7/31/2025

REZONING ENGINEERING NARRATIVE from R1C to PDP(GHC)

KODSI MIXED-USE PDP PROJECT

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Engineering Narrative

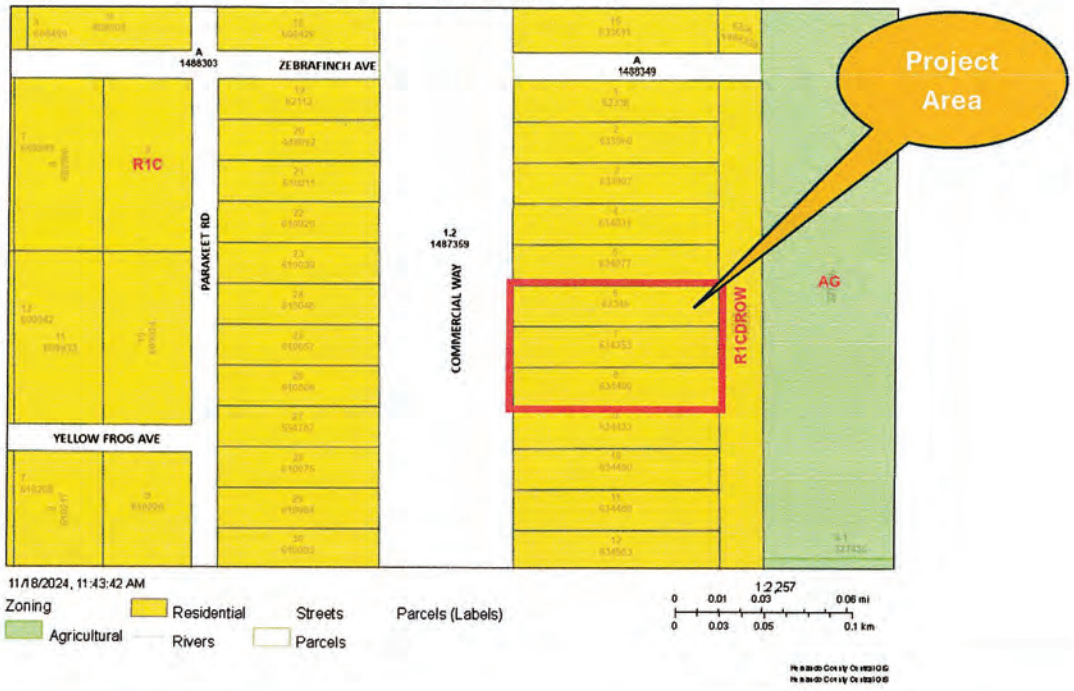
Proposal & Site Characteristics:

This report was prepared for lots 6, 7, and 8 in Hernando County, FL. A request to rezone the property from 'R1C' to 'PDP(GHC)' and for the approval of several variances. The owner would like to develop the property for mixed-use with 10,672 GFA of commercial space and twelve single-family dwelling units.

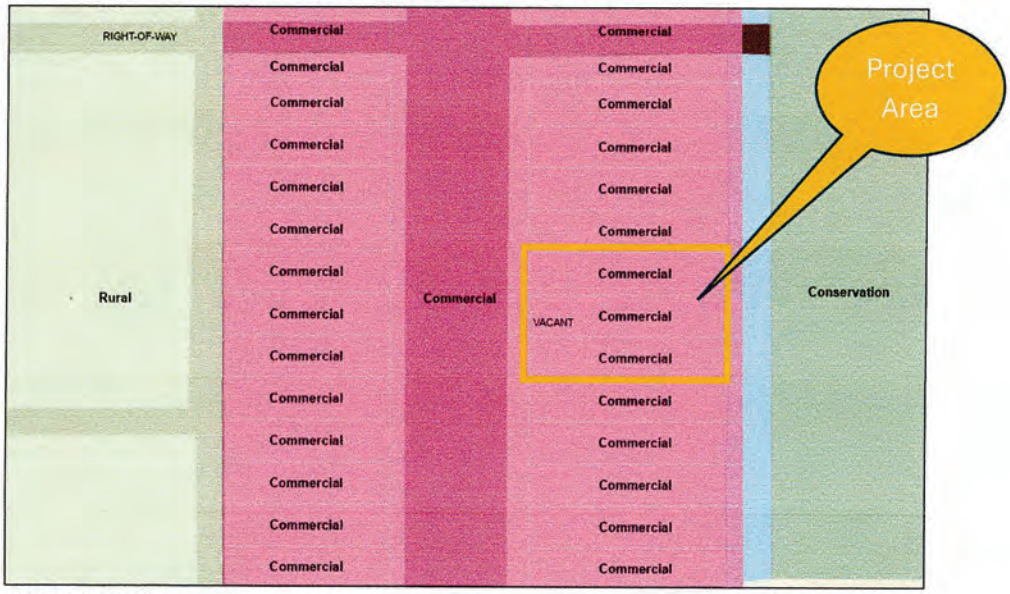
The site is located 0.14 miles south of Zebrafinch Avenue and Commercial Way along the western right-of-way line. Each vacant and undisturbed lot is 0.37 acres in size. The project area contains 2.0 acres of developable land. Lots 6, 7, and 8 do not contain any access connections or utilities.

