City of ALACHUA

THE GOOD LIFE COMMUNITY

FOR PLANNING USE ONLY
Case #: _____
Application Fee: $_____
Filing Date: _____
Acceptance Date: _____
Review Type: P&Z

Site Plan Application

Reference City of Alachua Land Development Regulations Article 2.4.9

A. PROJECT

1. Project Name: Walmart #3873-00
2. Address of Subject Property: SE Quadrant of Intersection of US 441 & I-75
3. Parcel ID Number(s): 03869-013-000 and 03869-014-000
4. Existing Use of Property: Vacant
5. Future Land Use Map Designation : COMM
6. Zoning Designation: Commercial Intensive
7. Acreage: 31.26

B. CO-APPLICANT

1. Applicant's Status ☒ Owner (title holder) ☐ Agent
2. Name of Applicant(s) or Contact Person(s): Michael Thomas Title: Director, Proj. Design & Mang.
   Company (if applicable): Walmart Stores East, LP
   Mailing address: 2001 SE 10th Street
   City: Bentonville State: Arkansas ZIP: 72716-5510
   Telephone: 479-204-2186 FAX: 479-273-8380 e-mail: Michael.Thomas1@wal-mart.com
3. If the applicant is agent for the property owner*:
   Name of Owner (title holder): N/A
   Mailing Address: _____
   City: _____ State: _____ ZIP: _____

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ☒ No
   If yes, list names of all parties involved: _____
   If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

D. ATTACHMENTS

1. Site Plan including but not limited to:
   a. Name, location, owner, and designer of the proposed development.
   b. Zoning of the subject property.
   c. Vicinity map - indicating general location of the site and all abutting streets and properties.
   d. Complete legal description.
   e. Statement of Proposed Uses.
   f. Location of the site in relation to adjacent properties, including the means of ingress and egress to such properties and any screening or buffers along adjacent properties.
   g. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to fifty (50) feet.)
   h. Area and dimensions of site.
   i. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
   j. Access and points of connection to utilities (electric, potable water, sanitary sewer, gas, etc.)
   k. Location and dimensions of all existing and proposed parking areas and loading areas.
   l. Location, size, and design of proposed landscaped areas (including existing trees and required landscaped buffer areas) with detail illustrating compliance with Section 6.2.2 of the Land Development Regulations.

City of ALACHUA

THE GOOD LIFE COMMUNITY

FOR PLANNING USE ONLY
Case #: _____
Application Fee: $_____
Filing Date: _____
Acceptance Date: _____
Review Type: P&Z

Site Plan Application

Reference City of Alachua Land Development Regulations Article 2.4.9

A. PROJECT

1. Project Name: Walmart #3873-00
2. Address of Subject Property: SE Quadrant of Intersection of US 441 & I-75
3. Parcel ID Number(s): PORTION OF PARCELS 03869-000-000 and 03066-000-000 - ROADS ONLY
4. Existing Use of Property: Vacant
5. Future Land Use Map Designation : COMM
6. Zoning Designation: Commercial Intensive
7. Acreage: 6.38

B. CO-APPLICANT

1. Applicant's Status ■ Owner (title holder) ☐ Agent
2. Name of Applicant(s) or Contact Person(s): Darryl J. Tompkins Title: Manager

   Company (if applicable): First Street Group, L.C.

   Mailing address: P.O. Box 519

   City: Alachua State: FL ZIP: 32616

   Telephone: 386-418-1000 FAX: 386-418-1079 e-mail: DJTOMPKINS@aol.com
3. If the applicant is agent for the property owner*:

   Name of Owner (title holder): N/A

   Mailing Address: _____

   City: _____ State: _____ ZIP: _____

   * Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ■ No

   If yes, list names of all parties involved: _____

   If yes, is the contract/option contingent or absolute? ☐ Contingent ☐ Absolute

D. ATTACHMENTS

1. Site Plan including but not limited to:
   a. Name, location, owner, and designer of the proposed development.
   b. Zoning of the subject property.
   c. Vicinity map - indicating general location of the site and all abutting streets and properties.
   d. Complete legal description.
   e. Statement of Proposed Uses.
   f. Location of the site in relation to adjacent properties, including the means of ingress and egress to such properties and any screening or buffers along adjacent properties.
   g. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to fifty (50) feet.)
   h. Area and dimensions of site.
   i. Location of all property lines, existing right-of-way approaches, sidewalks, curbs, and gutters.
   j. Access and points of connection to utilities (electric, potable water, sanitary sewer, gas, etc.)
   k. Location and dimensions of all existing and proposed parking areas and loading areas.
   l. Location, size, and design of proposed landscaped areas (including existing trees and required landscaped buffer areas) with detail illustrating compliance with Section 6.2.2 of the Land Development Regulations.

m. Location and size of any lakes, ponds, canals, or other waters and waterways.
n. Structures and major features – fully dimensioned – including setbacks, distances between structures, floor area, width of driveways, parking spaces, property or lot lines, and floor area ratio.
o. Location of waste receptacles and detail of waste receptacle screening.
p. For development consisting of a nonresidential use, except for single tenant retail sales and services uses greater than or equal to 20,000 square feet in area and except for use types within the industrial services, manufacturing and production, warehouse freight and movement, waste-related services, and wholesale sales use categories:
    i. Architectural plans and dimension plans which demonstrate compliance with the design standards for business uses as provided in Section 6.8.2 of the LDRs, including:
        (a) Calculation of glazing of the front façade.
        (b) Calculation of the area of ground floor façades subject to glazing.
        (c) Detail on the architectural plans and dimension plans depicting façade massing and/or alternatives to required façade massing.
        (d) Sufficient plan detail and calculations of each material utilized in each façade.
q. For development consisting of a nonresidential use where a single tenant is greater than or equal to 20,000 square feet in area:
    i. Architectural plans and dimension plans which demonstrate compliance with the design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet in area as provided in Section 6.8.3 of the LDRs, including:
        (a) Calculation of glazing of the façades facing streets, residential uses, and vacant residential/agricultural land.
        (b) Calculation of the area of ground floor façades subject to glazing.
        (c) If glazing alternatives are used, calculation of area of alternative materials used.
        (d) Detail on the architectural plans and dimension plans depicting façade massing and/or alternatives to required façade massing.
        (e) Color architectural plans depicting the color of all materials used in the façade.
r. For development consisting of one or more of the following: Multi-family residential; Hotel; or Mobile Home Park:
    i. Tabulation of gross acreage.
    ii. Tabulation of density.
    iii. Number of dwelling units proposed.
    iv. Location and percent of total open space and recreation areas.
    v. Floor area of dwelling units.
    vi. Number of proposed parking spaces.
    vii. Street layout.
    viii. Layout of mobile home stands (for mobile home parks only).
    ix. City of Alachua Public School Student Generation Form.

Sheet Size: 24" X 36" with 3" left margin and ½" top, bottom, and right margins

2. Stormwater management plan - including the following:

    a. Existing contours at one (1) foot intervals based on U.S. Coastal and Geodetic Datum.
    b. Proposed finished floor elevation of each building site.
    c. Existing and proposed stormwater management facilities with size and grades.
    d. Proposed orderly disposal of surface water runoff.
    e. Centerline elevations along adjacent streets.
    f. Water Management District surfacewater management Statement of proposed uses on the site plan

3. Fire Department Access and Water Supply: The design criteria shall be Chapter 18 of the Florida Fire Prevention Code. Plans must be on separate sealed sheets and must be prepared by a professional Fire engineer licensed in the State of Florida. Fire flow calculations must be provided for each newly constructed building. When required, fire flow calculations shall be in accordance with the Guide for Determination of Required Fire Flow, latest edition, as published by the Insurance Service Office (ISO) and /or Chapter 18, Section 18.4 of the Florida Fire Prevention Code, whichever is greater. All calculations must be demonstrated and provided. All calculations and specifications must be on the plans and not on separate sheets. All fire protection plans are reviewed and approved by the Alachua County Fire Marshal.

4. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools in accordance with Article 2.4.14 of the Land Development Regulations.

5. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy.)

For commercial project Applications:

a. In addition to submitting specific written information regarding your **commercial** development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, you must respond directly to the standards listed below. You should be specific in terms of how your commercial development will comply with these standards.

Policy 1.3.d Design and performance standards

The following criteria shall apply when evaluating commercial development proposals:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
2. Buffering from adjacent existing/potential uses;
3. Open space provisions and balance of proportion between gross floor area and site size;
4. Adequacy of pervious surface area in terms of drainage requirements;
5. Placement of signage;
6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
7. Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;
8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
11. Commercial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.

For industrial project Applications:

b. In addition to submitting specific written information regarding your **industrial** development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, you must respond directly to the standards listed below. You should be specific in terms of how your industrial development will comply with these standards.

Policy 1.5.d

The City shall develop performance standards for industrial uses in order to address the following:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
2. Buffering from adjacent existing/potential uses;
3. Open space provisions and balance of proportion between gross floor area and site size;
4. Adequacy of pervious surface area in terms of drainage requirements;
5. Placement of signage;
6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
7. Safety of on-site circulation patterns (patron, employee and delivery vehicles, trucks), including parking layout and drive aisles, and points of conflict;
8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
10. Performance based zoning requirements that may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
11. Industrial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres by 5 acres or greater, .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio for parcels 1 acre or less.

6. *For Site Plans for Buildings Less than 80,000 Square Feet in Area:* One (1) set of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.
   For Site Plans for Buildings Greater than or Equal to 80,000 Square Feet in Area: Two (2) sets of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.

7. Neighborhood Meeting Materials, including:
   i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's Land Development Regulations
   ii. Copy of written notice (letter) sent to all property owners within 400 feet and to all persons/organizations registered with the City to receive notice, and mailing labels or list of those who received written notice
   iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.

8. Legal description with tax parcel number, separate from all other documentation on 8.5" x 11" paper.

9. Proof of ownership (i.e., copy of deed.)

10. Proof of payment of taxes.

11. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District or Self-Certification for a Stormwater Management System in Uplands Serving Less than 10 Acres of Total Project Area and Less than 2 Acres of Impervious Surfaces from the Florida Department of Environmental Protection pursuant to Section 403.814(12), Florida Statutes.

12. If access is from a County Road, access management permit from Alachua County Public Works (or documentation providing evidence that a permit application has been submitted).

13. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation providing evidence that a permit application has been submitted).

14. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review or additional reviews of the application beyond the initial engineering review fee will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All 14 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

Michael Thomas

Signature of Applicant

Signature of Co-applicant

Michael Thomas, Director Project Design & Management

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Arkansas County of Benton

The foregoing application is acknowledged before me this 9th day of March, 2016 by Michael Thomas, who is/are personally known to me, or who has/have produced N/A as identification.

SHEILA J. WARD
MY COMMISSION # 12350098
EXPIRES: September 24, 2016
Benton County

Sheila J. Ward

Signature of Notary Public, State of Arkansas

6. *For Site Plans for Buildings Less than 80,000 Square Feet in Area:* One (1) set of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.
   For Site Plans for Buildings Greater than or Equal to 80,000 Square Feet in Area: Two (2) sets of labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications.

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10. Proof of payment of taxes.

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14. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any necessary technical review or additional reviews of the application beyond the initial engineering review fee will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any legislative and/or quasi-judicial action of any kind on the petition, appeal, or development application.

All 14 attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

FIRST STREET GROUP L.C.
BY:

Signature of Applicant

Signature of Co-applicant

Michael Thomas, Director Project Management

DARRYL J. TOMPKINS, MANAGER

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 30th day of March, 2016 by Darryl J. Tompkins, who is/are personally known to me, or who has/have produced _____ as identification.

Signature of Notary Public, State of Florida

Notary Public State of Florida
Sandra E Howe
My Commission FF 054525
Expires 11/15/2017

WAL-MART STORES EAST, LP

CERTIFICATE OF ASSISTANT SECRETARY

The undersigned, Amber Graham, an Assistant Secretary of WSE Management, LLC, a Delaware limited liability company, the General Partner of Wal-Mart Stores East, LP, a Delaware limited partnership (collectively, "Walmart"), hereby certifies that he has been elected, qualified, and is acting in such capacity and that he is familiar with the facts certified herein and is duly authorized to certify the same, and thus, he hereby certifies the following:

1. Exhibit A contains a true and correct copy of Article 3, Section 3.3 of the Operating Agreement of WSE Management, LLC as amended.

2. **John P. Suarez** currently serves as Senior Vice President for Walmart. Under the above referenced section, John P. Suarez is authorized to execute documents on behalf of Walmart and delegate the ability to execute documents on behalf of Walmart, and she has delegated such ability to those positions shown on the attached Exhibit B.

3. **Volker Heimeshoff** currently serves as Vice President for Walmart. Under the above referenced section, and pursuant to the delegation attached on Exhibit B, Volker Heimeshoff is authorized to delegate the signing of documents on behalf of Walmart to the manager level for his team and has delegated such ability to those positions shown on the attached Exhibit C.

4. **Michael Thomas** currently serves as Director of Project Design & Management and pursuant to the delegation attached on Exhibit C, Michael Thomas is authorized to execute documents on behalf of Walmart which includes, among other things, permit applications.

In witness thereof, I have executed this document as of this 11th day of April 2016.

Amber Graham
Assistant Secretary

Subscribed and sworn before me this 11 day of april, 2016

Notary Public
[Notary Seal]

My commission expires: 1-20-2022

JANE BENNETT
Commission No. 12386344
NOTARY
PUBLIC
My Commission Expires January 20, 2022
BENTON, ARKANSAS

EXHIBIT A

WSE Management, LLC

Article 3, Section 3.3. Management rights of Assistant Managers. The Assistant Managers shall be entitled to exercise all of the rights, authority and powers of the Manager under the LLC Act and under this Agreement if and to the extent that the Manager fails to provide otherwise in writing.

EXHIBIT B

Delegation of Signature Authority

I, John P. Suarez, as Senior Vice President of Wal-Mart Real Estate Business Trust; Wal-Mart TRS, LLC; Wal-Mart Realty Company; Wal-Mart Property Co.; Sam's Real Estate Business Trust; Sam's TRS, LLC; Sam's Property Co.; Benchmark Realty Advisors, Inc.; North Arkansas Wholesale Co., Inc.; Sam's PW, Inc.; Wal-Mart Stores, Inc.; Wal-Mart Stores Arkansas, LLC; Wal-Mart Stores Texas, LLC; Wal-Mart Stores East, LP; Wal-Mart Louisiana, LLC; WSE Management, LLC; Wal-Mart Stores East, LLC; Sam's East, Inc.; Sam's West, Inc.; Wal-Mart com USA, LLC; and Wal-Mart Puerto Rico, Inc. (hereinafter collectively referred to as "the Company", hereby delegate to:

Vice President, Sam's Real Estate and Facility Support
Vice President, Real Estate
Vice President, Real Estate West
Vice President, Real Estate East
Vice President, Construction
Vice President, Prototype and New Format Development
Vice President, Facilities Management and Environmental Services
Vice President, Real Estate Strategy & Analytics
Vice President, Store Planning
Vice President, Energy
Vice President, Realty Procurement Services
Vice President, Remodels and Special Projects

the authority to sign documents and to delegate the signing of documents on behalf of the Company to their respective teams, down to manager level, in compliance with Walmart US Governance and Operating Standards and Walmart Realty Division Corporate Governance.

Additionally, the authority to sign financial guarantees on behalf of the Company is hereby delegated those positions above.

This delegation shall supersede and revoke the signature authority I previously granted in the Delegation of Signature Authority signed on November 3, 2015 as of the date below. All acts and transactions of individuals in the positions above which were taken or made in good faith and prior to the formal delegation of authority to such position that are consistent with this delegation are hereby ratified and approved.

John P. Suarez
Senior Vice President, Walmart Realty

Subscribed and sworn before me on this 19th day of November, 2015

Notary Public

Notary Seal

EXHIBIT C

DELEGATION OF SIGNATURE AUTHORITY

I, **Volker Heimeshoff**, being a Vice President of Wal-Mart Stores, Inc.; Wal-Mart Real Estate Business Trust; Wal-Mart TRS, LLC; Wal-Mart Realty Company; Wal-Mart Property Company; Wal-Mart Stores Arkansas, LLC; Wal-Mart Stores, Texas, LLC; Wal-Mart Stores East, LP; Wal-Mart Louisiana, LLC; WSE Management, LLC; Sam's Real Estate Business Trust; Sam's TRS, LLC; Sam's East, Inc.; Sam's West, Inc.; Sam's PW, Inc., Sam's Property Company, Wal-Mart.com USA, LLC, and Wal-Mart Puerto Rico, Inc. (hereinafter collectively referred to as "the Company"), do hereby delegate to:

Sr. Director of Project Design & Management
Sr. Director of Engineering & Estimating
Sr. Director of Architecture & Design
Director of Project Design & Management
Director Special Projects and Design
Senior Manager of Project Design and Management (remodel team)

authority to execute, implement, maintain, amend or renew the following documents, in connection with the design and construction of new stores, site relocations, expansions, remodels and takeovers, including but not limited to civil engineering agreements; architectural agreements; easements, deeds, municipal maintenance agreements, municipal improvement development agreements, plats and any permit, application or other document required by various jurisdictions, as long a such contracts are for amounts less than $750,000.00, and in compliance with Walmart Realty Division Corporate Governance ("Governance"), on behalf of the Company, in their respective capacity for the Company. Notwithstanding the foregoing, the Senior Managers of Project Design and Management on the remodel team may only sign such items related to remodel projects.

All signing authority contained herein must be done in compliance with Governance and agreements signed may not commit the Company to amounts in excess of the individual's invoice approval authority as maintained by the VP of Real Estate Finance. All acts and transactions of individuals in the positions above which were taken or made in good faith and prior to the formal delegation of authority to such position that are consistent with this delegation are hereby ratified and approved.

Volker Heimeshoff
Vice President

Subscribed and sworn before me this 21st day of December, 2015

Notary Public

My commission expires: Nov 8, 2020

[Notary Seal]

NOTARY PUBLIC #1237943 NOV 8, 2020 COUNT

AGENT AUTHORIZATION

Wal-Mart Store #3873-00 Alachua, FL
Located at the SE quadrant of the intersection of I-75 & Hwy 441
Alachua, FL

On behalf of Wal-Mart Stores East, LP ("Wal-Mart"), I hereby authorize CPH, Inc., to serve as Wal-Mart's authorized agent for the purpose of seeking all requisite permits and approvals related to the proposed development of the above-referenced site.

This authorization is expressly limited to (1) signing and delivering applications for permits and approvals that are related to the development of the above-referenced site, and (2) advancing the requisite funds on behalf of Wal-Mart to file such applications. Further, this authorization does not empower CPH, Inc. to either negotiate on Wal-Mart's behalf or otherwise obligate Wal-Mart in any manner whatsoever, including any attempt to obligate Wal-Mart to pay for or construct improvements in connection with its development of the site.

Should you need additional information or have any questions regarding this authorization, please do not hesitate to contact Wal-Mart's design manager.

Respectfully,

WAL-MART STORES EAST, LP,
a Delaware limited partnership

By: WSE Management, LLC,
a Delaware limited liability company and
general partner

Michael Thomas
Signature

Michael Thomas, Director
Printed Name, Title

STATE OF Arkansas

COUNTY OF Benton

BEFORE ME, the undersigned Notary Public in and for said County and State, appeared Michael Thomas, who is personally known to me or who has produced personally known as identification, and who executed the foregoing instrument.

Given under my hand and seal this 12th day of April, 2016.

Sheila J. Ward
Signed Name of Notary Public

Sheila J. WARD
Printed Name of Notary Public

SHEILA J. WARD
MY COMMISSION # 12350098
EXPIRES: September 24, 2016
Benton County

{Seal}

AGENT AUTHORIZATION

Wal-Mart Store #3873-00 Alachua, FL
Located at the SE quadrant of the intersection of I-75 & Hwy 441
Alachua, FL

On behalf of First Street Group, L.C., I hereby authorize CPH, Inc., to serve as First Street Group, L.C.'s authorized agent for the purpose of seeking all requisite permits and approvals related to the proposed development of the above-referenced site.

This authorization is expressly limited to signing and delivering applications for permits and approvals that are related to the development of the above-referenced site. Further, this authorization does not empower CPH, Inc. to negotiate on First Street Group, L.C.'s behalf or make any financial commitment on its behalf.

Should you need additional information or have any questions regarding this authorization, please do not hesitate to contact me at (386) 418-1000 or Brian Cassidy at CPH, Inc. (904) 332-0999.

Respectfully,

FIRST STREET GROUP, L.C.,

By: Darryl J. Tompkins, Manager

Signature

DARRYL J. TOMPKINS
Printed Name, Title MANAGER

STATE OF FLORIDA

COUNTY OF ALACHUA

BEFORE ME, the undersigned Notary Public in and for said County and State, appeared Darryl J. Tompkins, who is personally known to me and who executed the foregoing instrument.

Given under my hand and seal this 3rd day of May, 2016.

Signed Name of Notary Public

Sandra E. Howe
Printed Name of Notary Public

Notary Public State of Florida
Sandra E Howe
My Commission FF 054525
Expires 11/15/2017

IN PAYMENT OF INVOICES TO

WAL-MART STORES, INC.
702 SW 8th Street
Bentonville, Arkansas 72716

CHECK DATE	CHECK NUMBER
02/26/16	9510282

PAGE# 1/1

INVOICE DATE	INVOICE NUMBER	STORE NO.	DOCUMENT	TYPE	GROSS AMOUNT	DISCOUNTS	NET AMOUNT
02/24/16	22416	05-9000			2,300.00	0.00	2,300.00
340356989/9999999989 Emergency Requests One Time V				TOTALS	2,300.00	0.00	2,300.00

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW

WAL-MART STORES, INC.
702 SW 8th Street
Bentonville, Arkansas 72716

Walmart
Save money. Live better.

66-156
531

VENDOR NUMBER	CHECK DATE	CHECK NUMBER
340356989	02/26/16	9510282

PAY: TWO THOUSAND THREE HUNDRED DOLLARS AND NO CENTS

NET AMOUNT
$*********2,300.00

TO THE ORDER OF

City of Alachua
15100 NW 142 Terrace
Alachua FL 32616

WAL-MART STORES, INC.

EVP and Treasurer

⑈9510282⑈ ⑆053101561⑆ 2079900136854⑈

Legal Description: (Parcel 03869-013-000 – Walmart Parcel)

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 10, 15, AND 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°51'49"E., A DISTANCE OF 3.91 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N.88°37'47"W., ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 790.35 FEET TO THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY) AND THE TRUE POINT OF BEGINNING; THENCE RUN N.04°30'53"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 49.91 FEET; THENCE RUN S.88°32'46"E., A DISTANCE OF 49.98 FEET; THENCE RUN N.04°58'37"E., A DISTANCE OF 50.15 FEET TO THE CENTERLINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN S.88°36'33"E., ALONG SAID CENTERLINE, A DISTANCE OF 379.41 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 1620, PAGE 1020 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "A"; THENCE RUN N.04°14'21"E., A DISTANCE OF 179.48 FEET TO THE NORTHWEST CORNER OF SAID PARCEL "A"; THENCE RUN S.79°38'59"E., ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 505.22 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "A"; THENCE RUN S.88°35'59"E., ALONG THE NORTH RIGHT OF WAY LINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD, A DISTANCE OF 19.74 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE RUN S.04°11'43"W., A DISTANCE OF 1431.98 FEET; THENCE RUN N.85°48'17"W., FOR A DISTANCE OF 952.11 FEET TO THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY); THENCE RUN N.04°11'43"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 1184.62 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 30.19 ACRES MORE OR LESS

Legal Description: (Parcel 03869-014-000 – Passive Recreation Parcel)

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 10, 15, AND 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°51'49"E., A DISTANCE OF 3.91 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N.88°37'47"W., ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 790.35 FEET TO THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY); THENCE RUN N.04°30'53"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 49.91 FEET; THENCE RUN S.88°32'46"E., A DISTANCE OF 49.98 FEET; THENCE RUN N.04°58'37"E., A DISTANCE OF 50.15 FEET TO THE CENTERLINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN S.88°36'33"E., ALONG SAID CENTERLINE, A DISTANCE OF 379.41 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 1620, PAGE 1020 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "A"; THENCE RUN N.04°14'21"E., A DISTANCE OF 179.48 FEET TO THE NORTHWEST CORNER OF SAID PARCEL "A"; THENCE RUN S.79°38'59"E., ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 505.22 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "A"; THENCE RUN S.88°35'59"E., ALONG THE NORTH RIGHT OF WAY LINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD, A DISTANCE OF 852.24 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE RUN S.10°38'41"W., A DISTANCE OF 127.20 FEET; THENCE RUN S.02°06'51"W., A DISTANCE OF 33.71 FEET; THENCE RUN S.10°38'41"W., A DISTANCE OF 104.50 FEET TO THE POINT OF BEGINNING; THENCE RUN S.10°38'41"W., A DISTANCE OF 191.52 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 25.00 FEET, THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 83°33'02" AN ARC DISTANCE OF 36.46 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE RUN N.85°48'17"W., A DISTANCE OF 186.42 FEET; THENCE RUN N.04°11'43"E., A DISTANCE OF 212.50 FEET; THENCE RUN S.85°48'17"E., A DISTANCE OF 232.77 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 1.07 ACRES MORE OR LESS.

Parcel: 03869-013-000

Search Date: 8/30/2016 at 12:26:43 PM

Taxpayer: WAL-MART STORES EAST LP

Mailing: 1301 SE 10TH ST
STORE NO 1205-01
BENTONVILLE, AR 72716-8013

Location:

Sec-Twn-Rng: 16-08-18

Property Use: 01000 - Vacant Comm

Tax Jurisdiction: Alachua - 1700

Area: Alachua Commercial

Subdivision: PlaceHolder

Legal: COM SE COR FRAC SEC 9-8-18 S 00 DEG 51 MIN 49 SEC E 3.91 FT N 88 DEG 37 MIN 47 SEC W 790.35 FT POB N 04 DEG 30 MIN 53 - SEC E 49.91 FT S 88 DEG 32 MIN 46 SEC E 49.98 FT N 04 DEG 58 MIN 37 SEC E 50.15 FT S 88 DEG 36 MIN 33 SEC E 379.41 FT N - 04 DEG 14 MIN 21 SEC E 179.48 FT S 79 DEG 38 MIN 59 SEC E 505.22 FT S 88 DEG 35 MIN 59 SEC E 19.74 FT S 04 DEG 11 MIN - 43 SEC W 1431.98 FT N 85 DEG 48 MIN 17 SEC W 952.11 FT N 04 DEG 11 MIN 43 SEC E 1184.62 FT POB OR 3444/0300 ALSO R/W ADJ - ON N ORD 11 02 OR 4081/366

	Property	Land	Land	Building	Misc	Total	Deferred	County	School	County	School	County	School	Total
YeaR	Use	Assessed Value	Just Value	Value	Value	Just Value	Value	Assessed	Assessed	Exempt	Exempt	Taxable	Taxable	Taxes
2015	Vacant Comm	1330300	1330300	0	0	1330300	0	1330300	1330300	0	0	1330300	1330300	33457.98
2014	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	1315100	0	0	1315100	1315100	32656.42
2013	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	1315100	0	0	1315100	1315100	32646.17
2012	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	1315100	0	0	1315100	1315100	32595.68
2011	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	1315100	0	0	1315100	1315100	33312.67
2010	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	1315100	0	0	1315100	1315100	33070.56
2009	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	1315100	0	0	1315100	1315100	32909.73
2008	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	0	0	0	1315100	0	29796.1
2007	Vacant Comm	1315100	1315100	0	0	1315100	0	1315100	0	0	0	1315100	0	29899.71

Land

Use	Zoning Type	Zoning Desc	Unit Type	Units
Vacant Commercial	PUD		Square Feet	1330322.4
			2015 Certified Land Just Value: 1330300	**2015 Certified Land Assessed Value: 1330300**

Sale

Date	Price	Vac/Imp	Qualified	OR Book	OR Page	Instrument
08/14/2006	100	V	U	3444	305	MS
08/14/2006	1406900	V	U	3444	300	MS
09/30/1999	1398700	V	U	2256	2504	MS
02/26/1997	49000	V	Q	2101	641	WD

03869-013-000

August 30, 2016

1:18,056

0 0.15 0.3 0.6 mi

0 0.25 0.5 1 km

Parcel: 03869-014-000

Search Date: 8/30/2016 at 12:27:44 PM

Taxpayer: WAL-MART STORES EAST LP

Mailing: 1301 SE 10TH ST
STORE NO 1205-01
BENTONVILLE, AR 72716-8013

Location:

Sec-Twn-Rng: 15-08-18

Property Use: 01000 - Vacant Comm

Tax Jurisdiction: Alachua - 1700

Area: Alachua Commercial

Subdivision: PlaceHolder

Legal: COM SE COR FRAC SEC 9-8-18 S 00 DEG 51 MIN 49 SEC E 3.91 FT N 88 DEG 37 MIN 47 SEC W 790.35 FT N 4 DEG 30 MIN 53 SEC E - 49.91 FT S 88 DEG 32 MIN 46 SEC E 49.98 FT N 04 DEG 58 MIN 37 SEC E 50.15 FT S 88 DEG 36 MIN 33 SEC E 379.41 FT N 04 - DEG 14 MIN 21 SEC E 179.48 FT S 79 DEG 38 MIN 59 SEC E 505.22 FT S 88 DEG 35 MIN 59 SEC E 852.24 FT S 10 DEG 38 MIN - 41 SEC W 127.20 FT S 02 DEG 06 MIN 51 SEC W 33.71 FT S 10 DEG 38 MIN 41 SEC W 104.50 FT POB S 10 DEG 38 MIN 41 SEC W - 191.52 FT SWLY ALG CURVE 36.46 FT N 85 DEG 48 MIN 17 SEC W 186.42 FT N 04 DEG 11 MIN 43 SEC E 212.50 FT S 85 DEG 48 - MIN 17 SEC E 232.77 FT POB OR 3444/0300

	Property	Land	Land	Building	Misc	Total	Deferred	County	School	County	School	County	School	Total
YeaR	Use	Assessed Value	Just Value	Value	Value	Just Value	Value	Assessed	Assessed	Exempt	Exempt	Taxable	Taxable	Taxes
2015	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1172.01
2014	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1157.17
2013	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1156.81
2012	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1155.02
2011	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1180.42
2010	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1171.85
2009	Vacant Comm	46600	46600	0	0	46600	0	46600	46600	0	0	46600	46600	1166.15
2008	Vacant Comm	46600	46600	0	0	46600	0	46600	0	0	0	46600	0	1055.81
2007	Vacant Comm	46600	46600	0	0	46600	0	46600	0	0	0	46600	0	1059.48

Land

Use	Zoning Type	Zoning Desc	Unit Type	Units
Vacant Commercial	PUD		Square Feet	46609.2
			2015 Certified Land Just Value: 46600	**2015 Certified Land Assessed Value: 46600**

Sale

Date	Price	Vac/Imp	Qualified	OR Book	OR Page	Instrument
08/14/2006	1406900	V	U	3444	300	MS

03869-014-000

August 30, 2016

1:2,257

0 0.0175 0.035 0.07 mi

0 0.03 0.06 0.12 km

117122

RETURN TO:
First American Title Ins. Co.
25400 US 19 N, Suite 135
Clearwater, FL 33763 DB/JS

Prepared by and when
~~recorded return to:~~
David J. Edwards
Edwards Cohen
6 East Bay Street, Suite 500
Jacksonville, Florida 32202
7016.47

(2)

RE Parcel ID Nos. 03869-000-00

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 2268212 5 PGS
2006 AUG 17 04:23 PM BK 3444 PG 300
J. K. "BUDDY" IRBY
CLERK OF CIRCUIT COURT
ALACHUA COUNTY, FLORIDA
CLERK13 Receipt#296766
Doc Stamp-Deed: 9,848.30

2268212

GENERAL WARRANTY DEED

THIS INDENTURE, made as of this 14th day of August, 2006, between **FIRST STREET GROUP, L.C.,** a Florida limited liability company, whose address is P. O. Box 1990, Alachua, FL 32616 (the "Grantor"), and **WAL-MART STORES EAST, LP**, a Delaware limited partnership, with offices located at Property Tax Dept. 8013, 1301 S.E. 10th Street, Store No. 1205-01, Bentonville, Arkansas 72716-8013 (the "Grantee").

WITNESSETH:

That the said Grantor, for and in consideration of the sum of Ten Dollars and other good and valuable consideration, to it in hand paid by the said Grantee, the receipt and adequacy of which is hereby acknowledged, has granted, bargained and sold to the said Grantee, its successors and assigns forever, the following described land located in Alachua County, Florida, to wit:

See Exhibit A attached.

TOGETHER WITH all the tenements, hereditaments, easements and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

Grantor hereby covenants with said Grantee that the Grantor is lawfully seized of said lands in fee simple; that the Grantor has good right and lawful authority to sell and convey the lands; Grantor does hereby fully warrant title to said land, and will defend the same against the lawful claims of all persons whomsoever. This conveyance of the Property is made subject only to those matters listed on Exhibit B attached hereto and made a part hereof.

Alachua, Florida
Wal-Mart Store No. 3873-00

5pgs 44.00 Doc 9,848.30

INSTRUMENT # 2268212
5 PGS

IN WITNESS WHEREOF, Grantor has executed this Deed as of the day and year first above written.

Signed, sealed and delivered in the presence of:

Name printed: DARRYL J. TOMPKINS

Name printed: Sandra E. Howe

FIRST STREET GROUP, L.C., a Florida limited liability company

By: _____
James W. Shaw
Vice President and Manager

STATE OF FLORIDA
COUNTY OF Alachua

The foregoing instrument was acknowledged before me on August 11, 2006, by James W. Shaw, as Vice President and Manager of the **FIRST STREET GROUP, L.C.**, a Florida limited liability company, on behalf of the limited liability company, who ☐ is personally known to me or ☑ has produced Florida drivers license as identification.

Notary Public State of Florida
Sandra E Howe
My Commission DD491123
Expires 11/15/2009

[NOTARIAL SEAL]

Notary Public, State and County Aforesaid
Name printed: Sandra E. Howe
My Commission Expires: 11/15/2009
Commission No.: DD491123

Alachua, Florida
Wal-Mart Store No. 3873-00

INSTRUMENT # 2268212
5 PGS

EXHIBIT A

WAL MART STORE TRACT

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 10, 15, AND 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°51'49"E., A DISTANCE OF 3.91 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N.88°37'47"W., ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 790.35 FEET TO THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY) AND THE TRUE POINT OF BEGINNING; THENCE RUN N.04°30'53"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 49.91 FEET; THENCE RUN S.88°32'46"E., A DISTANCE OF 49.98 FEET; THENCE RUN N.04°58'37"E., A DISTANCE OF 50.15 FEET TO THE CENTERLINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN S.88°36'33"E., ALONG SAID CENTERLINE, A DISTANCE OF 379.41 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 1620, PAGE 1020 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "A"; THENCE RUN N.04°14'21"E., A DISTANCE OF 179.48 FEET TO THE NORTHWEST CORNER OF SAID PARCEL "A"; THENCE RUN S.79°38'59"E., ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 505.22 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "A"; THENCE RUN S.88°35'59"E., ALONG THE NORTH RIGHT OF WAY LINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD, A DISTANCE OF 19.74 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE RUN S.04°11'43"W., A DISTANCE OF 1431.98 FEET; THENCE RUN N.85°48'17"W., FOR A DISTANCE OF 952.11 FEET TO THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY); THENCE RUN N.04°11'43"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, FOR A DISTANCE OF 1184.62 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH:

WAL MART OUTPARCEL TRACT

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 10, 15, AND 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°51'49"E., A DISTANCE OF 3.91 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N.88°37'47"W., ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 790.35 FEET TO THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY); THENCE RUN N.04°30'53"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 49.91 FEET; THENCE RUN S.88°32'46"E., A DISTANCE OF 49.98 FEET; THENCE RUN N.04°58'37"E., A DISTANCE OF 50.15 FEET TO THE CENTERLINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN S.88°36'33"E., ALONG SAID CENTERLINE, A DISTANCE OF 379.41 FEET TO THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 1620, PAGE 1020 OF THE

PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "A"; THENCE RUN N.04°14'21"E., A DISTANCE OF 179.48 FEET TO THE NORTHWEST CORNER OF SAID PARCEL "A"; THENCE RUN S.79°38'59"E., ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 505.22 FEET TO THE NORTHEAST CORNER OF SAID PARCEL "A"; THENCE RUN S.88°35'59"E., ALONG THE NORTH RIGHT OF WAY LINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD, A DISTANCE OF 852.24 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE RUN S.10°38'41"W., A DISTANCE OF 127.20 FEET; THENCE RUN S.02°06'51"W., A DISTANCE OF 33.71 FEET; THENCE RUN S.10°38'41"W., A DISTANCE OF 104.50 FEET TO THE POINT OF BEGINNING; THENCE RUN S.10°38'41"W., A DISTANCE OF 191.52 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 25.00 FEET, THENCE RUN SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 83°33'02" AN ARC DISTANCE OF 36.46 FEET TO THE POINT OF TANGENCY OF SAID CURVE; THENCE RUN N.85°48'17"W., A DISTANCE OF 186.42 FEET; THENCE RUN N.04°11'43"E., A DISTANCE OF 212.50 FEET; THENCE RUN S.85°48'17"E., A DISTANCE OF 232.77 FEET TO THE POINT OF BEGINNING.

INSTRUMENT # 2268212
5 PGS

EXHIBIT B

PERMITTED ENCUMBRANCES

1. Taxes for the year 2006 and subsequent years, which are not yet due and payable.
2. Those matters which a correct survey would disclose and which are not shown by the public records.

LEGAL DESCRIPTION

Parcel 03066-000-000

Owned by: First Street Group, L.C.

Legal Description per Warranty Deed as recorded in Official Records Book 2238, Page 1705 as recorded in the public records of Alachua County, Florida.

(Proposed Roadway is a portion of this parcel)

This Document Prepared By and Return to:
Darryl J. Tompkins, Esquire
Darryl J. Tompkins, P.A.
102 South Main Street
P.O. Box 519
Alachua, FL 32616

CIRCUIT COURT CLERK
J.K. "Buddy" Irby
ALACHUA COUNTY, FL
Date 06/21/1999 09:37
Document ID 1616794
Book/Page 2238/ 1705

DTAX 0.70

Parcel ID Number: 03066-002-000

Quitclaim Deed

This Quitclaim Deed, Made this 15th day of June, 1999 A.D., **Between** Terra International, Inc., a Delaware Corporation

of the County of Woodbury, State of Iowa, **grantor,** and First Street Group, L.C., a Florida Limited Liability Company

whose address is: 3728 North Main Street, Gainesville, FL 32609

of the County of Alachua, State of Florida, **grantee.**

Witnesseth that the GRANTOR, for and in consideration of the sum of ----------TEN DOLLARS ($10)---------- DOLLARS, and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained and quitclaimed to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of Alachua State of Florida to wit:

See Exhibit "A" attached hereto and made a part hereof.

This Quitclaim Deed is being recorded to convey any interest Grantor may have in property located South of the North right-of-way line of Old State Road No. 2.

To Have and to Hold the same together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of grantor, either in law or equity, for the use, benefit and profit of the said grantee forever.

In Witness Whereof, the grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Debra J Bliven
Printed Name: Debra J. Bliven
Witness

Sandy Heggestad
Printed Name: SANDY HEGGESTAD
Witness

Terra International, Inc., a Delaware Corporation

By: _____ (Seal)
Mark A. Kalafut
Its: Vice President
P.O. Address: 600 Fourth Street, P.O. Box 6000
Sioux City, Iowa 51102-6000

(Corporate Seal)

STATE OF Iowa
COUNTY OF Woodbury

The foregoing instrument was acknowledged before me this 15th day of June, 1999 by Mark A. Kalafut as Vice President of Terra International, Inc., a Delaware Corporation, on behalf of the corporation.

He is personally known to me or he has produced his driver's license as identification.

Debra J Bliven
Printed Name: Debra J Bliven
Notary Public
My Commission Expires: 11-15-99

FIRST/TERRA

EXHIBIT "A"

LEGAL DESCRIPTION

The Southwest 1/4 of the Southwest 1/4 of Section 10, Township 8 South, Range 18 East, Alachua County, Florida, LESS the West 792.16 feet thereof and LESS that portion thereof lying North of the South Right of Way line of State Road No. 20-25 a/k/a U.S. Highway 441.

LEGAL DESCRIPTION

Parcel 03869-000-000

Owned by: First Street Group, L.C.

Legal Description per Warranty Deed as recorded in Official Records Book 2256, Page 2504 as recorded in the public records of Alachua County, Florida.

(Proposed Roadway is a portion of this parcel)

RECORD AND RETURN TO:
DARRYL J. TOMPKINS, P.A.
P.O. BOX 519
ALACHUA, FL 32616

Prepared by and return to:
James L. Pendland, Jr., Esq.
Law Office
1025-5 N. Main Street
High Springs, FL 32643

Grantees tax identification number 59-3565657

Property folio number 3869-000-000; 3054-003-000; 3605-001-000

CIRCUIT COURT CLERK
J.K. "Buddy" Irby
ALACHUA COUNTY, FL
Date 10/04/1999 09:59
Document ID 1637871
Book/Page 2256/ 2504

DTAX 9,790.90

Warranty Deed

This Indenture, Made this September 30, 1999, between **JAMES H. SWICK AND HELEN HERNDON SWICK, AKA QUINELL SWICK, HUSBAND AND WIFE**, grantor*, whose post office address is P.O. BOX 159, ALACHUA, FL 32616, and **FIRST STREET GROUP, L. C., A FLORIDA LIMITED LIABILITY COMPANY**, grantee*, whose post office address is P. O. Box 1990, Alachua, FL 32616.

*"grantor" and "grantee" are used for singular or plural, as context requires

WITNESSETH: That said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold, to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Alachua County, Florida, wit:

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 10, 15 AND 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED IN THAT CERTAIN LEGAL DESCRIPTION ATTACHED HERETO AND INCORPORATED HEREIN AS "EXHIBIT A".

SUBJECT TO EASEMENTS, RESTRICTIONS, AND RESERVATIONS OF RECORD, IF ANY, AND TAXES FOR THE YEAR 1999 AND SUBSEQUENT YEARS.

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, grantor has hereunto set grantor's hand and seal the day and year first above written.

Witnesses:

(witness signature)
Print witness name JAMES L. PENDLAND, JR

(witness signature)
Print witness name DARRYL J TOMPKINS

James H. Swick
JAMES H. SWICK

Helen Herndon Swick
HELEN HERNDON SWICK, A/K/A QUINELL SWICK

STATE OF FLORIDA
COUNTY OF ALACHUA

THE FOREGOING DEED was acknowledged before me this 30the day of September, 1999, by James H. Swick and Helen Herndon Swick, a/k/a Quinell Swick, Husband and Wife, who are personally known to me.

Notary Public, State of Florida at Large.

