size	Census, April 1, 2010 Households	Census, April 1, 2010 Average Household Size	Census, April 1, 2000 Households	Census, April 1, 2000 Average Household Size
Lake	146,017	2.42	121,289	2.42	88,412	2.34
Lee	309,798	2.34	259,818	2.35	188,599	2.31
Leon	120,900	2.32	110,945	2.35	96,521	2.34
Levy	16,964	2.41	16,404	2.45	13,867	2.44
Liberty	2,639	2.54	2,525	2.57	2,222	2.51
Madison	7,289	2.41	6,985	2.48	6,629	2.57
Manatee	163,892	2.33	135,729	2.34	112,460	2.29
Marion	151,577	2.31	137,726	2.35	106,755	2.36
Martin	70,261	2.19	63,899	2.23	55,288	2.23
Miami-Dade	986,153	2.81	867,352	2.83	776,906	2.84
Monroe	34,557	2.15	32,629	2.18	35,086	2.23
Nassau	34,399	2.45	28,794	2.53	21,980	2.59
Okaloosa	81,779	2.40	72,379	2.43	66,269	2.49
Okeechobee	14,715	2.63	14,013	2.68	12,593	2.69
Orange	510,050	2.64	421,847	2.64	336,286	2.61
Osceola	123,464	2.97	90,603	2.93	60,977	2.79
Palm Beach	598,291	2.39	544,227	2.39	474,179	2.34
Pasco	215,278	2.42	189,612	2.42	147,567	2.30
Pinellas	447,984	2.14	415,876	2.16	414,974	2.17
Polk	261,811	2.59	227,485	2.59	187,233	2.52
Putnam	29,329	2.45	29,409	2.48	27,839	2.48
St. Johns	101,675	2.47	75,338	2.49	49,614	2.44
St. Lucie	121,546	2.52	108,523	2.53	76,933	2.47
Santa Rosa	67,909	2.54	56,910	2.59	43,793	2.63
Sarasota	199,207	2.11	175,746	2.13	149,940	2.13
Seminole	186,744	2.51	164,706	2.55	139,573	2.59
Sumter	61,672	1.95	41,361	2.04	20,779	2.27
Suwannee	17,346	2.47	15,953	2.52	13,460	2.54
Taylor	8,370	2.39	7,920	2.44	7,176	2.51
Union	4,159	2.56	4,048	2.66	3,367	2.76
Volusia	228,596	2.30	208,236	2.31	184,723	2.32
Wakulla	11,532	2.58	10,490	2.61	8,450	2.57
Walton	28,741	2.36	22,301	2.38	16,548	2.35
Washington	9,154	2.49	8,864	2.50	7,931	2.46

Table 2. Change in Households and Average Household Size in Florida and Its Counties, 2010–2019 and 2000–2010

