GROUP JFO

Traffic Engineering • Transportation Planning

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August 11, 2023

Sent via e-mail: patriciasesta@edc-Inc.com

Patricia "Trish" Sesta, Planner | Planning Division Engineering Design & Construction, Inc. 10250 SW Village Parkway - Suite 201 Port Saint Lucie, Florida 34987

Tradition Commerce Park [Tambone Parcel B] Re: SOUTHERN GROVE DRI Traffic Impact Statement Parcel ID: 4315-804-0003-000-8

JFO Group Inc. has been retained to evaluate a traffic impact analysis to determine compliance with City of Port St Lucie ULDC standards associated with the Site Plan application for 62,750 SF of Warehouse development on 5.86 Acres of Tract "B" at the Tradition Commerce Park property.

The Tradition Commerce Park property is located just east of SW Village Pkwy, ±1.5 miles south of Tradition Pkwy in the City of Port Saint Lucie, Florida. Figure 1 shows the project location in relation to the transportation network. Parcel ID associated with this project is 4315-804-0003-000-8. A copy of the property appraiser information for the site is included as Exhibit 1. Exhibit 2 includes a copy of the plat while Exhibit 3 includes a draft site plan of the proposed project.

Project trip generation rates used for this analysis were based on the 11th Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual. Exhibit 4 includes a copy of the Trip Generation Rates used in this analysis. Table 1 shows the equations used in order to determine the trip generation for Daily, AM, and PM peak hour conditions while Table 2 summarizes the net Daily, AM, and PM peak trips potentially generated by the proposed development.

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Tradition Pkwy	
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Discovery Way	er Blv
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SITE -	
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Figure 1 : Project Location

	Land Use ITE Code Daily Trip Gen.		AM Peak Hour			PM Peak Hour			
Lana Use			In	Out	Total	In	Out	Total	
Warehousing	150	T=1.58(X)+38.29	77%	23%	T=0.12(X)+23.62	28%	72%	T=0.12(X)+26.48	
General Office	710	Ln(T)=0.87Ln(X)+3.05	88%	12%	Ln(T)=0.86Ln(X)+1.16	17%	83%	Ln(T)=0.83Ln(X)+1.29	

Table 1: Trip Generation Rates

According to Table 2, the net Daily, AM and PM peak trips potentially generated due to the proposed development are 283, 54 (44 In/10 Out) and 58 (13 In/45 Out) trips respectively.

Table 2: Trip Generation

	Intensity	Daily Traffic	AM Peak Hour			PM Peak Hour		
Lana Use			In	Out	Total	In	Out	Total
Warehousing	52,320 SF	121	23	7	30	9	24	33
General Office Building	10,430 SF	162	21	3	24	4	21	25
Σ	62,750 SF	283	44	10	54	13	45	58

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6671 W Indiantown Rd • Suite 50-324 • Jupiter, Florida 33458 T: (561) 462-5364 • F: (561) 465-8044 • info@jfo.us

Driveways are being proposed aligning with the proposed driveways across the street. Figure 2 and 3 provide Daily, AM and PM peak hour driveway volumes for the *Tradition Commerce Park* property.



Figure 2: Project Driveway Volumes W/O Hegener Drive Extension to Village Pkwy



According to the City of Port St Lucie Engineering standards, exclusive right turn lanes for driveways are required when the operational aspects of the driveway meet the volume and speed criteria presented in Table 8-5 of Section 8.12.7, where a traffic study indicates that the LOS is degraded by the proposed development, or where required for safety reasons even though the peak hour turn volumes may be lower than specified in Table 8-5. Hegener Drive in front of the subject site will have a design speed of 40 MPH and a posted speed limit of 30 MPH. Consequently, based on the posted speed limit, right turn lanes are warranted on unsignalized driveways when the number of right turns per hour are 35-55¹.

Given the driveway volumes shown on Figure 3 and the City of Port St Lucie Engineering standards, exclusive right turn lanes will not be required at the project driveway, even when assuming the office component of the warehouses as General Office Buildings. On the other hand, as required by the City, a continuous southbound left turn lane will be built in front of the site.

As part of a conservative analysis and as typically requested by the City, the proposed 62,750 SF of Warehouse development was divided into 52,320 SF Warehouse and 10,430 SF Office for trip generation purposes. The net Daily, AM and PM peak trips potentially generated due to the proposed 62,750 SF Warehouse development at Tract "B" of the Tradition Commerce Park are 283, 54 (44 In/10 Out) and 58 (13 In/45 Out) trips respectively. Traffic concurrency for this site is vested through the Southern Grove DRI².

Sincerely,



Enclosures: Exhibit 1: Property Appraiser Information Exhibit 2: Plat Exhibit 3: Site Plan Exhibit 4: ITE Trip Generation Rates

any electronic copies

Printed copies of this document are not considered signed and sealed and the signature must be verified on

2023 using a Digital Signature.

