

LEVEL 3 & 4 DEVELOPMENT REVIEW APPLICATION

Office of Planning and Development Land Development Division

330 W. Church St. P.O. Box 9005, Drawer GM03 Bartow, FL 33831-9005 (863)534-6792 FAX (863) 534-6407

TYPE OF APPLICATION () Level 3 (/) Level 4

() Conditional Use		() Planned Development		
() Suburban Planned Development		() Sign Plan		
() Major Modification - Case Number				
	Owner	Owner	Contact Person	
Name	Lenore Crosland Stuart	Margaret Kennedy Stuart Satterfield	Jason Alligood	
Work Number			863.274.2261	
Fax Number				
Mailing Address	1323 Stewart Street, Winter Park, FL 32789	1323 Stewart Street, Winter Park, FL 32789	Kimley-Horn and Associates, Inc. 116 S. Kentucky Ave. Lakeland, FL 33801	
Email	crosland.stuart@outlook.com	crosland.stuart@outlook.com	jason.alligood@kimley-horn.com	
period for compl	ms, children, holes of golf, pumps, letion. Ige in Land Use from RL-1 and A/R		· · ·	
esidential devel	opment to allow for townhomes and	l multi-family		

	Range -	Township -	Section	Subdivision #	-	Parcel #
Parcel ID Number(s):	_R 25	_T 29	_S 10	000000	_	011010
2 42 001 22 2 14222 02 (5).				thers on a separate attach	ment)	
	_R 25	_T 29	S 03	000000	_	022120
						
	R	T	S		-	
	R	Т	S			
	K	1	<u> </u>			
Address and Location of	Property:					
Thornhill Rd, Bartow, FL,	, 33830					
Directions to Property fr	om Bartov	v				
HWY 17 North to Spirit L	aka Daad	I aft onto	Spirit Laka	Road and continu	e north	to Thornhill Dood
Continue West on Thornhi						
SW corner of Thornhill Ro					Direcs	bouil. Eocated at
5 W Corner of Thornin Re	au anu in	orimin Est	aics Dilve S	odun.		
D (D) (!						
Property Description						
Future Land Use (and Sub	district if a	nnlicable).	Residentia	l Medium (RM) a	nd Resid	dential Low-4 (RL-4
ature Land Ose (and buo	district if a	ppneadic).				
Property Size: 326.92 Acre	es	1	Developme	nt Area: RDA/UC	3A	
		Poli	c County Ut			
Water Provider Name and	Phone Nun	nber:	- County C.			
Carran Duard dan Manasan d	Diama Mass	Poll	k County U	tilities		
Sewer Provider Name and	Phone Nun	nber:				
Development of Regional	Impact:					
overopinem of Regionar.	impaci			(Name and Phase of D	RI)	
Selected Area Plan:						
			(Name of	SAP)		
Green Swamn Area of Crit	tical State (oncern:	` ,	•		
Green Swamp Area of Crit	icai State C	Joneem	(Name of	Special Protection Are	a)	
			, ,	1		
Joint Planning Area/Interlo	ocal Agreer	nent				
Have Development Rights	been transf	ferred to or	r from the s	ubject property?	Ye	es 🗸 No

Identify existing uses and structures on subject and surrounding properties (e.g. vacant, residential # du/ac, commercial approx. square feet, etc.):

RL-1. single family residences	RL-1. single family residences	RL-1. single family residences
NW	N	NE
Vacant	Vacant	RL-1. Single family residences
W	Subject Property	E
Vacant	Vacant	INST-2.
SW	S	SE

Approval of this application does not waive any other applicable provisions of the Polk County Land Development Code, the Polk County Comprehensive Plan, the Polk County Utility Code which are not part of the request for this application, nor does approval waive any applicable Florida Statutes, Florida Building Code, Florida Fire Prevention Code, or any other applicable laws, rules, or ordinances, whether federal, state or local. The applicant has the obligation and responsibility to be informed of and be in compliance with all applicable laws, rules, codes and ordinances.

I, Jason A. Alligood	(print name), the owner of the property which is the subject of
	entative of owner of the property which is the subject of this
	s of Polk County to enter onto the property which is the subject of
	or site visits necessary for reviewing this application. I understand
· ·	authorized to enter any structures dwellings which may be on the
property.	
0/ 200	
Xam G. allique	12/5/24

Date:

Office of Planning and Development Land Development Division

owner or property owner's authorized representative.

Level 4 Review

Stuart Property

Thornhill Road

Prepared By:

Kimley-Horn and Associates, Inc.

116 South Kentucky Avenue

Lakeland, FL 33801



APPLICANT INFORMATION

OWNER

Name: Lenore Crosland Stuart & Margrette Kennedy Stuart Satterfield

Address: Thornhill Road

Bartow, FL 33830

Email: crosland.stuart@outlook.com



APPLICANT/ENGINEERING FIRM

Name: Jason A. Alligood, P.E.

Address: Kimley-Horn and Associates

116 S. Kentucky Ave.

Lakeland, FL 33801

Phone Number: 863-274-2261

Email: jason.alligood@kimley-horn.com



LEVEL 4 REVIEW

Lenore Crosland Stuart and Margrette Kennedy Stuart Satterfield (collectively and individually the "Owner") are proposing a a map amendment to allow for higher density residential development than currently allowed (approximately 326.92 acres) on Parcels 25-29-03-000000-022120 and 25-29-10-000000-011010 (approximately 326.92 acres) located west of the intersection of Thornhill Road and Spirit Lake Road in unincorporated Polk County, Florida. The site does not have a registered address, but is listed as Thornhill Road, Bartow, FL 33830 on the Polk County Property Appraiser website.

The existing land use of Parcel 25-29-03-000000-022120 is RL-1. Parcel 25-29-10-000000-011010 has split zoning, with existing land use of RL-1 on the eastern portion and A/RR on the western portion. The proposed amendment includes a change to RM and RL-4.

This application includes an Impact Assessment Statement as well as a description of this project's consistency with the Polk County Land Development Code and Polk County Comprehensive Plan. Attachments include a legal description, deed, site "bubble" plan, and map series.

The following legal descriptions were taken from the Polk County Property Appraiser for Parcels 25-29-03-000000-022120 and 25-29-10-000000-011010. A more detailed legal description for the proposed 326.92 acres development is also included.

Legal Description of Parcel 25-29-03-000000-022120: BEG SW COR OF SE1/4 OF SW1/4 RUN N00-03-20W 1311.76 FT S89-47-57E 830.97 FT N00-07-29W 1712.10 FT TO S R/W OF THORNHILL RD S49-39-22E 112.32 FT S45-38-50E 200.09 FT S47-39-08E 200 FT S47-56-19E 200.01 FT S47-39-14E 198.78 FT S48-07-51E 16.31 FT S55-43-59E 400 FT S56-01-10E 185.72 FT S00-18-25E 1162.10 FT S58-17-57E 1415.14 FT RUN S00-18-25E TO S LINE SEC W TO POB LESS MAINT R/W & LESS THAT PART LYING WITHIN FOLL DESC: RD R/W PCL 137 FP ID 440897-2 FOR SR 570B AS DESC IN OR 12226 PG 1869

Legal Description of Parcel 25-29-10-000000-011010: BEG NW COR OF SEC RUN S 2652.47 FT E 2660.98 FT S 1251.95 FT N 40 DEG 16 MIN 59 SEC E 2719.58 FT N 494.52 FT E 100 FT N TO N-LINE OF SEC W TO POB LESS THAT PART LYING WITHIN SWFWMD PCL 20-503-123-P LAKE HANCOCK OUTFALL AS DESC IN STIPULATED AMENDED ORDER OF TAKING CASE#2010-CA-009204 REC IN OR 8487-2191 & LESS THAT PART LYING WITHIN FOLL DESC: RD R/W PCL 137 FP ID 440897-2 FOR SR 570B AS DESC IN OR 12226 PG 1869



Land and Neighborhood Characteristics

Assess the compatibility of the requested land use with adjacent properties and evaluate the suitability of the site for development. At a minimum, address the following specific questions in your response:

1. How and why is the location suitable for the proposed uses?

The proposed location currently allows residential development at a lower density than is appropriate given recent changes to the regional transportation network and in light of new development in the area. With the Polk Parkway extension bifurcating the property and including elevated overpasses with Mechanically Stabilized Earthwalls (MSE), the current land use designations of Agricultural/Rural Residential (A/RR) and the Rural Development Area (RDA) of the property and the surrounding area will change from its current feel. The land now being directly adjacent to the parkway would not likely be favorable for single family detached developments but be more in line with multi-family and single family attached (townhome) development, which is what has occurred in similarly situated areas along the Polk Parkway in other areas. Higher density developments and residential medium areas are located just to the east of the subject property.

2. What are, if any, the incompatibility and special efforts needed to minimize the differences in the proposed use with adjacent uses?

The adjacent uses are either vacant or include a few larger lot single family residential developments. The introduction of the elevated overpass will create separation with historic development to the west of the site There are natural wetland features that can serve as natural buffers along with The Land Development Code requirements that should be adequate to address buffering needs.

