



# Staff Report

**To:** Planning and Zoning Board

**From:** Ron A. Paradise, Director, Planning and Development Services

**Date:** September 10, 2019

**Re:** Project No. RZ19-0001, Ordinance No. 13-2019, Project Normandy IPUD

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## Summary of Application:

**Applicant:** Jason Lewis, P.E, Kimley-Horn and Associates, representing Seefried Industrial Properties.

**Request:** Rezone ±85.1 acres from Activity Center Industrial and Agriculture to Industrial Planned Unit Development (IPUD).

**Tax Parcel No.:** A portion of 8106-04-00-0710; A portion of 8106-04-00-0790; 8107-00-00-0010 and 8107-00-00-0070.

**Property Acreage:** ±85.1 acres

**Property Location:** The property has not been addressed but will carry an address off of N. Normandy Blvd. In general, the property is located between N. Normandy Blvd. and Interstate 4 situated south of Graves Av.

**Legal Description:** A parcel of land lying within Section 7, Township 18 South, Range 31 East, Volusia County, Florida, being more particularly described as follows:  
For a POINT OF BEGINNING commence at the Southeast corner of the Northwest 1/4 of said Section 7; thence N.00°08'23"W. along the East boundary of said Northwest 1/4, a distance of 1,443.11 feet; thence N.89°47'46"W., a distance of 203.28 feet; thence S.15°44'39"W., a distance of 358.77 feet; thence N.74°16'39"W., a distance of 728.83 feet to a point on the Easterly right-of-way line of Interstate 4 Access Road as shown on Florida Department of Transportation Right-of-Way Map Section 79110, dated 10/8/03; thence S.15°43'46"W. along said Easterly right-of-way, a distance of 2,709.74 feet to a point on the North boundary of FOREST PARK HILLS as recorded in Map Book 23, Page 152 of the Public Records of Volusia County, Florida; thence S.89°30'08"E. along said North boundary, a distance of 421.34 feet to the Northeast corner of FOREST PARK HILLS,

the same being the Northwest corner of Lot 103, YOURLANDO FARMS AND GROVES as recorded in Map Book 10, Page 227 of the Public Records of Volusia County; thence S.00°07'51"E. along the West boundary of said Lot 103 and Lot 106, a distance of 661.26 feet to a point on the Westerly right-of-way line of Normandy Boulevard per Volusia County Right-of-Way Map Project No. 1553; thence along said Westerly right-of-way line the following six (6) courses: (1) N.50°42'22"E., a distance of 394.37 feet to a non-tangent point of curvature; (2) Northeasterly 415.62 feet along the arc of a curve to the right, said curve having a radius of 1,959.14 feet, a central angle of 12°09'18", and a chord bearing and distance of N.39°47'43"E., 414.84 feet; (3) N.45°54'00" ., a distance of 900.38 feet to a point of curvature; (4) Northeasterly 139.91 feet along the arc of a curve to the left, said curve having a radius of 1,859.86 feet, a central angle of 04°18'37", and a chord bearing and distance of N.43°18'04"E., 139.88 feet; (5) N.88°33'15"W., a distance of 16.03 feet to a non-tangent point of curvature; (6) Northeasterly 786.45 feet along the arc of a curve to the left, said curve having a radius of 1,844.86 feet, a central angle of 24°25'29", and a chord bearing and distance of N.29°33'13"E., 780.51 feet to a point on the South boundary of the Northeast 1/4 of said Section 7; thence N.89°51'11"W. along said South boundary, a distance of 364.72 feet to the POINT OF BEGINNING.  
Containing 85.141 acres, more or less.

**Existing Zoning:** Industrial (Activity Center) – 84.5 acres and Agriculture (Activity Center) – 0.6 acre.

**Background:**

The property is located within a special planning area of the City known as the Deltona Activity Center. To ensure consistency with the Comprehensive Plan, all projects are required to be processed as a Planned Unit Development. A Planned Unit Development zoning classification involves the application of customized uses and development parameters to a specific property which will further Comprehensive Plan provisions, improve land use compatibility, protect infrastructure level of service, and promote economic goals of the City. The requested Industrial Planned Unit Development (IPUD) represents an industrial scale project which includes distribution activities and light manufacturing options. Every PUD zoning is associated with a written Development Agreement (DA) and a Master Development Plan (MDP) graphic, which generally depicts development areas including lots, buildings, internal circulation and other site design elements. The IPUD Development Agreement outlines allowed land uses, lot size, land use intensities, transportation improvements, aesthetic requirements, etc. The development conditions outlined in the DA will be discussed in detail as part of this staff report.

As has been stated, the property proposed to be rezoned is located within the Deltona Activity Center. The Activity Center is recognized as a special planning area within the City Comprehensive Plan. The planning effort associated with the Activity Center is in recognition of the strategic importance of the area representing a significant undeveloped land resource situated in close and accessible proximity to a major interstate interchange. The strategic importance of land near the Interstate 4/SR 472 interchange was recognized by the County as

part of the formulation of the County's 1990 Comprehensive Plan. More planning activity occurred through the years with the 1994 creation of the Southwest Activity Center (SWAC) land use overlay and the eventual establishment of an Areawide Development of Regional Impact (DRI) in the 2000s. As a result of a lack of development activity, in 2010 the Areawide DRI within the City of Deltona expired. The Activity Center planning area and related goals, objectives, and policies included as part of the City's Comprehensive Plan, has remained in effect.

The development proposal is to construct a building occupying a 1,094,865 square foot base area, containing, with an upper mezzanine, 1,414,894 square feet of warehouse space. This building can be used for distribution/logistics and/or light manufacturing. The project as planned will feature numerous cargo bays, ample drive aisles needed to accommodate logistically oriented truck ingress and egress, and separated parking for trucks and employees. There is also an internal bus stop planned, and an area for the public to pick up and drop off merchandise. The facility at the size proposed represents a substantial private investment and will create numerous jobs. The facility is envisioned to generally operate 24 hours a day under two shifts.

