Quattrone & Associates, Inc.
Engineers, Planners & Development Consultants
4301 Veronica Shoemaker Blvd. Fort Myers, FL 33916
239.936.5222 | QAINC.NET | f 239.936.7228

March 1, 2018

To: Alvin Block, Principle Planner

From: Greg Stuart, MUP

RE: DCI2018-00003 The Pine Island 7-11 CPD

Pursuant to your 7 February correspondence pertaining to submitting additional information for DCI2018-00003, The Pine Island 7-11 CPD, below and attached you will find response materials and information.

1. The enclosed Application for Public Hearing has been revised to more accurately seek rezoning from two CPD's to a unified Minor CPD.

2. The Boundary Survey is revised to provide coordinate points and to certify the survey to Lee County.

3. The enclosed Application for Public Hearing has been revised to:

    a. Identify the purchase dates of two properties and a corrected commercial intensity.
    b. The corrected Application for Public Hearing and Request Statement identifies a total of 18,454 sf and 16 self-service fuel pumps. Please see the revised Traffic Impact Statement, Application for Public Hearing and the Request Statement. Also, the ITE identifies self-service fuel pumps as "re-fueling position", not Self-service Fuel Pumps. Obviously, they are one and the same.
    c. The List of Zoning Resolutions has been revised to include both CPD's (Z-07-015 for 4.78 ac. Creative Corner; Johnson Rezoning Z-00-064/Pine Island Center CPD Z-06-043).

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Quattrone & Associates, Inc.
Engineers, Planners & Development Consultants
4301 Veronica Shoemaker Blvd. Fort Myers, FL 33916
239.936.5222 | QAINC.NET | f 239.936.7228

4. The enclosed Request Statement has been revised to accurately identify the application as to rezone two CPD's into one unified CPD. The Request Statement has been further revised to more accurately detail the Parcel One and Parcel Two development program. Finally, please see attachment for a record of the second Greater Pine Island Civic Association presentation.

5. MCP response comments are as follows:

   a. Three MCP copies are being transmitted for Staff review.
   b. The air photo overlay has been removed from the MCP.
   c. All easements are on the subject property are accurately depicted and noted by official records documentation, with particular emphasis on the Lot U.E. and ROW Sidewalk Easement.
   d. Nikkis Lane driveway connections are identified on the revised MCP.
   e. The MCP identifies Nikkis as a Local Street and Pine Island Rd. as a County maintained arterial.
   f. The MCP has been revised to show the conceptual location of building, parking and the like for Parcels One and Two.
   g. The MCP has been revised to show the conceptual location of the Parcel One and Two shared service area.
   h. Given the route and weekly schedule, a public transit stop is not depicted on the MCP.
   i. The MCP depicts dry detention with an optional wet retention approach. If wet retention is used it will be in the same location as the depicted southwest dry detention area. on-site wet retention.

6. Please see the enclosed and revised Traffic Impact Statement.

7. Please see the enclosed and revised Deviation Schedule.

8. Please see the enclosed and revised Property Development Regulations Table. The height is consistent with Chapters 33 and 34, the setbacks have been restated consistent with the LDC, and the open space qualifying statement and the Water Body Setback parenthetical statement have been removed.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Quattrone & Associates, Inc.
Engineers, Planners & Development Consultants
4301 Veronica Shoemaker Blvd. Fort Myers, FL 33916
239.936.5222 | QAINC.NET | f 239.936.7228

9. As per 34-373(b)(1) a Surface Water Management Plan is required for a Major PD. The application is for a Minor PD and is exempt. That said, enclosed is the Surface Water Management Plan for the CPD.

10. A new Pine Island Water Company service availability letter has been requested to clarify that the company does have the capacity to service the project. The letter states an availability of 3,550 GPD. That quantity will adequately cover the demand of 15,000 sf of commercial office and a 3,000-sf convenience food and beverage store with self-service gas pumps.

11. A 3:1 undulating berm will exceed the landscape buffering requirements stipulated in 34-1353(e)(2).

12. The site is comprised of small diameter third generation slash pines, FLUCCS 411E2 and 411 ES, and FLUCCS 190 Open Land (@ 0.73 acres). The 11/2017 Bex Bender PSS would note heritage trees if found. The site does not contain any heritage trees so therefore the PSS does not state any as such. This sufficiency response adequately addresses the fact that the site does not contain large Pine heritage trees. This fact can be verified by staff on-site inspection.

13. Please see the gopher tortoise and MCP overlay exhibit.

14. The subject south native open space area is to serve as a peak-standard attenuation area for storm events greater than the 25-year storm event design criteria. The subject perimeter berm is a requirement of the SFWMD in meeting the standard of post-development discharge may not exceed pre-development discharge. It is noted that the project exceeds the native open space requirement.

15. Please refer to the revised MCP and open space calculations.

16. OTHER – the MCP's Pine Island driveway has been shifted to align with the north Pine Island Road driveway.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Quattrone & Associates, Inc.
Engineers, Planners & Development Consultants
4301 Veronica Shoemaker Blvd. Fort Myers, FL 33916
239.936.5222 | QAINC.NET | f 239.936.7228

Sincerely,

Greg Stuart, MUP

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

P:\2017 Projects\170814 7-ELEVEN PINE ISLAND #1042477 [BOKEELIA] - ACTIVE\02-DOCUMENTS\13-ZONING\18FebSufficiencyResponse\22Feb18PineIsland711_SufficiencyResponse.docx

DCI2018-00003

APPLICATION FOR PLANNED DEVELOPMENT PUBLIC HEARING UNINCORPORATED AREAS ONLY

Project Name: The Pine Island Center 7-11 CPD

Request: Rezone from: CPD To: CPD

Type: ☐ Major PD ☐ Minor PD ☐ DRI w/Rezoning ☐ PRFPD
☐ Major PD Amendment ☒ Minor PD Amendment

Bonus Density included? ☒ NO ☐ YES[1] for: _____ Bonus Units

[1] *If **YES**, submit additional fee required by LDC 2-147(A)(3)*

Summary of Project:

To rezone the 4.78-acre 2017 Creative Corner CPD (Z-07-015) and the 0.99-acre Ryan Pine Island Center (Z-06-043) to create a new, unified 5.77-acre CPD project and to permit by right a new Convenience Food and Beverage Store with Self-service Fuel Pumps use.

PART 1
APPLICANT/AGENT INFORMATION

A. Name of Applicant: Creighton Commercial Development
Address: 900 SW Pine Island Road, Suite 202
City, State, Zip: Cape Coral, FL 33991
Phone Number: 239-210-0455
E-mail Address: levens@creightondev.com

B. Relationship of Applicant to owner (check one) and provide Affidavit of Authorization form:

☐ Applicant is the sole owner of the property. **[34-201(a)(1)a.1.]**

☒ Applicant has been authorized by the owner(s) to represent them for this action. **[34-202(b)(1)b. & c.]**

☐ Application is County initiated. Attach BOCC authorization.

C. Authorized Agent: (If different than applicant) Name of the person who is to receive all County-initiated correspondence regarding this application. [34-202(b)(1)c.]

1. Company Name: Quattrone & Associates, Inc
Contact Person: Al Quattrone, P.E.
Address: 4301 Veronica Shoemaker Blvd.
City, State, Zip: Fort Myers, FL 33916
Phone Number: 239-936-5222 Email: al@qainc.net

2. Additional Agent(s): Provide the names of other agents that the County may contact concerning this application. **[34-202(b)(1)c.]**

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DC12-017-00003

PART 2
PROPERTY OWNERSHIP

A. Property owner(s): If multiple owners (corporation, partnership, trust, association), provide a list with owner interest. [34-201; 34-204]

Name: See attached Property Owners List

Address: _____

City, State, Zip: _____

Phone Number: _____ Email: _____

B. Disclosure of Interest [34-201; 34-204]:

☒ Attach Disclosure of Interest Form. **[34-201; 34-204]**

C. Multiple parcels:

☒ Property owners list. **[34-202(a)(5)]**

☒ Property owners map. **[34-202(a)(5)]**

D. Certification of Title and Encumbrances [34-202(a)(3)]

1. Title certification document, no greater than 90 days old. **[34-202(a)(3)]**
2. Date property was acquired by present owner(s): 03/11/05 – 5431 Pine Island Rd.; 04/28/04 – 10446 Nikkis Ln

PART 3
PROPERTY INFORMATION

A. STRAP Number(s): [Attach extra sheets if additional space is needed.]

28-44-22-00-00039.0000; 28-44-22-01-0000B.0110; 28-44-22-01-0000B.0120; 28-44-22-01-0000B.0150; 28-44-22-01-0000B.0170

B. Street Address of Property: 5431 Pine Island Rd. NW; & 10416, 10428, 10466 & 10452 Nikkis Lane, Saint James City, FL

C. Legal Description (must submit) [34-202(a)(1)]:

☒ Legal description (metes and bounds) (8½"x11") and sealed sketch of the legal description.

OR

☐ Legal description (NO metes and bounds) if the property is located within a subdivision platted per F.S. Chapter 177, and is recorded in the Official Records of Lee County under Instruments or Plat Books. (Click here to see an example of a legal description with no metes and bounds.)

AND

Boundary Survey [34-202(a)(2); 34-373(a)(4)a.]:

☒ A Boundary survey, tied to the state plane coordinate system.

OR

☐ Not required if the property is located within a subdivision platted per F.S. Chapter 177.

D. Surrounding property owners (within 500 feet of the perimeter of the subject parcel or portion thereof that is subject of the request)**:**

1. ☐ List of surrounding property owners. **[34-202(a)(6)]**
2. ☐ Map of surrounding property owners. **[34-202(a)(7)]**
3. ☐ One set of mailing labels. **[34-202(a)(6)]**

Note: When the case is found complete/ sufficient, a new list and mailing labels must be submitted.

E. Current Zoning of Property: CPD & CPD

☒ Provide a list of all Zoning Resolutions and Zoning Approvals applicable to the subject property. **[34-202(a)(8)]**

F. Use(s) of Property [34-202(a)(8)]:

1. Current uses of property are: Vacant
2. Intended uses of property are: Minor Retail _ 7-11 Convenience Food & Beverage w./Self-service

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Fuel Pumps and future office and professional services.

G. Future Land Use Classification (Lee Plan) [34-202(a)(8)]:

Urban Community	5.77	Acres	100	% of Total
		Acres		% of Total
		Acres		% of Total

H. Property Dimensions [34-202(a)(8)]:

1. Width (average if irregular parcel): 324 Feet
2. Depth (average if irregular parcel): 643 Feet
3. Total area: 5.77 Acres or square feet
4. Frontage on road or street: 324 Feet on Pine Island Rd. Street
   2nd Frontage on road or street: 310 Feet on Nikkis Street

I. Planning Communities/Community Plan Area Requirements: If located in one of the following planning communities/community plan areas, provide a meeting summary document of the required public informational session. **[34-202(a)(10)]**

- ☐ Not Applicable
- ☐ Captiva Planning Community (Captiva Island). **[33-1612(a)&(b); Lee Plan Policy 13.1.7]**
- ☐ North (Upper) Captiva Community Plan area. **[33-1711]**
- ☐ Boca Grande Planning Community. **[Lee Plan Policy 22.1.5]**
- ☐ Caloosahatchee Shores Community Plan area. **[33-1482(a)&(b); Lee Plan Policy 21.6.3]**
- ☐ Page Park Community Plan area. **[33-1203(a) & (b); Lee Plan Policy 27.11.2]**
- ☐ Palm Beach Boulevard Community Plan area. **[Lee Plan Policy 23.5.2]**
- ☐ Buckingham Planning Community. **[Lee Plan Policy 17.7.2]**
- ☒ Pine Island Planning Community. **[33-1004(a) & (b); Lee Plan Policy 14.7.1]**
- ☐ Lehigh Acres Planning Community. **[33-1401(a)&(b); Lee Plan Policy 32.12.2]**
- ☐ North Fort Myers Planning Community. **[33-1532(a)&(b)]**
- ☐ North Olga Community Plan area. **[33-1663(a)&(b)]**

J. Waivers from Application Submission Requirements: Attach waivers, if any, approved by the Director of Zoning. **[34-202(a)]**

PART 4
TYPES OF LAND AREA ON PROPERTY

A. Gross Acres (total area within described parcel)			**5.77**	**Acres**
1. Submerged land subject to tidal influence				Acres
2. a. Preserved freshwater wetlands	0	Acres		
b. Impacted wetlands	0	Acres		
c. Preserved saltwater wetlands	0	Acres		
d. Total wetlands (A.2.a. plus A.2.b. plus A.2.c.)				Acres
3. R-O-W providing access to non-residential uses				Acres
4. Non-residential use areas (1) (2)				Acres
B. Total area not eligible as gross residential acreage (Items A.1. + A.3. + A.4.).			**0**	**Acres**
C. Gross residential acres. (A minus B) (3)				**Acres**
D. Gross residential acres (by Land Use Category)				
1. a. Intensive Development – upland				Acres
b. Intensive Development – preserved freshwater wetlands				Acres
c. Intensive Development – impacted wetlands				Acres
2. a. Central Urban – upland				Acres
b. Central Urban – preserved freshwater wetlands				Acres
c. Central Urban – impacted wetlands				Acres
3. a. Urban Community or Suburban – upland				Acres
b. Urban Community or Suburban – preserved freshwater wetlands				Acres
c. Urban Community or Suburban – impacted wetlands				Acres

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

4.	**a.**	Suburban – upland	_____	Acres
	b.	Suburban – preserved freshwater wetlands	_____	Acres
	c.	Suburban – impacted wetlands	_____	Acres
5.	**a.**	Outlying Suburban – upland	_____	Acres
	b.	Outlying Suburban – preserved freshwater wetlands	_____	Acres
	c.	Outlying Suburban – impacted wetlands	_____	Acres
6.	**a.**	Sub-Outlying Suburban – upland	_____	Acres
	b.	Sub-Outlying Suburban – preserved freshwater wetlands	_____	Acres
	c.	Sub-Outlying Suburban – impacted wetlands	_____	Acres
7.	**a.**	Rural, Outer Island, Rural Community Preserve – upland	_____	Acres
	b.	Rural, Outer Island, Rural Community Preserve – wetlands	_____	Acres
8.	**a.**	Open Lands – upland	_____	Acres
	b.	Open Lands – wetlands	_____	Acres
9.	**a.**	Resource – upland	_____	Acres
	b.	Resource – wetlands	_____	Acres
10.	**a.**	Wetlands	_____	Acres
11.	**a.**	New Community – upland	5.77	Acres
	b.	New Community – wetlands	_____	Acres
12.	**a.**	University Community – upland	_____	Acres
	b.	University Community – wetlands	_____	Acres
13.	**a.**	Coastal Rural – upland	_____	Acres
	b.	Coastal Rural – wetlands	_____	Acres
		TOTAL (should equal "C" above)	**5.77**	**Acres**

Notes:

(1) Lands for commercial, office, industrial uses, natural water bodies, and other non-residential uses must not be included except within the Mixed Use Overlay {see Note (2) below}.

(2) Within the Mixed Use Overlay, lands for commercial, office, industrial uses, natural water bodies, and other non-residential uses may be included in density calculations {see Lee Plan Objective 4.3}.

(3) Lands to be used for residential uses including land within the development proposed to be used for streets & street rights of way, utility rights-of-way, public & private parks, recreation & open space, schools, community centers, & facilities such as police, fire & emergency services, sewage & water, drainage, and existing man-made waterbodies.

PART 5
RESIDENTIAL DEVELOPMENT - PRELIMINARY DENSITY CALCULATIONS

i. Complete only if living units are proposed in a Future Land Use Category.

ii. If more than one classification, calculations for each classification must be submitted. Attach extra sheets as necessary.

iii. If wetlands are located on the property, density calculations are considered preliminary pending a wetlands jurisdictional determination.

A. Future Land Use Category: **Urban Community**

		Lee Plan Table 1(a) Max. standard density		Units
1.	**Standard Units**			
	a. Total upland acres (from Part 4, D.)	_____ x _____	equals	NA
	b. Total preserved freshwater wetlands acres (from Part 4, D.)	_____ x _____	equals	_____
	c. Total impacted wetlands acres (from Part 4, D.)	_____ x _____	equals	_____
	d. Total Allowed Standard Units (1)			_____
2.	**Bonus Units [2-143]**			
	a. Site-built Affordable Housing			NA
	b. Transferrable Dwelling Units			_____
	c. Sub-total			_____
3.	**Total Permitted Units** (1)			NA

Note:

(1) Subject to revision if wetlands jurisdictional determination indicates a different acreage of wetlands.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

PART 6
COMMERCIAL, INDUSTRIAL, MINING, ASSISTED LIVING FACILITIES, HOTELS & MOTELS
PRELIMINARY INTENSITY CALCUATIONS

A. **Commercial**	**Height**	**Total Floor Area (Square Feet)**
1. Medical		
2. General Office		15,000
3. Retail	35-ft	3,454
4. Other: _____		
5. TOTAL FLOOR AREA		**18,454** (1)

Note 1. – The 18,454 sf commercial may be used for office, medical office or retail.

B. **Industrial**	**Height**	**Total Floor Area (Square Feet)**
1. Under Roof		
2. Not Under Roof		
3. TOTAL FLOOR AREA		

C. **Mining**	**Depth**	**Total Acres**
1. Area to be excavated		

D. **Assisted Living Facilities**	**Height**	**Total Beds/Units**
1. Dependent Living Units		
2. Independent Living Units		
3. TOTAL BEDS/UNITS		

E. **Hotels/Motels (Room Size)**	**Height**	**Total Rental Units**
1. < 425 sq. ft.		
2. 426-725 sq. ft.		
3. 725 < sq. ft.		
4. TOTAL UNITS		

PART 7
ACTION REQUESTED

A. Request Statement: Provide a single narrative explaining the nature of the request and how the property qualifies for the rezoning to a planned development. This narrative should include how the proposed development complies with the Lee Plan, the Land Development Code, and the applicable findings/review criteria set forth in LDC section 34-145(d)(4). This narrative may be utilized by the Board of County Commissioners, Hearing Examiner and staff in establishing a factual basis for the granting or denial of the rezoning. **[34-373(a)(5)]**

B. Traffic Impact Statement. A traffic impact statement in a format and to the degree of detail required by the County and in conformance with the adopted Lee County Administrative Code. TIS is not required for an existing development. **[34-373(a)(7)]**

C. Master Concept Plan:

1. **Master Concept Plan, Non-PRFPD:** A graphic illustration (Master Concept Plan) of the proposed development, showing and identifying the information required by LCLDC Section 34-373(a)(6)a. Copies of the Master Concept Plan must be provided in two sizes, 24"x36" and 11"x17", and must be clearly legible and drawn at a scale sufficient to adequately show and identify the required information. In addition to the Master Concept Plan, an open space design plan delineating the indigenous preserves and/or native tree preservation areas as required by LDC Section 10-415(b) must be submitted. **[34-373(a)(6)]**
2. **Schedule of Uses:** A schedule of uses keyed to the Master Concept Plan as well as a summary for the entire property including the information required by LCLDC Section 34-373(a)(8)]. **[34-373(a)(8)]**

RECEIVED
MAR 02 2018
DCI2018-00003
COMMUNITY DEVELOPMENT

3. **Schedule of Deviations and Written Justification:** A schedule of deviations and a written justification for each deviation requested as part of the Master Concept Plan accompanied by documentation including sample detail drawings illustrating how each deviation would enhance the achievement of the objectives of the planned development and will not cause a detriment to public interests. The location of each requested deviation must be located/shown on the Master Concept Plan. **[34-373(a)(9)]**

D. **Bonus Density: [34-202(b)(5)]**

☒ Not Applicable

☐ Bonus Density will be used. Provide the number of Bonus Density units being requested and a narrative of how the request meets the requirements of LDC Section 2-146.

PART 8
ENVIRONMENTAL REQUIREMENTS

A. **Topography:** Describe the range of surface elevations of the property. Attach a county topographic map (if available) or a USGS quadrangle map showing the subject property. **[34-373(a)(4)d.iv.]**

B. **Sensitive Lands:** Identify any environmentally sensitive lands, including, but not limited to, wetlands (as defined in the LEE Plan Section XII), flowways, creek beds, sand dunes, other unique land forms [see LEE Plan Policy 77.1.1 (2)] or listed species occupied habitat [see LCLDC Section 10-473].
The property does not contain any environmentally sensitive lands; see the Nov 17 Protected Species Survey prepared by DexBender and Associates.

C. **Preservation/Conservation of Natural Features:** Describe how the lands listed in PART 6.B. above will be protected by the completed project:
Not applicable

D. **Shoreline Stabilization:** If the project is located adjacent to navigable natural waters, describe the method of shoreline stabilization, if any, being proposed:
Not applicable

E. **Soils Map:** Attach maps drawn at the same scale as the Master Concept Plan marked or overprinted to show the soils classified in accordance with the USDA/SCS System. **[34-373(a)(4)b.i.]**

F. **FLUCCS Map:** A Florida Land Use, Cover and Classification System (FLUCCS) map, at the same scale as the Master Concept Plan, prepared by an environmental consultant. The FLUCCS map must clearly delineate any Federal and State jurisdictional wetlands and other surface waters, including the total acreage of Federal and State wetlands. **[34-373(a)(4)c.]** See the Nov 17 Protected Species Survey prepared by DexBender and Associates.

G. **Rare & Unique Upland Habitat Map:** Maps drawn at the same scale as the Master Concept Plan marked or overprinted to show significant areas of rare and unique upland habitat as defined in the LEE Plan Section XII. **[34-373(a)(4)b.iii.]** See the Nov 17 Protected Species Survey prepared by DexBender and Associates.

H. **Existing and Historic Flow-Ways Map:** Map(s) drawn at the same scale as the master concept plan marked or overprinted to show existing and historic flow-ways. **[34-373(a)(4)b.v.]** The site does not contain any existing or historic flow-ways.

PART 9
SANITARY SEWER & POTABLE WATER FACILITIES

A. **Special Effluent:** If the discharge of any special effluent is anticipated, please specify what it is and what strategies will be used to deal with its' special characteristics:
Not applicable

B. **Private On-Site Facilities:** If a private on-site wastewater treatment and disposal facility is proposed, please provide a detailed description of the system including: Not applicable; the project will connect to Lee Co. Utilities sanitary sewer system.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

1. Method and degree of treatment:
   Not applicable
2. Quality of the effluent:
   Not applicable
3. Expected life of the facility:
   Not applicable
4. Who will operate and maintain the internal collection and treatment facilities:
   Not applicable
5. Receiving bodies or other means of effluent disposal:
   Not applicable

C. **Spray Irrigation:** If spray irrigation will be used, specify:
1. The location and approximate area of the spray fields:
   Not applicable
2. Current water table conditions:
   Not applicable
3. Proposed rate of application:
   Not applicable
4. Back-up system capacity:
   Not applicable

PART 10
ADDITIONAL REQUIREMENTS

A. **Major Planned Developments:**
1. **Surface Water Management Plan.** A written description of the surface water management plan as required by LCLDC Section 34-373(b)(1). **[34-373(b)(1)]**
2. **Phasing Program.** If the development is to be constructed in phases or if the Traffic Impact Statement utilized phasing, then a description of the phasing program must be submitted. **[34-373(b)(3)]**
3. **Protected Species Survey.** A protected species survey is required for large developments (as defined in LCLDC Section 10-1) as specified in LCLDC Section 10-473. **[34-373(b)(2)]**

B. **Amendments to Built Planned Developments:** The consent of the owners of the remainder of the original planned development is not required, but these owners must be given notice of the application and other proceedings as if they were owners of property abutting the subject property regardless of their actual proximity to the subject property. Attach proof of notice to other property. **[34-373(c)]**

C. **Development of Regional Impact:** Binding letter of interpretation from DCA or a complete and sufficient ADA. (See also Application for Public Hearing for DRI Form.) **[34-373(d)(2)]**

D. **Private Recreational Facility Planned Developments (PRFPDs):**
1. **Master Concept Plan, PRFPD.** Master Concept Plan showing and identifying information required by LDC Section 34-941(g)(1). Copies of the Master Concept Plan must be provided in two sizes, 24"x36" and 11"x17", and must be clearly legible and drawn at a scale sufficient to adequately show and identify the required information. **[34-941(g)]**
2. **Conceptual Surface Water Management Plan.** A Conceptual Surface Water Management Plan must be submitted. The plan must be viable and take into consideration any natural flowway corridors, cypress heads, natural lakes, and the restoration of impacted natural flowway corridors. **[34-941(d)(3)b.i.1)]**
3. **Well Drawdown Information.** If within an area identified as an anticipated drawdown area for existing or future well development, demonstration of compliance with LCLDC Section 34-941(d)(3)d.i.

RECEIVED
MAR 02 2018

DCI2018-00003 COMMUNITY DEVELOPMENT

& ii. must be provided. **[34-941(d)(3)d.]**

4. **Preliminary Indigenous Restoration Plan.** A Preliminary Indigenous Restoration Plan must be provided if on-site indigenous restoration is being used to meet the indigenous native plant community preservation requirement. **[34-941(e)(5)f.iii.]**
5. **Environmental Assessment.** An Environmental Assessment must be provided which includes, at a minimum, an analysis of the environment, historical and natural resources. **[34-941(g)(2)]**
6. **Demonstration of Compatibility.** Written statements concerning how the applicant will assure the compatibility of the proposed development with nearby land uses (by addressing such things as noise, odor, lighting and visual impacts), and the adequate provision of drainage, fire and safety, transportation, sewage disposal and solid waste disposal must be provided. **[34-941(g)(4)]**

E. Potable Water & Central Sewer. Will the project be connected to potable water and central sewer as part of any development of the property?

☒ **YES** (Provide a letter from the appropriate Utility to which the connection(s) are proposed confirming availability of service.) **[34-202(b)(8)]**

☐ **NO** (Provide a narrative explaining why the connection is not planned and how the water and sewer needs of the project will be met.) **[34-202(b)(8)]**

F. Existing Agricultural Use: If the property owner intends to continue an existing agricultural use on the property subsequent to the zoning approval, an Existing Agricultural Use Affidavit must be provided. Entitle as "Existing Agricultural Uses at Time of Zoning Application." **[34-202(b)(7)]**

G. Flood Hazard: [34-202(a)(8)]

☐ Not applicable

☒ The property is within an Area of Special Flood Hazard as indicated in the Flood Insurance Rate Maps (FIRM)s.

☒ The minimum elevation required for the first habitable floor is AE 7 NAVD (MSL)

H. Excavations/Blasting: [34-202(b)(6)]

☒ No blasting will be used in the excavation of lakes or other site elements.

☐ If blasting is proposed, provide Information Regarding Proposed Blasting (including soil borings, a map indicating the location of the proposed blasting, and other required information).

I. Hazardous Materials Emergency Plan for Port Facilities: [34-202(b)(4)]

☒ Not Applicable

☐ Provide a Hazardous materials emergency plan.

J. Mobile Home Park: [34-203(d)]

☒ Not Applicable

☐ Request includes rezoning of a Mobile Home Park. Provide facts related to the relocation of dislocated owners that meets the requirements of F.S. § 723.083 (1995).