State and County	Numerical Change				Percentage Change			
	Households		Average Household Size		Households		Average Household Size	
	2010–19	2000–10	2010–19	2000–10	2010–19	2000–10	2010–19	2000–10
FLORIDA	1,006,894	1,082,727	-0.02	0.02	13.6	17.1	-0.8	0.8
Alachua	9,404	13,007	-0.02	-0.02	9.4	14.9	-0.9	-0.9
Baker	533	1,729	-0.09	-0.04	6.1	24.5	-3.2	-1.4
Bay	137	8,841	-0.03	-0.02	0.2	14.8	-1.2	-0.8
Bradford	305	982	-0.03	-0.05	3.2	11.6	-1.2	-1.9
Brevard	25,835	31,497	-0.03	-0.02	11.2	15.9	-1.3	-0.9
Broward	65,769	31,602	0.01	0.07	9.6	4.8	0.4	2.9
Calhoun	-51	593	-0.04	-0.01	-1.0	13.3	-1.6	-0.4
Charlotte	11,463	9,506	-0.03	-0.04	15.6	14.9	-1.4	-1.8
Citrus	3,693	10,670	-0.03	0.00	5.8	20.3	-1.4	0.0
Clay	10,267	18,549	-0.06	-0.01	14.9	36.9	-2.2	-0.4
Collier	24,304	30,206	-0.02	-0.01	18.2	29.3	-0.8	-0.4
Columbia	1,578	4,016	-0.06	-0.04	6.3	19.2	-2.4	-1.6
DeSoto	511	699	-0.01	0.01	4.5	6.5	-0.4	0.4
Dixie	139	1,111	-0.08	-0.07	2.2	21.3	-3.4	-2.9
Duval	47,425	38,703	-0.04	-0.04	13.8	12.7	-1.6	-1.6
Escambia	10,927	5,189	-0.03	-0.04	9.4	4.7	-1.2	-1.6
Flagler	6,527	17,892	-0.02	0.10	16.7	84.0	-0.8	4.3
Franklin	406	158	-0.03	0.01	9.5	3.9	-1.3	0.4
Gadsden	232	1,085	-0.11	-0.08	1.4	6.8	-4.2	-3.0
Gilchrist	495	1,100	-0.05	-0.03	8.1	21.9	-1.9	-1.1
Glades	190	681	-0.05	0.01	4.2	17.7	-2.0	0.4
Gulf	280	404	-0.07	-0.09	5.2	8.2	-3.0	-3.7
Hamilton	203	456	-0.07	-0.06	4.4	11.0	-2.8	-2.3
Hardee	71	79	-0.02	0.06	0.9	1.0	-0.6	2.0
Hendry	703	1,175	0.01	0.00	5.8	10.8	0.3	0.0
Hernando	6,973	16,320	-0.01	0.06	9.7	29.4	-0.4	2.6
Highlands	2,458	5,133	-0.02	-0.02	5.8	13.7	-0.9	-0.9
Hillsborough	83,513	82,673	0.00	0.04	17.6	21.1	0.0	1.6
Holmes	126	433	-0.03	0.04	1.7	6.3	-1.2	1.6
Indian River	8,307	11,039	-0.02	0.01	13.8	22.5	-0.9	0.4
Jackson	-144	797	-0.04	-0.04	-0.8	4.8	-1.7	-1.6
Jefferson	254	951	-0.09	-0.15	4.5	20.3	-3.8	-5.9
Lafayette	205	438	-0.04	-0.03	7.9	20.4	-1.5	-1.1

Table 2. Change in Households and Average Household Size in Florida and Its Counties, 2010–2019 and 2000–2010 (Continued)

State and County	Numerical Change				Percentage Change			
	Households		Average Household Size		Households		Average Household Size	
	2010–19	2000–10	2010–19	2000–10	2010–19	2000–10	2010–19	2000–10
Lake	24,728	32,877	0.00	0.08	20.4	37.2	0.0	3.4
Lee	49,980	71,219	-0.01	0.04	19.2	37.8	-0.4	1.7
Leon	9,955	14,424	-0.03	0.01	9.0	14.9	-1.3	0.4
Levy	560	2,537	-0.04	0.01	3.4	18.3	-1.6	0.4
Liberty	114	303	-0.03	0.06	4.5	13.6	-1.2	2.4
Madison	304	356	-0.07	-0.09	4.4	5.4	-2.8	-3.5
Manatee	28,163	23,269	-0.01	0.05	20.7	20.7	-0.4	2.2
Marion	13,851	30,971	-0.04	-0.01	10.1	29.0	-1.7	-0.4
Martin	6,362	8,611	-0.04	0.00	10.0	15.6	-1.8	0.0
Miami-Dade	118,801	90,446	-0.02	-0.01	13.7	11.6	-0.7	-0.4
Monroe	1,928	-2,457	-0.03	-0.05	5.9	-7.0	-1.4	-2.2
Nassau	5,605	6,814	-0.08	-0.06	19.5	31.0	-3.2	-2.3
Okaloosa	9,400	6,110	-0.03	-0.06	13.0	9.2	-1.2	-2.4
Okeechobee	702	1,420	-0.05	-0.01	5.0	11.3	-1.9	-0.4
Orange	88,203	85,561	0.00	0.03	20.9	25.4	0.0	1.1
Osceola	32,861	29,626	0.04	0.14	36.3	48.6	1.4	5.0
Palm Beach	54,064	70,048	0.00	0.05	9.9	14.8	0.0	2.1
Pasco	25,666	42,045	0.00	0.12	13.5	28.5	0.0	5.2
Pinellas	32,108	902	-0.02	-0.01	7.7	0.2	-0.9	-0.5
Polk	34,326	40,252	0.00	0.07	15.1	21.5	0.0	2.8
Putnam	-80	1,570	-0.03	0.00	-0.3	5.6	-1.2	0.0
St. Johns	26,337	25,724	-0.02	0.05	35.0	51.8	-0.8	2.0
St. Lucie	13,023	31,590	-0.01	0.06	12.0	41.1	-0.4	2.4
Santa Rosa	10,999	13,117	-0.05	-0.04	19.3	30.0	-1.9	-1.5
Sarasota	23,461	25,806	-0.02	0.00	13.3	17.2	-0.9	0.0
Seminole	22,038	25,133	-0.04	-0.04	13.4	18.0	-1.6	-1.5
Sumter	20,311	20,582	-0.09	-0.23	49.1	99.1	-4.4	-10.1
Suwannee	1,393	2,493	-0.05	-0.02	8.7	18.5	-2.0	-0.8
Taylor	450	744	-0.05	-0.07	5.7	10.4	-2.0	-2.8
Union	111	681	-0.10	-0.10	2.7	20.2	-3.8	-3.6
Volusia	20,360	23,513	-0.01	-0.01	9.8	12.7	-0.4	-0.4
Wakulla	1,042	2,040	-0.03	0.04	9.9	24.1	-1.1	1.6
Walton	6,440	5,753	-0.02	0.03	28.9	34.8	-0.8	1.3
Washington	290	933	-0.01	0.04	3.3	11.8	-0.4	1.6