**Support Information:**

1. Potable Water: Volusia County Utilities – Deltona North
2. Sanitary Sewer: Volusia County Utilities – Deltona North
3. Fire Protection: Deltona Fire (Station 65)
4. Law Enforcement: Volusia County Sheriff's Office (VCSO)
5. Electricity: Duke Energy

**Matters for Consideration:**

Section 110-1101, Code of City Ordinances, states that the City shall consider the following matters when reviewing applications for amendments to the Official Zoning Map:

**Whether it is consistent with all adopted elements of the Comprehensive Plan.**

The area proposed to be rezoned to IPUD is designated on the Future Land Use Map as being located within the Activity Center. There are several sub-land use designations under the overarching Activity Center designation which are intended to provide general guidance regarding the application of actual land uses. The area proposed to be rezoned is designated within an Industrial/Business Park land use subcategory. However, to ensure consistency with all provisions of the Comprehensive Plan, all development (with very few exceptions) must be processed as a Planned Unit Development. Therefore, the proposed IPUD rezoning application is consistent with the following policy and the underlying Activity Center sub-land use designation:

***Policy FLU2-1.5***

*Future development within the Activity Center shall require rezoning to a Planned Unit Development (PUD) or amendment to an existing PUD. Provided, however, that any development of an existing parcel that is 0.5 acres or less in size and which is permissible by the existing zoning classification assigned the parcel shall not require*

*rezoning to PUD if the existing zoning classification is consistent with the Activity Center Plan future land use designation.*

The Activity Center is earmarked for high intensity development including, but not limited to, commercial, service, and industrial uses. The Activity Center goal is encouraging economic growth and the “development of a key employment area...” The proposed principal uses within the proposed IPUD include distribution and light manufacturing. The Activity Center plan establishes guidelines and intensity standards for various land use opportunities within the Activity Center, and the following guideline articulates the City expectation for industrial uses within the Activity Center:

***INDUSTRIAL GUIDELINE***

*Industrial areas should facilitate a wide range of light manufacturing, distribution and warehousing type of uses. Also, envisioned are research facilities and various flex space uses. Industrial uses shall be located in areas that have a full range of transportation and utility services. Maximum FAR – 1.0*

Based on the above guideline, the distribution and manufacturing uses proposed within the IPUD are consistent with the above guideline. In addition, the IPUD Development Agreement will establish a floor area ratio (FAR) below the 1.0 threshold as the maximum land use intensity applicable for the property. The actual development will have a FAR of a little less than 0.40.

The land use structure within the City has traditionally been oriented to residential. However, the City has sought to diversify the land use base. Deltona land use diversity goals are summed up as follows: 1) provide a greater range of readily available goods and services for residents. 2) Improve and enhance local employment opportunities. 3) Expand the tax base so there is less burden on residential property. With the above goals, the City has articulated a clear metric regarding land use diversification including the promotion of industrial uses within the following Comprehensive Plan provision:

***Policy FLU1-7.22***

*The City shall seek to ensure that its Future Land Use Plan Map provides for a minimum fifteen acres of commercial lands and two acres of industrial lands per 1,000 residents.*

The City has yet to implement the two acre per 1,000 residents for existing industrial land uses. However, the subject project will certainly assist the City in diversifying its land use base and achieving the stated goal in the above policy.

Even before the incorporation of the City of Deltona, the property proposed to be rezoned to IPUD was entitled for industrial uses. In addition, the property is strategically situated near a major interstate interchange and is well positioned for industrial development. Therefore, the IPUD rezoning request represents the next logical step in realizing the development potential of an area long planned for industrial uses. The IPUD rezoning is consistent with the below policy:

***Policy FLU1-7.10***

*The City of Deltona shall encourage the development and improvement of appropriate existing industrial areas.*

Land use compatibility is a major theme of the City Comprehensive Plan and is a primary driver of how land use entitlements are allocated and land development is managed within the City. The site proposed to be rezoned to IPUD is located well away from existing or planned residential areas. Therefore, impacts to neighborhoods will be minimal. In the context of the Activity Center, the IPUD project is an appropriate transition of land use intensity being situated between Interstate 4 and planned and existing businesses, like the Epic movie theater situated south and east of N. Normandy and Howland Blvds. Major institutional uses (Deltona High, YMCA and County water treatment infrastructure) are located even further east before the land use coverage becomes more residential in nature. To the south, along the N. Normandy corridor, the nearest residential areas are situated over 2,000 feet away from the most southern extent of the 85.1 acre property proposed for rezoning. The level of separation between the IPUD and existing residential areas is extensive and based on the distances involved, greatly reduces detrimental impacts to residential areas. However, there is recognition there could be off site impacts associated with the IPUD. The most obvious potential off-site impact could be vehicular traffic, and more specifically heavy truck traffic. To address truck traffic, travel patterns will be managed to encourage and otherwise require heavy trucks to access the IPUD through a dedicated driveway and direct trucks to utilize the most direct routes possible to the SR 472/Interstate 4 interchange. The intent is heavy truck traffic will be directed away from neighborhoods by a combination of access management, ingress/egress design, signage, and active enforcement. Compatibility, including minimizing off site impacts associated with heavy truck traffic, is consistent with the following provision:

***Policy FLU1-7.11***

*Review of industrial development proposals shall include consideration of compatibility between industrial and surrounding land uses.*

Within the Comprehensive Plan, the City has detailed land use location guidelines for common uses including industrial. The guidelines are listed below in *italics* and analyzed in light of the proposed IPUD.

***Policy FLU1-9.3***

***INDUSTRIAL***

1. *Be located with all structures outside of the 100-year flood plain;*  
None of the property is located within the 100-year floodplain.
2. *Have vehicular access to one or more major transportation systems such as: major thoroughfare routes, rail or airport;*  
The property has ready access to Interstate 4 by way of the SR 472/Interstate 4 interchange using City and County thoroughfares.
3. *Be accessible only to thoroughfare roadways, either by direct access or via an internal street system within a planned industrial area;*  
The 85.1 acre IPUD has direct access to City thoroughfare N. Normandy Blvd.
4. *Be located in a manner that will not cause through traffic in nearby residential neighborhoods;*

The IPUD site is located away from residential areas and heavy truck traffic will be channeled to the Interstate 4/SR 472 interchange.