The property is bordered by 'R1C' zoning to the north and south, with an existing DRA to the east.

Hernando County Zoning/Flu Map



Hernando County Zoning/Flu Map



The Applicant requests a rezoning and approval of the PD Master plan for a mixed-use development. The proposed structure will have 10,672 GFA of retail space including a drive-through restaurant. Twelve dwelling units will be located on the second floor of the building. Other improvements include parking areas, drive aisles, cross-access connections, a floodplain compensation area, a stormwater management system, and pedestrian sidewalks.

Density Request & Floor Area Ratio:

*A d*ensity of 6.0 units/acre is proposed for the PDP mixed-use development project, with a floor area ratio (FAR) of 25% or 21,344 sf.

Rezoning Request:

A request to rezone the property from 'R1C' to 'PDP(GHC)' for a mixed-use development project.

Variance Request(s):

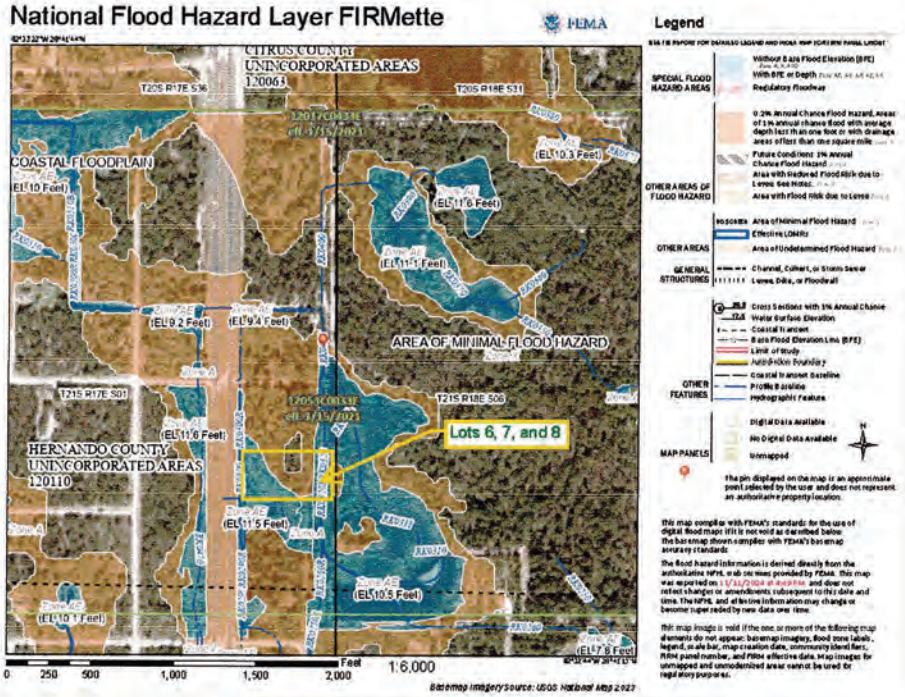
The Applicant is seeking approval of the following variance requests:

1. Deviation from Article II, Section 4 for reducing multifamily parking demands from 2.0 spaces/unit to 1.0 spaces/dwelling based on proposed sizes.
2. Deviation from Article II, Section 4 for a reduction to shopping center parking demands from 4 spaces/1,000 GFA to 3 spaces/1,000 GFA.
3. Reduction of the front landscape buffer from 20 ft to 10 ft due to site constraints.

Environmental Considerations:

FEMA Flood Zones:

The property is within FEMA flood zones 'AE' and 'A' per Community Panel #12053C0033E (Dated 1/15/2021). Around one-third of the site falls within an 'AE' flood zone, with elevations between 10.5 ft and 11.5 ft. The remaining portion of the property is in an 'A' zone. FEMA lines shown on the PD plan are based on topographic contour elevations. The parcel also falls within the Chassahowitzka Watershed.

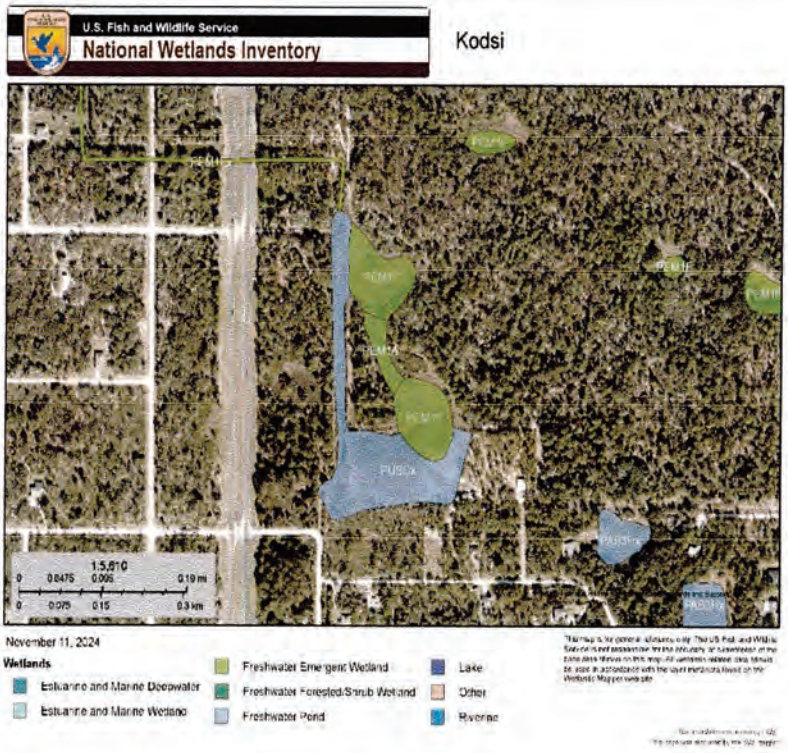


Wetlands, Drainage Features, & Habitats:

There are wetlands directly east of the parcel with classifications of 'PUSCx' (freshwater pond) and 'PEM1F' (emergent wetland) per the US Fish and Wildlife Service.