NOTARY PUBLIC STATE OF FLORIDA
OFFICIAL NOTARY SEAL
DARRYL J TOMPKINS
COMMISSION NUMBER
CC720532
MY COMMISSION EXPIRES
MAR. 1,2002

F:\DOT\WORD6\RWD.DOT

EXHIBIT "A"

TRACT ONE (1):

A TRACT OF LAND SITUATED IN FRACTIONAL SECTIONS 9, 10, 15, AND 16, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF THE AFOREMENTIONED FRACTIONAL SECTION 9, TOWNSHIP 8 SOUTH, RANGE 18 EAST FOR THE POINT OF REFERENCE AND RUN S.00°27'55"W., A DISTANCE OF 3.76 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF THE ABANDONED SEABOARD COASTLINE RAILROAD (200 FOOT RIGHT OF WAY); THENCE RUN N.88°38'19"W., ALONG SAID SOUTHERLY RIGHT OF WAY LINE, A DISTANCE OF 790.26 FEET TO THE INTERSECTION OF SAID SOUTHERLY RIGHT OF WAY LINE WITH THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY) AND THE TRUE POINT OF BEGINNING; THENCE RUN N.04°11'43"E., ALONG SAID EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 49.86 FEET TO A STEEL ROD AND CAP; THENCE RUN S.88°37'54"E., A DISTANCE OF 50.00 FEET TO A STEEL ROD AND CAP; THENCE RUN N.04°11'43"E., A DISTANCE OF 50.00 FEET TO THE CENTERLINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD; THENCE RUN S.88°37'53"E., ALONG SAID CENTERLINE, A DISTANCE OF 380.37 FEET TO A STEEL ROD AND CAP AT THE SOUTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 1610, PAGE 2540 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "A"; THENCE RUN N.04°13'23"E., A DISTANCE OF 179.49 FEET TO A STEEL ROD AND CAP AND AT THE NORTHWEST CORNER OF SAID PARCEL "A"; THENCE RUN S.79°38'59"E., ALONG THE NORTH LINE OF SAID PARCEL "A", A DISTANCE OF 505.31 FEET TO A STEEL ROD AND CAP AT THE NORTHEAST CORNER OF SAID PARCEL "A"; THENCE RUN S.88°36'02"E., ALONG THE NORTH RIGHT OF WAY LINE OF THE AFOREMENTIONED ABANDONED SEABOARD COASTLINE RAILROAD, A DISTANCE OF 1198.31 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID NORTH RIGHT OF WAY LINE WITH THE NORTHERLY PROJECTION OF THE WEST LINE OF THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN DEED BOOK 335, PAGE 461 OF SAID PUBLIC RECORDS, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "B"; THENCE RUN S.02°26'50"E., ALONG SAID NORTHERLY PROJECTION AND ALONG SAID WEST LINE OF PARCEL "B", A DISTANCE OF 979.69 FEET TO A CONCRETE MONUMENT AT THE SOUTHWEST CORNER OF SAID PARCEL "B"; THENCE RUN S.71°39'27"E., A DISTANCE OF 1451.77 FEET TO A CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF SAID PARCEL "B"; THENCE RUN N.02°27'17"W., ALONG THE EAST LINE OF SAID PARCEL "B", A DISTANCE OF 1104.59 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID EAST LINE WITH THE SOUTH LINE OF THE ROADWAY AND DRAINAGE EASEMENT AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY PLANS FOR STATE ROAD NO. 25 (ALSO KNOWN AS U.S. HIGHWAY NO. 441); THENCE RUN SOUTHEASTERLY, ALONG SAID SOUTH LINE AND WITH A CURVE CONCAVE SOUTHERLY, SAID CURVE HAVING A RADIUS OF 2779.79 FEET, THROUGH AN ARC ANGLE OF 05°37'05", AN ARC DISTANCE OF 272.57 FEET (CHORD BEARING AND DISTANCE OF S.58°58'11"E., 272.45 FEET RESPECTIVELY) TO A CONCRETE MONUMENT AT THE END OF SAID CURVE; THENCE RUN S.56°10'48"E., ALONG SAID SOUTH LINE, A DISTANCE OF 603.01 FEET TO A CONCRETE MONUMENT; THENCE RUN N.31°52'55"E., ALONG SAID SOUTH LINE, A DISTANCE OF 17.01 FEET TO A CONCRETE MONUMENT; THENCE RUN S.56°10'47"E., ALONG SAID SOUTH LINE, A DISTANCE OF 1238.32 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTH LINE WITH THE WESTERLY RIGHT OF WAY LINE OF N.W. 142nd TERRACE (60 FOOT RIGHT OF WAY); THENCE RUN S.03°12'57"E., ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 485.42 FEET; THENCE RUN S.89°10'03"W., A DISTANCE OF 420.00 FEET; THENCE RUN N.03°12'57"W., A DISTANCE OF 236.49 FEET; THENCE RUN S.89°10'03"W., A DISTANCE OF 1089.39 FEET; THENCE RUN S.03°12'57"E., A DISTANCE OF 686.74 FEET TO A CONCRETE MONUMENT ON THE SOUTH BOUNDARY LINE OF THAT CERTAIN PARCEL OF

(Continued)

LAND AS DESCRIBED IN OFFICIAL RECORD BOOK 740, PAGE 393 ET SEQ. OF SAID PUBLIC RECORDS, SAID PARCEL OF LAND BEING HEREINAFTER REFERRED TO AS PARCEL "C"; THENCE RUN N.85°46'42"W., ALONG SAID SOUTH LINE OF PARCEL "C", A DISTANCE OF 378.25 FEET TO A CONCRETE MONUMENT; THENCE RUN N.72°58'39"W., ALONG SAID SOUTH LINE OF PARCEL "C", A DISTANCE OF 2077.83 FEET TO A CONCRETE MONUMENT; THENCE RUN S.17°11'13"W., ALONG SAID SOUTH LINE OF PARCEL "C", A DISTANCE OF 308.61 FEET TO A CONCRETE MONUMENT; THENCE RUN N.72°33'47"W., ALONG SAID SOUTH LINE OF PARCEL "C", A DISTANCE OF 1348.22 FEET; THENCE RUN S.68°05'01"W., ALONG SAID SOUTH LINE OF PARCEL "C", A DISTANCE OF 228.46 FEET TO A CONCRETE MONUMENT AT THE INTERSECTION OF SAID SOUTH LINE WITH THE AFOREMENTIONED EASTERLY RIGHT OF WAY OF INTERSTATE HIGHWAY NO. 75 (300 FOOT LIMITED ACCESS RIGHT OF WAY): THENCE RUN N.04°11'43"E., ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 151.31 FEET TO A STEEL ROD AND CAP; THENCE RUN S.85°48'17"E., A DISTANCE OF 50.00 FEET; THENCE RUN N.04°11'43"E., A DISTANCE OF 50.00 FEET; THENCE RUN N.85°48'17"W., A DISTANCE OF 50.00 FEET TO SAID EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY NO. 75; THENCE RUN N.04°11'43"E., A DISTANCE OF 1433.87 FEET TO THE TRUE POINT OF BEGINNING.

LESS AND EXCEPT THAT CERTAIN PARCEL OF LAND AS DESCRIBED IN THE SPECIAL WARRANTY DEED AS RECORDED IN OFFICIAL RECORD BOOK 241, PAGES 84 AND 85 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 168.396 ACRES MORE OR LESS. ALSO:

TRACT TWO (2):

A PARCEL OF LAND SITUATED IN FRACTIONAL SECTION 15, TOWNSHIP 8 SOUTH, RANGE 18 EAST, AND THE WILLIAM GARVIN GRANT, CITY OF ALACHUA, ALACHUA COUNTY, FLORIDA, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF BLOCK 16 OF DOWNINGS SUBDIVISION, RECORDED IN PLAT BOOK 'C', PAGE 79-A OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE SOUTH 87 DEGREES 12 MINUTES 59 SECONDS WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF NORTHWEST 150th AVENUE (A 40 FOOT RIGHT-OF-WAY), 763.55 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE RIGHT, CONCAVE NORTHEASTERLY WHOSE RADIAL POINT BEARS NORTH 02 DEGREES 47 MINUTES 10 SECONDS WEST, 25.00 FEET, SAID POINT OF CURVATURE BEING THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL;

THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 87 DEGREES 03 MINUTES 30 SECONDS, 37.99 FEET TO THE POINT OF TANGENCY OF SAID CURVE;

THENCE NORTH 05 DEGREES 43 MINUTES 31 SECONDS WEST, 10.00 FEET TO THE POINT OF CURVATURE OF A CURVE TO THE LEFT, CONCAVE SOUTHWESTERLY WHOSE RADIAL POINT BEARS SOUTH 84 DEGREES 16 MINUTES 29 SECONDS WEST, 230.00 FEET;

THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 45 DEGREES 18 MINUTES 33 SECONDS, 181.88 FEET;

THENCE NORTH 02 DEGREES 33 MINUTES 05 SECONDS WEST, 356.14 FEET;

THENCE NORTH 89 DEGREES 10 MINUTES 03 SECONDS EAST, 347.62 FEET TO A POINT ON A NON-TANGENT CURVE TO THE LEFT, CONCAVE NORTHEASTERLY WHOSE RADIAL POINT BEARS NORTH 29 DEGREES 47 MINUTES 55 SECONDS EAST, 430.00 FEET;

THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 30 DEGREES 37 MINUTES 52 SECONDS, 229.88 FEET TO THE POINT OF TANGENCY OF SAID CURVE;

THENCE NORTH 89 DEGREES 10 MINUTES 03 SECONDS EAST, 296.50 FEET TO THE WEST RIGHT-OF-WAY LINE OF NW 142nd TERRACE (A 60 FOOT RIGHT-OF-WAY);

THENCE NORTH 03 DEGREES 12 MINUTES 57 SECONDS WEST, ALONG SAID WEST RIGHT-OF-WAY LINE, 60.05 FEET;

THENCE SOUTH 89 DEGREES 10 MINUTES 03 SECONDS WEST, 420.00 FEET;

THENCE NORTH 03 DEGREES 12 MINUTES 57 SECONDS WEST, 236.49 FEET;

THENCE SOUTH 89 DEGREES 10 MINUTES 03 SECONDS WEST, 1089.39 FEET;

THENCE SOUTH 03 DEGREES 12 MINUTES 57 SECONDS EAST, 686.74 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN OFFICIAL RECORD BOOK 2000, PAGE 1304 OF SAID PUBLIC RECORDS;

THENCE SOUTH 85 DEGREES 45 MINUTES 52 SECONDS EAST, ALONG THE NORTH LINE OF SAID PARCEL OF LAND, 214.79 FEET TO THE NORTHWEST CORNER OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN OFFICIAL RECORD BOOK 1742, PAGE 1462 OF SAID PUBLIC RECORDS;

THENCE SOUTH 79 DEGREES 33 MINUTES 04 SECONDS EAST, ALONG THE NORTHERLY LINE OF SAID PARCEL OF LAND, 175.60 FEET TO THE NORTHEAST CORNER OF SAID PARCEL OF LAND;

THENCE SOUTH 15 DEGREES 30 MINUTES 23 SECONDS WEST, ALONG THE EASTERLY LINE OF SAID PARCEL OF LAND, 57.84 FEET TO THE INTERSECTION WITH THE SOUTH LINE OF BLOCK 14 OF SAID DOWNNING SUBDIVISION;

THENCE NORTH 87 DEGREES 14 MINUTES 17 SECONDS EAST, ALONG THE SOUTH LINE OF SAID BLOCK 14, 274.60 FEET TO THE POINT OF INTERSECTION OF THE WEST RIGHT-OF-WAY LINE OF NW 145th TERRACE (A 40 FOOT RIGHT-OF-WAY) AND THE NORTH RIGHT-OF-WAY-LINE OF SAID NW 150Th AVENUE;

THENCE NORTH 87 DEGREES 12 MINUTES 59 SECONDS EAST, ALONG SAID NORTH RIGHT-OF-WAY LINE, 104.92 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 14.262 ACRES, MORE OR LESS

NEIGHBORHOOD MEETING

A Neighborhood meeting will be held to discuss the Walmart Supercenter #3873_on 43.73 acres at Southeast Quadrant of US 441 & I-75, Alachua, FL.

Date: March 1, 2016

Time: 5:30 P.M. to 7:30 P.M.

Place: The Swick House, 15010 NW 142 Terrace, Alachua, FL 32615

Contact: Brian Cassidy 904-332-0999

Mr. Cassidy will be holding a meeting to discuss the Site Plan for the proposed Walmart Supercenter. This is not a public hearing. The purpose of the meeting is to inform neighboring property owners of the nature of the proposal and to seek their comments.

CYAN MAGENTA
Even Odd
YELLOW BLACK

Motivates youth to develop talents

GTM:

Continued from page A1

environment for them."

GTM, currently working with about 85 boys aged 5 to 14, was the brainchild of Savonte, older brother Andre and Crawford.

The Hunt brothers are from Archer and played high school football with Crawford at Buchholz. Savonte and Crawford are the same age, and both continued their playing careers at Concordia University in Chicago.

After graduating in 2012, they returned home with visions of what would become GTM already in mind.

"We really wanted to get a youth center in Archer and tried to get a team there, too, but that didn't happen," Savonte said. "But we play all our home games with GTM in Archer at Wilson Robinson Park and have a great relationship with the City."

Savonte, Andre and Crawford at first started coaching with the Northwest Boys and Girls Club in Gainesville, where they met Britt. Crawford said it was after their first season with the Club that they decided to take a chance with their own venture.

"A parent approached Savonte and Andre and asked them, 'Whatever happened to y'all starting your own thing with the kids?' She pretty much told us that she and her husband supported us, and from there we took action," he said.

GTM operated four teams this past season, one each at the 6-and-under, 8-and-under, 10-and-under, and 12-and-under age levels. Savonte said this coming season, which begins in July, will see the addition of a 14-and-under team.

> ***"On the football side of things, it better prepares the kids to move on as they get older"***
>
> ■ *Alden Crawford*

He said the meaning behind the name "Greater Than Me" comes from a desire to make other people better.

"The idea of 'pay it forward,' that's the perfect way to say it," he said. "You make the kids greater than yourself. It's a world changing idea. If you make a kid greater than you, then he makes someone greater than him, then obviously you're going to end up with a better world."

That motivation naturally lends itself to instilling a hard work ethic and drives the organization to seek out the toughest competition, Crawford said.

"On the football side of things, it better prepares the kids to move on as they get older," he said. "It teaches them to compete."

GTM participates in the United Youth Football League, but Savonte stated that the desire to play against the best has led to scheduling games with teams from the Boys and Girls Club and Pop Warner in the past.

"We end up playing about 15 games from July to December; it's a long season," he said. "But we work to get our kids on bigger stages, get noticed and win championships at the highest levels."

He was quick to note that volunteers are more than welcome.

"We have about 12 coaches, three per team, and it's still not enough," he said. "We'd love people to volunteer, even if it's just coming out one time to speak to the kids and let them know that there are people who care about them."

The banquet provided such an opportunity for current Gator defensive backs Jalen Tabor and Quincy Wilson, who spoke to the kids about the importance of family and school in order to compete at a top college football program.

GTM can be contacted by phone at 352-642-4121, email at gtmblackstallions@yahoo.com, and as "Gainesville GTM Black Stallions" on Facebook.

# # #

Email Dwiesener@alachuatoday.com

Special to *Alachua County Today*

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WIC opens health clinic in Alachua

By C.M. WALKER
Today Reporter

ALACHUA – The Florida Department of Health Supplemental Nutrition Program for Women, Infants and Children (WIC) in North Central Florida has recently opened new clinic locations.

"Last month we opened a clinic at the Alachua Elementary School in the city of Alachua," said Diana Duque, MPH, CHES, Alachua County Health Department. "We collaborated with the Alachua County School Board and opened a clinic on site in their Family Service Center Building located at 13800 Northwest 152 Place, Alachua. We are providing services on Tuesdays. Any current or prospective clients may call us at the local number at 352-225-4343 or our toll-free number at 1-800-494-2543."

Another new clinic in southwest Gainesville is located within the newly renovated Southwest Health Clinic at 816 SW 64th Terrace. Prospective and current clients may call to inquire about the program or schedule an appointment at the same two telephone numbers as above.

"The Alachua WIC Program provides nutrition screening, risk assessment, nutrition education and counseling, breastfeeding support and referrals to health care and other social services," stated Duque. "We encourage those pregnant and mothers of children less than five years old to contact the WIC program for eligibility assistance."

For more information, visit the Florida Department of Health in Alachua County website or contact Diana Duque by phone at 352-225-4355 or email at Diana.Duque@flhealth.gov.

# # #

Email Cwalker@alachuatoday.com

PUBLIC NOTICE

A Neighborhood meeting will be held to discuss the Walmart Supercenter #3873 on 43.73 acres at the Southeast Quadrant of US 441 & I-75. This is not a public hearing. The purpose of the meeting is to inform neighboring property owners of the nature of the proposal and to seek their comments.

The meeting will be held Tuesday March 1, 2016 at 5:30 pm at The Swick House, 15010 NW 142 Terrace, Alachua, FL 32615.

Contact Person: Brian Cassidy bcassidy@cphcorp.com 904-332-0999.

(Published: Alachua County Today - February 11, 2016)

CYAN MAGENTA
Even Odd
YELLOW BLACK

SIGN IN

FULL NAME	EMAIL ADDRESS	MAILING ADDRESS	CITY, STATE, ZIP
Jim Shaw	J.M.Shaw10@gmail.com	352 Endless View Rd ~~Mineral Bluff~~ GA 30	mineral Bluff GA 30559
PHIL HAWLEY	PHAWLEY@HAwley	300 SW 143RD JONESVILLE, FLA	JONESVILLE FLA 32669
Jeannette Hinsdale	jayahari108@yahoo.com	P.O. Box 1156	Alachua, FL 32616

Neighborhood Meeting Summary
Proposed Walmart Supercenter #3873-00
Meeting Date: March 1, 2016
Meeting Time: 5:30pm
Meeting Location: The Swick House

Please see attached Sign-In sheet for a list of citizens in attendance.

The Applicant's representatives at the meeting included:

Larry Wray, CPH, Inc.
Brian Cassidy, CPH, Inc.
Teresa Murphy, BRR Architects
Jimi Epley, Walmart
David Theriaque, Theriaque and Spain Law Firm

The neighborhood meeting was set-up as individual stations, each addressing a specific aspect of the proposed project. The stations included: General / Site and Architecture. The Applicants representatives were available at each station to answer citizen questions. This allowed one-on-one attention for each attendee and schedule flexibility for those arriving at different times.

Those in attendance at the neighborhood meeting expressed the following:

1.) Has the county been a part of the Site Plan process?
2.) How many square feet is the building?
3.) Is it going to look like store #1081?
4.) Has Walmart had any discussions about joint stormwater pond?
5.) Any special stormwater treatment being done?
6.) Why is it so big?
7.) Are you going to have more trees?
8.) Have you seen the Fiat manufacturing plant in Italy?
9.) How long before commission meeting will you submit the site plan?
10.) Who should I contact about record of the submittal?
11.) How big is Walmart site area?
12.) What kind of stormwater proposed?
13.) Why is building so close to the other supercenter?
14.) How far is the other supercenter?
15.) Are you going to have a grocery store?
16.) Have you done a market study?
17.) When will you submit?
18.) How many p and z, and city commission meetings?

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TOMOKA HILLS FARMS INC
1301 DIXIANA DOMINO RD
LEXINGTON, KY 40511
PARCELS 03873-000-000 & 03873-001-000

REBECCA H AND KENNETH J FICKETT
3001 NE 20TH WAY
GAINESVILLE, FL 32606
PARCEL 03054-001-000

MCDONALD'S CORP (009/0551)
16018 NW US HIGHWAY 441
ALACHUA, FL 32615
PARCELS 03059-001-000 & 03059-005-000

AMERICAN PETROLEUM INVESTMENTS
380 COMMERCE PARKWAY
ROCKLEDGE, FL 32955
PARCEL 03066-007-000

MOHAN-LERRA FAMILY PARTNERSHIP
16715 NW 129TH TERRACE
ALACHUA, FL 32615
PARCEL 03066-006-000

TEMPLE HILL INC
11149 CONISTON WAY
WINDERMERE, FL 34786-5410
PARCELS 03066-008-002 & 03066-008-000

JP & KP LLC
11149 CONISTON WAY
WINDERMERE, FL 34786
PARCELS 03054-000-000 & 03054-002-000

A S SHEILA PATEL
15920 NW US HIGHWAY 441
ALACHUA, FL 32615
PARCEL 03066-008-001

FIRST STREET GROUP L C
PO BOX 1990
ALACHUA, FL 32616-1990
PARCELS 03066-000-000 & 03869-000-000

CHRISTOPHER ALLAN KOROSIC
15710 NW US HIGHWAY 441
ALACHUA, FL 32615
PARCEL 03868-000-000

10.47 LLC
14110 NW 21ST LANE
GAINESVILLE, FL 32606
PARCEL 03868-002-000

CITY OF ALACHUA
PO BOX 9
ALACHUA, FL 32616
PARCEL 03868-002-001

TLC PROPERTIES INC
2065 NW 57TH STREET
OCALA, FL 34475
PARCEL 03869-001-000

JAMES E JR & RENEE HARKINS
PO BOX 6307
MARIANNA, FL 32447-6307
PARCEL 03869-002-000

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PO BOX 1990
ALACHUA, FL 32616
PARCEL 03863-000-000

ALACHUA BBQ LAND LLC
PO BOX 2495
OCALA, FL 34478
PARCEL 03066-004-002

R & J MCCAULEY LLC
15260 NW 147TH DRIVE
ALACHUA, FL 32615
PARCEL 03863-002-000

THOMAS STALBAUM
4526 SW 63RD BLVD
GAINESVILLE, FL 32608-3879
PARCEL 03066-001-000

PINE ACRES LLC
2632 NW 43RD ST #2138
GAINESVILLE, FL 32606
PARCEL 03066-004-001

NATIONAL SPELEOLOGICAL
SOCIETY INC
6001 TULASKI PIKE NW
HUNTSVILLE, AL 35810-1122
PARCEL 03066-002-001

LUTHER ACQUISITIONS LLC
2632 NW 43RD ST UNIT# 2138
GAINESVILLE, FL 32606
PARCEL 03066-002-000

MEGAHEE ENTERPRISES LTD.,LLLP
2632 NW 43RD ST # 2138
GAINESVILLE, FL 32606
PARCELS 03067-001-000, 03066-006-002, 03066-004-000

ANTOINETTE ENDELICATO
5562 NW 93RD AVENUE
GAINESVILLE, FL 32653

DAN RHINE
288 TURKEY CREEK
ALACHUA, FL 32615

TOM GORMAN
9210 NW 59TH STREET
ALACHUA, FL 32653

RICHARD GORMAN
5716 NW 93RD AVENUE
ALACHUA, FL 32653

PEGGY ARNOLD
410 TURKEY CREEK
ALACHUA, FL 32615

DAVID FOREST
23 TURKEY CREEK
ALACHUA, FL 32615

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JOHN TINGUE
333 TURKEY CREEK
ALACHUA, FL 32615

TCMOA
1000 TURKEY CREEK
ALACHUA, FL 32615

LINDA DIXON
AICP
PO BOX 115050
GAINESVILLE, FL 32611

CRAIG PARENTEAU
FDEP
4801 CAMP RANCH ROAD
GAINESVILLE, FL 32641

JEANNETTE HINSDALE
PO BOX 1156
ALACHUA, FL 32616

LYNN COULLIAS
7406 NW 126TH AVENUE
ALACHUA, FL 32615

LYNDA COON
7216 NW 126 AVENUE
ALACHUA, FL 32615

TAMARA ROBBINS
PO BOX 2317
ALACHUA, FL 32616

DR. LEE A. NIBLOCK, COUNTY MGR
ALACHUA COUNTY
12 SE 1ST STREET
GAINESVILLE, FL 32601

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Walmart #3873-00

COMPLIANCE with Standards for Gateway Overlay District

JUSTIFICATION / RESPONSES

Presented to:

City of Alachua
Planning & Community Development
P.O. Box 9
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Walmart #3873-00
COMPLIANCE with Standards for
Gateway Overlay District

As required by Section 3.7.2(C)(5) – Gateway Overlay District of the City of Alachua's Land Development Regulations ("LDRs"), an applicant must demonstrate that the following standards have been satisfied prior to approval of a zoning permit:

(A) **Building Design & Orientation**

(i) Architectural elevation plans, drawn to scale, shall be required for all projects involving exterior renovation or new construction.

RESPONSE: All architectural plans, elevations, and details for this project will be drawn to scale.

(ii) Except for roofs, metal shall not be used as a finish building material.

RESPONSE: Metal has not been used as a finish building material for anything except the roof on this project.

(iii) When two or more buildings are proposed on a single lot of record, the primary building shall be oriented to face the public right-of-way.

RESPONSE: There is only one building proposed for this single lot of record. Thus, this requirement is not applicable to this project.

(iv) All accessory structures shall be of comparable design and building materials to the principal structure.

RESPONSE: The pick-up canopy will be of similar design and building materials to the principal structure.

(v) Glazing shall constitute a minimum of 35 percent of the ground floor area when a building faces and is substantially visible from U.S. 441 or I-75.

RESPONSE: This project does not front U.S. 441 and is only visible on the west side of the property adjacent to I-75. Based on Section 6.8.3(A)(2)(a)(iv) of the City's LDRs, glazing may be reduced to a minimum of 20% when the façade incorporates certain architectural elements. Such elements include the use of natural brick product or stone for at least 20% of the façade, window shutters, and customer entrances which include no less than six (6) design features as provided in Section 6.8.3(C)(2) of the City's LDRs. The customer entrances on the Front Building Elevation and East Building Elevation comply with the requirement of six (6) design

features per Section 6.8.3(C)(2) of the City's LDRs. The six (6) design features incorporated into the customer entrances are as follows:

- **(a) Canopies above the entrance**
- **(b) Roof overhangs above the entrance**
- **(c) Entry Recesses**
- **(e) Raised Cornice Parapets**
- **(i) Architectural details/tile work**
- **(j) Integral planters**

(vi) Exterior building walls facing a public right-of-way shall incorporate no fewer than three architectural elements comparable to those listed below. Architectural elements contributing to this requirement shall have sufficient visual impact to be noticeable from the public right-of-way, and may include, but not be limited to:

a. Accent materials.

RESPONSE: A tile accent material will be used at the customer entrances on the North and East Building Elevations to help define those spaces.

b. Public art

RESPONSE: Public art is not proposed for this project.

c. Architectural details, such as tile work and molding integrate into the building facade.

RESPONSE: Architectural details (tile work) is included as called for by Section 6.8.3(C) of the City's LDRs on both the North and East Building Elevations.

d. Recesses and/or projections.

RESPONSE: The building design incorporates recesses and projections across the entire façade which help to bring focus to the customer entrance areas. Pilasters are provided on the East Building Elevation giving some variation to the building façade.

e. Roof overhang, which shall vary according to building width, as follows: one-foot overhang for buildings less than 50 feet in width, two-foot overhang for buildings 50 to 100 feet in width, and three-foot overhang for buildings greater than 100 feet in width.

RESPONSE: The roof overhangs at all three (3) customer entrances are three (3) feet in width.

f. Varied roof lines.

RESPONSE: The raised parapets around the entire length of the building façade incorporate varied roof lines. The raised parapets on the east façade change height four (4) times.

g. Articulated cornice lines.

RESPONSE: Articulated cornices, which are at least eight (8) inches in depth, are located on all raised parapets around the entire length of the building façade, including the east side of the building.

h. Canopies, awnings, and/or porticos.

RESPONSE: Canopies are used at the main building entrances located on the Front and East Elevations of this project. There is also one (1) canopy on the east side of the building.

i. Use of brick in at least 30 percent of the facade.

RESPONSE: As part of the glazing alternative requirement, at least 20% of the façade will use a natural brick product, including the east side of the building.

j. Window shutters.

RESPONSE: A plantation-style shutter is used at all windows located on the Front Elevation of this project. Window shutters are provided on 10% of the overall length of the east façade.

k. Change in building materials.

RESPONSE: The building is designed with three (3) major materials for the façade: "Promenade Blend" Quik Brick, integrally colored split face masonry and EIFS (man-made stucco) including the East Building Elevation.

l. Prominent public entrances defined by substantive architectural features.

RESPONSE: Public entrances on the Front and East Elevations are defined by substantive architectural features as called for by Section 6.8.3(C) of the City's LDRs. The customer entrances on the Front Elevation and East Elevation comply with the requirement of six (6) design features per Section 6.8.3(C)(2) of the City's LDRs. The six (6) design features incorporated into the customer entrances are as follows:

- **(a) Canopies above the entrance**
- **(b) Roof overhangs above the entrance**
- **(c) Entry Recesses**
- **(e) Raised Cornice Parapets**
- **(i) Architectural details/tile work**
- **(j) Integral planters**

m. Fountain or other water feature.

RESPONSE: A fountain/water feature is not proposed for this project.

(B) **<u>Fencing</u>**

(i) With the exception of ornamental fencing, fences erected after the effective date of these regulations for property with frontage along U.S. 441 shall be installed in the side or rear yard only. Ornamental fencing may be erected inside the front yard.

RESPONSE: The property does not have frontage along U.S. 441. Therefore, this requirement is not applicable to this project.

(C) **<u>Outside Storage Areas</u>**

(i) All accessory outdoor storage areas shall be screened in accordance with Section 4.4.4(E). Such screening requirements shall apply to the parking of all vehicles used for commercial purposes.

RESPONSE: Pursuant to Section 4.4.4(E)(4) of the City's LDRs, a landscaped earth berm is being proposed to address screening requirements for the west and south sides of the building. See Landscape Plans, Site Grading Plan, and Cross Sections Sheets contained within the Construction Plans. Due to the proposed finished topography, a landscaped earth berm will provide additional screening along the west and south sides of the property.

(ii) Areas for outdoor storage, trash collection, and loading shall be incorporated into the primary building design. Construction materials for such areas shall be of comparable quality and appearance as the primary building.

RESPONSE: The outdoor storage, trash collection, and loading dock areas are incorporated into the building design and use the same construction materials as those of the primary building.

(D) **Street Buffer**

(i) Buffering for properties with frontage along I-75 and U.S. 441 shall meet the requirements of Section 6.2.3(E).

RESPONSE: The project does not have frontage along U.S. 441. The west side of the property is adjacent to I-75. The Landscape Plans propose a series of canopy and understory trees, shrubs, and ground cover along the west buffer. Additionally, due to the existing and proposed topography, a berm along the west side of the property will be created, thereby providing additional screening.

(ii) The minimum landscaped buffer width shall be 15 feet. No existing, dedicated, or reserved public or private right-of-way shall be included in the calculation of the buffer width.

RESPONSE: The proposed landscape buffer exceeds this requirement. See proposed Landscape Plans.

(iii) The planting requirements contained in Appendix 6.2.2(A) shall apply. Live Oak shall be used as the required canopy tree. Applicants shall use the following plant materials, in order to create a consistent and uniform planting program for the Gateway Overlay District:

a. American Holly.
b. Crape Myrtle.
c. Drake Elm.
d. Ligustrum.
e. Red Maple.
f. Southern Magnolia.
g. Southern Red Cedar.
h. Oak.
i. Bradford Pear.

RESPONSE: The proposed landscaping complies with this requirement. See proposed Landscape Plans.

(E) **Parking Areas**

(i) All parking areas shall be designed to avoid the appearance of a large expanse of pavement, and shall be conducive to safe pedestrian access and circulation.

RESPONSE: The proposed Site Plans provide safe pedestrian access through the use of ten (10) foot wide crosswalks, sidewalks every fourth row of parking, sidewalks on both sides of the access road, and appropriate signage and pavement markings to direct pedestrians. Large expanse of pavement is avoided. The site is designed to allow for safe and efficient operations of the delivery trucks, pedestrians, vehicles using pharmacy drive thru, etc.

(ii) No more than 25 percent of required parking shall be located in the front of the principal structure, for properties with frontage along U.S. 441. The percentage may be adjusted by the LDR Administrator if the applicant provides written information demonstrating that the property's characteristics, such as size and/or site topography, prevent the applicant from meeting this requirement. Under no circumstances shall be percentage of required parking located in front of the principal structure exceed 50 percent, and shall be the minimum necessary.

RESPONSE: Although the property does not have frontage along U.S. 441, less than 25 percent of the required parking is located in front of the principal structure. See proposed Site Plans.

(iii) Parking spaces shall not be located within a public right-of-way.

RESPONSE: No parking is proposed to be located within a public right-of-way.

(F) **Loading Areas**

(i) Loading areas shall not face a public right-of-way and shall be located at the rear of the principal structure when feasible.

RESPONSE: Loading areas are proposed at the rear of the building and do not face a public right-of-way. See proposed Site Plans and Building Elevations.

(G) **Access**

(i) Any parcel or assembly of parcels having frontage along U.S. 441 shall be permitted only one direct access. New development shall be designed for cross access to adjacent parcels.

RESPONSE: The property does not have frontage along U.S. 441. The proposed service roads are designed to provide access to adjacent parcels.

(H) **<u>Signage</u>**

(i) Prohibited Signs

a. Billboards.
b. Signs that display video or images or changeable copy.
c. Balloons, streamers, and air- or gas-filled figures.
d. Promotional beacons, searchlights, and/or laser lights/images.
e. Signs that emit audible sounds, smoke, vapor, particles, or odor.
f. Signs on utility poles or trees.
g. Signs or advertising devices attached to any vehicle or trailer so as to be visible from public right-of-way, including vehicles with for sale signs and excluding vehicles used for daily transportation, deliveries, or parked while business is being conducted on-site.
h. Neon tubing used to line the windows, highlight architectural features on the building, or used as part of a sign, excluding incidental signs as provided for in Section 2.4.11.

RESPONSE: This project does not incorporate any of the prohibited signs listed above.

(ii) Freestanding Signs

Monument signs shall be permitted within the Gateway Overlay District.

a. A monument sign, including its structure, shall not exceed 16 feet in height.
b. A sign and its structure shall be composed of materials identical to or similar in appearance, color, and texture to the materials used for the building to which the sign is accessory.
c. A sign and its structure shall not exceed 100 square feet per side. Changeable copy signs shall only be allowed to comprise up to 50 percent of the total sign area.
d. Properties with buildings containing multiple tenants or shopping centers shall be limited to one freestanding sign for any one premises, except that a parcel with more than 400 feet of frontage on one or more roads may have two freestanding signs, which must be separated from each other by at least 150 feet of road frontage. A sign and its structure shall not exceed 150 square feet per side. Changeable copy signs shall only be allowed to comprise up to 30 percent of the total sign area.

RESPONSE: Acknowledged. The proposed monument sign will comply with these requirements.

(iii) Window Signs

a. Window signs shall be incorporated into the overall sign area allowed for wall signage as per Section 6.5.4(C)(2).

b. Signage on any individual window shall not comprise more than 25 percent of the window area.

RESPONSE: Window signs will not be incorporated in the design of this project and will not be included as part of the overall sign area allowed for wall signage.

(iv) Landscaping and buffering

a. All freestanding signs shall provide a landscaped area around base of the sign meeting the following standards:

   i. Installation of a three-foot landscaped buffer around the base of the sign.

   ii. Such buffer must be landscaped with a mixture of shrubs, flowers, and/or other plantings native to the area.

   iii. Xeriscaping shall be utilized to the fullest extent possible to promote sustainable landscaping.

   iv. Provisions shall be made for irrigation if xeriscaping is not utilized.

RESPONSE: The base of the monument sign is proposed to have a three (3) foot buffer landscaped with native plantings. Irrigation will be provided as reflected on the proposed Irrigation Plans. See proposed Landscape Plans.

(v) Nonconforming signs

a. Nonconforming signs shall be subject to the nonconforming standards as established in Article 8.

RESPONSE: There are not any non-conforming signs proposed for this project.

WALMART SUPERCENTER – CITY OF ALACHUA

MARCH 30, 2016

COMPLIANCE WITH THE CITY'S COMPREHENSIVE PLAN

This Memorandum addresses the proposed Walmart Supercenter's compliance with the requirements of the City's Comprehensive Plan. The applicable Goal, Objective, or Policy is set forth, followed by an explanation in italics regarding how the proposed Walmart Supercenter complies with such Goal, Objective, or Policy.

Future Land Use Element

Policy 1.3.d: Design and performance standards: The following criteria shall apply when evaluating commercial development proposals:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;

   The site plan has been designed to appropriately integrate vehicular and non-vehicular access into the site.

2. Buffering from adjacent existing/potential uses;

   The site plan demonstrates adequate buffering from adjacent existing and potential uses.

3. Open space provisions and balance of proportion between gross floor area and site size;

   The site plan provides for substantial open space and demonstrates a balance of proportion between gross floor area and site size.

4. Adequacy of pervious surface area in terms of drainage requirements;

   The site plan contains adequate pervious surface area in terms of drainage requirements.

5. Placement of signage;

The placement of signage complies with the City's requirements for signs and is appropriate for the proposed use.

6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area. Lighting should be designed to minimize impacts and preserve the ambiance and quality of the nighttime sky by reducing light trespass and light pollution on adjacent properties by utilizing lighting at an appropriate intensity, direction and times to ensure light is not overrused or impacting areas where it is not intended;

The proposed lighting is adequate for use of the site as a Walmart Supercenter and such lighting will not intrude upon the surrounding area.

7. Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;

The on-site circulation patterns are designed to ensure the safety of patron, employee, and delivery vehicles.

8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;

The proposed landscaping meets or exceeds the requirements of the Comprehensive Plan and the Land Development Regulations.

9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and

There are no unique features or resources which constrain site development.

10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.

This provision is inapplicable to the proposed site plan.

11. Commercial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.

The site plan complies with this intensity requirement.

Policy 1.3.e: The creation/promotion of strip pattern commercial development shall be discouraged. Infill within established strip commercial areas is preferred over extension of a strip commercial pattern. Extension of a commercial land use designation may be considered in circumstances where the proposed commercial parcel is located within a block in which at least fifty percent (50%) of the block face (in linear feet) is either currently developed with commercial land uses or is designated for commercial use. In either case, the proposed commercial land use extension shall not encroach into a residential area. . . .

> *The proposed Walmart Supercenter does not constitute the creation or promotion of strip pattern commercial development. Moreover, the proposed Walmart Supercenter does not constitute an extension of a commercial land use designation. Rather, the proposed Walmart Supercenter is consistent with the CI Zoning that the City approved for the site in 2015.*

Policy 2.4.a: Landscaping: General – The City shall require landscaping plans to be submitted with each nonresidential and multiple family residential site plan. The minimum landscaped area shall be 30% of the development site. Landscaping designs shall incorporate principles of xeriscaping, where feasible. The City shall develop a list of preferred planting materials to assist in the landscape design. Landscape plans shall include perimeter and internal site landscaping.

> *A landscaping plan has been submitted. The landscaping plan demonstrates that a minimum of 30% of the development site is landscaped, that the landscaping incorporates principles of xeriscaping, and that a mixture of perimeter and internal landscaping has been achieved.*

Policy 2.5.a: There shall be a minimum of 10% percent open space required. The City shall establish incentives for the provision of open space beyond minimum requirements.

> *The site plan exceeds the 10% open space requirement.*

Policy 2.5.b: Open space shall not be limited to unusable portions of project sites. A portion of open space shall be usable and functional.

> *The site plan contains open space that is usable and functional.*

Policy 5.1.a: Topography: The City shall protect the natural topography of the City, including steep and seepage slopes, by requiring new development to include techniques to minimize negative impacts on the natural terrain. An emphasis will be placed on retaining the natural function of seepage slopes during development. Additionally, retention of existing native vegetation will be encouraged as one method of protecting slopes.

The site has been designed to incorporate techniques to minimize negative impacts on the natural terrain.

Policy 5.1.c: Flood prone areas: The City shall require as part of the development review process the identification of FEMA flood zone areas. Where necessary, base blood evelations and minimum finished floor elevations shall be established. The City shall also require finished floor elevations on subdivision plats, site plans and building permit plans when necessary to determine compliance with flood prone area regulations. The City shall establish standards for a limitation on filling in flood prone areas.

The site does not contain any FEMA flood zone areas.

Policy 5.1.e: Habitat: The City shall require as part of the development review process, an inventory of listed species for all new developments in areas identified as known habitat for listed species if listed species are known to exist in close proximity to the development. The survey shall include detailed information regarding type, quantity, location and habitat requirements for any listed species identified. A de minimus threshold for properties required to complete the inventory shall be established in the City's Land Development Regulations.

The site does not contain known habitat for listed species.

Objective 5.2: Availability of facilities and services: The City shall utilize a concurrency management system to ensure that the adopted level of service standards are maintained.

The proposed Walmart Supercenter will be constructed concurrently with the availability of facilities and services necessary for the Supercenter.

Policy 5.2.1: All new development shall meet level of service requirements for roadways, potable water and sanitary sewer, stormwater, solid waste, and improved recreation in accordance with LOS standards adopted in the elements addressing these facilities.

The proposed Walmart Supercenter meets all of the level of service requirements for roadways, potable water and sanitary sewer, stormwater, solid waste, and improved recreation in accordance with LOS standards adopted in the elements addressing these facilities.

Policy 7.2.a: A 500' radius area, known as the primary protection zone, shall be maintained around each city-owned potable water well. The primary protection zone is a conditional development zone. Low impact development that limits density and conditions uses so that the community wellheads are protected from contamination shall be permitted. In no instance shall development be permitted that conflicts with Chapter 62-521 - Wellhead Protection of the Florida Administrative Code (FAC).

The site is not located within 500 feet of a city-owned potable water well.

Policy 7.2.b: A secondary zone shall be maintained around each city-owned potable water well primary protection zone. This secondary zone is expanded from the primary zone at a 10-degree angle on both sides of its base to allow for variations in the angle of ground water flow and extending in an upflow direction. The secondary zone shall be managed as a low-density development zone.

The site is not located within the secondary zone.

Policy 9.1: Any new development within a Commercial or Industrial Future Land Use Map Designation within the corporate limits, where potable water and wastewater service are available, as defined in Policy 1.2.a and Policy 4.2.a of the Community Facilities and Natural Groundwater Aquifer Recharge Element of the City of Alachua Comprehensive Plan, shall connect to the City of Alachua's potable water and wastewater system.

The proposed Walmart Supercenter will be connected to the City's potable water and wastewater system.

<u>Transportation Element</u>

Objective 1.3: Parking
The City shall require innovative parking lot design for multiple-family and nonresidential developments, including the provision of bicycle parking, pedestrian-friendly design, and landscaping.

The parking lot design includes bicycle parking, is pedestrian friendly, and contains extensive landscaping.

Policy 1.3.d: The City shall require landscaping within parking areas, with an emphasis on canopy trees. The City shall consider establishing incentives for landscaping in excess of minimum standards.

The parking areas contain landscaping which includes canopy trees.

Policy 1.3.g: The City shall require spaces to accommodate persons with physical disabilities as required by the Americans with Disabilities Act.

The site plan complies with the requirements of the Americans with Disabilities Act.

Policy 1.4.c: The City shall require pedestrian paths within subdivisions and within new developments to be connected to paths outside the development.

The site plan contains sidewalks which connect with sidewalks located off-site.

Policy 1.5.c: To the extent feasible, the City shall require new developments which are compatible with adjacent existing development to interconnect with one another through one of the following methods:

1. Through the extension of a public street from one project to another;

2. Through the extension of a sidewalk from one project to another;

3. Through the extension of a multi-purpose trail from one project to another.

The proposed Walmart Supercenter will provide interconnectivity with a public street through the use of on-site streets and sidewalks.

<u>Community Facilities and Natural Groundwater Aquifer Recharge Element</u>

Policy 3.3.a: Stormwater facility design shall incorporate the following features, where practicable:

1. Joint use of retention and detention basins for passive recreation, habitat and open space.

   The joint use of retention and detention basins for passive recreation is not practicable for the site due to liability concerns.

2. Use of vegetation, such as cypress and river birch, in retention and detention basin to enhance stormwater management objectives.

   The landscaping plan contains vegetation such as cypress trees in the retention basin.

3. On-site retention and detention facilities shall be integrated with other elements of the proposed development through aesthetically sensitive design and the use of landscaping.

   The existing trees located to the north of the detention basin will be maintained, and a pedestrian trail will be provided in close proximity to the detention basin. Thus, the on-site retention and detention facilities are integrated with other elements of the proposed development through aesthetically sensitive design and the use of landscaping.