K. Airport Zones & Lee County Port Authority (LCPA) Requirements:

☒ Not Applicable

☐ Property is located within _____ Airport Noise Zone: **[34-1004]**

☐ Property is located within Airport Protection Zone. Indicate which Zone below. **[34-1005]**

- ☐ Property is located within Airport Runway Clear Zone: **[34-1006]**
- ☐ Property is located within Airport School Protection Zone: **[34-1007]**
- ☐ Property is located within Airport Residential Protection Zone: **[34-1009]**
- ☐ Property is located in an Airport Obstruction Notification Zone and subject to LCPA regulations. **[34-1009]**

☐ A Tall Structures Permit is required. **[34-1010]**

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

PART 5 SUBMITTAL REQUIREMENT CHECKLIST		
Clearly label your attachments as noted in bold below		
Copies Required		**SUBMITTAL ITEMS**
3	☒	Completed application for Public Hearing [34-201(b)]
1	☒	Filing Fee - [34-202(a)(9)]
1	☐	Bonus Density Filing Fee - [2-147(A)3)] (if applicable)
3	☒	Notarized **Affidavit of Authorization** Form [34-202(b)(1)c]
3	☒	**Additional Agents** [34-202(b)(1)c.]
3	☐	**Multiple Owners List** (if applicable) [34-201; 34-204]
3	☒	**Disclosure of Interest** Form (multiple owners) [34-201(b)(2)a]
3	☒	**Legal description (must submit)** [34-202(a)(1)]
	☒	Legal description (metes and bounds) and sealed sketch of legal description
		OR
	☐	Legal description (NO metes and bounds) if the property is located within a subdivision platted per F.S. Chapter 177, and is recorded in the Official Records of Lee County under Instruments or Plat Books. (Click here to see an example of a legal description with no metes and bounds.)
3	☒	**Boundary Survey** – not required if platted lot (2 originals required) [34-202(a)(2); [34-373(a)(4)a.]
3	☐	**Property Owners list** (if applicable) [34-202(a)(5)]
3	☐	**Property Owners map** (if applicable) [34-202(a)(5)]
3	☒	Confirmation of **Ownership/Title Certification** [34-202(a)(3)]
3	☐	**STRAP Numbers** (if additional sheet is required) [34-202(a)(1)]
1	☒	**List of Surrounding Property Owners** [34-202(a)(6)]
1	☒	**Map of Surrounding Property Owners** [34-202(a)(7)]
1	☒	**Mailing labels** [34-202(a)(6)]
3	☒	List of **Zoning Resolutions** and Approvals [34-202(a)8)]
3	☒	Summary of **Public Informational Session** (if applicable) [34-202(a)(10)]
3	☐	**Waivers** from Application Submission Requirements (if applicable)
3	☐	Preliminary **Density** Calculations (if applicable)
3	☒	**Request Statement**
3	☒	Traffic Impact Statement (**TIS**) (not required for existing development) [34-341(b)(2)d.1.]
3	☒	Master Concept Plan (**MCP**), **Non-PRFPD** [34-373(a)(6)]
3	☒	**Schedule of Uses** [34-373(a)(8)]
3	☐	Schedule of **Deviations and** Written **Justification** [34-373(a)(9)]
3	☐	**Topography** (if available) [34-373(a)(4)d.iv.]
3	☒	**Soils Map** [34-373(a)(4)b.v.]
3	☒	**FLUCCS Map** [34-373(a)(4)c.]
3	☒	Rare & Unique **Upland Habitat Map** [34-373(a)(4)b.iii.]
3	☒	Existing and Historic **Flow-Ways Map** [34-373(a)(4)b.v.]
3	☐	**Surface Water Management Plan** (if applicable) [34-373(b)(1)]
3	☐	**Phasing Program** (if applicable) [34-373(b)(3)]
3	☒	**Protected Species Survey** (if applicable) [34-373(b)(2)]
3	☐	**Proof of Notice** (if applicable) [34-373(c)]

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00009

3	☐	**Binding Letter** from DCA (if applicable) [34-373(d)(2)]
3	☐	Master Concept Plan (**MCP**), **PRFPD** (if applicable) [34-941(g)]
3	☐	**Conceptual Surface Water Management Plan** (if applicable) [34-941(d)(3)b.i.1)]
3	☐	**Well Drawdown** Information (if applicable) [34-941(d)(3)d.]
3	☐	Preliminary Indigenous **Restoration Plan** (if applicable) [34-941(e)(5)f.iii.]
3	☐	**Environmental Assessment** (if applicable) [34-941(g)(2)]
3	☐	Demonstration of **Compatibility** (if applicable) [34-941(g)(4)]
3	☐	**Potable Water & Sanitary Sewer**. Letter from the appropriate utility entity indicating the utility entity or explanation of how water and sewer needs will be met if connection will not be made. [34-202(b)(8)]
3	☐	Existing **Agricultural Use Affidavit** (if applicable) [34-202(b)(7)]
3	☐	Information Regarding **Proposed Blasting** (if applicable). [34-202(b)(6)]
3	☐	Hazardous Materials **Emergency Plan** (if applicable) [34-202(b)(4)]
3	☐	Mobile Home Park **Dislocated Owners** Information (if applicable) [34-203(d)]
3	☐	**Tall Structures Permit** (if applicable) [34-1001]

RECEIVED
MAR 02 2018
DCI 2018-00003
COMMUNITY DEVELOPMENT

Quattrone & Associates, Inc.

List of Zoning Resolutions and Approvals

Johnson Rezoning Z-00-064

Zoning Resolution Z-06-043

Zoning Resolution Z-07-015 CPD's 4.78 ac. Creative Corner

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

Quattrone & Associates, Inc.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

REQUEST STATEMENT

THE PINE ISLAND CENTER 7-11
A CPD AMENDMENT
5.77 ACRES
Strap # 28-44-22-00-00039.0000; 28-44-22-01-0000B.0170, .0150, .0120 & .0110
5431 Pine Island Road NW, Bokeelia FL 33922

The subject project is to rezone two separate, adjoining Commercial Planned Developments into one unified 5.77-ac. +/- CPD. The objective is to add Convenience Food and Beverage along with Self-service Fuel Pumps as two new uses by right to support the development of the Pine Island Center 7-11. The subject CPD zoning resolutions are Z-07-015 the Creative Corner CPD, and Z-06-043, the Ryan CPD. Resolution Z-07-015 permits by right up to 38,000 sf (28,000 sf retail and 10,000 sf office). Resolution Z-06-043 permits by right up to 8,700 sf office. The subject properties are located approximately 522 feet east of the intersection of Pine Island Road and Stringfellow Road. The Creative Corner CPD is forested, consisting of FLUCCS 411 upland pines at varying degrees of exotic vegetation infestation; the Ryan CPD is cleared. The properties are located within Pine Island Center with a Future Urban Community Land Use designation. The request and CPD master plan is to permit by right a Convenience Food and Beverage Store with Self-service Fuel Pumps, at 3,454 sf, and an addition outparcel intensity of 15,000 sf commercial space. Hence the request services to de-intensify two approved planned developments by 28,246 sf.

The project entails the construction of a 3,454 SF convenience store and up to 15,000 sf of commercial offices and shops within Parcels One and Two (see MCP). The proposed food and beverage convenience store will include the installation of new underground fuel storage tanks, fuel distribution and vent piping, a free-standing canopy, sixteen (16) self-service fuel pumps, a self-service car wash and a trash enclosure. The project will include an access-way from Nikkis Lane and a full access point on Pine Island Road. The final convenience store square footage may be reduced as the project moves forward with design development. The Pine Island Road segment is a two-lane section with a 45 MPH posted speed limit. The project will feature a minimum 30% open space, of which one-half will be native trees and vegetation that will be located to the south and southeast portion of the property. The MCP will include a rear area for future commercial office development within two outparcels. Finally, the project has available central water (Pine Island Water Co.) and central sanitary sewer (Lee Co. Utilities).

Associated with the Pine Island Commercial Center, most of the properties along the south side of Pine Island Road that are adjoining and/or adjacent to the new CPD are zoned commercial. Adjoining the property to the west are C-1 and C-1A sites developed as a plant nursery, a Subway fast food restaurant, mixed stores, shops and services, and offices. Adjoining the property to the east is an undeveloped and forested 2.3-acre TFC-2 site, an undeveloped and partial cleared 3.5-acre CC and CG site, the Pine Island Water Company (TFC-2), and various open storage and boat storage and repair properties zoned CG, IL and TFC-2. Opposite the project and along the north side of Pine Island Road one finds vacant C-1 parcels C-1A and CS-1 and C-1 that have been developed for business office uses. Further east along the north side of Pine Island Road at 5100/5200 Pine Island Road is the Calusa Cay CPD, at 26.7-acre project approved for 96,500 sf of

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

commercial uses and grocery store (DCI2012-00022). From this review, the requested CPD amendment is complementary and consistent with existing and future uses along the Pine Island Center Pine Island Road corridor.

LDC 34-145 REZONING AND SPECIAL EXCEPTION CONSIDERATIONS

The Pine Island Center CPD Amendment complies with the rules and considerations appropriate to support the requested rezoning and special exception. For rezoning, the applicant must prove entitlement based on:

- Consistency with the Lee Plan;
- Meets the LDC and other applicable County regulations, or qualifies for deviations;
- Is compatible with existing and planned uses in the surrounding area;
- Will not be injurious to the neighborhood or detrimental to the public welfare; and
- Will not adversely affect environmentally critical or sensitive areas and natural resources;
- Will provide access sufficient to support the proposed development intensity;
- The expected impacts on transportation facilities will be addressed by existing County regulations and conditions of approval; and
- Will be served by urban services if located in a Future Urban land use.

A discussion of how the project complies with 34-145 entitlement criteria will now follow.

LEE PLAN CONSIDERATIONS

POLICY 1.1.4 The Urban Community Future Land Use: Urban Community areas are areas outside of Fort Myers and Cape Coral that are characterized by a mixture of relatively intense commercial and residential uses with a distinct urban character but are to be developed at densities and intensities slightly lower that Central Urban land uses.

- RESPONSE: The property is in the mostly non-residential Pine Island Center, along Pine Island Road. Most of the properties along the south side of Pine Island Road that are adjoining and/or adjacent to the new CPD are zoned commercial and have been developed at moderate intensities. Adjoining the property to the west are C-1 and C-1A sites developed as a plant nursery, a Subway fast food restaurant, mixed stores, shops and services, and offices. Adjoining the property to the east is an undeveloped and forested 2.3-acre TFC-2 site, an undeveloped and partial cleared 3.5-acre CC and CG site, the Pine Island Water Company (TFC-2), and various open storage and boat storage and repair properties zoned CG, IL and TFC-2. Opposite the project and along the north side of Pine Island Road one finds vacant C-1 parcels C-1A and CS-1 and C-1 that have been developed for business office uses. Further east along the north side of Pine Island Road at 5100/5200 Pine Island Road is the Calusa Cay CPD, at 26.7-acre project approved for 96,500 sf of commercial uses and grocery store (DCI2012-00022). The project is requesting a very moderate intensity equal to 7% building coverage (18,454 sf @ 5.77 acres). The project is consistent with 1.1.4

POLICY 1.7.6: The Planning Communities Map and Acreage Allocation Table (see Map 16 and Table 1(b) and Policies 1.1.1 and 2.2.2) depicts the proposed distribution, extent, and location of

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

generalized land uses for the year 2030. Acreage totals are provided for land in each Planning Community in unincorporated Lee County. No development orders or extensions to development orders will be issued or approved by Lee County that would allow the acreage totals for residential, commercial or industrial uses contained in Table 1(b) to be exceeded.

- RESPONSE: The property is located within the Pine Island Planning District. With 500 acres of Urban Community land uses, the Pine Island Planning District has allocated to it 226 acres for commercial. The proposed CPD amendment is slightly less than 6 acres. Therefore, the rezoning is consistent with 1.76.

OBJECTIVE 2.1: DEVELOPMENT LOCATION: Contiguous and compact growth patterns will be promoted through the rezoning process to contain urban sprawl, minimize energy costs, conserve land, water, and natural resources, minimize the cost of services, prevent development patterns where large tracts of land are by-passed in favor of development more distant from services and existing communities.

- RESPONSE: The property is within a future urban land use and located approximately 522-ft. east from the intersection of Stringfellow Road and Pine Island Road. As noted, it is along a segment of the Pine Island Road that is commercial and mixed-use. It is located at the intersection of Nikkis Lane and Pine Island Road. The CPD amendment's location presents a contiguous and compact urban land use growth pattern that does not by-pass tracts of land to support development. The project is consistent with 2.1. Being at the intersection of a Local Street and a Minor Arterial, the project is consistent with Minor Commercial site location standards. The project complies with this standard and Objective 2.1.

POLICY 2.2. DEVELOPMENT TIMING: Rezoning's and development-of-regional-impact proposals will be evaluated as to the availability and proximity of the road network; central sewer and water lines; community facilities and services such as schools, EMS, fire and police protection, and other public facilities; compatibility with surrounding land uses; and any other relevant facts affecting the public health, safety, and welfare.

- RESPONSE: Fire protection and emergency response will be provided by Pine Island Fire Department, located immediately to the west at 5700 Pine Island Road. Though Lee County Sheriff Department patrols the community on a regular basis, Greater Pine Island does not contain a sheriff substation. The property is located within the Lee County Utility service franchise area and the Pine Island Water Company franchise area. Reflecting the fact that the CPD amendment is for a commercial project, schools and park facilities services are not germane to this analysis. The Pine Island Road segment from Stringfellow Road to Burnt Store road is designated "Constrained". The 2-lane road has a LOS E standard with a 950 Pk Hour max. capacity. According to the 2017 Lee County Concurrency Manual, the 2016 existing maximum peak hour trips were 592, with a 2016 forecast of 692. Hence, a project capacity of 258 peak hour trips may be forecast. The project is consistent with Policy 2.2.

OBJECTIVE 4.1: WATER, SEWER, AND ENVIRONMENTAL STANDARDS. Consider water, sewer, and environmental standards during the rezoning process. Ensure the standards are met prior to issuing a local development order.

STANDARD 4.1.1: WATER. 1 Any new residential development that exceeds 2.5 dwelling units per gross acre, and any new single commercial or industrial development in excess of 30,000 square feet of gross leasable (floor) area per parcel, must connect to a public water system

DCI2018-00003

Quattrone & Associates, Inc.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

STANDARD 4.1.2: SEWER. Any new residential development that exceeds 2.5 dwelling units per gross acre, and any new single commercial or industrial development that generates more than 5,000 gallons of sewage per day, must connect to a sanitary sewer system.

- RESPONSE: The project will hook up to central sanitary sewer services (Lee Co. Utilities) and central potable water utilities (Pine Island Water Co.). The project is consistent with Objective 4.1.

RESIDENTIAL LANDS POLICY 5.1.5: Protect existing and future residential areas from any encroachment of uses that are potentially destructive to the character and integrity of the residential environment. Requests for conventional rezoning will be denied in the event that the buffers provided in Chapter 10 of the Land Development Code are not adequate to address potentially incompatible uses in a satisfactory manner.

- RESPONSE: The property does not adjoin occupied residential properties across Pine Island Road to the north, to the west and to the south. To the north one finds business offices and services. To the west one finds C-1 and C-1A sites developed as a plant nursery, a Subway fast food restaurant, mixed stores, shops and services, and offices. To the south one finds a Lutheran Church (10360 Stringfellow Road) and a vacant 11.9-acre CG zoned property. Adjoining the property to the east is a vacant 2.39-acre TFC-2 parcel. This zoning district is to protect existing two-family homes and lots that have been previously permittable; the district is not available for new development. The project's MCP incorporates a 25-ft. planted landscape buffer and screening wall based on LDC34-1352(g)(h) standards (8-ft. tall screening wall with 5 trees per 100 LF and a double hedge). Further to the east one finds an undeveloped and partial cleared 3.5-acre CC and CG site, the Pine Island Water Company (TFC-2), and various open storage and boat storage and repair properties zoned CG, IL and TFC-2. Based upon surrounding land uses and zoning districts, the project does not encroach upon residential uses and is not potentially destructive to the character and integrity of the residential environment. This is so in that the adjoining parcels are generally zoned commercial and where the property may have an adjoining residential property, the MCP utilizes LDC code buffering. The project's native open space area is located to provide additional buffering to the east and south. The project is consistent with 5.1.5.

POLICY 5.2.4: The site design of the proposed development must be compatible with surrounding land uses to the maximum extent possible.

- RESPONSE: The site incorporates above code street, side and rear yard setbacks. For example, gas pumps are set back from the street 65-ft., the convenience store building is setback from the west side yard by 107-ft., the east side yard by 132-ft. and to the rear by 305-ft. to the projects paved parking and circulation area. The standards are 50-ft. street and 40-ft. side yard and rear yard. The project incorporates a 25-ft. Pine Island Road Type D buffer, 25-ft. east and west site boundary landscape buffers (see 5.1.5 discussion). The existing native trees will be used for native open space and buffering along the south and east boundary. These buffers and setbacks serve to internalize the site's buildings and self-storage fuel pumps to insure compatibility. Given these standards, within the context of being located in the Pine Island Center, the project is consistent with 5.2.4.

COMMERCIAL DEVELOPMENT REVIEW POLICY 6.1.1: All applications for commercial development will be reviewed and evaluated as to:

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

- Traffic and Access Impacts _ The project does not generate unanticipated and unacceptable traffic in that it the nature of a convenience food and beverage store with self-service fuel pumps captures existing traffic as contrasted to generating new trips. The project does not create negative impacts adverse to Pine Island Road and Nikkis Lane in that site access does not create any type of residential neighborhood intrusion problem. The Pine Island Road site access is designed to separate as far as possible from Nikkis Lane at approximately 400-ft. The CR rezoning with seventeen Self-service Fuel Pump request is for a 3,454 square feet convenience food and beverage store. The two roadways will have adequate capacity to handle all traffic generated from this development.
- Screening and Buffering _ Will be provided to meet County standards (see MCP and policy discussion 5.1.5 and 5.24). The project's native open space area is located to provide additional buffering to the east and south.
- Sewer and Water Facilities _ Sanitary sewer service provided by Lee County Utilities and potable water by Pine Island Water Company.
- Impacts On Adjacent Land Uses _ No built residential uses adjoin the project and the project is not proximate to any residential neighborhoods. The site is located at a commercial corner which minimizes surrounding neighborhood impacts.
- Proximity To Other Similar Centers _ The project is proximate to the old C-1 zoned Shell Gas and Convenience Store (southwest corner of Stringfellow Road and Pine Island Road), and is 1,036-ft. west of the Calusa Cay CPD.
- Environmental Considerations _ There are no environmental concerns with the property in that it is completely cleared and developed.

POLICY 6.1.4: Commercial development will be approved only when compatible with adjacent existing and proposed land uses and with existing and programmed public services and facilities.

- The requested CPD zoning amendment is compatible with adjoining and adjacent commercial uses. The site is located at a corner intersection of a local street and a Lee County minor arterial highway. Thus, no residential neighborhood intrusion will occur. The project's native open space area is located to provide additional buffering to the east and south. See the discussion of urban services in Policy 2.2 and Objective 4.1. The project is consistent with 6.1.4.

POLICY 6.1.5: The land development regulations will require that commercial development be designed to protect the traffic-carrying capacity of roads and streets.

- The requested CPD amendment is designed to protect the traffic carrying capacity of Pine Island Road by integrating the smaller Ryan CPD to the Creative Corner CPD to obtain the access and circulation benefit of Nikkis Lane. Acceleration and deceleration lanes will be determined and designed at the time of final DO. The project is consistent with 6.1.5.

POLICY 6.1.6: The land development regulations will require that commercial development provide adequate and appropriate landscaping, open space, and buffering. Such development is encouraged to be architecturally designed so that to enhance the appearance of structures and parking areas and blend with the character of existing or planned surrounding land uses.

- The project will comply with the Lee Plan and Chapter 10 Article IV Arch. Design Standards, along with other LDC rules, including 30% open space, 25-ft. Type D buffers along the public roadways, and a Type A buffer along the south property line. The project's native open space area is located to provide additional buffering to the east and south. The project is consistent with 6.1.6

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

PINE ISLAND PLAN NATURAL RESOURCES POLICY 14.1.5: New development, including "planned development" rezoning approvals, new subdivisions, and agriculture, that adjoin state-designated aquatic preserves and associated wetlands and natural tributaries must preserve or create a 50-foot-wide native vegetated buffer area between the development and the waterbody or associated wetlands.

- RESPONSE: The project does not adjoin wetland areas and natural tributaries. The project is consistent with 20.1.1

PINE ISLAND PLAN COMMERCIAL LAND USE POLICY 14.4.1: Future urban area in Pine Island Center are targeted for most future commercial and industrial uses, as permitted by other portions of this plan. Non-residential developments within Pine Island Center are encouraged to provide employment opportunities; serve the day to day needs of residents and visitors; demonstrate a positive impact on traffic patterns within Greater Pine Island; and reduce the number of vehicular trips through Matlacha.

- RESPONSE: The project is located within the Pine Island Center; the convenience food and beverage store serve the day to day needs of residents and visitors. The convenience food and beverage store does not generate additional vehicular trips. Rather, it captures existing local traffic. The project is consistent with 14.4.1.

PINE ISLAND PLAN COMMERCIAL LAND USE POLICY 14.4.3: The county will provide specific architectural and site design standards for Greater Pine Island in the Land Development Code. These standards must: promote but not mandate rehabilitation over demolition; address the size and scale of building mass in relation to the built and natural environment; establish community-specific architectural standards in support of Greater Pine Island's coastal rural character; preserve mature trees wherever possible; encourage the location of off-street parking to the side and rear of buildings to preserve viewsheds along public roadways; require large windows and forbid most blank walls; and encourage metal roofs and other features of traditional "Old Florida" styles. The new commercial design standards will reflect the different characteristics of Bokeelia, Pineland, Matlacha, and St. James City.

- RESPONSE: The project incorporates a coastal rural, Old Florida architectural style that has been reviewed by the Pine Island community (Civic Association). The project is and will be consistent with 14.4.3.

LAND DEVELOPMENT CODE CONSIDERATIONS

REZONING CRITERIA _ LDC 34-135 Meets the LDC and Other Applicable County Regulations: The development will follow all specific regulations applicable in Chapter 34 requirements for convenience food and beverage stores with fuel pumps. Other than site access connection spacing, no deviations are necessary to support the project.

REZONING CRITERIA _ LDC 34-145 Is Compatible With Existing and Planned Uses In The Surrounding Area: The zoning amendment is to add Convenience Food and Beverage, with Self-service Fuel Pumps. Previously approved intensities and uses remain the same. Associated with the Pine Island Commercial Center, most of the properties along the south side of Pine Island Road that are adjoining and/or adjacent to the new CPD are zoned commercial. Adjoining the property to the

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

west are C-1 and C-1A sites developed as a plant nursery, a Subway fast-food restaurant, mixed stores, shops and services, and offices. Adjoining the property to the east is an undeveloped and forested 2.3-acre TFC-2 site, an undeveloped and partial cleared 3.5-acre CC and CG site, the Pine Island Water Company (TFC-2), and various open storage and boat storage and repair properties zoned CG, IL and TFC-2. Opposite the project and along the north side of Pine Island Road one finds vacant C-1 parcels C-1A and CS-1 and C-1 that have been developed for business office uses. Further east along the north side of Pine Island Road at 5100/5200 Pine Island Road is the Calusa Cay CPD, at 26.7-acre project approved for 96,500 sf of commercial uses and grocery store (DCI2012-00022). From this review, the requested CPD amendment is complementary and compatible with existing and future uses along the Pine Island Center Pine Island Road corridor.

REZONING CRITERIA _ Will Not Be Injurious To The Neighborhood Or Detrimental To The Public Welfare: The convenience food and beverage store with fuel pumps will not be injurious to the neighborhood or detrimental to the public welfare. The location is inherently commercial at the intersection of Nikkis Lane and Pine Island Road; there are adjacent residential properties.

REZONING CRITERIA _ Will Protect, Conserve or Preserve Environmentally Critical and Sensitive Areas and Natural Resources, Where Applicable: The site contains exotic infested Pine Flatwood habitat of which 15%, equal to 0.86 acres, will be conserved. The site does not contain any environmentally critical or sensitive land area.

REZONING CRITERIA _ Will Provide Access Sufficient To Support the Proposed Development Intensity: The project will feature a connection driveway onto Nikkis Lane and Pine Island Road. Access is more than sufficient to support the project.

REZONING CRITERIA _ The Expected Impacts On Transportation Facilities Will Be Addressed By Existing County Regulations and Conditions of Approval: Specific site access de-acceleration lanes and similar improvements will be determined at the development order stage.

LEE PLAN AND LDC CONSISTENCY SUMMARY

The request is consistent with the goals, objectives, policies, and the intent of the Lee Plan.

The request will not cause damage, hazard, nuisance or other detriment to persons or property. It is being integrated into the existing neighborhood as a relatively low intensity development and is similar in nature to the uses in the area.

The requested use will be in compliance with all general zoning provisions and supplemental regulations pertaining to the uses set forth in Chapter 34 of the LDC.

Sufficient evidence has been provided within this application that this rezoning is in compliance with the Lee Plan, the Land Development Code and all other applicable rules and regulations.

The request will meet or exceed all performance and location standards set forth for the uses allowed by the request.

The request is consistent with the densities, intensities and general uses set forth in the Lee Plan.

Quattrone & Associates, Inc.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

The request is compatible with existing or planned uses in the surrounding area.

Approval of the request will not place an undue burden upon existing transportation or planned infrastructure facilities and will be served by streets with the capacity to carry traffic generated by the development.

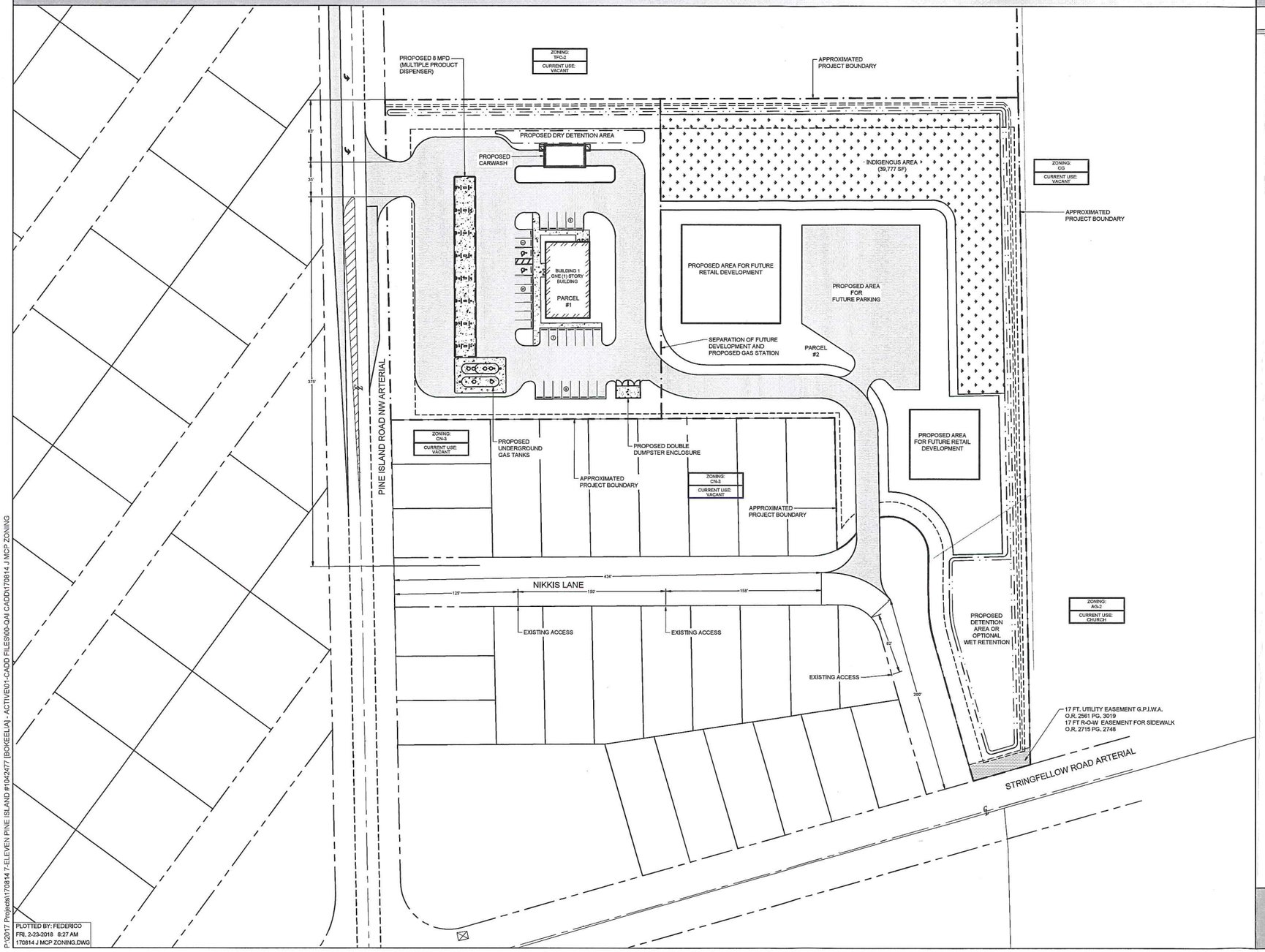
The request will not adversely affect environmentally critical areas and natural resources.