5. *Be within commuting time of the labor force and accessible to the labor force via the thoroughfare system;*

The City of Deltona has a population of 91,007 people. 57% of the City population are of working age. Currently, 66% of the sizable and significant City workforce commutes to jobs outside the City. The IPUD will be a major employer, and the created jobs will be located in the immediate vicinity of the City labor force.

6. *Be served by central utilities and services;*

The project will be served by central water and sewer provided by the County.

7. *Be located on parcels of land large enough to adequately support the type of industrial development proposed and minimize any adverse effects upon surrounding properties;*

The 85.1 acre parcel is fully developable with limited development constraints – no wetlands, floodplains, severe slopes, etc. and is of ample size to accommodate the use in compliance with all City land development code requirements.

8. *Encourage research and development uses to locate at premium and high visibility sites;*

The IPUD is a distribution and/or light industrial use. The facility will involve modern logistic and manufacturing techniques, including cutting edge packaging, handling, and cargo management processes. The IPUD represents a premiere, contemporary facility within the City and siting the development along the interstate to showcase the project would be appropriate.

9. *Have intensity dependent upon type of use;*

Building mass and development intensity is commensurate with the type and nature of the use proposed.

10. *Industrial operations shall minimize or, where possible eliminate, the following impacts on the environment: .*

- a. *Odor, fumes, vapors and gases*

The IPUD will be an active use. Personnel, equipment, traffic, and inventory and/or manufactured goods will be in almost constant, carefully choreographed, and efficient motion. There will be emissions associated with the use from trucks and other vehicles. However, some of the mobility equipment (forklifts) will be powered by hydrogen fuel cells. Hydrogen emissions consists of water vapor. Therefore, the use will minimize the impacts of odor, fumes, etc.

- b. *Erosion and stormwater runoff.*

The use will be engineered and developed in a manner as to not cause erosion or stormwater impacts.

- c. *Noise.*

The site is located well away from residential areas and is located next a busy segment of Interstate 4. Noise associated with the IPUD will be subsumed into the constant din of the interstate.

- d. *Fire and explosion hazards.*

The IPUD will only be used for distribution and light industrial uses. Typically explosive handling and flammable processes are located within heavy industrial areas and will not be an allowed IPUD use.

*e. Radioactive elements.*

There will be no radioactive materials associated with the IPUD beyond what is typically associated with household goods.

*f. Electromagnetic interference.*

The IPUD will not emit electromagnetic interferences.

*g. Smoke, dust and dirt.*

The IPUD is planned to be used for distribution and light industrial activities only. Both activities are not considered 'smoke stack' industries. In addition, the development portion of the 85.1 acres will be contained within a building or otherwise paved. Therefore, there will be no dirt or dust created as part of the IPUD.

*h. Vibrations.*

The IPUD site is located well away from residential and other sensitive land uses. In addition, the IPUD only allows lower intensity industrial uses – light manufacturing and distribution. Those type of uses are not associated with extreme vibrations.

*i. Glare.*

The use will be situated within an enclosed building. There will be no outside processing, welding, or other activities involving glare.

*j. Hazardous wastes.*

The direct processing or management of hazardous wastes will not be part of the allowed IPUD light industrial and distribution uses.

*k. Toxic waste.*

Toxic wastes will not be a direct element of the light industrial or distribution uses allowed within the IPUD.

*l. Petroleum contaminants.*

There will be no processing, refining, or distribution of petroleum products.

*m. Trespass lighting.*

The site plan for the project will address trespass lighting. According to the Land Development Code, no lighting rated at or beyond one candle power can illuminate off site properties.

*11. Sites for individual industrial land uses shall be at least one acre in size;*

The IPUD site involves 85.1 acres.

*12. Industrial land use shall be reviewed for compatibility with surrounding land uses;*

The IPUD is well removed from residential and nearby business uses and there will be land development requirements, including access management which will minimize the impacts on adjacent uses.

*13. Shall meet all applicable land development regulations; and*

Project will comply with all City Land Development regulations as the project progresses through the land development review process.

*14. Shall be light industrial.*

The uses within the IPUD are limited to distribution and light manufacturing which represent lower intensity type industrial uses.

**Its impact upon the environment or natural resources.**

The 85.1 acre IPUD project can be described as forested and undeveloped. The forested condition is characterized by a dense, mature stand of sand pines. Other trees include, long leaf pine, sand live oaks and myrtle oaks. On site soils are sandy, well drained, and are suitable to support urban development. The soils are classed as follows: Astatula fine sand, Orsino fine sand, Paola fine sand, and Tavares fine sand. The property does provide habitat for gopher tortoises. However, as a result of years of fire suppression, the vegetation on the property is very dense. Densely vegetated land, notwithstanding well drained soils, is not conducive tortoise habitat. Thick vegetation typically limits herbaceous vegetation which tortoises forage, and the dense vegetation reduces tortoise fecundity. Therefore, the site will probably not support a high tortoise per acre population. The property will be surveyed for tortoises and any tortoises found on site will be relocated to a mitigation bank with suitable habitat. The site may also support scrub jays. However, ideal scrub jay habitat is low canopy xeric oak scrub with open patches of sand interspersed throughout the scrub oak. As has been mentioned, the property is forested with a significant over story component of mature pine trees. Jays do not occupy these densely forested landscapes. Predation and competition from other wildlife – including hawks and blue jays is too intense. Jays may be present on the property persisting in sub-optimal habitat along the margins of roadways and cleared areas. This is known in biological parlance as the edge ecotone effect. While the condition of the property is not conducive to supporting scrub jays, the property will be surveyed and if present the owner/developer will be responsible for working with the U.S. Fish and Wildlife Department to initiate a habitat conservation plan for the jays on site. The property is located in an area where there is other undeveloped or lightly developed land (pasture) in the area. Therefore, the property probably supports deer, hog and other game animals. Other wildlife would include common species such as raccoons, opossums, and song birds.