3. How will the request influence future development of the area?

With the introduction of the parkway extension, and existing and newer higher density residential development just to the east, it is anticipated development will transition to less rural feel and more to a higher density development feel.

Access to Roads and Highways

Assess the impact of the proposed development on the existing, planned and programmed road system, the applicant shall:

1. What is the number of vehicle trips to be generated daily and at the PM peak hour based on the latest Institute of Traffic Engineers (ITE)? Please provide a detailed methodology and calculations.

The total acreage of the site is approximately 326.92 acres. The bubble plan indicates an approximately 615Single-Family Attached dwelling units. The ITE Manual for Single-Family Attached Housing (215) generates 7.20 trips per dwelling unit daily, and 0.61 trips per dwelling unit at the PM peak hour. Therefore, the formula is as follows:

615*7.20 = 4,428 Daily Trips



615*0.61 = 376 Peak Hour Trips

The bubble plan indicates approximately 291 Multi-Family dwelling units. The ITE Manual for Multi-Family Housing (220) generates 6.74 trips per dwelling unit daily, and 0.57 trips per dwelling unit at the PM peak hour. Therefore, the formula is as follows:

291*6.74 = 1,962 Daily Trips

291*0.57 = 166 Peak Hour Trips

The total number of daily trips generated by the property is 6,390 trips. The total number of PM peak hour trips generated by the property is 542 trips.

2. What modifications to the present transportation system will be required as a result of the proposed development?

Per the Polk County Land Development Code (LDC) roadways less than 24-foot-wide will require widening along the property frontage. Thornhill Road, which lies along the north side of the property is currently 22 feet wide and will require widening along the south ROW for the length of the development. Turn lanes will also likely be required on Thornhill Road to allow access to the proposed development.

3. What is the total number of parking spaces required pursuant to Section 708 of the Land Development Code?

According to section 708 of the Polk County Land Development Code (LDC), Multi-Family (excluding townhomes) are required to provide 2.0 spaces per unit. Townhouse Developments (Single-Family attached) are required to provide 2.0 spaces per unit, excluding garages. Handicapped parking shall be provided in accordance with the Federal Americans with Disabilities Act.

4. What are the proposed methods of access to existing public roads (e.g., direct frontage, intersecting streets, and frontage roads)?

The site has access to Thornhill Road along the north property frontage. Thornhill Road is an Urban Collector with Level of Service B and 22-foot pavement width.

NOTE: Applications for projects attributing 50 or fewer Average Annual Daily Trips (AADT) according to the latest Institute of Transportation Engineers (ITE) manual may provide a written explanation and justification of why impacts will not be significant in lieu of the required information for "Infrastructure Impacts" items 3 through 9 above.

<u>Sewage</u>

Determine the impact caused by sewage generated from the proposed development. At a minimum, address the following specific questions in your response:



1. What is the amount of sewage in gallons per day (GPD) expected to be generated by the proposed development? (Response may be based on Section 703.F of the LDC)

Using Polk County standards, water and wastewater capacity application the development would generate a maximum sewage generated is estimated as follows:

906 units = 500 RECs x 2780 gpd/ERC = 135,000 GPD

2. If on-site treatment is proposed, what are the proposed method, level of treatment, and the method of effluent disposal for the proposed sewage?

Not applicable as the site does not utilize on-site systems.

3. If offsite treatment, who is the service provider?

The service provider is Polk County Utilities.

4. Where is the nearest sewer line (in feet) to the proposed development (Sanitary sewer shall be considered available if a gravity line, force main, manhole, or lift station is located within an easement or right-of- way under certain conditions listed in Section 702E.3 of the Land Development Code)

There is an existing sanitary sewer line located approximately 0.5 miles east of the property along Thornhill Road. New development along Thornhill Road will be extending the sanitary sewer closer to the property. At the completion of this new development, the sanitary sewer will be roughly 1500 feet from the east property line along Thornhill Road.

5. What is the provider's general capacity at the time of application?

The provider's general capacity is unknown at the time of this application. However, a capacity request was submitted and there is not an anticipation that capacity will be an issue.

6. What is the anticipated date of connection?

The anticipated date of connection is unknown at the time of this application. The date of connection will be determined based on development schedules.

7. What improvements to the providers system are necessary to support the proposed request (e.g., lift stations, line extensions/expansions, interconnects, etc.)?

The sanitary sewer force main line will need to be extended along Thornhill Road to provide service to the property.

Water Supply

Determine the amount of water to be used, how it will be distributed, and the impact on the surrounding area. At a minimum, address the following specific questions in your response:

1. What is the proposed source of water supply and/or who is the service provider?



Potable water is provided by Polk County Utilities public supply.

2. What is the estimated volume of consumption in gallons per day (GPD)? (Response may be based on Section 703 of the LDC)

Using Polk County standards, water and wastewater capacity application the development would generate a maximum potable demand is estimated as follows:

906 units = 610 RECs x 360 gpd/ERC = 219,600 GPD

3. Where is the nearest potable water connection and re-claimed water connection, including the distance and size of the line?

There is a 12-inch water line located to the north of the property. This water line runs along the Thornhill Road. Connection will be made to this line located along Thornhill Road.

4. Who is the service provider?

The service provider is Polk County Utilities.

5. What is the anticipated date of connection?

The anticipated date of connection is unknown at the time of this application. The date of connection will be determined based on development schedules.

6. What is the provider's general capacity at the time of application?

The provider's general capacity is unknown at the time of this application. However, a capacity request was submitted and there is not an anticipation that capacity will be an issue.

7. Is there an existing well on the property(ies)?

Yes, there are permitted wells per the Southwest Florida Water Management District's (SWFWMD) online water use permit map. These wells are described in Water Use Permit No. 20000136.006 and Water Use Permit No. 20 021135.000. Permit No. 20000136.006 is one existing 12" diameter well for withdrawal of groundwater for agricultural use. This is shown located east of the parkway extension. This well has an average withdrawal of 1400 GPD and a peak withdrawal of 4000 GPD.

Permit No. 20 021135.000 consists of one proposed 12" diameter well for withdrawal of groundwater, and forty-one proposed 2" diameter monitoring wells for mining and dewatering use. The 12" diameter well has an average withdrawal of 101,500 GPD and a peak withdrawal of 110,500 GPD. This well permit was associated with potential mining activities for the construction of the parkway extension. This work never initiated as the parkway fill was obtained from a separate site. It is not believed the wells were ever installed.



Surface Water Management and Drainage

Determine the impact of drainage on the groundwater and surface water quality and quantity caused by the proposed development. At a minimum, address the following specific questions in your response:

1. Discuss the surface water features, including drainage patterns, basin characteristics, and flood hazards, (describe the drainage of the site and any flooding issues)

The property generally slopes from northeast (about elevation 129) to west (about elevation 103 at west property line) before discharging into freshwater ponds and Lake Hancock (about elevation 98). A notable portion of the site is located within FEMA flood zone A.

2. What alterations to the site's natural drainage features, including wetlands, would be necessary to develop the project?

The proposed drainage will maintain the general flow patterns with stormwater being provided at the low end of the development area before discharging at matching pre-post rates into Lake Hancock and existing wetlands. Wetland impacts by future development would be required to meet state, regional, and local regulations by minimization and mitigation.

Environmental Analysis

Provide an analysis of the character of the subject property and surrounding properties, and further assess the site's suitability for the proposed land use classification based on soils, topography, and the presence of wetlands, floodplain, aquifer recharge areas, scrub or other threatened habitat, and historic resources, including, but not limited to:

1. Discuss the environmental sensitivity of the property and adjacent property in basic terms by identifying any significant features of the site and the surrounding properties.

Any future development on site will be required to adhere to state, regional, and local regulations regarding impacts to wetlands, floodplain, endangered species, etc.

2. What are the wetland and floodplain conditions? Discuss the changes to these features which would result from development of the site.

There are wetlands and surface water features throughout the property. A notable portion of the property is located within FEMA flood zone A. Future development will be required to adhere to state, regional, and local regulations regarding impacts to wetlands and floodplains.



3. Discuss location of potable water supplies, private wells, public well fields (discuss the location, address potential impacts), and;

There is a potential agricultural well on the east parcel. This would be anticipated to be abandoned with future residential development or utilized for irrigation purposes. The Polk County GIS website does not indicate the land being within a wellfield protection district.

4. Discuss the location of Airport Buffer Zones (if any) (discuss the location and address, potential impacts).

The subject site does not appear to be within an Airport Buffer Zone

5. Provide an analysis of soil types and percentage of coverage on site and what effect it will have on development.

A breakdown of soil types and percent coverage of the development area is shown in **Table 1** below. The organic muck is largely confined to the wetland areas, which would be minimized in impact. The soils, with the exception of muck, are generally suitable for the proposed development, with 1.8% of the site coverage having hydrologic group A, 2.26% being group C, 6.54% group D, and 89% being group B/D.