4. Maintain and enhance the existing hydrological and ecological function of stream or drainage corridors or wetland areas which serve stormwater facilities.

   There are no existing streams or wetlands on the site.

5. Where retention and detention basins are located along County roads or State roads, the basin design shall comply with the Gainesville Urbanized Area Metropolitan Transportation Planning Organization's drainage retention basin landscaping standards.

   The retention and detention basins for the site are not located along a County or State road.

Policy 3.4.a: The City shall require development practices that minimize land disturbance, the clearing of vegetation and the removal of topsoil. These practices shall be based on established construction best management practices, such as the use of silt fences and sediment basins to retain sediment onsite.

Development of the site will utilize best management practices that minimize land disturbance, the clearing of vegetation, and the removal of topsoil.

Policy 4.2.a: New urban development will only occur within areas where potable water services are available concurrent with development. . . .

Potable water services will be available concurrent with the development of the site.

Policy 4.2.b: The City will continue to require necessary on-site water system improvements to be completed at the expense of the property owner.

Walmart will be responsible for the cost of completing the necessary on-site water system improvements for the proposed Walmart Supercenter.

Policy 5.1.c: The City shall coordinate with the Suwannee River Water Management District to protect the functions of natural groundwater recharge areas and natural drainage features, by requiring that all development proposals, which have the potential for impacting the water resources of the City, be reviewed by the SRWMD, in accordance with Chapter 373, Florida Statutes and Rules 40B-4 and 40B-400, Florida Administrative Code, or subsequent provisions.

Walmart has applied for a SRWMD ERP permit.

Policy 5.2.b: The City shall require demonstration from engineering results that post-development recharge volumes will equal predevelopment recharge volumes to the Floridan aquifer.

Walmart has demonstrated that post-development recharge volumes will equal predevelopment recharge volumes to the Floridan aquifer.

Policy 5.2.c: Applicants for new development, expansions, or redevelopment shall employ one or more of the following techniques to address potential groundwater quality and quantity impacts:

1. Construction and maintenance of shallow, landscaped retention basins

   The site was designed in accordance with the St. Johns River Water Management District's criteria for karst sensitive areas. Such criteria require the construction and maintenance of shallow, landscaped retention basins.

2. Decreasing the amount of stormwater runoff through the use of pervious surfaces or increased open space

   The site plan contains significantly more open space than required by the City's regulations, and incorporates the use of pervious pavement.

3. Development of a stormwater pollution prevention plan

   Walmart will develop a stormwater pollution prevention plan.

4. Development of a sinkhole remediation plan

   Walmart has developed a sinkhole remediation plan, which was reviewed and approved by the Suwannee River Water Management District. As stated above, the site was designed in accordance with the St. Johns River Water Management District's criteria for karst sensitive areas.

5. Development of a groundwater monitoring plan

   In light of the fact that Walmart has elected to utilize four of the five above-referenced options, development of a groundwater monitoring plan is not applicable.

Policy 5.2.d: Best management practices and performance standards shall be utilized to maximize open space, limit impervious surfaces, to minimize the use of fertilizers on turf grass areas, promote protection of natural vegetation, promote the use of pervious parking areas, and treat stormwater to protect water quality.

Walmart will utilize best management practices and performance standards to maximize open space, limit impervious surfaces, to minimize the use of fertilizers on turf grass areas, promote protection of natural vegetation, promote the use of pervious parking areas, and treat stormwater to protect water quality.

<u>Conservation and Open Space Element</u>

Policy 1.2.i: The City shall, as a condition of development, prohibit the planting of Pest Plant Species, and require perpetual maintenance of preserved and landscaped areas to eradicate invasive exotics.

The landscaping plan does not plant any Pest Plant Species, and the preserved and landscaped areas will be maintained to eradicate invasive exotics.

Policy 1.2.j: The City shall require all new development to be oriented in a fashion that reduces habitat fragmentation and preserves the largest possible contiguous area of undisturbed habitat, to the extent practicable.

The proposed Walmart Supercenter is oriented in a fashion that reduces habitat fragmentation and preserves the largest possible contiguous area of undisturbed habitat, to the extent practicable.

Policy 1.3.b: The City shall utilize the development review process, land acquisition programs, environmental regulatory partnerships, stewardship programs and public education to protect listed species and their habitat, and prevent extinction of or reduction in populations of listed species.

The site does not contain any listed species or their habitat.

Policy 1.3.d: The City shall require prior to development approval, an inventory of listed species for all new developments in areas identified as known habitat for listed species. The inventory shall include detailed information regarding type, quantity, location and habitat requirements for any listed species identified. De minimus threshold for properties required to complete the inventory shall be established in the City's Land Development Regulations.

The site does not contain any known habitat for listed species.

Policy 1.5.c: The City shall protect the natural topography of the City, including steep and seepage slopes, by requiring new development to include techniques to minimize negative impacts on the natural terrain. An emphasis will be placed on retaining the natural function of seepage slopes during development. Additionally, retention of existing native vegetation will be encouraged as one method of protecting slopes.

The site does not contain any steep or seepage slopes.

Policy 1.10.b: The City shall conserve wetlands by prohibiting, where the alternative of clustering all structures in the non-wetland portion of the site exists, any development or dredging and filling which would alter their natural functions. If no other alternative for development exists, the City shall allow only minimal residential development activity in those areas designated as wetlands within this Comprehensive Plan and that such development activity comply with the following densities and performance standards. . . .

The site does not contain any wetlands.

Policy 1.10.c: The City shall review wetland mitigation and monitoring proposals to allow limited development activity in wetlands and wetland buffers. Applicants must provide documentation which indicates that the following steps have been taken: the applicant has attempted every reasonable measure to avoid adverse impacts; the applicant has taken every reasonable measure to minimize unavoidable adverse impacts; the applicant has provided adequate mitigation to compensate for wetland impacts. The property owner shall incur any and all expenses associated with wetland mitigation.

The site does not contain any wetlands.

Policy 1.10.d: The City shall provide all wetland mitigation and monitoring proposals for review by the County, Suwannee River Water Management District and any other applicable agencies.

The site does not contain any wetlands.

Policy 1.10.g: The City shall require natural vegetative buffers around wetlands to protect the fragile ecosystems they sustain. Buffers, measured from the outer edge of the wetland, shall be created as established in the following table. . . .

The site does not contain any wetlands.

Policy 1.10.h: As an alternative to Policy 1.10.g, where scientific data is available, specific buffering requirements may vary according to the nature of the individual wetland and the proposed land use, but in no case will the buffer be less than 35 feet. Buffering requirements will be based on the best available science regarding impacted ecosystems, listed species, wetland function, and hydrologic considerations.

The site does not contain any wetlands.

Policy 1.12.d: The City shall require the following buffers for development along surface water bodies. Buffers shall be measured from the outer edge of the water body, and created as established in the following table. . . .

The site does not contain any surface water bodies.

Policy 1.12.f: The City shall work with FEMA, SRWMD, DEP and the County to regulate development within special flood hazard areas susceptible to the one percent (1%) annual chance flood established by FEMA. The City will require development activity to occupy only the non-floodplain portion of a site when feasible; allow dredging and filling within floodplains only if it preserves the natural function of the floodplain and adequately provides for stormwater management; require the minimum floor elevation of any structure to be at least one foot above the established base flood elevation; and will prohibit the storage of hazardous materials or waste within the floodplain, and development activity that threatens to raise the base flood elevation.

The site is not located within the 100-year flood hazard zone established by FEMA.

Policy 1.12.r: The City shall protect groundwater resources by establishing maximum impervious surface requirements for new development and by providing incentives to developers for utilizing environmentally beneficial techniques and materials, such as pervious materials for parking lots, water reclamation practices, and high filtration landscape design. The incentives should be based on best management practices for water resources protection recommended by the FDEP, Florida Department of Agriculture and Consumer Services, and Florida Department of Economic Opportunity.

The site was designed in accordance with the St. Johns River Water Management District's criteria for karst sensitive areas. Such criteria require the construction and maintenance of shallow, landscaped retention basins. Additionally, the site plan contains significantly more open space than required by the City's regulations, and incorporates the use of pervious pavement.

Capital Improvements Element

Objective 1.2: The City shall require that all decisions regarding the issuance of development orders and permits shall be consistent with the development requirements of the Plan, the Land Development Regulations, and availability of public facilities and services necessary to support such development while maintaining the adopted level of service standards adopted for public facilities.

> *The proposed Walmart Supercenter is consistent with the development requirements of the Plan, the Land Development Regulations, and availability of public facilities and services necessary to support the Supercenter while maintaining the adopted level of service standards adopted for public facilities.*

Policy.1.3.2: The City shall not issue development orders and permits in areas where the adopted level of service standards for public facilities are not met.

> *The proposed Walmart Supercenter will maintain the adopted level of service standards for the provision of public facilities found within the Comprehensive Plan.*

Form 62-330.060(1)

JOINT APPLICATION FOR INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT/ AUTHORIZATION TO USE STATE-OWNED SUBMERGED LANDS/ FEDERAL DREDGE AND FILL PERMIT

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION/
WATER MANAGEMENT DISTRICTS/
U.S. ARMY CORPS OF ENGINEERS

Effective October 1, 2013

US Army Corps of Engineers®

INSTRUCTIONS FOR USE OF THIS FORM:

This form is designed to assist you in submitting a complete application. All applications must include Section A- General Information for All Activities. Sections B through H list typical information that is needed based on the proposed activities, and are only required as applicable. Part 1-C of Section A will guide you to the correct sections needed based on your proposed activities. Applicants are advised to consult Chapter 62-330, F.A.C., and the Environmental Resource Permit Applicant's Handbook Volumes I and II for information regarding the ERP permitting process and requirements while preparing their application. Internet addresses for Chapter 62-330, F.A.C. and the Applicant's Handbook, Agency contact information, and additional instructions for this form can be found in Attachment 1.

What Sections of the Application Must I Fill Out?

Does the project involve....	Section							
	A- General Information	B- Single Family Projects	C- Wetlands and other Surface Waters	D- Structures or Works in Surface Waters	E- Stormwater Management System	F- State-owned Submerged Lands	G- Mitigation Banks	H- Mines
Fill in wetlands or waters for a single family residence?	X	X						
Docks, shoreline stabilization, seawalls associated with a single family residence?	X	X				X, if applicable		
Wetland impacts (other than associated with an individual residence)?	X		X					
Boating facilities, a marina, jetty, reef, or dredging?	X		X	X		X if applicable		
Any work on state owned submerged land?	X		X			X		
Construction of a stormwater management system?	X		X, if applicable		X			
Constructing a mitigation bank?	X		X		X, if applicable		X	
Creating a mine?	X		X, if applicable					X

Note- if you are required to provide Section B, then you do not have to provide any other Sections, unless the activities are on state-owned submerged lands. In that case, Section F will also be required.

If you have any questions, or would like assistance completing this form, please contact the staff of the nearest office of either the Florida Department of Environmental Protection (DEP) or a Water Management District (WMD) (see Attachment 2).

Section A: General Information for All Activities

PART 1: NAME, APPLICATION TYPE, LOCATION, AND DESCRIPTION OF ACTIVITY

A. Name of project, including phase if applicable: **Wal-Mart Supercenter #3873-00, Alachua, FL**

B. This is for (check all that apply):

☒ Construction or operation of ***new*** works, activities and/ or a stormwater management system

☐ ***Conceptual Approval*** of proposed works, activities and/ or a stormwater management system

☐ Modification or Alteration of ***existing*** works activities and / or a stormwater management system. Provide the existing DEP or WMD permit #, if known: _____ Note: Minor modifications do not require completion of this form, and may instead be requested by letter.

☐ ***Maintenance or repair*** of works, activities and/ or stormwater management system previously permitted by the DEP or WMD Provide existing permit #, if known: _____

☐ Abandonment or removal of works, activities and/ or stormwater management system Provide existing DEP or WMD permit #, if known: _____

☐ Operation of an ***existing unpermitted*** stormwater management system.

☐ Construction of additional phases of a permitted work, activity and/ or stormwater management system.

Provide the existing DEP or WMD permit #, if known: _____

C. ***List the type of activities proposed. Check all that apply, and provide the supplemental information requested in each of the referenced application sections.*** *Please also reference Applicant's Handbooks I and II for the type of information that may be needed.*

☐ Activities associated with one single-family residence, duplex, triplex, or quadruplex that do not qualify for an exemption or a General Permit: ***Provide the information requested in Section B. Do not complete Section C.***

☐ Activities within wetlands or surface waters, or within 25 feet of a wetland or surface water, (not including the activities associated with an individual residence). *Examples include dredging, filling, outfall structures, docks, piers, over-water structures, shoreline stabilization, mitigation, reclamation, restoration/enhancement.* ***Provide the information requested in Section C.***

☐ Activities within navigable or flowing surface waters such as a multi-slip dock or marina, dry storage facility, dredging, bridge, breakwaters, reefs, or other offshore structures: ***In addition to Section C, also provide the information requested in Section D.***

☐ Activities that are (or may be) located within, on or over state-owned submerged lands (*See Chapter 18-21, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=18-21*): ***In addition to Section B or C, also provide the information requested in Section F***

☒ Construction or alteration of a stormwater management system serving residential, commercial, transportation, industrial, agricultural, or other land uses, or a solid waste facility (excluding mines that are regulated by DEP). ***Provide the information requested in Section E.***

☐ Creation or modification of Mitigation Bank (refer to Chapter 62-342, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-342): ***Provide the information requested in Section G.***

☐ Mines (as defined in Section 2.0 of Applicant's Handbook Volume I) that are regulated by the DEP: ***Provide the information requested in Section H.***

☐ Other, describe: Please contact the Agency to determine which additional sections of the application are needed. See Attachment 1 for Agency contacts.

D. Describe in general terms the proposed project, system, works, or other activities. For permit modifications, please briefly describe the changes requested to the permit: **Construction of a new Wal-Mart Supercenter & Service Roads with associated stormwater pond, conveyance systems**

E. For activities in, on, or over wetlands or other surface waters, check the type of federal dredge and fill permit requested (if known): ☐Individual ☐Programmatic General permit #: SAJ
☐General ☐Nationwide permit #: NWP ☒Not Applicable ☐Not sure

F. Project/Activity Street/Road Address or other location (if applicable):
City: **Alachua** County(ies): **Alachua** Zip: **32615**

Note: For utility, road, or ditch/canal activities, provide a starting and ending point using street names and nearest house numbers or provide length of project in miles along named streets or highways.

G. Project location map and Section, Township, and Range information (use additional sheets if needed):
Please attach a location map showing the location and boundaries of the proposed activity in relation to major intersections or other landmarks. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.
Section(s): **15&16** Township: **8S** Range: **18E** Land Grant name, if applicable:
Section(s): Township: Range:
Section(s): Township: Range:

H. Latitude (DMS) **29° 47' 51.12"** Longitude (DMS) **29° 47' 39.02"** (Taken from central location of the activity). Explain source for obtaining latitude and longitude (i.e. U.S.G.S. Quadrangle Map, GPS, online resource): **Google Earth**

I. Tax Parcel Identification Number(s): **03869-000-000, 03869-013-000, 03869-014-000**

[Number may be obtained from property tax bill or from the county property appraiser's office; if on multiple parcels, provide multiple Tax Parcel Identification Numbers]

J. Directions to Site (from major roads; include distances and landmarks as applicable): **The southeast quadrant of the intersection of U.S. Highway 441 and Interstate 75.**

K. Project area or phase area: **68.38** acres

L. Name of waterbody(ies) (if known) in which activities will occur or into which the system will discharge:

The following questions (M-O) are not applicable to activities related to a single-family residence, including private single-family residential docks, piers, seawalls or boat ramps.

M. Is it part of a larger plan of development or sale? ☒ yes ☐ no

N. Impervious or semi-impervious area excluding wetlands and other surface waters (if applicable):
20.42 acres or square feet

O. Volume of water the system is capable of impounding (if applicable): **32** acre-feet.

PART 2: SUPPLEMENTAL INFORMATION, AND PERMIT HISTORY

A. Is this an application to modify an existing Environmental Resource Permit, or to construct or implement part of a multi-phase project, such as a project with a Conceptual Approval permit? ☒ Yes ☐ No *If you answered "yes", please provide permit numbers below:*

AGENCY	DATE	PERMIT/APPLICATION NO.	PROJECT NAME
SRWMD	**1/24/2013**	**ERP05-0518M**	**Wal-Mart Supercenter #3873-00**

B. Indicate if there have been any ***pre-application meeting(s)*** or other discussions about the proposed project, system or activity. If so, please provide the date(s), location(s) of the meeting, and the name(s) of Agency staff that attended the meeting(s):

AGENCY	DATE	LOCATION	MEETING ATTENDEES
SRWMD/CPH	**11/18/2015**	**SRWMD**	**Brian Cassidy, Brian Brooker, Patrick Webster, Tim Sagul**

C. ***Attach a depiction (plan and section views), which clearly shows the works or other activities proposed to be constructed.*** Use multiple sheets, if necessary, a scale sufficient to show the location and type of works, and include a north arrow and a key to any symbols used. ***Specific information to be included in the plans is based on the activities proposed and is further described in Sections B-H.*** However, supplemental information may be required based on the specific circumstances or location of the proposed works or other activities.

D. Processing Fee: ***Please submit the application processing fee along with this application form and supplemental information.*** Processing fees vary based on the size of the activity, the type of permit applied for, and the reviewing Agency. Please reference Attachment 3 to determine the appropriate fee.

PART 3: APPLICANT AND ASSOCIATED PARTIES INFORMATION

Instructions: Permits are only issued to entities having sufficient real property interest as described in Section 4.2.3 (d) of Applicant's Handbook Volume I. Please attach evidence of sufficient real property interest over the land upon which the activities subject to the application will be conducted, including mitigation (if applicable). Refer to Section 4.2.3 (d) for acceptable ownership or real property interest documentation. For corporations, list a person who is a registered agent or officer of the corporation who has the legal authority to bind the corporation.

A. APPLICANT (ENTITY MUST HAVE SUFFICIENT REAL PROPERTY INTEREST) ☐ **THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION**		
Name: Last: **Thomas**	First: **Michael**	Middle:
Title: **Director of Project Design and Management**	Company: **Wal-Mart Stores East, L.P.**	
Address: **2001 SE 10th Street**		
City: **Bentonville**	State: **AR**	Zip: **72716-0550**
Home Telephone:	Work Telephone: **479-273-4000**	
Cell Phone:	Fax: **(479) 273-4107**	
E-mail Address: **michael.thomas1@walmart.com**		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

B. LAND OWNER(S) (IF DIFFERENT OR IN ADDITION TO APPLICANT) ☐ **CHECK HERE IF LAND OWNER IS ALSO A CO-APPLICANT**		
Name: Last: **Tompkins**	First: **Darryl**	Middle:
Title: **Manager**	Company: **First Street Group, L.C.**	
Address: **PO Box 519 14420 NW 151 Blvd.**		
City: **Alachua**	State: **FL**	Zip: **32615**
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

C. OPERATION AND MAINTENANCE ENTITY (see Applicant's Handbook I, Section 12.3)			
Entity Name: **Wal-Mart Stores East, L.P.**	Contact: Last: **Thomas**	First: **Michael**	Middle:
Title: **Director of Project Design and Management**	Company: **Wal-Mart Stores East, L.P.**		
Address: **2001 SE 10th Street**			
City: **Bentonville**	State: **AR**		Zip: **72716-0550**
Home Telephone:	Work Telephone: **479-273-4000**		
Cell Phone:	Fax: **(479) 273-4107**		
E-mail Address: **michael.thomas1@walmart.com**			
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐			

D. CO-APPLICANT (IF DIFFERENT OR IN ADDITION TO APPLICANT AND OWNER)		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

E. ENGINEERING CONSULTANT ☒ THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION		
Name: Last: **Cassidy**	First: **Brian**	Middle:
Title: **Project Manager**	Company: **CPH, Inc.**	
Address: **5200 Belfort Rd. Ste 220**		
City: **Jacksonville**	State: **FL**	Zip: **32256**
Home Telephone:	Work Telephone: **904-332-0999**	
Cell Phone: **904-477-4822**	Fax: **904-332-0997**	
E-mail Address: **bcassidy@cphcorp.com**		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

F. ENVIRONMENTAL CONSULTANT ☐ THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

G. AGENT AUTHORIZED TO SECURE PERMIT (IF DIFFERENT FROM CONSULTANT) ☐ THIS IS A CONTACT PERSON FOR ADDITIONAL INFORMATION		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:	Fax:	
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

If necessary, please add additional pages for other contacts and property owners related to this project.

PART 4: SIGNATURES AND AUTHORIZATION TO ACCESS PROPERTY

Instructions: For multiple applicants please provide a separate Part 4 for each applicant. For corporations, the application must be signed by a person authorized to bind the corporation. A person who has sufficient real property interest (see Section 4.2.3 (d) of Applicant's Handbook Volume I) is required in (B) to authorize access to the property, except when the applicant has the power of eminent domain.

A. By signing this application form, I am applying for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relieve of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a different responsible operation and maintenance entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Frank Pampalone		11/24/15
Typed/Printed Name of Applicant or Applicant's Authorized Agent	Signature of Applicant or Applicant's Authorized Agent	Date

Design Director

(Corporate Title if applicable)

B. CERTIFICATION OF SUFFICIENT REAL PROPERTY INTEREST AND AUTHORIZATION FOR STAFF TO ACCESS THE PROPERTY:
I certify that:

☒ ***I possess sufficient real property interest in or control, as defined in Section 4.2.3 (d) of Applicant's Handbook Volume I,*** over the land upon which the activities described in this application are proposed and I have legal authority to grant permission to access those lands. I hereby grant permission, evidenced by my signature below, for staff of the Agency and the U.S. Army Corps of Engineers to access, inspect, and sample the lands and waters of the property as necessary for the review of the proposed works and other activities specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review, inspection, and/ or sampling. Further, I agree to provide entry to the project site for such agents or personnel to monitor and inspect permitted work if a permit is granted.

OR

☐ I represent an entity having ***the power of eminent domain and condemnation authority***, and I/we shall make appropriate arrangements to enable staff of the Agency and the U.S. Army Corps of Engineers to access, inspect, and sample the property as described above.

Frank Pampalone		11/24/15
Typed/Printed Name	Signature	Date

Design Director

(Corporate Title if applicable)

C. DESIGNATION OF AUTHORIZED AGENT (IF APPLICABLE):

I hereby designate and authorize **CPH, Inc.** to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Frank Pampalone		11/24/15
Typed/Printed Name of Applicant	Signature of Applicant	Date

Design Director

(Corporate Title if applicable)

If necessary, please add additional pages for other contacts and property owners related to this project.

PART 4: SIGNATURES AND AUTHORIZATION TO ACCESS PROPERTY

Instructions: For multiple applicants please provide a separate Part 4 for each applicant. For corporations, the application must be signed by a person authorized to bind the corporation. A person who has sufficient real property interest (see Section 4.2.3 (d) of Applicant's Handbook Volume I) is required in (B) to authorize access to the property, except when the applicant has the power of eminent domain.

A. By signing this application form, I am applying for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relieve of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a different responsible operation and maintenance entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Darryl J. Tompkins, Esq.		11/23/2015
Typed/Printed Name of Applicant or Applicant's Authorized Agent	Signature of Applicant or Applicant's Authorized Agent	Date

MANAGER
(Corporate Title if applicable)

B. CERTIFICATION OF SUFFICIENT REAL PROPERTY INTEREST AND AUTHORIZATION FOR STAFF TO ACCESS THE PROPERTY:
I certify that:

☒ ***I possess sufficient real property interest in or control, as defined in Section 4.2.3 (d) of Applicant's Handbook Volume I,*** over the land upon which the activities described in this application are proposed and I have legal authority to grant permission to access those lands. I hereby grant permission, evidenced by my signature below, for staff of the Agency and the U.S. Army Corps of Engineers to access, inspect, and sample the lands and waters of the property as necessary for the review of the proposed works and other activities specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review, inspection, and/ or sampling. Further, I agree to provide entry to the project site for such agents or personnel to monitor and inspect permitted work if a permit is granted.

OR

☐ I represent an entity having ***the power of eminent domain and condemnation authority***, and I/we shall make appropriate arrangements to enable staff of the Agency and the U.S. Army Corps of Engineers to access, inspect, and sample the property as described above.

Darryl J. Tompkins, Esq.		11/23/2015
Typed/Printed Name	Signature	Date

MANAGER
(Corporate Title if applicable)

C. DESIGNATION OF AUTHORIZED AGENT (IF APPLICABLE):

I hereby designate and authorize **CPH, Inc.** to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Darryl J. Tompkins, Esq.		11/23/2015
Typed/Printed Name of Applicant	Signature of Applicant	Date

MANAGER
(Corporate Title if applicable)

Letter of Transmittal

5200 Belfort Road
Suite 220
Jacksonville, Florida 32256
Phone: 904.332.0999
Fax: 904.332.0997

www.cphengineers.com

Date: June 10, 2016

To: Adam E. Doyle, P.E.
Florida Department of Transportation – Gainesville Operations
5301 NE 39th Avenue
Gainesville, FL 32609
(352) 381-4308

Re: Walmart Supercenter #3873-00, Alachua, FL (US 441)
Driveway Connection Permit Application
CPH Project No. W13392

WE ARE SENDING YOU THE ATTACHED ITEMS VIA:
FEDEX Priority _X_ Standard ___ 2nd Day ____
Hand Delivery _____ Courier ____ USPS _____ Other _____

NO. OF COPIES	DESCRIPTION
4	Driveway Connection Permit Application
4	Signed & sealed sets of Plans
4	Traffic Study
4	Certificate's Documenting Applicant's Signature Authority
4	Agent Authorization's for CPH, Inc. by Walmart Stores East, LP
4	Agent Authorization's for CPH, Inc. by First Street Group, LC
1	CD containing the Submittal Documents & Plans
1	Check #9510285 for $3,000.00

THESE ITEMS ARE TRANSMITTED AS INDICATED BELOW:

X	For Your Use	**X**	For Review and Approval
	As Requested		For Signature and Return

REMARKS:

Please do not hesitate to contact me at 904.332.0999 or at **bcassidy@cphcorp.com** if you have any questions or need any additional information.

SIGNED: Brian Cassidy
Brian Cassidy, P.E.

If enclosures are not as noted, kindly notify us at once.

GE
Lighting

Evolve™ LED Area Light

Scalable Area Light (EASC)

imagination at work

Product Features

The next evolution of the GE Evolve™ LED Area Light continues to deliver outstanding features, while adding greater flexibility, style and scalability. This latest design offers higher lumen outputs and provides photometric combinations with high efficacy, providing the ability to meet even a wider range of area lighting needs. Additionally, the new EASC Evolve Luminaire comes with a specially designed auto dealership optic for exceptional illuminance on the dealership's front row. Optional programmable motion sensing for Title 24 compliance is available.

Applications

- Site, area, and general lighting applications utilizing advanced LED optical system providing high uniformity, excellent vertical light distribution, reduced offsite visibility, reduced on-site glare and effective security light levels.
- Ideal for small to large retailers, commercial to medical properties, and big box retailers.

Housing

- Die-cast aluminum housing.
- Slim architectural design incorporates an integral heat sink and light engine, ensuring maximum heat transfer, long LED life, and a reduced Effective Projected Area (EPA).
- Meets 3G vibration standards per ANSI C136.31-2010 for Slipfitter and Mounting Arm configurations. Meets 1.5G vibration standards for Knuckle Slipfitter Mounting.

LED & Optical Assembly

- Structured LED arrays for optimized area light photometric distribution.
- Evolve light engine with directional reflectors designed to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 4000K and 5000K typical.

Lumen Maintenance

Lumen Maintenance (25°C Ambient)				
Optical Code	Calculated 50,000 hr	Calculated 100,000 hr	Calculated Hours L70	Calculated Hours L90
L5, V5, L4, L3, L2	0.98	0.95	>100,000	>100,000
LA	0.90	0.81	>100,000	49,000
All others	0.99	0.97	>100,000	>100,000

Lumen Maintenance per IES TM-21.

Ratings

- UL listed, suitable for wet locations.
- cUL listed with option code "J" SKUs.
- IP65 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at –40° to 50°C (–40° to 35°C for fixtures over 390 watts).
- Upward Light Output Ratio (ULOR) = 0.
- Title 24 compliant with "H" motion sensor option.
- Compliant with the material restriction requirements of RoHS.
- DLC Listed

Please refer to the DLC QPL website for the latest and most complete information.
www.designlights.org/QPL

Mounting

Option A
- 10-inch (254mm) mounting arm for square pole prewired with 24-inch (610mm) leads.

Option B
- 10-inch (254mm) mounting arm for round pole prewired with 24-inch (610mm) leads.

Option C
- Slipfitter mounting for 2 3/8-inch (60mm) O.D. pipe prewired with 24-inch (610mm) leads.

Option D
- 10-inch (254mm) mounting arm for round or square pole prewired with 24-inch (610mm) leads.

Option S
- Knuckle Slipfitter mounting for 2.3-3" O.D. pipe, pre-wired with 24-inch (610mm) leads.

Finish

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard colors: Black & Dark Bronze.
- RAL & custom colors available.

Electrical

- 120-277 volt and 347-480 volt available.
- System power factor is >90% and THD <20%.*
- Class "A" sound rating.
- Photo electric sensors (PE) available for all voltages.
- ANSI C136.41 dimmable PE receptacle is available making the unit "adaptive controls ready."
- Surge Protection Options:
  For 120-277VAC and 347-480VAC per IEEE/ANSI C136.2-2015.
  - 6kV/3kA "Basic" surge protection, standard.
  - 10kV/5kA "Enhanced" surge protection available with R option.

** System power factor and THD is tested and specified at 120V input and maximum load conditions.*

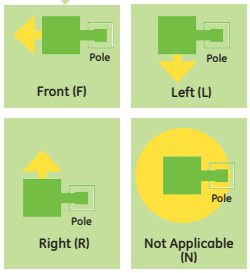
Ordering Number Logic

Evolve™ LED Scalable Area Light (EASC)

E A S C ___ _ _ _ _ __ _ _ ____ ___

PROD. ID	PHOTOMETRIC	VOLTAGE	OPTICAL CODE	DISTRIBUTION ORIENTATION	DRIVE CURRENT	LED COLOR TEMP	PE FUNCTION	MOUNTING ARM	COLOR	OPTIONS
E = Evolve **A** = Area **S** = Scalable	**C** = Photometric Series	**0** = 120 - 277 **1** = 120* **2** = 208* **3** = 240* **4** = 277* **5** = 480* **D** = 347* **H** = 347-480 * Specify single voltage if fuse option is selected.		**F** = Front **L** = Left **R** = Right **N** = Not Applicable	**5** = 525mA **7** = 700mA* * Only select for product 395W or greater.	**40** = 4000K **50** = 5000K	**1** = None **2** = PE Rec. **4** = PE Rec. with Shorting Cap **5** = PE Rec. with Control** **A** = ANSI C136.41 7-pin dimming PE Receptacle †# **D** = ANSI C136.41 7-pin dimming PE Receptacle with Shorting Cap †# ** PE control not available for 347-480V. Must be a discrete voltage (347V or 480V). † When ordering PE function socket A-D, a dimming driver must also be ordered under the "OPTIONS" column. # Order Dimming/Control PE as a separate item.	**A** = 10" Arm for Square Pole supplied with leads **B** = 10" Arm for Round Pole supplied with leads **C** = EXT Slip-fitter 2" Pipe (2.378 in. OD) supplied with leads **D** = 10" Arm for round or square poles, supplied with leads and additional hardware **S** = Knuckle Slipfitter for 2.3 in. - 3.0 in. OD Tenon, supplied with leads. 0-45° vertical aiming angles achievable.	**BLCK** = Black **DKBZ** = Dark Bronze **GRAY** = Gray **WHTE** = White Contact manufacturer for other colors.	**C** = IEC **D** = Dimming (0-10 Volt Input)† **F** = Fusing **H** = Motion Sensor**# **J** = cUL/Canada **R** = 10kV Extra Surge Protection **XXX** = Special Options † Dimming leads will be provided through the back of the arm, unless specified with A or D PE Function. ** When ordering Motion Sensing Option H - "A" or "B" Mounting Arm must be selected. Fixture power increase of 1W expected with sensor use. # Dimming is standard with H option code. Do not also select D option. Not compatible with PE receptacle options A, or D.

Light pattern thrown in direction specified in relation to Pole and Fixture.

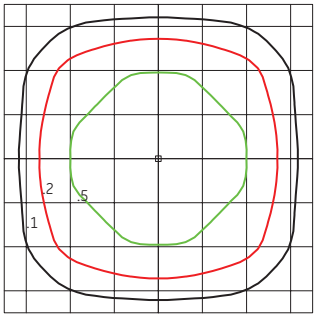


	OPTICAL CODE	TYPE	TYPICAL INITIAL LUMENS 4000K & 5000K	TYPICAL SYSTEM WATTAGE 120-277V & 347-480V	DISTRIBUTION ORIENTATION AVAILABLE	BUG RATING* 4000K & 5000K B	U	G	IES FILE NUMBER 4000K	5000K
TYPE V	D5	Symmetric Medium	8300	82	N	3	0	2	EASC_D5N540_____.IES	EASC_D5N550_____.IES
	E5	Symmetric Medium	12700	119	N	4	0	2	EASC_E5N540_____.IES	EASC_E5N550_____.IES
	F5	Symmetric Medium	15000	137	N	4	0	2	EASC_F5N540_____.IES	EASC_F5N550_____.IES
	G5	Symmetric Medium	17100	156	N	4	0	2	EASC_G5N540_____.IES	EASC_G5N550_____.IES
	H5	Symmetric Medium	21200	199	N	4	0	2	EASC_H5N540_____.IES	EASC_H5N550_____.IES
	J5	Symmetric Medium	25200	235	N	5	0	3	EASC_J5N540_____.IES	EASC_J5N550_____.IES
	K5	Symmetric Medium	30000	283	N	5	0	3	EASC_K5N540_____.IES	EASC_K5N550_____.IES
	L5	Symmetric Medium	38000	395	N	5	0	4	EASC_L5N740_____.IES	EASC_L5N750_____.IES
	N5	Symmetric Short	9200	82	N	3	0	1	EASC_N5N540_____.IES	EASC_N5N550_____.IES
	P5	Symmetric Short	13800	119	N	3	0	2	EASC_P5N540_____.IES	EASC_P5N550_____.IES
	Q5	Symmetric Short	16400	137	N	4	0	2	EASC_Q5N540_____.IES	EASC_Q5N550_____.IES
	R5	Symmetric Short	18700	156	N	4	0	2	EASC_R5N540_____.IES	EASC_R5N550_____.IES
	S5	Symmetric Short	23100	199	N	4	0	2	EASC_S5N540_____.IES	EASC_S5N550_____.IES
	T5	Symmetric Short	27400	235	N	4	0	2	EASC_T5N540_____.IES	EASC_T5N550_____.IES
	U5	Symmetric Short	33000	283	N	5	0	2	EASC_U5N540_____.IES	EASC_U5N550_____.IES
	V5	Symmetric Short	41500	395	N	5	0	3	EASC_V5N740_____.IES	EASC_V5N750_____.IES
TYPE IV	A4	Asymmetric Forward	4200	44	F, L, R	1	0	1	EASC_A4F540_____.IES	EASC_A4F550_____.IES
	B4	Asymmetric Forward	6500	62	F, L, R	1	0	2	EASC_B4F540_____.IES	EASC_B4F550_____.IES
	C4	Asymmetric Forward	7600	72	F, L, R	1	0	2	EASC_C4F540_____.IES	EASC_C4F550_____.IES
	D4	Asymmetric Forward	8700	82	F, L, R	1	0	2	EASC_D4F540_____.IES	EASC_D4F550_____.IES
	E4	Asymmetric Forward	12900	119	F, L, R	2	0	3	EASC_E4F540_____.IES	EASC_E4F550_____.IES
	F4	Asymmetric Forward	15400	144	F, L, R	2	0	3	EASC_F4F540_____.IES	EASC_F4F550_____.IES
	G4	Asymmetric Forward	17100	156	F, L, R	2	0	3	EASC_G4F540_____.IES	EASC_G4F550_____.IES
	H4	Asymmetric Forward	21200	199	F, L, R	3	0	4	EASC_H4F540_____.IES	EASC_H4F550_____.IES
	J4	Asymmetric Forward	25200	235	F, L, R	3	0	4	EASC_J4F540_____.IES	EASC_J4F550_____.IES
	K4	Asymmetric Forward	30000	283	F, L, R	3	0	5	EASC_K4F540_____.IES	EASC_K4F550_____.IES
	L4	Asymmetric Forward	38300	395	F, L, R	3	0	5	EASC_L4F740_____.IES	EASC_L4F750_____.IES
TYPE III	A3	Asymmetric Wide	4700	44	F, L, R	1	0	1	EASC_A3F540_____.IES	EASC_A3F550_____.IES
	B3	Asymmetric Wide	7100	62	F, L, R	1	0	1	EASC_B3F540_____.IES	EASC_B3F550_____.IES
	C3	Asymmetric Wide	8300	72	F, L, R	1	0	2	EASC_C3F540_____.IES	EASC_C3F550_____.IES
	D3	Asymmetric Wide	9500	82	F, L, R	2	0	2	EASC_D3F540_____.IES	EASC_D3F550_____.IES
	E3	Asymmetric Wide	13900	119	F, L, R	2	0	2	EASC_E3F540_____.IES	EASC_E3F550_____.IES
	F3	Asymmetric Wide	16800	144	F, L, R	2	0	2	EASC_F3F540_____.IES	EASC_F3F550_____.IES
	G3	Asymmetric Wide	18700	156	F, L, R	2	0	2	EASC_G3F540_____.IES	EASC_G3F550_____.IES
	H3	Asymmetric Wide	23100	199	F, L, R	3	0	3	EASC_H3F540_____.IES	EASC_H3F550_____.IES
	J3	Asymmetric Wide	27400	235	F, L, R	3	0	3	EASC_J3F540_____.IES	EASC_J3F550_____.IES
	K3	Asymmetric Wide	33000	283	F, L, R	3	0	4	EASC_K3F540_____.IES	EASC_K3F550_____.IES
	L3	Asymmetric Wide	41500	395	F, L, R	3	0	4	EASC_L3F740_____.IES	EASC_L3F750_____.IES
TYPE II	A2	Asymmetric Narrow	4600	44	F, L, R	1	0	1	EASC_A2F540_____.IES	EASC_A2F550_____.IES
	B2	Asymmetric Narrow	6800	62	F, L, R	1	0	1	EASC_B2F540_____.IES	EASC_B2F550_____.IES
	C2	Asymmetric Narrow	8000	72	F, L, R	2	0	2	EASC_C2F540_____.IES	EASC_C2F550_____.IES
	D2	Asymmetric Narrow	9100	82	F, L, R	2	0	2	EASC_D2F540_____.IES	EASC_D2F550_____.IES
	E2	Asymmetric Narrow	13400	119	F, L, R	2	0	2	EASC_E2F540_____.IES	EASC_E2F550_____.IES
	F2	Asymmetric Narrow	16200	144	F, L, R	3	0	3	EASC_F2F540_____.IES	EASC_F2F550_____.IES
	G2	Asymmetric Narrow	18000	156	F, L, R	3	0	3	EASC_G2F540_____.IES	EASC_G2F550_____.IES
	H2	Asymmetric Narrow	22300	199	F, L, R	3	0	3	EASC_H2F540_____.IES	EASC_H2F550_____.IES
	J2	Asymmetric Narrow	26500	235	F, L, R	3	0	3	EASC_J2F540_____.IES	EASC_J2F550_____.IES
	K2	Asymmetric Narrow	31900	283	F, L, R	3	0	4	EASC_K2F540_____.IES	EASC_K2F550_____.IES
	L2	Asymmetric Narrow	40000	395	F, L, R	4	0	4	EASC_L2F740_____.IES	EASC_L2F750_____.IES
	KA	Asymmetric 100° Wide Auto	35400	283	F, L, R	4	0	3	EASC_KAF540_____.IES	EASC_KAF550_____.IES
	LA	Asymmetric 100° Wide Auto	46900	398	F, L, R	5	0	4	EASC_LAF740_____.IES	EASC_LAF750_____.IES

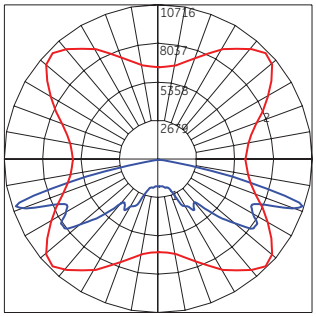
*Rating values for B and G are based on rated lumens and may vary due to flux tolerances.