Average Household Size

We estimate that average household size has changed only moderately since 2010 in most counties, and that it has decreased very slightly for the state as a whole (2.46). Average household size varies considerably among counties in Florida. In 2019, it was largest in Hardee (3.10), Hendry (3.10), Osceola (2.97), Miami-Dade (2.81), Baker (2.73), Clay (2.70), and DeSoto (2.70) counties; it was smallest in Sumter (1.95), Sarasota (2.11), Charlotte (2.11), Pinellas (2.14), Monroe (2.15) and Citrus (2.17) counties.

In general, average household size tends to be higher for black than white households, for Hispanic than non-Hispanic households, and for households headed by young or middle-aged persons than for households headed by older persons. Although there is not a perfect correlation, the counties in Florida with the largest average household sizes tend to have low proportions of older residents and high proportions of black or Hispanic residents, whereas counties with the smallest average household sizes tend to have high proportions of older residents and low proportions of black and Hispanic residents.

Methodology

These estimates of the number of households and average household size were produced with the so-called headship rate model, in which headship rates are applied to population estimates. Headship rates represent the share of the population that head a household; they are constructed by dividing the number of household heads by the number of people. A more detailed description of the methodology used for these estimates can be found in "Revised Estimates of Households and Average Household Size for Florida and Its Counties, 2000–2016, with Estimates for 2017," *Florida Population Studies*, Bulletin 179, December 2017.

Acknowledgement

Funding for these estimates was provided by the Florida Legislature.

ANCLOTE HARBOR
HURRICANE SHELTER IMPACT STUDY

EXHIBIT 2

Letter from Pinellas County Emergency Management to Cyndi Tarapani, November 5, 2019.

Pinellas County EMERGENCY MANAGEMENT

November 5, 2019

Tarapani Planning Strategies, LLC
Cyndi Tarapani
128 E. Tarpon Avenue
Tarpon Springs, FL. 34689

RE: Public Records Request Direct Notice to Emergency Management dated 11/5/19; Hurricane Shelter Capacity and Utilization

Dear Ms. Tarapani,

We are in receipt of your request dated November 5, 2019. As requested, capacity and utilization of the six (6) shelters provided is listed below:

Shelter	Capacity (15 sq. ft. per person)	Usage (Hurricane Irma)
Tarpon Springs Middle School, 501 N. Florida Avenue, Tarpon Springs	1464	683
Brooker Creek Elementary School, 3139 Forelock Road, Tarpon Springs	869	N/A
East Lake High School, 1300 Silver Eagle Drive, Tarpon Springs	2855	N/A
Carwise Middle School, 3301 Bentley Drive, Palm Harbor	2373	1734
Palm Harbor University High School, 1900 Omaha Street, Palm Harbor	3600	1800
Palm Harbor Middle School, 1800 Tampa Road, Palm Harbor	1743	N/A

This concludes are responsive duties to your request.

