

November 25, 2020

VIA: Fusion Upload

Mr. Colt Schwerdt, P.E. Deputy Director  
City of Port St. Lucie – Public Works Department  
121 SW Port St. Lucie Blvd., Building B  
Port St. Lucie, FL 34984-5099

RE: P20-181 – Tradition Regional Business Park – Legacy Place, Lot 1 - Site Plan  
P20-171 – Southern Grove Plat 33  
C&T Project No. 20-127 (Response to Comments)

Dear Mr. Schwerdt:

Attached, please find a separated copy of the previously submitted traffic impact statement for the proposed development activity to be located at Tradition Regional Business Park – Legacy Place, Lot 1. If you need anything additional, please do not hesitate to let me know.

Sincerely,  
**CULPEPPER & TERPENING, INC.**

*DJ. Murphy*

Dennis J. Murphy  
Principal Planner

cc: Brad Berg  
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## LEGACY PARK – LOT 1 – TRAFFIC IMPACT SUMMARY REPORT

Pursuant to Policy 19-01 of the Port St. Lucie Public Works Department, the following represents the requested Traffic Impact Summary Statement for the proposed development of Lot 1 at the Legacy Park area of the Tradition Regional Business Park at Southern Groves.

The petitioner is proposing to construct a 245,000 square foot regional distribution center on certain property located in the southeastern portion of the existing Development of Regional Impact (DRI) known as Southern Grove. Overall regional traffic impacts associated with the Southern Grove DRI have been addressed through the previously approved Final Development Order for this DRI. This traffic summary report is intended to address the specific traffic and trip generation impacts from this proposed development site, only.

Per the most recent edition of the ITE (Institute of Transportation Engineers) Trip Generation Manual, the trip use category most closely aligned with our proposed use is ITE Code 156, *High Cube / Parcel Hub Warehouse*. A *High Cube / Parcel Hub Warehouse* is designed as follows:

A High-Cube /-Parcel Hub Warehouse is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. High-Cube Parcel Hub Warehouse typically serves as regional and local freight forwarder facilities for time sensitive shipments via air freight and round carriers.

The identified average trip generation rate for this type of facility is 7.75 trips per day, per 1,000 gross square feet of building area. In the case of our particular use, the expected trip generation based on the ITE codes for this type of facility is 1,899 trips per day. However, for this particular use, specific trip generation data has been collected from the facility operator who maintains numerous like type facilities throughout the United States. On average, this sized facility can be expected to generate a total of 2,313 daily trips. This translates to a daily trip rate of 9.44 trips per 1,000 square feet of building area. This rate is slightly higher than the national ITE average, but we believe it is a truer indicator of the expected system impacts from this use.

This proposed High-Cube /-Parcel Hub Warehouse facility is to be a 24 hour per day operation. There will be three work shifts, generally running from . For the purpose of this impact assessment summary, Peak Hour impacts are defined as being any one (or more) half hour period where the expected trip impacts from this site are to be greater than 1.5% of the average daily rates from this facility. Using this general standard, the expected Peak Hour period impacts from this facility, upon the local street network, are:

- 03:30 am to 04:30 am
- 10:00 am to 11:30 am
- 05:00 pm to 06:00 pm
- 09:30 pm to 12:00 am

A complete summary of the expected trip impacts from this facility is found in Appendix A.

Upon the completion of this facility, the distribution of trips from this site, on the local street network (the proposed SW Anthony F Sansone Sr Drive) are expected to be as follows:

<b>Travel Direction</b>	<b>Percent Distribution</b>	<b>Trip Assignment (daily)</b>
North:	0% <sup>1</sup>	0
South:	100%	2,313
East:	n/a <sup>2</sup>	0
West:	0% <sup>3</sup>	0

- Notes:
- 1.) SW Anthony F Sansone Sr Drive initial phases of construction terminate at project site.
  - 2.) No access to the east.
  - 3.) There is no westerly access as part of phase 1 development.



Entry traffic into this facility, during peak hour conditions, is expected as follows (Note: all autos will use the southern entry, and all trailers will use the north entry):

HOUR	Autos	Trailers
	VEHICLE ENTRY – PEAK HOURS	
00:00	In	In
03:30-04:00	67	9
04:00-04:30	85	6
04:30-05:00	19	6
10:00-10:30	2	5
10:30-11:00	1	6
11:00-11:30	67	5
11:30-12:00	84	5
17:00-17:30	67	5
17:30-18:00	87	9
18:00-18:30	21	11
21:30-22:00	67	11
22:00-22:30	84	10
22:30-23:00	20	10
23:00-23:30	4	12
23:30-00:00	0	15

The proposed project development site is located on the east side of SW Anthony F Sansone Sr Drive. Each of the project driveways will be served with dedicated right-turn lanes. The southern driveway will be for employee/visitor access only. The length of the southern right turn lane (no trailer use) is 95 feet, with no access gate restrictions. The length of the northern right turn lane is 200 feet (300 feet to access gates). During *peak periods*, the expected average entry volumes for vehicles at the southern driveway access will be, two per minute. The expected entry volumes for the trailered vehicles at the northern driveway will be less than one per minute.