Habitat and Conditions & Impacts on Natural Features:

A detailed Species Report will be prepared during the construction and building review process for Hernando County's review. The project does not impact any natural features. A natural vegetative buffer of 5.0% along the north and east property lines.



Site Plan Discussion

The owner is proposing a PDP mixed-use development project. A two-story building is proposed, with the first floor devoted to commercial space and a drive-through restaurant. The second story will contain twelve (12) single-attached dwelling units with two bedrooms or less. Other site improvements include constructing a floodplain compensation area, an underground stormwater management system, pedestrian sidewalks, parking areas, and on-site utilities.

Parking Demands and Delivery Vehicles

The project includes three or more retail units within a single building. A retail rate of 4 spaces per 1000 GFA is required for a shopping center per Hernando County Code of Ordinances Article II, Section 4. Multifamily units must have 2 spaces per dwelling unit for two bedrooms or less. The proposed parking layout is based on each variance request. The first request is to reduce multifamily parking from 2 spaces/unit to 1.0 space/dwelling based on the proposed unit size. A second request is being made to minimize onsite parking associated with a shopping center from 4 spaces/1,000 GFA to 3 spaces/1,000 GFA.

The first parking leg is located directly south of the proposed building, containing twenty (20) standard parking stalls with (3) accessible spaces. The second parking area is located south of the main drive aisle and is configured with 29 parking spaces. The central drive aisle will allow vehicles to either park or enter the drive-through lane for ordering.

Eight stalls for bicycle parking will be provided, with pedestrian access into the right-of-way. The bike rack will be connected to the proposed trail along Commercial Way via a 5-ft. wide pedestrian path. Based on Article II of the Hernando County Code of Ordinances, a 5.0% reduction is applied to the overall parking count.

Forty-four (44) parking stalls are required based on the proposed commercial use and multifamily dwellings. Forty-six (46) stalls will be constructed, with excess stalls being signed for delivery vehicles only. Box trucks are anticipated for deliveries by Walmart, Amazon, UPS, or FED-Ex. No deliveries are expected by a semi-truck.

Driveway onto Commercial Way and Service Road

One (1) access connection is proposed from Commercial Way into the property connecting to a 50' wide front service road per the Hernando County Design Guidelines. Cross-access connections are proposed to the north and south. The owner shall obtain recorded agreements with each adjacent owner for the connections prior to the construction review phase. All other elements of the service road will be designed per the Hernando County Facility Design Manual.

Proposed Buffer Sizes and Separations

Buffers are proposed for the following areas:

1. Front Buffer (west): A 10-ft wide front landscape buffer along the property frontage adjacent to Commercial Way. Due to site constraints, a variance request is being made to reduce the buffer from 20 ft to 10 ft.

2. Side Buffer (south): A 5-foot-wide landscape buffer will be planted along the boundary line.

3. Side (north) and Rear (east) Buffers: A 5-ft. wide area will be retained to dedicate a natural vegetative buffer. Plants and trees will be in-filled to ensure compliance with Article II.

Proposed Setbacks and Minimum Sizes of Lots

The structure is proposed to maintain the following setbacks:

1. Front: A 35 ft front setback is required along the property frontage. A 75.95 ft setback is proposed from the right-of-way line of Commercial Way to the proposed structure.
2. Sides: A side setback of 20 ft is required when adjacent to the same zoning. A setback of 40.4 ft. is proposed from the structure to the northern property line. A side setback of 142.9 ft is proposed from the proposed structure to the southern property line.
3. Rear: A rear setback of 35-ft. is required from the eastern property line. The proposed development will maintain a 47.0 ft setback.

Transportation Analysis

Trip Generation:

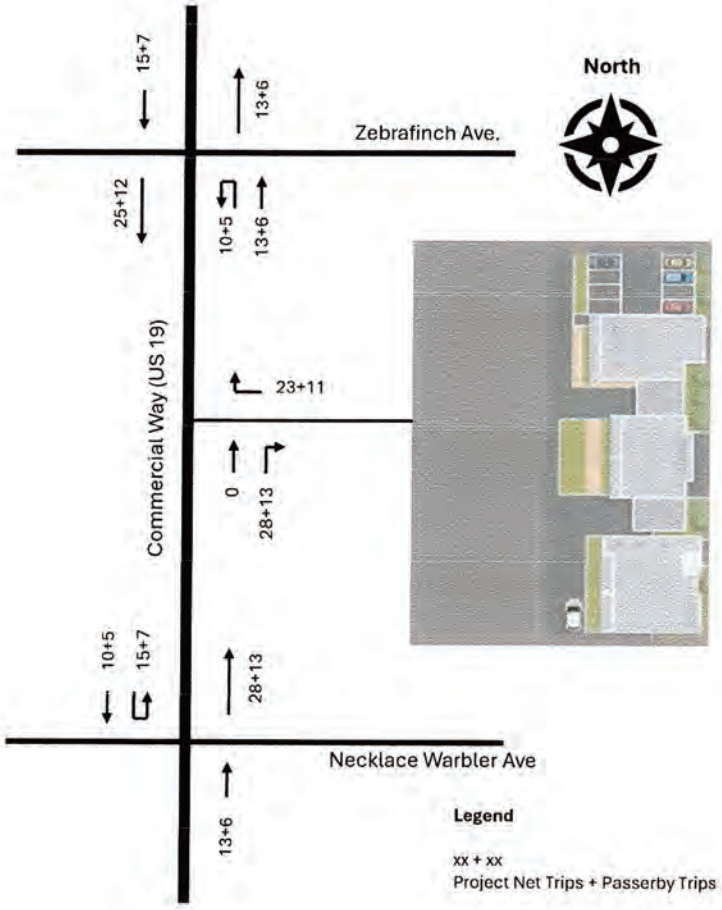
Trip generation for the proposed mixed-use development was estimated using the ITE Trip Generation Manual. The development includes 12 multifamily residential units and approximately 10,672 square feet of retail space. Based on standard trip generation rates, the site is expected to generate a total of 832 daily trips, with 52 trips during the AM peak hour and 97 during the PM peak hour. After applying adjustments for pass-by trips and internal capture, the projected AM peak hour traffic consists of 15 inbound and 27 outbound trips. For the PM peak hour, the adjusted traffic includes 28 inbound and 23 outbound trips.

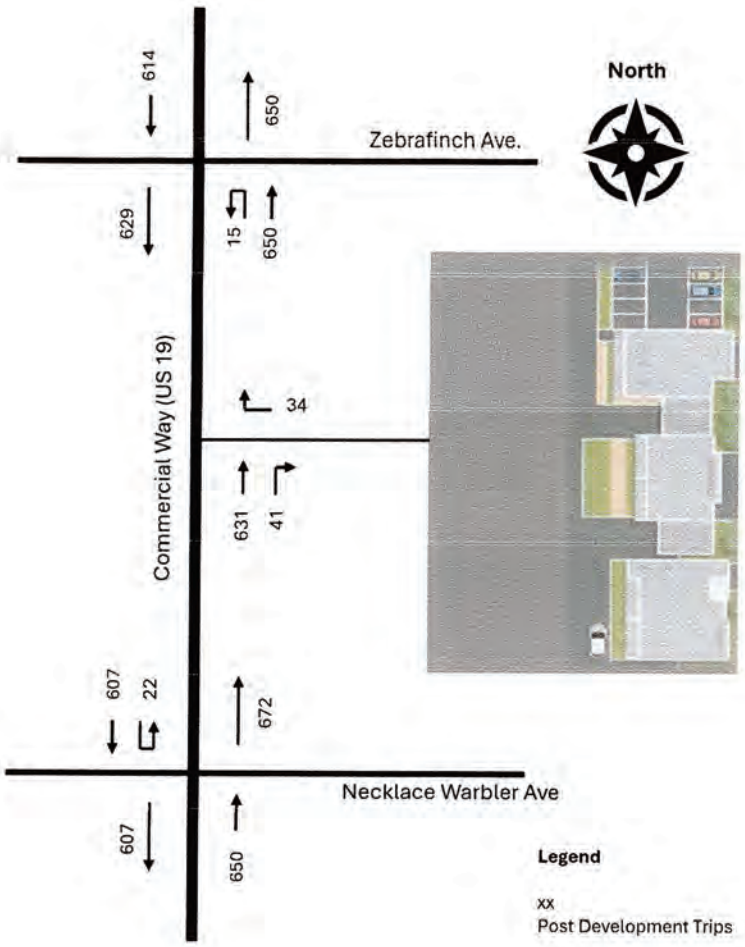
AM PEAK HOUR TRIP GENERATION															
ITE Code	*Land Use*	*Size*	*Daily Trip*	*AM Trips*			*Internal Capture*			*Passerby Trip*			*New AM Trips*		
				In	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
822	Shopping Plaza	10,672	680	15	10	25	0	0	0	6	4	10	9	6	15
220	MultiFamily Low-Rise	12	152	6	21	27	0	0	0	0	0	0	6	21	27
Total			832	21	31	52	0	0	0	6	4	10	15	27	42

PM PEAK HOUR TRIP GENERATION															
ITE Code	*Land Use*	*Size*	*Daily Trip*	*PM Trips*			*Internal Capture*			*Passerby Trip*			*New PM Trips*		
				In	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
822	Shopping Plaza <40	10,672	680	36	35	71	4	7	11	13	11	24	19	17	36
220	MultiFamily Low-Rise	12	152	16	10	26	7	4	11	0	0	0	9	6	15
Total			832	52	45	97	11	11	22	13	11	24	28	23	51

Trip Distribution:

To estimate the distribution of project-related traffic, FDOT's online traffic data was used for Commercial Way, which has an average annual daily traffic (AADT) of 13,000 vehicles. The directional factor (D) is 0.55 and the peak hour factor (K) is 9.5. These values suggest a peak hour volume of approximately 637 vehicles northbound and 599 vehicles southbound. It is assumed that 55 percent of the project's traffic will approach from or depart toward the north, with the remaining 45 percent traveling to and from the south. A corresponding traffic distribution diagram has been prepared to illustrate how project-generated trips will be assigned to the roadway network.