DCI 2018-00003

THE PINE ISLAND CENTER 7-11 CPD

5431 PINE ISLAND ROAD NW

MASTER CONCEPT PLAN



P:\2017 Projects\170814 7-ELEVEN PINE ISLAND #1042477 [BOKEELIA] - ACTIVE\01-CADD FILES\00-QAI CADD\170814 J MCP ZONING

PLOTTED BY: FEDERICO
FRI, 2-23-2018 8:27 AM
170814 J MCP ZONING.DWG

PROJECT SUMMARY:

EXISTING ZONING: COMMERCIAL PLANNED DEVELOPMENT
PROPOSED ZONING: COMMERCIAL PLANNED DEVELOPMENT

LAND BREAKDOWN:

TOTAL AREA = 251,686 SF (5.78 A.C)

- OPEN SPACE REQUIRED (30%) = 75,533 SF (1.73 AC.)
- OPEN SPACE PROVIDED = 75,506 SF (1.73 AC.)
- BUFFER, DRY DETENTION, OTHER = 75,600 SF (1.73 AC.)

INDIGENOUS AREA REQ. (15%) = 37,767 SF (0.87 A.C)
INDIGENOUS AREA PROVIDED = 39,777 SF (0.91 A.C)
10% INDIGENOUS CREDIT = 3,978 SF
TOTAL INDIGENOUS OPEN SPACE = 43,755 SF (1 AC.)

PROVIDED INDIGENOUS OPEN SPACE

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

N

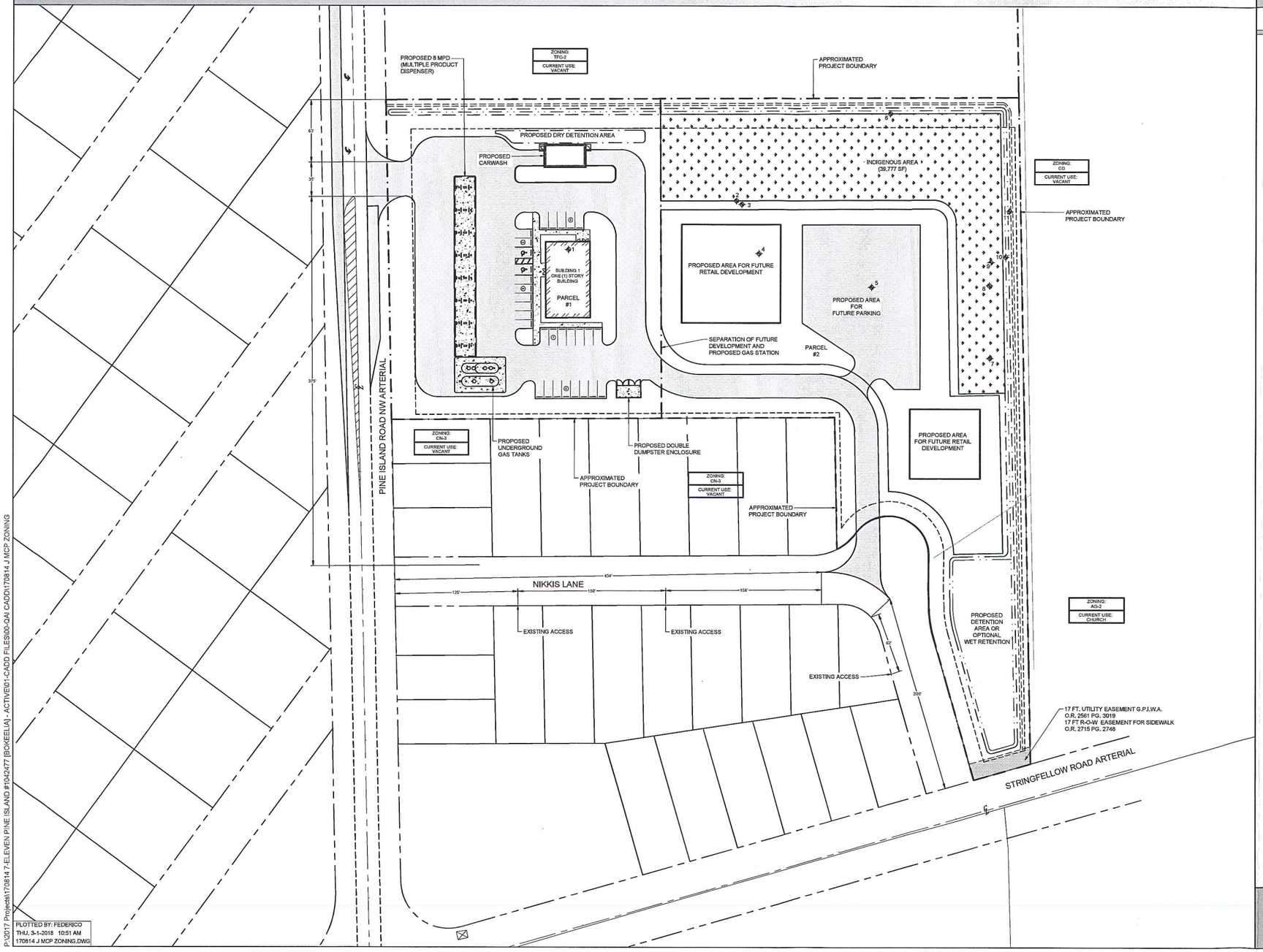
50' 100'

PLAN VIEW SCALE

Quattrone & Associates, Inc.
Engineers, Planners, & Development Consultants
4301 Veronica Shoemaker Blvd. | Fort Myers, FL 33916 | 239.936.5222 | QAInc.net

THE PINE ISLAND CENTER 7-11 CPD

5431 PINE ISLAND ROAD NW



P:\2017 Projects\170814 7-ELEVEN PINE ISLAND #1042477 [BOKEELIA] - ACTIVE\01-CADD FILES\00-QA\ CADD\170814 J MCP ZONING

PLOTTED BY: FEDERICO
THU, 3-1-2018 10:51 AM
170814 J MCP ZONING.DWG

MASTER CONCEPT PLAN

PROJECT SUMMARY:

EXISTING ZONING: COMMERCIAL PLANNED DEVELOPMENT
PROPOSED ZONING: COMMERCIAL PLANNED DEVELOPMENT

LAND BREAKDOWN:

TOTAL AREA = 251,686 SF (5.78 A.C)

- OPEN SPACE REQUIRED (30%) = 75,533 SF (1.73 AC.)
- OPEN SPACE PROVIDED = 75,506 SF (1.73 AC.)
- BUFFER, DRY DETENTION, OTHER = 75,600 SF (1.73 AC.)

INDIGENOUS AREA REQ. (15%) = 37,767 SF (0.87 A.C)
INDIGENOUS AREA PROVIDED = 39,777 SF (0.91 A.C)
10% INDIGENOUS CREDIT = 3,978 SF
TOTAL INDIGENOUS OPEN SPACE = 43,755 SF (1 AC.)

PROVIDED INDIGENOUS OPEN SPACE

GOPHER TORTOISE BURROW

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

N

50' 100'
PLAN VIEW SCALE

Quattrone & Associates, Inc.
Engineers, Planners, & Development Consultants
4301 Veronica Shoemaker Blvd. | Fort Myers, FL 33916 | 239.936.5222 | QAInc.net

Quattrone & Associates, Inc.

LIST OF DEVIATIONS AND JUSTIFICATION

The Pine Island Center 7-11
A CPD Amendment
Strap#: 28-44-22-00-00039.0000; 28-44-22-01-0000B.0170, .0150, .0120, .0110
5431 Pine Island Road NW, Bokeelia, FL 33922
5.77 ACRES

A request to deviate from LDC 10-285 Connection Separation, which requires a minimum 440-ft. Principal Arterial 440-ft. separation, to permit a 375 +/- connection separation on Pine Island Road as depicted on the Master Concept Plan measured from the west edge of the request CPD driveway to the northeast corner of Nikkis Lane and Pine Island Road.

The connection separation standard rests on the project's Pine Island Road driveway being located at the far east area of the property and aligning with Pine Island Professional Center's west driveway, located at 5400 Pine Island Road. By locating the project driveway at the east portion of the property and in alignment with the Pine Island Professional Center, the CPD meets the objective of 10-285, which calls for adequate driveway connection spacing. It is noted that the CPD parcel has 324-ft. feet along Pine Island Road, reducing the feasibility of meeting the code standard. Finally, the project benefits from the spacing connection deviation by providing for reasonable and necessary access onto Pine Island Road.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

P:\2017 Projects\170814 7-ELEVEN PINE ISLAND #1042477 [BOKEELIA] - ACTIVE\02-DOCUMENTS\13-ZONING\18FebSufficiencyResponse\22Feb18 PineIslaned7-11 Deviations and Justification.docx

Quattrone & Associates, Inc.

DEVELOPMENT PARAMETERS AND SCHEDULE OF USES

THE PINE ISLAND CENTER 7-11 CPD
CPD REZONING
5.77 ACRES
STRAPS#: 28-44-22-00-00039.0000 & 28-44-22-01-0000B.0110, 0120, 0150, & 0170
5431 PINE ISLAND RD NW, BOKEELIA, FL 33922

PROJECT SUMMARY

Future Land Use	Urban Community
Existing Zoning/Requested Zoning	CPD to CPD
Development Program	18,454 sf Commercial
Watershed	Pine Island Sound
Planning Community	Pine Island
Water Utilities	Pine Island Water Co.
Sanitary Sewer Utilities	Lee County Utilities

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Quattrone & Associates, Inc.

PINE ISLAND CENTER 7-11 CPD PROPERTY DEVELOPMENT REGULATIONS

Minimum Area Dimensions:	
Min. Lot Size	20,000 square feet
Min. Lot Depth	100 feet
Min. Lot Width	100 feet
Maximum Height	35 feet 2-story
Building Separation	One-half the sum of the heights of both buildings or 20 feet, whichever is greater per LDC Section 34-935e (4)
Maximum Lot Coverage	40%
Minimum Open Space	In accordance with the LDC 10-415
Minimum Setbacks:	
Street	50 feet
Side	15 feet
Rear	20 feet
Water body	25 feet
Accessory Structures	In accordance with LDC
Minimum Development Parcel Perimeter Setback	25 feet

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

Quattrone & Associates, Inc.

SCHEDULE OF USES

Accessory Uses and Structures
Administrative Offices
Agricultural Uses and Agricultural Accessory Uses
Animals: Clinic or Kennel (No Outdoor Runs)
ATM (Automatic Teller Machine)
Auto Parts Store (No Installation)
Banks and Financial Establishments: Groups I & II
Business Services: Groups I & II, excluding bail bonding and armored car services
Car Wash
Clothing Stores, general
Clubs, commercial, fraternal, membership organizations and private
Consumption on Premises
Convenience Food and Beverage Store
Drug Store, Pharmacy, limited to 4,500 sf
Essential Services
Essential Service Facilities: Group I & II, except for Sewage Disposal or Treatment Facilities, Solid Waste Transfer Stations, and Water Treatment Facilities.
Excavation: Water Retention, not to include the removal of excavated material
Fences and Walls
Food Stores: Group 1
Gift and Souvenir Shop
Hardware Store
Health Care Facilities: Groups I, II & III
Hobby, Toy and Game Shops
Household and Office Furnishings: Groups I & II, no outdoor display
Insurance Companies
Laundry or Dry Cleaning: Group I
Medical Office
Package Store
Paint Glass and Wallpaper
Parking Lot: Accessory
Personal Services: Groups I, II, III & IV, excluding massage establishments, massage parlors, steam or Turkish baths, dating services, escort services, palm readers, fortune tellers, card readers and tattoo parlors
Pet Services, no outdoor runs
Pet Shop, no outdoor runs
Place of Worship
Post Office
Printing and Publishing

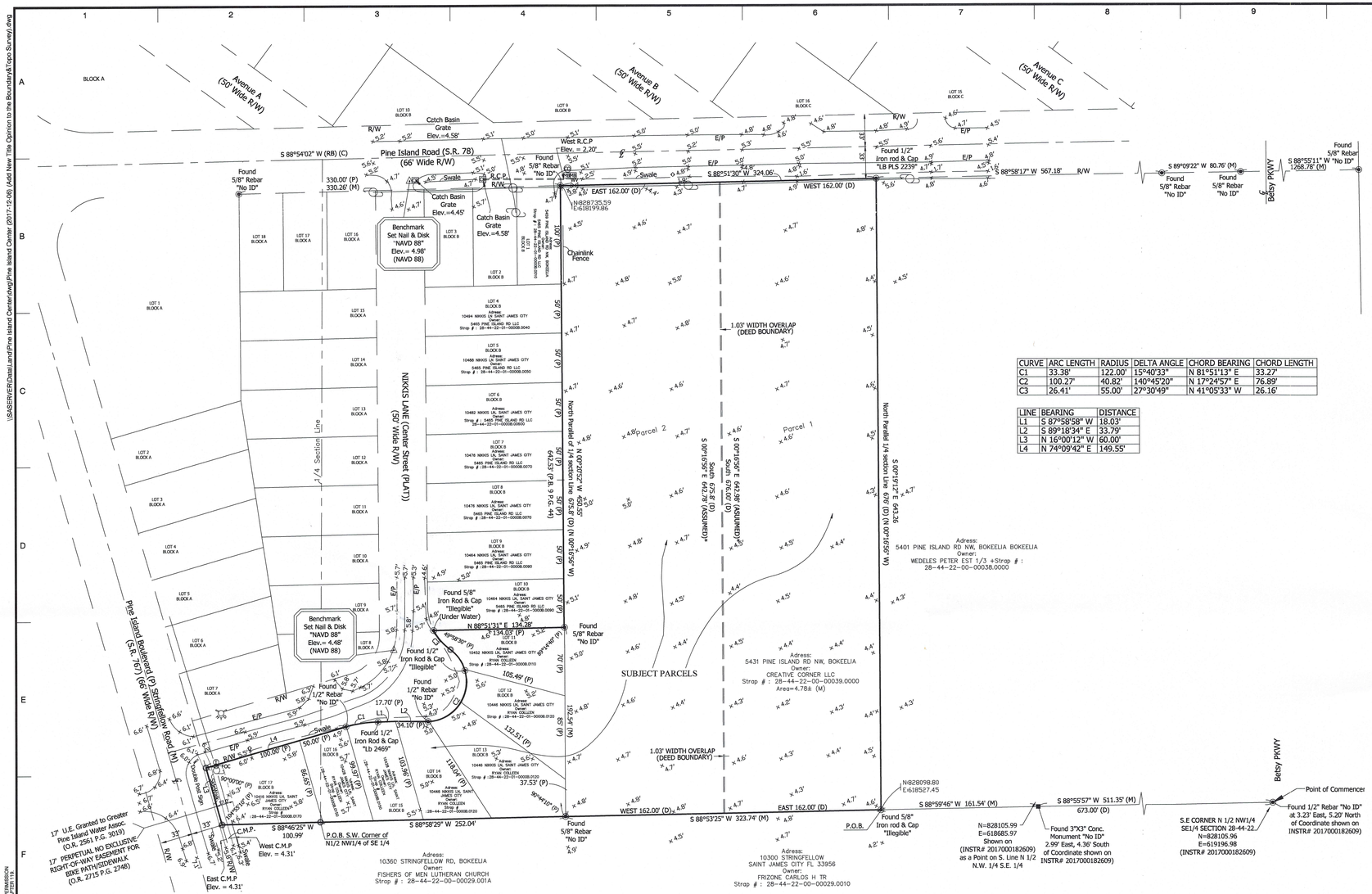
RECEIVED
MAR 0 2 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

Quattrone & Associates, Inc.

Real Estate Sales Offices
Recreation Facilities Commercial: Groups I & IV
Religious Facilities
Rental or Leasing Establishment: Groups I, II & III (no Construction Equipment and Trucks)
Repair Shops: Groups I & II
Restaurants: Groups II & III; Group IV by Special Exception
Retail and Wholesale Sales
Schools: Commercial & Non-commercial
Self-service Fuel Pumps
Signs (in accordance with chapter 30)
Social Services: Groups I & II
Specialty Retail, all Groups
Storage: Indoor accessory only

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003


Avenue A (50' Wide R/W)
Avenue B (50' Wide R/W)
Avenue C (50' Wide R/W)
Pine Island Road (S.R. 78) (66' Wide R/W)
S 88°54'02" W (RB) (C)
330.00' (P)
330.26' (M)
Found 5/8" Rebar "No ID"
Found 5/8" Rebar "No ID"
Found 1/2" Iron rod & Cap "LB PLS 2239"
S 88°58'17" W 567.18'
S 89°09'22" W 80.76' (M)
Found 5/8" Rebar "No ID"
Found 5/8" Rebar "No ID"
Betsy PKWY
S 88°55'11" W 1268.76' (M)
Found 5/8" Rebar "No ID"
Catch Basin Grate Elev.=4.58'
Catch Basin Grate Elev.=4.45'
Catch Basin Grate Elev.=4.58'
West R.C.P Elev. = 2.20'
E.C.P. Elev. = 2.20'
Swale
E/P
R/W
Benchmark Set Nail & Disk "NAVD 88" Elev.= 4.98' (NAVD 88)
Benchmark Set Nail & Disk "NAVD 88" Elev.= 4.48' (NAVD 88)
EAST 162.00' (D)
WEST 162.00' (D)
N828798.59
E:618199.86
Chainlink Fence
1.03' WIDTH OVERLAP (DEED BOUNDARY)
NIKKLS LANE (Center Street (PLAT)) (50' Wide R/W)
1/4 Section Line
North Parallel of 1/4 section Line 675.8' (D) N 00°25'52" W 450.55'
S 00°16'59" E 642.78' (ASSUMED)
S 00°16'59" E 643.98' (ASSUMED)
South 676.00' (D)
S 00°19'12" E 643.26'
N 00°19'12" W 643.26' (D)
Parcel 1
Parcel 2
SUBJECT PARCELS
Pine Island Boulevard (S.R. 767) Stringfellow Road (NW)
Found 5/8" Iron Rod & Cap "Illegible" (Under Water)
N 88°51'31" E 134.28'
134.03' (P)
Found 1/2" Rebar "No ID"
Found 1/2" Iron Rod & Cap "Illegible"
Found 1/2" Iron Rod & Cap "LB 2469"
Found 5/8" Rebar "No ID"
105.49' (P)
17.20' (P)
34.10' (P)
132.51' (P)
37.53' (P)
30°46'20" (P)
S 88°46'25" W 100.99'
West C.M.P Elev. = 4.31'
East C.M.P Elev. = 4.31'
P.O.B. S.W. Corner of N1/2 NW1/4 of SE 1/4
S 88°53'25" W 323.74' (M)
S 88°58'29" W 252.04'
Found 5/8" Iron rod & Cap "No ID"
P.O.B.
Found 5/8" Iron rod & Cap "Illegible"
N=828105.99
E=618685.97
Shown on (INSTR# 2017000182609) as a Point on S. Line N 1/2 N.W. 1/4 S.E. 1/4
Found 3"X3" Conc. Monument "No ID" 2.99' East, 4.36' South of Coordinate shown on INSTR# 2017000182609)
S 88°55'57" W 511.35' (M) 673.00' (D)
S.E CORNER N 1/2 NW1/4 SE1/4 SECTION 28-44-22 N=828105.96 E=619196.98 (INSTR# 2017000182609)
Point of Commencer
Found 1/2" Rebar "No ID" at 3.23' East, 5.20' North of Coordinate shown on INSTR# 2017000182609)
N828098.80
E:618527.45
17' U.E. Granted to Greater Pine Island Water Assoc. (O.R. 2561 P.G. 3019)
17' PERPETUAL NO EXCLUSIVE RIGHT-OF-WAY EASEMENT FOR BIKE PATH/SIDEWALK (O.R. 2715 P.G. 2748)
C.M.P.
Swale
Double Yellow Line
Adress: 10360 STRINGFELLOW RD, BOKEELIA Owner: FISHERS OF MEN LUTHERAN CHURCH Strap # : 28--44--22--00--00029.001A
Adress: 10300 STRINGFELLOW SAINT JAMES CITY FL 33956 Owner: FRIZONE CARLOS H TR Strap # : 28--44--22--00--00029.0010
Adress: 5401 PINE ISLAND RD NW, BOKEELIA BOKEELIA Owner: WEDELES PETER EST 1/3 +Strap # : 28--44--22--00--00038.0000
Adress: 5431 PINE ISLAND RD NW, BOKEELIA Owner: CREATIVE CORNER LLC Strap # : 28--44--22--00--00039.0000 Area= 4.78± (M)
Adress: 10484 NIKKIS LN, SAINT JAMES CITY Owner: 5465 PINE ISLAND RD LLC Strap # : 28--44--22--01--00008.0040
Adress: 10468 NIKKIS LN, SAINT JAMES CITY Owner: 5465 PINE ISLAND RD LLC Strap # : 28--44--22--01--00008.0050
Adress: 10482 NIKKIS LN, SAINT JAMES CITY Owner: 5465 PINE ISLAND RD LLC Strap # : 28--44--22--01--00008.0060
Adress: 10476 NIKKIS LN, SAINT JAMES CITY Owner: 5465 PINE ISLAND RD LLC Strap # : 28--44--22--01--00008.0070
Adress: 10464 NIKKIS LN, SAINT JAMES CITY Owner: 5465 PINE ISLAND RD LLC Strap # : 28--44--22--01--00008.0090
Adress: 10446 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0110
Adress: 10452 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0100
Adress: 10446 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0120
Adress: 10469 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0070
Adress: 10453 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0080
Adress: 10437 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0130
Adress: 10429 NIKKIS LN, SAINT JAMES CITY Owner: RYAN COLLEEN Strap # : 28--44--22--01--00008.0140
Found 5/8" Rebar "No ID"
Found 5/8" Rebar "No ID"
Found 5/8" Rebar "No ID"

Quattrone & Associates, Inc.

The Pine Island 7-11 CPD Surface Water Management Plan

The current existing site runoff character reflects the degree and character of the site's pine flatwood forested, the west site Nikkis Lane improved and platted land area, the east adjoining forested and unimproved property and the north Pine Island Road developed and cleared lands. A Pine Island Road drainage swale is located along the project's north boundary with drainage flows from west to east and towards Little Pine Island Creek.

In general terms, the project's drainage concept is based upon attenuation for a 25-year/3 day storm event. The primary hydrological concern for the site will be the management and storage of its surface waters as determined by FAC 17-3, 17-40, 17-301 and 40E-4. . A permit amendment to the South Florida Water Management District will insure continued compliance to the current District construction and operation permit so as to insure that there will not be a net increase in storm water run off quantity nor diminished water quality, as measured from existing, pre-development conditions.

The project will feature perimeter site berming and small dry detention areas for both water quality pre-treatment and surface water attenuation. The perimeter berm will be placed on the outside of the south 0.9 acre native open space area so as to allow the area to manage and attenuate storm water. The project is located within the 100-year flood with an AE - EL 7-ft. elevation for building construction and road design consideration. The project's surface water management system does not include any wetland system or upland habitat of concern.

DCI 2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Greater
Pine Island
Water Association, Inc.

October 26, 2017

Lee County Division of Concurrency Management
P. O. Box 398
Ft. Myers, FL 33902

Re: 5431 Pine Island Rd – 28-44-22-00-00039.0000

To Whom It May Concern:

Please be advised that Creative Corner LLC has requested potable water service availability for the above referenced property. Water mains are available adjacent to this project site or will be extended or upgraded by the developer under the terms of the Association's Rules and Regulations and Developer Specifications.

As of this date, the Greater Pine Island Water Association, Inc. has the capacity to provide an average daily flow of 3550 gallons per day of potable water from its water treatment plant to this site. Under normal operating conditions, static water pressure at the point where the development's water system is connected to the Association's existing main is estimated to be at 60 PSI.

This letter should not be construed as a commitment to serve, but only as to the availability of service at this time.

Sincerely,

Laurie Adams

Laurie Adams
General Manager

RECEIVED
MAR 0 2 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

TR TRANSPORTATION CONSULTANTS, INC

2726 OAK RIDGE COURT, SUITE 503
FORT MYERS, FL 33901-9356
OFFICE 239.278.3090
FAX 239.278.1906

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

March 1, 2018

Mr. Al Quattrone, P.E.
Quattrone & Associates, Inc.
4301 Veronica Shoemaker Blvd
Fort Myers, FL 33916

RE: DCI2018-00003, The Pine Island 7-11 CPD

Dear Mr. Quattrone:

TR Transportation Consultants, Inc. has reviewed the Traffic Impact Statement (TIS) comments issued by the Lee County Department of Community Development regarding the proposed zoning application of the above project. The comments and TR Transportation's response to those comments are listed below for reference.

LC T.I.S. Application Sufficiency Checklist:

3.b. *It will be necessary to revise the TIS to revise the description using the Land Development Code language for the pumps. The term "Re-fueling positions" is not defined by the LDC. Please refer to LDC Section 34-2 for the definition of fuel pump.*

The "re-fueling positions" terminology is defined by the Institute of Transportation Engineers (ITE) ***Trip Generation Manual*** and is consistent with previous traffic studies completed for gasoline stations in Lee County. The definition of a **fuel pump** in the LDC Section 34-2 has the same interpretation as a **re-fueling position**.

6.a. *The site design parameters that are stated in the TIS do not appear to correspond to the parameters that are stated and/or depicted in the non-TIS submittals. See the application and "Development Parameters and Schedule of Uses" as compared to the Master Concept Plan. Is the intent to have 2 options – one as shown on the MCP and the other as specific or generalized combination of commercial uses? Please clarify the maximum development intensity contemplated, and review and revise the TIS accordingly.*

The proposed rezoning application is to rezone the two existing CPD's into one CPD to allow the site to be developed with a gas/convenience use and up to 15,000 square feet of commercial/retail uses. The site design parameters have been revised to match those in the non-TIS submittals, specifically the number of re-fueling positions or fuel pumps. Note, the proposed carwash to be located on the north side of the subject site does not generate any additional project trips. According to **ITE Trip Generation Manual**, 10th Edition, "the presence of a car wash does not have a demonstrative

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

effect on trip generation rates". Therefore, the proposed car wash was not included in the analysis.

b. *Section III of the TIS indicates the proposed development is a 3,454 square foot convenience store with 18 refueling positions, and a 15,000 square foot shopping center. This conflicts with other areas of application. Please review the submitted application making sure the full application accurately and consistently describes the proposed development.*

Attached to this response is the updated TIS which has been corrected to reflect the correct number of refueling positions or fuel pumps.

c. *The TIS does not appear to contain a LOS analysis for each of the project's access points. Please review and revise the TIS accordingly.*

Attached to this response is the updated TIS which has been updated to reflect the above comment.

d. *The TIS LOS analysis for collector/arterial roadways does not appear to reference the Lee County Link-Specific Peak Hour Service Volumes table for LOS determination. Please review and revise the TIS accordingly.*

Based on previously completed zoning traffic studies for the Lee County, the Link-Specific Peak Hour Service Volumes table is utilized when the difference between build-out year and data tables (June, 2016) is less than 5 years. Therefore, LOS analysis has not been updated based on the *Comment 6d*.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

If you have any additional questions, please do not hesitate to contact us.