Sincerely,

Elizabeth D Farley

Elizabeth D. Farley
Administrative Support Specialist II
Pinellas County Emergency Management

REPLY TO:
10750 Ulmerton Road
Building 1, Suite 267
Largo, FL. 33778
Main: (727) 464-5550
Fax: (727) 464-4024
TDD: (727) 464-4431

www.pinellascounty.org

Pinellas County
ATTORNEY'S OFFICE

Jewel White
County Attorney

July 21, 2020

E.D. Armstrong III
Hill Ward Henderson
600 Cleveland Street, Suite 800
Clearwater, Florida 33755

Dear Ed,

Please be advised that upon further review as requested by Cyndi Tarapani, Forward Pinellas has amended its position regarding the transfer of development rights pursuant to Section 5.2.1.1.1.D of the Countywide Rules as it relates to the Anclote Harbor development. Specifically, the third interpretation provided in the July 2, 2020 correspondence from Forward Pinellas has been amended as follows:

Pursuant to Section 5.2.1.1.1.D of the Countywide Rules, the maximum allowable transfer of development rights to the proposed receiving parcel, which provides or contains Manufacturing, Office, or Research Development uses, is 30%. With a maximum of 75 units allowed on the Office portion of the site before transfer, the maximum number of units that can be transferred pursuant to the Countywide Rules is 23 units.

Please contact me with any further questions or concerns.

Thank you,

Chelsea D. Hardy
Assistant County Attorney

CC: Rodney Chatman
Cyndi Tarapani

PCAO 287315

315 Court Street
Clearwater, FL 33756
Phone: (727) 464-3354
FAX: (727) 464-4147
TDD: (727) 464-4431

www.pinellascounty.org

Patricia McNeese

From: the1midge@aol.com
Sent: Wednesday, September 30, 2020 12:05 AM
To: Patricia McNeese
Subject: TRC meeting October 1, 2020

Please share these thoughts at the TRC meeting.
Thank you all for working so diligently to ensure that the new projects comply with City standards. A couple of thoughts on the Anclote River Project -

1. In the description of the project, both at the beginning, introductory section, and on page 1021 when it is repeated, the project is said to be on the WEST side of US 19. It is clearly on the east side.
2. The extensive traffic studies demonstrate the difficulty of accessing the site. Although I think the U-turns required are extremely problematic and will result in accidents, it seems the only way to make the site useable. It appears to be FDOT approved.

If the development proceeds, please look at some of these details -
1. The landscape plan does not include any mangroves. Although most buildings are kept at a distance from the river, mangroves provide the most natural way to maintain our clean water, support aquatic nurseries, and mitigate the damage that having more people causes.
2. If history is any guide, permitting a kayak launch in that area will be difficult.
3. As the lighting plan for the project progresses, stress the use of "dark sky" lighting to avoid light trespass.
4. The elevation of the entrance and the angle of car lights entering and exiting need to be evaluated so the car headlights do not impede drivers on US 19.
5. As the actual construction draws closer, could we please have exteriors with a little more personality? Other that palm trees, nothing shown signified Florida or Tarpon Springs. The exterior is boring. It does not fulfill the promise of being a gateway invitation to live here. I'm certain their talented architects can do better.
6. Please provide more information and/or drawings of the "garages". Are they covered carports or individual doored spaces or a large space into which many cars drive?
7. As sidewalks and paved areas are considerable, please use permeable surfaces whenever possible.
8. Would the Developer be willing to contribute to affordable housing in our community? With 400+ units, could some be allocated to helping families find homes? If not at this site, perhaps they could contribute to a City fund which helps lower income residents.

Thank you for adding these thoughts to the planning process.

Julie Wade
1095 Mainsail Drive
34689

ORDINANCE 2020-34

AN ORDINANCE OF THE CITY OF TARPON SPRINGS, FLORIDA AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF TARPON SPRINGS, FLORIDA, FOR 72.62 ACRES, MORE OR LESS, OF REAL PROPERTY LOCATED AT 42501 U.S. HIGHWAY 19 NORTH, ON THE EAST SIDE OF U.S. HIGHWAY 19 NORTH, FROM ZONING DESIGNATION GB (GENERAL BUSINESS) TO ZONING DESIGNATION RPD (RESIDENTIAL PLANNED DEVELOPMENT); APPROVING PRELIMINARY PLANNED DEVELOPMENT FOR ANCLOTE HARBOR RESIDENTIAL PLANNED DEVELOPMENT; PROVIDING FOR WAIVERS OF DESIGN REQUIREMENTS OF THE RPD DISTRICT; PROVIDING FOR FINDINGS; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the property owner of record of said parcel has requested to amend to the zoning district designation of said parcel from General Business (GB) district to Residential Planned Development (RPD) district; and,