Segment Analysis

A segment analysis was conducted along Commercial Way to assess the potential impact of project-generated traffic. Based on FDOT's Generalized Volume Tables for suburban areas, Commercial Way is classified as a four-lane divided urban arterial. Under Level of Service (LOS) D conditions, the maximum service volume for this roadway type is 4,960 vehicles per hour.

Following development, the projected traffic volume during the peak hour is approximately 1,301 vehicles, resulting in a volume-to-capacity (v/c) ratio of 0.26. This is well below the LOS D threshold, indicating that the roadway will continue to operate efficiently.

In conclusion, the additional traffic generated by the project will not negatively impact roadway operations, and no capacity improvements are necessary at this time.

Roadway Segment	Post Development Traffic			
	Capacity	# Lanes	Volume	V/C
Commercial Way				
South of Citrus County Line Road	4960	4	1301	0.26

Impacts on Public Facilities

A 5-ft. wide sidewalk is proposed along the service road in accordance with the Hernando County Design Guidelines. Other facility improvements include a 26-ft wide access connection from Commercial Way extending into the property.

Grading, Drainage, and Stormwater Management

The site will be graded according to FEMA regulations ADA and to minimize the amount of fill onsite. Two existing utility and drainage easements will be maintained along the north and south property lines to access the existing DRA directly east.

Accessible ramps will be constructed for pedestrian access from the parking area to the first floor. Grading throughout the project will be minimized to ensure compliance with FEMA regulations and for the proper separation of the base layer and underground stormwater system.

A combination of underground chambers and a permeable paver system will be utilized as a stormwater management system to retain treatment plus attenuation from the 100-year storm event. The system will be considered a closed basin without out-falling runoff into the existing DRA or right-of-way. Please see **Attachment "A"** within this report for a preliminary grading plan.

FEMA Floodplain Compensation Area

The property falls within a FEMA 'AE' zone with assigned elevations of 10.5-ft and 11.5-ft. The first floor of the proposed structure will be elevated to 15.15 ft, allowing for a minimum of one-foot of freeboard per FEMA regulations and Hernando County regulations. Appendix 'A' contains a copy of the preliminary grading plan for the subject property. The appendix also includes a preliminary floodplain compensation analysis depicting the fill placed between the existing grade, proposed grade (<11.5'), and FEMA elevation of 11.5 feet. The floodplain compensation area will be positioned along the southern boundary line due to historical runoff patterns. The following preliminary calculation has been prepared based on survey grades and proposed improvements:

Required Floodplain Area						
1	Floodplain Area	Cup per Cup Analysis Factor(s)	2D Area (sf)	Cut (cy)	Fill (cy)	Net (cy)
	56381.0	1:1	56,329.08	692.90	635.03	57.87

A net cut of 57.87 cy is anticipated to offset the development of the subject parcel. Please see exhibit EX-2 Preliminary Floodplain Compensation Plan under **Attachment "C"** within this report.

Sanitary Sewer Service

Sanitary service is proposed using an onsite septic system and drain field per FDEP and Hernando County Health Department regulations. The septic system is anticipated to be mounded with a tank, grinder pump, and drain field sized in accordance with Hernando County Health Department and FDEP standards. A grease interceptor and tanks will be implemented outside of the proposed structure for the proposed 20-seat restaurant. Retail subunits will have two restrooms, and each

multifamily unit will have one. Two separate systems will be incorporated with one dedicated to commercial space and a second devoted to multifamily use. The following demands are based on coordination with the Hernando County Health Department for permitting during the site plan review phase. Each system will be positioned to meet minimum setbacks as shown under EX-1 Preliminary Site, Grading, and Drainage Plan under **Attachment "B"** within this report. The system will be refined under the site plan review process.

Estimated Sewage Demand per FDEP 62E:

Establishment Type	Demand	Calculation
Food Operations – 16 hours or less per Seat	40 gpd per seat	(40 gpd x 20 seats) = 800 gpd
Multiple Family w/ 2 Bedrooms	200 gpd per unit	(200 gpd/unit x 12 units) = 2,400 gpd (1.66 gpm)
Retail Space per 100 sf	15 gpd per 100 sf	(15 gpd/100 sf) x (889 sf per unit) x 12 units = 1,600.2 gpd (1.11 gpm)
Subtotal		*4,800.2 gpd (3.33 gpm)*
Peak		1.5
Total Demand		**7,200.3 gpd (5.00 gpm)**

Water Service

A dedicated well is proposed with pumps with a 2-inch service line to the building that will be designed in accordance with FDEP and Hernando County Health Department regulations. The estimated water demands are based on proposed fixture counts for each use proposed. The placement of the well will adhere with minimum setback standards from the proposed septic systems. The system will be refined under the site plan review process.