Ortega, PE on August 11,

This item has been electronically signed and sealed by Dr.

¹ The lower threshold of thirty-five right turn vehicles per hour would be most appropriately used on higher volume two lane roadways where lateral movement is restricted. The fifty-five right turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (fifty feet or greater).

² According to the Treasure Coast Regional Planning Council (2021), the Southern Grove DRI included ±3,600 acres originally approved for 7,400 residential units, 3.7 million SF of retail, 2.4 million SF of office, 2.5 million SF of research and development, 4.6 million SF of warehouse/industrial, nearly 800 hotel rooms, and a 300-bed hospital. 2023-08-11_Tradition Commerce Park Tract B_Traffic_1133.17

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Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

Property Identification

Site Address: TBD Sec/Town/Range: 22/37S/39E Parcel ID: 4315-804-0003-000-8 Jurisdiction: Port Saint Lucie

Ownership

Tradition Commerce Park LLC 5750 Powerline RD Fort Lauderdale, FL 33309

Legal Description

SOUTHERN GROVE PLAT NO. 40 (PB 102-39) PARCEL 1

Current Values

Just/Market Value:	\$2,807,368
Assessed Value:	\$11,003
Exemptions:	\$0
Taxable Value:	\$11,003

Property taxes are subject to change upon change of ownership.

• Past taxes are not a reliable projection of future taxes.

The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.

Taxes for this parcel: SLC Tax Collector's Office Z Download TRIM for this parcel: Download PDF **Z**

Use Type: 6999 Account #: 194190 Map ID: 43/22N Zoning:



Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	40.03
Land Size (SF):	1,743,707

Building Design Wind Speed

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Occupancy Category I

Speed	140	150	160
Sources/links:			

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Mar 10, 2022	4790 / 0324	0118	SPWD	Port St Lucie Governmental Finance Corp	\$4,969,600

Special Features and Yard Items

Type

Units Year Blt Qty

Current Year Values

Current Year Exemption Value Breakdown

Building:	\$0
Land:	\$2,807,368
Just/Market:	\$2,807,368
Ag Credit:	\$2,796,365
Save Our Homes or 10% Cap:	\$0
Assessed:	\$11,003
Exemption(s):	\$0
Taxable:	\$11,003

Start Year	AssessCode	Units	Description	Amount
2022	0093	0	Southern Grove Bond	\$0.00
Start Year	AssessCode	Units	Description	Amount
2022	0080	115.08	PSL Stormwater in Southern Grove	\$19,333.44
Start Year	AssessCode	Units	Description	Amount
2022	0092	20960.74268	Southern Grove CDD	\$20,960.74

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office **2**.

		Historical Values		
Year	Just/Market	Assessed	Exemptions	Taxable
2022	\$2,807,368	\$11,003	\$0	\$11,003
		Permits		
Number	Issue Date	Description	Amount	Fee

Click the following link to check for additional permit data in Port Saint Lucie

All information is believed to be correct at this time, but is subject to change and is provided without any warranty. © Copyright 2023 Saint Lucie County Property Appraiser. All rights reserved.

THIS IS NOT A SURVEY

DESCRIPTION:

PROPOSED TRACT "B" OF THE PROPOSED PLAT OF SOUTHERN GROVE PLAT NO. 42, ALSO BEING A PORTION OF PARCEL 1, ACCORDING TO THE PLAT OF SOUTHERN GROVE PLAT NO. 40, AS RECORDED IN PLAT BOOK 102, PAGE 39, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID PARCEL 1, SAID CORNER BEING THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF HEGENER DRIVE (A 100.00-FOOT-WIDE RIGHT-OF-WAY, AS SHOWN IN PLAT BOOK 84, PAGE 35, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA) AND THE NORTH LINE OF SAID PARCEL 1; THENCE NORTH 71°12'40" EAST, ALONG SAID NORTH LINE, A DISTANCE OF 733.73 FEET; THENCE DEPARTING SAID NORTH LINE, SOUTH 21°00'38" EAST, A DISTANCE OF 373.86 FEET; THENCE SOUTH 68°59'22" WEST, A DISTANCE OF 485.67 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 30.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 14°38'56", AN ARC DISTANCE OF 7.67 FEET TO A POINT OF TANGENCY; THENCE SOUTH 54°20'26" WEST, A DISTANCE OF 100.36 FEET TO THE AFOREMENTIONED EAST RIGHT-OF-WAY LINE OF HEGENER DRIVE; THENCE NORTH 35°39'34" WEST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 163.65 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1,400.00 FEET; THENCE NORTH 35°39'34" WEST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 163.65 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 1,400.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 11°50'17", AN ARC DISTANCE OF 289.26 FEET TO THE POINT OF BEGINNING.