Photometrics

EASC Type V - Symmetric Medium (K5)
30,000 Lumens, 5000K (EASC_K5N550__.ies)

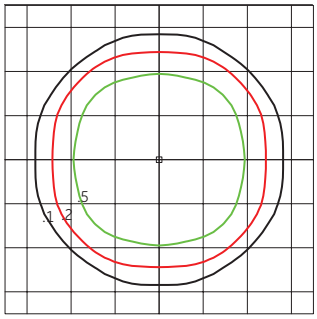


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

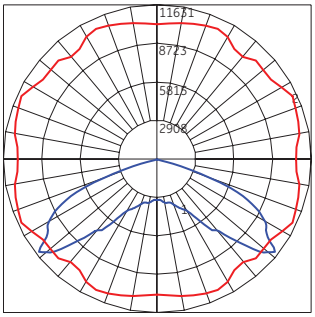


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72°

EASC Type V - Symmetric Short (U5)
33,000 Lumens, 5000K (EASC_U5N550__.ies)

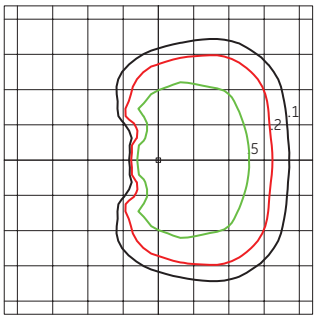


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

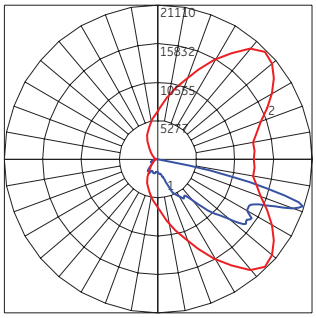


— Vertical plane through horizontal angle of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52°

EASC Type IV - Asymmetric Forward (K4)
30,000 Lumens, 5000K (EASC_K4F550__.ies)

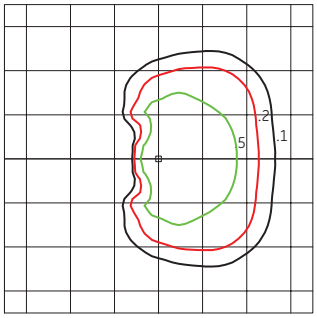


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

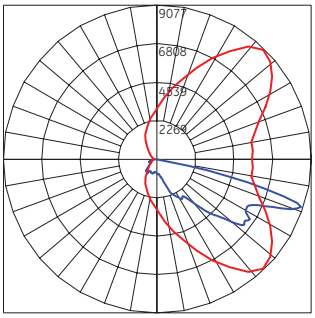


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72°

EASC Type IV - Asymmetric Forward (E4)
12,900 Lumens, 5000K (EASC_E4F550__.ies)

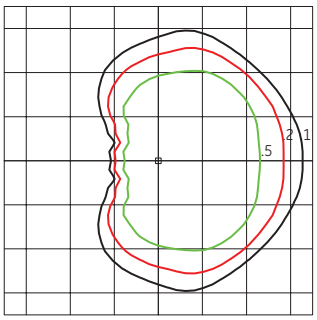


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

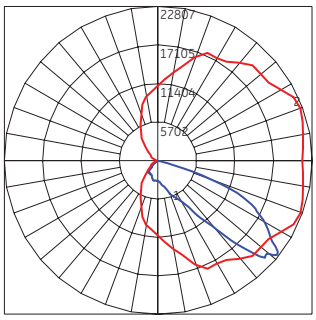


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72°

EASC Type III - Asymmetric Wide (K3)
33,000 Lumens, 5000K (EASC_K3F550__.ies)

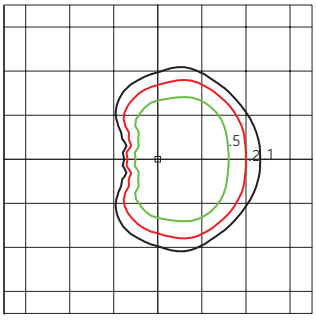


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

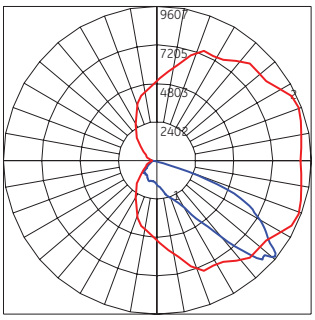


— Vertical plane through horizontal angle of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52°

EASC Type III - Asymmetric Wide (E3)
13,900 Lumens, 5000K (EASC_E3F550__.ies)

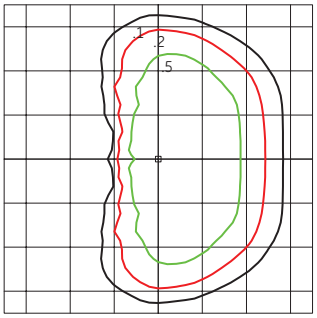


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

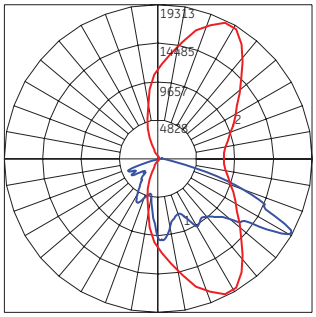


— Vertical plane through horizontal angle of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52°

EASC Type II - Asymmetric Narrow (K2)
31,900 Lumens, 5000K (EASC_K2F550__.ies)

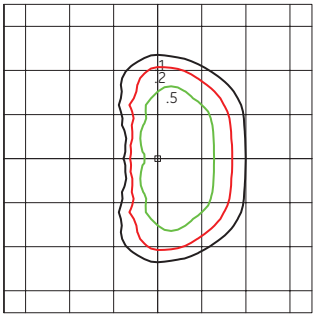


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

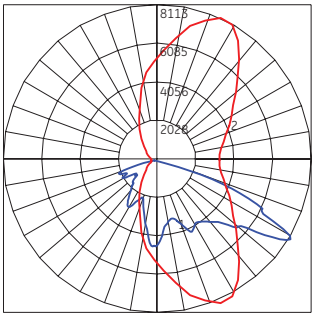


— Vertical plane through horizontal angle of maximum candlepower at 65°
— Vertical plane through horizontal angle of 60°

EASC Type II - Asymmetric Narrow (E2)
13,400 Lumens, 5000K (EASC_E2F550__.ies)



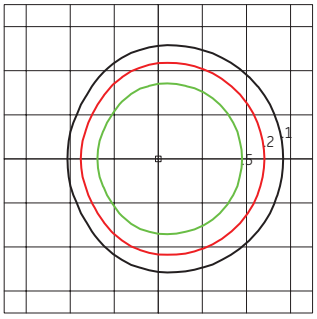
Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade



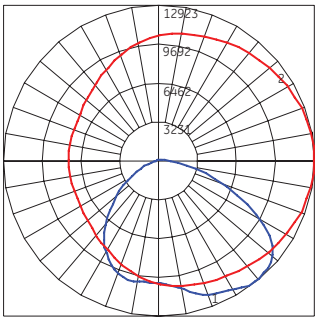
— Vertical plane through horizontal angle of maximum candlepower at 65°
— Vertical plane through horizontal angle of 60°

Photometrics

EASC Type II - Assymetric Auto (KA)
35,400 Lumens, 5000K (EASC_KAF550__.ies)

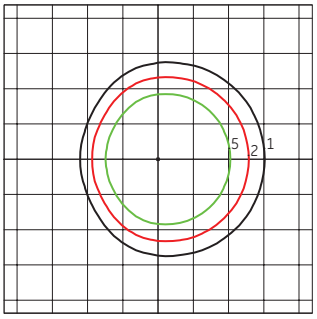


Grid Distance in Units
of Mounting Height at 40' Initial
Footcandle Values at Grade

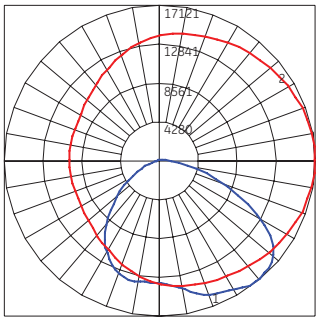


Vertical plane through horizontal angle
of maximum candlepower at 0°
Vertical plane through horizontal angle of 37°

EASC Type II - Assymetric Auto (LA)
46,900 Lumens, 5000K (EASC_LAF750__.ies)

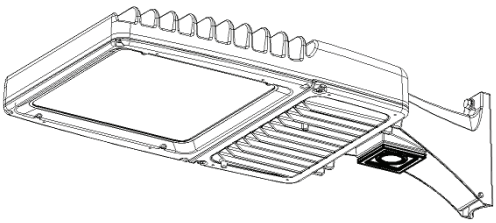


Grid Distance in Units
of Mounting Height at 40' Initial
Footcandle Values at Grade



Vertical plane through horizontal angle
of maximum candlepower at 0°
Vertical plane through horizontal angle of 37°

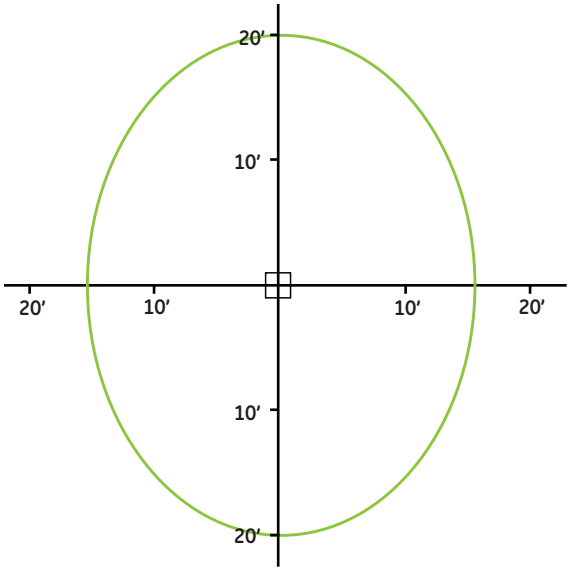
H-Motion Sensing Option:



- Intended for high mounting applications, between 15-30ft (4.57-9.14m). For mounting heights exceeding 30ft, pole mounted sensors are recommended.
- Provides a coverage area radius for walking motion of 15-20ft (4.57-6.10m).
- Provides 270° of coverage (~90° is blocked by the pole).
- Comes standard with 50% dimmed light output with no occupancy, and full power at occupancy.
- Comes standard with photocell function. Note: It is not necessary to also purchase PE receptacle or control.
- Comes standard with a 5 minute occupancy time delay and a 5 minute ramp-down to the 50% dimmed level.
- Must order with decorative mounting arm options "A" or "B".
- Fixture power increase of 1W expected with sensor use.

Note: Standard options may be reprogrammed in the field. Reprogramming instructions included in product shipment.

Sensor Pattern:

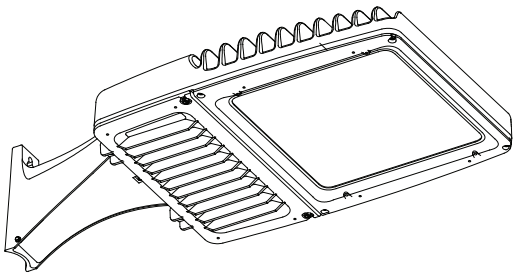


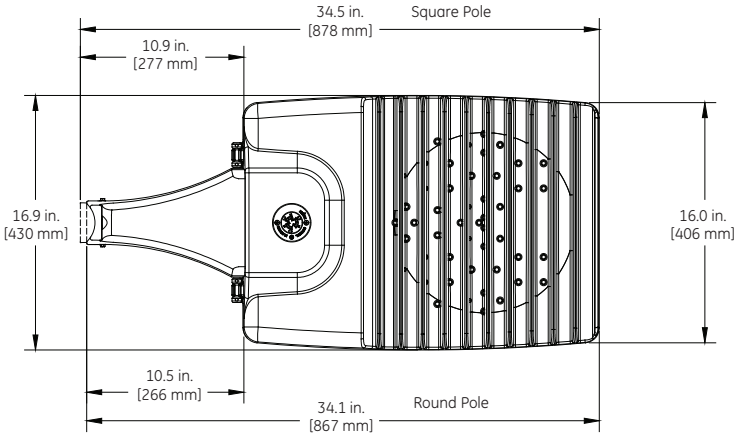
Sensing Pattern Area Fixture
Up to 30 ft.

Product Dimensions

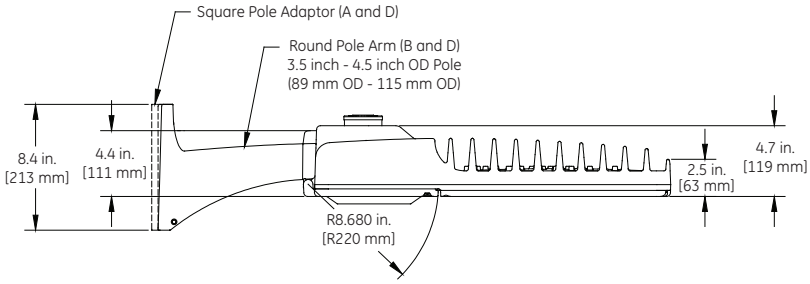
(Option A) 10” Arm for Square Pole Mount
(Option B) 10” Arm for Round Pole Mount
(Option D) 10” Arm for Square Pole Mount or Round Pole Mount

Option D includes all mounting hardware in Option A and Option B

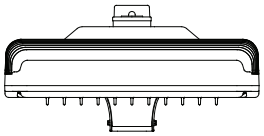




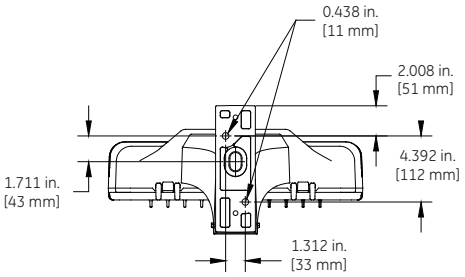
TOP VIEW



SIDE VIEW

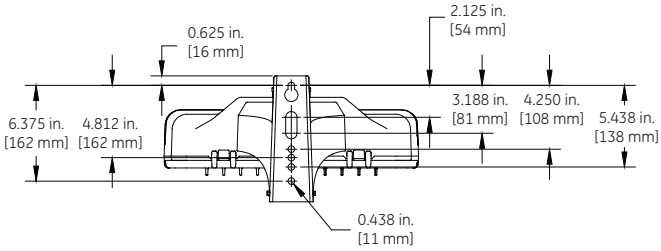


FRONT VIEW



BACK VIEW

Option A and D Square Pole
3.5 inch - 4.5 inch Pole
(89 mm - 115 mm)



BACK VIEW

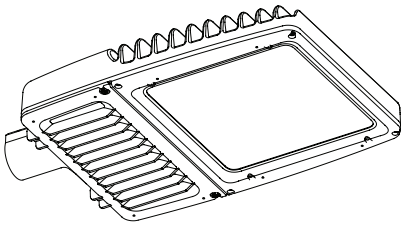
Option B and D Round Pole
3.5 inch - 4.5 inch OD Pole
(89 mm OD - 115 mm OD)

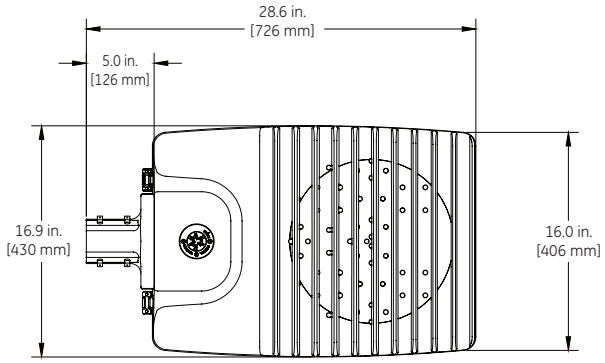
DATA

- Approximate net weight: 43-47 lbs (19.50 - 21.32 kgs)
  Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA) with 10” Mounting Arm: 0.97 sq ft max (0.09 sq m)

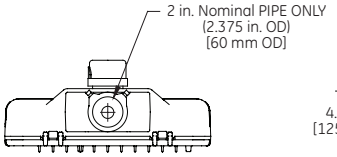
Product Dimensions

(Option C) Slipfitter Arm Mount

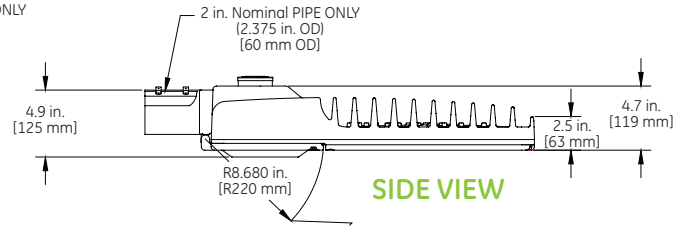




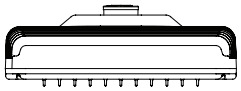
TOP VIEW



BACK VIEW



SIDE VIEW

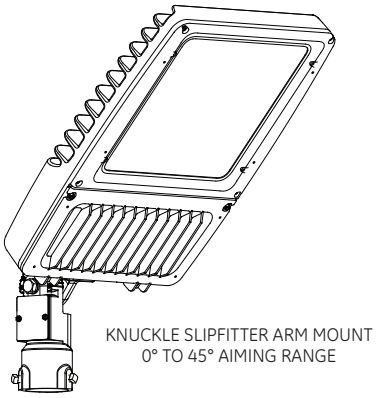


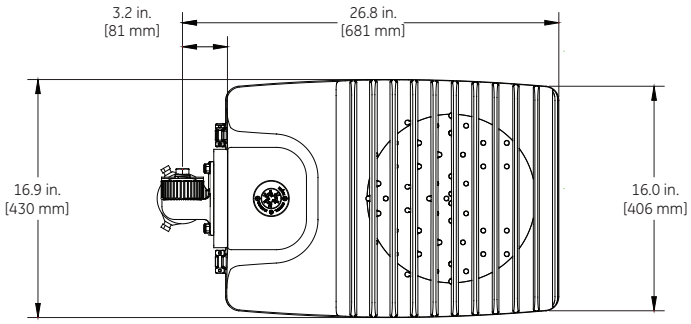
FRONT VIEW

DATA

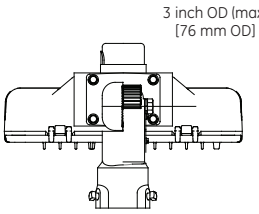
- Approximate net weight: 41-45 lbs (18.60 - 20.41 kgs)
  Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA) with Slipfitter: 0.47 sq ft max (0.04 sq m)

(Option S) Knuckle Arm Mount

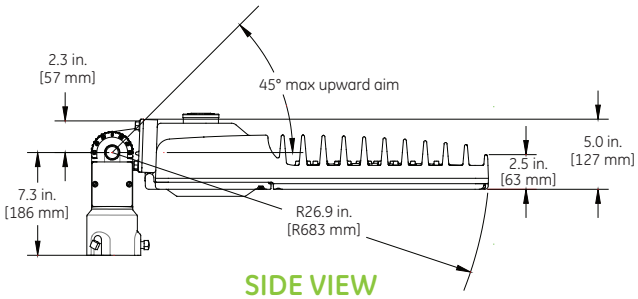




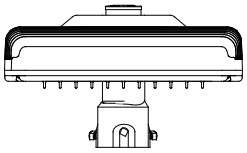
TOP VIEW



BACK VIEW



SIDE VIEW



FRONT VIEW

DATA

- Approximate net weight: 41-45 lbs (18.60 - 20.41 kgs)
  Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA) with fixture mounted at 45° upward: 1.97 sq ft max

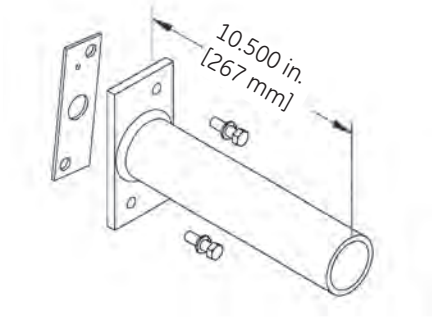
Mounting Information

Mounting Arms for Slipfitter

Order separately with Mounting Option C (External Slipfitter)

SQUARE POLE MOUNTING ARM

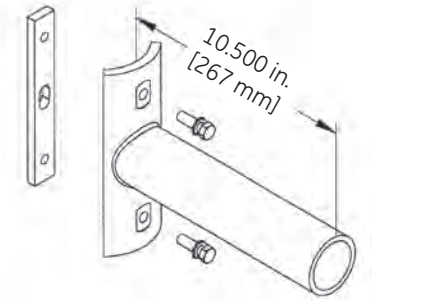
3.5 TO 4.5-inch (89 to 114mm) SQUARE
(WILL ALLOW 4 FIXTURES PER POLE @ 90 DEGREES.)



ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
SPA-EAMT10BLCK "Black"
SPA-EAMT10DKBZ "Dark Bronze"

ROUND POLE MOUNTING ARM

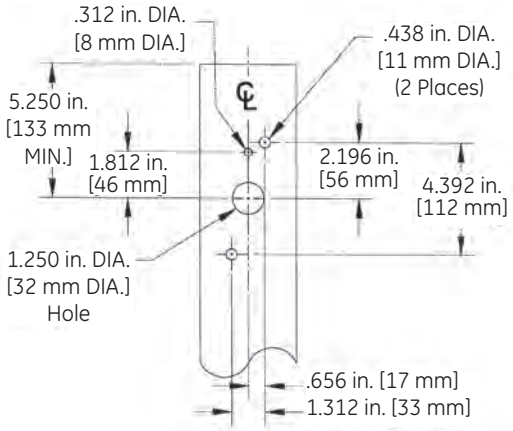
3.5 TO 4.5-inch (89 to 114mm) OD
(WILL ALLOW 4 FIXTURES PER POLE @ 90 DEGREES.)



ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
RPA-EAMT10BLCK "Black"
RPA-EAMT10DKBZ "Dark Bronze"

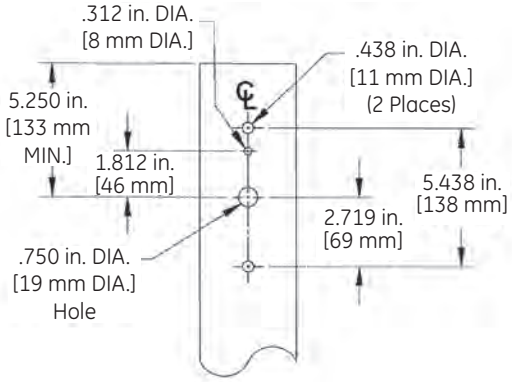
Drilling Templates for Slipfitter Arms & Arm Mount

SQUARE POLE MOUNTING



ROUND POLE MOUNTING

3.5 TO 4.5-inch (89 to 114mm) OD
round pole mounting arm



Wall Mounting Bracket Adapter Plate

ORDER SEPERATELY FROM FIXTURE AS CATALOG NUMBER
WMB-EAMT06
NOTE: For Wall Mounting, order luminaire with mounting arm: C = EXT Slip-fitter 2" Pipe (2.378 in. OD) supplied with leads.

Other mounting patterns are available for retrofit installations.
Contact manufacturing for other available mounting patterns.

www.gelighting.com

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OLP3090 (Rev 03/24/16)

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Jacksonville, FL 32256
Phone: 904.332.0999
Fax: 904.332.0997

January 30, 2017

Ms. Kathy Winburn, AICP
City of Alachua
Planning & Community Development Director
15100 NW 142nd Terrace
Alachua, Florida 32615
(386) 418-6121

RE: Concurrency Impact Analysis (Site Plan Application)
Walmart #3873-00, Alachua, FL
CPH Project No. W13392

Dear Ms. Winburn:

The Concurrency Impact Analysis calculations have been performed for the proposed 161,397 SF Walmart Supercenter. Public facility capacities are based on the January 2017 Monitoring Report supplied by the City's Planning and Zoning staff.

The proposed Walmart Supercenter will not adversely impact the adopted Level of Service ("LOS") for the City of Alachua's public facilities. In accordance with Section 2.4.14 of the City of Alachua Land Development Regulations ("LDRs"), the following summary addresses the proposed infrastructure impacts based on available information.

The proposed Walmart Supercenter is projected to generate 5,898 new daily trips, of which 506 trips occur during the PM peak hour. Trip generation calculations are provided in Table 1A.

Table 1A: Trip Generation Calculations

ITE Land Use[1]	Units (1,000 s.f.)	Daily		Peak Hour	
		Rate*	Trips	Rate*	Trips
Discount Superstore (ITE 813)	161.40	50.75	8,191	4.35	702
Pass-by Trips for Superstore (28%)			*2,293*		*196*
Total			**5,898**	**-**	**506**

**Source: ITE Trip Generation 9th Edition and ITE Trip Generation Manual, 3rd Edition*

Per Section 2.4.14(H)(2)(b) of the City's LDRs, the affected roadways for developments generating more than 1,000 external average daily trips are as follows:

- Those on which the development's impacts are five percent (5%) or greater of the maximum service volume of the roadway; and
- All roadway segments located partially or wholly within one-half (1/2) mile of the development's ingress / egress, or to the nearest major intersection, whichever is greater.

The following conditions and assumptions were utilized to estimate impacts to roadway segments tracked in the City of Alachua Concurrency Monitoring Report. These assumptions are also reflected on the Transportation Concurrency Map provided as Appendix A to this report.

Table 1B: Significance Test

Roadway	Segment	Lanes	Project Distrib	Project Trips	Segment Capacity	Project Significance
US 441	NW 188th St to CR 235A	4	20%	101	3,200	3.2%
	CR 235A to I-75	4	37%	187	3,200	**5.8%**
	I-75 to NW 147th Dr	4	52%	263	3,200	**8.2%**
	NW 147th Dr to SR 235	4	34%	172	3,200	**5.4%**
	SR 235 to Rachael Blvd	4	19%	96	3,200	3.0%
CR 235A	NW 138th Ave to US 441	2	5%	25	1,050	2.4%
	US 441 to I-75	2	7%	35	1,050	3.3%
SR 235	Peggy Rd to US 441	2	8%	41	960	4.3%
	US 441 to NW 140th St	2	6%	30	960	3.1%

**Significance is defined as an impact of 5% or more of the segment's capacity; data obtained from the Traffic Impact Analysis prepared by Traffic and Mobility Consultants dated September 2016.*

- The roadway segment along US 441 from CR 235A to I-75 is within the ½-mile radius of the project's ingress / egress point.
- The roadway segment along US 441 from I-75 to NW 147th Drive is within the ½-mile radius of the project's ingress / egress point.
- The roadway segment along US 441 from NW 147th Drive to SR 235 is within the ½-mile radius of the project's ingress / egress point.
- The affected roadway segments are only those accessible within the ½-mile radius of the project's ingress / egress point: US Hwy 441.
- The roadway segments along US 441 from CR 235A to I-75, along US 441 from I-75 to NW 147th Drive, and along US 441 from NW 147th Drive to SR 235 also qualify as affected roadways because the proposed Walmart Supercenter's impacts will be five percent (5%) or greater of the maximum service volume of such roadway segments.

Table 1C: Impacted Roadway Segments

Segment Description	Comp Plan MSV*	Existing Traffic*	Reserved Trips*	Available Capacity*
US Hwy 441 (SR235 to NCL of Alachua)	35,500 AADT 3,200 PHr	24,411 AADT 2,319 PHr	2,260 AADT 214 PHr	8,829 AADT 667 PHr

**Source: City of Alachua January 2017 Development Monitoring Report*

Table 1D: Roadway Capacity

Segment Description	Available Capacity	Additional Trips	Residual Capacity
US Hwy 441 (SR235 to NCL of Alachua)	8,829 AADT 667 PHr	5,898 AADT 506 PHr	2,931 AADT 161 PHr

Conclusion: As evident by the available capacities identified in Tables 1C and 1D, the trips generated by the proposed Walmart Supercenter will not exceed the adopted LOS standards. Capacity exists to handle the additional trips resulting from the proposed Walmart Supercenter.

Table 2: Potable Water Impact

System Category	Gallons Per Day
Current Permitted Capacity*	2,300,000
Less Actual Potable Water Flow*	1,190,000
Reserved Capacity*	135,912
Residual Capacity*	974,088
Residual Capacity with Walmart Supercenter 469 fixture units x 7.136 GPD = 3,347 GPD**	**970,741**
Percentage of Permitted Design Capacity Utilized	**58%**

**Source: City of Alachua January 2017 Development Monitoring Report.*
***Source: Wal-Mart Proto Utility Loads, Appendix B*

Conclusion: The demand generated by the proposed Walmart Supercenter will not exceed the adopted LOS standard for potable water. Capacity exists to handle the additional demand resulting from the proposed Walmart Supercenter.

Table 3: Sanitary Sewer Impact

System Category	Gallons Per Day
Current Permitted Capacity*	1,500,000
Less Actual Treatment Plant Flows*	615,000
Reserved Capacity*	96,322
Residual Capacity*	788,678
Residual Capacity with Walmart Supercenter 469 fixture units x 6.422 GPD = 3,012 GPD**	**785,666**
Percentage of Permitted Design Capacity Utilized	**48%**

**Source: City of Alachua January 2017 Development Monitoring Report.*
***Source: Ch. 64E-6.008, F.A.C.*

Conclusion: The demand generated by the proposed Walmart Supercenter will not exceed the adopted LOS standard for sanitary sewer. Capacity exists to handle the additional demand resulting from the proposed Walmart Supercenter.

Table 4: Solid Waste Impact

System Category	Tons Per Year
12 tons per month*	144
Existing Demand**	7,221.16
Reserved Capacity**	1,162.75
Total Average Solid Waste Disposal for the Facility**	**50-Year Capacity**

**Source: Based on Historical Data of Store Operations, provided by Doug Sanders, Store Innovations and Sustainability Division for Walmart, Appendix B.*
***Source: City of Alachua January 2017 Development Monitoring Report*

Conclusion: The demand generated by the proposed Walmart Supercenter will not exceed the adopted LOS standard for solid waste. Capacity exists to handle the additional demand resulting from the proposed Walmart Supercenter.

Recreational Impacts

Conclusion: The subject project is commercial and will not generate any recreational impacts.

Table 5: Stormwater Impacts

Attenuation		
Storm Event (YR/HR)	**Discharge Rate Pre/Post (CFS)**	**Discharge Volume Pre/Post (AC-FT)**
100/24	85.05/4.18	14.4/3.3
100/72	66.58/5.13	21.1/12.1
100/168	42.27/6.34	26.7/19.1
100/240	35.7/10.82	31.8/25.9

Water Quality	
Required Treatment Volume (AC-FT)	**Provided Treatment Volume (AC-FT)**
7.13	21.35

Conclusion: The post-development discharge rate and volume are less than the pre-development discharge rate and volume at the US Hwy 441 boundary for the critical 100-year storm events. Additionally, water quality treatment volume is provided on-site.

The above information establishes that the proposed Walmart Supercenter will not have any adverse impacts to the City of Alachua's adopted Level of Service for public facilities.

We appreciate your consideration of Walmart's application for its proposed Supercenter. Please do not hesitate to contact me if you have any questions or need further information.

Sincerely,
CPH, INC.

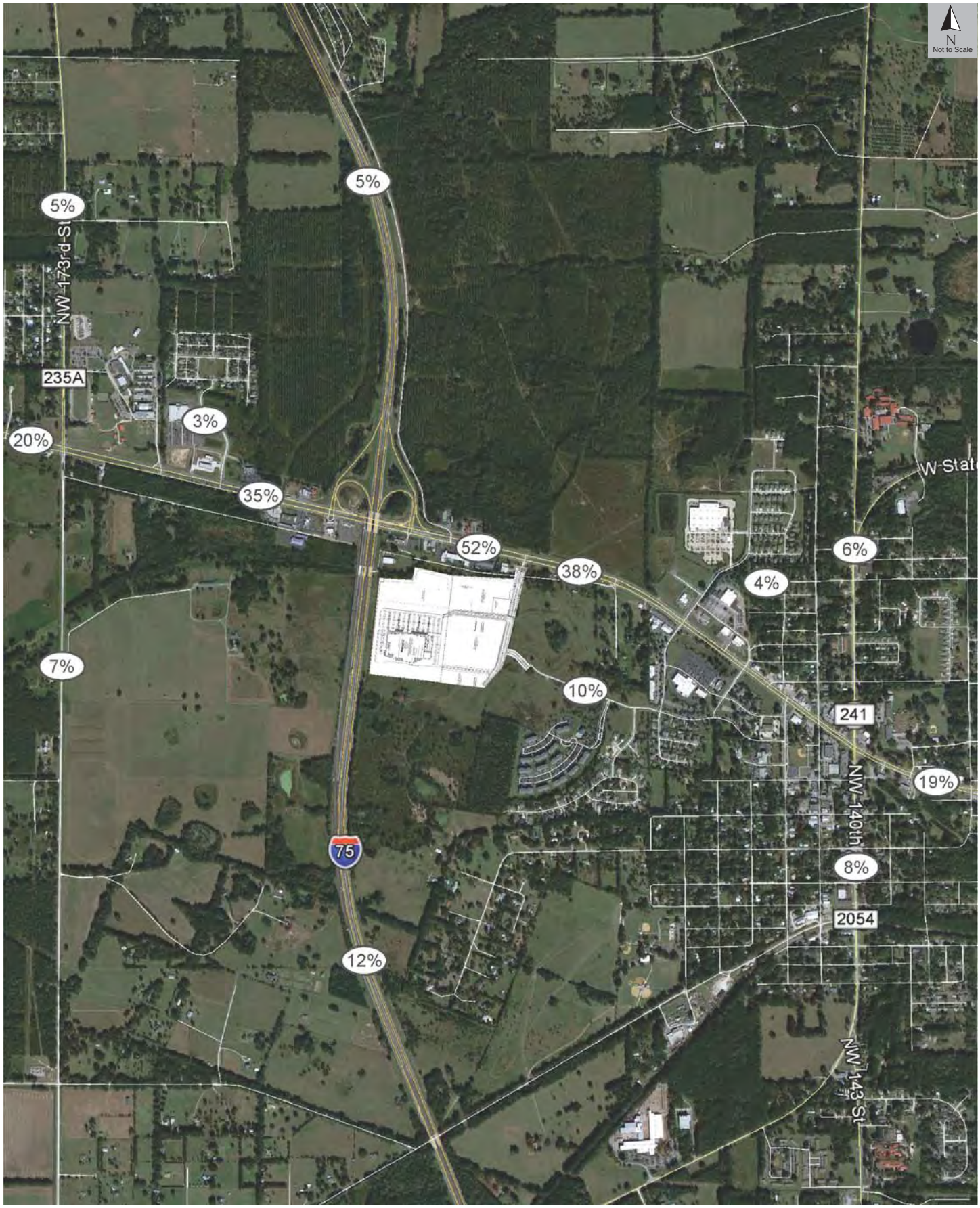
Brian Cassidy, P.E.

cc: file
David Theriaque, ESQ

APPENDIX A

PROJECT DISTRIBUTION MAP

(a.k.a. TRANSPORTATION CONCURRENCY MAP)



TMC Traffic & Mobility Consultants

Project Trip Distribution

Walmart #3873 - Alachua
16-016

Figure
3

APPENDIX B

WALMART PROTOTYPICAL UTILITY LOADS

WAL-MART PROTOTYPICAL UTILITY LOADS

Prototype & Size	Water Fixture Units	Domestic Wtr Instantaneous Peak Flow (GPM)	Average Sewer Load ~90% Dom (GPD)	Average Domestic Water Demand (GPD)	Average Irrigation Water Demand (GPD)	Minimum Residual Press. FRONT ENTRY (PSI)	Minimum Residual Press. REAR ENTRY (PSI)	Connected Gas Load (MBH)	Actual Avg Zone 3 Peak Gas Load (MBH)	Actual Avg Zone 4 Peak Gas Load (MBH)	Actual Avg Zone 5 Peak Gas Load (MBH)	Connected Electric Load (kVA)	Diversified Electric Load (kVA)	Actual Avg Zone 3 Peak Electric Load (kVA)	Actual Avg Zone 4 Peak Electric Load (kVA)	Actual Avg Zone 5 Peak Electric Load (kVA)
Sam's 136	399	130	2,813	3,125	4,400	N/A psi	45 psi	10,409	1,381	1,750	2,289	1,829	1,893	758	754	729
Supercenter 70	148	79	1,323	1,470	No Utility Bills Available for 70	N/A psi	45 psi	3,824	530	831	938	1,157	1,108	310	312	292
Supercenter 102	364	119	2,020	2,244	3,490	N/A psi	45 psi	7,729	763	1,256	1,560	1,649	1,586	629	629	576
Supercenter 122	429	117	2,274	2,526	4,653	N/A psi	44 psi	8,609	907	1,319	1,685	1,923	1,860	717	541	541
Supercenter 151	469	125	3,012	3,347	5,379	N/A psi	45 psi	13,079	1,368	1,817	2,118	2,385	2,253	777	739	659
Supercenter 182	458	125	4,513	5,015	8,693	N/A psi	45 psi	11,359	1,554	1,877	2,322	2,577	2,448	844	834	767
WNM 41	171	81	1,109	1,232	4,400	N/A psi	37 psi	2,669	644	820	993	978	937	334	319	319
XPS	30	23	184	205	No Utility Bills Available for XPS	N/A psi	37 psi	517	73	129	129	328	334	116	110	110
Sams Fuel Station	12	16	36	40	N/A	N/A psi	45 psi	N/A	N/A	N/A	N/A	34	34	14	14	14
SUP8-740 Fuel Station	27	40	225	250	N/A	N/A psi	45 psi	N/A	N/A	N/A	N/A	96	90	35	35	35
SUP8-1440 Fuel Station	39	47	270	300	N/A	N/A psi	45 psi	N/A	N/A	N/A	N/A	126	119	46	46	46
WNM-740 Fuel Station	27	40	225	250	N/A	N/A psi	45 psi	N/A	N/A	N/A	N/A	91	84	38	38	38
WNM-192 Fuel Station	12	16	36	40	N/A	N/A psi	45 psi	N/A	N/A	N/A	N/A	40	41	14	14	14

Summary Page

Comparison of GPD flow ratios for all the Prototypes

Comparing Gallons Per day / Water Fixture Unit Ratio
and Gallons Per day / Square Feet area

SF	WFU	GPD	GPD/SF Ratio	GPD/WFU Ratio	Notes
41	171	1,232	30	7	
102	364	2,244	22	6	1,2
122	429	2,526	21	6	
136	399	3,125	23	8	
151	469	3,347	22	7	
182	458	5,015	28	11	

1) The 102 prototype had only 12 sample stores data and the GPD appears to be low.

2) The GPD for the 102 prototype was determined by using a 22 GPD/ SF ratio of 22 and prorating.

Summary Page

151 Prototype

# of Stores Data	33
Demand (85th Percentile)	**4,257**
Average Water Demand (All Stores) (All Data)	3,407
Low 1 STD (All Data)	1,255
	2,151
High 1 STD (All Data)	4,662
Average Water Demand (Average of Stores within plus or minus one standard deviation. (Prorated per area for current proto)	**3,347**

150 Prototype

1 STD Average	**3,325**	**GPD from 2011 Utility load Schedule for 150 Proto** **3134**
Average	**3,407**	
Low 1 STD	**2,151**	
High 1 STD	**4,662**	
One Standard Deviation	**1,255**	
Two Standard Deviation	**2,510**	

4395	01-4395	POST FALLS	ID	SUPERCENTEI	150	49,000	2012,12	#N/A	919000	1,259		low but cor
4695	01-4695	GODFREY	IL	SUPERCENTEI	150	47,875	2012,12	#N/A	1,057,745.39	**1,449**		low but cor
876	01-0876	MANY	LA	SUPERCENTEI	150	74,000	2012,12	#N/A	2189000	1,999		low but pre
2143	01-2143	SKOWHEGAN	ME	SUPERCENTEI	150	198,982	2012,10	#N/A	2211241.416	2,047		low but pre
1753	01-1753	DERRY	NH	SUPERCENTEI	150	226,936	2012,11	#N/A	2503689.294	2,286	1 sdt dev	low but pre
2543	01-2543	PITTSTON	PA	SUPERCENTEI	150	69,600	2012,12	#N/A	2667400	2,436	1 sdt dev	low but pre
4404	01-4404	ETTERS	PA	SUPERCENTEI	150	85,000	2012,12	#N/A	1644000	2,574	1 sdt dev	low but pre
4403	01-4403	QUEENSBURY	NY	SUPERCENTEI	150	195,000	2012,10	#N/A	950000	2,603	1 sdt dev	low but pre
5748	01-5748	GRIMES	IA	SUPERCENTEI	150	88,000	2012,12	#N/A	1940000	2,658	1 sdt dev	low but pre
4276	01-4276	TAYLOR	PA	SUPERCENTEI	150	104,500	2012,12	#N/A	973500	2,704	1 sdt dev	low but pre
1666	01-1666	CHARLOTTE	NC	SUPERCENTEI	150	0	2012,12	#N/A	3032602.403	2,769	1 sdt dev	Pretty cons
5779	01-5779	KING GEORGE	VA	SUPERCENTEI	150	152,100	2012,12	#N/A	1024100	2,806	1 sdt dev	Pretty cons
1329	01-1329	LOGANSPORT	IN	SUPERCENTEI	150	85,500	2012,12	#N/A	3205300	2,927	1 sdt dev	Pretty cons
1404	01-1404	LAKE ZURICH	IL	SUPERCENTEI	150	98,000	2012,12	#N/A	3245000	2,963	1 sdt dev	Pretty cons
4509	01-4509	BENBROOK	TX	SUPERCENTEI	150	98,743	2012,12	#N/A	2186553.073	2,995	1 sdt dev	Pretty cons
5705	01-5705	GARDEN CITY	SC	SUPERCENTEI	150	86,100	2012,12	#N/A	2194900	3,007	1 sdt dev	Pretty cons
1780	01-1780	CHARLOTTESVILLE	VA	SUPERCENTEI	150	113,500	2012,12	#N/A	3580653	3,270	1 sdt dev	Pretty cons
1394	01-1394	GREENFIELD	WI	SUPERCENTEI	150	169,060	2012,12	#N/A	3583916.653	3,273	1 sdt dev	Pretty cons
829	01-0829	SANTA FE	NM	WAL-MART	150	153,000	2012,12	#N/A	3830200	3,498	1 sdt dev	consistent
2936	01-2936	MILWAUKEE	WI	SUPERCENTEI	150	205,714	2012,11	#N/A	2630490.773	3,603	1 sdt dev	consistent
2081	01-2081	CLEARWATER	FL	SUPERCENTEI	150	124,900	2012,12	#N/A	2603800	3,616	1 sdt dev	Used last 2
1694	01-1694	MARION	NC	SUPERCENTEI	150	113,000	2012,12	#N/A	3969988.293	3,626	1 sdt dev	consistent
2469	01-2469	LONGVIEW	WA	SUPERCENTEI	150	114,452	2012,12	#N/A	4107646.584	3,751	1 sdt dev	ok
2438	01-2438	STAFFORD	VA	SUPERCENTEI	150	121,000	2012,12	#N/A	2,840,000	3,944	1 sdt dev	Used last 2
2141	01-2141	PHILADELPHIA	PA	SUPERCENTEI	150	112,208	2012,12	#N/A	4337952.968	3,962	1 sdt dev	ok
3573	01-3573	MANASSAS (S)	VA	SUPERCENTEI	150	138,000	2012,12	#N/A	2880000	4,000	1 sdt dev	Used last 2
5786	01-5786	JASPER	GA	SUPERCENTEI	150	500	2012,12	#N/A	2962400	4,058	1 sdt dev	ok sort of?
2147	01-2147	MISSOULA	MT	SUPERCENTEI	150	136,893	2012,12	#N/A	3064020.582	4,256	1 sdt dev	Used last 2
1079	01-1079	NEW SMYRNA BEA	FL	SUPERCENTEI	150	138,000	2012,12	#N/A	1535000	4,264	1 sdt dev	Used last 1
5845	01-5845	NICEVILLE	FL	SUPERCENTEI	150	76,400	2012,12	#N/A	3353000	4,593	1 sdt dev	ok
2960	01-2960	LOS ANGELES	CA	WAL-MART	150	136,145	2012,12	#N/A	6412300.887	5,856		ok
2070	01-2070	ANCHORAGE	AK	WAL-MART	150	173,000	2012,12	#N/A	7146000	6,526		ok
1068	01-1068	SEBASTIAN	FL	SUPERCENTEI	150	214,000	2012,12	#N/A	7487000	6,837		stable and
313	01-0313	HOUSE SPRINGS	MO	SUPERCENTEI	150	79,000	2012,12	#N/A	1253000	1,144		erratic
5068	01-5068	MASSAPEQUA (LI)	NY	WAL-MART	150	4,713	2012,12	#N/A	1179826.118	1,616		erratic
2247	01-2247	CARY	NC	SUPERCENTEI	150	77,807	2012,12	#N/A	2041595	1,864	1 sdt dev	erratic
4677	01-4677	MUSKEGO	WI	SUPERCENTEI	150	155,000	2012,12	#N/A	1600000	2,192	1 sdt dev	erratic
2272	01-2272	CAMBRIDGE	MD	SUPERCENTEI	150	88,000	2012,12	#N/A	2549000	2,328	1 sdt dev	erratic
5787	01-5787	RAEFORD	NC	SUPERCENTEI	150	115,120	2012,12	#N/A	1764450	2,417	1 sdt dev	erratic
3780	01-3780	FALLSTON	MD	SUPERCENTEI	150	444,000	2012,11	#N/A	1923000	2,634	1 sdt dev	erratic
5709	01-5709	LOCUST GROVE	GA	SUPERCENTEI	150	68,000	2012,12	#N/A	1450000	2,648	1 sdt dev	erratic
4600	01-4600	GRETNA	NE	SUPERCENTEI	150	82,286	2012,12	#N/A	1992062.21	2,729	1 sdt dev	erratic
1970	01-1970	HUDSON	MA	SUPERCENTEI	150	230,175	2012,10	#N/A	3045839.257	2,782	1 sdt dev	erratic
1897	01-1897	ELK GROVE VILLA	IL	SUPERCENTEI	150	152,000	2012,11	#N/A	3246000	2,964	1 sdt dev	erratic
465	01-0465	FLORESVILLE	TX	SUPERCENTEI	150	21,300	2012,12	#N/A	3316200	3,028	1 sdt dev	erratic
1658	01-1658	THOMSON	GA	SUPERCENTEI	150	72,000	2012,12	#N/A	3528484	3,222	1 sdt dev	erratic
1403	01-1403	CORNELIA	GA	SUPERCENTEI	150	18,700	2012,12	#N/A	3757200	3,431	1 sdt dev	erratic
5761	01-5761	CANTON	MI	SUPERCENTEI	150	305,000	2012,11	#N/A	4162000	5,701	1 sdt dev	very erratic
3423	01-3423	SANTA FE	NM	SUPERCENTEI	150	89,900	2012,12	#N/A	2773601.22	6,079		very erratic
2187	01-2187	WENATCHEE	WA	SUPERCENTEI	150	0	2012,12	#N/A	8241600	7,527		very erratic
2545	01-2545	MARINETTE	WI	SUPERCENTEI	150	104,000	2012,12	#N/A	10159000	9,278		erratic
1688	01-1688	VIRGINIA BEACH	VA	SUPERCENTEI	150	1,615,792	2012,12	#N/A	13711043.28	12,522		erratic
5947	01-5947	EL PASO	TX	SUPERCENTEI	150	339,616	2012,12	**Cooling Towers**	14533194.54	19,908		
1870	01-1870	PULLMAN	WA	SUPERCENTEI	150	77,797	2012,12	**HE store**	5135396.71	4,690	1 sdt dev	

Walmart Supercenter
Alachua, Florida
Market and Impact Study

Prepared For:
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Prepared by

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March, 2016

Table of Contents

1.0 Study Introduction and Outline 1

2.0 Overview of Area Economic Conditions
- 2.1 The Regional Marketplace 3
- 2.2 Alachua County Introductory Profile 4
- 2.3 Growth Patterns in Alachua County, 1980 – 2015 4
- 2.4 Growth Forecasts for Alachua County, 2015 – 2040 10

3.0 Market Conditions for Retail Shopping
- 3.1 Defining the Retail Shopping Center: Primary Center Characteristics 15
- 3.2 Retail Shopping Center Trade Areas 16
- 3.3 Defining the Walmart Supercenter Primary Retail Trade Area 18
- 3.4 Economic and Demographic Trends in the Walmart Supercenter Primary Retail Trade Area 19
- 3.5 Average Daily Traffic Volumes 20
- 3.6 Primary Trade Area Retail Purchasing Potential and Net Demand Estimation 21
- 3.7 Other Market Demand Considerations 22
- 3.8 Market Demand Conclusions 23

4.0 Analysis of Project Local Benefits: Economic and Fiscal Impacts to the City of Alachua from the Walmart Supercenter
- 4.1 Assumptions Used to Estimate Direct Economic and Fiscal Impacts 24
- 4.2 Local Benefits from Walmart's Presence 27
- 4.3 Summary of Economic and Fiscal Impacts to the City of Alachua from the Walmart Supercenter 28

Appendix: Market Area Commercial/Retail Inventory 29

1.0: Study Introduction and Outline

Florida Economic Advisors was retained to conduct an economic analysis that investigates the market supportability and fiscal impacts of a proposed Walmart Supercenter in the City of Alachua, Florida (Alachua County). The proposed Supercenter would be constructed on a site located immediately southeast of the Interstate 75 - US Highway 441 interchange.