**Its impact upon the economy of any affected area.**

At over one million square feet of building footprint, the project is a significant investment in the City. The uses allowed are distribution and light industrial in nature. Many economic thinkers in the last 30 to 40 years have posited the American economy has transitioned from an industrial/manufacturing model to an information and service oriented market. Under the information and service economic paradigm, there is less reliance on manufacturing and centralized employment centers. While there is no doubt the U.S. economy has transitioned where service and information industries have grown, there is still growth within the logistics and light manufacturing sectors. These logistic and light industrial uses tend to be located where there is ready access to transportation systems and major markets. These uses also require adequate labor resources.



The development of this property reflects what is known in planning practice as the 'multiple nuclei theory'. The multiple nuclei theory, articulated by C. Harris and E. Ullmann in 1945, postulates certain guidelines which can drive the location of land uses. The following guidelines are applicable: 1) Land uses may require highly specialized facilities. In the case of the IPUD, that would be a large building with over 1.4 million square feet of floor area with ancillary paved parking and freight logistics area. 2) Certain uses can cluster taking advantage of supply chains, access availability to major arteries like Interstate 4. 3) Conversely, the separation of land uses can be driven by inherent incompatibilities. Incompatibilities can come in various forms including competition for scarce resources like affordable land or traffic capacity, emissions, noise, etc. The fact the IPUD property is well removed from sensitive land uses such as residential areas reinforces the multiple nuclei theory.

There are several metrics of which to evaluate the impact of the IPUD project on the economy of the area. The proposed approximately 1.4 million square foot facility represents an impressive private capital investment. Currently the 85.1 acres generates about \$20,000 in property taxes a year. However, using the Trader Joe's distribution facility in Daytona Beach as a comparable, the City could generate about \$950,000 a year in ad valorem revenue.

Perhaps the most remarkable benefit the proposed use will have on the local economy is a dramatic expansion of the job base. The use at full capacity the project is expected to generate numerous jobs spread over 2 shifts. Entry salaries will be competitive and there will be room for career growth. In addition, the salary will provide opportunity for younger workers within the City to obtain local employment. As evidenced by the high percentage of workers employed outside of the City, there is a significant jobs/housing imbalance. This project will help alleviate the City's jobs/housing imbalance. While the starting salary can be considered entry level, at least local workers will not have to incur high commuting costs expressed in terms of money (fuel), vehicular depreciation, and lost time.

While entry salaries may be somewhat modest, there are other valuable employment oriented considerations associated with this project: health insurance and other benefits. Many types of employment opportunities within the City are geared to the service sector and do not offer comprehensive benefit packages. A labor force covered by health insurance will result in a healthier population. There will be less household economic stress with regard to the cost of medical care. The demand for public services such as indigent health care will be lessened as well.

For many years there has been demand for sit-down restaurants and higher scale services within the City. While the service sector within the City has expanded, many restaurateurs have been reluctant to locate within the City citing a lack of a ready customer base of which to serve lunch. The lacking lunch customer base is directly related to the fact that nearly 50% of the population works outside of the City. However, the project will represent a major

local employment center which will grow the lunch customer base needed by the sit-down restaurant industry.

Finally, light industrial and distribution centers tend to locate in close proximity to other such uses. Light industrial and distribution centers value convenient access to transportation facilities, ready labor, and local service and supply chains needed to support such uses. There is vacant land in the area and therefore, room for similar uses to locate in the vicinity.

The use will be a positive for the economy of the City and local area. However, the City and other public agencies will still have to make investments in public safety, transportation, education, and other infrastructure to support the use.

**Notwithstanding the provisions of Article XIV of the Land Development Code, Ordinance No. 92-25 [Chapter 86, Code of Ordinances], as it may be amended from time to time, its impact upon necessary governmental services, such as schools, sewage disposal, potable water, drainage, fire and police protection, solid waste or transportation systems.**

- a. **Schools:** The IPUD will not directly generate the need for new student workstations.
- b. **Sewage Disposal:** Sanitary sewer (Volusia County Utilities). The County has the wastewater management capacity to serve the project.
- c. **Potable Water:** Central water (Volusia County Utilities). The County has the potable water capacity, both physical and permitted, to serve the IPUD. In addition, according to the County, there is ample flow for fire suppression purposes. Also, there will be an axillary fire suppression water tank on site to augment the central water system.
- d. **Drainage:** Appropriately designed and constructed on-site drainage facilities will address stormwater run-off.
- e. **Transportation Systems:** Traffic patterns associated with the project represent unique transportation dynamics and an opportunity to maximize existing traffic infrastructure. Understandably, transportation is a critical component of a project based on use and magnitude. Therefore, to more effectively address transportation, this narrative will be broken down into five sections: Traffic Characteristics of the City and the IPUD Project; Mitigation Measures; Access Management; Needed Transportation Improvements; and Facilitating Improvements.

**Traffic Characteristics of the City and the IPUD Project:** The City land use base is mostly residential with supporting commercial and institutional uses (schools) representing a smaller segment of the developed landscape. In addition, most of the Deltona work force commutes to jobs outside of the City. The land use mix and the commuting characteristics create traffic patterns which closely correspond to the normal daytime business cycle – 8:00 am to 5:00 pm. For the purposes of transportation planning, the most congested times within the City are in the mornings when people are driving to work and school and in the evenings when commuters are returning from work. This traffic pattern can be observed on any week day along major thoroughfares within the City like Howland Blvd. or Saxon Blvd. especially near Interstate 4. In 2018, the City hired a traffic consultant to study City traffic patterns with the intent of more effectively and efficiently guiding transportation capital

planning and managing development to maximize roadway capacity. Traffic counts on City thoroughfares were also a component of the study. Some of what the study documented/reinforced was the aforementioned AM and PM peak traffic patterns. What was also elucidated by the study was the use of the main City roadway network on an hourly basis. The hourly finding was there is ample capacity on City thoroughfares during non-peak times. To clarify traffic volume spikes, AM peak times within the City would be generally considered between the hours of 7:00 am and 9:00 am and PM peak times would be from 4:00 pm and 6:00 pm.