Table 1: Soil Types and F	Percent Coverage on	Development Site
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Soil Type	Hydrologic Group	Area (Acres)	Percent Coverage
Adamsville Fine Sand	С	7.4	2.26%
Hontoon Muck	B/D	66	20.18%
Immokalee Sand	B/D	29.7	9.08%
Placid and Myakka Fine Sands	D	21.4	6.54%
Pomona Fine Sand	B/D	25.4	7.77%
Samsula Muck	B/D	70.9	21.69%
Smyrna and Myakka Fine Sands	B/D	99	30.28%
Tavares Fine Sand	Α	5.9	1.80%

Infrastructure Impact Information

What is the nearest location (travel distance), provider, capacity or general response time, and estimated demand of the provision for the following services:

- **1. Parks and Recreation;** The closet County park is Grassy Lake Park, which is located across Thornhill Road to the northeast of the site. The park is approximately 1.6 miles from the property.
- **2.** Educational Facilities (e.g., preschool, elementary, middle school, high school); The closest schools include Eagle Lake Elementary, a proposed Middle School, and Lake Region Senior High



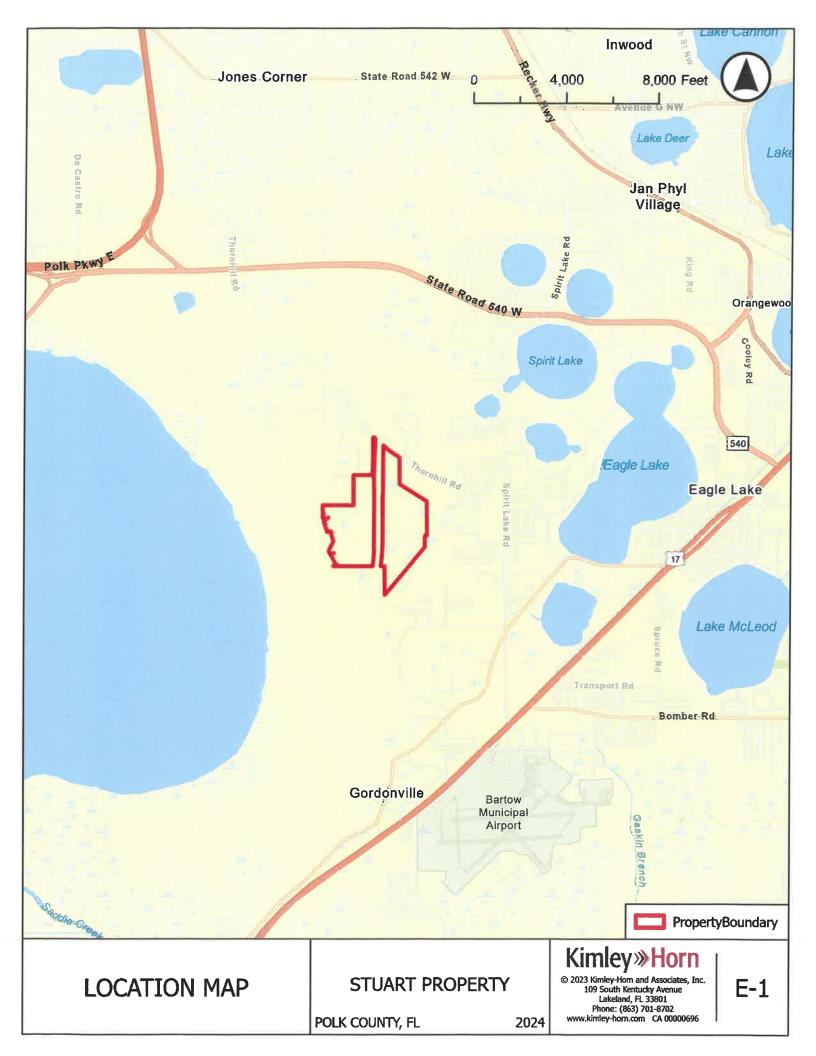
School. These schools are approximately 2.5 miles, 2.2 miles, and 4 miles from the property, respectively.

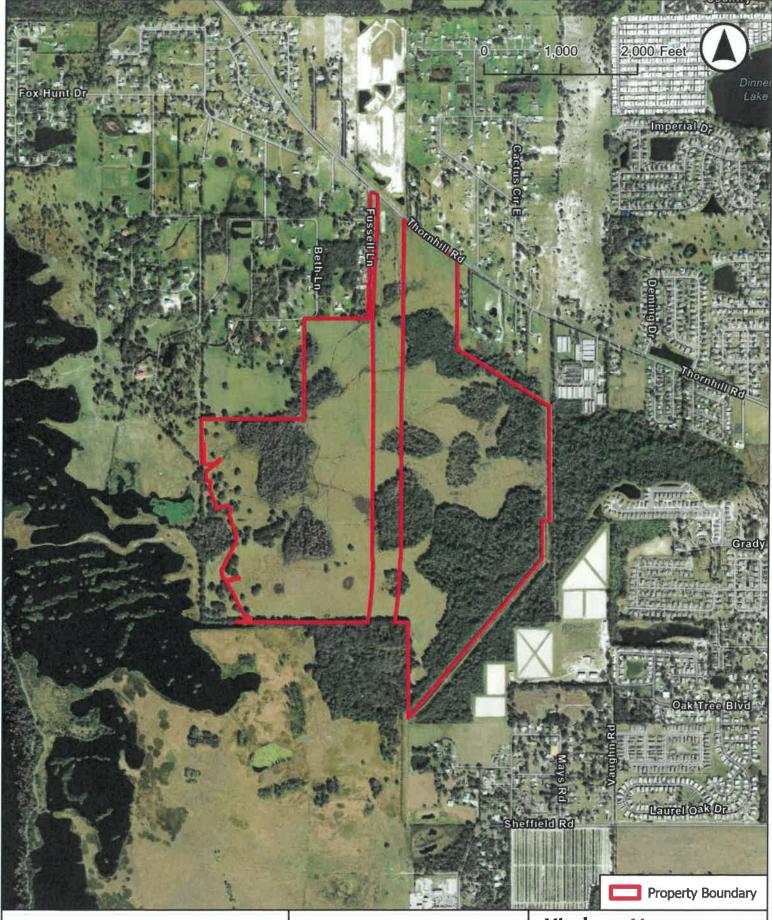
- **3. Health Care (e.g., emergency, hospital);** The nearest Hospitals are Regency Medical Center and Bartow Regional Medical Center. Regency Medical Center is approximately 6 miles from the property, while Bartow Regional Medical Center is approximately 8 miles from the property.
- **4. Fire Protection;** The nearest fire station is Eagle Lake station (Polk County Fire Rescue Station 17), located at 185 3rd Street South, Eagle Lake 33839. The fire station is approximately 3 miles from the property.
- 5. Emergency Medical Services (EMS); See answer to 4 above.
- **6. Solid Waste (collection and waste generation);** All waste is transported to the County's Landfill.
- 7. How may this request contribute to neighborhood needs?

This would allow for future development of more multi-family and townhome units for the area which would make available new product types to the area in support of the existing mix of new development, historic large lot development, and manufactured home developments and will increase property tax revenues from the property which has historically been under agricultural exemption. In addition, roadway improvements and utility extensions would be completed as part of future development.

Demonstration of Need

The amendment would allow higher density more appropriate to the change in land use feel the parkway extension will create. The construction of new infrastructure, like the Polk Parkway, provides new residential needs for the area to support the new traffic patterns which will allow residents to new and more convenient access to the interstate network. Large lot, single family detached developments are incompatible with these uses and areless likely to develop adjacent to an elevated parkway with MSE walls.





AERIAL LOCATION MAP

POLK COUNTY, FL

STUART PROPERTY

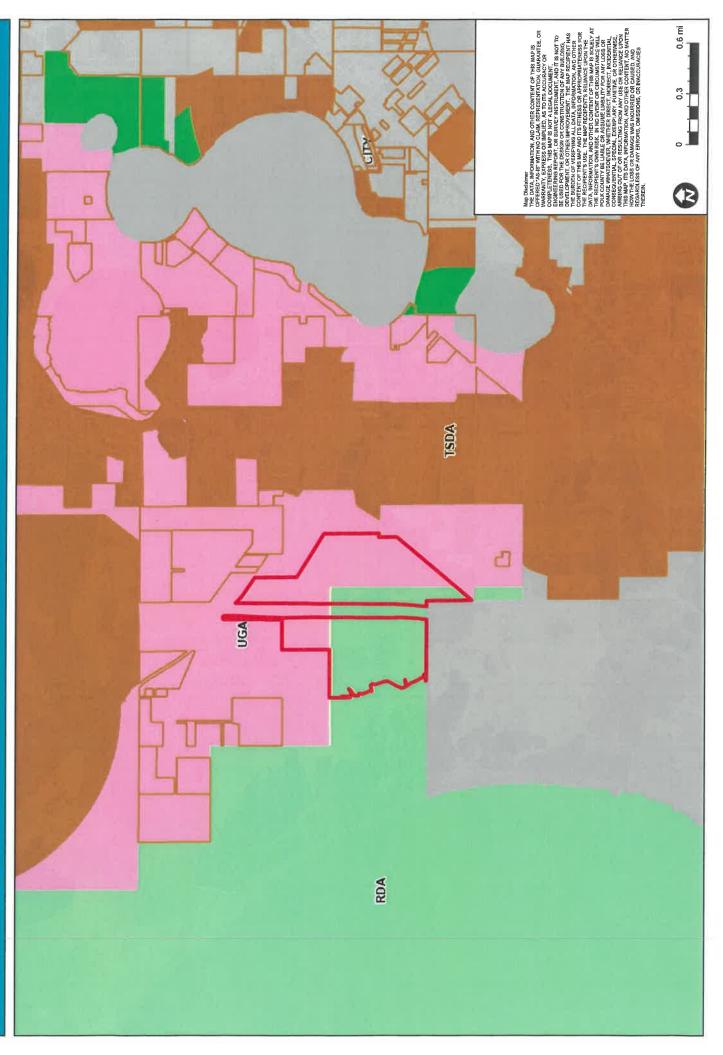
Kimley»Horn

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2024

E-2

Polk County - GIS Viewer v.1





Date: January 23, 2025

To: Polk County Land Development

Attn: Lyndsay Rathke 330 W Church Street Bartow, FL 33830

From: Jason Alligood, P.E.