Proposed Walmart Supercenter Site

The principal objective of this study is to address the following issues:

1. The market supportability of the proposed Walmart Supercenter, given local area demographics and existing commercial businesses within the Walmart Supercenter's principal trade area of influence.
2. Local economic and fiscal impacts to the City of Alachua from ongoing operation of the proposed Walmart Supercenter. These impacts include property tax revenue, employment generation, earnings, and annual business output (sales).

This report includes 4 sections with an associated appendix. Section 2 defines the regional area of economic influence for the subject property, and provides an overview of historical and projected economic conditions influencing development in the region. Section 3 discusses demand and supply factors contributing to market support for the Walmart Supercenter. Finally, Section 4 presents a summary of economic and fiscal analysis impacts to the City of Alachua from project development.

Section 4.3.4(G)(7)(b)(iii) of the City of Alachua Land Development Regulations ("LDRs") establishes the requirements for a market and impact study. This report satisfies impact study requirements a., b., g., and h.

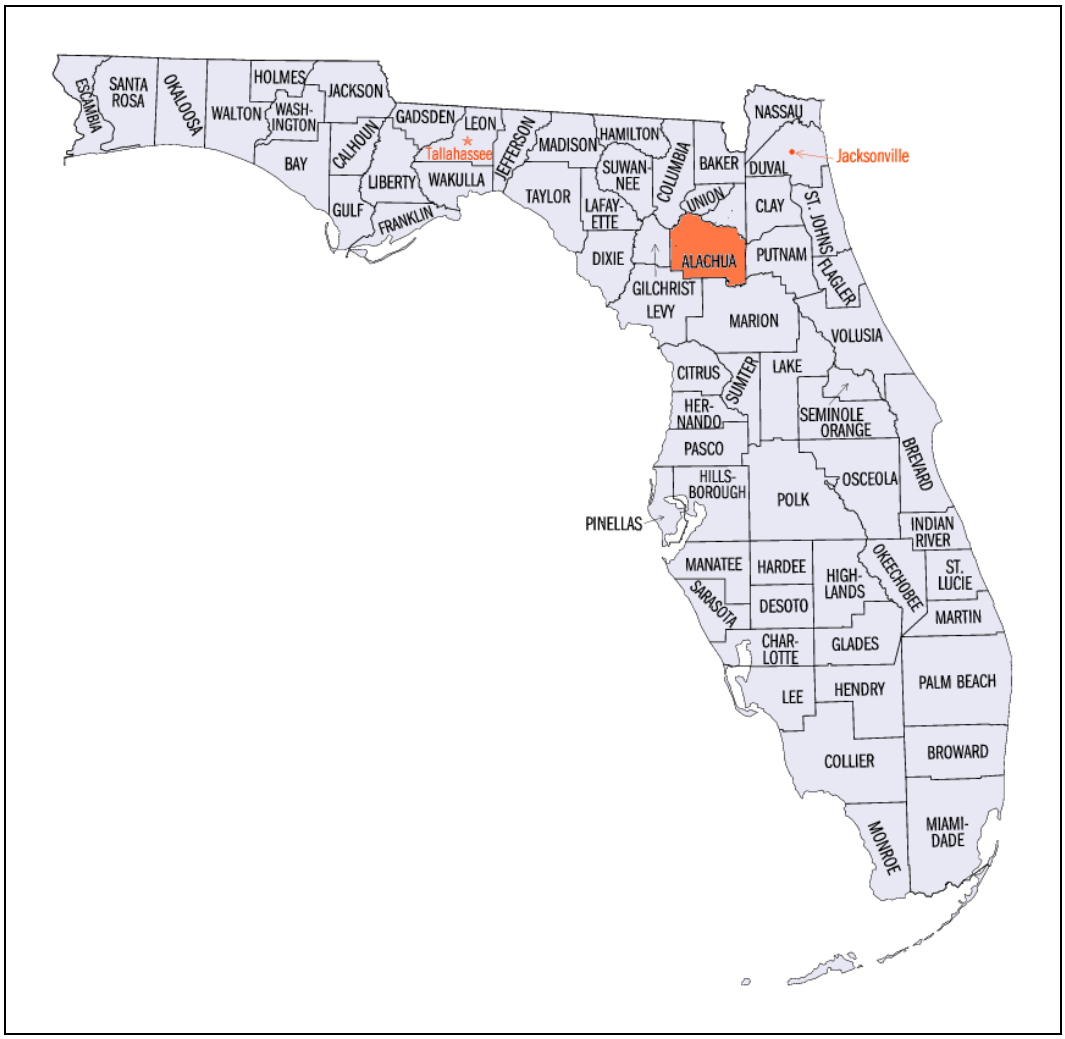
a. Inventory of local retail base
   (Presented in appendix and discussed in Sections 3.6 through 3.8)
b. Assessment of market areas and market impacts
   (Presented in Table 3.1 and discussed in Sections 3.3 through 3.8)
c. *Services and capital expenditures*
   (Presented in work products submitted by team planners/engineers)
d. *Traffic and other service impacts*
   (Presented in work products submitted by team planners/engineers)
e. *Cost of associated economic development incentives*
   (The Applicant is not seeking any incentives or tax credits)
f. *Impact of redevelopment zone tax-increment financing*
   (The project does not meet qualification criteria for this program)
g. Inventory locations of competing retailers
   (Presented in appendix and discussed in Sections 3.6 through 3.8)
h. Assessment of impact on existing local retailers
   (Discussed in Sections 3.6 through 3.8)

This report provides additional economic and fiscal assessments beyond those required by the LDRs, but which are important in evaluating the economic and fiscal impacts of the proposed Walmart Supercenter.

2.0: Overview of Area Economic Conditions

2.1 The Regional Marketplace

A market area is defined in the Dictionary of Real Estate Terms, 4th Edition, as "*a geographic region from which one can expect primary demand for a specific product or service provided at a fixed location*." For purposes of this report, the regional area of economic influence for the subject property is Alachua County, although the specific trade area is smaller in size (*discussed in Section 3 of the report*).



This regional market area was established with the recognition of the subject property's geographic location and access to major thoroughfares that serve the entirety of the County. The trade area

draw of the proposed Walmart Supercenter will extend beyond the municipal boundaries of the City of Alachua, into the County domain. Based on these factors, and standard practices for evaluating long-range economic trends at the county level of geography, economic history and projections presented in this section focus on the larger local geography of Alachua County.

2.2 Alachua County Introductory Profile

Home to the University of Florida and 3 of northern Florida's premier medical centers, Alachua County is an area whose economy relies heavily on the industry sectors of education and healthcare services. These industries, which are less sensitive to changes in the state and national economy, have provided Alachua County with a degree of long-term economic stability that other Florida counties have not enjoyed. Conversely, the County has not realized the development surge experienced by other Florida markets with a rapidly-urbanizing population base, such as Miami, Orlando, Tampa, or Jacksonville. Economic growth in Alachua County is best characterized as modest and steady, with the potential for some expansion of the real estate market as urban markets to the south reach buildout levels.

Current estimates place the population of Alachua County at 258,780, with an attendant employment base of 162,440. The County's largest employers include the University of Florida, UF Health, the Alachua County School Board, the VA Medical Center, the City of Gainesville, Walmart, Alachua County Government, Publix Supermarkets, Gator Dining Services, RTI Surgical, Dollar General, North Florida Regional Medical Center, and Nationwide Insurance. These organizations employ 58,112 persons, or 36 percent of the total County workforce.

2.3 Growth Patterns in Alachua County, 1980 to 2015

Future development potential in Alachua County is closely tied to the continued demand for additional housing. Population growth is the major determinant of the long-range trend for housing demand in the area.

The shaded portion of Table 2.1 provides the base historical economic conditions for this market.

Table 2.1: Alachua County Economic Profile

Growth 1980-2015	1980	1990	2000	2015	2020	2030	2040
Total Population (Thousands)	152.23	182.72	218.61	258.78	273.58	304.98	335.55
Age Under 5 Years	9.79	12.51	11.11	14.49	14.86	16.13	17.06
5 to 9 Years	9.29	12.13	12.01	12.97	14.19	15.96	17.17
10 to 14 Years	9.70	10.50	12.97	11.47	12.59	15.62	16.67
15 to 19 Years	18.12	18.06	22.51	20.03	19.44	20.61	21.46
20 to 24 Years	28.82	27.92	36.40	44.85	43.18	41.98	44.60
25 to 29 Years	17.55	17.05	17.55	22.48	25.23	18.62	22.96
30 to 34 Years	12.86	15.51	13.75	17.83	21.70	17.31	19.77
35 to 39 Years	8.48	14.04	14.22	14.06	17.00	24.04	17.18
40 to 44 Years	6.24	11.82	14.72	12.54	13.50	22.28	17.45
45 to 49 Years	5.45	8.46	14.36	12.27	12.29	17.86	25.15
50 to 54 Years	5.36	6.33	12.51	13.77	11.96	14.43	23.46
55 to 59 Years	5.32	5.66	8.80	14.78	13.43	13.04	18.69
60 to 64 Years	4.36	5.79	6.67	14.27	14.29	12.51	14.91
65 to 69 Years	3.93	5.70	5.66	11.75	13.67	13.74	13.11
70 to 74 Years	2.95	4.31	5.24	7.75	10.41	13.43	11.50
75 to 79 Years	2.01	3.22	4.52	5.24	6.77	11.85	11.66
80 to 84 Years	1.15	2.10	3.09	3.76	4.27	8.38	10.66
85 Years and Over	0.85	1.62	2.52	4.45	4.80	7.18	12.10
Median Age of Population	25.10	27.92	29.03	30.82	31.53	36.55	37.34
Caucasian Population	n.a.	136.42	153.87	165.01	169.90	187.79	205.86
African-American Population	n.a.	34.54	42.82	53.94	58.68	69.15	79.65
Native American Population	n.a.	0.33	0.56	0.68	0.70	0.74	0.71
Asian and Pacific Islander Population	n.a.	4.55	8.57	15.96	18.30	20.88	23.27
Hispanic Population	4.72	6.88	12.80	23.20	26.00	26.41	26.05
Total Employment (Thousands)	79.97	113.57	144.63	162.44	175.72	201.41	224.96
Farm	1.62	1.47	1.87	2.15	2.25	2.42	2.55
Forestry, Fishing, & Other	0.29	0.53	0.60	0.65	0.68	0.72	0.77
Mining	0.04	0.04	0.05	0.42	0.45	0.52	0.60
Utilities	0.11	0.13	0.12	0.48	0.55	0.71	0.88
Construction	4.54	5.44	5.96	5.82	6.42	7.23	7.60
Manufacturing	3.30	3.70	4.46	4.84	4.97	5.11	5.06
Wholesale Trade	1.82	2.04	2.34	2.89	3.10	3.47	3.75
Retail Trade	8.96	12.88	16.40	15.62	16.90	18.97	21.20
Transportation & Warehousing	0.76	0.89	1.34	2.69	2.96	3.59	4.25
Information	1.15	1.94	2.82	1.55	1.64	1.82	2.03
Finance & Insurance	3.33	4.46	5.54	6.57	7.17	8.35	9.13
Real Estate, Rental & Lease	2.69	3.60	4.47	5.97	6.53	7.81	9.33
Professional & Tech Services	2.86	5.42	7.99	9.63	10.25	11.65	13.26
Management & Enterprises	0.05	0.10	0.17	1.46	1.71	2.33	3.14
Administrative & Waste Services	1.71	3.11	7.29	7.34	7.85	8.79	9.42
Educational Services	0.67	1.27	2.04	2.77	2.99	3.37	3.66
Health Care & Social Assistance	7.37	13.95	19.23	24.19	26.71	32.46	38.40
Arts, Entertainment & Recreation	1.17	1.98	2.82	3.40	3.64	4.08	4.43
Accomodation & Food Services	5.50	9.28	10.81	12.88	13.95	16.03	17.72
Other Services	2.64	4.98	6.29	7.46	8.16	9.75	11.58
Federal Civilian Government	2.49	3.08	3.05	4.51	4.76	5.28	5.85
Federal Military Government	0.49	0.66	0.54	0.56	0.56	0.56	0.56
State and Local Government	26.43	32.62	38.43	37.33	41.52	46.38	49.77
Total Earnings (Millions 2009$)	2,306.08	3,777.25	5,417.90	7,272.79	8,298.87	10,209.50	12,384.52
Per Capita Income (2009$)	18,414.00	25,914.00	30,267.00	36,608.00	39,314.00	44,734.00	49,015.00
Avg. Household Income (2009$)	48,072.00	62,818.00	71,784.00	83,062.00	88,722.00	102,663.00	115,094.00
Per Capita Income (Current$)	8,098.00	17,476.00	25,161.00	40,396.00	48,037.00	73,967.00	117,940.00
Avg. Household Income (Current$)	21,141.00	42,364.00	59,675.00	91,657.00	108,409.00	169,750.00	276,941.00
Retail Sales Per Household (2009$)	30,769.00	31,386.00	34,878.00	36,807.00	38,058.00	40,830.00	44,034.00
Number of Households (Thousands)	55.35	71.79	87.84	100.56	116.05	127.02	136.58
Persons Per Household	2.58	2.39	2.34	2.26	2.23	2.27	2.32
Households With Money Income (Thousands)	55.35	71.79	87.84	100.56	116.05	127.02	136.58
Less than $10,000 (2009$)	n.a.	10.59	12.34	14.81	15.38	13.92	12.35
$10,000 - $29,999	n.a.	20.72	23.17	26.16	25.89	23.43	20.79
$30,000 - $44,999	n.a.	10.48	12.49	15.35	16.26	14.72	13.06
$45,000 - $59,999	n.a.	8.92	10.35	10.93	15.30	17.53	16.00
$60,000 - $74,999	n.a.	5.91	7.02	8.79	10.68	14.18	17.82
$75,000 - $99,999	n.a.	6.92	8.44	8.92	12.14	16.13	21.10
$100,000 - $124,999	n.a.	4.10	5.74	5.84	7.58	10.07	13.17
$125,000 - $149,999	n.a.	1.44	2.93	3.46	4.67	6.21	8.12
$150,000 - $199,999	n.a.	1.65	2.56	3.01	3.90	5.19	6.78
$200,000 or more	n.a.	1.05	2.80	3.30	4.24	5.64	7.37

Data Sources: Woods & Poole Economics, Inc.

2015 estimates indicate Alachua County has a population of 258,780[1] persons and 162,440 attendant employees. These totals comprise 1.3 percent of the state's population, and 1.5 percent of the state's employment base. From 1980 through 2015, population growth within the market area accounted for 1.04 percent of state growth, or 106,550 persons. This equates to average annual population growth of 3,044 persons per year.

During this period, 82,470 net new jobs were created in Alachua County, resulting in 1.3 percent of Florida's employment growth. The annualized rate of employment growth from 1980 – 2015 was 2,356 jobs.

Figure 1 presents a graphic summary of population growth by age within the County. It is quite interesting to note that the growth in Alachua County's population was quite balanced among these age groups. Few counties in Florida experienced such balanced population change over this time period.

Fig. 1: Alachua County
Population Growth by Age 1980-2015

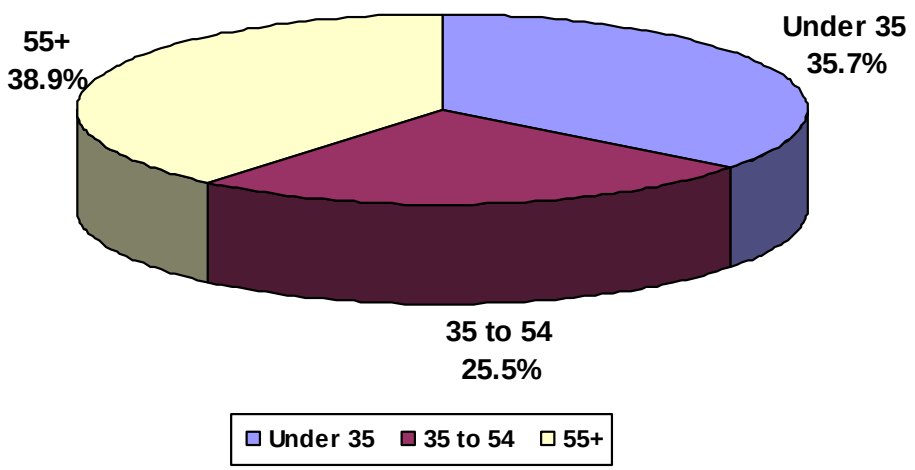
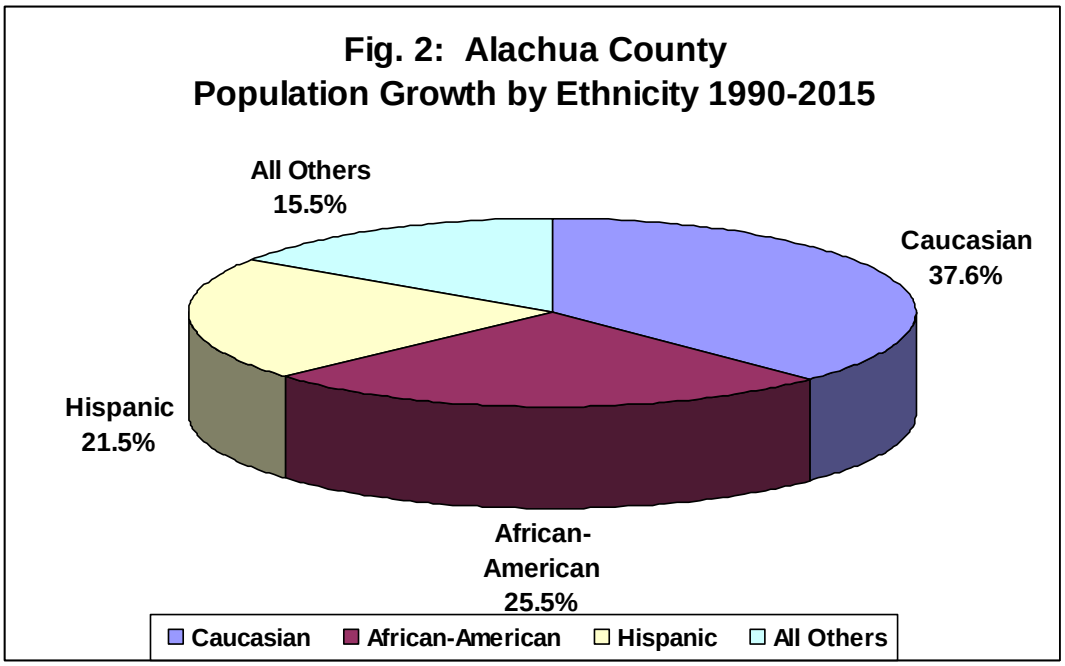
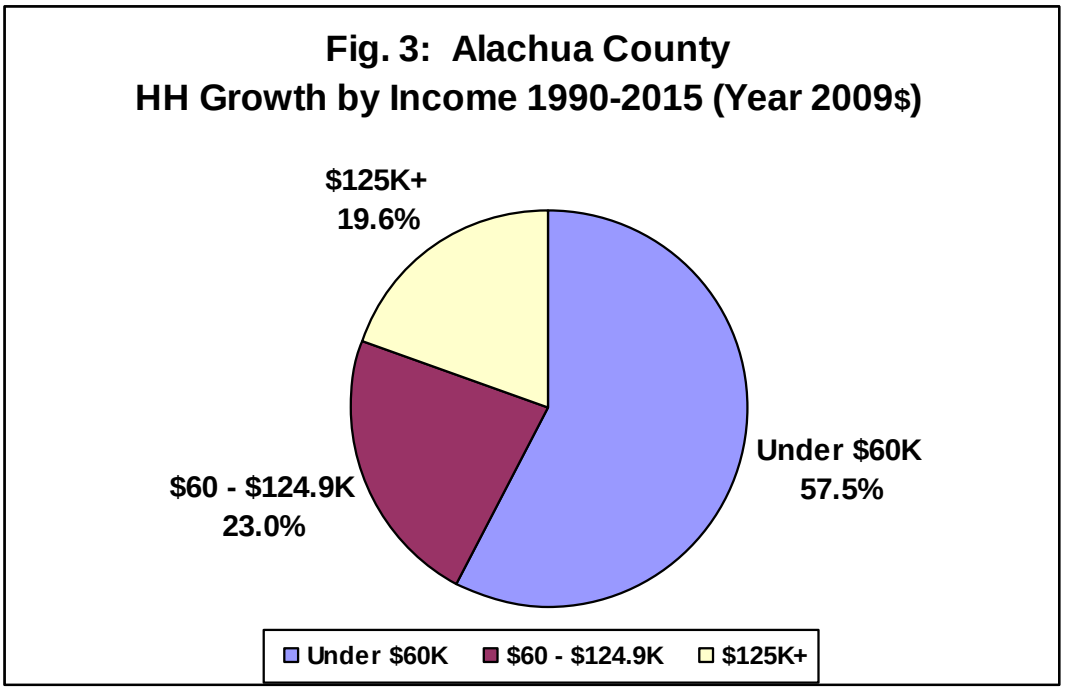


Figure 2 presents the profile of area population growth by race/ethnic status. Caucasian residents accounted for the largest share of population growth during the 1990-2015 period, at 37.6 percent. African-Americans accounted for 25.5 percent of

[1] Source: Woods & Poole Economics. 2015 estimate as reported the University of Florida Bureau of Economic and Business Research: 254,893

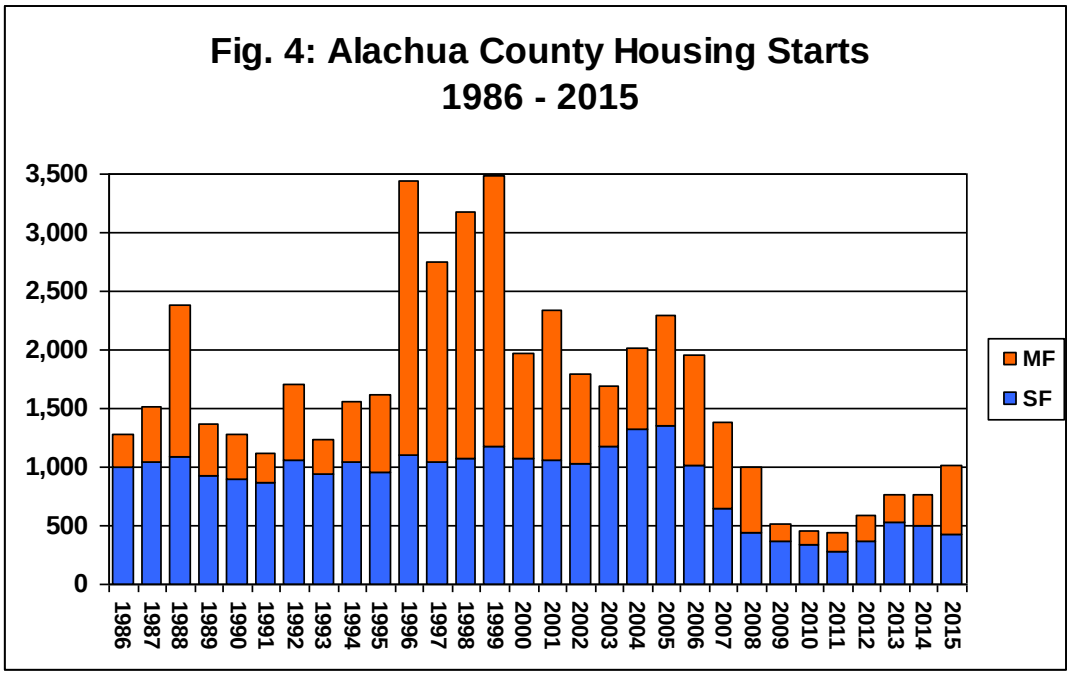
population growth over the previous 25 years, and Hispanics accounted for 21.5 percent of the population growth during this period. This growth trend differs from many urban locales in Central and South Florida, where Hispanic cohorts comprise considerably larger shares of county population growth.





The profile of household growth by income status is presented in Figure 3. From 1990 through 2015, the proportion of household growth with inflation-adjusted incomes[2] of under $60,000 per year accounted for 57.5 percent of Alachua County's household growth. Middle to upper-middle income households, those in the $60,000 to $124,999 annual income range, held a noticeable but smaller share of growth at 23.0 percent. Upper income households (those with annual incomes of $125,000 or more) made up 19.6 percent of the County's household formation during this 25-year period. In inflation-adjusted dollars, the average household income has increased by 72.8 percent since 1980. 2015 estimates show that the average household income within the region is $91,657.

With a considerable population of non-family households, Alachua County's household size has historically been lower than other areas within the state. In fact, the persons-per-household estimate has declined from 2.58 in 1980 to 2.26 in 2015.



Prior to the mid-1990s, Alachua County typically[3] achieved between 1,000 and 1,500 housing starts annually. Substantial inventories of multifamily units were delivered in the latter half of the 1990s, effectively doubling the rate of new residential construction within the County. Alachua was not immune to the effects of the

[2] In Year 2009 dollars. Source: Woods and Poole Economics, Inc.
[3] In 1988, there were 2,300 housing starts in the County.

national housing market collapse and subsequent recession. By 2010 residential construction activity had fallen off by nearly 75 percent from the first half of the decade. A modest recovery began in 2012; over the past three years, annual starts have approached the 1,000-unit mark.

Of the 73,680 new jobs created during the 1980 – 2015 period, industry sectors with the largest growth included health care & social services (16,820) and government (13,000). These 2 sectors have accounted for 36.2 percent of Alachua County's employment growth since 1980.

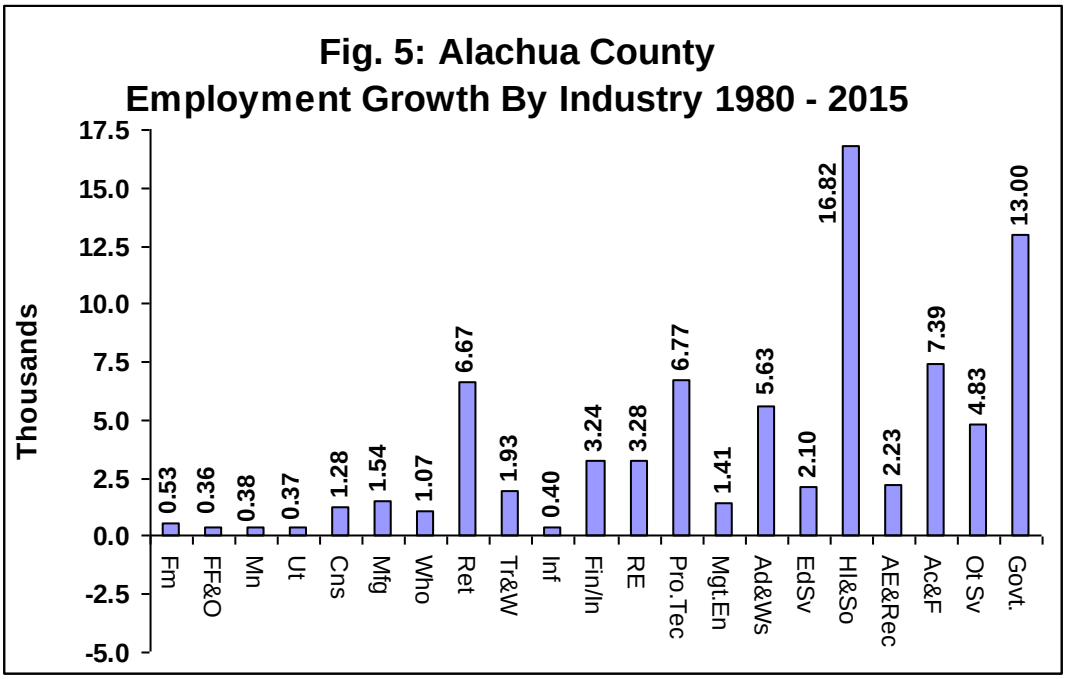
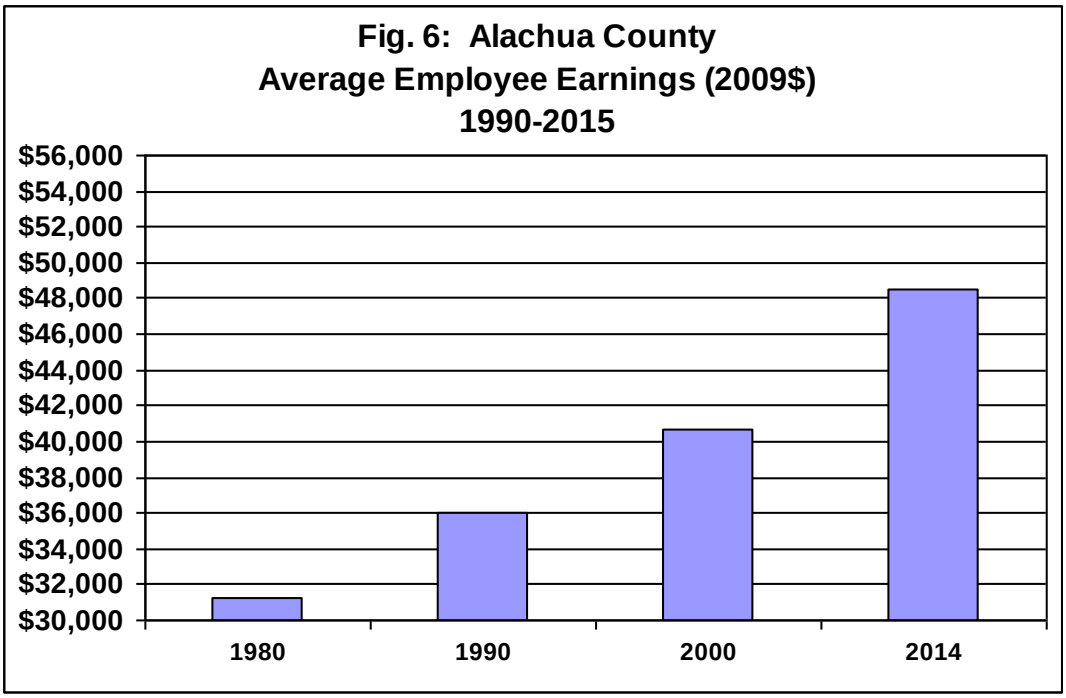


Fig. 5(a)
Industry Sector Abbreviations

Fm = Farm
FF&O = Forestry, Fishing, & Other
Mn = Mining
Ut = Utilities
Cns = Construction
Mfg = Manufacturing
Who = Wholesale Trade
Ret = Retail Trade
Tr&W = Transportation & Warehousing
Inf = Information
Fin/In = Finance & Insurance
RE = Real Estate, Rental & Lease
Pro.Tec = Professional & Tech Services
Mgt.En = Management & Enterprises
Ad&Ws = Administrative & Waste Services
EdSv = Educational Services
Hl&So = Health Care & Social Assistance
AE&Rec = Arts, Entertainment & Recreation
Ac&F = Accomodation & Food Services
Ot Sv = Other Services
Govt = Government



The average wage in Alachua County, when adjusted for inflation, has risen by 57.9 percent since 1980. The 2015 average wage in Alachua County was $49,049, approximately 2 percent higher than the statewide average.

2.4 Growth Forecasts for Alachua County, 2015 to 2040

The long-range forecasts presented for Alachua County reflect a market whose economic base will continue to grow steadily relative to the levels realized during the 1980-2015 period. Annual population and employment growth from 2015 to 2040 will generally maintain the pace of 1980–2015 historic growth. Population change will be influenced slightly more by increases in the 35 - 54 and 55+ age groups. Middle income households will account for more than two-thirds of resident expansion over the next quarter century. Finally, the ethnic composition of new residents is expected to reflect the county's historic trend of diverse growth.

Over the 2015–2040 period, population growth within Alachua County will account for 1.01 percent of state growth, or 76,770 persons. The area will see 62,520 net new jobs created by 2040, which will equate to 1.24 percent of Florida's projected employment growth. The shaded portion of Table 2.2 provides the statistical detail of these economic forecasts.

Table 2.2: Alachua County Economic Profile

Growth 2015-2040	1980	1990	2000	2015	2020	2030	2040
Total Population (Thousands)	152.23	182.72	218.61	258.78	273.58	304.98	335.55
Age Under 5 Years	9.79	12.51	11.11	14.49	14.86	16.13	17.06
5 to 9 Years	9.29	12.13	12.01	12.97	14.19	15.96	17.17
10 to 14 Years	9.70	10.50	12.97	11.47	12.59	15.62	16.67
15 to 19 Years	18.12	18.06	22.51	20.03	19.44	20.61	21.46
20 to 24 Years	28.82	27.92	36.40	44.85	43.18	41.98	44.60
25 to 29 Years	17.55	17.05	17.55	22.48	25.23	18.62	22.96
30 to 34 Years	12.86	15.51	13.75	17.83	21.70	17.31	19.77
35 to 39 Years	8.48	14.04	14.22	14.06	17.00	24.04	17.18
40 to 44 Years	6.24	11.82	14.72	12.54	13.50	22.28	17.45
45 to 49 Years	5.45	8.46	14.36	12.27	12.29	17.86	25.15
50 to 54 Years	5.36	6.33	12.51	13.77	11.96	14.43	23.46
55 to 59 Years	5.32	5.66	8.80	14.78	13.43	13.04	18.69
60 to 64 Years	4.36	5.79	6.67	14.27	14.29	12.51	14.91
65 to 69 Years	3.93	5.70	5.66	11.75	13.67	13.74	13.11
70 to 74 Years	2.95	4.31	5.24	7.75	10.41	13.43	11.50
75 to 79 Years	2.01	3.22	4.52	5.24	6.77	11.85	11.66
80 to 84 Years	1.15	2.10	3.09	3.76	4.27	8.38	10.66
85 Years and Over	0.85	1.62	2.52	4.45	4.80	7.18	12.10
Median Age of Population	25.10	27.92	29.03	30.82	31.53	36.55	37.34
Caucasian Population	n.a.	136.42	153.87	165.01	169.90	187.79	205.86
African-American Population	n.a.	34.54	42.82	53.94	58.68	69.15	79.65
Native American Population	n.a.	0.33	0.56	0.68	0.70	0.74	0.71
Asian and Pacific Islander Population	n.a.	4.55	8.57	15.96	18.30	20.88	23.27
Hispanic Population	4.72	6.88	12.80	23.20	26.00	26.41	26.05
Total Employment (Thousands)	79.97	113.57	144.63	162.44	175.72	201.41	224.96
Farm	1.62	1.47	1.87	2.15	2.25	2.42	2.55
Forestry, Fishing, & Other	0.29	0.53	0.60	0.65	0.68	0.72	0.77
Mining	0.04	0.04	0.05	0.42	0.45	0.52	0.60
Utilities	0.11	0.13	0.12	0.48	0.55	0.71	0.88
Construction	4.54	5.44	5.96	5.82	6.42	7.23	7.60
Manufacturing	3.30	3.70	4.46	4.84	4.97	5.11	5.06
Wholesale Trade	1.82	2.04	2.34	2.89	3.10	3.47	3.75
Retail Trade	8.96	12.88	16.40	15.62	16.90	18.97	21.20
Transportation & Warehousing	0.76	0.89	1.34	2.69	2.96	3.59	4.25
Information	1.15	1.94	2.82	1.55	1.64	1.82	2.03
Finance & Insurance	3.33	4.46	5.54	6.57	7.17	8.35	9.13
Real Estate, Rental & Lease	2.69	3.60	4.47	5.97	6.53	7.81	9.33
Professional & Tech Services	2.86	5.42	7.99	9.63	10.25	11.65	13.26
Management & Enterprises	0.05	0.10	0.17	1.46	1.71	2.33	3.14
Administrative & Waste Services	1.71	3.11	7.29	7.34	7.85	8.79	9.42
Educational Services	0.67	1.27	2.04	2.77	2.99	3.37	3.66
Health Care & Social Assistance	7.37	13.95	19.23	24.19	26.71	32.46	38.40
Arts, Entertainment & Recreation	1.17	1.98	2.82	3.40	3.64	4.08	4.43
Accomodation & Food Services	5.50	9.28	10.81	12.88	13.95	16.03	17.72
Other Services	2.64	4.98	6.29	7.46	8.16	9.75	11.58
Federal Civilian Government	2.49	3.08	3.05	4.51	4.76	5.28	5.85
Federal Military Government	0.49	0.66	0.54	0.56	0.56	0.56	0.56
State and Local Government	26.43	32.62	38.43	37.33	41.52	46.38	49.77
Total Earnings (Millions 2009$)	2,306.08	3,777.25	5,417.90	7,272.79	8,298.87	10,209.50	12,384.52
Per Capita Income (2009$)	18,414.00	25,914.00	30,267.00	36,608.00	39,314.00	44,734.00	49,015.00
Avg. Household Income (2009$)	48,072.00	62,818.00	71,784.00	83,062.00	88,722.00	102,663.00	115,094.00
Per Capita Income (Current$)	8,098.00	17,476.00	25,161.00	40,396.00	48,037.00	73,967.00	117,940.00
Avg. Household Income (Current$)	21,141.00	42,364.00	59,675.00	91,657.00	108,409.00	169,750.00	276,941.00
Retail Sales Per Household (2009$)	30,769.00	31,386.00	34,878.00	36,807.00	38,058.00	40,830.00	44,034.00
Number of Households (Thousands)	55.35	71.79	87.84	100.56	116.05	127.02	136.58
Persons Per Household	2.58	2.39	2.34	2.26	2.23	2.27	2.32
Households With Money Income (Thousands)	55.35	71.79	87.84	100.56	116.05	127.02	136.58
Less than $10,000 (2009$)	n.a.	10.59	12.34	14.81	15.38	13.92	12.35
$10,000 - $29,999	n.a.	20.72	23.17	26.16	25.89	23.43	20.79
$30,000 - $44,999	n.a.	10.48	12.49	15.35	16.26	14.72	13.06
$45,000 - $59,999	n.a.	8.92	10.35	10.93	15.30	17.53	16.00
$60,000 - $74,999	n.a.	5.91	7.02	8.79	10.68	14.18	17.82
$75,000 - $99,999	n.a.	6.92	8.44	8.92	12.14	16.13	21.10
$100,000 - $124,999	n.a.	4.10	5.74	5.84	7.58	10.07	13.17
$125,000 - $149,999	n.a.	1.44	2.93	3.46	4.67	6.21	8.12
$150,000 - $199,999	n.a.	1.65	2.56	3.01	3.90	5.19	6.78
$200,000 or more	n.a.	1.05	2.80	3.30	4.24	5.64	7.37

Data Sources: Woods & Poole Economics, Inc.