Trailer arrivals and departures will be occurring all day, but at specified times. Arriving trailers are to be at pre-determined times and vehicle queuing (stacking) at the entry point is not permitted at this facility.

Onsite Circulation:

Refer to the project site plan. The project site has been segregated into two different use areas. Employee parking and trailer access. The two separate use areas do not intermingle and are separated by security fencing.



APPENDIX A  
Expected Trip Impacts – High Cube Parcel Hub Warehouse

Hour	Autos			Trailers			Total			% Project Trips
	Average Weekday			Average Weekday			Average Weekday			
	In	Out	Total	In	Out	Total	In	Out	Total	
00:00	0	0	0	16	12	28	16	12	28	1.2%
00:30	0	0	0	11	11	23	11	11	23	1.0%
01:00	3	0	3	10	14	24	13	14	27	1.2%
01:30	4	0	4	15	9	24	19	9	28	1.2%
02:00	0	0	0	15	11	26	15	11	26	1.1%
02:30	0	0	0	15	10	25	15	10	25	1.1%
03:00	0	0	0	16	15	30	16	15	30	1.3%
03:30	67	0	67	9	21	30	76	21	97	4.2%
04:00	85	67	152	6	19	25	91	86	177	7.6%
04:30	19	84	103	6	16	22	25	100	125	5.4%
05:00	2	17	19	5	11	17	7	28	36	1.5%
05:30	3	0	3	6	8	15	9	8	18	0.8%
06:00	4	0	4	5	4	9	9	4	13	0.6%
06:30	7	3	10	6	3	9	13	6	19	0.8%
07:00	9	4	13	3	4	7	12	8	20	0.9%
07:30	9	0	9	4	3	7	13	3	16	0.7%
08:00	4	0	4	4	3	7	8	3	11	0.5%
08:30	3	0	3	3	7	10	6	7	13	0.6%
09:00	2	0	2	4	7	11	6	7	13	0.6%
09:30	2	0	2	3	9	12	5	9	14	0.6%
10:00	2	67	69	5	14	19	7	81	88	3.8%
10:30	1	84	85	6	11	18	7	95	103	4.4%
11:00	67	20	87	5	12	18	72	32	105	4.5%
11:30	84	4	88	5	9	15	89	13	103	4.4%
12:00	17	0	17	5	9	15	22	9	32	1.4%
12:30	0	0	0	6	6	12	6	6	12	0.5%
13:00	0	0	0	7	7	15	7	7	15	0.6%
13:30	3	0	3	6	5	11	9	5	14	0.6%
14:00	4	4	8	5	4	9	9	8	17	0.7%
14:30	0	6	6	5	4	9	5	10	15	0.7%
15:00	0	2	2	6	5	11	6	7	13	0.6%
15:30	0	2	2	6	2	8	6	4	10	0.4%
16:00	0	2	2	11	8	20	11	10	22	0.9%
16:30	0	3	3	7	4	11	7	7	14	0.6%
17:00	67	72	139	5	5	10	72	77	149	6.4%
17:30	87	91	178	9	5	15	96	96	193	8.3%
18:00	21	21	42	11	7	19	32	28	61	2.6%



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	Average Weekday			Average Weekday			Average Weekday			
	In	Out	Total	In	Out	Total	In	Out	Total	
18:30	0	7	7	10	12	23	10	19	30	1.3%
19:00	0	6	6	14	6	20	14	12	26	1.1%
19:30	0	5	5	10	6	17	10	11	22	0.9%
20:00	0	0	0	14	8	22	14	8	22	0.9%
20:30	0	0	0	11	11	23	11	11	23	1.0%
21:00	0	0	0	9	9	19	9	9	19	0.8%
21:30	67	0	67	11	10	22	78	10	89	3.8%
22:00	84	0	84	10	10	21	94	10	105	4.5%
22:30	20	67	87	10	8	19	30	75	106	4.5%
23:00	4	87	91	12	10	23	16	97	114	4.9%
23:30	0	26	26	15	8	23	15	34	49	2.1%
	751	751	1,502	406	422	828	1,157	1,173	2,330	100.0%