Sr. Project Manager

Project: Stuart Property Thornhill Road

LDCPAL-2024-17

Regarding your first round of review comments for the above referenced project, please see our responses below.

Planning:

Airport Impact District - According to the Airport Impact District Map, the subject property appears to be in the height notification zone and the in-flight visual interference zone for the Bartow Municipal Airport. Please provide a narrative on the proposed use will impact the airport (if applicable).

RESPONSE: The FAA OEAAA website to evaluate potential 5-story apartment building which would be under 75 ft in height. Using the average site elevation with 75 ft the FAA site states Notice Criteria was not exceeded (see provided print out document). . At time of development, the developer would coordinate with the FAA and Bartow Airport. It is also likely an avigation easement would be required to be recorded as part of the development.

Note: The applicant/owner hereby acknowledges and agrees that any staff discussions or negotiations about conditions of approval are preliminary only, and are not final, nor are they the specific conditions or demands required to gain approval of the application, unless the conditions or demands are actually included in writing in the final development order or the final denial determination or order.

RESPONSE: Acknowledged

District Change - Any change from RL-1 to RL-4 will also require a separate application for a Level 4 review.

RESPONSE: This application will be submitted with this response.

Status of Sand Mine Approval - As mentioned in the pre-application comments, the western side of the CPP was approved for a sand mine (LDCU-2023-23), and that the post reclamation plan shows that all of the developable land is to become a lake. Given that this application is to allow

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863 701 8702

higher-density residential uses, it is presumed that a post reclamation plan that shows a lake is no longer valid. Has the applicant submitted an amendment to the mine plan, specifically the post-reclamation plan? Please advise as to the status of this approval.

RESPONSE: The mining permit was issued anticipating the parkway extension using the parcel for fill material for the overpass. This did not come to fruition as the parkway found another source. The conditional use for the mine is a valuable property right, the change of the land use form does not affect the conditional use. If the property is not mined the permit/conditional use will just expire.

Policy Narrative - No narrative explaining how the application is consistent with the relevant Future Land Use and Development Area polices (as requested in the pre-application comments) is not included. Please provide this narrative. At a minimum, this narrative should include an analysis of Policy 2.102-A10: Location Criteria; Section 2.105-A Urban Growth Areas; Section 2.120-C, Residential-Low; and Section 2.120-D, Residential-Medium.

RESPONSE: The Demonstration of Need is included with this response

Note: The applicant/owner hereby acknowledges and agrees that any staff discussions or negotiations about conditions of approval are preliminary only, and are not final, nor are they the specific conditions or demands required to gain approval of the application, unless the conditions or demands are actually included in writing in the final development order or the final denial determination or order.

RESPONSE: Acknowledged

Resubmittal Deadline -Please submit responses to these comments by Thursday, January 23 in order to stay on schedule for the March 5 Planning Commission meeting.

RESPONSE: Acknowledged

Impact Assessment Statement Maps - Please include the following maps that are required by Section 910 H of the Land Development Code: Map B - Topographical Map Map C - Land Use and Land Use District Map Map D - Soils Map Map E - Traffic Circulation Map Map G - Drainage Map

RESPONSE: These were inadvertently left out of the initial submittal and have been included with this response

Development Data - Please revised the Development Data table to include the amount of floodplain area (by parcel).

RESPONSE: The table has been updated and include with this response

Inundation Easements - Portions of the site are next to property owned by the Southwest Water Management District (SWFWMD). Does the subject property have any inundation easements to accept water from the SWFWMD property?

RESPONSE: The owner is unaware of any. The property appraiser shows parcel west of the parkway being owned by the WMD that was part of eminent domain.

Parkway/Thornhill Road - The Impact Assessment Statement mentions that the Polk Parkway extension will include elevated overpasses with Mechanically Stabilized Earthwalls. Will the Polk Parkway have an interchange with Thornhill Road? Will vehicles on Thornhill Road be also to access the parkway at this location? Please provide cross-sections, sketches, etc. showing the wall

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863 701 8702

in relation to the site.

RESPONSE: No interchange is planned. Plans sheets and roadway profile sheets for this area have been pulled from readily available online documents and provided with our response. The construction of the Polk Parkway Extension as a limited access arterial road materially changes the character of the subject property. The property's location proximate to the expanded interchange at Winter Lake Road provides increased access to other regions in the area, which makes the site ideal for residential development at urban densities. As shown below, it is common in Polk County for development to occur around newly expanded infrastructure. This can also be shown along turnpike facilities(SR 429/SR 417) in nearby areas.

Site Suitability - the Impact Assessment Statement includes comments regarding how the MSE walls will change the character of the area, thereby justifying the placement of higher-density residential uses. Please provide information/documentation/examples to support these statements.

RESPONSE: There are several examples within our development area where recent builders developed multi-family apartments due to the nature of being adjacent to overpasses and having a less rural feel. See below the last comment response.

Bubble Plan - The bubble plan shows a proposed Residential-High (RH) designation, but the application states that the request is for Residential-Medium (RM). Please clarify.

RESPONSE: The application was in error. The proposed bubble plan is correct as shown.

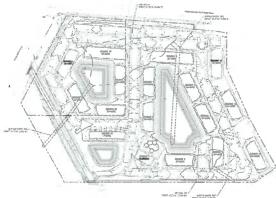
Example Sites:

Mirrorton - Lakeland

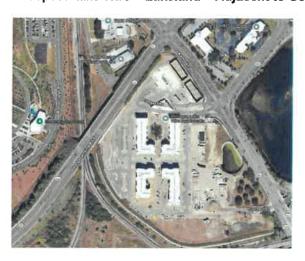


Prose Apartments - Lakeland





Prospect Lake Wire - Lakeland - Adjacent to George Jenkins Blvd CSX Overpass



Level 4 Review

Stuart Property

Thornhill Road

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116 South Kentucky Avenue

Lakeland, FL 33801



APPLICANT INFORMATION

OWNER

Name: Lenore Crosland Stuart & Margrette Kennedy Stuart Satterfield

Address: Thornhill Road

Bartow, FL 33830

Email: crosland.stuart@outlook.com



APPLICANT/ENGINEERING FIRM

Name: Jason A. Alligood, P.E.

Address: Kimley-Horn and Associates

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Phone Number: 863-274-2261

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Lenore Crosland Stuart and Margrette Kennedy Stuart Satterfield (collectively and individually the "Owner") are proposing a a map amendment to allow for higher density residential development than currently allowed (approximately 326.92 acres) on Parcels 25-29-03-000000-022120 and 25-29-10-00000-011010 (approximately 326.92 acres) located west of the intersection of Thornhill Road and Spirit Lake Road in unincorporated Polk County, Florida. The site does not have a registered address, but is listed as Thornhill Road, Bartow, FL 33830 on the Polk County Property Appraiser website.

The existing land use of Parcel 25-29-03-000000-022120 is RL-1. Parcel 25-29-10-000000-011010 has split zoning, with existing land use of RL-1 on the eastern portion and A/RR on the western portion. The proposed amendment includes a change to RM and RL-4.

This application includes an Impact Assessment Statement as well as a description of this project's consistency with the Polk County Land Development Code and Polk County Comprehensive Plan. Attachments include a legal description, deed, site "bubble" plan, and map series.

The following legal descriptions were taken from the Polk County Property Appraiser for Parcels 25-29-03-000000-022120 and 25-29-10-000000-011010. A more detailed legal description for the proposed 326.92 acres development is also included.