The engineering firm Kimley-Horn performed a Traffic Impact Analysis (TIA) for the IPUD project. The TIA first quantified and then characterized the traffic generated by the IPUD use. The project as proposed is projected to generate 2,596 total trips per day. 336 of the 2,596 trips will consist of heavy cargo trucks – 18 wheelers. The traffic generation rates were derived utilizing similar distribution/light manufacturing facilities within the southeastern United States. To put the IPUD traffic generation in perspective, a 280 unit residential subdivision would generate approximately the same number of trips less the presence of heavy truck traffic. The non-hauler, commuter traffic generated by the IPUD is projected to be distributed along major transportation arteries within the Deltona, Orange City and southeast Deland areas. 56% of the trips are projected to travel north on N. Normandy Blvd. where the trips are dispersed east and west along Graves Av. Westbound Graves Av. trips extend into Orange City. Other trips will utilize Interstate 4 or continue northwest along the Dr. Martin Luther King Jr. Blvd. and SR 472 right of ways into the greater Deland area. Approximately 17% of those trips will be heading east along the Howland Blvd. corridor accessing other areas of Deltona. 44% of the light duty vehicle trips are projected to be southbound along the N. Normandy Blvd. corridor. Those trips will be disseminated eastward along the Elkcum Blvd. and Saxon Blvd. thoroughfares. According to the TIA, heavy truck traffic is evenly split east and west on Interstate 4 exclusively utilizing the SR 472 and I-4 interchange. The TIA indicates the I-4 west bound trucks will travel west along Graves Av. over interstate and traverse northward on Kentucky Av. The trucks would then turn right on SR 472 to access the I-4 west bound on ramp. The east bound I-4 truck traffic is projected to utilize SR 472 via N. Normandy Blvd. to Graves Av. and then left through the SR 472/Howland Blvd. Graves Av. intersection. No trucks are proposed to travel south on N. Normandy Blvd.

**Mitigation Measures:** As far as traffic generation rates, a comparison was made between the IPUD and a hypothetical 280 unit residential subdivision. The approximate total trips are similar, but the characteristics of how the trips impact the transportation network are very different. Traffic from a typical residential subdivision is evident during the day and directly contributes to the AM and PM traffic peaks. In contrast, the IPUD will be operating on a 24-hour cycle with two shifts staffing the facility. Each shift will be approximately 12 hours. Truck traffic will also be entering and exiting the site on a 24-hour schedule. The 24-hour nature of the use and related shift cycles creates a condition where the IPUD traffic impacts can be off-set by shift changes not directly corresponding with the AM and PM peak traffic

demands. In short, the shift changes can mitigate traffic congestion in which traffic generated from the use can occur at times of low transportation demand. Roadway capacity is measured at peak times – typically AM and PM demand periods. Furthermore, roadway capital improvement programs tend to be driven by the need to address peak hour congestion. As has been stated, roadways within the City have plenty of capacity to support traffic during off-peak hours. The use of the non-peak roadway capacity represents an efficient use of existing public infrastructure and creates a condition where the need for extensive capital improvements are minimized and in some cases deferred until there is a demonstrated need predicated on background traffic expansion and future development. The shifts proposed for the workforce are as follows:

Early Morning Shift – Outgoing/Incoming	Morning Shift - Incoming	Afternoon Shift - Outgoing	Afternoon Shift - Incoming
4:30 – 5:15 am	6:30 - 7:15am	5:30 – 6:15pm	5:30 – 6:15 pm
414 outgoing/34 incoming	573 incoming	630 outgoing	414 incoming

The number of employees leaving the early morning shift will result in 414 outgoing trips. There will be 34 incoming trips associated with the early morning shift. Another 573 incoming trips will be generated as the day staff arrives for the morning shift. As has been stated, the AM peak traffic in the City is between 7:00 am and 9:00 pm. There is a slight overlap of 15 minutes between normal AM peak times and the morning shift changes. However, most of the IPUD employees will be at work and off the roadway network before the AM peak volumes increase. The AM peak window of 7:00 am to 9:00 am has been predicated on historical traffic flow. What has changed recently is the later 8:30 am high school start time. This start time should smooth traffic during the AM peak, especially for the Howland Blvd. corridor near Deltona High School, by shifting more traffic to later in the AM peak timeframe.

The shift characteristics of the use and the prevailing traffic flows indicate there should be little or no impact regarding the AM peak movement. However, the afternoon shift change does occur during the PM peak return cycle. To better understand the traffic dynamic during the PM peak, the type and nature of the afternoon shift change will be analyzed in detail. The afternoon shift change will involve 1,017 trips – 414 incoming and 630 outgoing.

Based on the general flow of traffic within the City, most of the PM peak trips are heading east travelling from Interstate 4 to home. Therefore, the incoming trips from residential

areas of the City to the IPUD site will not greatly influence the prevailing PM peak traffic easterly movement. The outbound trips associated with the project could impact the PM peak traffic sequence. To better gauge the outgoing afternoon shift traffic, the Kimley-Horn traffic distribution percentages as illustrated in the TIA will be used to quantify how the trips will be distributed on the City roadway network.