Sincerely,

Ted B. Treesh, PTP
President

Yury Bykau, E.I.
Transportation Consultant

Attachments

K: 2017 11 November 14 7-Eleven Pine Island Center Sufficiency 3-1-2018 Sufficiency.doc

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

TR TRANSPORTATION CONSULTANTS, INC

2726 OAK RIDGE COURT, SUITE 503
FORT MYERS, FL 33901-9356
OFFICE 239.278.3090
FAX 239.278.1906

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

TRAFFIC IMPACT STATEMENT

FOR

PINE ISLAND CENTER 7-ELEVEN CPD

PROJECT NO. F1711.14

PREPARED BY:
TR Transportation Consultants, Inc.
Certificate of Authorization Number: 27003
2726 Oak Ridge Court, Suite 503
Fort Myers, Florida 33901-9356
(239) 278-3090

Revised: March 1, 2018

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

TR TRANSPORTATION CONSULTANTS, INC

CONTENTS

I. INTRODUCTION

II. EXISTING CONDITIONS

III. PROPOSED DEVELOPMENT

IV. TRIP GENERATION

V. TRIP DISTRIBUTION

VI. FUTURE TRAFFIC CONDITIONS

VII. PROJECTED LEVEL OF SERVICE AND IMPROVEMENTS

VIII. EXISTING ZONING VS PROPOSED ZONING

IX. CONCLUSION

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

TR TRANSPORTATION CONSULTANTS, INC

I. INTRODUCTION

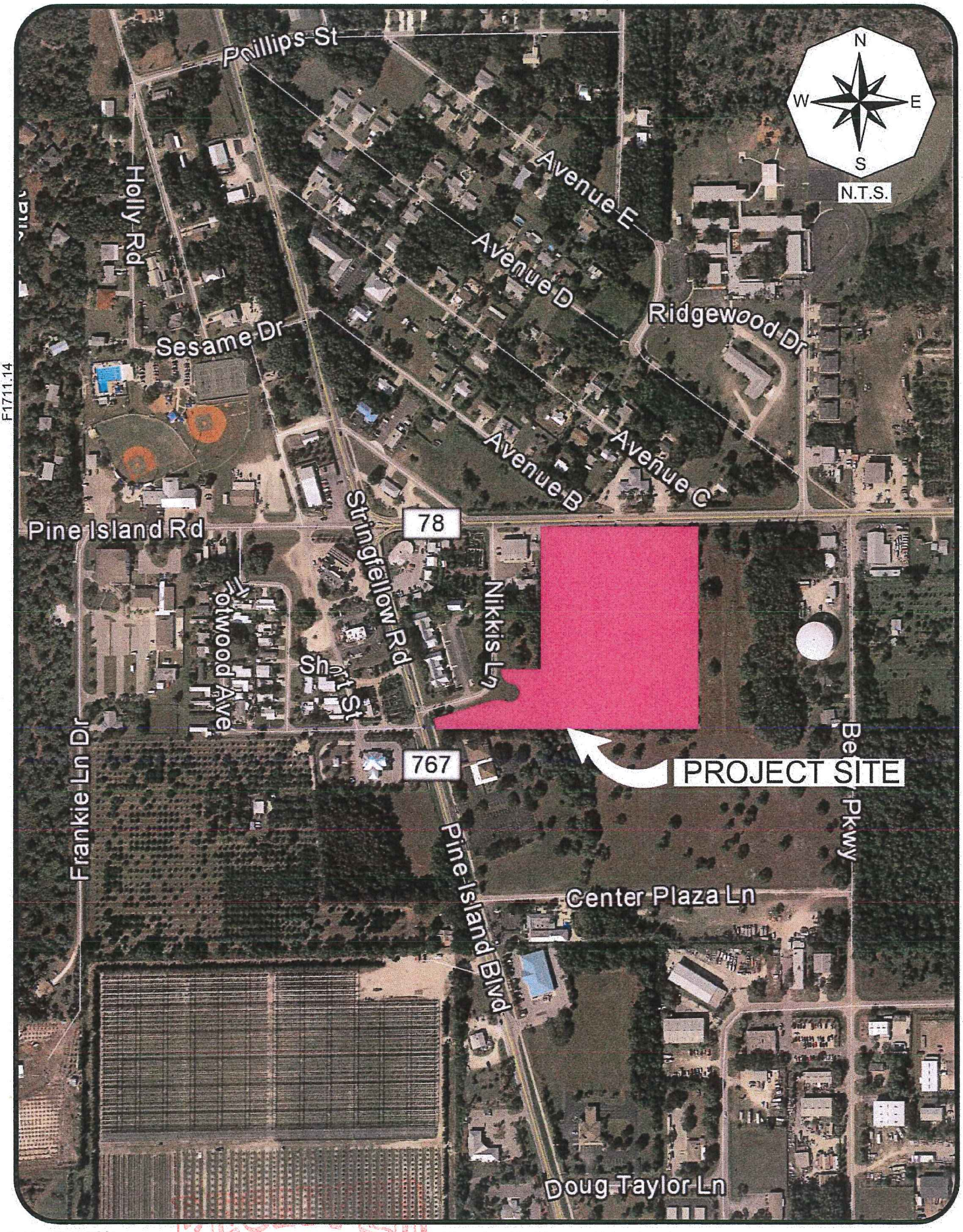
TR Transportation Consultants, Inc. has conducted a traffic impact statement to fulfill requirements set forth by the Lee County Department of Community Development for projects seeking rezoning approval. The proposed project is located at the southeast corner of the Pine Island Road and Stringfellow Road on Pine Island Center in the Lee County, Florida. **Figure 1** illustrates the approximate location of the subject site.

The subject site consists of five vacant parcels which are currently zoned CPD (Commercial Planned Development). The four western lots, previously known as Johnson Rezoning and currently known as Pine Island Center CPD, are governed by Resolution #Z-06-043. The eastern lot, known as Creative Corner CPD, is governed by Resolution #Z-07-015. In Resolution #Z-07-015, the subject site was approved to allow a maximum of 38,000 square feet of commercial uses, of which a maximum of 28,000 square feet are retail uses. The applicant is requesting a rezoning of the two existing CPD's to one CPD to allow the site to be developed of a gas/convenience use and up to 15,000 square feet of commercial and retail uses. Access to the subject site is proposed to Pine Island Road via a full site access drive and to Nikkis Lane.

This report examines the impact of the development on the surrounding roadways and intersections. Trip generation and assignments to the various surrounding intersections will be completed and analysis conducted to determine the impacts of the development on the surrounding streets and intersections.

The conclusions of this report support the rezoning request and demonstrate consistency with Goals and Objectives of the Lee County Comprehensive Plan as they relate to Greater Pine Island. Specifically, Goal 14 and Objectives related to commercial development within Pine Island Center and the impacts of commercial development on the roads and reducing the transportation impacts on vehicular trips through Matlacha.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003



F1711.14

TR TRANSPORTATION CONSULTANTS, INC.

PROJECT LOCATION MAP
7-ELEVEN @ PINE ISLAND CENTER

Figure 1

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

II. EXISTING CONDITIONS

The subject site is currently vacant. Pine Island Road borders the subject site to the north, vacant land borders the site to the east, a church and vacant land border the site to the south and Nikkis Lane along with a restaurant border the site to the west.

Pine Island Road is a two-lane undivided arterial that borders the subject site to the north. The intersection of Pine Island Road with Stringfellow Road operates under a four-way stop control. Pine Island Road has a posted speed limit of 40 mph and is under the jurisdiction of the Lee County Department of Transportation.

Nikkis Lane is two-lane undivided local roadway to the west of the subject site. Project traffic will access Nikkis Lane via proposed two-way easement. Since Nikkis Lane has no posted speed limit, the speed limit per Florida Statute 316.183(2) is 30 mph. Nikkis Lane is also under the jurisdiction of the Lee County Department of Transportation.

Stringfellow Road is a two-lane undivided arterial within the vicinity of the subject site. The intersection of Stringfellow Road with Nikkis Lane operates under a two-way stop control. Stringfellow Road has a posted speed limit of 45 mph and is under the jurisdiction of the Lee County Department of Transportation.

TR Transportation conducted manual vehicle turning movements at the intersections of Pine Island Road/Stringfellow Road and Stringfellow Road/Nikkis Lane in December of 2017. The RAW data sheets are included in the Appendix of this report for reference. A peak season adjustment factor (Category 1249 – Pine Island) was applied based on the most recent peak season factors contained in the FDOT Traffic Information Online information. The peak season adjustment factor used is included in the Appendix of this report for reference.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

III. PROPOSED DEVELOPMENT

The applicant is requesting to rezone the subject site from CPD to allow the site to be developed with an approximately 3,454 square foot convenience store with 16 refueling positions (8 pumps) and 15,000 square feet of retail uses. **Table 1** summarizes the land uses utilized for trip generation purposes for the subject site.

Table 1
Land Uses
Pine Island Center 7-Eleven CPD

Land Use	Size
Super Convenience Market/Gas Station	3,454 sq. ft. & 16 Re-Fueling Positions
Shopping Center	15,000 sq. ft.

Access to the subject site is proposed to Pine Island Road via a full site access drive and to Nikkis Lane via a two-way easement.

IV. TRIP GENERATION

The trip generation for the proposed development was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation***, 10th Edition. The multi-variable regression equations from the Land Use Code 960 (Super Convenience Market/Gas Station) were utilized for the trip generation purposes of the proposed 7-Eleven. Land Use Code 820 (Shopping Center) was utilized for the trip generation purposes of the proposed retail uses. The equations utilized from these land uses are contained in the Appendix of this report for reference. **Table 2** outlines the anticipated weekday A.M. and P.M. peak hour and daily trip generation of the development as currently proposed.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

Table 2
Trip Generation
Pine Island Center 7-Eleven CPD

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Super Convenience Market/Gas Station (3,454 sq. ft. and 16 re-fueling positions)	121	120	241	122	122	244	2,893
Shopping Center (15,000 sq. ft.)	99	60	159	64	69	133	1,655
Total Trips	**220**	**180**	**400**	**186**	**191**	**377**	**4,548**

The total trips shown for the gas station use in Table 2 will not all be new trips to the adjacent roadway system. ITE estimates that a shopping center and a convenience market/gas station of comparable size may attract a significant amount of its traffic from vehicles already traveling the adjoining roadway system. This traffic, called "pass-by" traffic, reduces the development's overall impact on the surrounding roadway system but does not decrease the actual driveway volumes. Since no "pass-by" information was provided for Land Use Code 960 in the latest Trip Generation Handbook, the "pass-by" information from Land Use Code 853 (Convenience Market with Gasoline Pumps) was utilized. ITE indicates an average "pass-by" traffic reduction for Land Use Code 853 of 63% during the A.M. peak hour and 66% during the P.M. peak hour. Additionally, Lee County only permits a maximum reduction in trips due to "pass-by" traffic for shopping centers of thirty percent (30%). Therefore, thirty percent (30%) pass-by reduction was utilized for the proposed retail uses.

For this analysis, the "pass-by" traffic was accounted for in order to determine the number of "new" trips the development will add to the surrounding roadways. **Table 3** summarizes the "pass-by" percentages for the proposed uses. **Table 4** summarizes the development traffic and the breakdown between the new trips the development is anticipated to generate and the "pass-by" trips the development is anticipated to attract. It should be noted that the driveway volumes are not reduced as a result of the "pass-by" reduction, only the traffic added to the surrounding streets and intersections.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Table 3
Pass-by Trip Reduction Factors
Pine Island Center 7-Eleven CPD

Land Use	Percentage Trip Reduction
Convenience Market with Gasoline Pumps (LUC 853)	63% A.M. 66% P.M. & Daily
Shopping Center (LUC 820)	30% A.M/P.M

Table 4
Trip Generation – New Trips
Pine Island Center 7-Eleven CPD

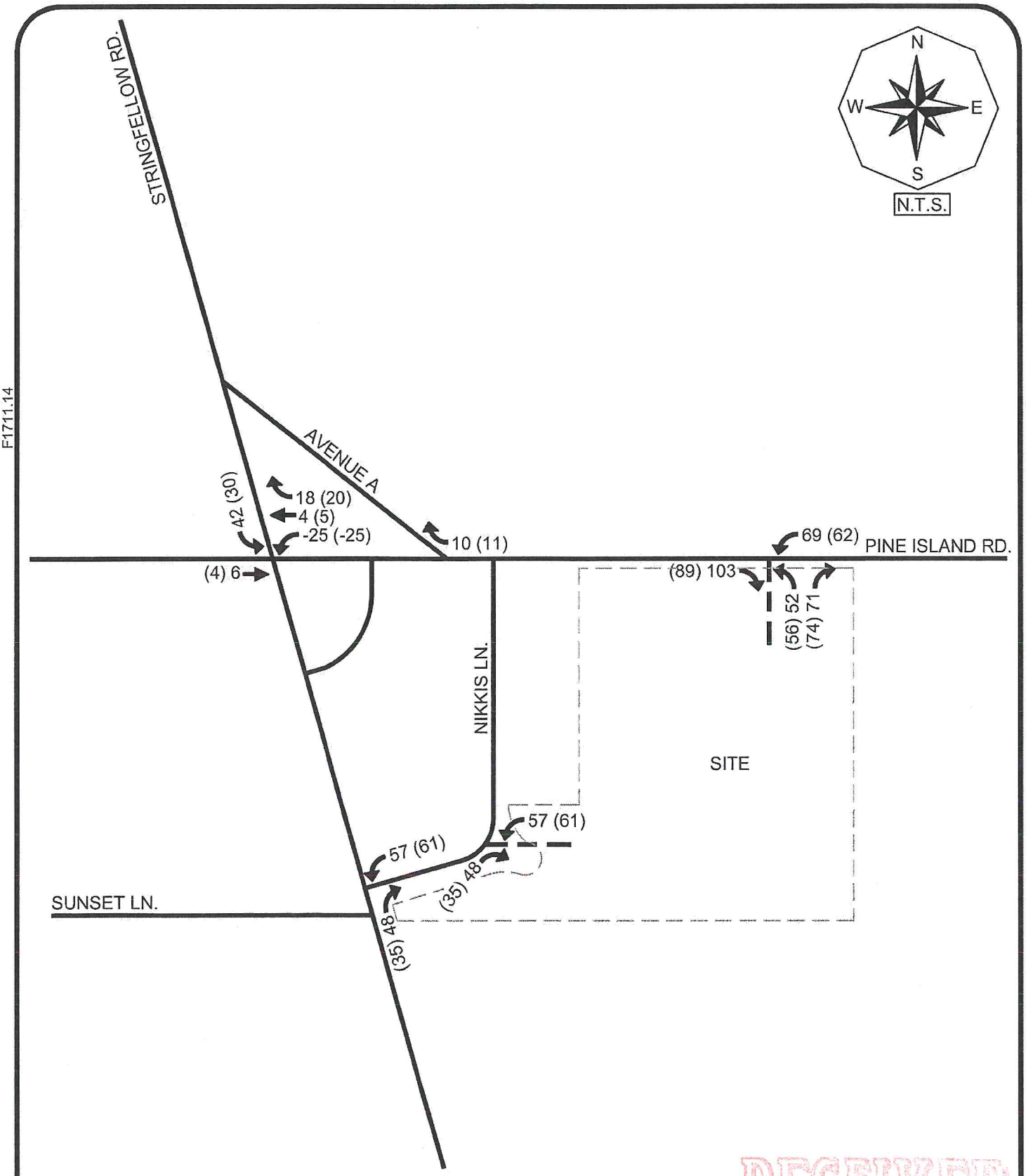
Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Total Trips	**220**	**180**	**400**	**186**	**191**	**377**	**4,548**
Less LUC 853 Pass-by	-76	-76	-152	-80	-81	-161	-1,909
Less LUC 820 Pass-by	-24	-24	-48	-20	-20	-40	-497
New Trips	**120**	**80**	**200**	**86**	**90**	**176**	**2,142**

V. TRIP DISTRIBUTION

The trips the proposed development is anticipated to generate were assigned to the site access drives and the surrounding roadway network. The net new trips anticipated to be added to the surrounding roadway network were assigned based upon the routes drivers are anticipated to utilize to approach the subject site. Figure A-1, included in the Appendix of this report, illustrates the percent project traffic distribution and assignment of the net new project trips. Figure A-2, included in the Appendix of this report, illustrates the percent project traffic distribution and assignment of pass-by trips. **Figure 2** illustrates the resulting assignment of all project related trips (net new + pass-by).

In order to determine which roadway segments surrounding the site may be significantly impacted as outlined in the Lee County Traffic Impact Statement Guidelines, **Table 1A**, in the Appendix, was created. This table indicates which roadway links will accommodate greater than 10% of the Peak Hour Level of Service "C" volumes. The Level of Service threshold volumes were obtained from the ***Lee County Generalized***

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003



F1711.14

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

TR TRANSPORTATION CONSULTANTS, INC

ASSIGNMENT OF ALL SITE RELATED TRIPS
NET NEW + PASS-BY TRIPS
7-ELEVEN @ PINE ISLAND GLENEIS

DECEMBER 2018 • Figure 2

Peak Hour Directional Service Volume Tables (dated June, 2016). Based on Table 1A, no roadway segments will be significantly impacted as a result of the proposed development.

VI. FUTURE TRAFFIC CONDITIONS

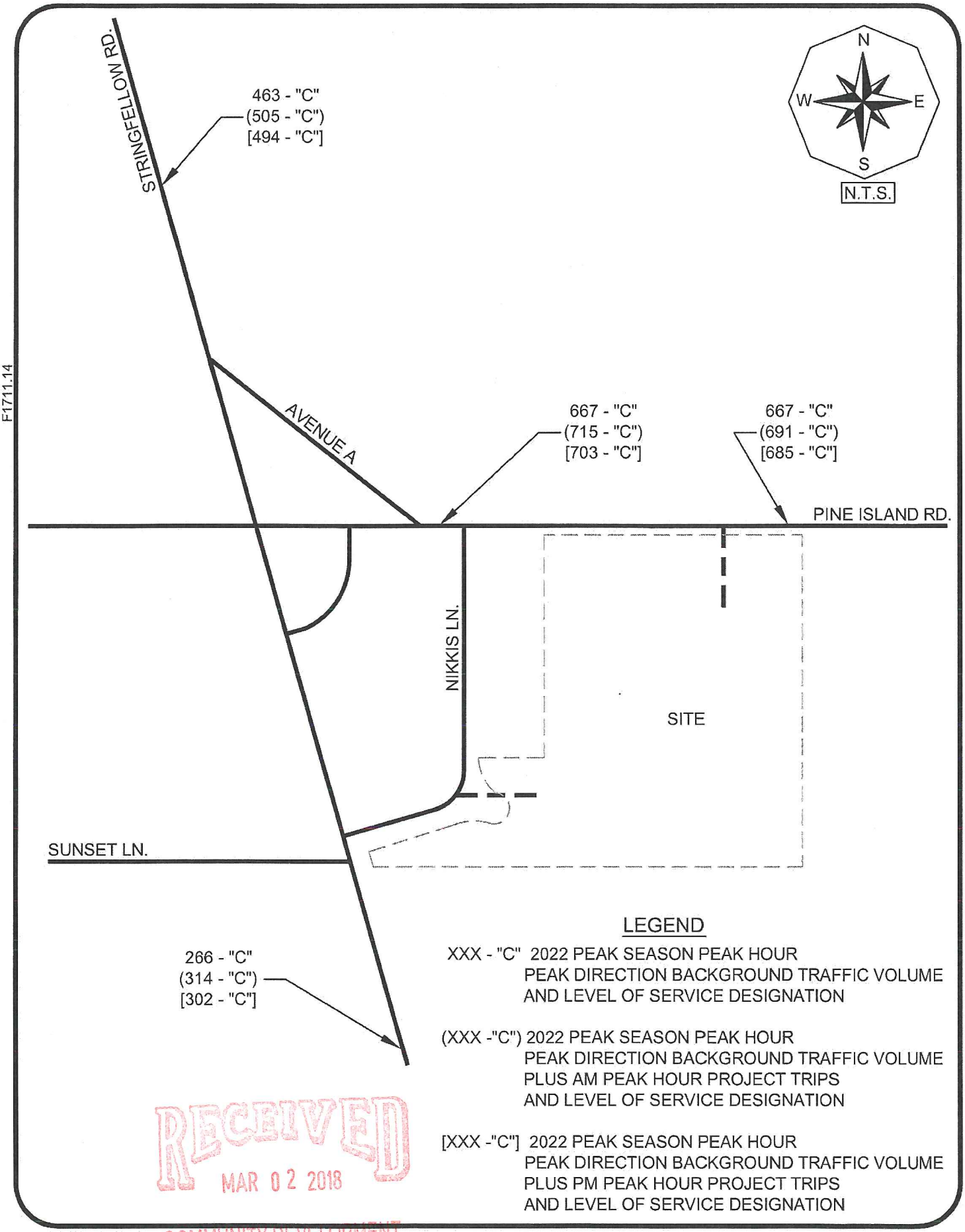
A horizon year analysis of 2022 was selected as the analysis year to evaluate the future impacts this project will have on the surrounding roadway network. Based on this horizon year, a growth rate was applied to the existing traffic conditions for all roadway links that could be significantly impacted by this development. The growth rates were obtained through comparisons of annual traffic data from 2016 Lee County Traffic Count Report. Based on the project distribution illustrated on Figure 2, the link data was analyzed for the year 2022 without the development and year 2022 with the development.

Table 2A in the Appendix of the report indicates the methodology utilized to obtain the year 2022 build-out traffic volumes as well as the growth rate utilized for each roadway segment. The base year traffic volumes were obtained from the 2017 ***Lee County Public Facilities Level of Service and Concurrency Report.***

Figure 3 indicates the year 2022 peak hour – peak direction traffic volumes and Level of Service for the various roadway links within the study area. Noted on Figure 3 is the peak hour – peak direction volume and Level of Service of each link should no development occur on the subject site and the peak hour – peak direction volume and Level of Service for the weekday A.M. and P.M. peak hours with the development traffic added to the roadways. These figures are derived from Table 2A contained in the Appendix.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003



F1711.14

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

TR TRANSPORTATION CONSULTANTS, INC

PROJECTED 2022 LEVEL OF SERVICE ANALYSIS
7-ELEVEN @ PINE ISLAND CENTER

CU 2018-00003

Figure 3

VII. PROJECTED LEVEL OF SERVICE AND IMPROVEMENTS

Figure 3 details the Level of Service for all links inside the project's area of influence based on this analysis. In comparing the links' functional classification and calculated 2022 traffic volumes to the Service Volume Tables, it was determined that none of the roadways inside the project's area of influence would be adversely impacted by the proposed development. Adverse impacts are defined as a degradation of the Level of Service beyond the adopted Level of Service Thresholds for those links as indicated in Table 1A. In other words, all roadways analyzed as a result of the proposed development ill maintain an acceptable Level of Service when the development traffic is added to the surrounding roadway network. Therefore, the proposed rezoning of the subject site is consistent with the goals and objectives of the Lee County Comprehensive Plan in that there is sufficient roadway capacity to accommodate the additional new vehicle trips the subject site is anticipated to generate.

Intersection analysis was performed at the intersection of Pine Island Road with Stringfellow Road, Stringfellow Road with Nikkis Lane and at site access drive intersections to Pine Island Road and Nikkis Lane based on the latest version of the Highway Capacity Software (HCS®). The analysis was based on the projected 2022 weekday AM and PM peak hour traffic conditions both with and without the project traffic. The traffic counts were conducted between hours of 7:00 to 9:00 A.M. and 4:00 to 6:00 P.M. The turning movement counts were then adjusted to reflect peak season conditions based on the Peak Season Factor as published by the Florida Department of Transportation. The existing traffic volumes were then increased by a growth rate factor to determine the projected 2022 background turning movement volumes. The volumes utilized for the intersection analysis can be found in the Appendix of this report in the *Development of Future Year Background Turning Movement* volumes spreadsheets.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Based upon the results of the capacity analysis at the intersection of Pine Island Road and Stringfellow Road, the intersection is shown to operate at a LOS "C" both with and without the proposed development in the 2022 peak hour conditions. The results of the intersection analysis completed at the intersection of Stringfellow Road with Nikkis Lane indicate that all of the approaches will operate at an acceptable LOS in 2022 both with and without the proposed development in the peak hour conditions. The results also indicate that all of the approaches at the site access drive intersections to Pine Island Road and Nikkis Lane will operate at an acceptable LOS in 2022 in the peak hour conditions. Therefore, no intersection improvements are warranted at the analyzed intersections.

The zoning amendment to combine two existing CPD's into one CPD will not increase hurricane evacuation times leaving Greater Pine Island. With the added use of a gas/convenience use, patrons will be able to complete essential services that are necessary in an evacuation (re-fueling) that can be overburdened on the mainland. During typical business periods, the gas/convenience use is primarily a "pass-by" use, meaning patrons are not coming from the mainland to visit the gas/convenience use. These uses are abundant on the mainland. A new gas/convenience store is proposed on Pine Island Road at the northeast corner with Burnt Store Road. This use will "attract" traffic from patrons that are already on Greater Pine Island and give customers more options to choose from when visiting a gas/convenience store. The proposed amendment will have minimal to no impact on traffic traveling through Matlacha, consistent with Policy 14.4.1 of the Lee Plan.

Turn Lane improvements at the site access drives intersections will be evaluated at the time the project seeks Local Development Order approval.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

VIII. EXISTING ZONING VS PROPOSED ZONING

A trip generation comparison for information purposes was conducted between the approved uses as described in Resolutions #Z-06-043 and #Z-07-015, and the proposed uses as part of this rezoning application. Currently, the subject site consists of five vacant parcels which are currently zoned CPD (Commercial Planned Development). The four western lots, known as Pine Island Center CPD, are governed by Resolution #Z-06-043. The eastern lot, known as Creative Corner CPD, is governed by Resolution #Z-07-015. In the Resolution #Z-06-043, the subject is approved to allow a maximum development of 8,700 square feet of gross floor area, or not more than 3,700 square feet of medical office uses. Resolution #Z-06-043 also states that the development is limited to uses which generate less than 134 daily trips. In Resolution #Z-07-015, the subject site was approved to allow a maximum of 38,000 square feet of commercial uses, of which a maximum of 28,000 square feet are retail uses. The proposed rezoning would allow the applicant to rezone the two existing CPD's to one CPD to allow the site to be developed with an approximately 3,454 square foot convenience store with 16 refueling positions (8 pumps) and 15,000 square feet of retail uses. **Table 5** summarizes the uses that would be permitted under the existing zoning versus those under the proposed rezoning.

Table 5
Land Uses
Approved vs Proposed Uses

Land Use Category	Intensity
Approved Land Use	**Resolution #Z-06-043:** 3,700 sq. ft. of Medical Office **Resolution #Z-07-015:** 28,000 sq. ft. of Retail & 10,000 sq. ft. of Office
Proposed Land Uses	3,454 sq. ft. C-store with 16 Re-Fueling Positions and 15,000 sq. ft. of Retail

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

The trip generation for the approved land uses was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation***, 10th Edition. Land Use Code 720 (Medical-Dental Office Building) was utilized for the trip generation purposes for the uses approved in the Zoning Resolution #Z-06-043. Land Use Code 820 (Shopping Center) and Land Use Code 710 (General Office Building) was utilized for the trip generation purposes for the uses approved in the Zoning Resolution #Z-07-015. The equations utilized from these land uses are contained in the Appendix of this report for reference. **Table 6** outlines the anticipated weekday A.M. and P.M. peak hour and daily trip generation of the development as currently approved.