Legal Description of Parcel 25-29-03-000000-022120: BEG SW COR OF SE1/4 OF SW1/4 RUN N00-03-20W 1311.76 FT S89-47-57E 830.97 FT N00-07-29W 1712.10 FT TO S R/W OF THORNHILL RD S49-39-22E 112.32 FT S45-38-50E 200.09 FT S47-39-08E 200 FT S47-56-19E 200.01 FT S47-39-14E 198.78 FT S48-07-51E 16.31 FT S55-43-59E 400 FT S56-01-10E 185.72 FT S00-18-25E 1162.10 FT S58-17-57E 1415.14 FT RUN S00-18-25E TO S LINE SEC W TO POB LESS MAINT R/W & LESS THAT PART LYING WITHIN FOLL DESC: RD R/W PCL 137 FP ID 440897-2 FOR SR 570B AS DESC IN OR 12226 PG 1869

Legal Description of Parcel 25-29-10-000000-011010: BEG NW COR OF SEC RUN S 2652.47 FT E 2660.98 FT S 1251.95 FT N 40 DEG 16 MIN 59 SEC E 2719.58 FT N 494.52 FT E 100 FT N TO N-LINE OF SEC W TO POB LESS THAT PART LYING WITHIN SWFWMD PCL 20- 503-123-P LAKE HANCOCK OUTFALL AS DESC IN STIPULATED AMENDED ORDER OF TAKING CASE#2010-CA-009204 REC IN OR 8487-2191 & LESS THAT PART LYING WITHIN FOLL DESC: RD R/W PCL 137 FP ID 440897-2 FOR SR 570B AS DESC IN OR 12226 PG 1869



Land and Neighborhood Characteristics

Assess the compatibility of the requested land use with adjacent properties and evaluate the suitability of the site for development. At a minimum, address the following specific questions in your response:

1. How and why is the location suitable for the proposed uses?

The proposed location currently allows residential development at a lower density than is appropriate given recent changes to the regional transportation network and in light of new development in the area. With the Polk Parkway extension bifurcating the property and including elevated overpasses with Mechanically Stabilized Earthwalls (MSE), the current land use designations of Agricultural/Rural Residential (A/RR) and the Rural Development Area (RDA) of the property and the surrounding area will change from its current feel. The land now being directly adjacent to the parkway would not likely be favorable for single family detached developments but be more in line with multi-family and single family attached (townhome) development, which is what has occurred in similarly situated areas along the Polk Parkway in other areas. Higher density developments and residential medium areas are located just to the east of the subject property.

2. What are, if any, the incompatibility and special efforts needed to minimize the differences in the proposed use with adjacent uses?

The adjacent uses are either vacant or include a few larger lot single family residential developments. The introduction of the elevated overpass will create separation with historic development to the west of the site There are natural wetland features that can serve as natural buffers along with The Land Development Code requirements that should be adequate to address buffering needs.

3. How will the request influence future development of the area?

With the introduction of the parkway extension, and existing and newer higher density residential development just to the east, it is anticipated development will transition to less rural feel and more to a higher density development feel.

Access to Roads and Highways

Assess the impact of the proposed development on the existing, planned and programmed road system, the applicant shall:

1. What is the number of vehicle trips to be generated daily and at the PM peak hour based on the latest Institute of Traffic Engineers (ITE)? Please provide a detailed methodology and calculations.

The total acreage of the site is approximately 326.92 acres. The bubble plan indicates an approximately 615Single-Family Attached dwelling units. The ITE Manual for Single-Family Attached Housing (215) generates 7.20 trips per dwelling unit daily, and 0.61 trips per dwelling unit at the PM peak hour. Therefore, the formula is as follows:

615*7.20 = 4,428 Daily Trips



615*0.61 = 376 Peak Hour Trips

The bubble plan indicates approximately 291 Multi-Family dwelling units. The ITE Manual for Multi-Family Housing (220) generates 6.74 trips per dwelling unit daily, and 0.57 trips per dwelling unit at the PM peak hour. Therefore, the formula is as follows:

291*6.74 = 1,962 Daily Trips

291*0.57 = 166 Peak Hour Trips

The total number of daily trips generated by the property is 6,390 trips. The total number of PM peak hour trips generated by the property is 542 trips.

2. What modifications to the present transportation system will be required as a result of the proposed development?

Per the Polk County Land Development Code (LDC) roadways less than 24-foot-wide will require widening along the property frontage. Thornhill Road, which lies along the north side of the property is currently 22 feet wide and will require widening along the south ROW for the length of the development. Turn lanes will also likely be required on Thornhill Road to allow access to the proposed development.

3. What is the total number of parking spaces required pursuant to Section 708 of the Land Development Code?

According to section 708 of the Polk County Land Development Code (LDC), Multi-Family (excluding townhomes) are required to provide 2.0 spaces per unit. Townhouse Developments (Single-Family attached) are required to provide 2.0 spaces per unit, excluding garages. Handicapped parking shall be provided in accordance with the Federal Americans with Disabilities Act.

4. What are the proposed methods of access to existing public roads (e.g., direct frontage, intersecting streets, and frontage roads)?

The site has access to Thornhill Road along the north property frontage. Thornhill Road is an Urban Collector with Level of Service B and 22-foot pavement width.

NOTE: Applications for projects attributing 50 or fewer Average Annual Daily Trips (AADT) according to the latest Institute of Transportation Engineers (ITE) manual may provide a written explanation and justification of why impacts will not be significant in lieu of the required information for "Infrastructure Impacts" items 3 through 9 above.

Sewage

Determine the impact caused by sewage generated from the proposed development. At a minimum, address the following specific questions in your response:



1. What is the amount of sewage in gallons per day (GPD) expected to be generated by the proposed development? (Response may be based on Section 703.F of the LDC)

Using Polk County standards, water and wastewater capacity application the development would generate a maximum sewage generated is estimated as follows:

906 units = 500 RECs x 2780 gpd/ERC = 135,000 GPD

2. If on-site treatment is proposed, what are the proposed method, level of treatment, and the method of effluent disposal for the proposed sewage?

Not applicable as the site does not utilize on-site systems.

3. If offsite treatment, who is the service provider?

The service provider is Polk County Utilities.

4. Where is the nearest sewer line (in feet) to the proposed development (Sanitary sewer shall be considered available if a gravity line, force main, manhole, or lift station is located within an easement or right-of- way under certain conditions listed in Section 702E.3 of the Land Development Code)

There is an existing sanitary sewer line located approximately 0.5 miles east of the property along Thornhill Road. New development along Thornhill Road will be extending the sanitary sewer closer to the property. At the completion of this new development, the sanitary sewer will be roughly 1500 feet from the east property line along Thornhill Road.

5. What is the provider's general capacity at the time of application?

The provider's general capacity is unknown at the time of this application. However, a capacity request was submitted and there is not an anticipation that capacity will be an issue.

6. What is the anticipated date of connection?

The anticipated date of connection is unknown at the time of this application. The date of connection will be determined based on development schedules.

7. What improvements to the providers system are necessary to support the proposed request (e.g., lift stations, line extensions/expansions, interconnects, etc.)?

The sanitary sewer force main line will need to be extended along Thornhill Road to provide service to the property.

Water Supply

Determine the amount of water to be used, how it will be distributed, and the impact on the surrounding area. At a minimum, address the following specific questions in your response:

1. What is the proposed source of water supply and/or who is the service provider?



Potable water is provided by Polk County Utilities public supply.

2. What is the estimated volume of consumption in gallons per day (GPD)? (Response may be based on Section 703 of the LDC)

Using Polk County standards, water and wastewater capacity application the development would generate a maximum potable demand is estimated as follows:

906 units = 610 RECs x 360 gpd/ERC = 219,600 GPD

3. Where is the nearest potable water connection and re-claimed water connection, including the distance and size of the line?

There is a 12-inch water line located to the north of the property. This water line runs along the Thornhill Road. Connection will be made to this line located along Thornhill Road.

4. Who is the service provider?

The service provider is Polk County Utilities.

5. What is the anticipated date of connection?

The anticipated date of connection is unknown at the time of this application. The date of connection will be determined based on development schedules.

6. What is the provider's general capacity at the time of application?

The provider's general capacity is unknown at the time of this application. However, a capacity request was submitted and there is not an anticipation that capacity will be an issue.

7. Is there an existing well on the property(ies)?

Yes, there are permitted wells per the Southwest Florida Water Management District's (SWFWMD) online water use permit map. These wells are described in Water Use Permit No. 20000136.006 and Water Use Permit No. 20 021135.000. Permit No. 20000136.006 is one existing 12" diameter well for withdrawal of groundwater for agricultural use. This is shown located east of the parkway extension. This well has an average withdrawal of 1400 GPD and a peak withdrawal of 4000 GPD.

Permit No. 20 021135.000 consists of one proposed 12" diameter well for withdrawal of groundwater, and forty-one proposed 2" diameter monitoring wells for mining and dewatering use. The 12" diameter well has an average withdrawal of 101,500 GPD and a peak withdrawal of 110,500 GPD. This well permit was associated with potential mining activities for the construction of the parkway extension. This work never initiated as the parkway fill was obtained from a separate site. It is not believed the wells were ever installed.