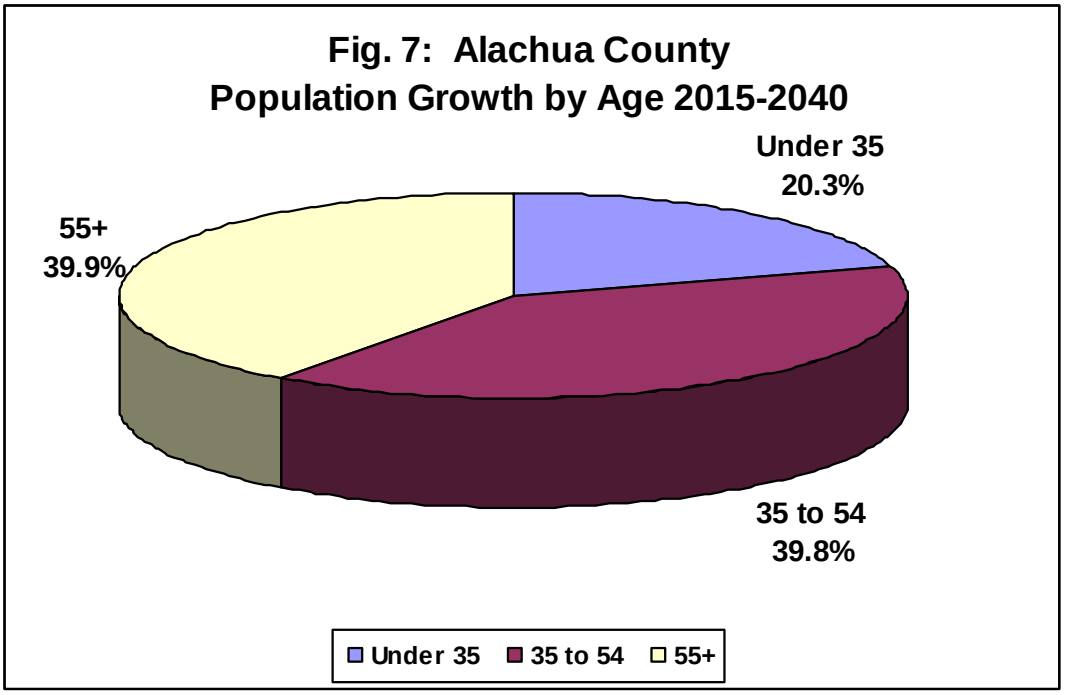
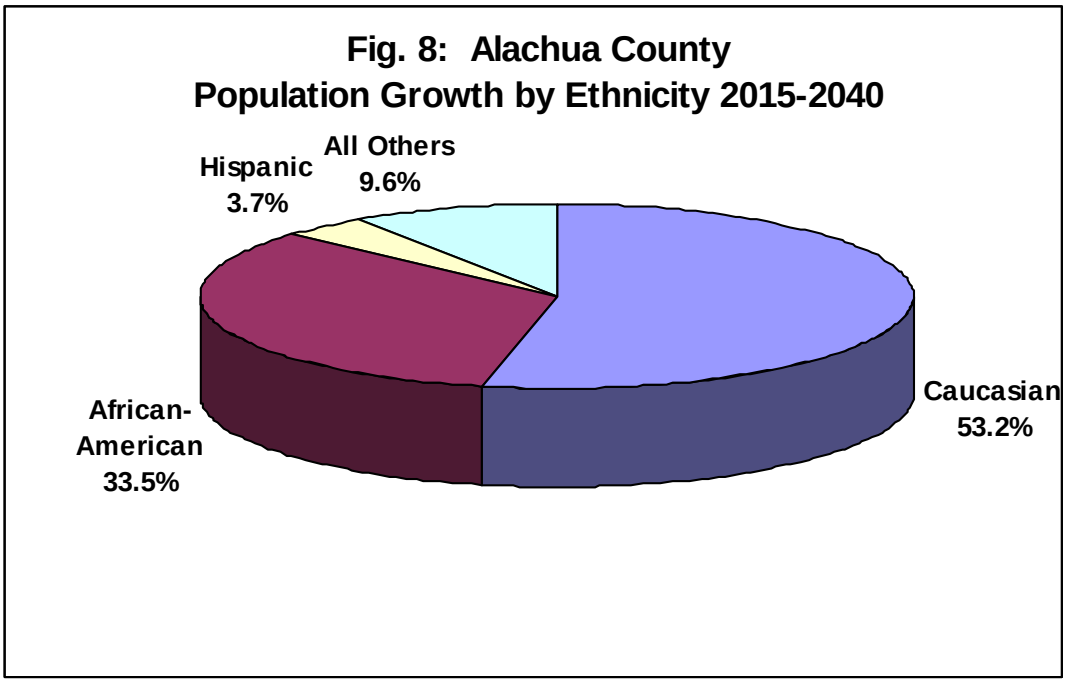
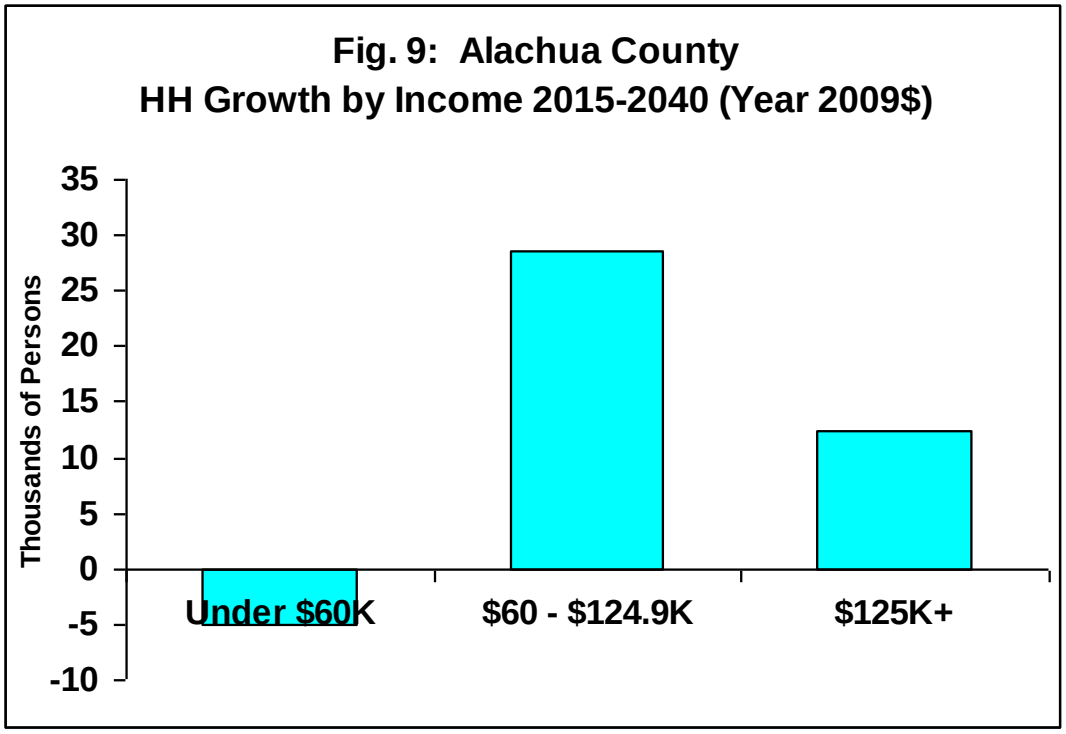


Figure 7 indicates an anticipated shift in the distribution of population growth by age. Alachua County will see a slightly larger share of growth in the 55+ age group over the forecast horizon, relative to the historic trend. 39.9 percent of forecasted population growth will occur in the 55+ age range. This growth will come from a combination of in-migration from older households and aging of the local population base. In addition, residents of the "working adult" age cohort (35-54) will account for 39.8 percent of the projected resident increase, which reflects an 14.3 percent increase in forecasted growth share relative to the historic period.

Figure 8 suggests that the future demographic profile of area residents will be more diverse than ever. During the 2015-2040 period, minority ethnic and racial segments will comprise 46.8 percent of Alachua County's population growth. This is an impressive statistic, considering the 1990 population of Alachua County was 75 percent Caucasian. Minority growth shares will increase across the board, including the African-American, Hispanic, and Asian ethnic cohorts.

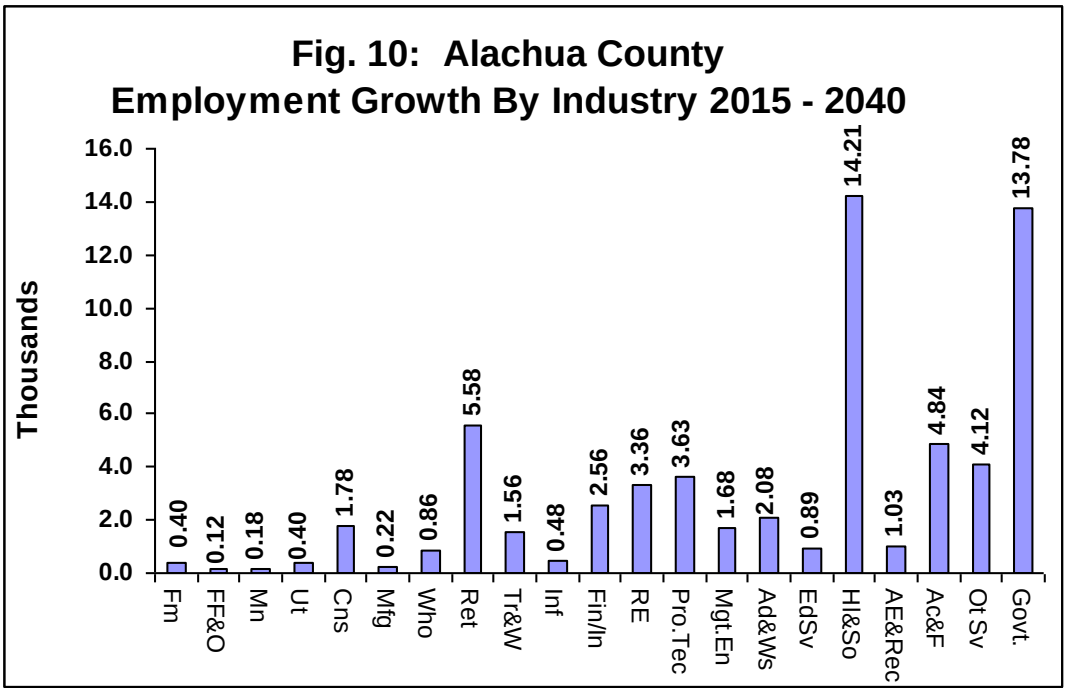


Forecasts of household growth by income suggest that Alachua County's wealth will be expanding considerably, as virtually all residential growth is expected to occur in households with incomes in excess of $60,000 per year.



The under $60,000 income segment, accounting for nearly half of 1990-2014 household growth, is projected to decline over the next 24 years.

The historic trend of annual housing starts reflects an average construction pace of 1,630 units per year. The 2015-2040 forecasts of household formation suggest growth of 1,441 occupied units per year. A forecasted long-range annual average of 1,536 starts per year for Alachua County would be consistent with these trends, although we would expect to see cycles of rapid construction (as was been the case during the late 1990s) and below average construction rates (as witnessed recently) during the forecast period.



53.7 percent of forecasted job growth (33,570 jobs by 2040) is expected to occur in the following sectors: retail (5,580), health & social services (14,210), and government (13,780). Alachua County's economy is expected to expand its base of industries, serving a growing and demographically evolving population. In total, service and government occupations will account for 74 percent of County jobs created between 2015 and 2040.

3.0: Market Conditions for Retail Shopping

3.1 Defining the Retail Shopping Center: Primary Center Characteristics

The Urban Land Institute, in its "Dollars and Cents of Shopping Centers" publication, provides category-based classifications of modern shopping centers, outlining center size and store mix characteristics that define a center's type and function. These classifications and associated characteristics are outlined in this section.

As the shopping center evolved, **5 basic types** emerged, each distinctive in its own function: the **convenience**, the **neighborhood**, the **community**, the **regional**, and the **super regional**. In all cases, a shopping center's type and function are determined by its major tenant or tenants and the size of the trade area; they are never based solely on the area of the site or the square footage of the structure.

A **convenience center** provides for the sale of personal services and convenience goods similar to those of a neighborhood center. It contains a minimum of 3 stores, with a gross leasable area ("GLA") of up to 30,000 square feet. Instead of being anchored by a supermarket, a convenience center usually is anchored by some other type of personal/convenience service such as a minimarket.

A **neighborhood center** provides for the sale of convenience goods (foods, drugs, and sundries) and personal services (laundry and dry cleaning, barbering, shoe repairing, etc.) for the day-to-day living needs of the immediate neighborhood. It is built around the supermarket as the principal tenant and typically contains a GLA of about 60,000 square feet. In practice, it may range in size from 30,000 to 100,000 square feet.

In addition to the convenience goods and personal services offered by the neighborhood center, a **community center** provides a wider range of soft lines (wearing apparel for men, women, and children), and hard lines (hardware and appliances). The community center makes merchandise available in a greater variety of sizes, styles, colors, and prices. Many centers are built around a junior department store, variety store, super drugstore, or discount department store as the major tenant, in addition to a supermarket. Although a community center does not have a full

line department store, it may have a strong specialty store or stores. Its typical size is about 150,000 square feet, but in practice, it may range from 100,000 to 500,000 or more square feet. Centers that fit the general profile of a community center but contain more than 250,000 square feet are classified as **super community centers**. In some cases, these centers contain more than 1 million square feet. As a result, the community center is the most difficult to estimate for size and pulling power.

A **power center** is a type of super community center. It contains category-specific, off-price anchors of 20,000 or more square feet. These anchors typically emphasize hard goods such as consumer electronics, sporting goods, office supplies, home furnishings, home improvement goods, bulk foods, drugs, health and beauty aids, toys, and personal computer hardware/software. They tend to have narrowly focused but deeply merchandised category offerings together with more broadly merchandised, price oriented warehouse club and discount department stores. Anchors in power centers typically occupy 85 percent or more of the total GLA. A center such as Walmart could be best represented within this category classification.

A **regional center** provides general merchandise, apparel, furniture, and home furnishings in depth and variety, as well as a range of services and recreational facilities. It is built around 1 or 2 full line department stores of generally not less than 50,000 square feet. Its typical size is about 500,000 square feet of GLA; in practice, it may range from 250,000 to more than 900,000 square feet. The regional center provides services typical of a business district yet not as extensive as those of the super regional center.

A **super regional center** offers extensive variety in general merchandise, apparel, furniture, and home furnishings, as well as a variety of services and recreation facilities. It is built around 3 or more full-line department stores generally of not less than 75,000 square feet each. The typical size of a super regional center is about 1 million square feet of GLA. In practice, the size ranges from about 500,000 to more than 1.5 million square feet.

3.2 Retail Shopping Center Trade Areas

The ULI "Shopping Center Development Handbook" contains a detailed discussion of shopping center trade area analysis that outlines the complexities involved in the assessment of appropriate

retail trade areas. The following paragraphs from Page 46 of the handbook include excerpts of this text discussion.

> "The character of a prospective retail trade area and the nature of the competition in it shape the character of a shopping center, including type, quality, and tone. The trade area traditionally is the geographic area that provides the majority of the steady customers necessary to support a shopping center.
>
> As new shopping centers do not create buying power, they must attract existing customers from their trade areas and capture a portion of the new buying power as those areas grow. Hence, the extent of the area from which a new center can be expected to draw the most significant number of its customers - whether residents, workers, tourists, or business travelers - must first be established. Within a shopping center's trade area, customers closest to the site affect the center most strongly, with their influence diminishing gradually as the distance increases. Trade areas are usually divided into 3 categories or zones of influence, although the following general guidelines describing these categories vary depending on the type of center and other factors."

A center's *primary trade area* is the geographical area from which the center derives its largest share of repeat sales. This area typically extends to 1.5 miles for neighborhood centers, 3 to 5 miles for community and super community centers, and 8 to 12 miles for regional malls. Driving time within the primary trade area ranges correspondingly from 5 to 30 minutes, and 70 to 80 percent of the center's regular customers are drawn from this area.

The *secondary trade area* generates 15 to 20 percent of the total sales of an average shopping center. The extent of the secondary trade area is heavily influenced by the existence of similar centers nearby, and, as a result, the extent of secondary trade areas varies widely, depending on the center's type and size, and the competition. For the largest centers, it may extend 3 to 7 miles beyond the primary trade area.

The *tertiary* or fringe trade area is the broadest area from which consumers may be drawn. A small but sometimes significant share of a center's customers - particularly for large specialty centers,

downtown centers, off-price centers, and entertainment centers, may be drawn from tourists and other travelers who do not live in the market at all. Although customers who live in the tertiary trade area must travel greater distances, they may be attracted to a center because it is more accessible or it offers unusual goods, greater parking, more stores, better value, or higher quality merchandise than closer centers. For the largest centers, driving time from the tertiary market area to the site can be an hour or more, extending 15 miles beyond the primary trade area in major metropolitan markets. In much smaller markets, however, it may extend 50 miles or more.

3.3 Defining the Walmart Supercenter Primary Retail Trade Area

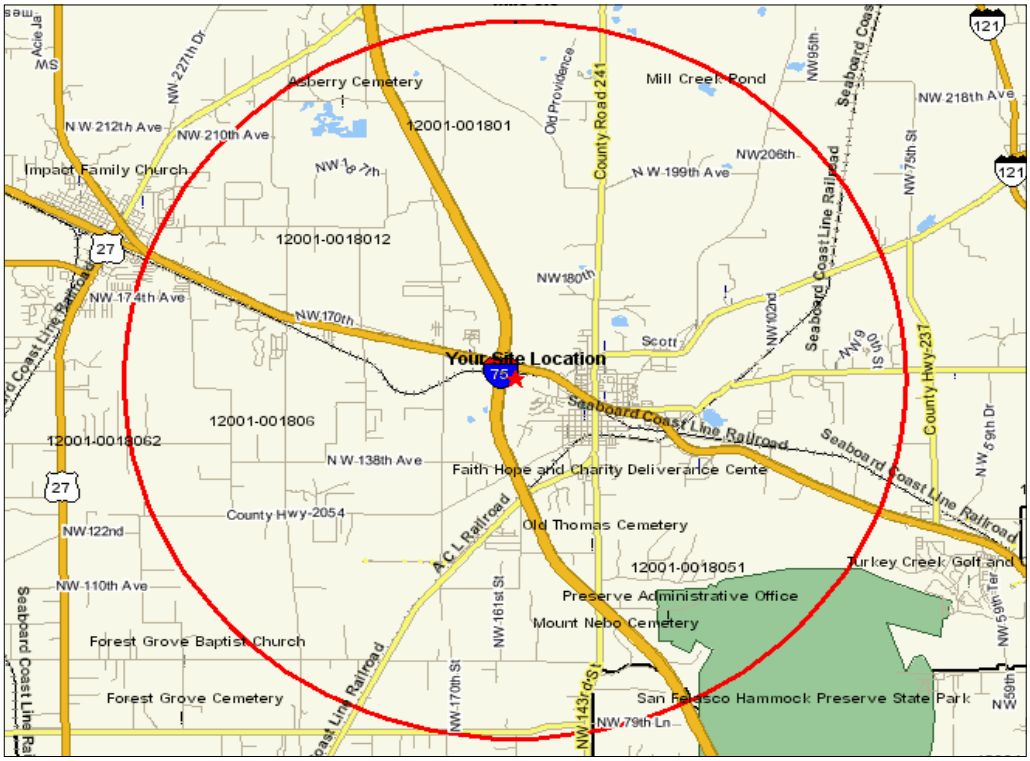
Defining geographic markets or economic trade areas is, at best, an imprecise science. Advanced spatial theory in the study of urban and regional economics provides us with some foundation for this exercise. Distinct economic markets generally exist in geographic areas with largely homogenous demographic, political, and transportation elements.

In the case of the proposed Walmart Supercenter, the above factors are considered in establishing the trade area boundary, but they are not the "limiting factors" in determining the extent of the market's influence on this property (and vice versa).

As a guide for the development of these trade area boundaries, we again turn to the ULI as an authoritative data source. In its series of development handbooks for commercial uses, the ULI has stated that the primary trade area for super community retail centers extends a distance from 3 to 5 miles outward from the site. For purposes of this analysis, we consider demographic, expenditure, and sales patterns within a 5-mile radius of the proposed Supercenter site in order to evaluate the state of the retail market as it applies to this shopping location.

3.4 Economic and Demographic Trends in the Walmart Supercenter Primary Retail Trade Area

Table 3.1: Walmart Supercenter Primary Trade Area
Economic Trends and Estimates of Retail Shopping Demand and Supply



	2000	2010	2015 (est.)	2020 (proj.)
Population	9,140	11,138	11,666	12,315
Households	3,448	4,336	4,596	4,886
Families	2,580	3,094	3,275	3,483
Housing Units	3,653	4,830	5,092	5,382
Median HH Income	$38,955	n/a	$54,892	$56,123
Average HH Income	$51,419	n/a	$67,187	$69,350
Median Owner-Occupied Housing Unit Value	$78,844	n/a	$182,917	$189,805
Total No. Of Employees			6,622	
Estimated Annual Employee Earnings ($millions)			$267.5	
Aggregate Consumer Expenditures			$234,122,574	
Consumer Retail Expenditures, Plus Eating & Drinking Places			192,253,448	
Estimated Store Sales Per Square Foot			$300	
Estimated Sq. Footage Demand for Retail Space			640,845	
Estimated Supply of Retail Sq. Footage			513,949	
EXISTING PRIMARY TRADE AREA UNMET DEMAND			**126,896**	**sq. feet**

From 2000 through 2015, the population of the 5-mile primary trade area increased by 27.6 percent. 2015 estimates place the permanent population of this area at 11,666, residing in 4,596 households. As Table 3.1 illustrates, the rate of growth in this trade area has been noticeable over the last 15 years, and it should remain steady for the foreseeable future.

Year 2020 forecasts project the 5-mile primary trade area at a population of 12,315 persons, with 4,886 households, and 5,382 housing units. These forecasts indicate that, over the next 5 years, the trade area will grow by 649 persons, 290 households, and 290 housing units. 2015 estimates indicate that households within the 5-mile primary trade area have an average annual income of $67,187. Five-year forecasts suggest that average annual income of households within this trade area will approach $69,350 by 2020.

The U.S. Bureau of the Census Censtats business database indicates that businesses within the 5-mile primary trade area employ 6,622 persons in a variety of industries. These businesses generate $267.5 million annually in employee earnings.

3.5 Average Daily Traffic Volumes

In the process of retail site selection, the assessment of traffic flow in front of a candidate parcel is an important element in the determination of a site's viability. Strong pass-by traffic volumes can support, or in some cases even supplant, trade area population as the most important criterion for a development location decision. In the case of the proposed project, the site's superior frontage and visibility along I-75 at the US 441 interchange is a major factor influencing development opportunities for a Walmart Supercenter.

The Florida Department of Transportation's 2014 Annual Average Daily Traffic report[2] indicates an average daily traffic volume of 55,500 vehicles at the I-75 reporting station closest to the subject property (FDOT Counter 0454). On US 441, the counter closest to the subject property has an average daily traffic count of 20,000 (FDOT Counter 5106). This volume of traffic is substantial, and more than adequate to meet basic site selection thresholds for the considered uses.

[2] Source: FDOT website http://www2.dot.state.fl.us/FloridaTrafficOnline. Represents most recent data available.

3.6 Primary Trade Area Retail Purchasing Potential and Net Demand Estimation

According to estimates generated by Nielsen Claritas, the 4,596 households within the 5-mile primary retail trade area spent $192.3 million in 2015 on purchases at retail stores and eating/drinking establishments. This is represented in Table 3.1. The "typical" household within the trade area spent $41,830 in 2015 at these venues.

This $192.3 million volume of consumer expenditures, at a store sales volume of $300 per square foot, translates to gross retail trade area demand of 640,845 square feet.

In order to account for dollars spent in local businesses that may offer competitive or complimentary services, FEA obtained an inventory of local commercial establishments engaging in retail sales and dining activities from the Alachua County property appraiser database. This database search identified a total of 70 businesses, with an aggregate space inventory of 513,949 square feet. The inventory of these retail uses is presented in Appendix A of this report.

To arrive at a current day "net demand" estimate for the primary trade area, the local retail supply of 513,949 square feet was subtracted from the gross retail demand estimate of 640,845 square feet. This yields a current-day unmet demand for 126,896 square feet of retail shopping within the primary trade area. The Walmart Supercenter is planned for 158,562 square feet, plus 2,835 square feet for the garden center. The analysis indicates that the unmet shopping demand (126,896 sq. feet) within the primary trade area would support 79 percent of retail activity at the proposed Walmart Supercenter. Referring to the ULI retail center trade area guidelines (previously referenced in Section 3.2 of this report), a primary trade area should support 70 to 80 percent of the total shopping activity at a retail center.

The unmet trade area demand previously noted exceeds the requirements necessary to successfully support shopping for the Walmart Supercenter at its proposed size. The quantitative conclusion reached by this analysis is that local demand for the proposed Walmart is legitimate, with sufficient local shopper dollars remaining to support existing area businesses, thus eliminating tangible competitive concerns.

3.7 Other Market Demand Considerations

In addition to the primary trade area demand supporting the proposed Walmart site, an important consideration involves the variety of retail product lines the proposed Supercenter will offer, that are currently in very limited supply or non-existent within the local marketplace. Examples of these product lines include:

- Home and Office Electronics
- Business/Office Supplies and Stationery
- Sporting Goods
- Toys and Children's Games
- Full lines of women's, men's, and children's apparel

The local Walmart will fill these under-served market segments, as local residents presently must drive as far as Gainesville to find stores that offer full lines of the aforementioned merchandise.

The access and visibility that will be enjoyed by the Walmart location generates the potential to draw consumers from outside of the trade area. A majority of these "out-of-market" consumers would be interstate auto travelers, including many tourists, who are coming to or from other Florida destinations (*e.g.*, Orlando, Tampa, Miami, Ft. Myers). Interstate traveler demand will help to provide additional support for the Walmart Supercenter, beyond the primary trade area net demand of 126,896 square feet.

The recently opened Lowe's home and building supply store (Lowes) near the subject property does not present a competitive issue for Walmart or its primary trade area, based on 2 important factors. Home and building supply stores serve a very specific and narrow portion of the retail consumer market. Data from the U.S. Consumer Expenditure Survey indicates that less than 5 percent of a typical household's annual retail spending is for items found in these stores. As a result, the primary geographic trade area for a large building supply store is much larger than the primary trade area outlined for Walmart in this study, often extending outward to 10 miles or more. Notwithstanding these considerations, the 129,734 square foot Lowe's store is still included in the competitive supply analysis, for purposes of conservatism. If this store is eliminated from the competitive inventory, the unmet retail demand within the 5-mile trade area would increase from 126,896 to 256,630 square feet.

3.8 Market Demand Conclusions

The conclusions drawn by this analysis include the following:

- Sufficient unmet demand currently exists within the 5-mile primary retail trade area to develop a Walmart Supercenter on the subject property.
- Businesses within this primary trade area have been factored into the demand estimation, and sufficient shopper dollars exist to support the Walmart Supercenter, as well as the existing local businesses. Simply put, market area support for the Walmart Supercenter *includes* the continued successful operation of local area businesses.
- Notwithstanding the abundance of local purchasing power, the 40+/- businesses located along Main Street are mostly non-competitive with the proposed Walmart Supercenter due to the nature of their consumer offerings. These include specialty retail, restaurants, personal services, and civic services.
- The location of the Walmart Supercenter is advantageous to capture "out-of-market" interstate traveler commerce, which will create additional support above and beyond that generated from primary trade area households.
- The Walmart Supercenter will offer full retail product lines for local shoppers that are not readily available within the local market, and that area residents presently have to travel as far as Gainesville to obtain.
- Uses such as home and building supply stores, which serve a narrow retail market segment, with larger primary trade areas, are not directly competitive with the proposed Walmart Supercenter.
- Future population and household growth will occur within the 5-mile primary trade area, providing further support for the Walmart Supercenter and other local businesses.
- Market demand is only one business consideration affecting the sustainability of local area businesses. Other factors that significantly impact store success, not directly attributable to trade area demand, include effective merchandise mix, store management practices, and responsive business plans.
- Based on these factors, the proposed Walmart Supercenter poses no direct competitive threat to existing businesses within the local market, and could actually increase business volume, based on positive traffic generation and capture.

4.0: Analysis of Project Local Benefits: Economic and Fiscal Impacts to the City of Alachua from the Walmart Supercenter

4.1 Assumptions Used to Estimate Direct Economic and Fiscal Impacts

Table 4.1 below provides a summary of the various assumptions utilized in the formulation of the summary of economic and fiscal impacts for the proposed Walmart Supercenter.

Table 4.1: Walmart Economic and Fiscal Analysis
Background Information and Assumptions

Proposed Walmart Supercenter Size	
Store	158,562 sq. feet
Garden Center	2,835 sq. feet
Total	161,397 sq. feet
Square feet of Store Space per Full-Time Equivalent Employee	400
Store Sales Per Square Foot	$300.00
Avg. Wage, Alachua Co, Retail/Gen Mdse. (Source: Agency for Workforce Innov., Q2 15)	$23,956
City of Alachua Operating Millage, General Fund (Source: City of Alachua FY 15-16 Budget)	5.9900
RIMS-II Economic Impact Multipliers	
Output	1.4598
Earnings	0.3917
Employment	13.8786
(Source: U.S. Department of Commerce, Bureau of Economic Analysis)	
Average Taxable Value Per Building Sq. Foot	$77.68

The total economic impacts to Alachua County from the proposed Walmart supercenter were estimated using the RIMS-II economic impact model methodology. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. These multipliers are best suited for estimating the impacts of small changes on a regional economy. To effectively use the multipliers

for impact analysis, users must provide geographically and industrially detailed information on the initial changes in output, earnings, or employment that are associated with the project or program under study. The multipliers can then be used to estimate the total impact of the project or program on regional output, earnings, and employment.

Systematic analysis of economic impacts must account for the inter-industry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus, regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting economic impact analysis.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: The U.S. Bureau of Economic Analysis (BEA) national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

The national I-O table, which shows the input and output structure for approximately 500 industries. Since a particular region may not contain all the industries found at the national level, some direct input requirements cannot be supplied by that region's industries. Input requirements that are not produced in a study region are identified using BEA's regional economic accounts.

The RIMS II method for estimating regional I-O multipliers can be viewed as a three-step process. In the first step, the producer portion of the national I-O table is made region-specific by using four-digit SIC location quotients. In the second-step, the household column from the national I-O table is made region-specific. In the last step, the Leontief inversion approach is used to estimate multipliers. This inversion approach produces output, earnings, and employment multipliers, which can be used to trace the impacts of changes in final demand on the directly and indirectly affected industries.

Empirical tests indicate that RIMS II yields multipliers that are not substantially different in magnitude from those generated by regional I-O models based on highly specified and expensive

surveys. For example, a comparison of 224 industry-specific multipliers from survey-based tables for Texas, Washington, and West Virginia indicates that RIMS II average multipliers overstate the average multipliers from the survey-based tables by approximately 5 percent. For the majority of individual industry-specific multipliers, the difference between RIMS II and survey-based multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show statistically similar distributions of affected industries.

Industry Category	Spending has to be classified by spending category consistent with the industry classification used by RIMS (see section below on spending categories).
Year of Expenditure	The time of expenditure needs to be specified in order to determine the time period of the economic consequences and in order to adjust the spending to current dollars for use in the estimation of jobs. The RIMS models were calibrated on current dollars and the estimate of jobs requires spending inputs in terms of current dollars.
Location	The spending location also needs to be specified so that the multipliers for the appropriate region can be applied.

In order to apply RIMS II multipliers, direct economic data for the project in question is required. The results of a RIMS II analysis are expressed in terms of three measures of economic activity: Earnings (sometimes expressed as wages and salaries), Output (sometimes referred to as economic activity, or sales), and Jobs.

Earnings	Earnings refers to a measure, expressed in millions of dollars, of the change in the value earnings that are received by households from the production of regional goods and services for the time period covered by the cost estimate.
Output	This is a measure of the economic activity created by the spending. It refers to the change in the dollar value of production in all sectors of the economy to satisfy the new demands resulting from spending. Each time a dollar changes hands for products or services it increases the measure of output. By including products as well as labor, the output measure is inclusive of and typically significantly larger than the measure of earnings. Economic output is typically referred to as the Gross Domestic Product (GDP) at the national level.

Jobs	This measure refers to the employment or jobs expressed as full time person years of employment. The measure refers to person years of employment, regardless of the term over which spending is aggregated in the input. Jobs are estimated by adjusting the year of spending to calibration year dollars. The jobs multiplier is expressed in terms of jobs per million dollars of spending.

4.2 Local Benefits from Walmart's Presence

A 2005 study published by Global Insight Advisory Services concluded that Walmart's U.S. presence over the 1985-2004 period resulted in consumer savings in excess of $263 billion. These savings resulted in a 9.1 percent decline in food-at-home prices, a 4.2 percent decline in commodities prices, and a 3.1 percent overall decline in inflation, as measured by the Consumer Price Index. Walmart's U.S. presence is estimated to have increased aggregate real disposable income by 0.9 percent. This study also estimated that each direct job at Walmart generates an additional 0.39 to 0.55 jobs in the local economy, and creates overall consumer cost savings of approximately 4.0 percent in the local economy. In addition, another 2005 study published jointly by MIT and the U.S. Department of Agriculture Economic Research Service concluded that discount general merchandise retailers such as Walmart create significant benefits to consumers, particularly those with lower and moderate incomes. Taking a direct quote from the final sentence of the MIT/USDA study, "*a significant <u>decrease</u> in consumer surplus arises from zoning regulations and pressure group tactics that restrict the entry and expansion of supercenters into particular geographic markets*"[3].

[3] "*Consumer Benefits from the Increased Competition in Shopping Outlets: Measuring the Effect of Wal-Mart*". Hausman, J. and Leibtag, E. October, 2005.

4.3 Summary of Economic and Fiscal Impacts to the City of Alachua from the Walmart Supercenter

It is estimated that Walmart would employ approximately 403 employees with total annual earnings of $9.7 million. Direct business output, measured in store sales, should exceed $48.4 million annually. Indirect economic impacts include an additional 268 jobs, $9.3 million in annual earnings, and $22.3 million in annual output, from area businesses supported by Walmart's presence. Although the indirect impacts would occur throughout the metro area, some component of this spinoff impact would occur within the City of Alachua. With an estimated taxable property value of $12.5 million, the Walmart Supercenter is expected to generate more than $75,000 per year in ad valorem revenue to the City of Alachua. These impacts are presented in Table 4.2 below.

Table 4.2
Walmart Economic and Fiscal Summary

Direct Economic Impacts	
Employment	403
Annual Earnings	$9,666,066
Annual Business Output (Sales)	$48,419,100
Indirect (Spin-off) Economic Impacts	
Employment (@ 0.47 multiplier)	268
Annual Earnings	$9,299,695
Annual Business Output (Sales)	$22,263,102
Fiscal Impacts to City of Alachua	
Annual Ad Valorem Revenue, City of Alachua	$75,101

All Estimates are in 2015-16 Dollars

APPENDIX:

MARKET AREA COMMERCIAL/RETAIL INVENTORY
SOURCE: ALACHUA COUNTY PROPERTY APPRAISER

Parcel ID Number	DOR Use Code	Total Building Area	Property Owner Name	Township	Range	Section	Physical Address
00318 013 000	11	1,389	ANDERSEN, LARS & PATRICIA	08S	17E	2	18238 NW US HIGHWAY 441
00449 001 000	11	2,595	610 NE 1ST AVE LLC	08S	17E	2	610 NE 1ST AVE
00473 000 000	11	980	ROBERT P DILBONE LLC	08S	17E	2	415 NE SANTA FE BLVD
03049 002 000	11	6,836	MILLIKEN, ROBERT P	08S	18E	9	16091 NW US HIGHWAY 441
03053 001 003	11	6,225	RACETRAC PETROLEUM INC	08S	18E	9	16171 NW US HIGHWAY 441
03061 010 002	11	3,633	LE STORE LLC	08S	18E	9	16070 NW US HIGHWAY 441
03066 006 000	11	5,509	MOHAN-LERRA FAMILY PARTNERSHIP	08S	18E	10	15981 NW US HIGHWAY 441
03066 007 000	11	1,992	AMERICAN PETROLEUM INVESTMENTS	08S	18E	9	15980 NW US HIGHWAY 441
03067 003 000	11	6,606	ADVANCE AUTO PARTS INC	08S	18E	15	15579 NW US HIGHWAY 441
03067 006 010	11	129,734	LOWES HOME CENTERS INC	08S	18E	10	15910 NW 144TH TER
03210 006 000	11	2,610	THE PANTRY INC	08S	18E	14	14411 NW US HIGHWAY 441
03210 007 000	11	4,795	ALACHUA COUNTY FARM BUREAU	08S	18E	14	14435 NW US HIGHWAY 441
03226 001 000	11	6,880	LOUIS L HUNTLEY ENTERPRISES	08S	18E	14	15089 NW US HIGHWAY 441
03388 005 000	11	3,993	BBTI HOLDING LLC	08S	18E	14	13921 NW 146TH AVE
03534 000 000	11	1,899	FUNKHOUSER, D R	08S	18E	15	15121 NW US HIGHWAY 441
03583 000 000	11	4,494	WALKER, FREDERICK JAMESLINDA M	08S	18E	15	15419 NW US HIGHWAY 441
03583 001 000	11	1,338	WALKER, FREDERICK JAMESLINDA M	08S	18E	15	15405 NW US HIGHWAY 441
03584 001 000	11	1,676	ALACHUA CORNER INC	08S	18E	15	14212 NW 154TH AVE
03591 000 000	11	15,519	WALGREEN CO	08S	18E	15	15155 NW US HIGHWAY 441
03595 020 001	11	13,073	HITCHCOCK & SONS INC	08S	18E	15	15174 US HIGHWAY 441
03595 200 000	11	2,094	WIRELESS WIZARD INC	08S	18E	15	15210 NW US HIGHWAY 441
03595 200 001	11	10,332	DOLGENCORP LLC	08S	18E	15	15250 NW US HIGHWAY 441
03606 001 000	11	1,462	LANGE, SCOTT R & ANNETTE A	08S	18E	15	14933 MAIN ST
03610 000 000	11	1,737	LANGE, SCOTT R & ANNETTE A	08S	18E	15	14925 MAIN ST
03617 000 000	11	624	ESKRIDGE, MARTY & DIANE	08S	18E	15	14952 MAIN ST
03617 001 000	11	1,572	ROBERTSON, RICKY L	08S	18E	15	14920 MAIN ST
03617 002 000	11	858	ROBERTSON, RICKY L & DONNA J	08S	18E	15	14940 MAIN ST
03617 004 000	11	624	LEE, GUSSIE M	08S	18E	15	14954 MAIN ST
03630 000 000	11	2,133	DEL ROSAL, THOMAS & BONNIE	08S	18E	15	14874 MAIN ST
03631 000 000	11	2,219	HEUSS, MICHAEL & CONSTANCE	08S	18E	15	14862 MAIN ST
03632 000 000	11	1,438	GAUSE, THOMAS P & PATRICIA M	08S	18E	15	14856 MAIN ST
03633 000 000	11	1,506	MALPHURS, SARA DEESE TRUSTEE	08S	18E	15	14850 MAIN ST
03644 000 000	11	3,190	ESKRIDGE, MARTY	08S	18E	15	14107 NW 148TH PL
03645 000 000	11	3,269	BERGDOLL, W BRUCE TRUSTEE	08S	18E	15	14838 MAIN ST
03646 000 000	11	5,783	KOHL, RICHARD G & JOANN	08S	18E	15	14822 MAIN ST

Parcel ID Number	DOR Use Code	Total Building Area	Property Owner Name	Township	Range	Section	Physical Address
03647 001 000	11	1,867	D W ASHTON CATERY INC	08S	18E	15	14816 MAIN ST
03656 000 000	11	2,968	AMIRA, STUART L & COLLEEN G	08S	18E	15	14055 NW 148TH PL
03657 000 000	11	1,941	BINGAMAN, LAWRENCE	08S	18E	15	14827 MAIN ST
03658 000 000	11	1,351	RIDGE, THOMAS S IV & KAREN L	08S	18E	15	11 S MAIN ST
03674 000 000	11	1,445	KIRKWOOD, KEVIN R & ELAINE P	08S	18E	15	14706 MAIN ST
03694 000 000	11	5,931	TANNER, WAYNE	08S	18E	15	14507 MAIN ST
03695 000 000	11	1,483	PURVIS, W R & DAISY	08S	18E	15	14515 MAIN ST
03696 000 000	11	2,106	RED SILK INC	08S	18E	15	14545 MAIN ST
03697 000 000	11	1,421	COMPUTERDOCTOR OF ALACHUA, COR	08S	18E	15	14555 MAIN ST
03697 001 000	11	1,421	MACDOUGALL & MACDOUGALL &, MAC	08S	18E	15	14521 MAIN ST
03710 000 000	11	10,476	ALACHUA FARM & LUMBER INC	08S	18E	15	14101 NW 145TH AVE
03727 000 000	11	1,647	ALACHUA FARM & LUMBER INC	08S	18E	15	14310 MAIN ST
03736 000 000	11	3,466	MCDANIEL, CLIFTON RAY JR	08S	18E	15	14400 NW 140TH ST
03910 002 001	11	3,713	SOUTHWEST GEORGIA OIL COMPANY	08S	18E	22	13820 NW 140TH ST
03061 004 001	14	10,675	THE PANTRY INC	08S	18E	9	16130 NW US HIGHWAY 441
03067 001 001	16	34,106	OAKHILL PLAZA ASSOCIATES LP	08S	18E	15	15551 NW US HIGHWAY 441
03210 007 001	16	4,704	BROWN, ROBERT E	08S	18E	14	14423 NW US HIGHWAY 441
03211 002 000	16	5,389	SNELGROVE, CHARLES W & DIANA H	08S	18E	14	14557 NW US HIGHWAY 441
03370 000 000	16	7,102	CENTRAL MOTOR SUPPLY OF, ALACH	08S	18E	14	14923 NW US HIGHWAY 441
03613 001 000	16	7,846	ROBERTSON, RICKY L & DONNA J	08S	18E	15	14911 MAIN ST
03869 003 000	16	51,119	HITCHCOCK & SONS INC	08S	18E	15	15530 NW US HIGHWAY 441
03869 012 000	16	27,537	ALACHUA PROFESSIONAL PLAZA LLC	08S	18E	15	15234 NW 147TH DR
03053 001 002	21	7,570	TALAL PROPERTIES LTD & TAREK	08S	18E	9	16135 NW US HIGHWAY 441
03066 004 002	21	5,163	ALACHUA BBQ LAND LLC	08S	18E	10	15931 NW US HIGHWAY 441
03066 006 001	21	1,545	SFASSIE FAMILY II LTD, PARTNER	08S	18E	10	15979 NW US HIGHWAY 441
03612 000 000	21	4,313	ROBERTSON, RICKY L & DONNA J	08S	18E	15	14841 MAIN ST
03617 003 000	21	2,876	KEARNEY, MICHAEL A & JUDITH A	08S	18E	15	14956 MAIN ST
03618 000 000	21	3,024	ROBERTSON, R L	08S	18E	15	14920 MAIN ST
03670 000 000	21	5,750	IVY HOUSE LLC THE	08S	18E	15	14603 MAIN ST
05970 001 002	11	5,757	GILSON, GLEN W III	08S	19E	19	13701 NW US HIGHWAY 441
05964 002 001	16	8,419	UPLAND PROPERTIES OF NCF LLC	08S	19E	19	13570 NW 101ST DR
17045 000 000	11	5,948	M & R UNITED INC	08S	21E	14	15295 NE US HIGHWAY 301
17064 001 000	11	3,929	WALDO PETRO MART LLC	08S	21E	14	15035 NE US HIGHWAY 301
17070 001 001	11	7,392	ALACHUA COUNTY LIBRARY, DISTRI	08S	21E	14	15150 NE US HIGHWAY 301
17074 004 000	11	1,932	WALDO ROAD INC	08S	21E	14	14820 NE US HIGHWAY 301

Walmart Water Supply Site Survey
Walmart Store #3873
I-75 and US-441
Alachua, FL **TEST DATE: 3/8/2016**

SUMMARY STATEMENT

This report provides the current available water supply for the proposed Walmart Supercenter #3873 located at I-75 and US-441 in Alachua, FL with an FFE of 118 ft AMSL. Required fire sprinkler supply for this 151 prototype is 1600 gpm at 47 psig and 2000 gpm at 41 psig. Required domestic water supply is 125 gpm at 45 psig.

SUMMARY OF RESULTS (Conclusion C1 – AS DESIGNED)

Fireline Base of Riser (BOR) static pressure at Finish Floor Elevation (FFE):	59.3 psig
Fireline BOR high static pressure at FFE:	65.2 psig
Fireline BOR residual pressure at FFE:	36.3 psig at 1600 gpm
Fireline BOR residual pressure at FFE:	26.1 psig at 2000 gpm
Assumed Fireline BOR FFE:	118 ft. AMSL
Safety Factor Used in Minimum Target Demands:	5 psig

Fireline Backflow Device Required: 8 in. Wilkins 350ADA double detector check outside above ground

Domestic BOR static pressure at FFE:	54.3 psig
Domestic BOR residual pressure at FFE:	44.5 psig at 125 gpm

Domestic Backflow Device Required: 3 in. Wilkins 375 reduced pressure outside above ground

FIRE FLOW REQUIREMENTS

Code Basis for Design:	5th Edition FFPC
Required Fire Flow at 20 psig and Duration:	2000 gpm for 4 hours
Available Residual Pressure at 2000 gpm for 4 hours:	41.4 psig

SUMMARY OF RESULTS (Conclusion C2 – WITH RECOMMENDED IMPROVEMENTS)

Domestic BOR static pressure at FFE:	54.3 psig
Domestic BOR residual pressure at FFE:	46.6 psig at 125 gpm

Domestic Backflow Device Required: 3 in. Wilkins 375 reduced pressure outside above ground

CONTACT INFORMATION

Backflow Prevention Contact
Scott Roane
Alachua Water Department
15100 NW 142nd Ter.
Alachua, FL 32615
PH: (386) 462-1084
Fax: (386) 418-6164

Fire Department Contact
Brian Green
Alachua County Fire Rescue
913 SE 5th St
Gainesville, FL 32601
PH: (352) 384-3101
Fax: (352) 384-3157

Water Department Contact
Scott Roane
Alachua Water Department
15100 NW 142nd Ter.
Alachua, FL 32615
PH: (386) 462-1084
Fax: (386) 418-6164

Please consult with the Fire Protection Engineer-of-Record to discuss design options prior to site layout.