Table 6
Trip Generation
Approved Uses

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Medical-Dental Office (3,700 sq. ft.)	9	3	12	4	11	15	55
Shopping Center (28,000 sq. ft.)	103	63	166	102	110	212	2,530
General Office Building (10,000 sq. ft.)	31	5	36	2	11	13	114
Total Trips	**143**	**71**	**214**	**108**	**132**	**240**	**2,699**

Table 7 indicates the trip generation comparison between the approved driveway trips shown in Table 6 versus the driveway trips based on the proposed rezoning as shown in Table 2. As can be seen in Table 7, a positive number is shown as the resultant trip change.

Table 7
Trip Generation
Resultant Trip Change – Total Trips

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Proposed Uses (Table 2)	220	180	400	186	191	377	4,548
Approved Uses (Table 6)	-143	-71	-214	-108	-132	-240	-2,699
Resultant Trip Change	**+77**	**+109**	**+186**	**+78**	**+59**	**+137**	**+1,849**

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

UCI2018-00003

Table 8 below summarizes the approved development traffic and the breakdown between the new trips the approved development is anticipated to generate and the "pass-by" trips the approved retail uses are anticipated to attract.

Table 8
Trip Generation – Net New Trips
Approved Uses

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Total Trips	143	71	214	108	132	240	2,699
Less LUC 820 Pass-by	-25	-25	-50	-32	-32	-64	-759
New Trips	**118**	**46**	**164**	**76**	**100**	**176**	**1,940**

Note: The same pass-by rate as shown in Table 3 for retail uses was utilized.

Table 9 indicates the trip generation comparison between the approved net new trips shown in Table 8 versus the net new trips based on the proposed rezoning as shown in Table 4. As can be seen in Table 9, a positive number is shown as the resultant trip change in the AM peak hour conditions. In the PM peak hour conditions the overall resultant trip change is shown to equal to zero.

Table 9
Trip Generation
Resultant Trip Change – Net New Trips

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Proposed Uses (Table 4)	120	80	200	86	90	176	2,142
Approved Uses (Table 8)	-118	-46	-164	-76	-100	-176	-1,940
Resultant Trip Change	**+2**	**+34**	**+36**	**+10**	**-10**	**0**	**+202**

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

IX. CONCLUSION

The proposed Pine Island Center 7-Eleven CPD located at the southeast corner of the Pine Island Road and Stringfellow Road on Pine Island Center in the Lee County, Florida will not degrade the Level of Service of Pine Island Road and Stringfellow Road below the conditions for which they are currently operating. Pine Island Road and Stringfellow Road are shown to operate at a Level of Service "C" in 2022 both with and without the addition of the project traffic.

Intersection analysis was conducted at the intersections of Pine Island Road with Stringfellow Road, Stringfellow Road with Nikkis Lane and at site access drive intersections to Pine Island Road and Nikkis Lane based upon the projected 2022 AM and PM peak hour traffic conditions. Based upon the results of the capacity analysis, all aforementioned intersections are shown to operate at an acceptable LOS in 2022 both with and without the proposed development in the peak hour conditions.

The zoning amendment will not increase the overall hurricane evacuation times from Greater Pine Island. The added use of a gas/convenience store on this parcel will give additional opportunities for Greater Pine Island residents to obtain essential services (gas) during a storm event. In general, the gas/convenience use is an "attractor" or trips rather than generating "new" trips to the island. Trips from the mainland will not travel to this site to only visit the gas/convenience use. These uses are abundant on the mainland and in fact, a new 7-Eleven is proposed on the north side of Pine Island Road in the Publix shopping center at Burnt Store Road. The requested amendment is consistent with Goal 14 of the Lee County Comprehensive Plans with respect to transportation impacts to Greater Pine Island.

A trip generation comparison between the approved uses as described in Resolutions #Z-06-043 and #Z-07-015, and the proposed uses as part of this rezoning application was conducted. Based on the results of the analysis, the number of "new" trips the rezoning

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

will add to the adjacent road network is negligible in the AM Peak Hour and is the same as the existing permitted uses in the PM Peak Hour, effectively having no net additional impacts.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

APPENDIX

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

TABLES 1A & 2A

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

TABLE 1A
PEAK DIRECTION PROJECT TRAFFIC VS. 10% LOS C LINK VOLUMES
7-ELEVEN @ PINE ISLAND CENTER

TOTAL AM PEAK HOUR PROJECT TRAFFIC = 200 VPH IN= 120 OUT= 80

TOTAL PM PEAK HOUR PROJECT TRAFFIC = 176 VPH IN= 86 OUT= 90

ROADWAY	SEGMENT	ROADWAY CLASS	LOS A VOLUME	LOS B VOLUME	LOS C VOLUME	LOS D VOLUME	LOS E VOLUME	PERCENT PROJECT TRAFFIC	PROJECT TRAFFIC	PROJ/ LOS C
Pine Island Rd	E. of Site Access	2LU	0	140	800	860	860	20%	24	3.00%
	W. of Site Access	2LU	0	140	800	860	860	40%	48	6.00%
Stringfellow Rd	N. of Pine Island Rd	2LU	0	140	800	860	860	35%	42	5.25%
	S. of Pine Island Rd	2LU	0	140	800	860	860	40%	48	6.00%

* Lee County Generalized Peak Hour Level of Service thresholds (April 2016) utilized.

** Note: 5% of project traffic was assigned to Pine Island Road, west of Stringfellow Road.

DCI2018-00003
RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

TABLE 2A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
7-ELEVEN @ PINE ISLAND CENTER

TOTAL PROJECT TRAFFIC AM = 200 VPH IN = 120 OUT= 80

TOTAL PROJECT TRAFFIC PM = 176 VPH IN= 86 OUT= 90

ROADWAY	SEGMENT	STA #	2008 ADT	2016 ADT	YRS OF GROWTH	ANNUAL RATE[1]	2016 PK HR PK SEASON PEAK DIR.[2]	2022 PK HR PK SEASON PEAK DIRECTION VOLUME	LOS	PERCENT PROJECT TRAFFIC	AM PROJ TRAFFIC	PM PROJ TRAFFIC	2022 BCKGRND + AM PROJ VOLUME	LOS	2022 BCKGRND + PM PROJ VOLUME	LOS
Pine Island Rd	E. of Site Access	3	10,300	11,500	8	2.00%	592	667	C	20%	24	18	691	C	685	C
	W. of Site Access	3	10,300	11,500	8	2.00%	592	667	C	40%	48	36	715	C	703	C
Stringfellow Rd	N. of Pine Island Rd	399	8,400	8,400	8	2.00%	411	463	C	35%	42	32	505	C	494	C
	S. of Pine Island Rd	399	8,400	8,400	8	2.00%	236	266	C	40%	48	36	314	C	302	C

[1] Growth rate was calculated based on historical AADT data obtained from 2016 Lee County Traffic Count Report.
A minimum growth rate of two percent (2%) would be utilized, if annual rate did not exceed 2%.

[2] Data was obtained from the 2017 Lee County Public Facilities Level of Service and Concurrency Report.

DCI2018-00003
COMMUNITY DEVELOPMENT
RECEIVED
MAR 02 2018

2017 LEE COUNTY PUBLIC FACILITIES LEVEL OF SERVICE AND CONCURRENCY REPORT

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

Table 18 (cont.): Existing and Future Roadway LOS on County-Maintained Arterials in Unincorporated Areas

ROADWAY LINK				100TH HIGHEST HOUR DIRECTIONAL VOLUMES						
				STANDARD		2016		2021		
NAME	FROM	TO	TYPE	LOS	MAX	LOS	EXISTING	LOS	FUTURE	NOTES
McGREGOR BLVD	SANIBEL T PLAZA	HARBOR DR	4LD	E	1,960	B	1,141	B	1,199	
	HARBOR DR	SUMMERLIN RD	4LD	E	1,960	B	1,071	B	1,126	
	SUMMERLIN RD	KELLY RD	4LD	E	1,960	A	964	A	1,013	
	KELLY RD	GLADIOLUS DR	4LD	E	1,960	A	964	A	1,013	
N RIVER RD	SR 31	FRANKLIN LOCK RD	2LN	E	1,140	A	126	B	246	
	FRANKLIN LOCK RD	BROADWAY RD	2LN	E	1,140	A	119	B	264	
	BROADWAY RD	COUNTY LINE	2LN	E	1,140	A	119	A	152	
ORANGE RIVER BLVD	SR 80	STALEY RD	2LN	E	1,000	C	411	C	432	
	STALEY RD	BUCKINGHAM RD	2LN	E	1,000	C	344	C	381	
ORTIZ AVE	COLONIAL BLVD	SR 82	2LN	E	900	C	839	C	882	
	SR 82	LUCKETT RD	2LN	E	900	F	1,046	F	1,099	4 Ln design & ROW
	LUCKETT RD	SR 80	2LN	E	900	B	392	B	412	4 Ln design & ROW
PINE ISLAND RD	STRINGFELLOW RD	BURNT STORE RD	2LN	E	950	E	592	E	692	Constrained
PONDELLA RD	SR 78	ORANGE GROVE BLVD	4LD	E	1,890	B	1,043	B	1,096	
	ORANGE GROVE BLVD	US 41	4LD	E	1,890	B	1,294	B	1,369	
	US 41	BUS 41	4LD	E	1,890	B	1,139	B	1,197	
SANIBEL CAUSE-WAY	SANIBEL SHORELINE	TOLL PLAZA	2LN	E	1,140	E	902	E	948	
SIX MILE CYPRESS	METRO PKWY	DANIELS PKWY	4LD	E	2,000	B	1,378	B	1,448	
	DANIELS PKWY	WINKLER EXT.	4LD	E	1,900	B	1,040	B	1,167	
SLATER RD	SR 78	NALLE GRADE RD	2LN	E	1,010	C	430	C	452	
STRING-FELLOW RD	1ST AVE	BERKSHIRE RD	2LN	E	1,060	B	236	D	597	Constrained
	BERKSHIRE RD	PINE ISLAND RD	2LN	E	1,060	B	236	C	365	Constrained
	PINE ISLAND RD	PINELAND RD	2LN	E	1,060	C	411	C	529	Constrained
	PINELAND RD	MAIN ST	2LN	E	1,060	C	411	C	505	
SUMMERLIN RD	McGREGOR BLVD	KELLY COVE RD	4LD	E	1,980	A	1,257	A	1,321	
	KELLY COVE RD	SAN CARLOS BLVD	4LD	E	1,980	A	1,257	A	1,321	
	SAN CARLOS BLVD	PINE RIDGE RD	6LD	E	3,000	A	1,854	A	1,965	
	PINE RIDGE RD	BASS RD	6LD	E	3,000	A	1,854	A	1,949	
	BASS RD	GLADIOLUS DR	6LD	E	3,000	A	1,854	A	1,950	
	GLADIOLUS DR	CYPRESS LAKE DR	4LD	E	1,900	B	1,229	B	1,340	
	CYPRESS LAKE DR	COLLEGE PKWY	6LD	E	2,880	B	1,224	B	1,286	
	COLLEGE PKWY	PARK MEADOW DR	6LD	E	2,880	B	1,940	B	2,039	
	PARK MEADOW DR	BOY SCOUT	6LD	E	2,880	B	1,940	B	2,039	
SUNSHINE BLVD	SR 82	23RD ST SW	2LN	E	1,010	C	387	C	407	
	23RD ST SW	LEE BLVD	2LN	E	1,010	C	387	C	407	
	LEE BLVD	W 12TH ST	2LN	E	1,010	D	521	D	548	
	W 12TH ST	W 75TH ST	2LN	E	860	D	643	D	676	

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

LEE COUNTY GENERALIZED PEAK HOUR LEVEL OF SERVICE TABLES

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

Lee County
Generalized Peak Hour Directional Service Volumes
Urbanized Areas

April 2016 c:\input5

Uninterrupted Flow Highway

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	130	420	850	1,210	1,640
2	Divided	1,060	1,810	2,560	3,240	3,590
3	Divided	1,600	2,720	3,840	4,860	5,380

Arterials

Class I (40 mph or higher posted speed limit)

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	140	800	860	860
2	Divided	*	250	1,840	1,960	1,960
3	Divided	*	400	2,840	2,940	2,940
4	Divided	*	540	3,830	3,940	3,940

Class II (35 mph or slower posted speed limit)

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	330	710	780
2	Divided	*	*	710	1,590	1,660
3	Divided	*	*	1,150	2,450	2,500
4	Divided	*	*	1,580	3,310	3,340

Controlled Access Facilities

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	160	880	940	940
2	Divided	*	270	1,970	2,100	2,100
3	Divided	*	430	3,050	3,180	3,180

Collectors

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	310	660	740
1	Divided	*	*	330	700	780
2	Undivided	*	*	730	1,440	1,520
2	Divided	*	*	770	1,510	1,600

Note: the service volumes for I-75 (freeway), bicycle mode, pedestrian mode, and bus mode should be from FDOT's most current version of LOS Handbook.

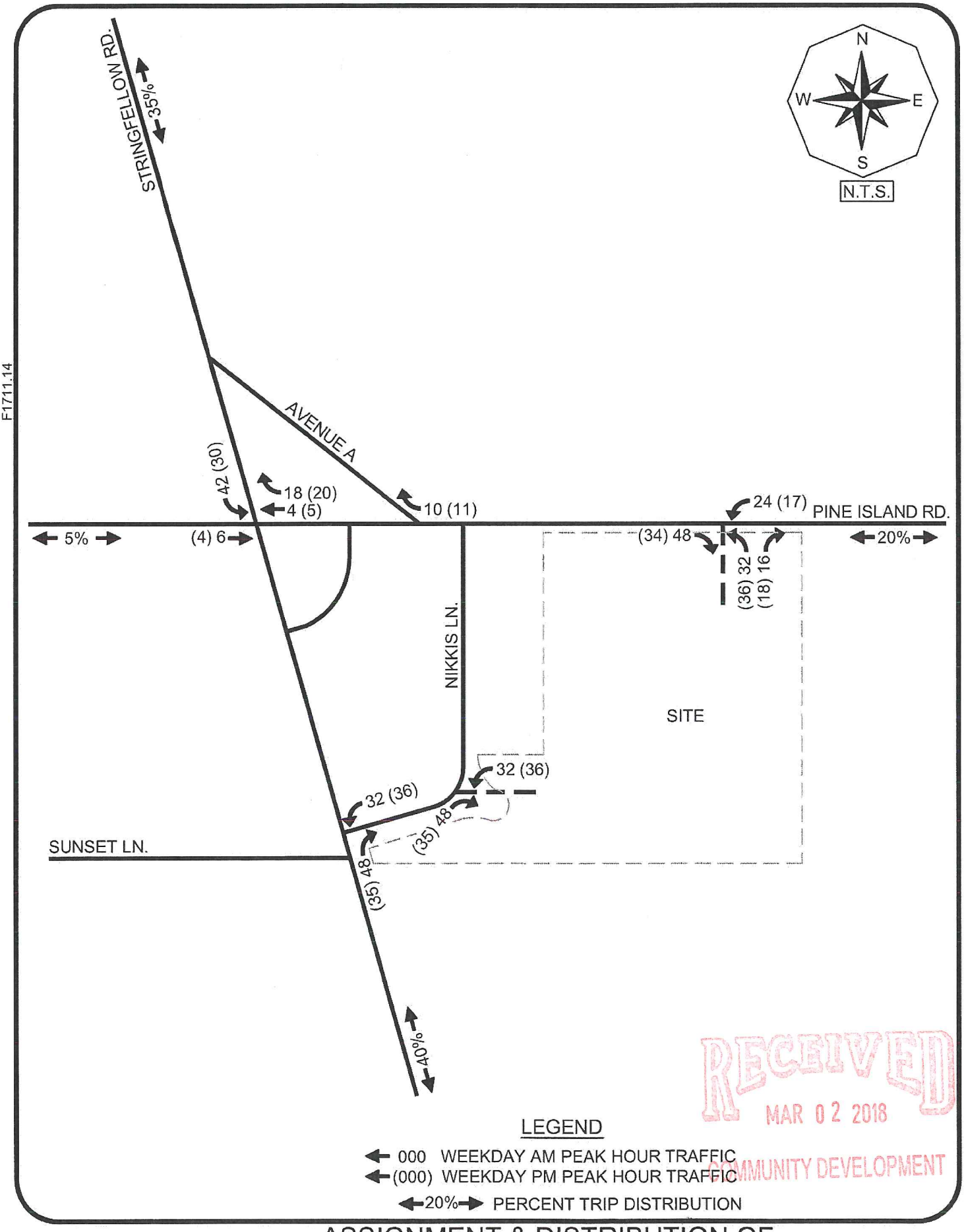
RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

SITE TRAFFIC ASSIGNMENT
SUPPLEMENTAL GRAPHICS
FIGURES A-1 & A-2

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003



F1711.14

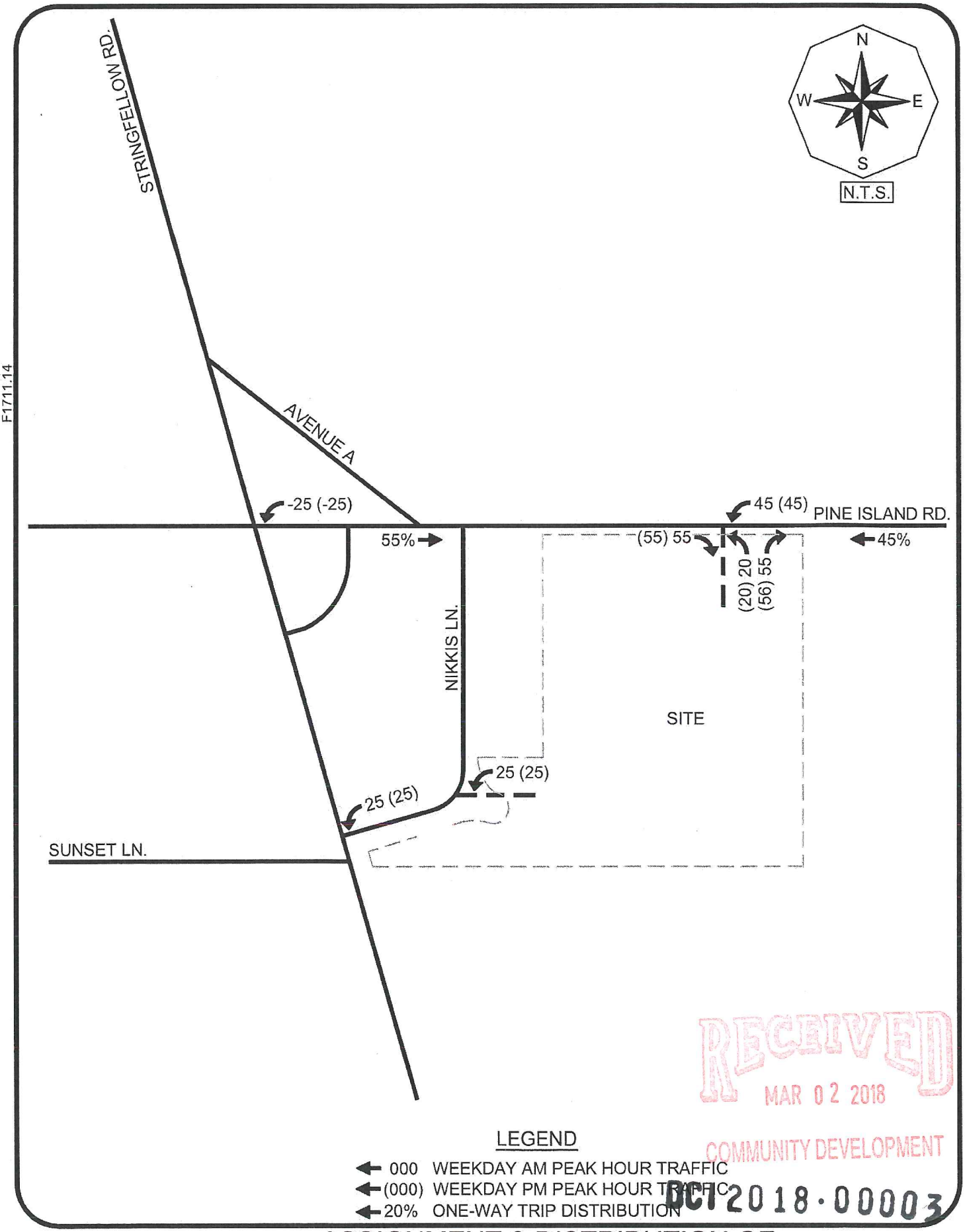
RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

TR TRANSPORTATION CONSULTANTS, INC

ASSIGNMENT & DISTRIBUTION OF
NET NEW PROJECT TRIPS
7-ELEVEN @ PINE ISLAND CENTER • Figure A-1

DCI2018-00003

F1711.14



RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
BCI2018-00003

LEGEND

← 000 WEEKDAY AM PEAK HOUR TRAFFIC
←(000) WEEKDAY PM PEAK HOUR TRAFFIC
←20% ONE-WAY TRIP DISTRIBUTION

TR TRANSPORTATION CONSULTANTS, INC

ASSIGNMENT & DISTRIBUTION OF PASS-BY PROJECT TRIPS
7-ELEVEN @ PINE ISLAND CENTER

Figure A-2

TRAFFIC COUNT DATA FROM 2016

LEE COUNTY TRAFFIC COUNT

REPORT

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

RECEIVED
COMMUNITY DEVELOPMENT

Daily Traffic Volume (AADT)

STREET	LOCATION	Station #	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	PCS	Area
ORTIZ AVE	N OF COLONIAL BLVD	354	16000	12600	14200	12900			16400	15000		16300	18	3
ORTIZ AVE	N OF M.L.K. BLVD (SR 82)	355	16800	17700	11900	14600			10400	14300		20600	18	3
ORTIZ AVE	N OF BALLARD RD												18	3
ORTIZ AVE	N OF TICE ST	356	8600	8900	6200	6900	5900	6400	6400	6800	6800	7400	5	
PALM BEACH BLVD (SR 80)	W OF TICE STREET	452	31400	20600	17900	20600							5	3
PALM BEACH BLVD (SR 80)	E OF ORTIZ BLVD	359	26800	22400	19500	21700							5	3
PALM BEACH BLVD (SR 80)	W OF SR 31	5	U/C	27100	25900	26900	21400	26300	26400	27600	30100	32900		3
PALM BEACH BLVD (SR 80)	E OF SR 31	360	34400	34200	30400								5	5
PALM BEACH BLVD (SR 80)	E OF BUCKINGHAM RD	362	22900	16400	20900								5	5
PALM BEACH BLVD (SR 80)	W OF HENDRY CO LINE	358	15100	16000	12300								5	5
PALOMINO RD	N OF DANIELS	501	5100	3800	4600	4300				6700		8200	31	4
PAUL J DOHERTY PKWY	S OF DANIELS PKWY	51	1300			1400		2300	1600	1800				
PARK MEADOWS DR	W OF US 41	363	3700	3500	3700	3100							9	3
PENNSYLVANIA AVE	W OF OLD 41	494	4300	3000	3200								42	6
PENZANCE BLVD	W OF SIX MILE CYPRESS PKWY	483	2300		2300	2200							45	3
PINE ISLAND RD	@ MATLACHA PASS	3	10500	10300	10500	10300	10100	10200	10600	10800	11400	11500		7
PINE ISLAND RD (SR 78)	W OF DEL PRADO BLVD	366	38300	37200	36600								49	1
PINE ISLAND RD (SR 78)	E OF PONDELLA RD	49	26200	25800	25100	22800	23000	22800	23100	25000	26800	28000		2
PINE ISLAND RD (SR 78)	W OF US 41												49	
PINE ISLAND RD (SR 78)	W OF BUSINESS 41	365	29500	26800	26200								49	2

DCI 2018-00003

STREET	LOCATION	Sta-tion #	Daily Traffic Volume (AADT) 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	PCS	Area
SOLOMON BLVD	N OF COLONIAL BLVD	623	7400	6700	7200								29	3
SOLOMON BLVD	N OF WINKLER AVE	622	4900	5200	4800								29	3
SR 31	N OF PALM BEACH BLVD	391	9900	7500	7700								11	2
SR 31	S OF CHARLOTTE CO LINE	392	6900	5200	4600								34	2
STALEY RD	S OF ORANGE RIVER BLVD	398	4300	4100	3000	3300	3700		3400		2600		11	3
STRINGFELLOW BLVD	N OF CASTILE RD	27	4500	4100	4200	4000	4000	4000	4000	4200	4400	4500		7
STRINGFELLOW BLVD	S OF PINE ISLAND RD	400	10200	9300	8800								27	7
STRINGFELLOW BLVD	N OF AVENUE C	399	8800	8400	7500	7400	7700	7700	8000	8100	8700	8400	27	7
STRINGFELLOW BLVD	N OF HOWARD RD	401	3300	2900	2700								27	7
SUMMERLIN RD	E OF JOHN MORRIS RD	36	16500	17900	18200	18200	18000	18300	18900	19700	20800	21200		7
SUMMERLIN RD	W OF SAN CARLOS BLVD	402		18600	23100	18700							36	7
SUMMERLIN RD	E OF SAN CARLOS BLVD	408				20000							19	7
SUMMERLIN RD	E OF PINE RIDGE RD	410		27400										7
SUMMERLIN RD	E OF PINE RIDGE RD	19			31200	30100	29700	26300	32100	33500	32000	31800		
SUMMERLIN RD	N OF GLADIOLUS DR	409		21600										4
SUMMERLIN RD	S OF LAKEWOOD BLVD	47			27000	18700	18700	22000	22200	23300	24300	22800		
SUMMERLIN RD	N OF CYPRESS LAKE DR	407	26100	30400									9	3
SUMMERLIN RD	S OF UNINVERSITY DR	66						22000	24500	28000	30500			
SUMMERLIN RD	S OF PARK MEADOWS		31600											
SUMMERLIN RD	N OF PARK MEADOWS	35					24700	26400	28100	29800	29000	31500		3
SUMMERLIN RD	N OF MAPLE DR	405	34400	36300									9	3
SUMMERLIN RD	N OF BOY SCOUT DR	403	22200	21000	16600	16300							9	3
SUMMERLIN RD	N OF MATTHEWS RD	74							18100	19100	19700	19000		
SUMMERLIN RD	S OF COLONIAL BLVD	411	23100	20600	16700	16800				20000			14	3

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

FDOT PEAK SEASON ADJUSTMENT FACTOR

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

2016 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1249 PINE ISLAND, MATLACHA