WHEREAS, the applicant is also requesting approval of a Preliminary Planned Development under the RPD (Residential Planned Development) zoning district; and,

WHEREAS, the applicant is also requesting approval of a conditional use to allow for establishment of a residential use on the property in the Commercial General (CG) Future Land Use Map (FLUM) category; and,

WHEREAS, the proposed RPD, Residential Planned Development, zoning district is consistent with the Commercial General (CG) and Residential/Office General (R/OG) Future Land Use Map category designations of the subject property; and,

WHEREAS, the planned uses within the RPD District are compatible with surrounding and existing land uses; and,

WHEREAS, the Planning and Zoning Board conducted a public hearing on this rezoning Ordinance on November 16, 2020; and

WHEREAS, published legal notice of this Ordinance has been provided pursuant to the requirements of Chapter 166.041, F.S. and Section 206 of the Tarpon Springs Comprehensive Zoning and Land Development Code.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE CITY OF TARPON SPRINGS, FLORIDA:

Section 1. FINDINGS

1. That the Board of Commissioners finds that this Ordinance is consistent with the Tarpon Springs Comprehensive Plan.

2. That available uses to which the property may be put are appropriate to the property in question and are compatible with the existing and planned uses in the area.

3. That the amendment shall provide for efficient and orderly development considering the impact upon growth patterns and the cost to the City to provide public facilities.

4. That the amendment will not adversely impact nor exceed the capacity or the fiscal ability of the City to provide public facilities including transportation, water and sewer, solid waste, drainage, recreation, education, fire protection, library service and other similar public facilities.

Section 2. MAP AMENDMENT

That the Official Zoning Atlas of the City of Tarpon Springs is hereby amended for property legally described in Exhibit A, attached hereto.

Section 3. PRELIMINARY PLANNED DEVELOPMENT APPROVAL

The Preliminary Planned Development for Anclote Harbor multifamily residential development is hereby approved with the following waivers of design requirements:

1. Allowance of a maximum building height of 53 feet.
2. Allowance of a single access point to the development with multiple lanes as shown on the approved preliminary plan.

and with the following conditions:

1. Details of the proposed method of wetland enhancement and preliminary coordination with the Southwest Florida Water Management District (SWFWMD) showing approval of the jurisdictional determination shall be submitted with the Final Development Plan. Final permits from the SWFWMD may be submitted prior to issuance of a building permit for site work.
2. A conceptual plan detailing the approach for eradication and future management of Brazilian pepper tree (*Schinus terebinthifolius*) for each habitat area of the site shall be submitted with the Final Development Plan. The final plan shall be submitted at the time of application for a building permit for site work in

conjunction with the arborist's report and the final tree protection and mitigation plan. The City recognizes that it may be appropriate in some areas of the site to address the tree protection requirements of Section 133.04(d) of the Land Development Code on an area-wide basis for habitats being preserved rather than using crown spread for individual trees.

3. A landscape plan with a site-specific planting schedule shall be submitted with the Final Planned Development and shall include appropriately sized species for driveway medians within the site.
4. The 50-foot buffer adjacent to the Anclote River shall remain and be managed as undisturbed uplands (hardwood conifer mix) and shall not be graded.
5. A plan for proposed lighting with shielded lighting and decorative poles shall be submitted with the Final Development Plan.
6. On site signs and sign poles shall be designed to match City of Tarpon Springs specifications for the downtown/Community Redevelopment Area (CRA). Details shall be included with the Final Development Plan.
7. The developer will be responsible for addressing the provision of Public Art pursuant to Article XVII of the Land Development Code as part of the Final Development Plan.
8. A detailed drainage plan meeting the requirements of Section 141.00 of the Land Development Code and requirements of the Southwest Florida Water Management District shall be submitted with the Final Development Plan.
9. Detailed plans for utilities connections and infrastructure, including wastewater forcemain construction shall be submitted with the Final Development Plan along with documented coordination from all applicable agencies and landowners affected by the construction.
10. The traffic study shall be revised in accordance with the City's comments and submitted with the Final Development Plan along with Florida Department of Transportation approval of the proposed roadway and access configuration.
11. An updated letter from the Florida Department of State documenting no change to the status of archeological resources on the site shall be provided with the Final Development Plan.
12. An application for Future Land Use Map amendment to Recreation Open Space (ROS) for the upland preserve area shall be submitted prior to, or at the time of, Final Development Plan submittal.
13. A map adjustment to the Preservation (P) area on the City's Future Land Use Map will be required to match the category designation to the delineated wetlands on site. The City will process the map adjustment concurrently with the Final Planned Development.
14. The Applicant will donate an approximate 1.84 acre parcel to the City for public recreation. Public access to the park shall be restricted to pedestrians and bicycles from the land, and watercraft from the river. The park site is generally located in the northwest portion of the site adjacent to the Anclote River and as generally located on the Preliminary Development Plan. Upon donation of this passive park land to the City of Tarpon Springs, the Applicant will work with the City to design and install improvements consisting of a riverfront pullout/rest area for kayaks and park furniture for sitting. The City will pursue any jurisdictional