Of the 603 trips leaving the IPUD facility in the afternoon, 338 will traverse to the north on N. Normandy Blvd. 265 trips will head south on N. Normandy. Of the 338 northbound trips, 95 will make a left hand turn on to Graves Av. and head west across Interstate 4. 57 of the 338 trips will head east on the Howland Blvd. corridor to destinations within the City. The remaining trips are forecasted to access SR 472 and be absorbed as background traffic on Interstate 4 or SR 472 towards the Deland area. The nearest traffic split for the 265 southbound N. Normandy Blvd. trips is the intersection of N. Normandy Blvd. and Elkcarn Blvd. 24 cars will travel eastbound on Elkcarn Blvd. 82 trips will continue travelling south along N. Normandy where the traffic splits again at the intersection of N. Normandy Blvd. and Saxon Blvd. A significant percentage of the southbound N. Normandy Blvd. trips are absorbed into the network of local roads like Vicksburg St. and Antoinette St. before the intersection of N. Normandy Blvd. and Elkcarn Blvd.

The above mentioned traffic distribution scenario indicates clearly the City transportation matrix and land use structure is very effective at distributing traffic. Furthermore, the actual traffic volumes, after trip distribution, on City thoroughfare streets as a result of the outgoing IPUD afternoon shift change is not very significant. In the context of the 24 trip impact on Elkcarn Blvd. the volume equates to no more than three new houses being built near the corridor.

With regard to actual traffic volumes on the City thoroughfares in the area, there is capacity to support the use or there are improvements proposed or required to mitigate the traffic. N. Normandy Blvd. is a two lane rural cross section roadway. Currently, the roadway from Graves Av. to the Rhode Island Rd. extension carries about 8,700 vehicles per day. However, the road can carry about 13,600 trips per day according to design and a level of service "E" policy constraint. Basically, N. Normandy Blvd. with approximately 5,000 trips of capacity is adequate to support the 2,596 trips generated by the IPUD. Other thoroughfares like Elkcarn Blvd. are proposed to be improved with 5 foot wide paved shoulders. The paved shoulders will improve operation of the roadway, improve safety and increase capacity. The Elkcarn Blvd. paved shoulder project should be complete sometime in 2020 or early 2021. Longer term transportation projects include the six lane expansion of Saxon Blvd. between Interstate 4 and the intersection of N. Normandy Blvd. and Saxon Blvd. This improvement, while not currently funded, will be undertaken by FDOT in the next number of years as part of the I-4 Beyond the Ultimate project. Finally, in the future, there will be other transportation improvements occurring such as the Rhode Island Rd. extension flying over I-4 to connect to N. Normandy Blvd. that will provide greater mobility options in the area.

The shift changes will essentially distribute much of the traffic to off peak hours. Though there will be some overlap with the PM peak, those trips will be efficiently distributed through a network of thoroughfare and local roadways. The shift changes will help efficiently utilize already existing investments in public infrastructure and would be consistent with the following Activity Center Local Plan objective:

**OBJECTIVE FLU2-2**

*Promote development and programs, which are designed to alleviate traffic congestion.*

Votran (Volusia Transit Authority) has just implemented a new bus route (Route 25) focused on the Howland Blvd. corridor. Stops include City Hall, The Center at Deltona, Halifax Hospital, and the Epic movie theater. Ridership on Route 25 is low, but the route is new and headways are high – one hour. The IPUD project is well positioned to be included as a stop along Route 25. In addition, the IPUD MDP depicts an internal bus stop. Therefore, to encourage multi-modal transportation within the City, the concept of an on-site bus stop is supported. However, there will need to be an agreement between Votran and the applicant to address right of entry and design parameters for the circulation of the bus and function of the bus stop. The requirement for the developer and Votran to facilitate an internal bus stop will be outlined as part of the IPUD Development Agreement. Initial conversations with Votran staff indicated service of a major employer like this project could increase ridership, result in lesser headway times, and expand general transit service Citywide. In addition, Votran is amenable to adjusting route schedules to correspond with proposed shift changes – morning and early afternoon at least. The proposal to establish an on-site bus stop, improve multi-modal transportation, and coordinate with Votran is consistent with the following provision:

**Policy T1-8.2**

*The City of Deltona shall coordinate with the River to Sea TPO, VOTRAN and other entities as deemed appropriate to explore meaningful ways to ensure the transportation disadvantaged population is adequately served by transit. These may include implementation of service standards, reevaluation of routing based on demographic and land use information, implementation of special transit services, etc.*

**Access Management:** Access management is a critical method to protect roadway capacity, promote safe travel patterns, and in some cases direct traffic impacts away from residential areas. The basic goal of access management is to remove turning cars from travel lanes in a manner that minimizes impacts on through traffic and reduce trips on City thoroughfares through cross access. The project is proposed to have four separate access points on N. Normandy Blvd. N. Normandy Blvd. is a two-lane City thoroughfare road with a 45 mph posted speed limit. The northern most access will use a road known as Energy Av. Energy Av. is a paved two-lane facility currently accessing a Duke Energy electrical substation. Energy Av. will be extended to the IPUD property and is designed to connect to the heavy truck distribution area of the project. Basically, Energy Av. and related extension will be earmarked for heavy truck traffic only. Cargo traffic will not be able to use any other of the

three access points. The other three access points located to the south will serve as entry and exit from the main parking lot including transit/bus traffic and non-distribution oriented deliveries. Access management in the context of the IPUD project include left and right turn lanes, specific access channelization, and traffic signalization. Access management improvements are considered needed land development upgrades directly related to providing functional access to the property. Therefore, the following improvements shall be funded by the developer and shall not be the responsibility of the City or other government entity to fund, provide or otherwise off-set through fair share or other similar arrangements. Driveways will be described from north to south:

- a. Energy Av. (Driveway 1) will be reserved for heavy truck traffic ingress and egress to the IPUD. Already the road is used by Duke Energy for heavy equipment to access an electrical substation. The substation also is used by the power company to stage vehicles and material needed for local power outage response. As per the Kimley-Horn TIA, no truck traffic is forecast to traverse south on N. Normandy Blvd. and directing truck traffic to the SR 472/I-4 interchange is a preferable scenario. Neighborhoods located along the N. Normandy corridor from Firwood Dr. to Saxon Blvd. could be deleteriously impacted by extensive truck traffic. The Energy Av. driveway at N. Normandy will be a partial access point featuring right in, right out and left out only movements To discourage long wheel base traffic (i.e. heavy trucks) from making southbound movements, the access throat will need to be redesigned to feature a 20 foot radius on the southern margin of the driveway with a curb and berm. Also, the driveway will be posted to indicate trucks will be prohibited from making right hand turns. This traffic control will be subject to enforcement by the Volusia County Sheriff's office and truck drivers can be cited for making illegal right hand turns. Finally, there is a license plate reader near the proposed driveway along N. Normandy Blvd. This electronic reader will be deployed to enforce the right turn prohibition for exiting heavy truck traffic. To support turning truck traffic from the southbound travel lane entering the project, a minimum of a 315-foot deceleration lane shall be constructed. The deceleration lane shall be curbed/guttered. This intersection will be fully signalized and the signal shall be synchronized with other signalization. Finally, with the goal of discouraging illegal left hand movements the driveway needs to be treated with a raised "pork chop" and ancillary "bat wing" design. The City shall determine the exact dimension and design elements during the land development review process. To facilitate appropriate access for Duke Energy to efficiently respond to power outages, etc. the applicant shall enter into a cross access easement or some other arrangement with Duke Energy (or successors) to access through the IPUD property to utilize other driveways.
- b. Driveway 2 will be a full access and shall feature a right turn lane of at least 265 feet. The deceleration lane shall be curbed and guttered. This entrance will be controlled with a full traffic signal and appropriately synchronized.

- c. Driveway 3 shall be designed as a right in and right out only facility. The right turn lane shall have a minimum length of 265 feet each and be treated with curb and gutters. In addition, to discourage illegal left hand movements a “pork chop” and a “bat wing” of sufficient dimension shall be constructed. The pork chop/bat wing shall consist of raised concrete.
- d. Driveway 4 shall be a full access and treated with a right turn lane of no less 265 feet in length. The right turn lane shall feature curb and gutters. A need for a traffic signal at this driveway has not been established. Therefore, no later than one year after a C.O. is issued for the project, a signal warrant study shall be completed by the developer and submitted to the City Development Review Committee for review and comment. If warranted, the signal shall be constructed by the developer within six months of the study being completed. Finally, when the driveway improvements are constructed, the driveway shall be designed and built to accommodate poles, control boxes, and other signal infrastructure. All City required easements for signal management shall be part of the driveway design.
- e. Center 12 foot turn lane constructed within the Normandy Blvd. envelope beginning beyond the southern property boundary, as applicable, with a two to three lane transition. Transition should be clearly demarcated and should not be combined with the left turn movement into Driveway 4. Then the three lane expansion should extend to Energy Av/Driveway 1. North of signalized Driveway 1 (Energy Av.) the three lanes shall transition back to two lanes.
- f. To facilitate truck access an extra turn right lane shall be constructed along N. Normandy Blvd. at the intersection of N. Normandy Blvd. and Graves Av. The right turn lane shall be a minimum of 550 feet in length.

The implementation of effective access management is consistent with the following Comprehensive Plan policies:

**Policy T1-1.4**

*The City of Deltona shall maintain land use regulations, including, but not limited to, access control/management and cross access easements, to facilitate safe and efficient mobility on the City transportation network.*

**Policy T1-3.2**

*The City of Deltona shall maintain land use regulations, including access management, which provide for the continued safe and efficient movement of local traffic. Such regulations also maintain, and enhance roadway level of service, capacity, and mobility.*

**Policy T1-5.2**

*The City of Deltona shall strategically review and study signalized intersection operations. This information will be used to determine and prioritize intersection improvements including but not limited to turn lane additions/modifications, signal timing, etc.*



**Needed Transportation Improvements:** To assist in the review of the IPUD project, the City hired BCC Engineering to review the Kimley-Horn TIA and to provide assistance in the formulation of appropriate access management requirements and traffic mitigation. The BCC review of the TIA revealed various technical insufficiencies including traffic volume assumptions, intersection synchro data, signal timing, etc. The Kimley-Horn TIA has since been updated with the goal of technically reconciling the document. Many of the recommendations regarding access and mitigation have been coordinated with BCC and the County.

As documented by the Kimley-Horn TIA, the project could cause numerous roadway segments and intersections to fail. Some of these roadway and intersection segments are already failing to support present traffic volumes. The failing roadway segments and intersections are located both within the City and outside the City. Kimley-Horn recorded extensive improvements needed to the upgrade the local roadway network. The improvements involved roadways ranging from Orange Camp Rd. in the Deland area to the Saxon Blvd. segment located between Tivoli Dr. and Providence Blvd. Included in the list is a major lane mile expansion of Interstate 4 which is part of the Beyond the Ultimate I-4 project. The improvements needed as represented in the Kimley-Horn TIA, less the improvement to I-4 within the City to 10 lanes, has a total cost of about \$50 million. This amount is so high there is no way a single project – even a large scale project – can be relied upon to come close to resolving the identified deficiencies. However, these deficiencies will be addressed over time through the efforts of federal, state, and local entities. , To a certain extent, the private sector will also play a role in the incremental improvement of transportation infrastructure.

To comprehensively manage traffic associated with project, City staff has worked extensively with Volusia County Traffic Engineering staff. Based on those interactions, the Kimley-Horn list has been greatly refined to include improvements to roadways and intersections near the confluences of N. Normandy Blvd., Graves Av., and SR 472/Howland Blvd. However, the suggested improvements do not represent a stand-alone traffic management solution. The off-site improvements combined with the shift changes and access management are part of an integrated approach to efficiently using the existing transportation network and protecting roadway mobility. Off-site needed transportation improvements are as follows and can be described generally as lane mile additions and intersection improvements:

#### **Lane Mile Additions**

##### **Graves Av. extending from Howland Blvd/SR 472.**

Widen Graves Av. from SR 472/Howland Blvd. to N. Normandy Blvd. to four lanes. There shall be a transition back to two lanes extending west of the intersection of N. Normandy Blvd. and Graves Av. All improvements will need to be designed and constructed at urban cross section standards. Graves Av. is a County road and therefore, the exact design parameters will be determined by the County. In addition, the Graves Av. lane mile expansion shall be subject to a fair share agreement with the County and the applicant.