MOCF: 0.81

WEEK	DATES	SF	PSCF
1	01/01/2016 - 01/02/2016	0.95	1.17
2	01/03/2016 - 01/09/2016	0.89	1.10
* 3	01/10/2016 - 01/16/2016	0.84	1.04
* 4	01/17/2016 - 01/23/2016	0.82	1.01
* 5	01/24/2016 - 01/30/2016	0.81	1.00
* 6	01/31/2016 - 02/06/2016	0.79	0.98
* 7	02/07/2016 - 02/13/2016	0.78	0.96
* 8	02/14/2016 - 02/20/2016	0.77	0.95
* 9	02/21/2016 - 02/27/2016	0.77	0.95
*10	02/28/2016 - 03/05/2016	0.78	0.96
*11	03/06/2016 - 03/12/2016	0.78	0.96
*12	03/13/2016 - 03/19/2016	0.79	0.98
*13	03/20/2016 - 03/26/2016	0.82	1.01
*14	03/27/2016 - 04/02/2016	0.86	1.06
*15	04/03/2016 - 04/09/2016	0.89	1.10
16	04/10/2016 - 04/16/2016	0.93	1.15
17	04/17/2016 - 04/23/2016	0.96	1.19
18	04/24/2016 - 04/30/2016	0.99	1.22
19	05/01/2016 - 05/07/2016	1.03	1.27
20	05/08/2016 - 05/14/2016	1.06	1.31
21	05/15/2016 - 05/21/2016	1.10	1.36
22	05/22/2016 - 05/28/2016	1.12	1.38
23	05/29/2016 - 06/04/2016	1.15	1.42
24	06/05/2016 - 06/11/2016	1.18	1.46
25	06/12/2016 - 06/18/2016	1.21	1.49
26	06/19/2016 - 06/25/2016	1.21	1.49
27	06/26/2016 - 07/02/2016	1.22	1.51
28	07/03/2016 - 07/09/2016	1.22	1.51
29	07/10/2016 - 07/16/2016	1.23	1.52
30	07/17/2016 - 07/23/2016	1.23	1.52
31	07/24/2016 - 07/30/2016	1.24	1.53
32	07/31/2016 - 08/06/2016	1.25	1.54
33	08/07/2016 - 08/13/2016	1.26	1.56
34	08/14/2016 - 08/20/2016	1.27	1.57
35	08/21/2016 - 08/27/2016	1.26	1.56
36	08/28/2016 - 09/03/2016	1.26	1.56
37	09/04/2016 - 09/10/2016	1.26	1.56
38	09/11/2016 - 09/17/2016	1.26	1.56
39	09/18/2016 - 09/24/2016	1.23	1.52
40	09/25/2016 - 10/01/2016	1.20	1.48
41	10/02/2016 - 10/08/2016	1.17	1.44
42	10/09/2016 - 10/15/2016	1.14	1.41
43	10/16/2016 - 10/22/2016	1.11	1.37
44	10/23/2016 - 10/29/2016	1.08	1.33
45	10/30/2016 - 11/05/2016	1.06	1.31
46	11/06/2016 - 11/12/2016	1.03	1.27
47	11/13/2016 - 11/19/2016	1.01	1.25
48	11/20/2016 - 11/26/2016	0.99	1.22
49	11/27/2016 - 12/03/2016	0.98	1.21
50	12/04/2016 - 12/10/2016	0.96	1.19
51	12/11/2016 - 12/17/2016	0.95	1.17
52	12/18/2016 - 12/24/2016	0.89	1.10
53	12/25/2016 - 12/31/2016	0.84	1.04

* PEAK SEASON

21-FEB-2017 10:54:33 830UPD 1_1249_PKSEASON.TXT

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

TURNING MOVEMENT COUNT

PINE ISLAND ROAD

@

STRINGFELLOW ROAD

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Pine Island Rd & Stringfellow Rd

12-5-2017

AM Count

File Name: Pine Island Rd & Stringfellow Rd AM
Location: Pine Island Center

All Vehicles

Site Code:
Study Date: 12/05/2017

	Stringfellow Rd Southbound					Pine Island Rd Westbound					Stringfellow Rd Northbound					Pine Island Rd Eastbound					
Time	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Int Total
07:00	13	14	48	0	75	24	8	18	0	50	55	6	2	0	63	6	11	3	0	20	208
07:15	9	16	46	0	71	18	11	24	0	53	38	13	1	0	52	5	8	8	0	21	197
07:30	9	16	40	0	65	27	12	28	0	67	32	15	5	0	52	6	5	8	0	19	203
07:45	7	29	44	0	80	20	9	39	0	68	53	29	4	0	86	5	13	5	0	23	257
Total	38	75	178	0	291	89	40	109	0	238	178	63	12	0	253	22	37	24	0	83	865
08:00	7	35	43	0	85	33	6	41	0	80	44	26	7	0	77	4	7	10	0	21	263
08:15	10	25	44	0	79	44	15	40	0	99	51	21	6	0	78	2	12	5	0	19	275
08:30	8	35	56	0	99	20	15	43	0	78	38	35	5	0	78	6	12	9	0	27	282
08:45	13	37	38	0	88	30	13	38	0	81	58	32	5	0	95	11	4	9	0	24	288
Total	38	132	181	0	351	127	49	162	0	338	191	114	23	0	328	23	35	33	0	91	1108
09:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	51	169	219	0	439	157	62	201	0	420	249	146	28	0	423	34	39	42	0	115	1397
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	76	207	359	0	642	216	89	272	0	577	369	177	35	0	581	45	72	57	0	174	1974
Appr %	11.8	32.2	55.9	00.0		37.4	15.4	47.1	00.0		63.5	30.5	06.0	00.0		25.9	41.4	32.8	00.0		
Total %	03.9	10.5	18.2	00.0		10.9	04.5	13.8	00.0		18.7	09.0	01.8	00.0		02.3	03.6	02.9	00.0		
% Trucks	00.0	00.0	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0
AM Pk Hr	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00
AM Pk Vol	38	132	181	0	351	127	49	162	0	338	191	114	23	0	328	23	35	33	0	91	1108
AM PHF	0.731	0.892	0.808	NaN	0.886	0.722	0.817	0.942	NaN	0.854	0.823	0.814	0.821	NaN	0.863	0.523	0.729	0.825	NaN	0.843	0.962

DCI 2018-00003

Pine Island Rd & Stringfellow Rd

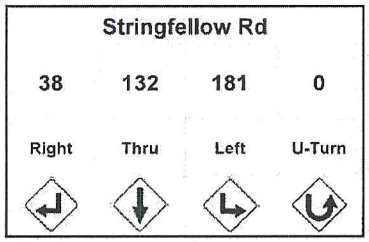
12-5-2017

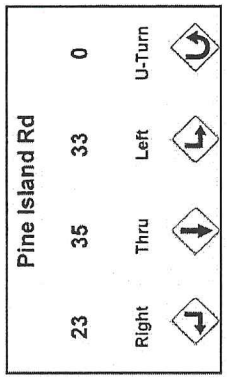
AM Count

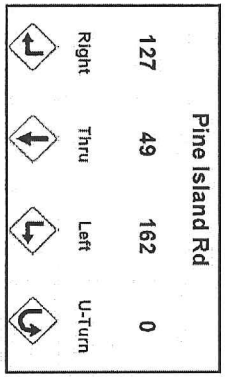
File Name: Pine Island Rd & Stringfellow Rd AM
Location: Pine Island Center

All Vehicles

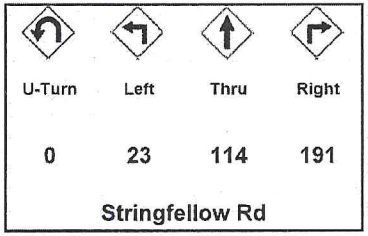
Site Code:
Study Date: 12/05/2017







AM Peak Hour Statistics
AM Peak Hour Begins: 08:00
AM Peak Hour Volume: 1108
AM Peak Hour Factor: 0.962



RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

CountingCars.com

RECEIVED
MAR 0 2018
COMMUNITY DEVELOPMENT

Pine Island Rd @ Stringfellow Rd 12-5-2017 (PM)

File Name: Pine Island Rd @ Stringfellow Rd 12-5-2017
Location: Pine Island Center

All Vehicles

Site Code:
Study Date: 12/05/2017

	Stringfellow Rd Southbound					Pine Island Rd Westbound					Stringfellow Rd Northbound					Pine Island Rd Eastbound					
Time	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Int Total
15:45	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	4
Total	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	4
16:00	6	17	33	0	56	50	10	56	0	116	47	27	3	0	77	3	8	8	0	19	268
16:15	4	26	37	0	67	31	7	34	0	72	42	35	2	0	79	2	9	4	0	15	233
16:30	2	38	35	0	75	40	9	46	0	95	39	23	1	0	63	2	7	3	0	12	245
16:45	9	24	42	0	75	67	10	56	0	133	50	41	2	0	93	4	3	7	0	14	315
Total	21	105	147	0	273	188	36	192	0	416	178	126	8	0	312	11	27	22	0	60	1061
17:00	7	40	34	0	81	49	5	38	0	92	48	35	4	0	87	2	6	14	0	22	282
17:15	5	37	56	0	98	51	10	56	0	117	56	41	4	0	101	4	13	3	0	20	336
17:30	11	31	36	0	78	48	14	57	0	119	41	39	4	0	84	8	10	10	0	28	309
17:45	1	30	25	0	56	45	10	62	0	117	28	30	6	0	64	5	11	6	0	22	259
Total	24	138	151	0	313	193	39	213	0	445	173	145	18	0	336	19	40	33	0	92	1186
18:00	0	0	1	0	1	3	1	2	0	6	1	1	0	0	2	0	0	0	0	0	9
Total	25	168	177	0	370	241	50	277	0	568	202	176	24	0	402	24	51	39	0	114	1454
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	45	243	299	0	587	384	76	407	0	867	355	273	26	0	654	30	67	55	0	152	2260
Appr %	07.7	41.4	50.9	00.0		44.3	08.8	46.9	00.0		54.3	41.7	04.0	00.0		19.7	44.1	36.2	00.0		
Total %	02.0	10.8	13.2	00.0		17.0	03.4	18.0	00.0		15.7	12.1	01.2	00.0		01.3	03.0	02.4	00.0		
% Trucks	00.0	00.0	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0
PM Pk Hr	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45
PM Pk Vol	32	132	168	0	332	215	39	207	0	461	195	156	14	0	365	18	32	34	0	84	1242

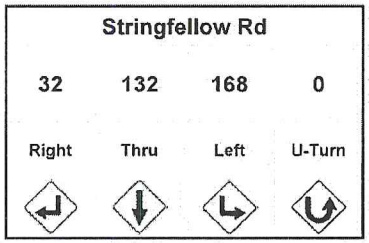
DCI 2018-0003

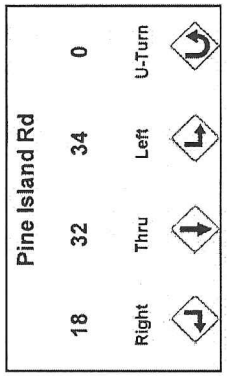
Pine Island Rd @ Stringfellow Rd 12-5-2017 (PM)

File Name: Pine Island Rd @ Stringfellow Rd 12-5-2017
Location: Pine Island Center

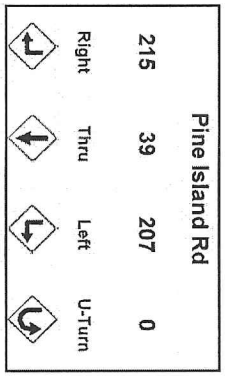
All Vehicles

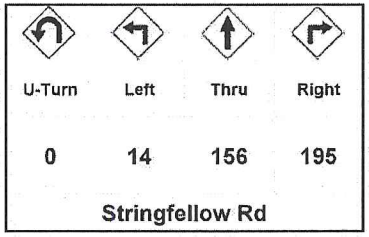
Site Code:
Study Date: 12/05/2017





PM Peak Hour Statistics
PM Peak Hour Begins: 16:45
PM Peak Hour Volume: 1242
PM Peak Hour Factor: 0.924





RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

TURNING MOVEMENT COUNT

STRINGFELLOW ROAD

@

NIKKIS LANE

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

RECEIVED
MAR 20 2018
COMMUNITY DEVELOPMENT

Stringfellow Rd @ Nikkis Ln 12-5-2017 (AM)

File Name: Stringfellow Rd @ Nikkis Ln 12-5-2017 (AM)
Location:

All Vehicles

Site Code:
Study Date: 12/05/2017

	Stringfellow Rd Southbound					Nikkis Ln Westbound					Stringfellow Rd Northbound					Nikkis Ln Eastbound					
Time	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Int Total
07:00	0	34	1	0	35	0	0	0	0	0	0	63	0	0	63	5	0	0	0	5	103
07:15	0	41	1	0	42	0	0	0	0	0	1	56	1	0	58	2	0	1	0	3	103
07:30	0	50	0	0	50	0	0	1	0	1	1	54	3	0	58	1	0	1	0	2	111
07:45	3	72	2	0	77	0	0	3	0	3	2	89	0	0	91	4	0	4	0	8	179
Total	3	197	4	0	204	0	0	4	0	4	4	262	4	0	270	12	0	6	0	18	496
08:00	2	75	1	0	78	0	0	1	0	1	2	82	0	0	84	3	0	0	0	3	166
08:15	0	62	0	0	62	4	0	1	0	5	1	74	1	0	76	2	0	3	0	5	148
08:30	0	94	2	0	96	0	0	0	0	0	1	87	4	0	92	1	0	0	0	1	189
08:45	2	85	4	0	91	1	0	2	0	3	1	89	2	0	92	3	0	1	0	4	190
Total	4	316	7	0	327	5	0	4	0	9	5	332	7	0	344	9	0	4	0	13	693
09:00	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
Total	6	404	11	0	421	6	0	6	0	12	6	423	9	0	438	12	0	5	0	17	888
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	7	516	11	0	534	5	0	8	0	13	9	596	11	0	616	21	0	10	0	31	1194
Appr %	01.3	96.6	02.1	00.0		38.5	00.0	61.5	00.0		01.5	96.8	01.8	00.0		67.7	00.0	32.3	00.0		
Total %	00.6	43.2	00.9	00.0		00.4	00.0	00.7	00.0		00.8	49.9	00.9	00.0		01.8	00.0	00.8	00.0		
% Trucks	00.0	00.0	00.0	-	00.0	00.0	-	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0	-	00.0	-	00.0	00.0
AM Pk Hr	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00
AM Pk Vol	4	316	7	0	327	5	0	4	0	9	5	332	7	0	344	9	0	4	0	13	693
AM PHF	0.500	0.840	0.438	NaN	0.852	0.313	NaN	0.500	NaN	0.450	0.625	0.933	0.438	NaN	0.935	0.750	NaN	0.333	NaN	0.650	0.912

CountingCars.com

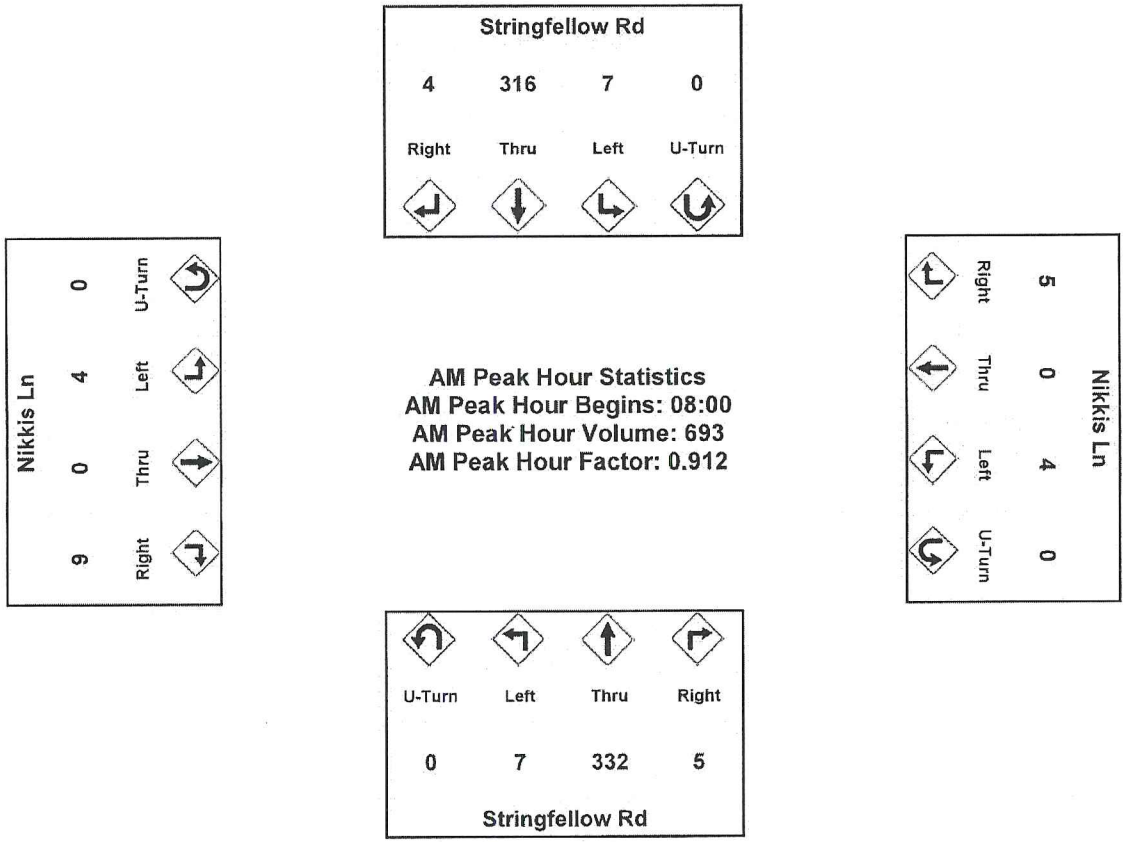
DCI 2018.0003

Stringfellow Rd @ Nikkis Ln 12-5-2017 (AM)

File Name: Stringfellow Rd @ Nikkis Ln 12-5-2017 (AM)
Location:

All Vehicles

Site Code:
Study Date: 12/05/2017



AM Peak Hour Statistics
AM Peak Hour Begins: 08:00
AM Peak Hour Volume: 693
AM Peak Hour Factor: 0.912

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

RECEIVED
MAR 12 2018
COMMUNITY DEVELOPMENT

Stringfellow Rd @ Nikkis Ln 12-5-2017 (PM)

File Name: Stringfellow Rd @ Nikkis Ln 12-5-2017 (PM)
Location: Pine Island Center

All Vehicles

Site Code:
Study Date: 12/05/2017

	Stringfellow Rd Southbound					Nikkis Ln Westbound					Stringfellow Rd Northbound					Nikkis Ln Eastbound					
Time	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Right	Thru	Left	U-Turn	Appr Total	Int Total
16:00	1	91	0	0	92	1	0	0	0	1	2	101	1	0	104	6	0	2	0	8	205
16:15	0	90	0	0	90	2	0	2	0	4	2	88	2	0	92	1	0	0	0	1	187
16:30	1	106	0	0	107	0	0	1	0	1	0	85	0	0	85	2	0	0	0	2	195
16:45	1	94	0	0	95	1	0	3	0	4	0	100	0	0	100	3	0	3	0	6	205
Total	3	381	0	0	384	4	0	6	0	10	4	374	3	0	381	12	0	5	0	17	792
17:00	1	92	0	0	93	1	0	1	0	2	0	115	2	0	117	2	0	0	0	2	214
17:15	1	89	0	0	90	0	0	1	0	1	1	101	1	0	103	6	0	0	0	6	200
17:30	0	99	1	0	100	1	0	1	0	2	1	99	3	0	103	3	0	0	0	3	208
17:45	1	89	0	0	90	1	0	3	0	4	1	74	3	0	78	3	0	0	0	3	175
Total	3	369	1	0	373	3	0	6	0	9	3	389	9	0	401	14	0	0	0	14	797
18:00	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	9
Total	4	463	1	0	468	4	0	9	0	13	4	467	12	0	483	17	0	0	0	17	981
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	6	755	1	0	762	7	0	12	0	19	7	767	12	0	786	26	0	5	0	31	1598
Appr %	00.8	99.1	00.1	00.0		36.8	00.0	63.2	00.0		00.9	97.6	01.5	00.0		83.9	00.0	16.1	00.0		
Total %	00.4	47.2	00.1	00.0		00.4	00.0	00.8	00.0		00.4	48.0	00.8	00.0		01.6	00.0	00.3	00.0		
% Trucks	00.0	00.0	00.0	-	00.0	00.0	-	00.0	-	00.0	00.0	00.0	00.0	-	00.0	00.0	-	00.0	-	00.0	00.0
PM Pk Hr	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45	16:45
PM Pk Vol	3	374	1	0	378	3	0	6	0	9	2	415	6	0	423	14	0	3	0	17	827
PM PHF	0.750	0.944	0.250	NaN	0.945	0.750	NaN	0.500	NaN	0.563	0.500	0.902	0.500	NaN	0.904	0.583	NaN	0.250	NaN	0.708	0.966

CountingCars.com

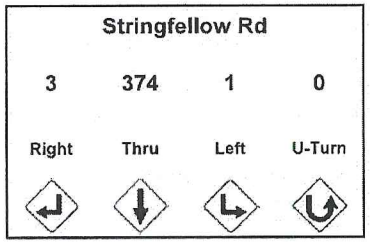
DCI2018.00003

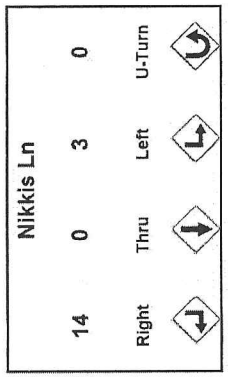
Stringfellow Rd @ Nikkis Ln 12-5-2017 (PM)

File Name: Stringfellow Rd @ Nikkis Ln 12-5-2017 (PM)
Location: Pine Island Center

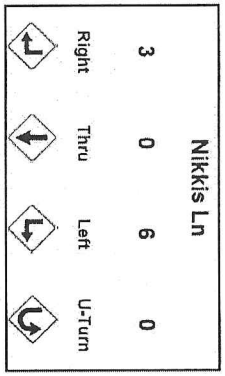
All Vehicles

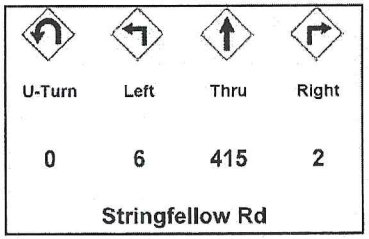
Site Code:
Study Date: 12/05/2017





PM Peak Hour Statistics
PM Peak Hour Begins: 16:45
PM Peak Hour Volume: 827
PM Peak Hour Factor: 0.966





RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

DEVELOPMENT OF FUTURE YEAR BACKGROUND TURNING VOLUMES

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

Development of Future Year Background Turning Volumes

Intersection	**PINE ISLAND ROAD @ STRINGFELLOW ROAD**
Count Date	December 05, 2017
Build-Out Year	2022

AM Peak Hour (8:00 - 9:00 AM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	23	114	191	181	132	38	33	35	23	162	49	127
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	27	136	227	215	157	45	39	42	27	193	58	151
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**29**	**147**	**246**	**233**	**170**	**49**	**42**	**45**	**29**	**209**	**63**	**163**
7-Eleven Turning Volumes				42				6		-25	4	18
2022 Background + Project	**29**	**147**	**246**	**275**	**170**	**49**	**42**	**51**	**29**	**184**	**67**	**181**

PM Peak Hour (4:45- 5:45 PM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	14	156	195	168	132	32	34	32	18	207	39	215
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	17	186	232	200	157	38	40	38	21	246	46	256
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**18**	**201**	**251**	**216**	**170**	**41**	**43**	**41**	**23**	**266**	**50**	**277**
7-Eleven Turning Volumes				30				4		-25	5	20
2022 Background + Project	**18**	**201**	**251**	**246**	**170**	**41**	**43**	**45**	**23**	**241**	**55**	**297**

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Development of Future Year Background Turning Volumes

Intersection	**STRINGFELLOW ROAD @ NIKKIS LANE**
Count Date	December 05, 2017
Build-Out Year	2022

AM Peak Hour (8:00 - 9:00 AM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	7	332	5	7	316	4	4	0	9	4	0	5
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	8	395	6	8	376	5	5	0	11	5	0	6
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**9**	**428**	**6**	**9**	**407**	**5**	**5**	**0**	**12**	**5**	**0**	**6**
7-Eleven Turning Volumes			48							57		
2022 Background + Project	**9**	**428**	**54**	**9**	**407**	**5**	**5**	**0**	**12**	**62**	**0**	**6**

PM Peak Hour (4:45- 5:45 PM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	6	415	2	1	374	3	3	0	14	6	0	3
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	7	494	2	1	445	4	4	0	17	7	0	4
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**8**	**535**	**2**	**1**	**482**	**4**	**4**	**0**	**18**	**8**	**0**	**4**
7-Eleven Turning Volumes			35							61		
2022 Background + Project	**8**	**535**	**37**	**1**	**482**	**4**	**4**	**0**	**18**	**69**	**0**	**4**

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Development of Future Year Background Turning Volumes

Intersection	**SITE ACCESS @ PINE ISLAND ROAD**
Count Date	December 05, 2017
Build-Out Year	2022

AM Peak Hour (8:00 - 9:00 AM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	0	0	0	0	407	0	0	338	0
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	0	0	0	0	0	0	0	484	0	0	402	0
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**524**	**0**	**0**	**435**	**0**
7-Eleven Turning Volumes	52		71						103	69		
2022 Background + Project	**52**	**0**	**71**	**0**	**0**	**0**	**0**	**524**	**103**	**69**	**435**	**0**

PM Peak Hour (4:45- 5:45 PM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	0	0	0	0	395	0	0	461	0
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	0	0	0	0	0	0	0	470	0	0	549	0
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**509**	**0**	**0**	**594**	**0**
7-Eleven Turning Volumes	56		74						89	62		
2022 Background + Project	**56**	**0**	**74**	**0**	**0**	**0**	**0**	**509**	**89**	**62**	**594**	**0**

DCI2018-00003

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Development of Future Year Background Turning Volumes

Intersection	**SITE ACCESS @ NIKKIS LANE**
Count Date	December 05, 2017
Build-Out Year	2022

AM Peak Hour (8:00 - 9:00 AM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	12	0	0	9	0	0	0	0	0	0	0
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	0	14	0	0	11	0	0	0	0	0	0	0
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**0**	**15**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7-Eleven Turning Volumes			48							57		
2022 Background + Project	**0**	**15**	**48**	**0**	**12**	**0**	**0**	**0**	**0**	**57**	**0**	**0**

PM Peak Hour (4:45- 5:45 PM)

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	3	0	0	9	0	0	0	0	0	0	0
Peak Season Correction Factor	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Current Peak Season Volumes	0	4	0	0	11	0	0	0	0	0	0	0
Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Years to Build-out	4	4	4	4	4	4	4	4	4	4	4	4
2022 Background Turning Volumes	**0**	**4**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7-Eleven Turning Volumes			35							61		
2022 Background + Project	**0**	**4**	**35**	**0**	**12**	**0**	**0**	**0**	**0**	**61**	**0**	**0**

DCI 2018-00003
RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

YEAR 2022 INTERSECTION ANALYSIS

HCS SUMMARY SHEETS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

PINE ISLAND ROAD

@

STRINGFELLOW ROAD

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

2022 AM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

HCS7 All-Way Stop Control Report

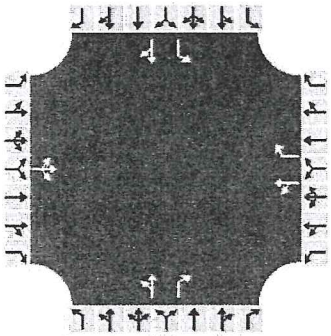
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Analysis Time Period (hrs)	1.00
Time Analyzed	AM Peak Hour Background
Project Description	F1711.14

Site Information

Intersection	Pine Island/Stringfellow
Jurisdiction	Lee County
East/West Street	Pine Island Rd
North/South Street	Stringfellow Rd
Peak Hour Factor	0.96

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	42	45	29	209	63	163	29	147	246	233	170	49
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LT	R		LT	R		L	TR	
Flow Rate, v (veh/h)	121			283	170		183	256		243	228	
Percent Heavy Vehicles	2			2	2		2	2		2	2	

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20	3.20		3.20	3.20	
Initial Degree of Utilization, x	0.107			0.252	0.151		0.163	0.228		0.216	0.203	
Final Departure Headway, hd (s)	7.91			7.80	6.71		7.50	6.70		7.82	7.15	
Final Degree of Utilization, x	0.266			0.614	0.316		0.382	0.477		0.527	0.453	
Move-Up Time, m (s)	2.0			2.3	2.3		2.3	2.3		2.3	2.3	
Service Time, ts (s)	5.91			5.50	4.41		5.20	4.40		5.52	4.85	

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	121			283	170		183	256		243	228	
Capacity	455			461	537		480	537		460	503	
95% Queue Length, Q_{95} (veh)	1.1			4.5	1.4		1.8	2.7		3.3	2.4	
Control Delay (s/veh)	13.8			22.7	12.5		14.8	15.5		19.2	15.7	
Level of Service, LOS	B			C	B		B	C		C	C	
Approach Delay (s/veh)	13.8			18.9			15.2			17.5		
Approach LOS	B			C			C			C		
Intersection Delay, s/veh | LOS	16.9						C					

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2017 University of Florida. All Rights Reserved.