Surface Water Management and Drainage

Determine the impact of drainage on the groundwater and surface water quality and quantity caused by the proposed development. At a minimum, address the following specific questions in your response:

1. Discuss the surface water features, including drainage patterns, basin characteristics, and flood hazards, (describe the drainage of the site and any flooding issues)

The property generally slopes from northeast (about elevation 129) to west (about elevation 103 at west property line) before discharging into freshwater ponds and Lake Hancock (about elevation 98). A notable portion of the site is located within FEMA flood zone A.

2. What alterations to the site's natural drainage features, including wetlands, would be necessary to develop the project?

The proposed drainage will maintain the general flow patterns with stormwater being provided at the low end of the development area before discharging at matching pre-post rates into Lake Hancock and existing wetlands. Wetland impacts by future development would be required to meet state, regional, and local regulations by minimization and mitigation.

Environmental Analysis

Provide an analysis of the character of the subject property and surrounding properties, and further assess the site's suitability for the proposed land use classification based on soils, topography, and the presence of wetlands, floodplain, aquifer recharge areas, scrub or other threatened habitat, and historic resources, including, but not limited to:

1. Discuss the environmental sensitivity of the property and adjacent property in basic terms by identifying any significant features of the site and the surrounding properties.

Any future development on site will be required to adhere to state, regional, and local regulations regarding impacts to wetlands, floodplain, endangered species, etc.

2. What are the wetland and floodplain conditions? Discuss the changes to these features which would result from development of the site.

There are wetlands and surface water features throughout the property. A notable portion of the property is located within FEMA flood zone A. Future development will be required to adhere to state, regional, and local regulations regarding impacts to wetlands and floodplains.



3. Discuss location of potable water supplies, private wells, public well fields (discuss the location, address potential impacts), and;

There is a potential agricultural well on the east parcel. This would be anticipated to be abandoned with future residential development or utilized for irrigation purposes. The Polk County GIS website does not indicate the land being within a wellfield protection district.

4. Discuss the location of Airport Buffer Zones (if any) (discuss the location and address, potential impacts).

The subject site does not appear to be within an Airport Buffer Zone

5. Provide an analysis of soil types and percentage of coverage on site and what effect it will have on development.

A breakdown of soil types and percent coverage of the development area is shown in **Table 1** below. The organic muck is largely confined to the wetland areas, which would be minimized in impact. The soils, with the exception of muck, are generally suitable for the proposed development, with 1.8% of the site coverage having hydrologic group A, 2.26% being group C, 6.54% group D, and 89% being group B/D.

Soil Type	Hydrologic Group	Area (Acres)	Percent Coverage
Adamsville Fine Sand	С	7.4	2.26%
Hontoon Muck	B/D	66	20.18%
Immokalee Sand	B/D	29.7	9.08%
Placid and Myakka Fine Sands	D	21.4	6.54%
Pomona Fine Sand	B/D	25.4	7.77%
Samsula Muck	B/D	70.9	21.69%
Smyrna and Myakka Fine Sands	B/D	99	30.28%
Tavares Fine Sand	A	5.9	1.80%

Infrastructure Impact Information

What is the nearest location (travel distance), provider, capacity or general response time, and estimated demand of the provision for the following services:

- **1. Parks and Recreation;** The closet County park is Grassy Lake Park, which is located across Thornhill Road to the northeast of the site. The park is approximately 1.6 miles from the property.
- 2. Educational Facilities (e.g., preschool, elementary, middle school, high school); The closest schools include Eagle Lake Elementary, a proposed Middle School, and Lake Region Senior High



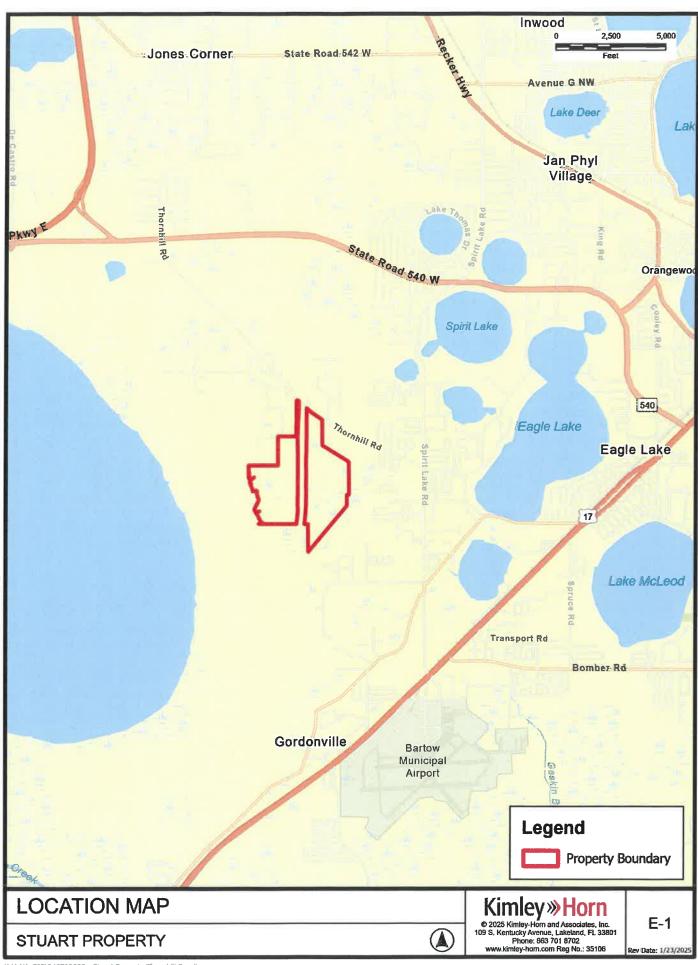
School. These schools are approximately 2.5 miles, 2.2 miles, and 4 miles from the property, respectively.

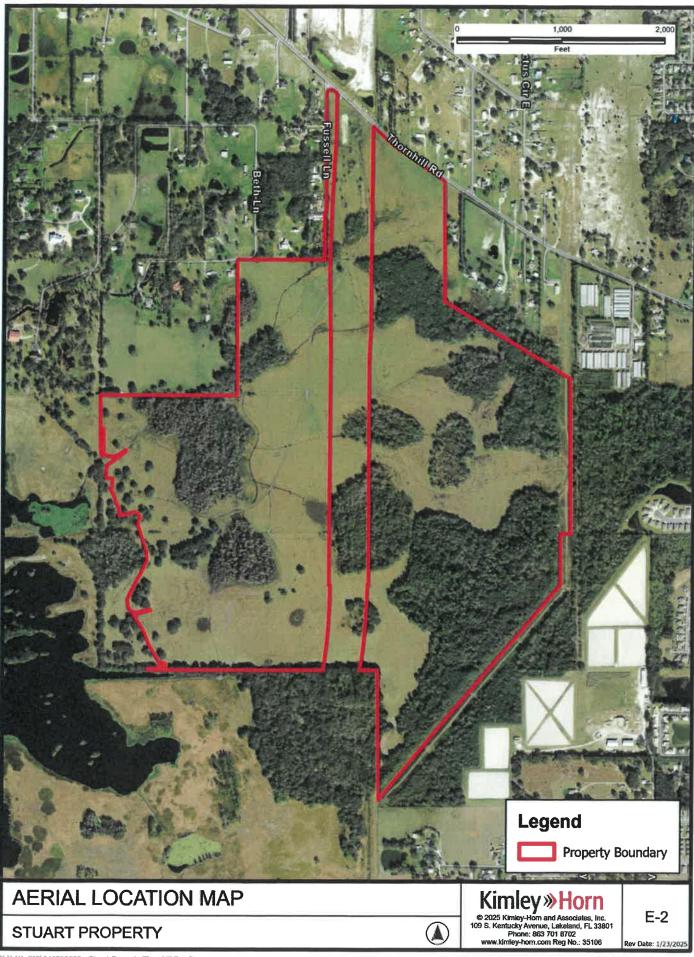
- **3. Health Care (e.g., emergency, hospital);** The nearest Hospitals are Regency Medical Center and Bartow Regional Medical Center. Regency Medical Center is approximately 6 miles from the property, while Bartow Regional Medical Center is approximately 8 miles from the property.
- **4. Fire Protection;** The nearest fire station is Eagle Lake station (Polk County Fire Rescue Station 17), located at 185 3rd Street South, Eagle Lake 33839. The fire station is approximately 3 miles from the property.
- 5. Emergency Medical Services (EMS); See answer to 4 above.
- **6. Solid Waste (collection and waste generation);** All waste is transported to the County's Landfill.
- 7. How may this request contribute to neighborhood needs?