Estimated Fixture Count for Demands:

Use	Fixture Valus at 35 psi	No. of Fixtures	Fixture Value	
Restaurant				
Kitchen Sink	3	2	6	
Wash Sink	2	2	4	
Service Sink	3	1	3	
Dishwasher	5	1	5	
Water Closet	3	2	6	
subtotal			*24*	
Retail				
Wash Sink	2	18	36	
Water Closet	3	18	54	
subtotal			*90*	
12 Multifamily Units				
Wash Sink	2	12	24	

Water Closet	3	12	36	
Bathtub	8	12	96	
Dishwasher	5	12	60	
Washing Machine	5	12	60	
subtotal			*276*	
Total Combined Fixture Count			390	
Peak Demand			45	gpm
Pressure Factor			1.5	
Peak x Pressure Factor			**67.5**	**gpm**
			97200	**gpd**
Equivalent Meter Size			1-1/2" to 2"	

Fire Service

A dedicated fire protection well will be implemented onsite to service the proposed hydrant and potential sprinkler system. A licensed fire protection engineer will design and permit the sizing of the well, piping, tanks, and suppression system. The system will adhere to the Florida Fire Prevention Code and NFPA codes and standards.

Table 18.4.5.2.1 Minimum Required Fire Flow and Flow Duration for Buildings

Fire Flow Area ft² (× 0.0929 for m²)					Fire Flow gpm[1] (× 3.785 for L/min)	Flow Duration (hours)
I(443), I(332), II(222)*	II(111), III(211)*	IV(2HH), V(111)*	II(000), III(200)*	V(000)*		
0–22,700	0–12,700	0–8200	0–5900	0–3600	1500	
22,701–30,200	12,701–17,000	8201–10,900	5901–7900	3601–4800	1750	
30,201–38,700	17,001–21,800	10,901–12,900	7901–9800	4801–6200	2000	2
38,701–48,300	21,801–24,200	12,901–17,400	9801–12,600	6201–7700	2250	
48,301–59,000	24,201–33,200	17,401–21,300	12,601–15,400	7701–9400	2500	
59,001–70,900	33,201–39,700	21,301–25,500	15,401–18,100	9401–11,300	2750	
70,901–83,700	39,701–47,100	25,501–30,100	18,401–21,800	11,301–13,400	3000	
83,701–97,700	47,101–54,900	30,101–35,200	21,801–25,900	13,401–15,600	3250	3
97,701–112,700	54,901–63,400	35,201–40,600	25,901–29,300	15,601–18,000	3500	
112,701–128,700	63,401–72,400	40,601–46,100	29,301–33,500	18,001–20,600	3750	
128,701–145,900	72,401–82,100	46,401–52,500	33,501–37,900	20,601–23,300	4000	
145,901–164,200	82,101–92,400	52,501–59,100	37,901–42,700	23,301–26,300	4250	

Estimated Fire Protection Demand:

Building Type	Building Size (GFA)	Required Fire Flow GPM and Duration
II (222)	1st Floor = 10,672 sf 2nd Floor= 10,672 sf Total = 21,344 sf	1750 gpm @ 2 Hours
The building size and protection type will be finalized during the building review process.		

Solid Waste

The following calculation has been prepared to estimate solid waste for the proposed development:

Solid Waste Demands

Land-Use	Units	Persons	Subtotal	
Retail	12	2	24	
Restaurant	1	5	5	
Multifamily	12	3	36	
Total Persons			**65**	
Calculation:	4.75	Lbs./day	65	person
Total Solid Waste Estimated			**308.75**	**lbs/day**
			112,693.75	**lbs/yr**

Impacts on Public Facilities

a. There will be no impacts on public infrastructure related to sewer, water, parking, or recreational facilities.
b. There are adequate solid waste companies and facilities within Hernando County to handle the disposal of.
c. The twelve multifamily units will not impact existing schools within the immediate area.

Water and Sewer Services

All utilities will be privately owned and maintained. No utility extensions or offsite improvements are proposed. During the project's permitting phase, all on-site utilities will be permitted, designed, and constructed in accordance with the Hernando County Health Department, FDEP, and the Florida Fire Prevention Code.

Senior, Age-Restricted or Affordable Housing

No senior, age restrictions or affordable housing units are proposed.

Attachment A – Hernando Health Department Coordination

From: Wilcock, Andrea E
To: Richard Marcel
Subject: RE: Rezoning application
Date: Friday, June 20, 2025 3:03:20 PM
Attachments: image003.png

No, we do not issue a letter unless you apply for a Septic permit.

The Building Department/Zoning Dept will normally contact us to comment on the Development. Otherwise, we are not involved with the rezoning. You need to speak to Zoning Department at Hernando County Government. It is confusing as we are two separate agencies, State of Florida and Hernando County local Government.

Andrea Wilcock
Environmental Public Health Director
Bureau of Environmental Public Health
Division of Disease Control and Health Protection
Florida Department of Health in Hernando County
7551 Forest Oaks Blvd. Spring Hill, FL 34606
(w) 352-540-6845 (f) 352-688-5015
andrea.wilcock@flhealth.gov

Mission: To protect, promote, and improve the health of all people in Florida through integrated state, county, and community efforts.

NOTE: Florida has a very broad public records law. Most written communication to or from state officials regarding state business are public records available to the public and media upon request. Your email communication may therefore be subject to public disclosure.