CONTAINING 5.86 ACRES (255,144.87 SQUARE FEET), MORE OR LESS.

MICHAEL T. OWEN 1. 1. PROMESS 5 Sil PROFESSIONAL SURVEYOR & MAPPER PROITS PROITS FLORIDA REGISTRATION #5556 SKETCH & DESCRIPTION OF: PROPOSED TRACT "B" PORT SAINT LUCIE OFFICE 10250 SW VILLAGE PARKWAY SOUTHERN GROVE PLAT NO. 42 SUITE 201 PORT SAINT LUCIE, FL 34987 PREPARED FOR: 图 772-462-2455 ENGINEERS @ SURVEYORS ENVIRONMENTAL A www.edc-inc.com TRADITION COMMERCE PARK F.B.P.E. CERTIFICATE OF AUTHORIZATION 9935 L.B. CERTIFICATE OF AUTHORIZATION 8098 REVISIONS PROJ. #: 21-370 DATE: 8/11/2022 DRAWN BY: SPT CHECKED BY: MTO SCALE: 1"-150' CAD FILE: 21-325 Tract B.dwg SHEET z:\EDC-2021\21-325 - Miller - Southern Grove Property\SURVEY\Dwg - PDF\Sketch & Description\21-325 Tract B.dwg, 8/11/2022 11:24 AM 1 OF 2

Exhibit 2 Page 1 of 2



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Exhibit 3

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Land Use: 150 Warehousing

Description

A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas. High-cube transload and short-term storage warehouse (Land Use 154), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas.

Source Numbers

184, 331, 406, 411, 443, 579, 583, 596, 598, 611, 619, 642, 752, 869, 875, 876, 914, 940, 1050

Exhibit 4 Page 1 of 9

Warehousing (150)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 31

Avg. 1000 Sq. Ft. GFA: 292

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.71	0.15 - 16.93	1.48



Warehousing (150)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 36

Avg. 1000 Sq. Ft. GFA: 448

Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.19

Warehousing (150)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

Avg. 1000 Sq. Ft. GFA: 400

Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.01 - 1.80	0.18

Land Use: 710 General Office Building

Description

A general office building is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building houses multiple tenants that can include, as examples, professional services, insurance companies, investment brokers, a banking institution, a restaurant, or other service retailers. A general office building with a gross floor area of 10,000 square feet or less is classified as a small office building (Land Use 712). Corporate headquarters building (Land Use 714), single tenant office building (Land Use 715), medical-dental office building (Land Use 720), office park (Land Use 750), research and development center (Land Use 760), and business park (Land Use 770) are additional related uses.

Additional Data

If two or more general office buildings are in close physical proximity (within a close walk) and function as a unit (perhaps with a shared parking facility and common or complementary tenants), the total gross floor area or employment of the paired office buildings can be used for calculating the site trip generation. If the individual buildings are isolated or not functionally related to one another, trip generation should be calculated for each building separately.

For study sites with reported gross floor area and employees, an average employee density of 3.3 employees per 1,000 square feet GFA (or roughly 300 square feet per employee) has been consistent through the 1980s, 1990s, and 2000s. No sites counted in the 2010s reported both GFA and employees.

The average building occupancy varies considerably within the studies for which occupancy data were provided. The reported occupied gross floor area was 88 percent for general urban/suburban sites and 96 percent for the center city core and dense multi-use urban sites.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The average numbers of person trips per vehicle trip at the eight center city core sites at which both person trip and vehicle trip data were collected are as follows:

- 2.8 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 2.9 during Weekday, AM Peak Hour of Generator
- 2.9 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 3.0 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 18 dense multi-use urban sites at which both person trip and vehicle trip data were collected are as follows:

- 1.5 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.5 during Weekday, AM Peak Hour of Generator
- 1.5 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.5 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 23 general urban/suburban sites at which both person trip and vehicle trip data were collected are as follows:

- 1.3 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.3 during Weekday, AM Peak Hour of Generator
- 1.3 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.4 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New York, Ontario (CAN)Pennsylvania, Texas, Utah, Virginia, and Washington.

Source Numbers

161, 175, 183, 184, 185, 207, 212, 217, 247, 253, 257, 260, 262, 273, 279, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 419, 423, 562, 734, 850, 859, 862, 867, 869, 883, 884, 890, 891, 904, 940, 944, 946, 964, 965, 972, 1009, 1030, 1058, 1061

General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 59

Avg. 1000 Sq. Ft. GFA: 163

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.84	3.27 - 27.56	4.76

General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 221

Avg. 1000 Sq. Ft. GFA: 201

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 232

Avg. 1000 Sq. Ft. GFA: 199

Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

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