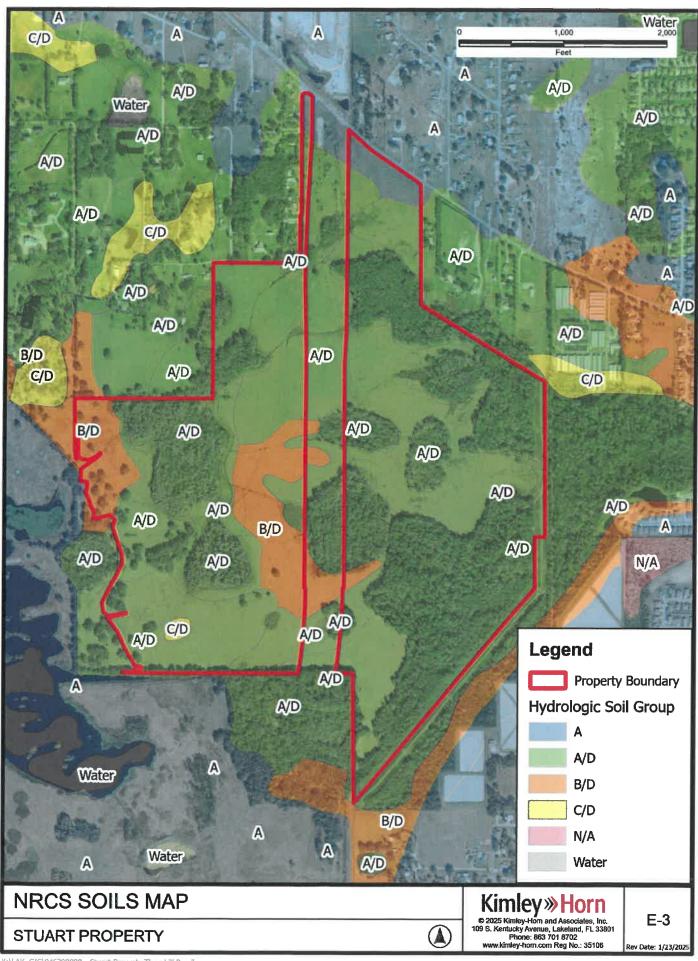
This would allow for future development of more multi-family and townhome units for the area which would make available new product types to the area in support of the existing mix of new development, historic large lot development, and manufactured home developments and will increase property tax revenues from the property which has historically been under agricultural exemption. In addition, roadway improvements and utility extensions would be completed as part of future development.

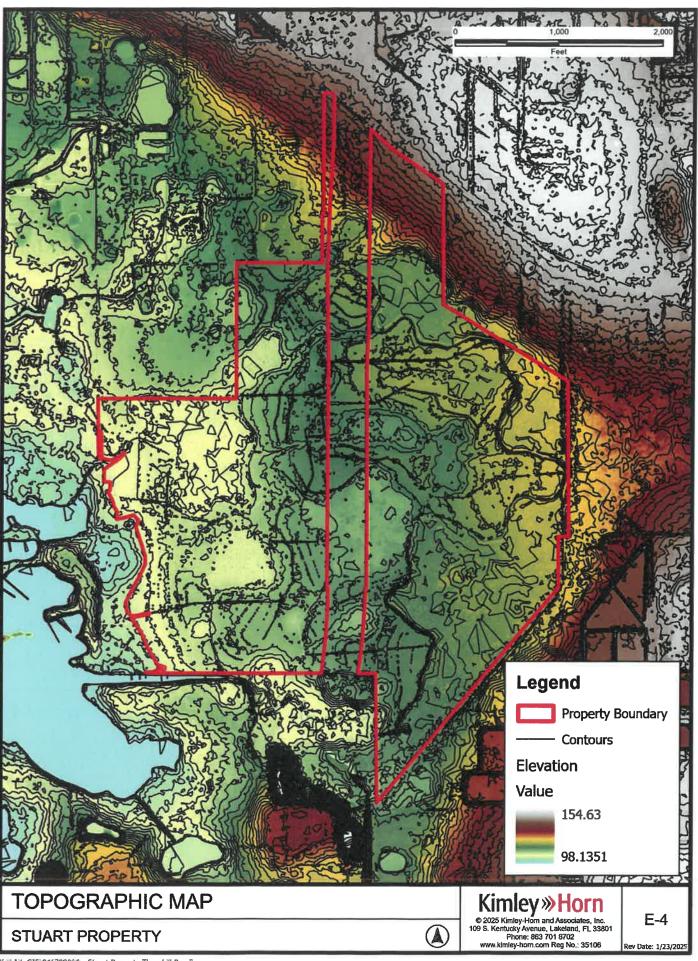
Demonstration of Need

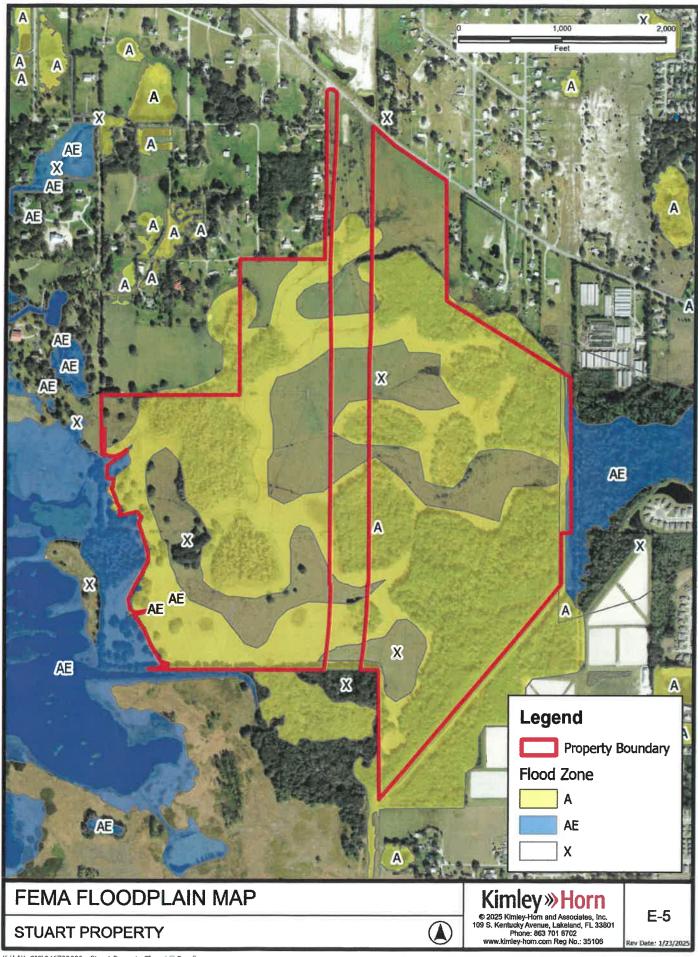
The amendment would allow higher density more appropriate to the change in land use feel the parkway extension will create. The construction of new infrastructure, like the Polk Parkway, provides new residential needs for the area to support the new traffic patterns which will allow residents to new and more convenient access to the interstate network. Large lot, single family detached developments are incompatible with these uses and areless likely to develop adjacent to an elevated parkway with MSE walls.