Accredited Health Department
Public Health Accreditation Board

From: Richard Marcel <rick@arldesign.net>
Sent: Thursday, June 19, 2025 5:12 PM
To: Wilcock, Andrea E <Andrea.Wilcock@flhealth.gov>
Cc: Matt Kodsi <matt.kodsi@yahoo.com>; Sampson, Jacqueline M <Jacqueline.Sampson@flhealth.gov>
Subject: RE: Rezoning application

EXTERNAL EMAIL: DO NOT CLICK links or open attachments unless you recognize the sender and know the content is safe.

Andrea,
We are confused as well since it's a rezoning with Hernando. They want us to pull permits or obtain a letter for the rezoning.
I cannot permit the project until the rezoning goes through and then plans are prepared.

Is there a letter we can obtain that states based on the layout it's permittable with the Health

Department?

Richard 'Rick' Marcel, Project Manager

ARL Design Group, llc

Civil Engineering, Land Planning & Construction Management
Phone: 727-488-1002
Address: 8209 State Road 52, Hudson, FL 34667
Website: https://www.arldesign.net
State of Florida CofA #36127
Respect, Honor, and Integrity

From: Wilcock, Andrea E <Andrea.Wilcock@flhealth.gov>
Sent: Thursday, June 19, 2025 4:40 PM
To: Richard Marcel <rick@arldesign.net>
Cc: Matt Kodsi <matt.kodsi@yahoo.com>; Sampson, Jacqueline M <Jacqueline.Sampson@flhealth.gov>
Subject: RE: Rezoning application

Richard,

The Building Department has jurisdiction over your rezoning. I only comment on compliance with applicable septic rules.

Florida HEALTH

Andrea Wilcock
Environmental Public Health Director
Bureau of Environmental Public Health
Division of Disease Control and Health Protection
Florida Department of Health in Hernando County
7551 Forest Oaks Blvd, Spring Hill, FL 34606
(w) 352-540-6845 (f) 352-688-5015
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PHAB
Accredited Health Department
Public Health Accreditation Board

From: Richard Marcel <rick@arldesign.net>
Sent: Thursday, June 19, 2025 3:17 PM
To: Wilcock, Andrea E <Andrea.Wilcock@flhealth.gov>
Cc: Matt Kodsi <matt.kodsi@yahoo.com>; Sampson, Jacqueline M <Jacqueline.Sampson@flhealth.gov>
Subject: RE: Rezoning application

EXTERNAL EMAIL: DO NOT CLICK links or open attachments unless you recognize the sender and know the content is safe.

Andrea,
Thank you for the review and information. Attached is a copy of the revised plan set with revised drainfield locations, demands, and notes on EX-1.
I am also providing a response below in blue to each comment. Each MF unit will be between 800 and 1000 sf due to limited space.
Notes with conditions are added to sheet EX-1 to ensure adherence with the below requirements during the permitting phase of the project.
Hopefully this will suffice so we can move forward with the rezoning.

Please let us know if any changes are needed.

Thank you again.

Richard 'Rick' Marcel, Project Manager

ARL Design Group, llc

Civil Engineering, Land Planning & Construction Management
Phone: 727-488-1002
Address: 8209 State Road 52, Hudson, FL 34667
Website: https://www.arldesign.net
State of Florida CofA #36127
Respect, Honor, and Integrity

From: Wilcock, Andrea E <Andrea.Wilcock@flhealth.gov>
Sent: Tuesday, June 3, 2025 12:32 PM
To: Richard Marcel <rick@arldesign.net>
Cc: Matt Kodsi <matt.kodsi@yahoo.com>; Sampson, Jacqueline M <Jacqueline.Sampson@flhealth.gov>
Subject: RE: Rezoning application

Rick,

Thank You for our patience.

See comments below:

1. The estimated sewage flow of 4800.2 does not exceed the authorized sewage flow for the lot of 5589gpd. Acknowledged.
2. If space allows, I recommend installing two systems one for the commercial waste from the restaurant and the other for the domestic waste from the office and multifamily. Two or three separate systems will be installed within the area shown on EX-1. We will design and permit with Hernando County Health Department depicting each area during the preparation of construction plans. The system will be mounded with hydrologic group 'a' soils to increase percolation into the ground.
3. The septic system requires a Florida Licensed Professional Engineer design due domestic sewage flow more than 2500gpd and the size of the drainfield. A note has been placed on sheet EX-1 and we will provide a sealed design during the permitting phase.
4. The drainfield size required is 6000sqft or 9000sqft depends on if the drainfield is based on slightly limited or moderately limited soil. Is this space available? I cannot read the lot dimensions on the site plan to scale the area.
5. Lot requires 7386 or 11080sqft of unobstructed depends on if the drainfield is based on slightly limited or moderately limited soil. Is this space available? As above

   Response to items 4 and 5. A surface area of 13,386 sf will be provided for the drianfield. Additionally, please see the response to item #2 above about the hydrologic soil types.
6. Potable well setback required is 200ft if one septic system installed.. The well would be regulated by the Florida Department of Environmental Protection.

   Setbacks notes and permitting with the FDEP has been placed on sheet EX-1.
7. Calculations in estimated sewage demand table correct. See note in row 2. No comments on peak or total demand as this is the remit of the engineer.