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REGISTRATION STATEMENT

I, Darrell E. Stein, II, a registered Professional Engineer in the State of Florida, do hereby certify that this water flow test has been completed in accordance with NFPA 291 and is a true and correct survey for the project location for the date and time of the test. It is understood that the water supply information supplied in this report will become the design basis for the water based fire suppression systems (fire sprinkler and hose station).

DARRELL E. STEIN
LICENSE
No. 58463
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

3.18.16

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REVISED REPORT: This report, effective 3/18/2016, is a revised copy of HEI's report of 5/5/2015 and 11/23/2009. This report has been revised to reflect an updated utility plan provided by CPH Engineers, Inc. and a new fire hydrant flow test.

EXISTING CONDITIONS

Site

The site is located in the northwestern portion of Alachua and is located along the east side of Interstate 75, south of US Highway 441. A 12 in. water line is located north of US Highway 441 along the west side of NW 147th Drive. A 16 in. main extension to the site is proposed to supply 12 in. and 8 in. services to this property. The arrangement of these lines in the immediate vicinity of the property is contained in Attachment #1. Additional details on water mains serving the area are contained on Attachment #2 and #3. It is proposed that sprinkler protection for this facility be provided by an 8 in. lead-in from the 12 in. and 8 in. fire hydrant loop on the property, as detailed in Attachment #1.

Water System

The City of Alachua utilizes an indirect pumping arrangement to supply water to its gridded distribution system. The tank controlling pressures at this site is the Mebane tank, which is an elevated water tower having a capacity of 0.15 MG, an overflow elevation of 269.5 ft AMSL, a low water level of 265.1 ft AMSL, and a ground elevation of 154 ft AMSL. At the time of testing the water level was found to be 269 ft AMSL. The tank is located 1.2 miles northeast of the site.

The water plant is located approximately 1.2 miles southeast of the site. Pumps at the wells are high service pumps. There are three pumps, two are rated for 600 gpm and one is rated at 950 gpm. Emergency standby power is available for two of the well heads. At the time of the test, one 600 gpm and one 950 gpm well were discharging.

WATER FLOW TEST RESULTS

Flow for the test was made utilizing the hydrant located approximately 400 ft northwest of NW 147th Drive, at the end of NW 157th Lane. Static and residual pressures were taken at the hydrant located at the along the west side of NW 147th Drive, east of Lowes entrance. Two 2-1/2 in. hydrant butts were flowed. A pitot reading was taken with a thread-lock pitot gauge on one hydrant butt. A pitot reading of 37 psig was received on the opening with a discharge coefficient of 0.9. The calculated flow was doubled to account for the second hydrant butt, which resulted in a total flow of 2042 gpm at a residual pressure of 64 psig. Static pressure before and after testing was 68 psig. The static and residual pressures were taken at an elevation of 111 ft, AMSL, which is 7 ft below the planned finish floor elevation of the store (118 ft AMSL). Please see Attachment #4 for a graphical representation of this test and for necessary calculations. This test is effective at the base of the pressure hydrant for friction loss purposes. The test was conducted at 1:30 PM EDT.

HYDRAULIC CALCULATIONS

Per Brian Green, a 75% reduction for fully sprinklered buildings is acceptable when determining fire hydrant flow rates in accordance with the 5th Edition of the Florida Fire Protection Code which includes the 2012 NFPA 1. Based upon the size of the building area, and its current classification as a Type V-B structure in accordance with NFPA 220, the required flow rate reduces to 2000 gpm at 20 psig from the remote hydrants on the property (Labeled H1 and H2 on Attachment #1). Calculations presented represent this required flow rate determined independent of any sprinkler system demand.

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Adjusting to the low city pressures available results in a 1.7 psig deduction and is included with the calculations. The local jurisdiction also requires a 5 psig safety factor from the water supply to be used in the sprinkler system hydraulic calculations.

The city system can be considered a reliable supply, with respect to Walmart duration requirements. This acceptability is based on the system capability to meet the calculated base of riser supply of 2000 gpm for the design 120 minute fire flow duration. HEI is not aware of any proposed water system improvements other than those shown on the attached drawings.

The area around the site is largely undeveloped. An assumed 300 gpm has been added to the calculations at Node U7.

For domestic calculation purposes, demand requirements for a 151 prototype were used. In addition, loss through a 2 in. Sensus compound water meter was used.

Pipe lengths used in the calculations include equivalent lengths of fittings, and all new pipes are assumed to be PVC. Calculations are based on the preliminary utility layout provided by CPH Engineers, Inc., shown on Attachment #1.

BACKFLOW PREVENTION REQUIREMENTS

Backflow prevention information provided by: Scott Roane, Alachua Water Department

Fire line: a double detector check type backflow device located outside above ground is required on the fire sprinkler service. A fire meter is required with a diesel fire pump.

Domestic: a reduced pressure backflow device located outside above ground is required on the domestic service, in addition to the water meter located outside.

Irrigation: a reduced pressure backflow device located outside is required on the irrigation service.

CONCLUSIONS

CONCLUSION C1 – AS DESIGNED ON PRELIMINARY CIVILS

FIRE SPRINKLER SUPPLY: The available public water supplies combined with the planned fire protection lead-in sizing and arrangement as shown on Attachment #1 should yield a base of riser supply downstream of an 8 in. Wilkins 350ADA backflow device of 59.3 psig static with 1600 gpm flowing at 36.3 psig residual and 2000 gpm flowing at 26.1 psig residual. See Attachment #4 for a graphical representation and calculations. This does not exceed the minimum target demands of 1600 gpm at 47 psig and 2000 gpm at 41 psig. Minimum target demands include a 5 psig safety factor.

DOMESTIC SUPPLY: The available public water supplies combined with the planned domestic waterline sizing and arrangement as shown on Attachment #1 should yield a domestic supply at the stub-up above the finish floor, downstream of a 3 in. Wilkins 375 backflow device and a 2 in. Sensus compound meter of 54.3 psig static with 125 gpm flowing at 44.5 psig residual. See Attachment #5 for a graphical representation and calculations. This does not exceed the target demand of 125 gpm at 45 psig for a 151 prototype rear entry.

FIRE HYDRANT SUPPLY: The available public supplies combined with the planned main sizing and arrangement as shown on Attachment #1 should yield a fire hydrant flow residual pressure of 41.4 psig at 2000 gpm. See Attachment #6 for a graphical representation and calculations. This does meet the 2000 gpm at 20 psig requirement set forth by Brian Green.

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CONCLUSION C2 – WITH RECOMMENDED IMPROVEMENTS OF A 4 IN. DOMESTIC LEAD-IN

DOMESTIC SUPPLY: The available public water supplies combined with the planned domestic waterline sizing and arrangement as shown on Attachment #1 should yield a domestic supply at the stub-up above the finish floor, downstream of a 3 in. Wilkins 375 backflow device and a 2 in. Sensus compound meter of 54.3 psig static with 125 gpm flowing at 46.6 psig residual. See Attachment #7 for a graphical representation and calculations. This does exceed the target demand of 125 gpm at 45 psig for a 151 prototype rear entry.

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INFORMATION REQUIRED IN SITE WATER FLOW TEST AND REPORT

This checklist is provided to assure that the site water flow test report includes all Walmart required information and must be included in the Water Report.

- (✓ Walmart store and project number.
- (✓ Seal and signature of the Professional Engineer supervising the test.
- (✓ The test must be conducted in conformance with NFPA 291.
- (✓ Sprinkler contractor cannot conduct test.
- (✓ The City Fire Marshal or another city representative was present during test.
- (✓ Pressure test hydrant separate from flowing hydrant.
- (✓ Date and time of test provided.
- (✓ Water main size shown.
- (✓ Water main pipe type shown.
- (✓ Hydrant butt diameter shown.
- (✓ Pitot pressure shown.
- (✓ Hydrant coefficient shown.
- (✓ Hydrant elevation shown.
- (✓ Building pad elevation shown.
- (✓ Static pressure shown.
- (✓ Residual pressure shown.
- (✓ Statement provided as to any proposed improvements to City's water system and date.
- (✓ Complete calculations, including water system model calculations (if applicable).
- (✓ Complete N - 1.85 Graph.
- (✓ Provide sketch of area showing all water lines, project building, test location with test and flowing hydrants identified.
- (✓ Cover page certification.
- (✓ Cover page summary statement.
- (✓ Fire Department Contact, Water Department Contact, and Cross Connection Control (Backflow Prevention) Authority contact name and phone number (if applicable).
- (✓ Local jurisdiction sprinkler design safety factor indicated (if applicable).
- (✓ This Checklist completed and included in report.

Checked By:

Kent Rabe — 3/18/2016

Kent Rabe — Date

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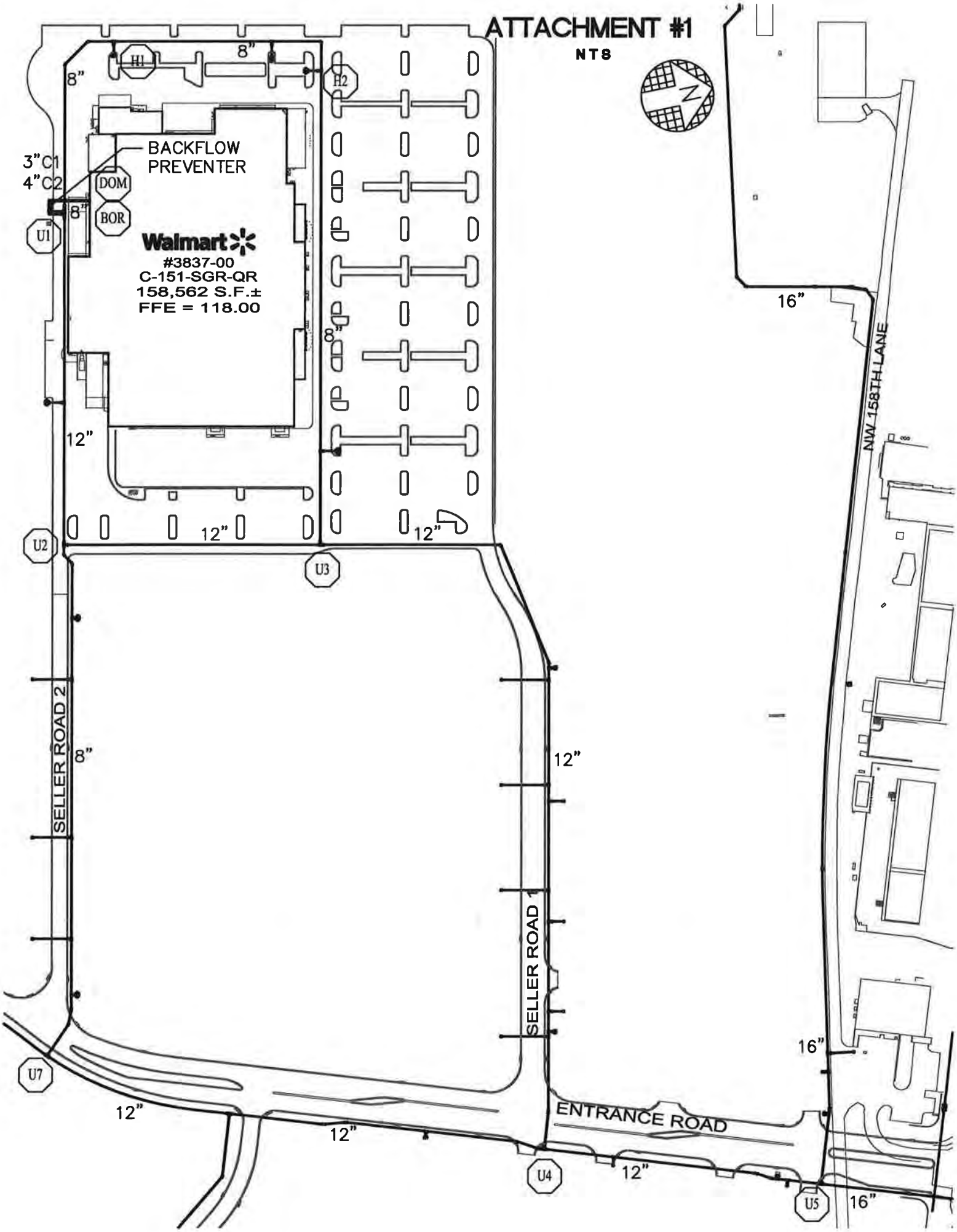
ATTACHMENT #1

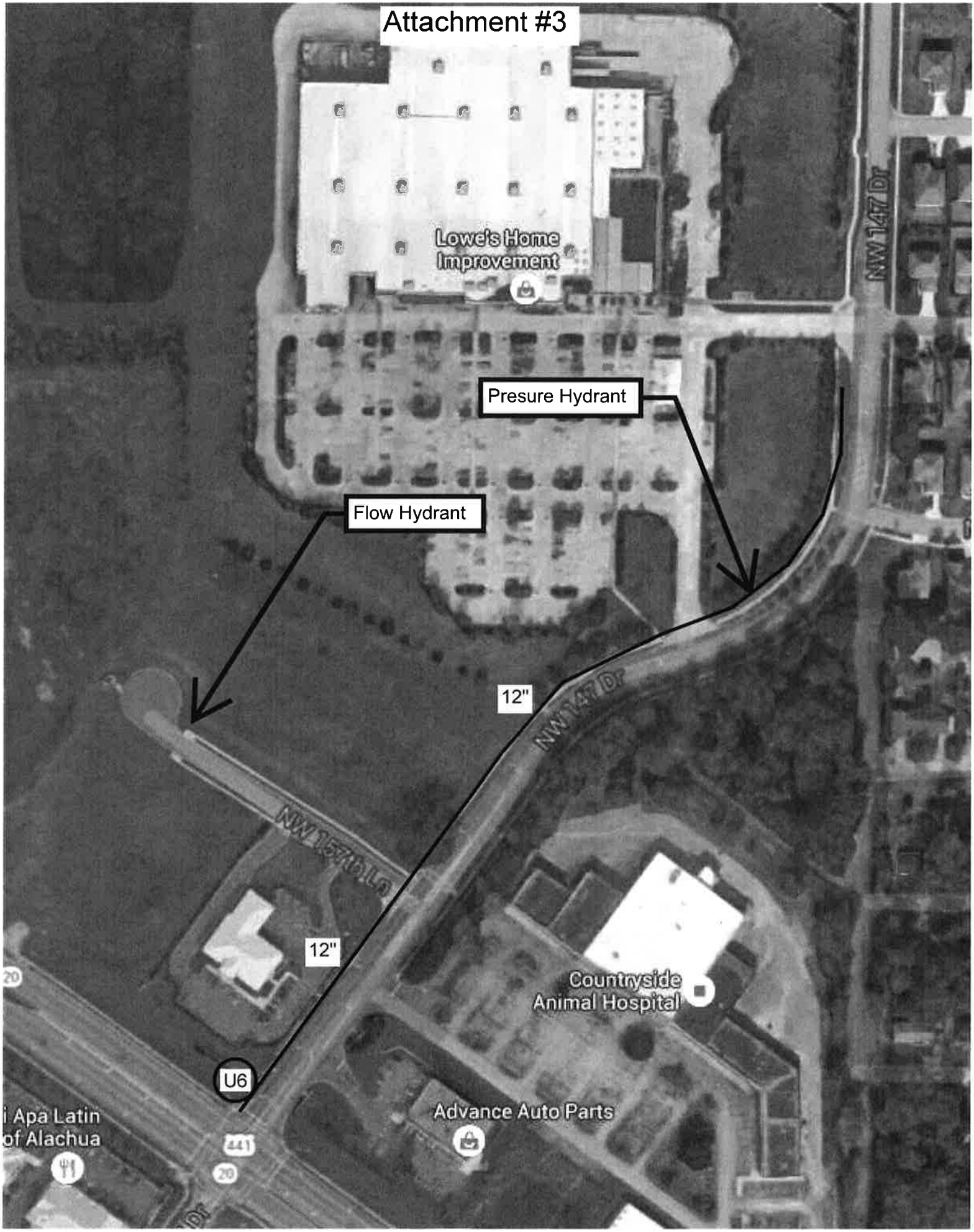
NTS



ATTACHMENT #2

NTS

Attachment #3



Attachment 4

Fire

Water Flow Test Store Number: 3873 Date/Time: Mar 08, 2016 - 1:30 PM EDT

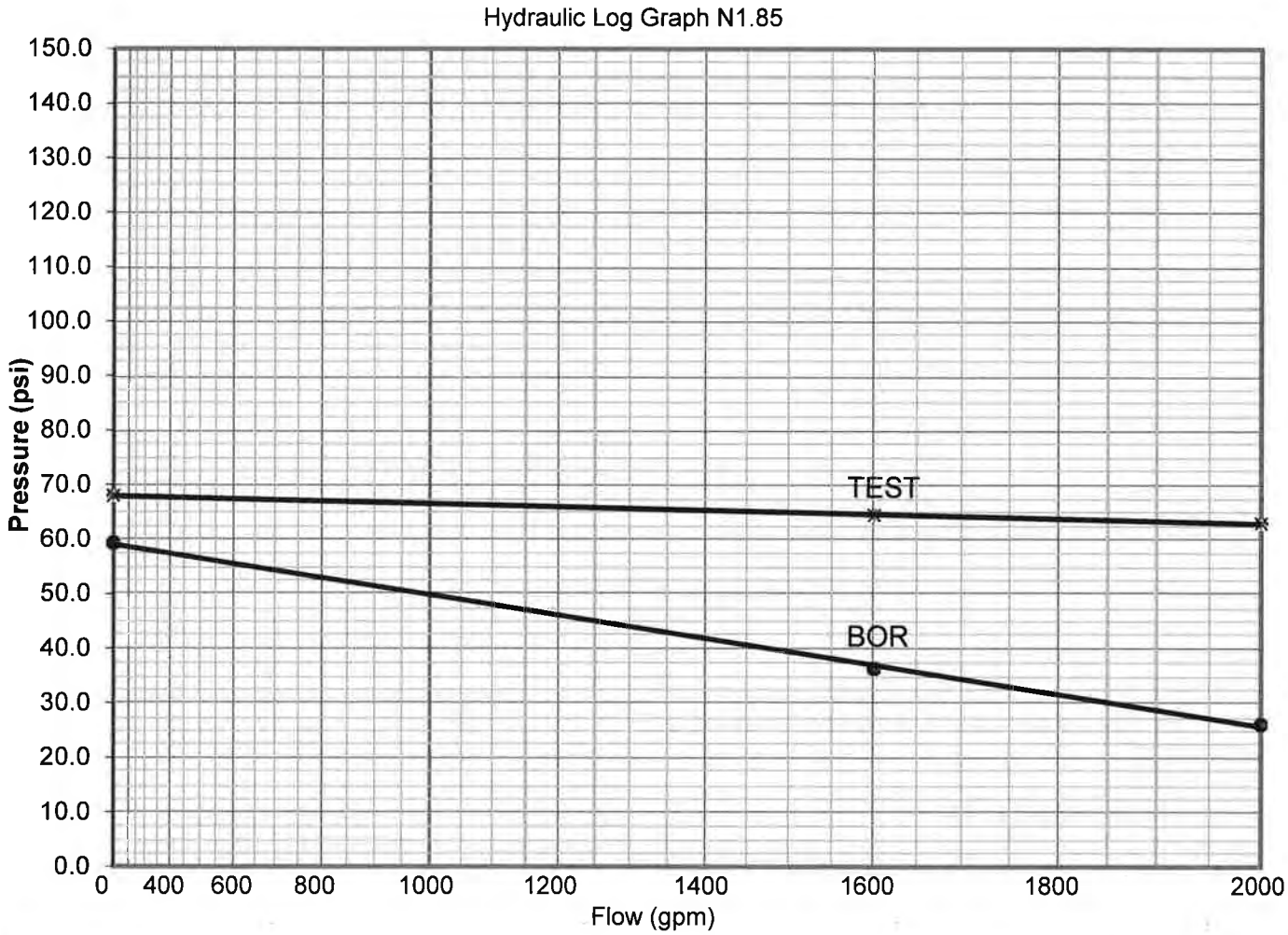
Test By: Chuck Burdett, HEI City, State: Alachua, FL

Static (psi): 68 Residual (psi): 64 Pitot (psi): 37 x 2 Flow (gpm): 2042 Disch. Coeff.: 0.9 / 0.9

Gauge Hydrant Location: along the west side of NW 147th Drive, east of Lowes entrance

Flow Hydrant Location: 400 ft northwest of NW 147th Drive, at the end of NW 157th Lane

Backflow Device Size and Type: Wilkins 350ADA



Fire Calculations to Base of Riser		Static	Residual	Residual
	gpm:	0	1600	2000
1	Available per Test	68.0	64.5	63.0
2	Elevation Adjustment (0.433 x -7.0 ft.)	-3.0	-3.0	-3.0
3	Loss to BOR See attached calculations		-15.4	-22.7
4	BOR per Test See attached calculations	65.0	46.0	37.3
5	Low Tank / Low City Pressure	-1.7	-1.7	-1.7
6	BFP Type: double detector check	-4.0	-6.5	-7.5
7	Meter Type: Sensus Fire Line Meter	0.0	-1.5	-2.0
8	**BOR after BFP**	**59.3**	**36.3**	**26.1**

Pressure / Flow Summary - STANDARD

Henderson Engineers, Inc.
Attachment #4

Date

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
BOR	118.0		46.02	na	1600.0			
DOM	118.0		51.19	na				
U1	118.0		51.19	na				
H1	118.0		51.47	na				
H2	118.0		51.78	na				
U2	118.0		52.14	na				
U7	118.0		53.56	na	300.0			
U3	118.0		52.41	na				
U4	118.0		54.11	na				
U5	118.0		55.66	na				
U6	118.0		57.87	na				
SRC	111.0		64.5	na				

The maximum velocity is 10.26 and it occurs in the pipe between nodes BOR and U1

Final Calculations - Hazen-Williams - 2007

Henderson Engineers, Inc.
Attachment #4

Date

Hyd. Ref. Point	Qa / Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
BOR	1600.00	7.98	1T	52.855	105.000	46.020		Qa = 1600
to		150.0	1G	6.041	249.173	0.0		
U1	1600.0	0.0146	7E	190.278	354.173	5.170		Vel = 10.26
	0.0							
	1600.00					51.190		K Factor = 223.63
DOM	0.0	3.068	1T	22.666	120.000	51.190		
to		150.0	1G	1.511	98.219	0.0		
U1	0.0	0.0	7E	74.042	218.219	0.0		Vel = 0
	0.0							
	0.0					51.190		K Factor = 0
U1	326.18	7.98	2F	27.183	330.000	51.190		
to		150.0	1G	6.041	33.222	0.0		
H1	326.18	0.0008		0.0	363.222	0.279		Vel = 2.09
H1	0.0	7.98	1E	27.183	375.000	51.469		
to		150.0		0.0	27.182	0.0		
H2	326.18	0.0008		0.0	402.182	0.310		Vel = 2.09
H2	0.0	7.98	1T	52.855	755.000	51.779		
to		150.0	1G	6.041	58.895	0.0		
U3	326.18	0.0008		0.0	813.895	0.627		Vel = 2.09
	0.0							
	326.18					52.406		K Factor = 45.06
U2	472.10	7.98	1T	52.855	825.000	52.140		
to		150.0	2G	12.081	105.711	0.0		
U7	472.1	0.0015	3F	40.774	930.711	1.420		Vel = 3.03
U7	300.00	11.65	5F	87.206	805.000	53.560		Qa = 300
to		150.0	2G	16.1	103.306	0.0		
U4	772.1	0.0006		0.0	908.306	0.546		Vel = 2.32
	0.0							
	772.10					54.106		K Factor = 104.97
U1	1273.82	11.65	1T	80.498	530.000	51.190		
to		150.0	2G	16.1	96.598	0.0		
U2	1273.82	0.0015		0.0	626.598	0.950		Vel = 3.83
U2	-472.10	11.65	1G	8.05	405.000	52.140		
to		150.0		0.0	8.049	0.0		
U3	801.72	0.0006		0.0	413.049	0.266		Vel = 2.41
U3	326.19	11.65	1T	80.498	1255.000	52.406		
to		150.0	2G	16.1	148.922	0.0		
U4	1127.91	0.0012	3F	52.324	1403.922	1.700		Vel = 3.39
U4	772.09	11.65	1G	8.05	445.000	54.106		
to		150.0	2F	34.882	42.932	0.0		
U5	1900.0	0.0032		0.0	487.932	1.550		Vel = 5.72
U5	0.0	16.41	1T	145.482	2560.000	55.656		
to		130.0	4F	136.502	281.984	0.0		
U6	1900.0	0.0008		0.0	2841.984	2.218		Vel = 2.88
U6	0.0	11.65	1T	80.498	1000.000	57.874		
to		150.0	2F	34.882	131.481	3.032		
SRC	1900.0	0.0032	2G	16.1	1131.481	3.595		Vel = 5.72
	0.0							
	1900.00					64.501		K Factor = 236.58

Pressure / Flow Summary - STANDARD

Henderson Engineers, Inc.
Attachment #4

Date

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
BOR	118.0		37.32	na	2000.0			
DOM	118.0		45.13	na				
U1	118.0		45.13	na				
H1	118.0		45.55	na				
H2	118.0		46.02	na				
U2	118.0		46.57	na				
U7	118.0		48.78	na	300.0			
U3	118.0		46.96	na				
U4	118.0		49.5	na				
U5	118.0		51.71	na				
U6	118.0		54.87	na				
SRC	111.0		63.02	na				

The maximum velocity is 12.83 and it occurs in the pipe between nodes BOR and U1

Final Calculations - Hazen-Williams - 2007

Henderson Engineers, Inc.
Attachment #4

Date

Hyd. Ref. Point	Qa / Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
BOR	2000.00	7.98	1T	52.855	105.000	37.320		Qa = 2000
to		150.0	1G	6.041	249.173	0.0		
U1	2000.0	0.0221	7E	190.278	354.173	7.812		Vel = 12.83
	0.0							
	2000.00					45.132		K Factor = 297.71
DOM	0.0	3.068	1T	22.666	120.000	45.132		
to		150.0	1G	1.511	98.219	0.0		
U1	0.0	0.0	7E	74.042	218.219	0.0		Vel = 0
	0.0							
	0.0					45.132		K Factor = 0
U1	407.08	7.98	2F	27.183	330.000	45.132		
to		150.0	1G	6.041	33.222	0.0		
H1	407.08	0.0012		0.0	363.222	0.421		Vel = 2.61
H1	0.0	7.98	1E	27.183	375.000	45.553		
to		150.0		0.0	27.182	0.0		
H2	407.08	0.0012		0.0	402.182	0.467		Vel = 2.61
H2	0.0	7.98	1T	52.855	755.000	46.020		
to		150.0	1G	6.041	58.895	0.0		
U3	407.08	0.0012		0.0	813.895	0.944		Vel = 2.61
	0.0							
	407.08					46.964		K Factor = 59.40
U2	599.43	7.98	1T	52.855	825.000	46.568		
to		150.0	2G	12.081	105.711	0.0		
U7	599.43	0.0024	3F	40.774	930.711	2.210		Vel = 3.85
U7	300.00	11.65	5F	87.206	805.000	48.778		Qa = 300
to		150.0	2G	16.1	103.306	0.0		
U4	899.43	0.0008		0.0	908.306	0.723		Vel = 2.71
	0.0							
	899.43					49.501		K Factor = 127.84
U1	1592.91	11.65	1T	80.498	530.000	45.132		
to		150.0	2G	16.1	96.598	0.0		
U2	1592.91	0.0023		0.0	626.598	1.436		Vel = 4.79
U2	-599.43	11.65	1G	8.05	405.000	46.568		
to		150.0		0.0	8.049	0.0		
U3	993.48	0.0010		0.0	413.049	0.396		Vel = 2.99
U3	407.09	11.65	1T	80.498	1255.000	46.964		
to		150.0	2G	16.1	148.922	0.0		
U4	1400.57	0.0018	3F	52.324	1403.922	2.537		Vel = 4.22
U4	899.43	11.65	1G	8.05	445.000	49.501		
to		150.0	2F	34.882	42.932	0.0		
U5	2300.0	0.0045		0.0	487.932	2.208		Vel = 6.92
U5	0.0	16.41	1T	145.482	2560.000	51.709		
to		130.0	4F	136.502	281.984	0.0		
U6	2300.0	0.0011		0.0	2841.984	3.159		Vel = 3.49
U6	0.0	11.65	1T	80.498	1000.000	54.868		
to		150.0	2F	34.882	131.481	3.032		
SRC	2300.0	0.0045	2G	16.1	1131.481	5.119		Vel = 6.92
	0.0							
	2300.00					63.019		K Factor = 289.73

Attachment 5

Domestic

Water Flow Test Store Number: 3873 Date/Time: Mar 08, 2016 - 1:30 PM EDT

Test By: Chuck Burdett, HEI City, State: Alachua, FL

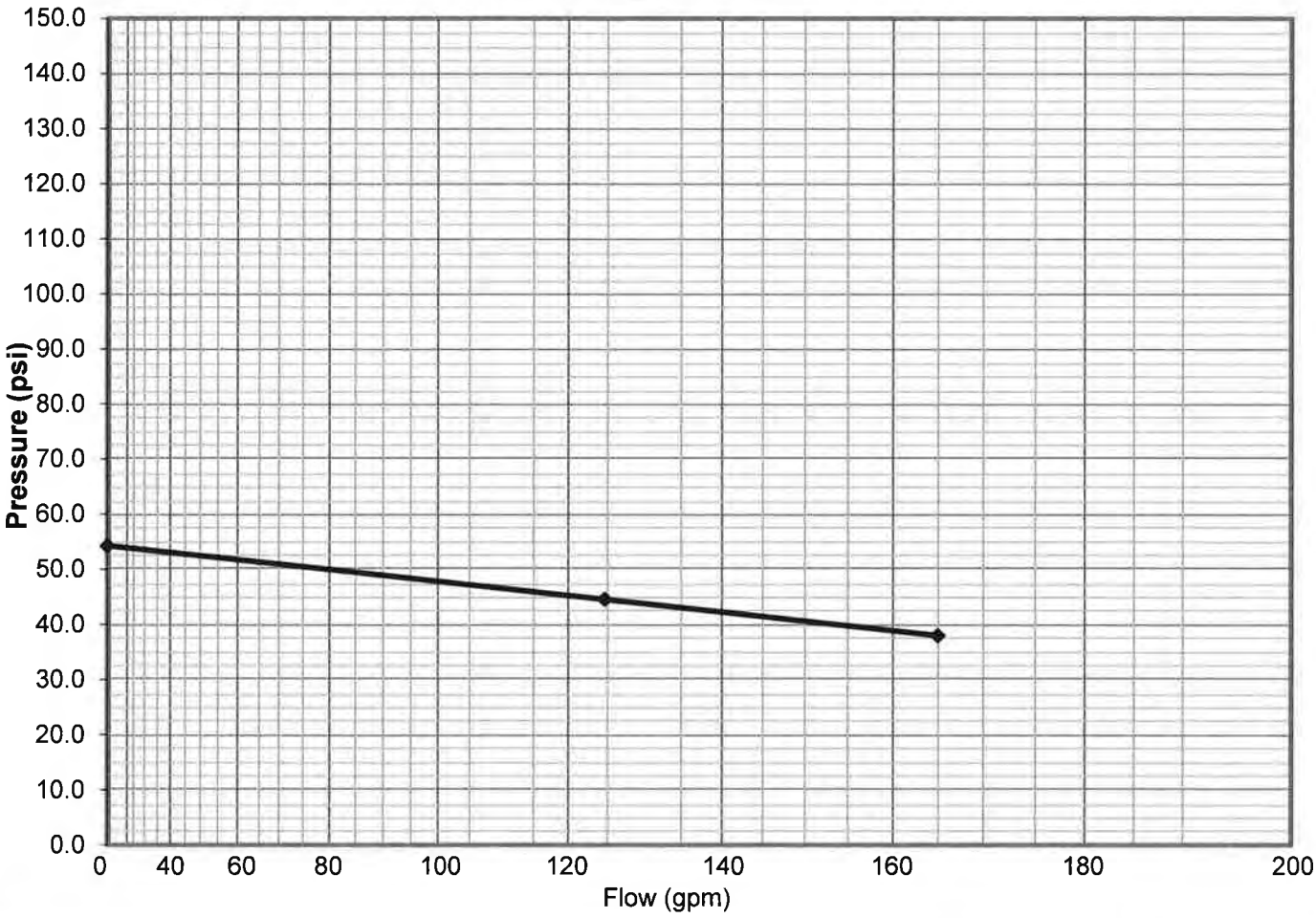
Static (psi): 68 Residual (psi): 64 Pitot (psi): 37 x 2 Flow (gpm): 2042 Disch. Coeff.: 0.9 / 0.9

Gauge Hydrant Location: along the west side of NW 147th Drive, east of Lowes entrance

Flow Hydrant Location: 400 ft northwest of NW 147th Drive, at the end of NW 157th Lane

Backflow Device Size and Type: 3 in. Wilkins 375

Hydraulic Log Graph N1.85



Domestic Calculations to Base of Riser		Static	Residual
	gpm:	0	125
1	Available per Test	68.0	67.8
2	Elevation Adjustment (0.433 x -7.0 ft.)	-3.0	-3.0
3	Loss to BOR See attached calculations		-3.5
4	BOR per Test	65.0	61.2
5	Low Tank / Low City Pressure	-1.7	-1.7
6	BFP Type: 3 in. Wilkins 375	-9.0	-12.0
7	Meter: 2 in. Sensus	0.0	-3.0
8	**BOR after BFP**	**54.3**	**44.5**

Pressure / Flow Summary - STANDARD

Henderson Engineers, Inc.
Attachment #5

Date

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
BOR	118.0		64.23	na				
DOM	118.0		61.23	na	125.0			
U1	118.0		64.23	na				
H1	118.0		64.23	na				
H2	118.0		64.23	na				
U2	118.0		64.23	na				
U7	118.0		64.22	na	300.0			
U3	118.0		64.24	na				
U4	118.0		64.29	na				
U5	118.0		64.39	na				
U6	118.0		64.53	na				
SRC	111.0		67.78	na				

The maximum velocity is 5.42 and it occurs in the pipe between nodes DOM and U1

Final Calculations - Hazen-Williams - 2007

Henderson Engineers, Inc.
Attachment #5

Date

Hyd. Ref. Point	Qa / Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
BOR	0.0	7.98	1T	52.855	105.000	64.226		
to		150.0	1G	6.041	249.173	0.0		
U1	0.0	0.0	7E	190.278	354.173	0.0		Vel = 0
	0.0							
	0.0					64.226		K Factor = 0
DOM	125.00	3.068	1T	22.666	120.000	61.230		Qa = 125
to		150.0	1G	1.511	98.219	0.0		
U1	125.0	0.0137	7E	74.042	218.219	2.996		Vel = 5.42
	0.0							
	125.00					64.226		K Factor = 15.60
U1	32.40	7.98	2F	27.183	330.000	64.226		
to		150.0	1G	6.041	33.222	0.0		
H1	32.4	0.0		0.0	363.222	0.004		Vel = 0.21
H1	0.0	7.98	1E	27.183	375.000	64.230		
to		150.0		0.0	27.182	0.0		
H2	32.4	0.0		0.0	402.182	0.004		Vel = 0.21
H2	0.0	7.98	1T	52.855	755.000	64.234		
to		150.0	1G	6.041	58.895	0.0		
U3	32.4	0.0		0.0	813.895	0.009		Vel = 0.21
	0.0							
	32.40					64.243		K Factor = 4.04
U2	-40.00	7.98	1T	52.855	825.000	64.234		
to		150.0	2G	12.081	105.711	0.0		
U7	-40.0	0.0	3F	40.774	930.711	-0.015		Vel = 0.26
U7	300.00	11.65	5F	87.206	805.000	64.219		Qa = 300
to		150.0	2G	16.1	103.306	0.0		
U4	260.0	0.0001		0.0	908.306	0.073		Vel = 0.78
	0.0							
	260.00					64.292		K Factor = 32.43
U1	92.60	11.65	1T	80.498	530.000	64.226		
to		150.0	2G	16.1	96.598	0.0		
U2	92.6	0.0		0.0	626.598	0.008		Vel = 0.28
U2	40.00	11.65	1G	8.05	405.000	64.234		
to		150.0		0.0	8.049	0.0		
U3	132.6	0.0		0.0	413.049	0.009		Vel = 0.40
U3	32.40	11.65	1T	80.498	1255.000	64.243		
to		150.0	2G	16.1	148.922	0.0		
U4	165.0	0.0	3F	52.324	1403.922	0.049		Vel = 0.50
U4	260.00	11.65	1G	8.05	445.000	64.292		
to		150.0	2F	34.882	42.932	0.0		
U5	425.0	0.0002		0.0	487.932	0.097		Vel = 1.28
U5	0.0	16.41	1T	145.482	2560.000	64.389		
to		130.0	4F	136.502	281.984	0.0		
U6	425.0	0.0		0.0	2841.984	0.139		Vel = 0.64
U6	0.0	11.65	1T	80.498	1000.000	64.528		
to		150.0	2F	34.882	131.481	3.032		
SRC	425.0	0.0002	2G	16.1	1131.481	0.225		Vel = 1.28
	0.0							
	425.00					67.785		K Factor = 51.62

Attachment 6

Fire Hydrant Flow

Water Flow Test Store Number: 3873 Date/Time: Mar 08, 2016 - 1:30 PM EDT

Test By: Chuck Burdett, HEI City, State: Alachua, FL

Static (psi): 68 Residual (psi): 64 Pitot (psi): 37 x 2 Flow (gpm): 2042 Disch. Coeff.: 0.9 / 0.9

Gauge Hydrant Location: along the west side of NW 147th Drive, east of Lowes entrance

Flow Hydrant Location: 400 ft northwest of NW 147th Drive, at the end of NW 157th Lane

Backflow Device Size and Type: N/A

Hydraulic Log Graph N1.85

Fire Calculations to Hydrants	Static	Residual
gpm:	0	2000
1 Available per Test	68.0	63.0
2 Elevation Adjustment (0.433 x -7.0 ft.)	-3.0	-3.0
3 Loss to Hydrants See attached calculations		-16.9
4 Hydrants per Test	65.0	43.1
5 Low Tank / Low City Pressure	-1.7	-1.7
6 Hydrants Before BFP	63.3	41.4
7 BFP Type: N/A	0.0	0.0
8 Meter Type:	0.0	0.0
9 Hydrants after BFP	**63.3**	**41.4**

Pressure / Flow Summary - STANDARD

Henderson Engineers, Inc.
Attachment #6

Date

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
BOR	118.0		45.98	na				
DOM	118.0		45.98	na				
U1	118.0		45.98	na				
H1	118.0		43.16	na	1000.0			
H2	118.0		43.1	na	1000.0			
U2	118.0		46.75	na				
U7	118.0		48.81	na	300.0			
U3	118.0		46.89	na				
U4	118.0		49.5	na				
U5	118.0		51.71	na				
U6	118.0		54.87	na				
SRC	111.0		63.02	na				

The maximum velocity is 7.3 and it occurs in the pipe between nodes U1 and H1

Final Calculations - Hazen-Williams - 2007

Henderson Engineers, Inc.
Attachment #6

Date

Hyd. Ref. Point	Qa / Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
BOR	0.0	7.98	T	52.855	105.000	45.979		
to		150.0	G	6.041	249.173	0.0		
U1	0.0	0.0	7E	190.278	354.173	0.0		Vel = 0
	0.0							
	0.0					45.979		K Factor = 0
DOM	0.0	3.068	T	22.666	120.000	45.979		
to		150.0	G	1.511	98.219	0.0		
U1	0.0	0.0	7E	74.042	218.219	0.0		Vel = 0
	0.0							
	0.0					45.979		K Factor = 0
U1	-1137.28	7.98	2F	27.183	330.000	45.979		
to		150.0	G	6.041	33.222	0.0		
H1	-1137.28	-0.0078		0.0	363.222	-2.819		Vel = 7.30
H1	1000.00	7.98	E	27.183	375.000	43.160		Qa = 1000
to		150.0		0.0	27.182	0.0		
H2	-137.28	-0.0002		0.0	402.182	-0.062		Vel = 0.88
H2	1000.00	7.98	T	52.855	755.000	43.098		Qa = 1000
to		150.0	G	6.041	58.895	0.0		
U3	862.72	0.0047		0.0	813.895	3.789		Vel = 5.53
	0.0							
	862.72					46.887		K Factor = 125.99
U2	577.07	7.98	T	52.855	825.000	46.750		
to		150.0	2G	12.081	105.711	0.0		
U7	577.07	0.0022	3F	40.774	930.711	2.059		Vel = 3.70
U7	300.00	11.65	5F	87.206	805.000	48.809		Qa = 300
to		150.0	2G	16.1	103.306	0.0		
U4	877.07	0.0008		0.0	908.306	0.691		Vel = 2.64
	0.0							
	877.07					49.500		K Factor = 124.66
U1	1137.28	11.65	T	80.498	530.000	45.979		
to		150.0	2G	16.1	96.598	0.0		
U2	1137.28	0.0012		0.0	626.598	0.771		Vel = 3.42
U2	-577.07	11.65	G	8.05	405.000	46.750		
to		150.0		0.0	8.049	0.0		
U3	560.21	0.0003		0.0	413.049	0.137		Vel = 1.69
U3	862.72	11.65	T	80.498	1255.000	46.887		
to		150.0	2G	16.1	148.922	0.0		
U4	1422.93	0.0019	3F	52.324	1403.922	2.613		Vel = 4.28
U4	877.07	11.65	G	8.05	445.000	49.500		
to		150.0	2F	34.882	42.932	0.0		
U5	2300.0	0.0045		0.0	487.932	2.207		Vel = 6.92
U5	0.0	16.41	T	145.482	2560.000	51.707		
to		130.0	4F	136.502	281.984	0.0		
U6	2300.0	0.0011		0.0	2841.984	3.159		Vel = 3.49
U6	0.0	11.65	T	80.498	1000.000	54.866		
to		150.0	2F	34.882	131.481	3.032		
SRC	2300.0	0.0045	2G	16.1	1131.481	5.119		Vel = 6.92
	0.0							
	2300.00					63.017		K Factor = 289.73