permits needed for work in shoreline/water areas. Improvements shall be installed prior to the issuance of a Certificate of Occupancy for the project.

15. The design of the residential buildings and clubhouse submitted for Final Development Plan approval shall be substantially similar to the architectural elevations that are a part of the Preliminary Development Plan application; however, minor revisions to the architectural features of these buildings may occur without requiring a new Preliminary Development Plan Review. Minor revisions to the architectural features shall include but are not limited to changes to the color palette, the window pattern, siding and roofing materials and other similar features.
16. The proposed boat dock located adjacent to the Anclote River is subject to all applicable permitting requirements; and, upon the issuance of the applicable permits, the timing of construction of the dock will be determined by the Applicant in his sole discretion.
17. A construction management and mitigation plan as required by the applicable jurisdictional agencies to avoid/address listed species impacts including bald eagle, indigo snake and gopher tortoises shall be submitted with the application for a building permit for site work.
18. The developer is responsible for obtaining applicable permits from all other agencies, for meeting the minimum requirements of the Comprehensive Zoning and Land Development Code, and for payment of all requisite fees.
19. The applicant shall complete the process for a Final Development Plan pursuant to Section 82.00 of the Land Development Code. The Final Development Plan shall be submitted within one year of approval of the Preliminary Planned Development.

Section 4. EFFECTIVE DATE

This Ordinance shall be effective upon approval and in conjunction with approval of Resolution 2020-72.

Ordinance 2020-34. Exhibit A

ANCLOTE HARBOR
LEGAL DESCRIPTION:

A TRACT OF LAND BEING A PORTION OF TAMPA AND TARPON SPRINGS LAND COMPANY AS RECORDED IN PLAT BOOK H-1, PAGE 116 OF THE PUBLIC RECORDS OF PINELLAS (FORMERLY HILLSBOROUGH) COUNTY, FLORIDA, LYING IN AND BEING A PART OF THE SOUTHEAST 1/4 OF SECTION 6, TOWNSHIP 27 SOUTH, RANGE 16 EAST, PINELLAS COUNTY FLORIDA AND A PORTION OF THE OFFICIAL MAP OF THE TOWN OF TARPON SPRINGS AS RECORDED IN PLAT BOOK 4, PAGE 79 OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA LYING IN AND BEING A PART OF THE NORTHEAST 1/4 OF SECTION 7, TOWNSHIP 27 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SECTION 6, TOWNSHIP 27 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA; AND RUN NORTH 85° 40' 26" WEST ALONG THE SOUTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 6 FOR A DISTANCE OF 885.46 FEET TO THE POINT OF BEGINNING BEING AT THE SOUTHEAST CORNER OF LOT 42 OF THE TAMPA AND TARPON SPRINGS LAND COMPANY AS RECORDED IN PLAT BOOK H-1, PAGE 116 OF THE PUBLIC RECORDS OF PINELLAS (FORMERLY HILLSBOROUGH) COUNTY, FLORIDA; THENCE RUN NORTH 00° 09' 16" WEST ALONG THE EAST LINE OF THE AFORESAID LOT 42 AND THE EAST LINE OF THE WEST 1/3 OF LOT 41 FOR A DISTANCE OF 1319.40 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 41; THENCE RUN N 85° 42' 06" W ALONG THE NORTH LINE OF LOTS 41 AND 45 FOR A DISTANCE OF 1380.36 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF STATE ROAD 55 (US HIGHWAY 19), RIGHT OF WAY WIDTH VARIES, AS SHOWN ON FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP SECTION NO. 15150-2548; THENCE RUN SOUTH 00° 02' 56" WEST ALONG SAID EAST RIGHT OF WAY LINE FOR A DISTANCE OF 1543.63 FEET; THENCE CONTINUE SOUTHERLY ALONG THE RIGHT OF WAY LINE AS PER THE ORDER OF TAKING AS RECORDED IN OFFICIAL RECORDS BOOK 6222, PAGE 2159 OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA FOR THE FOLLOWING TWO COURSES; THENCE RUN SOUTH 03° 40' 12" EAST FOR DISTANCE OF 308.34 FEET; THENCE RUN SOUTH 00° 02' 56" WEST FOR A DISTANCE OF 504.19 FEET; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE AND RUN NORTH 77° 42' 54" EAST ALONG THE NORTHERLY RIGHT OF WAY LINE AS RECORDED IN OFFICIAL RECORDS BOOK 3268, PAGE 99 AND VACATED PER ORDINANCE 84-07 RECORDED IN OFFICIAL RECORDS BOOK 5746, PAGE 1209, ALL OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA FOR A DISTANCE OF 1956.89 FEET TO A POINT ON THE EAST LINE OF BLOCK 96 OF THE AFORESAID OFFICIAL MAP OF THE TOWN OF TARPON SPRINGS AS RECORDED IN PLAT BOOK 4, PAGE 79 OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA, THENCE RUN NORTH 14° 38' 46" WEST ALONG THE EAST LINE OF BLOCK 96 AND BLOCK 90 OF THE AFORESAID OFFICIAL MAP OF THE TOWN OF TARPON SPRINGS FOR A DISTANCE OF 474.10 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF A 25 FOOT ROAD RIGHT OF WAY AS DESCRIBED IN THAT CERTAIN DEED RECORDED IN OFFICIAL RECORDS BOOK 2, PAGE 227 OF THE PUBLIC RECORD OF PINELLAS COUNTY, FLORIDA; THENCE