   Calculations are added to sheet EX-1. Each MF unit will be between 800 and 100 sf (max.).
8. Not sure if there is a retention pond but the setback to the well is 75ft. Also setback to the septic system is 50ft or 75ft depending on when the lot was created. Prior to 1/11972 the setback is 50ft. Call me discuss if necessary, as it also depends if DRA designed to hold water less than 72hours.

   Please see setback notes on sheet EX-1 for adherence during the

permitting phase.

Hope this helps.

Andrea Wilcock
Environmental Public Health Director
Bureau of Environmental Public Health
Division of Disease Control and Health Protection
Florida Department of Health in Hernando County
7551 Forest Oaks Blvd, Spring Hill, FL 34606
(w) 352-540-6845 (f) 352-688-5015
andrea.wilcock@flhealth.gov
Mission: To protect, promote, and improve the health of all people in Florida through integrated state, county, and community efforts.

NOTE: Florida has a very broad public records law. Most written communication to or from state officials regarding state business are public records available to the public and media upon request. Your email communication may therefore be subject to public disclosure.

Accredited Health Department
Public Health Accreditation Board

From: Richard Marcel <rick@arldesign.net>
Sent: Friday, May 23, 2025 7:32 AM
To: Wilcock, Andrea E <Andrea.Wilcock@flhealth.gov>
Cc: Matt Kodsi <matt.kodsi@yahoo.com>; Sampson, Jacqueline M <Jacqueline.Sampson@flhealth.gov>
Subject: RE: Rezoning application

You don't often get email from rick@arldesign.net. Learn why this is important

EXTERNAL EMAIL: DO NOT CLICK links or open attachments unless you recognize the sender and know the content is safe.

Andrea,
Thank you for taking our call yesterday. I do apologize for not sending the information over this morning.

Attached is a copy of the site plan and a basic floor plan for the multifamily units. The first level of the building will contain a restaurant and 12 retail units. The restaurant is hopefully a 20 seat (max) Dunkin Doughnuts. The remaining units will be 889 sf with only two restrooms.
Below are the calculations prepared for sewer and water demands from our narratives. These are based on rule 62E and anticipated fixture counts.

Sanitary Sewer Service:
Sanitary service is proposed using an onsite septic system and drain field per FDEP and

Hernando County Health Department regulations.
The septic system is anticipated to be mounded with a tank, grinder pump, and drain field sized per FDEP standards. A grease interceptor and tanks will be implemented outside of the proposed structure for the proposed 20-seat restaurant. Retail subunits will have two restrooms, and each multifamily unit will have one.

Estimated Sewage Demand per FDEP 62E:

Establishment Type	Demand	Calculation
Food Operations – 16 hours or less per Seat	40 gpd per seat	(40 gpd x 20 seats) = 800 gpd
Multiple Family w/ 2 Bedrooms	200 gpd per unit	(200 gpd/unit x 12 units) = 2,400 gpd (1.66 gpm) This is correct if the Multi family is less than 1200sqft. More than 1200sqft would be 300gpd.
Retail Space per 100 sf	15 gpd per 100 sf	(15 gpd/100 sf) x (889 sf per unit) x 12 units = 1,600.2 gpd (1.11 gpm)
Subtotal		*4,800.2 gpd (3.33 gpm)*
Peak		1.5
Total Demand		**7,200.3 gpd (5.00 gpm)**

Water Service:
A well with pumps and a 2-inch service line is utilized for water service in accordance with FDEP and Hernando County Health Department regulations. The estimated water demands are based on proposed fixture counts for each use proposed.

Estimated Fixture Count for Demands:

Use	Fixture Valus at 35 psi	No. of Fixtures	Fixture Value	
Restaurant				
Kitchen Sink	3	2	6	
Wash Sink	2	2	4	
Service Sink	3	1	3	
Dishwasher	5	1	5	
Water Closet	3	2	6	
subtotal			*24*	
Retail				
Wash Sink	2	18	36	
Water Closet	3	18	54	
subtotal			*90*	
12 Multifamily Units				
Wash Sink	2	12	24	
Water Closet	3	12	36	

Bathtub	8	12	96	
Dishwasher	5	12	60	
Washing Machine	5	12	60	
subtotal			*276*	
Total Combined Fixture Count			390	
Peak Demand			45	gpm
Pressure Factor			1.5	
Peak x Pressure Factor			**67.5**	**gpm**
			97200	**gpd**
Equivalent Meter Size			1-1/2" to 2"	

Please let me know if you have any questions.

Richard 'Rick' Marcel, Project Manager

ARL Design Group, llc

Civil Engineering, Land Planning & Construction Management
Phone: 727 488 1002
Address: 8209 State Road 52, Hudson, FL 34667
Website: https://www.arldesign.net
State of Florida CofA #36127
Respect, Honor, and Integrity

From: Wilcock, Andrea L <Andrea.Wilcock@flhealth.gov>
Sent: Wednesday, May 21, 2025 1:37 PM
To: Richard Marcel <rick@arldesign.net>
Cc: Matt Kodsi <matt.kodsi@yahoo.com>; Sampson, Jacqueline M <Jacqueline.Sampson@flhealth.gov>
Subject: RE: Rezoning application

Received. Thank you

Andrea Wilcock
Environmental Public Health Director
Bureau of Environmental Public Health
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Attachment B – EX-1 Preliminary Site, Grading and Utility Plan

Attachment B – EX-2 Preliminary Floodplain Compensation Plan