HCS7 All-Way Stop Control Report

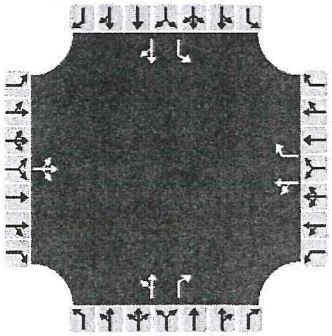
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Analysis Time Period (hrs)	1.00
Time Analyzed	AM Peak Hour W/ Project
Project Description	F1711.14

Site Information

Intersection	Pine Island/Stringfellow
Jurisdiction	Lee County
East/West Street	Pine Island Rd
North/South Street	Stringfellow Rd
Peak Hour Factor	0.96

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	42	51	29	184	67	181	29	147	246	275	170	49
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LT	R		LT	R		L	TR	
Flow Rate, v (veh/h)	127			261	189		183	256		286	228	
Percent Heavy Vehicles	2			2	2		2	2		2	2	

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20	3.20		3.20	3.20	
Initial Degree of Utilization, x	0.113			0.232	0.168		0.163	0.228		0.255	0.203	
Final Departure Headway, hd (s)	8.02			7.93	6.86		7.61	6.81		7.85	7.18	
Final Degree of Utilization, x	0.283			0.576	0.359		0.388	0.485		0.625	0.455	
Move-Up Time, m (s)	2.0			2.3	2.3		2.3	2.3		2.3	2.3	
Service Time, ts (s)	6.02			5.63	4.56		5.31	4.51		5.55	4.88	

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	127			261	189		183	256		286	228	
Capacity	449			454	525		473	529		458	501	
95% Queue Length, Q_{95} (veh)	1.2			3.9	1.7		1.9	2.8		4.7	2.5	
Control Delay (s/veh)	14.2			21.3	13.4		15.1	15.9		23.4	15.9	
Level of Service, LOS	B			C	B		C	C		C	C	
Approach Delay (s/veh)	14.2			18.0			15.6			20.1		
Approach LOS	B			C			C			C		
Intersection Delay, s/veh | LOS	17.7						C					

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2018 University of Florida. All Rights Reserved.

DCI2018-00003

2022 PM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

HCS7 All-Way Stop Control Report

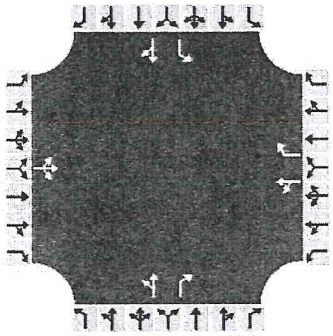
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Analysis Time Period (hrs)	1.00
Time Analyzed	PM Peak Hour Background
Project Description	F1711.14

Site Information

Intersection	Pine Island/Stringfellow
Jurisdiction	Lee County
East/West Street	Pine Island Rd
North/South Street	Stringfellow Rd
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	43	41	23	266	50	277	18	201	251	216	170	41
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LT	R		LT	R		L	TR	
Flow Rate, v (veh/h)	116			343	301		238	273		235	229	
Percent Heavy Vehicles	2			2	2		2	2		2	2	

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20	3.20		3.20	3.20	
Initial Degree of Utilization, x	0.103			0.305	0.268		0.212	0.243		0.209	0.204	
Final Departure Headway, hd (s)	8.54			8.15	7.02		8.03	7.27		8.52	7.87	
Final Degree of Utilization, x	0.276			0.778	0.587		0.531	0.551		0.556	0.501	
Move-Up Time, m (s)	2.0			2.3	2.3		2.3	2.3		2.3	2.3	
Service Time, ts (s)	6.54			5.85	4.72		5.73	4.97		6.22	5.57	

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	116			343	301		238	273		235	229	
Capacity	421			442	513		448	495		422	457	
95% Queue Length, Q_{95} (veh)	1.1			8.9	4.1		3.3	3.6		3.6	2.9	
Control Delay (s/veh)	14.8			37.6	19.6		19.7	18.8		21.8	18.4	
Level of Service, LOS	B			E	C		C	C		C	C	
Approach Delay (s/veh)	14.8			29.2			19.2			20.1		
Approach LOS	B			D			C			C		
Intersection Delay, s/veh | LOS	22.9						C					

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

Copyright © 2017 University of Florida. All Rights Reserved.

HCS7 All-Way Stop Control Report

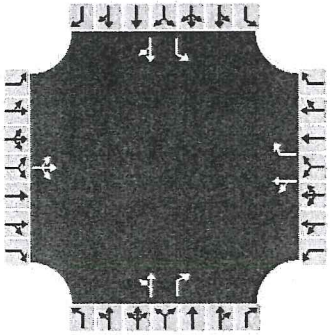
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Analysis Time Period (hrs)	1.00
Time Analyzed	PM Peak Hour W/ Project
Project Description	F1711.14

Site Information

Intersection	Pine Island/Stringfellow
Jurisdiction	Lee County
East/West Street	Pine Island Rd
North/South Street	Stringfellow Rd
Peak Hour Factor	0.92

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	43	45	23	241	55	297	18	201	251	246	170	41
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LT	R		LT	R		L	TR	
Flow Rate, v (veh/h)	121			322	323		238	273		267	229	
Percent Heavy Vehicles	2			2	2		2	2		2	2	

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20			3.20	3.20		3.20	3.20		3.20	3.20	
Initial Degree of Utilization, x	0.107			0.286	0.287		0.212	0.243		0.238	0.204	
Final Departure Headway, hd (s)	8.64			8.25	7.13		8.13	7.37		8.56	7.91	
Final Degree of Utilization, x	0.290			0.738	0.640		0.537	0.558		0.636	0.504	
Move-Up Time, m (s)	2.0			2.3	2.3		2.3	2.3		2.3	2.3	
Service Time, ts (s)	6.64			5.95	4.83		5.83	5.07		6.26	5.61	

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	121			322	323		238	273		267	229	
Capacity	417			436	505		443	489		421	455	
95% Queue Length, Q_{95} (veh)	1.2			7.5	5.0		3.4	3.7		4.9	3.0	
Control Delay (s/veh)	15.2			33.1	22.3		20.2	19.3		25.9	18.6	
Level of Service, LOS	C			D	C		C	C		D	C	
Approach Delay (s/veh)	15.2			27.7			19.7			22.5		
Approach LOS	C			D			C			C		
Intersection Delay, s/veh | LOS	23.1						C					

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2018 University of Florida. All Rights Reserved.

DCI2018-00003

STRINGFELLOW ROAD

@

NIKKIS LANE

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

2022 AM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

HCS7 Two-Way Stop-Control Report

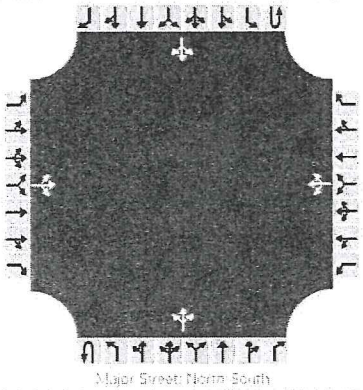
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	AM Peak Hour Background
Intersection Orientation	North-South
Project Description	F1711.14

Site Information

Intersection	Stringfellow Rd/Nikkis Ln
Jurisdiction	Lee County
East/West Street	Nikkis Ln/Sunset Ln
North/South Street	Stringfellow Rd
Peak Hour Factor	0.91
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		5	0	12		5	0	6		9	428	6		9	407	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			18				12			10				10		
Capacity, c (veh/h)			413				349			1102				1079		
v/c Ratio			0.04				0.03			0.01				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.1			0.0				0.0		
Control Delay (s/veh)			14.1				15.7			8.3				8.4		
Level of Service, LOS			B				C			A				A		
Approach Delay (s/veh)		14.1				15.7				0.3				0.3		
Approach LOS		B				C										

Copyright © 2017 University of Florida. All Rights Reserved.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

HCS7 Two-Way Stop-Control Report

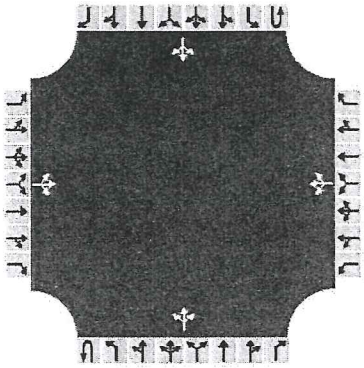
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	AM Peak Hour W/ Project
Intersection Orientation	North-South
Project Description	F1711.14

Site Information

Intersection	Stringfellow Rd/Nikkis Ln
Jurisdiction	Lee County
East/West Street	Nikkis Ln/Sunset Ln
North/South Street	Stringfellow Rd
Peak Hour Factor	0.91
Analysis Time Period (hrs)	1.00

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		5	0	12		62	0	6		9	428	54		9	407	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			18				75			10				10		
Capacity, c (veh/h)			404				226			1102				1032		
v/c Ratio			0.04				0.33			0.01				0.01		
95% Queue Length, Q_{95} (veh)			0.1				1.5			0.0				0.0		
Control Delay (s/veh)			14.3				28.7			8.3				8.5		
Level of Service, LOS			B				D			A				A		
Approach Delay (s/veh)		14.3				28.7				0.3				0.3		
Approach LOS		B				D										

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2018 University of Florida. All Rights Reserved.

DCI 2018-00003

2022 PM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

HCS7 Two-Way Stop-Control Report

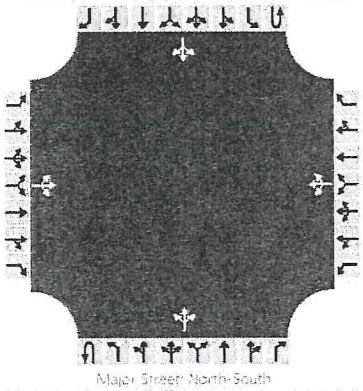
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	PM Peak Hour Background
Intersection Orientation	North-South
Project Description	F1711.14

Site Information

Intersection	Stringfellow Rd/Nikkis Ln
Jurisdiction	Lee County
East/West Street	Nikkis Ln/Sunset Ln
North/South Street	Stringfellow Rd
Peak Hour Factor	0.97
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		4	0	18		8	0	4		8	535	2		1	482	4
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			23				12			8				1		
Capacity, c (veh/h)			426				238			1057				1010		
v/c Ratio			0.05				0.05			0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.2			0.0				0.0		
Control Delay (s/veh)			13.9				20.9			8.4				8.6		
Level of Service, LOS			B				C			A				A		
Approach Delay (s/veh)		13.9				20.9				0.2				0.0		
Approach LOS		B				C										

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2017 University of Florida. All Rights Reserved.

HCS7 Two-Way Stop-Control Report

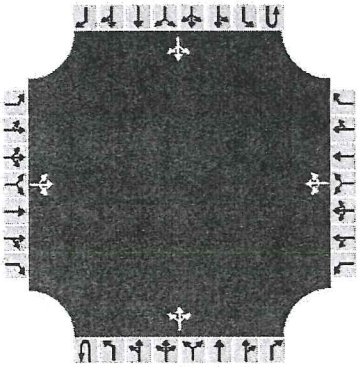
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	PM Peak Hour W/ Project
Intersection Orientation	North-South
Project Description	F1711.14

Site Information

Intersection	Stringfellow Rd/Nikkis Ln
Jurisdiction	Lee County
East/West Street	Nikkis Ln/Sunset Ln
North/South Street	Stringfellow Rd
Peak Hour Factor	0.97
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume, V (veh/h)		4	0	18		69	0	4		8	535	37		1	482	4
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			23				75			8				1		
Capacity, c (veh/h)			421				188			1057				980		
v/c Ratio			0.05				0.40			0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.2				1.9			0.0				0.0		
Control Delay (s/veh)			14.0				36.8			8.4				8.7		
Level of Service, LOS			B				E			A				A		
Approach Delay (s/veh)		14.0				36.8				0.2				0.0		
Approach LOS		B				E										

Copyright © 2018 University of Florida. All Rights Reserved.

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

SITE ACCESS

@

PINE ISLAND ROAD

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

2022 AM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

HCS7 Two-Way Stop-Control Report

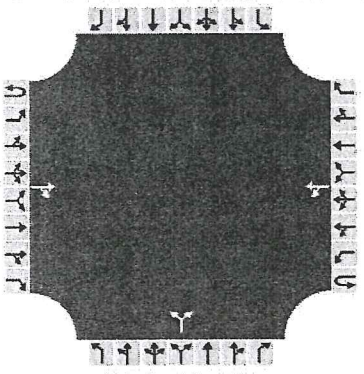
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	AM Peak Hour W/ Project
Intersection Orientation	East-West
Project Description	F1711.14

Site Information

Intersection	Site Access/Pine Island
Jurisdiction	Lee County
East/West Street	Pine Island Rd
North/South Street	Site Access
Peak Hour Factor	0.91
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			524	103		69	435			52		71				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						76					135					
Capacity, c (veh/h)						900					272					
v/c Ratio						0.08					0.50					
95% Queue Length, Q_{95} (veh)						0.3					2.8					
Control Delay (s/veh)						9.4					31.1					
Level of Service, LOS						A					D					
Approach Delay (s/veh)					2.2				31.1							
Approach LOS										D						

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2018 University of Florida. All Rights Reserved.

DCI 2018-00003

2022 PM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

HCS7 Two-Way Stop-Control Report

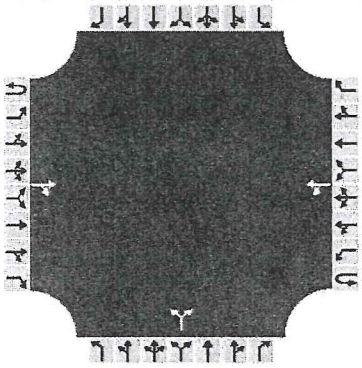
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	PM Peak Hour W/ Project
Intersection Orientation	East-West
Project Description	F1711.14

Site Information

Intersection	Site Access/Pine Island
Jurisdiction	Lee County
East/West Street	Pine Island Rd
North/South Street	Site Access
Peak Hour Factor	0.91
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume, V (veh/h)			509	89		62	594			56		74				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						68					143					
Capacity, c (veh/h)						925					239					
v/c Ratio						0.07					0.60					
95% Queue Length, Q_{95} (veh)						0.2					4.1					
Control Delay (s/veh)						9.2					41.7					
Level of Service, LOS						A					E					
Approach Delay (s/veh)						1.8					41.7					
Approach LOS											E					

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

Copyright © 2018 University of Florida. All Rights Reserved.

SITE ACCESS

@

NIKKIS LANE

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

2022 AM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

HCS7 Two-Way Stop-Control Report

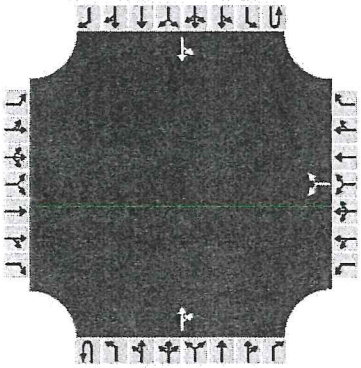
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	AM Peak Hour W/ Project
Intersection Orientation	North-South
Project Description	F1711.14

Site Information

Intersection	Site Access/Nikkis Ln
Jurisdiction	Lee County
East/West Street	Site Access
North/South Street	Nikkis Lane
Peak Hour Factor	0.91
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						57		0			15	48		0	12	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							63							0		
Capacity, c (veh/h)							948							1524		
v/c Ratio							0.07							0.00		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
Control Delay (s/veh)							9.1							7.4		
Level of Service, LOS							A							A		
Approach Delay (s/veh)						9.1				0.0						
Approach LOS						A										

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2018 University of Florida. All Rights Reserved.

2022 PM PEAK HOUR ANALYSIS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

HCS7 Two-Way Stop-Control Report

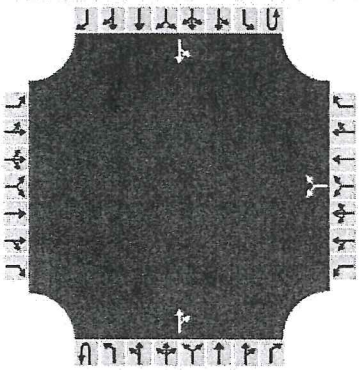
General Information

Analyst	YB
Agency/Co.	TR Transportation Cons.
Date Performed	12/11/2017
Analysis Year	2022
Time Analyzed	PM Peak Hour W/ Project
Intersection Orientation	North-South
Project Description	F1711.14

Site Information

Intersection	Site Access/Nikkis Ln
Jurisdiction	Lee County
East/West Street	Site Access
North/South Street	Nikkis Ln
Peak Hour Factor	0.91
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume, V (veh/h)						61		0			4	35		0	12	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized		No				No				No				No		
Median Type/Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							67							0		
Capacity, c (veh/h)							973							1559		
v/c Ratio							0.07							0.00		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
Control Delay (s/veh)							9.0							7.3		
Level of Service, LOS							A							A		
Approach Delay (s/veh)					9.0								0.0			
Approach LOS					A											

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

Copyright © 2018 University of Florida. All Rights Reserved.

DCI2018-00007

TRIP GENERATION EQUATIONS

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

Land Use: 960
Super Convenience Market/Gas Station

Description

This land use includes gasoline/service stations with convenience markets where there is significant business related to the sale of convenience items and the fueling of motor vehicles. Some commonly sold convenience items include newspapers, freshly brewed coffee, daily-made donuts, bakery items, hot and cold beverages, breakfast items, dairy items, fresh fruits, soups, light meals, ready-to-go and freshly made sandwiches and wraps, and ready-to-go salads. Stores typically also had automated teller machines (ATMs), and public restrooms. The sites included in this land use category have the following two specific characteristics:

- The gross floor area of the convenience market is at least 3,000 gross square feet
- The number of vehicle fueling positions is at least 10

Convenience market with gasoline pumps (Land Use 853) and gasoline/service station with convenience market (Land Use 945) are related uses.

Additional Data

To reflect changing characteristics of the convenience market component of this land use, only data from the past two decades have been included in this land use.

The independent variable, vehicle fueling positions, is defined as the maximum number of vehicles that can be fueled simultaneously. Gasoline/service stations in this land use include "pay-at-the-pump" and traditional fueling stations.

A multi-variable regression analysis based on both the convenience market gross floor area (GFA) and the number of vehicle fueling positions (VFP) produced a series of fitted curve equations. The equations are in the form of:

Vehicle Trips = [(VFP Factor) x (Number of VFP)] + [(GFA Factor) x (GFA)] + (Constant)

The values for the VFP factor, GFA factor, and constant are presented in the following table for each time period for which a fitted curve equation could produce an R^2 value of at least 0.50.

Time Period	VFP Factor	GFA Factor	Constant	R^2
Weekday, AM Peak Hour of Generator	10.3	105	-290	0.62
Weekday, PM Peak Hour of Generator	6.91	76.0	-133	0.68
Weekday, AM Peak Hour of Adjacent Street	16.1	135	-483	0.66
Weekday, PM Peak Hour of Adjacent Street	11.5	82.9	-226	0.51

The sites were surveyed in the late 1990's, 2000s and the 2010s in Florida, Iowa, Maryland, Minnesota, New Hampshire, New Jersey, Pennsylvania, Texas, Utah, and Wisconsin.

Source Numbers

617, 813, 844, 850, 864, 865, 867, 869, 882, 888, 904, 938, 954, 960, 962

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

Super Convenience Market/Gas Station
(960)

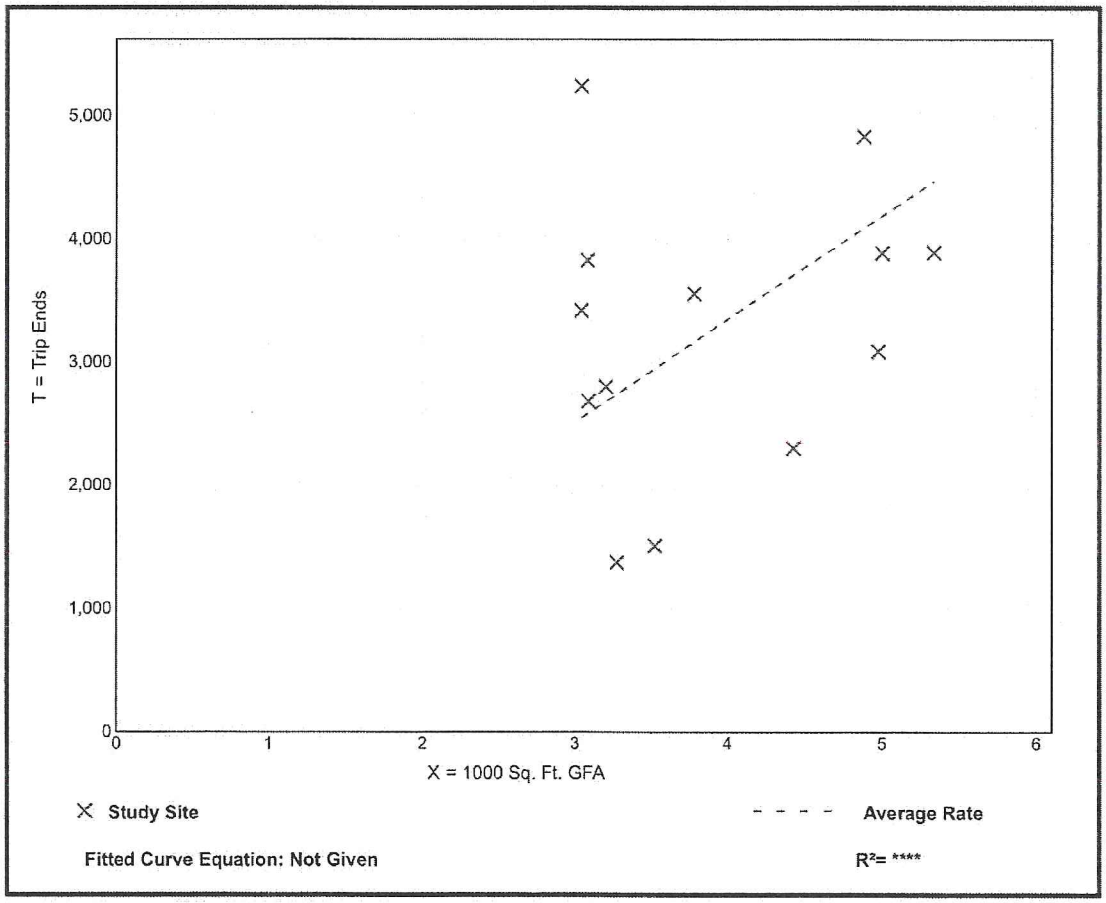
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 13
1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
837.58	419.93 - 1725.33	334.67

Data Plot and Equation



RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018.0002

Shopping Center
(820)

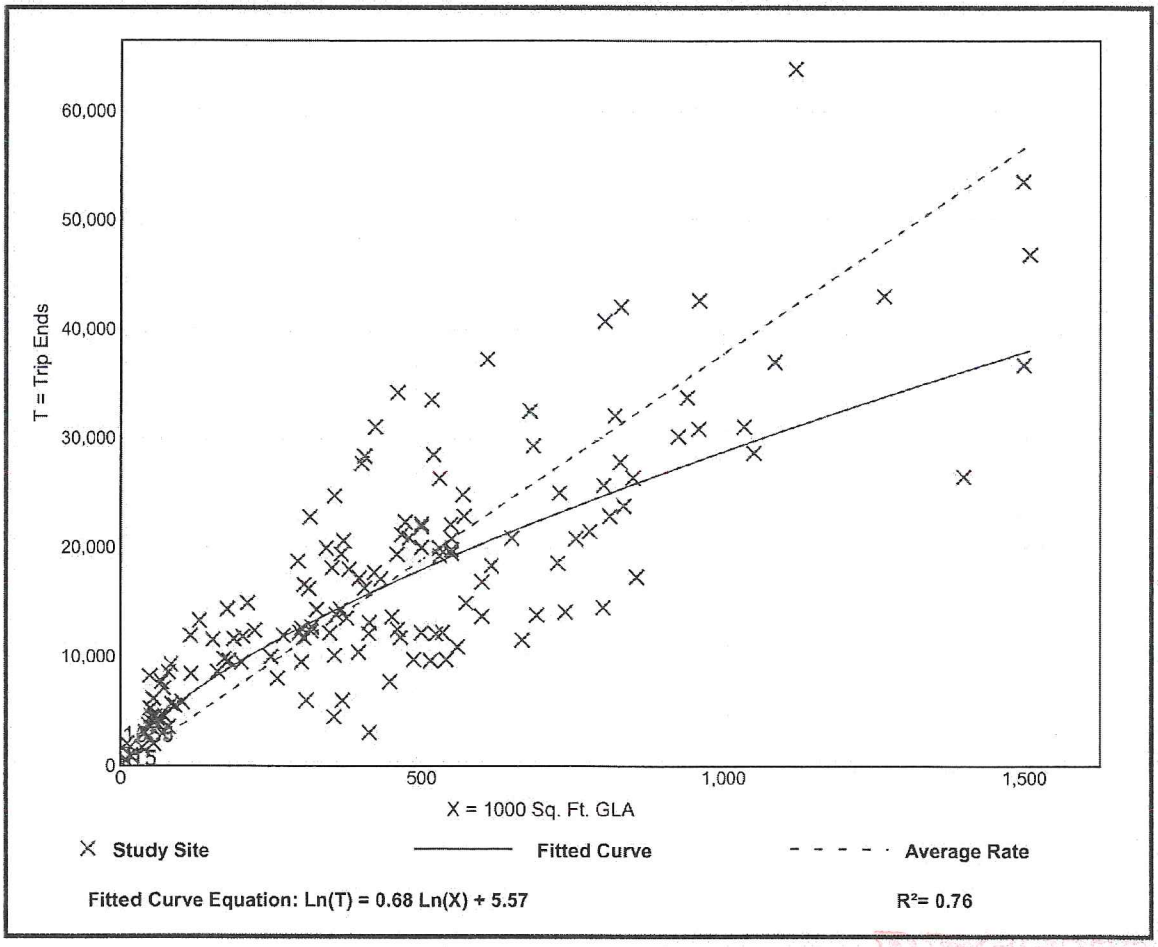
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 147
Avg. 1000 Sq. Ft. GLA: 453
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
37.75	7.42 - 207.98	16.41