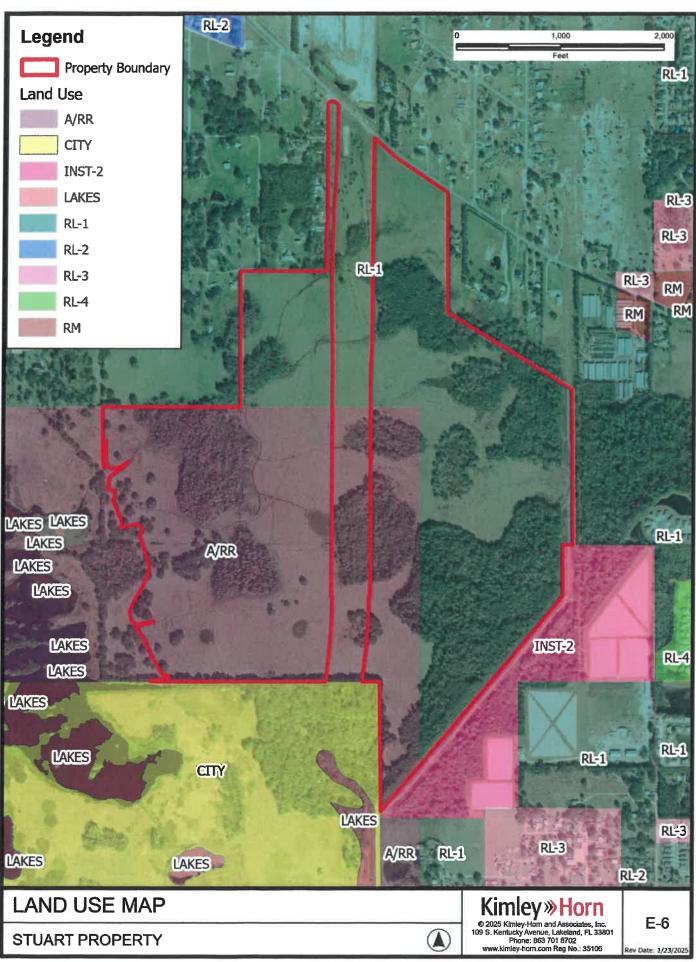


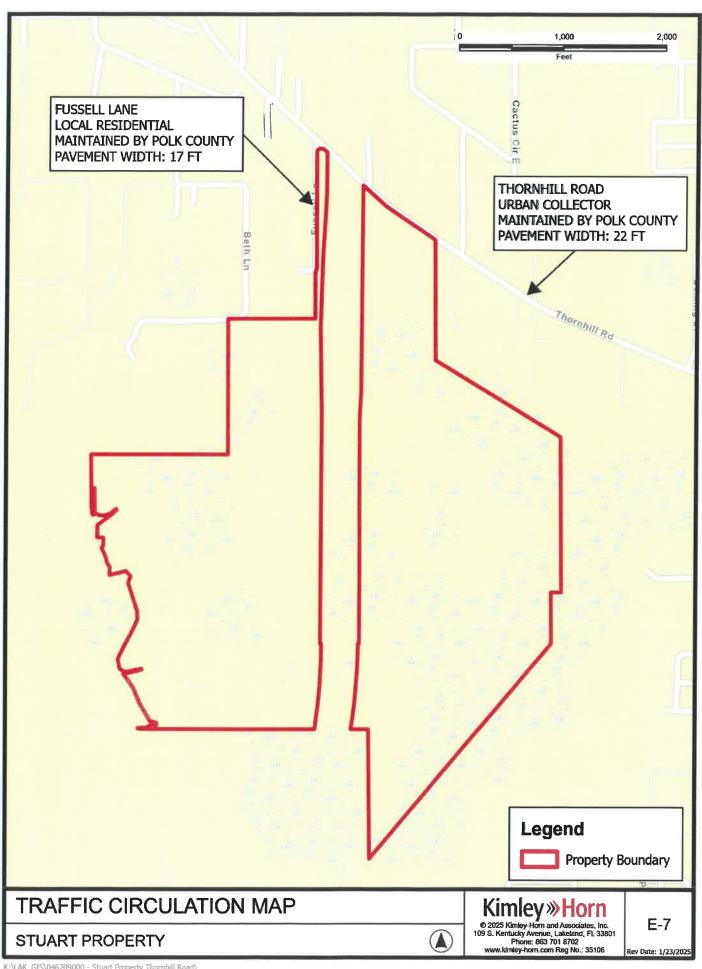


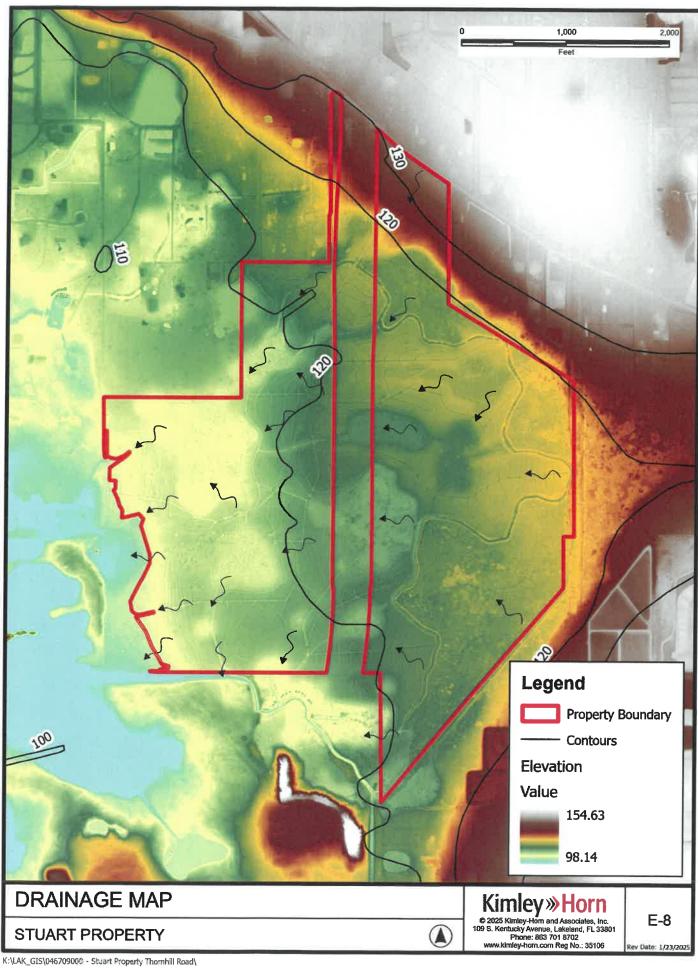


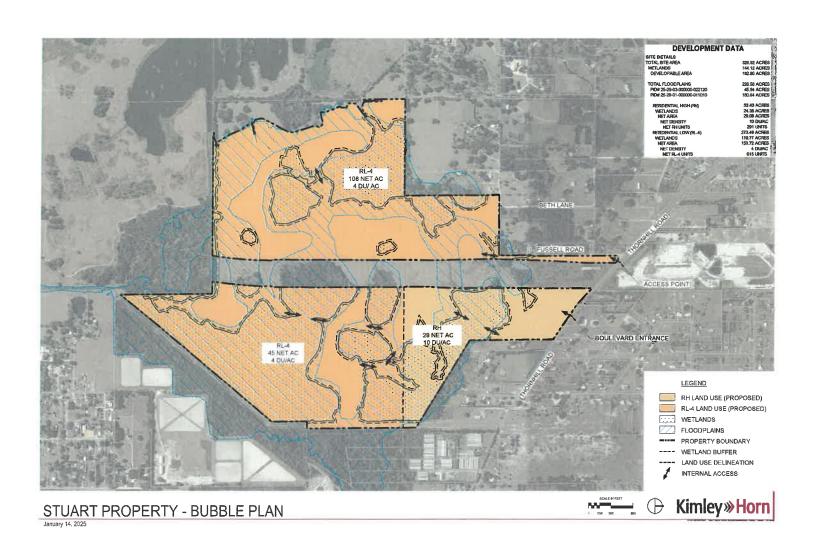












DEMONSTRATION OF NEED

- 1. Could the proposed amendment promote substantial amounts of low-density, low intensity, or single use development in excess of demonstrated need?
 - No. Central Florida and Polk County are exhibiting residential growth and need. It is anticipated there have been over 1,300 building permits for new construction in Polk County since October 2024. The proposed amendment is necessary to meet the continued demand in the area. The development of the subject site is limited by natural wetland features requiring strategic planning to minimize and avoid impacts.
- 2. Will passage of the proposed amendment allow a significant amount of urban development to occur in rural areas?
 - No. The proposed request is an effort to master plan development of the parcels, in light of recently approved development and the construction of the overpass, in order to efficiently and effectively develop the property. The property is immediately adjacent to the northern boundary of the Old Florida Plantation DRI, which was approved by Polk County BoCC in 1999 and annexed into the municipal limits of the City of Bartow. According to the City of Bartow's Future Land Use Map the Old Florida Plantation DRI contains residential high, residential medium, and residential low entitlements. The area is no longer rural as there is ample infrastructure and nearby commercial to support the residential community considered in the proposed request.
- 3. Does the proposed amendment create or encourage urban development in radial, strip, isolated, or ribbon patterns emanating from existing urban development?

No.

- 4. Does the proposed amendment fail to adequately protect adjacent agriculture areas?
 - No. There is limited agricultural land in the area. To the extent necessary, there are significant natural features that would provide for buffers from other existing development in the area.
- 5. Could the proposed amendment fail to maximize existing public facilities and services?
 - No. The Land Use would utilize the existing water infrastructure and provide for future extension of the County's sanitary force main.
- 6. Could the proposed amendment fail to minimize the need for future public facilities and services?
 - No. The Land Use would limit the impact on water infrastructure. The future extension would be designed for the needed use unless the County required upsizing to serve additional areas for the future.
- 7. Will the proposed amendment allow development patterns that will

disproportionately increase the cost of providing public facilities and services?

No. The development pattern would be appropriate and proportionate to the facilities existing and to be extended in the future.

8. Does the proposed amendment fail to provide clear separation between urban and rural uses?

Due to the investment in infrastructure in the area, it is not appropriate to consider this area rural. There are urban services and infrastructure within the area for the property. To the extent there is larger lot development adjacent to the site, there is ample wetland areas

9. Will the proposed amendment discourage infill development or redevelopment of existing neighborhoods?

No. The change in Land Use would encourage more appropriate redevelopment in the future as a result of the overpass construction changing the feel of the area.

10. Does the proposed amendment fail to encourage an attractive and functional mixture of land uses?

No. The change in Land Use would be more appropriate to the change brought by the overpass construction while still developing around and maintaining natural features.

11. Could the proposed amendment result in poor accessibility among linked or related land uses?

No. The land would have accessibility based on the type of access.

12. As a result of approval of this amendment, how much open space will be lost?

None. The site is currently impacted by the construction of the new parkway extension, which has impacted the ability to continue the previous agricultural activities.



Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

* Structure Type:	BUILDING Building Please select structure type and complete location point	information.
Latitude:	27 Deg 58 M 18.5 S N V	
Longitude:	81 Deg 48 M 01.2 S W 🕶	
Horizontal Datum:	NAD83 ❖	
Site Elevation (SE):	125 (nearest foot)	
Structure Height :	75 (nearest foot)	
Is structure on airport:	● No	
	○ Yes	

Results

You do not exceed Notice Criteria.