RUN NORTH 85° 40' 26" WEST ALONG SAID SOUTH RIGHT OF WAY LINE FOR A DISTANCE OF 431.33 FEET; THENCE RUN NORTH 00° 09' 16" WEST ALONG A SOUTHERLY EXTENSION OF THE EAST LINE OF LOT 42 OF THE TAMPA AND TARPON SPRINGS LAND COMPANY AS RECORDED IN PLAT BOOK H-1, PAGE 116 OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA FOR A DISTANCE OF 25.08 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT LAND CONVEYED PURSUANT TO THAT CERTAIN SPECIAL WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 14238, PAGE 1044 OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA.

RESOLUTION NO. 2020-72

A RESOLUTION OF THE CITY OF TARPON SPRINGS, FLORIDA, APPROVING APPLICATION #20-123 REQUESTING A CONDITIONAL USE PERMIT TO ALLOW THE ESTABLISHMENT OF A RESIDENTIAL USE IN THE COMMERCIAL GENERAL (CG) FUTURE LAND USE DISTRICT ON PROPERTY LOCATED AT 42501 U.S. HIGHWAY 19 NORTH; PROVIDING FOR FINDINGS; PROVIDING FOR CONDITIONS; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Tarpon Springs has received an application for a Conditional Use to allow for establishment of a residential use in the Commercial General (CG) Future Land Use Map (FLUM) category; and,

WHEREAS, Policy 2.4.3(e) of the City's Comprehensive Plan requires conditional use approval for such uses within the Commercial General FLUM category; and,

WHEREAS, the Planning and Zoning Board held a public hearing on this application at its meeting of November 16, 2020 and recommended approval; and,

WHEREAS, the Board of Commissioners must approve, deny or approve subject to conditions, each application for conditional use approval; and,

WHEREAS, written notice of this action has been provided in accordance with Article XII of the Comprehensive Zoning and Land Development Code.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE CITY OF TARPON SPRINGS, FLORIDA, THAT:

SECTION 1: FINDINGS

Application #20-123 meets the criteria for approving a Conditional Use as set forth in Section 209.01 of the Land Development Code.

SECTION 2: CONDITIONAL USE APPROVAL

Application #20-123 under Resolution 2020-72, requesting Conditional Use approval to allow establishment of a residential use on property located at 42501 U.S. Highway 19 North in the Commercial General (CG) Future Land Use Map category is approved.

SECTION 3: EFFECTIVE DATE

This Resolution shall be effective upon adoption of Ordinance 2020-34.