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.68 Ln(X) + 5.57

R^2= 0.76

Trip Generation Manual, 10th Edition • Institute of Transportation Engineers

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

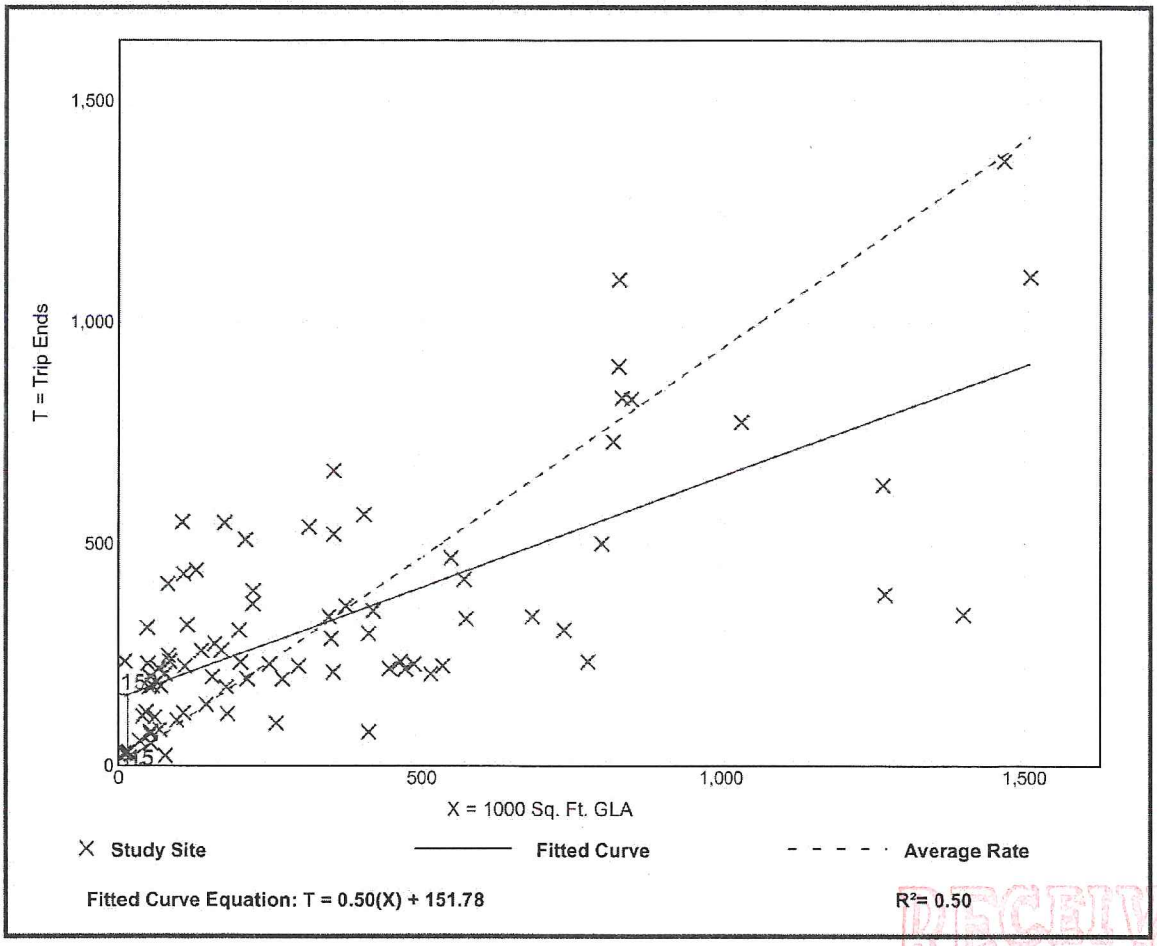
Shopping Center
(820)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GLA**
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:	84
Avg. 1000 Sq. Ft. GLA:	351
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.94	0.18 - 23.74	0.87

Data Plot and Equation



Fitted Curve Equation: T = 0.50(X) + 151.78

R^2= 0.50

Trip Generation Manual, 10th Edition • Institute of Transportation Engineers

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

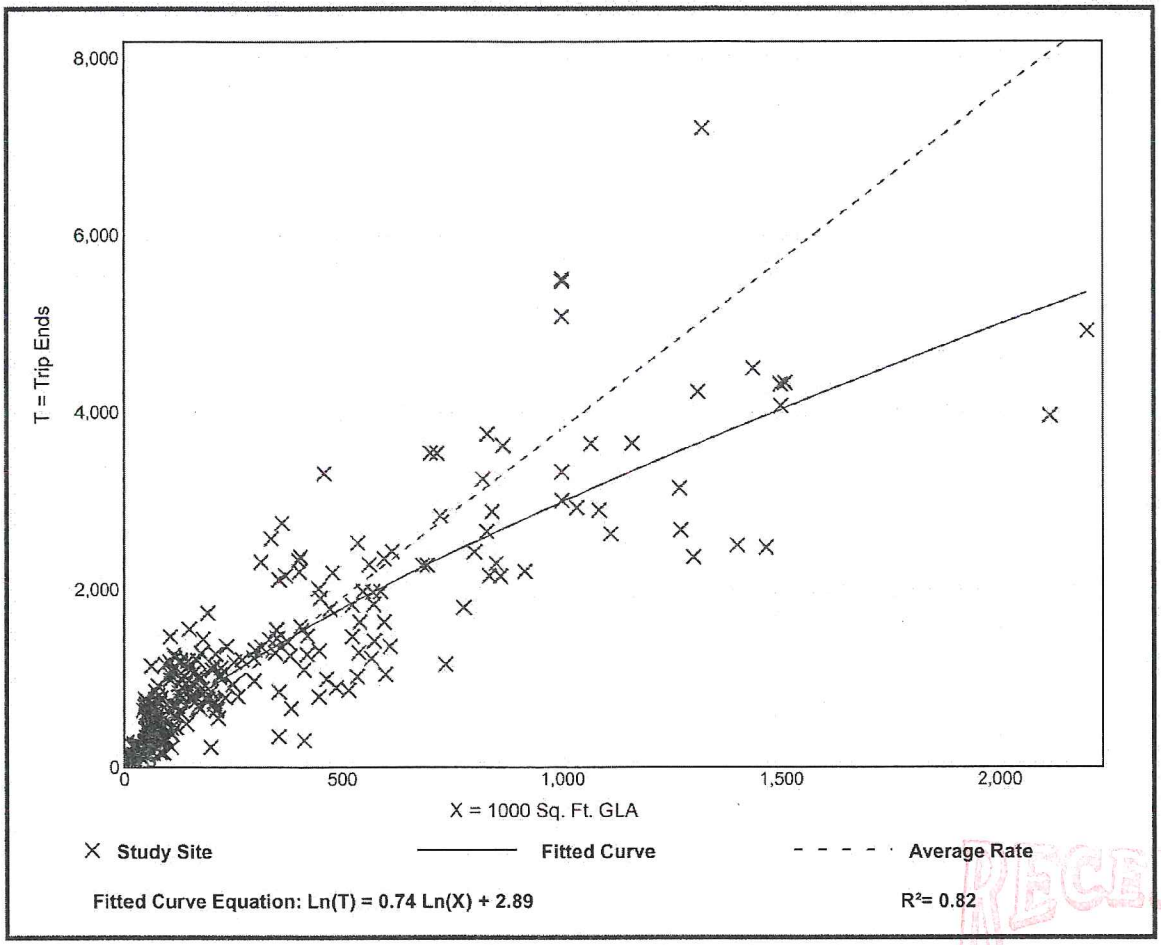
Shopping Center
(820)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GLA**
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:	261
Avg. 1000 Sq. Ft. GLA:	327
Directional Distribution:	48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.81	0.74 - 18.69	2.04

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.74 Ln(X) + 2.89

R^2= 0.82

Trip Generation Manual, 10th Edition • Institute of Transportation Engineers

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI2018-00003

Medical-Dental Office Building
(720)

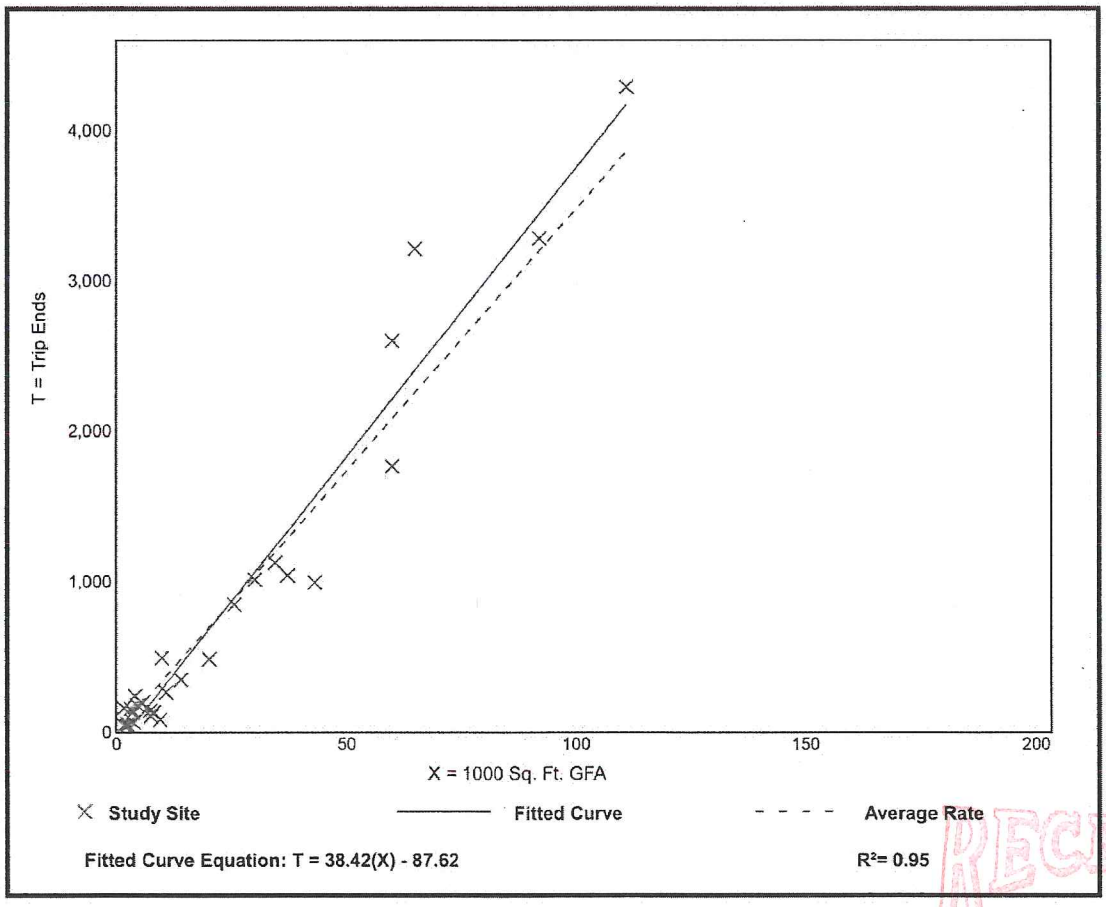
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 28
1000 Sq. Ft. GFA: 24
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
34.80	9.14 - 100.75	9.79

Data Plot and Equation



Fitted Curve Equation: T = 38.42(X) - 87.62

R^2= 0.95

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT

DCI 2018-00003

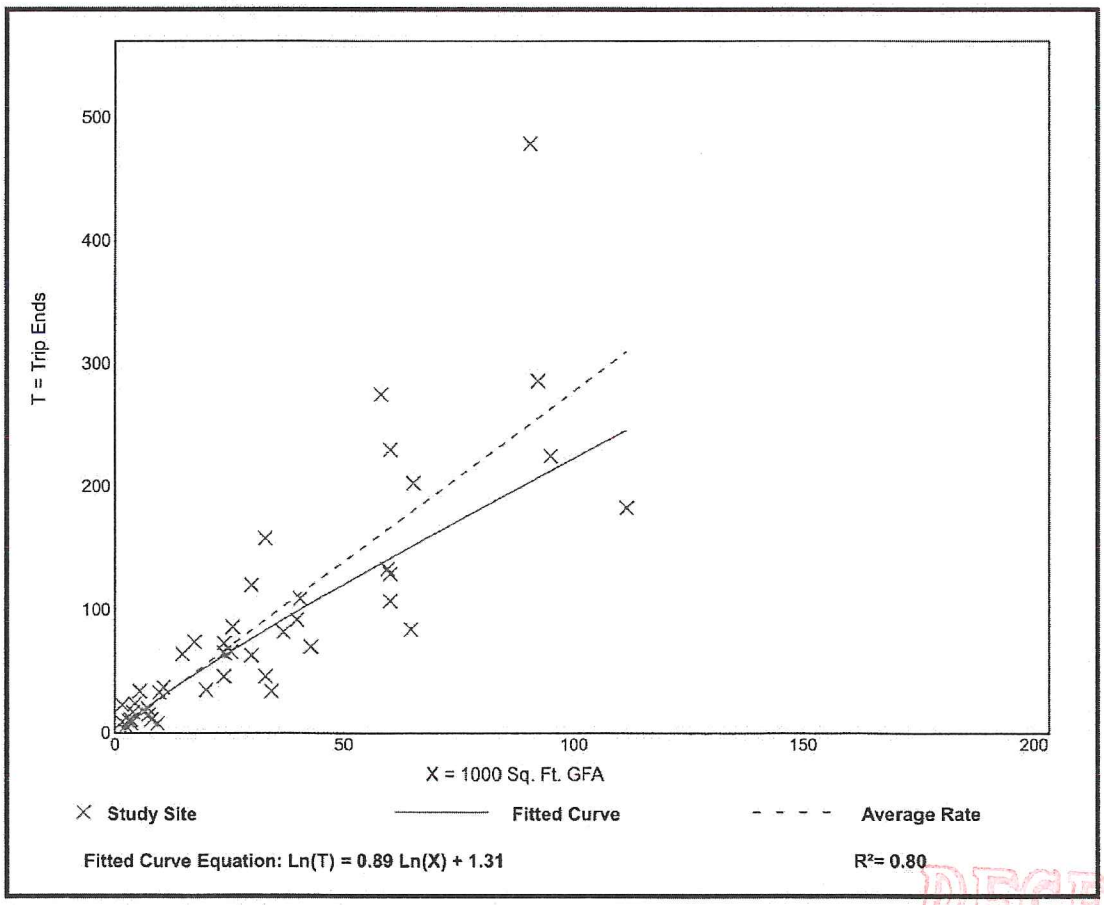
Medical-Dental Office Building
(720)

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: 44
1000 Sq. Ft. GFA: 32
Directional Distribution: 78% entering, 22% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.78	0.85 - 14.30	1.28

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.89 Ln(X) + 1.31 **R^2= 0.80**

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

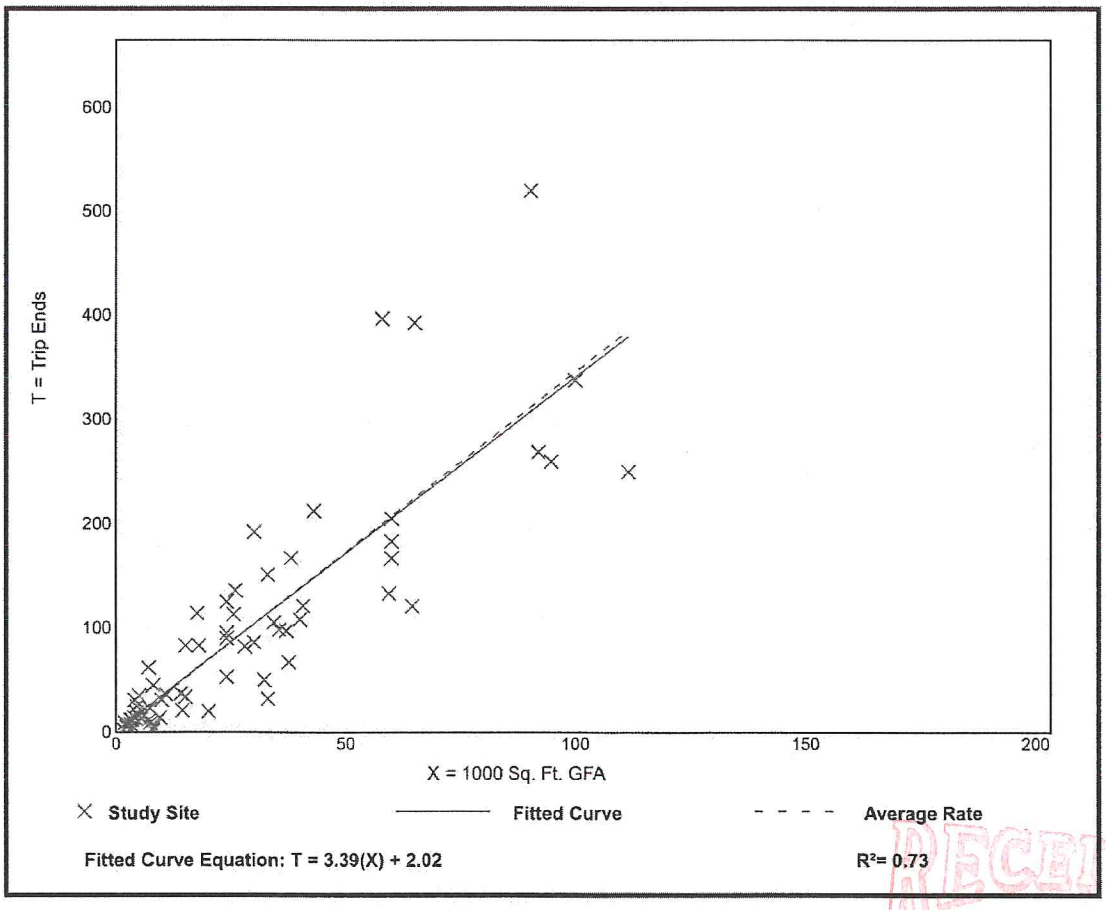
Medical-Dental Office Building
(720)

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: 65
1000 Sq. Ft. GFA: 28
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.46	0.25 - 8.86	1.58

Data Plot and Equation



Fitted Curve Equation: T = 3.39(X) + 2.02

R^2= 0.73

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI2018-00003

General Office Building
(710)

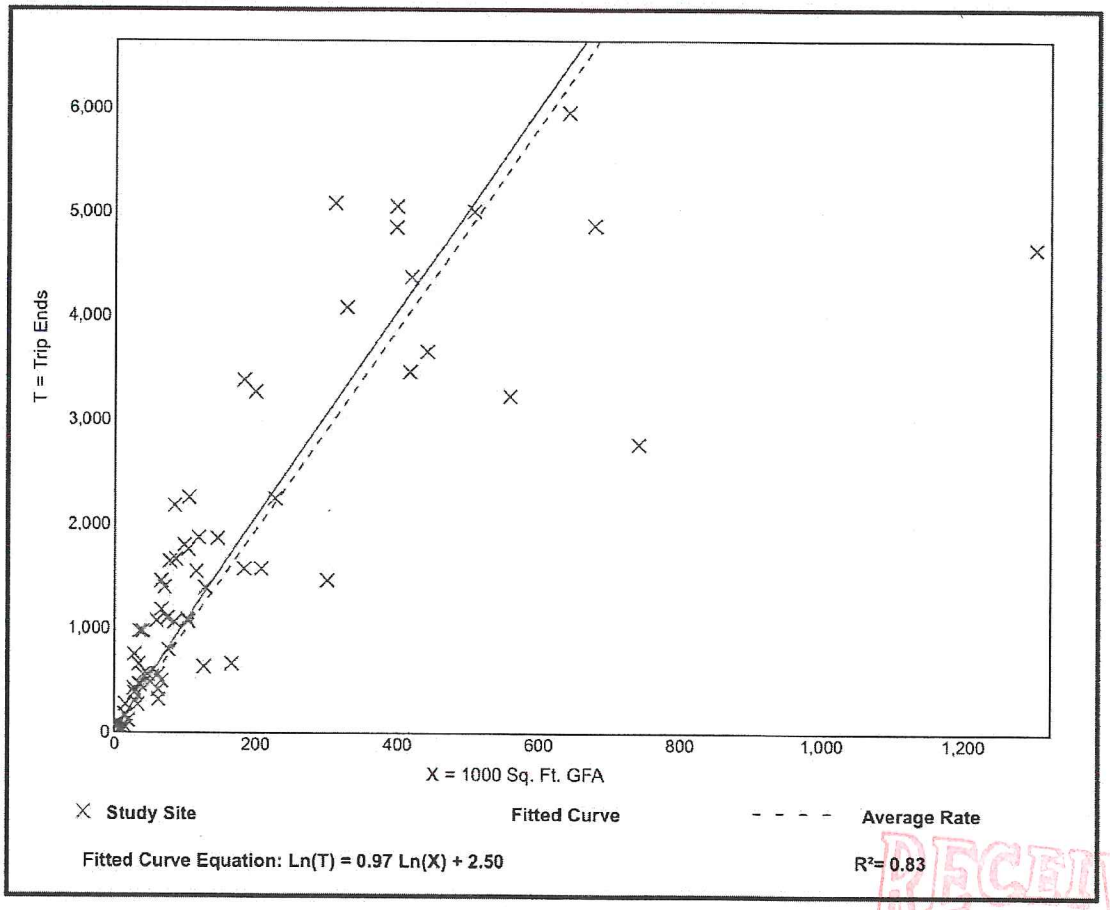
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 66
1000 Sq. Ft. GFA: 171
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.74	2.71 - 27.56	5.15

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.97 Ln(X) + 2.50

R^2= 0.83

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

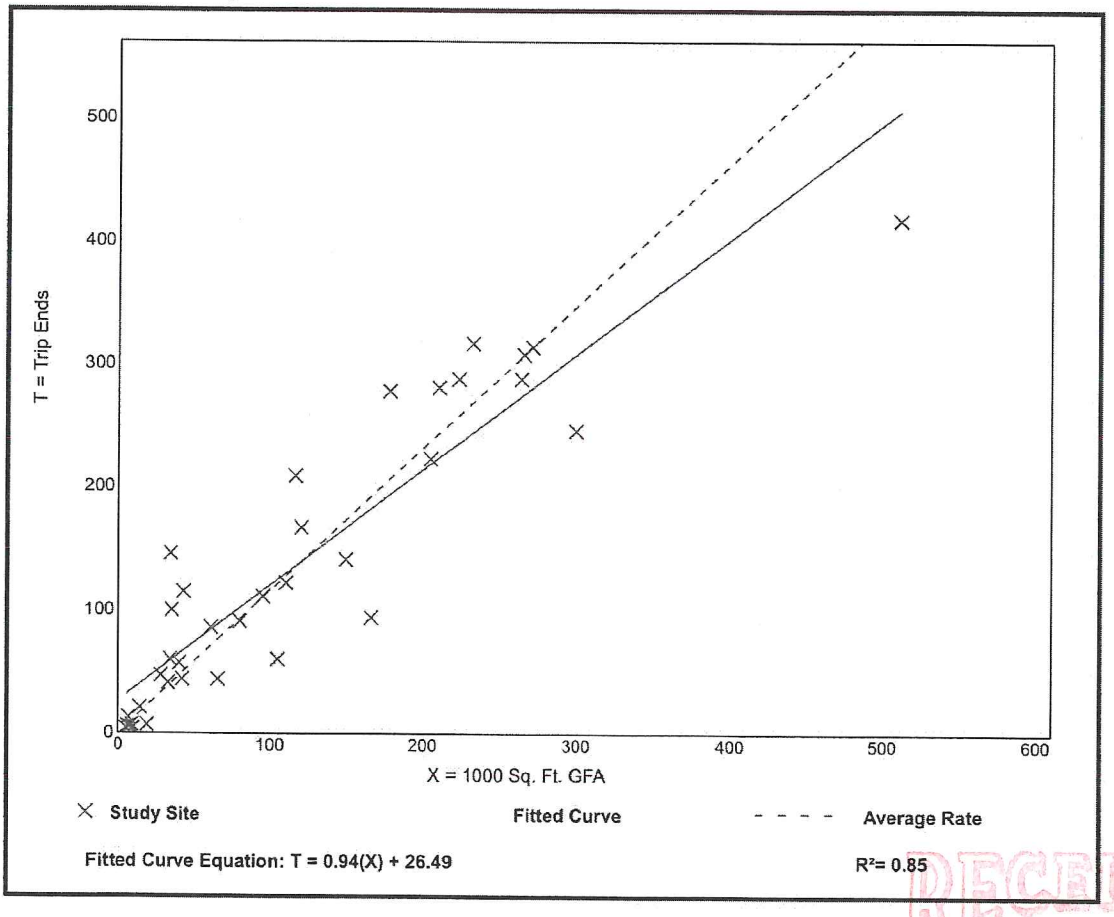
General Office Building
(710)

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: 35
1000 Sq. Ft. GFA: 117
Directional Distribution: 86% entering, 14% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.16	0.37 - 4.23	0.47

Data Plot and Equation



Fitted Curve Equation: T = 0.94(X) + 26.49

R^2= 0.85

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003

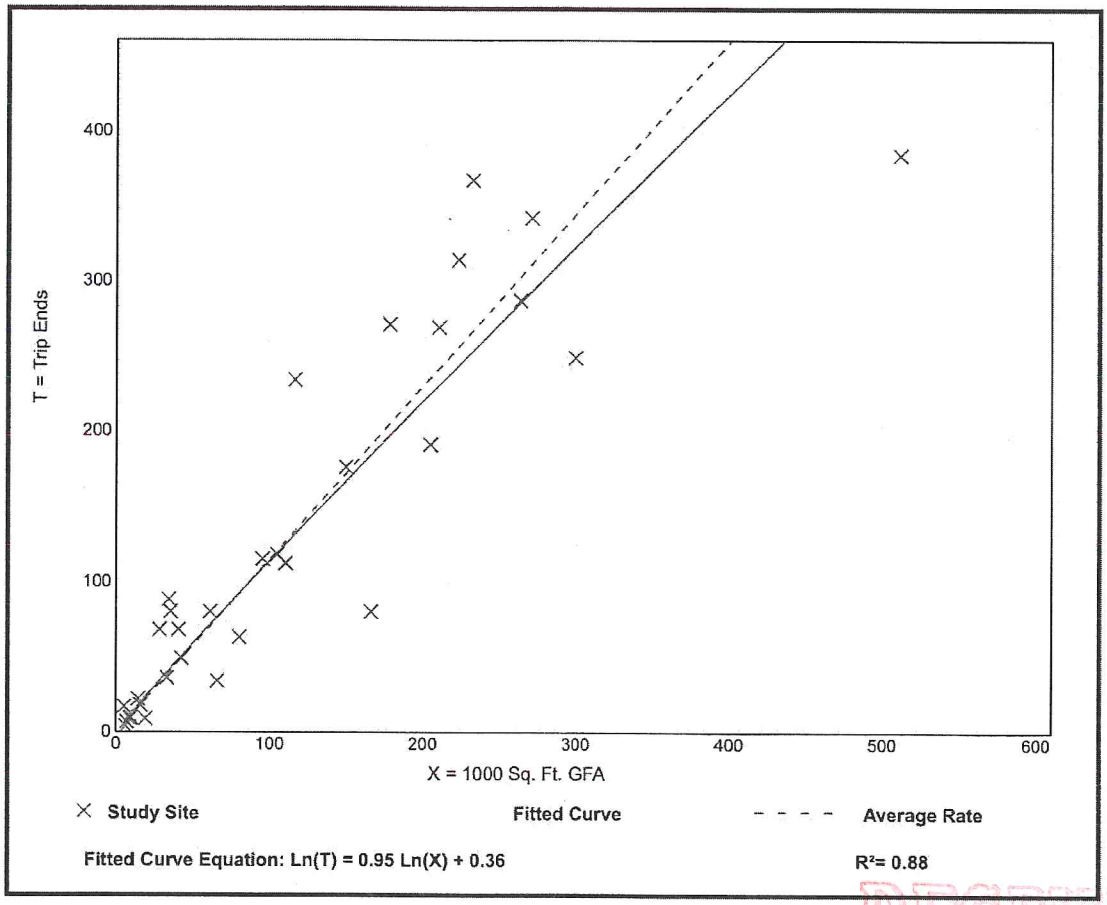
General Office Building
(710)

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: 32
1000 Sq. Ft. GFA: 114
Directional Distribution: 16% entering, 84% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.15	0.47 - 3.23	0.42

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.95 Ln(X) + 0.36

R^2= 0.88

RECEIVED
MAR 02 2018
COMMUNITY DEVELOPMENT
DCI 2018-00003