## **Intersection Improvements**

### Intersection of N. Normandy and Graves Av.:

Expand the westbound left lane of Graves Av. to N. Normandy to increase storage. The County shall determine the exact design.

Construct an eastbound right-turn lane from Graves Av. to N. Normandy Blvd. County will provide the length and design elements of the right-turn lane.

The above intersection improvements shall be subject to a fair share agreement with the County and the applicant.

### Intersection of SR 472/Howland Blvd. and Graves Av.:

Install a right-turn lane from SR 472 on to Graves Av. The right turn lane shall extend from the acceleration lane associated with the I-4/SR 472 eastbound I-4 off ramp.

Construct dual left-turn lanes for the westbound movement from Howland Blvd. to Graves Av. The County and State will determine design criteria for the above improvements.

The above intersection improvements shall be subject to a fair share agreement with the County and the applicant.

### Intersection of N. Normandy Blvd. and Graves Av./Stormwater:

Extend the northbound left turn lane a minimum of 310 feet. .

Design and construct all stormwater management infrastructure associated with the aforementioned improvements along the N. Normandy Blvd. corridor.

The above improvements shall be subject to a fair share agreement with the City and the applicant.

**Facilitating Improvements:** The access management elements of the project along N. Normandy Blvd. will be part of the construction costs associated with building the project. Those costs will be paid for by the developer. The subject off-site improvements (lane mile extensions and intersection improvements), when complete, will not only support the IPUD but also add capacity to the local roadway network. Therefore, financing the improvements will be addressed through proportionate fair share agreements with the County. Fair share allows impact fees through the issuance of developer credits to be used to improve capacity on roadway infrastructure. The advantage of a fair share arrangement is improvements can be constructed by a developer relatively quickly and there is an expectation the construction of all off-site improvements will be performed by the developer under appropriate right-of-way use permitting. The capacity improvement on N. Normandy, (left turn lane extension) will be eligible for City impact fee credits. Other options in the long term to finance improvements include grants by the State of Florida DOT, and/or the Department of Economic Opportunity.

**Any changes in circumstances or conditions affecting the area.**

There are no changes that affect the area.

**Any mistakes in the original classification.**

None. The Comprehensive Plan Future Land Use Map has designated the 85.1 acre IPUD property for industrial type uses for many years.

**Its effect upon the public health, safety, or welfare.**

The IPUD represents a large scale development within the City. As with all Planned Unit Developments, there is a written Development Agreement (DA). The DA represents development conditions determined by the City and the applicant/developer. The goal of the IPUD DA is to allow compatible development forms, consistent with the Comprehensive Plan, which do not impact the health, safety, or welfare of the community. Therefore, the following changes are suggested to the Development Agreement to implement these very basic elements of government function:

- 1) The Developer shall be recorded as part of the DA as Seefried Industrial Properties.
- 2) Floor Area Ratio (FAR) needs to be figured on the actual floor area in light of the 85.1 acre parcel size. The FAR also needs to be calculated on the upper level square footage afforded by the “mezzanine”. However, the FAR shall not exceed 1.0.
- 3) Prohibited uses shall include the primary transport, manufacturing, handling or other management of radioactive or hazardous/toxic materials. The goal is the facility will not be used for the processing, transfer, or storage of such materials.
- 4) The traffic modeling and related traffic mitigation are predicated on a distribution/light manufacturing facility. Retail uses are not part of the traffic conclusions. Therefore, retail uses should not be part of the allowed uses. Uses should be limited to only distribution and/or light industrial.
- 5) The term “limited direct product pick up and product returns” needs to be further defined. In addition, this general public access will need to be quantified in related to traffic generation and internal circulation.
- 6) Please note that lot coverage is defined as an area of a lot covered with principal and accessory structures. The project as proposed has a lot coverage area of 30%.
- 7) Maximum building height shall be increased to 60 feet.
- 8) The transportation section of the DA will be updated to include the access management and off-site improvements illustrated in this staff report.

**Conclusion/Staff Recommendation:**

The project proposed as part of the IPUD rezoning request represents a significant investment within the City. After the project is opened it will in all likelihood constitute the largest private employer in the City. The IPUD at the scope and magnitude proposed, certainly furthers City long standing economic development goals –

employment opportunities and tax base diversification. In addition, the expansion of the City job base is an important component to improve City sustainability into the 21<sup>st</sup> century. Commuting times will be shortened resulting in less energy usage and regional traffic volumes on major roadways such as Interstate 4 will be lowered. In addition, the time savings for the average worker not confronted with a long commute can translate into more personal time to spend with family and engage in other quality of life pursuits.

With a useful life span of at least 50 years, the project represents not only a long-term private asset but also a continuing and substantial economic resource for the City. Throughout the life of the project, there is anticipation the building and site will be repurposed at least once and during that timeframe, there could be various end users. For example, the General Motors Fremont, California assembly plant opened in 1960 and was sold to Tesla Motors in 2010. The subject plant that once manufactured Chevy Chevelles is still in use today building cutting edge Tesla vehicles.

The IPUD proposal is consistent with the Comprehensive Plan and is compatible with land uses planned in the area. There will be upgrades to transportation infrastructure which will benefit the project and expand capacity on City roads. In addition, the project will be managed to efficiently maximize existing investments in City infrastructure. Other infrastructure like water and sewer service is in place to serve the IPUD. The IPUD is located well away from residential areas but is in close proximity to the City labor force. Finally, surrounding land uses, existing and planned, are business or industrial oriented. Therefore, the IPUD will be compatible with surrounding existing and future land uses. Finally, the land is environmentally suitable for intensive development.

In light of the above, staff recommends the Planning and Zoning Board recommend to the City Commission the City Commission approve the IPUD request with the changes suggested to the Development Agreement.