Attachment 7
Domestic

Water Flow Test Store Number: 3873 Date/Time: Mar 08, 2016 - 1:30 PM EDT

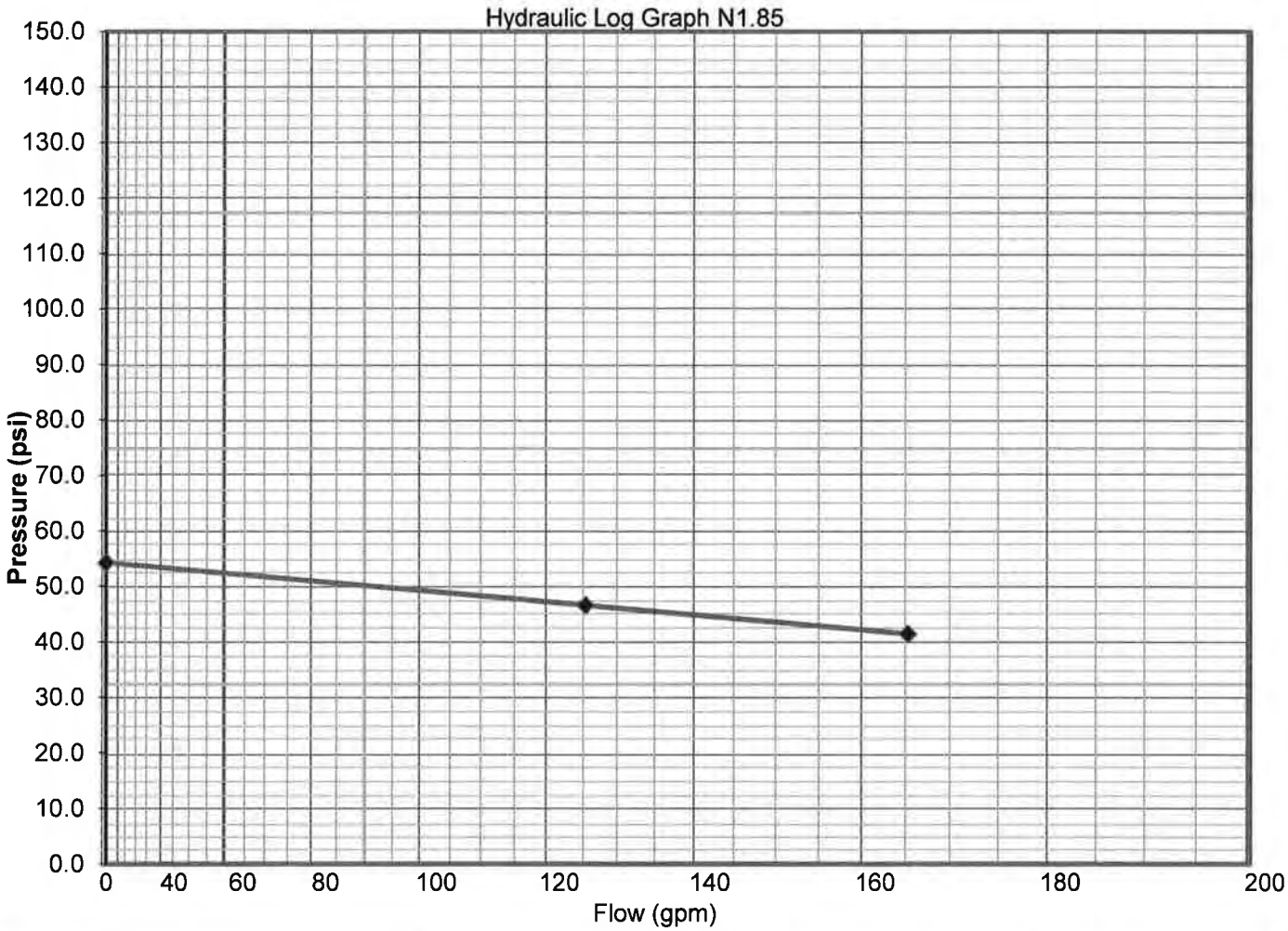
Test By: Chuck Burdett, HEI City, State: Alachua, FL

Static (psi): 68 Residual (psi): 64 Pitot (psi): 37 x 2 Flow (gpm): 2042 Disch. Coeff.: 0.9 / 0.9

Gauge Hydrant Location: along the west side of NW 147th Drive, east of Lowes entrance

Flow Hydrant Location: 400 ft northwest of NW 147th Drive, at the end of NW 157th Lane

Backflow Device Size and Type: 3 in. Wilkins 375



Domestic Calculations to Base of Riser	Static	Residual
gpm:	0	125
1 Available per Test	68.0	67.8
2 Elevation Adjustment (0.433 x -7.0 ft.)	-3.0	-3.0
3 Loss to BOR See attached calculations		-1.5
4 BOR per Test	65.0	63.3
5 Low Tank / Low City Pressure	-1.7	-1.7
6 BFP Type: 3 in. Wilkins 375	-9.0	-12.0
7 Meter: 2 in. Sensus	0.0	-3.0
8 BOR after BFP	**54.3**	**46.6**

Pressure / Flow Summary - STANDARD

Henderson Engineers, Inc.
Attachment #7

Date

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
BOR	118.0		64.23	na				
DOM	118.0		63.28	na	125.0			
U1	118.0		64.23	na				
H1	118.0		64.23	na				
H2	118.0		64.24	na				
U2	118.0		64.23	na				
U7	118.0		64.22	na	300.0			
U3	118.0		64.24	na				
U4	118.0		64.29	na				
U5	118.0		64.39	na				
U6	118.0		64.53	na				
SRC	111.0		67.79	na				

The maximum velocity is 3.15 and it occurs in the pipe between nodes DOM and U1

Hyd. Ref. Point	Qa / Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt / Pe / Pf	Pt / Pv / Pn	******* Notes ******
BOR	0.0	7.98	T	52.855	105.000	64.227		
to		150.0	G	6.041	249.173	0.0		
U1	0.0	0.0	7E	190.278	354.173	0.0		Vel = 0
	0.0							
	0.0					64.227		K Factor = 0
DOM	125.00	4.026	T	30.221	120.000	63.280		Qa = 125
to		150.0	G	3.022	139.018	0.0		
U1	125.0	0.0037	7E	105.775	259.018	0.947		Vel = 3.15
	0.0							
	125.00					64.227		K Factor = 15.60
U1	32.40	7.98	2F	27.183	330.000	64.227		
to		150.0	G	6.041	33.222	0.0		
H1	32.4	0.0		0.0	363.222	0.004		Vel = 0.21
H1	0.0	7.98	E	27.183	375.000	64.231		
to		150.0		0.0	27.182	0.0		
H2	32.4	0.0		0.0	402.182	0.004		Vel = 0.21
H2	0.0	7.98	T	52.855	755.000	64.235		
to		150.0	G	6.041	58.895	0.0		
U3	32.4	0.0		0.0	813.895	0.009		Vel = 0.21
	0.0							
	32.40					64.244		K Factor = 4.04
U2	-40.00	7.98	T	52.855	825.000	64.234		
to		150.0	2G	12.081	105.711	0.0		
U7	-40.0	0.0	3F	40.774	930.711	-0.014		Vel = 0.26
U7	300.00	11.65	5F	87.206	805.000	64.220		Qa = 300
to		150.0	2G	16.1	103.306	0.0		
U4	260.0	0.0001		0.0	908.306	0.072		Vel = 0.78
	0.0							
	260.00					64.292		K Factor = 32.43
U1	92.60	11.65	T	80.498	530.000	64.227		
to		150.0	2G	16.1	96.598	0.0		
U2	92.6	0.0		0.0	626.598	0.007		Vel = 0.28
U2	40.00	11.65	G	8.05	405.000	64.234		
to		150.0		0.0	8.049	0.0		
U3	132.6	0.0		0.0	413.049	0.010		Vel = 0.40
U3	32.40	11.65	T	80.498	1255.000	64.244		
to		150.0	2G	16.1	148.922	0.0		
U4	165.0	0.0	3F	52.324	1403.922	0.048		Vel = 0.50
U4	260.00	11.65	G	8.05	445.000	64.292		
to		150.0	2F	34.882	42.932	0.0		
U5	425.0	0.0002		0.0	487.932	0.097		Vel = 1.28
U5	0.0	16.41	T	145.482	2560.000	64.389		
to		130.0	4F	136.502	281.984	0.0		
U6	425.0	0.0		0.0	2841.984	0.139		Vel = 0.64
U6	0.0	11.65	T	80.498	1000.000	64.528		
to		150.0	2F	34.882	131.481	3.032		
SRC	425.0	0.0002	2G	16.1	1131.481	0.225		Vel = 1.28
	0.0							
	425.00					67.785		K Factor = 51.62

WALMART #3873 –ALACHUA
Project № 16-016 (v1.2)
November 2016

TRAFFIC IMPACT ANALYSIS
CITY OF ALACHUA
FLORIDA

Prepared by:

Traffic & Mobility Consultants
3101 Maguire Boulevard, Suite 265
Orlando, Florida 32803
www.trafficmobility.com
(407) 531-5332

Prepared for:

CPH Engineers Inc.
500 W Fulton Street
Sanford, FL 32771

EXECUTIVE SUMMARY

This traffic impact study was conducted to assess the traffic impacts for the proposed Walmart Supercenter in the City of Alachua, Florida. The results of the study documented herein are summarized below:

Trip Generation

- The proposed 161,397 square foot Walmart Supercenter is projected to generate 5,898 new daily trips and 506 new PM peak hour trips.

Roadways

- All roadway segments analyzed currently operate at acceptable levels of service during the peak hour and are expected to continue to do so at project build-out (2018).

Intersections

- All study intersections currently operate at acceptable levels of service during the peak hour and are expected to continue to do so at project build-out.

Access

- The proposed site driveway on US 441 is projected to operate at an acceptable level of service with the proposed signal control.
- The recommended configuration for the intersection includes dual westbound left-turn lanes and an eastbound right-turn lane serving traffic entering the site. Traffic exiting onto US 441 is served by dual northbound left-turn lanes and dual northbound right-turn lanes.
- The site driveway on US 441 was reviewed to determine the recommended turn lane lengths for each approach. The following turn lane lengths are recommended:

Turn Lane	Length
EB Right	330 ft
WB Left	330 ft
NB Left	265 ft
NB Right	185 ft

The proposed Walmart Superstore in the City of Alachua will not adversely impact the transportation network, which is adequate to support the development.

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic & Mobility Consultants, LLC, a corporation authorized to operate as an engineering business, EB-30024, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Walmart Store #3873 Alachua

LOCATION: City of Alachua, Florida

CLIENT: CPH Engineers Inc.

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Mohammed Abdallah

P.E. No.: Florida P.E. No. 56168

DATE: November 3, 2016

SIGNATURE:

MOHAMMED ALI HABDALLAH
LICENSE
56168
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

1.1 Study Area 3

2.0 EXISTING ROADWAY ANALYSIS 4

2.1 Existing Traffic Volumes 4
2.2 Roadway Segment Analysis 4
2.3 Intersection Analysis 6

3.0 PROJECT TRAFFIC 7

3.1 Trip Generation 7
3.2 Trip Distribution/Assignment 7

4.0 PROJECTED TRAFFIC CONDITIONS 9

4.1 Background Traffic Growth 9
4.2 Roadway Segment Analysis 9
4.3 Intersection Analysis 10
4.4 Turn Lane Length Analysis 12

5.0 STUDY CONCLUSIONS 13

APPENDICES 14

Appendix A Responses to Comments
Appendix B Proposed Site Plan
Appendix C Existing Intersection Counts, Seasonal Factors, and Service Volumes
Appendix D Existing Intersection Analysis
Appendix E ITE Trip Generation Information
Appendix F Trip Distribution Plot
Appendix G Growth Rate Calculations
Appendix H Projected Intersection Volumes
Appendix I Projected Intersection Conditions

LIST OF TABLES

Table 1 Significance Test 3
Table 2 Existing Roadway Conditions 4
Table 3 Existing Intersection Conditions 6
Table 4 Trip Generation Analysis 7
Table 5 Projected Roadway Conditions 9
Table 6 Projected Intersection Conditions 10
Table 7 Recommended Turn Lane Dimensions 12

LIST OF FIGURES

Figure 1 Site Location Map 2
Figure 2 Existing Intersection Volumes 5
Figure 3 Project Trip Distribution 8
Figure 4 Projected PM Peak Hour Intersection Volumes 11

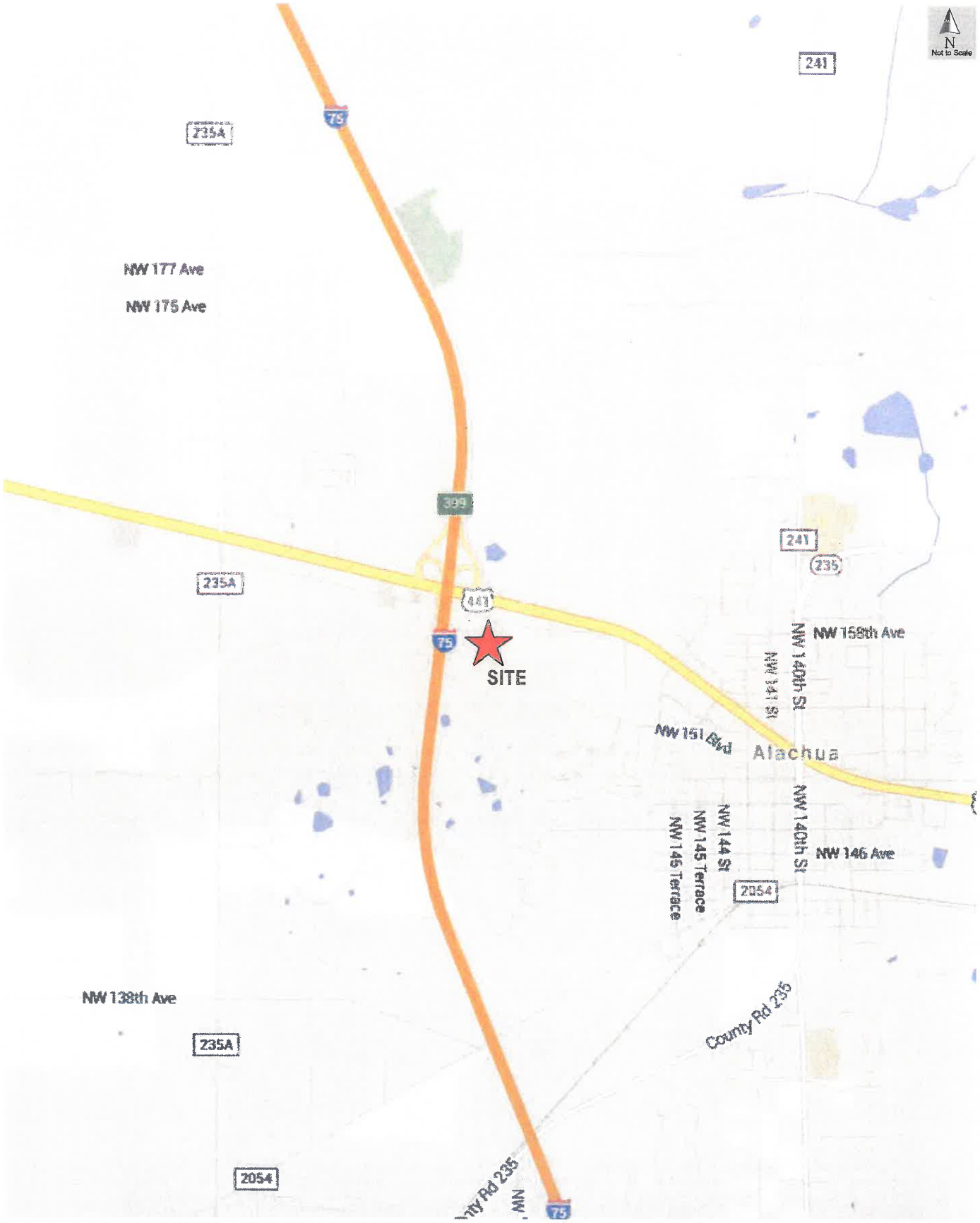
1.0 INTRODUCTION

This Traffic Impact Analysis was prepared to evaluate the transportation impact of the proposed Walmart Supercenter in the City of Alachua, Florida. The analysis was revised and updated in response to comments received from the City of Alachua and the Florida Department of Transportation. The comments and responses are included in **Appendix A**.

The proposed development is a 158,562 square foot Walmart Supercenter building with a 2,835 square foot seasonal garden center. Therefore, the total gross floor area of the Walmart Supercenter is 161,397 square feet.

The site is located in the southeast quadrant of the I-75/US 441 interchange. Site access will be provided via US 441, which is anticipated to have signal control to serve the development. In addition, secondary access will be provided via the extension of NW 151st Boulevard. The build-out date is anticipated to occur by 2017. However, for purposes of the traffic analysis, the buildout year was conservatively established as the year 2018. Site location and the surrounding roadway network are illustrated in **Figure 1**. The proposed site plan is included in **Appendix B**.

The analysis was conducted generally in accordance with the initial study methodology approved for the project, the City of Alachua's requirements, and standard engineering practice. Information used in the analysis includes traffic volumes collected by Traffic & Mobility Consultants, LLC (TMC), and data obtained from the City of Alachua (City), Alachua County (County), and/or the Florida Department of Transportation (FDOT).



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Site Location Map

Walmart #3873 - Alachua
16-016

Figure
1

1.1 Study Area

Based on the City of Alachua's Land Development Code, the primary influence area of the proposed development includes all primary roadway segments within ½ mile of the site access and any segment where project traffic exceeds 5% of the segment's capacity. **Table 1** summarizes the significance test performed for the study area.

Table 1
Significance Test

Roadway	Segment	Lanes	Project Distrib	Project Trips	Segment Capacity	Project Significance
US 441	NW 188th St to CR 235A	4	20%	101	3,200	3.2%
	CR 235A to I-75	4	37%	187	3,200	**5.8%**
	I-75 to NW 147th Dr	4	52%	263	3,200	**8.2%**
	NW 147th Dr to SR 235	4	34%	172	3,200	**5.4%**
	SR 235 to Rachael Blvd	4	19%	96	3,200	3.0%
CR 235A	NW 138th Ave to US 441	2	5%	25	1,050	2.4%
	US 441 to I-75	2	7%	35	1,050	3.3%
SR 235	Peggy Rd to US 441	2	8%	41	960	4.3%
	US 441 to NW 140th St	2	6%	30	960	3.1%

**Significance is defined as an impact of 5% or more of the segment's capacity*

The study includes the following roadway segments and intersections in the vicinity of the site:

Roadways/Limits
US 441 – CR 235A to SR 235

Intersections
US 441 & CR 235A (Signalized)
US 441 & NW 167th Boulevard (Signalized)
US 441 & I-75 SB Ramps (Signalized)
US 441 & I-75 NB Ramps (Signalized)
US 441 & NW 147th Drive (Signalized)
US 441 & Main Street (Signalized)
US 441 & NW 140th Street (Signalized)
US 441 & Site Access (Proposed Signal)

2.0 EXISTING ROADWAY ANALYSIS

2.1 Existing Traffic Volumes

Existing traffic volumes at the study intersections were collected by TMC for use in this analysis. Intersection turning movement counts were performed on Tuesday, March 8, 2016. A supplemental count was performed at the intersection of US 441 & NW 167th Boulevard on August 17, 2016. A review of the FDOT peak season factors indicates that the traffic counts were made during the peak season. Therefore, no seasonal adjustment was applied to the field volumes.

The PM peak hour intersection volumes are illustrated in **Figure 2**. For the most part, the peak hour was observed to occur at 5:00 pm to 6:00 pm, except for the intersection of I-75 northbound ramp and US 441 which peaked at 4:45 pm to 5:45 pm. For purposes of this analysis, the peak hour was considered to be 5:00 pm to 6:00 pm.

Segment traffic volumes were calculated from the existing intersection approach and departure volumes. The existing turning movement counts, seasonal factor data, and the Q/LOS service volume table are provided in **Appendix C.**

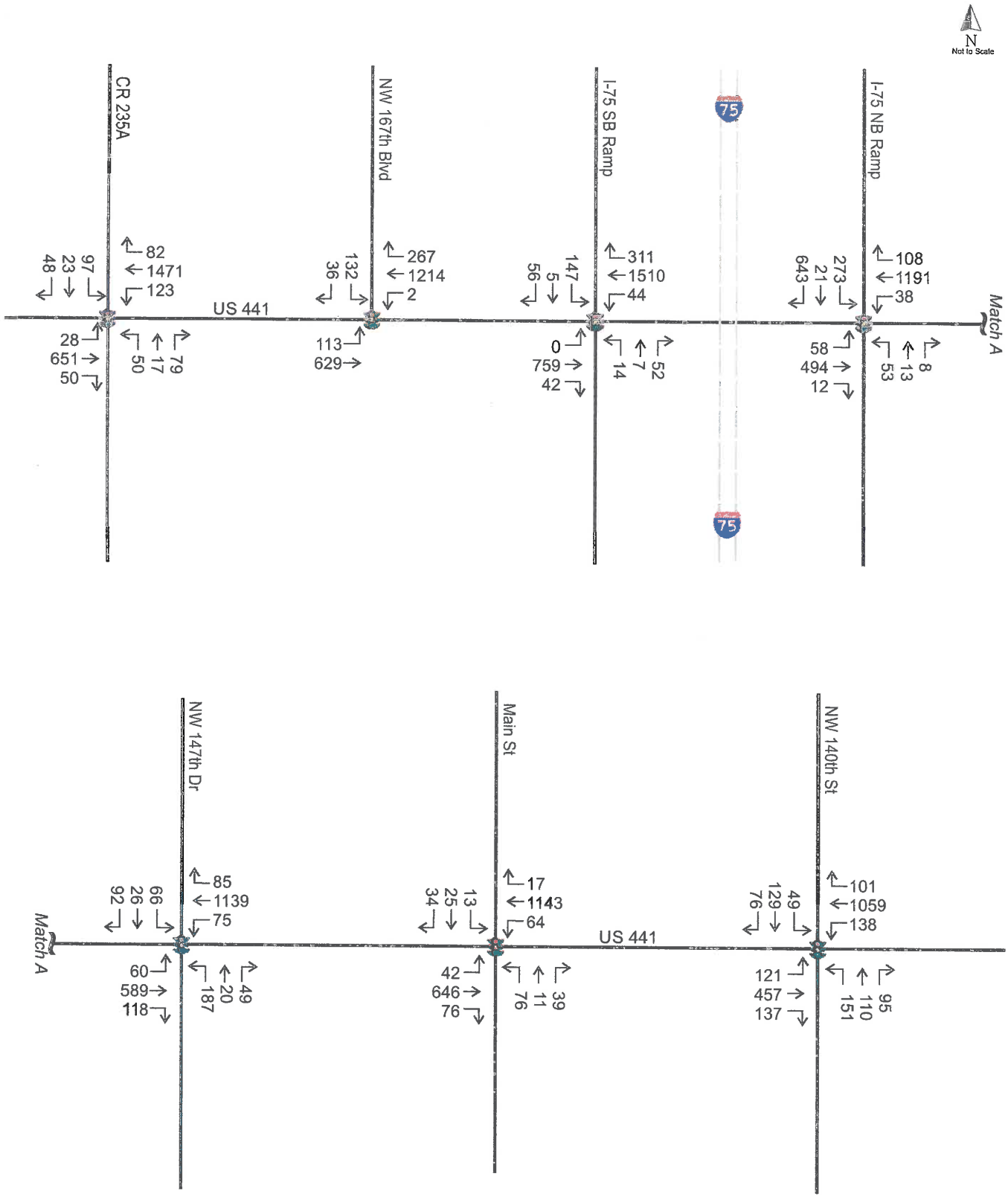
2.2 Roadway Segment Analysis

The existing roadway conditions analysis was performed for the PM peak hour from 5:00 pm to 6:00 pm. The roadway capacity volumes for the study roadway segments were obtained from FDOT's 2013 Generalized Service Volume Tables. The results of the existing PM peak hour roadway analysis are shown in **Table 2,** which indicates that all roadway segments analyzed are currently operating at an acceptable LOS.

Table 2
Existing Roadway Conditions

Roadway	Segment	Lanes	Existing Volume	LOS Std	Adopted Capacity	Existing LOS
US 441	CR 235A to I-75	4	2,381	D	3,200	C
	I-75 to NW 147th Dr	4	2,111	D	3,200	C
	NW 147th Dr to SR 235	4	2,185	D	3,200	C

Peak hour volumes obtained from existing intersection counts



Existing PM Peak Hour Volume (5:00 pm to 6:00 pm, except I-75NB Ramp - 4:45 pm to 5:45 pm)

TMC Traffic & Mobility Consultants

Existing PM Peak Hour Intersection Volumes

Walmart #3873 - Alachua
16-016

Figure 2

2.3 Intersection Analysis

The study intersections were analyzed in accordance with the procedures of the 2000 Highway Capacity Manual with the use of the Synchro Software (version 9.0). The analysis was conducted using existing PM peak hour volumes and intersection geometry. The results of this analysis, as summarized in **Table 3**, show that all study intersections currently operate at an acceptable LOS. The Synchro output sheets are included in **Appendix D**.

Table 3
Existing Intersection Conditions

Intersection	Control	LOS	EB		WB		NB		SB		Overall	
		STD	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
US 441 & CR 235A	Signal	D	15.5	B	21.0	C	45.8	D	45.6	D	22.0	C
US 441 & NW 167th Blvd	Signal	D	4.6	A	2.1	A	--	--	42.8	D	5.8	A
US 441 & I-75 SB Ramp	Signal	D	30.2	C	4.8	A	46.6	D	53.0	D	16.7	B
US 441 & I-75 NB Ramp	Signal	D	6.8	A	31.7	C	68.6	E	51.6	D	29.1	C
US 441 & NW 147th Dr	Signal	D	19.8	B	4.7	A	40.6	D	48.1	D	16.2	B
US 441 & Main St	Signal	D	1.4	A	2.7	A	38.5	D	38.2	D	5.2	A
US 441 & NW 140th St	Signal	D	9.2	A	32.4	C	42.0	D	49.9	D	29.0	C

All average delay values are in seconds/vehicle

3.0 PROJECT TRAFFIC

3.1 Trip Generation

The proposed development is a 161,397 square foot Walmart Supercenter. The Institute of Transportation Engineers' *Trip Generation Manual, 9th Edition* was used to calculate the Daily and PM peak hour trip generation of the proposed development. Since the analysis was conducted for a single land use, it is not necessary or appropriate to calculate internal captured trips. The results of the Daily and PM peak hour trip generation for the project are presented in **Table 4**.

Table 4
Trip Generation Analysis

Description	LU Code	Quantity	Daily		PM Peak Hour Trips			
			Rate	Trips	Rate	Enter	Exit	Total
Discount Superstore	813	161,397 SF	50.75	8,191	4.35	344	358	702
Pass-by Trips for Superstore (28%)				*2,293*		*98*	*98*	*196*
Net New Trips				**5,898**		**246**	**260**	**506**

ITE Trip Generation, 9th Edition and ITE Trip Generation Manual, 3rd Edition

The proposed Walmart Supercenter is projected to generate 5,898 new daily trips, of which 506 trips occur during the PM peak hour. The detailed trip generation information sheets are included in **Appendix E**.

3.2 Trip Distribution/Assignment

The trip distribution pattern was developed using the Alachua County Transportation Demand Model and the Florida Standard Urban Transportation Model Structure (FSUTMS). The adopted model structure was modified to include a project specific Traffic Analysis Zone (TAZ). A Select Zone Analysis (SZA) was performed for the project specific TAZ to determine the distribution and assignment of project trips on the transportation network.

Figure 3 illustrates the resulting trip distribution pattern and the model generated trip distribution plot is provided in **Appendix F**.

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Project Trip Distribution

Walmart #3873 - Alachua
16-016

Figure
3

4.0 PROJECTED TRAFFIC CONDITIONS

The critical intersections and roadway segments were analyzed based on the existing roadway geometry to determine potential impacts and to investigate mitigation possibilities, if necessary. The total projected traffic volumes, which consist of future background traffic and project trips, were assigned to the roadway network.

4.1 Background Traffic Growth

In order to estimate background traffic in the build-out year 2018, historical growth rates were calculated based on a review of historical traffic volumes on US 441. Based on historical traffic volumes, a 3% annual growth rate was applied to all existing traffic volumes in order to obtain the projected 2018 background traffic. Additionally, vested trips provided by the City of Alachua were checked against the 3% annual growth rate. If the vested trips on the study segment were determined to be greater than the 3% annual growth rate, then the growth from vested trips was applied to ensure that the maximum potential growth is assumed in the analysis without double counting trips. The volumes projected using the growth rate were determined to be higher than vested trips, therefore, projected 2018 background traffic was based on a 3% annual growth rate. The growth trend analysis worksheets and the vested trips table are included in **Appendix G**.

4.2 Roadway Segment Analysis

Projected conditions on the roadway segments within the study area were determined by comparing the total projected volume to the segment's service volumes and adopted capacity. **Table 5** summarizes the analysis and the projected level of service per roadway segment. All study segments are projected to operate at an acceptable level of service at the build-out year 2018.

Table 5
Projected Roadway Conditions

Roadway	Segment	Lns	Existing Volume	3% AGR	Vested Trips	2018 Volume*	LOS Std	Adopted Capacity	Trip Distrib	Project Trips	Total Traffic	2018 LOS
US 441	CR 235A to I-75	4	2,381	143	67	2,524	D	3,200	37%	187	2,711	C
	I-75 to Access	4	2,111	127	67	2,238	D	3,200	52%	263	2,501	C
	Access to NW 147th Dr	4	2,185	131	67	2,238	D	3,200	38%	192	2,430	C
	NW 147th Dr to SR 235	4	1,899	114	67	2,316	D	3,200	34%	172	2,488	C

** 2018 Volume projected using maximum growth - 3% annual growth rate*

4.3 Intersection Analysis

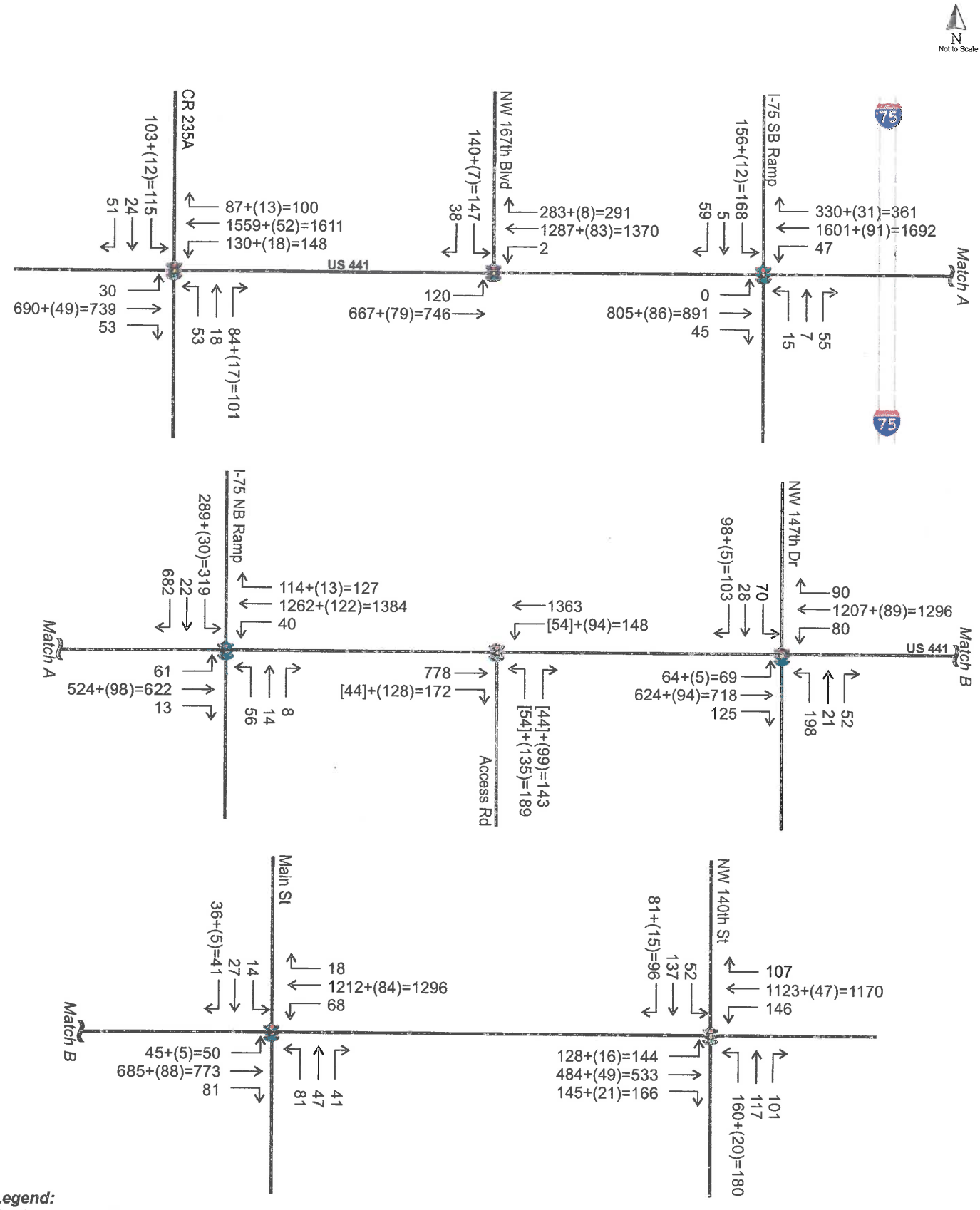
The study intersections, including the proposed signal at the site access on US 441, were analyzed to determine whether improvements would be required to accommodate the projected traffic volumes at project build-out. Future intersection turning movement volumes were determined by projecting the existing PM peak hour volume to the buildout year 2018 using the 3% annual growth rate. The projected turning movement volumes are illustrated in **Figure 4** and the detailed projected traffic volume calculations are included in **Appendix H.**

The operating conditions at the intersections were analyzed using the Synchro Software and the methods of the *Highway Capacity Manual (2010).* **Table 6** summarizes the results of the projected intersection conditions at project buildout. The analysis reveals that all study intersections are projected to operate at adequate overall LOS in the year 2018. The detailed Synchro output sheets are provided in **Appendix I.**

Table 6
Projected Intersection Conditions

Intersection	Control	LOS	EB		WB		NB		SB		Overall	
		STD	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
US 441 & CR 235A	Signal	D	16.2	B	23.7	C	47.7	D	46.5	D	24.1	C
US 441 & NW 167th Blvd	Signal	D	4.5	A	16.0	B	--	--	43.4	D	14.2	B
US 441 & I-75 SB Ramp	Signal	D	12.1	B	8.3	A	46.7	D	56.1	E	13.5	B
US 441 & I-75 NB Ramp	Signal	D	6.7	A	14.4	B	70.5	E	60.4	E	20.1	C
US 441 & Access	Signal	D	24.3	C	4.8	A	36.9	D	--	--	14.3	B
US 441 & NW 147th Dr	Signal	D	3.8	A	21.3	C	41.2	D	49.1	D	19.5	B
US 441 & Main St	Signal	D	1.7	A	3.6	A	39.2	D	38.6	D	6.1	A
US 441 & NW 140th St	Signal	D	10.9	B	36.9	D	45.9	D	53.8	D	32.2	C

All average delay values are in seconds/vehicle



Legend:
Background + [Pass-by] + (Project) = Total

TMC Traffic & Mobility Consultants

Projected PM Peak Hour Intersection Volumes

Walmart #3873 - Alachua
16-016

Figure **4**

4.4 Turn Lane Length Analysis

The site access intersection at US 441 was reviewed to determine the required left turn lane lengths. The recommended and proposed configuration for the intersection is dual westbound left-turn lanes and an eastbound right-turn lane on the US 441 approaches. On the access drive, the approach is recommended with dual northbound left-turn lanes and dual northbound right-turn lanes. Turn lane dimensions were calculated to accommodate queue storage and deceleration distance.

The recommended queue storage was based on the 95th percentile queue from the signal analysis. Deceleration length requirements were obtained from Index 301 of the FDOT Design Standards. The results of the calculations are summarized in **Table 7**.

Table 7
Recommended Turn Lane Dimensions

Intersection	Movement	Peak Hour Volume	95th %ile Queue	Queue Length[1]	Design Speed	Decel Distance[2]	Total Lane Length[3]
US 441 & Site Access	EB Right	172	3.7 veh	90 ft	50 mph	240 ft	330 ft
	WB Left	148	3.6 veh	90 ft	50 mph	240 ft	330 ft
	NB Left	189	4.9 veh	120 ft	35 mph	145 ft	265 ft
	NB Right	143	1.6 veh	40 ft	35 mph	145 ft	185 ft

1. Queue lengths based on signal operations analysis
2. Deceleration length based on FDOT Design Standards, Index 301
3. Turn lane dimensions include taper lengths

It should be noted that all lane lengths listed above include standard 50-foot tapers for single lanes and 100-foot tapers for dual lanes. The lane lengths calculated above present minimum required lengths. All applicable FDOT design standards must be adhered to in the design of the project's deceleration lanes.

5.0 STUDY CONCLUSIONS

This traffic impact study was conducted to assess the traffic impacts for the proposed Walmart Supercenter in the City of Alachua, Florida. The results of the study documented herein are summarized below:

Trip Generation

- The proposed 161,397 square foot Walmart Supercenter is projected to generate 5,898 new daily trips and 506 new PM peak hour trips.

Roadways

- All roadway segments analyzed currently operate at acceptable levels of service during the peak hour and are expected to continue to do so at project build-out (2018).

Intersections

- All study intersections currently operate at acceptable levels of service during the peak hour and are expected to continue to do so at project build-out.

Access

- The proposed site driveway on US 441 is projected to operate at an acceptable level of service with the proposed signal control.
- The recommended configuration for the intersection includes dual westbound left-turn lanes and an eastbound right-turn lane serving traffic entering the site. Traffic exiting onto US 441 is served by dual northbound left-turn lanes and dual northbound right-turn lanes.
- The site driveway on US 441 was reviewed to determine the recommended turn lane lengths for each approach. The following turn lane lengths are recommended:

Turn Lane	Length
EB Right	330 ft
WB Left	330 ft
NB Left	265 ft
NB Right	185 ft

The proposed Walmart Superstore in the City of Alachua will not adversely impact the transportation network, which is adequate to support the development.

APPENDICES

Appendix A
Responses to Comments

Traffic & Mobility Consultants

November 3, 2016

Ms. Ameera Sayeed, Growth Management
Mr. Tom Cavin, Traffic Operations
FDOT – District 2
2198 Edison Avenue
Jacksonville, Florida 32204

Re: Traffic Impact Study Review for Walmart Store 3873-00, Alachua (US 441 East of I-75)
TMC Project № 16-016, FDOT Section No. 26020
City of Alachua, Florida

Dear Ms. Sayeed and Mr. Cavin,

Please find below the response to the comments from the FDOT review memorandum dated August 19, 2016, regarding the above-referenced Traffic Impact Analysis prepared by Traffic & Mobility Consultants (TMC) dated March, 2016. The FDOT comments are listed in **bold** typeface and the TMC responses follow in *normal* typeface.

TRAFFIC OPERATIONS COMMENTS

Comment 48: The figures should be labeled as Figure 1: not just 1.

TMC Response: *The figures in the revised report were labeled.*

Comment 49: Most of the study uses the pm volumes for impacts/improvements; however, many times throughout the study there is no reference to the volumes being pm volumes. Please describe them as such. And, label them as pm in the tables and figures.

TMC Response: *The revised report labels the peak hour trips as PM peak hour trips.*

Comment 50: Table 5 should reference project trips as Net New Trips.

TMC Response: *Table 5 has been updated to reflect "Net New Trips."*

Comment 51: Figure 4 needs to reference as to what the [] and () volumes are.

TMC Response: *Figure 4 has been revised to include a legend of trips.*

Comment 52: The trips shown in Table 4 along with the trip distribution %'s shown in Figure 3 do not seem to match the turning movements in Figure 4.

TMC Response: *The trips were checked and were found to match.*

Comment 53: WalMart is just a small portion of the total development. Will this intersection handle the future developments along this connection?

TMC Response: *This study considers only the proposed Walmart development. There are currently no known development plans for the other parcels, which are not owned by Walmart. When development is proposed for those parcels, the intersection should be revaluated with those plans.*

GROWTH MANAGEMENT COMMENTS

Comment 54: The land uses and trips calculated are only reported and analyzed for the Walmart. There are two other parcels that should be included in the analysis and total trips added into the analysis.

TMC Response: *This study considers only the proposed Walmart development. There are currently no known development plans for the other parcels, which are not owned by Walmart. When development is proposed for those parcels, the intersection should be revaluated with those plans.*

Comment 55: What year of the model was used?

TMC Response: The Alachua County Model adjusted for the year 2020 was used.

Comment 56: Walmart has build-out of 2018 but the out parcels and build out date is not accounted for in the TIA.

TMC Response: *This study considers the only the proposed Walmart development. There are currently no known development plans for the other parcels, which are not owned by Walmart. When development is proposed for those parcels, the intersection should be revaluated with those plans.*

Comment 57: Please provide the model and Synchro files.

TMC Response: *The files will be provided by ftp link.*

Comment 58: The pass by capture rates are not reasonable and are far too high, given the area, and the travel patterns and especially since the analysis only accounted for the

Walmart and not the out parcels.

TMC Response: *The pass-by rates were agreed with the City and are based on ITE information for similar stores. Pass-by trips are included in the analysis of the primary intersection's movements.*

Comment 59: The site plans shows a double left and a right and the analyses is based on this – we may need to revisit this once the out parcels and the Walmart trips are calculated and analyses re-calculated.

TMC Response: *Noted. The adjacent parcels, which are not owned by Walmart, will be required to perform a traffic analysis and address any additional capacity or operational needs at the intersection.*

Comment 60: Two areas of concern at the interchange of I75 and US441. The numbers may change and as well as the analysis after the comments above are addressed. The two turns are the I 75 southbound left turn and the I75 NN ramp – SB left turn at the signal. I believe there maybe 1,250 approximately from the interchange to the proposed access point and proposed signalization.

TMC Response: *The I-75 ramp intersections were analyzed and they are projected to operate adequately at buildout.*

END OF COMMENTS

We trust these responses adequately address the review comments. A revised analysis has been provided under separate cover. We remain available to discuss this matter further or to answer any questions.

Regards,

Mohammed N. Abdallah, P.E.

Traffic & Mobility Consultants

November 3, 2016

Mr. Brian D. Kanely, P.E.
Volkert, Inc.
3501 South Main Street, Suite 2
Gainesville, Florida 32601

Re: Traffic Impact Study Review for Walmart Store 3873-00, Alachua
TMC Project № 16-016
City of Alachua, Florida

Dear Mr. Kanely,

Please find below the response to the comments from the Volkert, Inc. review memorandum dated May 31, 2016, regarding the above-referenced Traffic Impact Analysis prepared by Traffic & Mobility Consultants (TMC) dated March, 2016. The Volkert, Inc. comments are listed in **bold** typeface and the TMC responses follow in *normal* typeface.

SECTION 1.1 -STUDY AREA/SIGNIFICANCE TEST

This section of the report describes the study area for the traffic impact analysis. The study area for the project is based on the City's Land Development Code and includes:

- **Primary roadway segments within 0.5 miles of the site.**
- **Any roadway segment where the percent of the project traffic exceeds 5% of the roadway segment's capacity based on the approved level of service standard (LOS D for US 441).**

The calculation of the number of trips assigned (distributed) to each roadway segment is based on the trip distribution plot, which is derived from the Alachua County Transportation Demand Model and the Florida Standard Urban Transportation Model Structure (FSUTMS). A review of the trip generation data and the trip distribution plot demonstrated that the project trips were correctly distributed and assigned to the roadway network. The three roadway segments that require analysis were correctly identified (significance test). Once the limits of the roadway segments for analysis were identified, any existing and proposed traffic signals in those roadway segments must also be analyzed.

The report identifies seven traffic signals that are within the project limits (significant roadway segments) that need to be reviewed/analyzed. However, the report did not include the new traffic signal at the Public just west of 1-75 (US 441 & NW 167th Blvd). This signal was operational on the day the intersection turning movement counts were obtained (March 8, 2016) and should have been included in the intersections to be analyzed.

The analysis of the roadway segments and intersections (traffic signals) is based on the PM peak hour volumes. The reference to the PM peak hour was omitted from this section of the report (this information is provided in Section 2.2) and should be included in this section for informational purposes.

Report Deficiencies & Recommended Action:

1. **Omitted traffic signal for analysis:**
   a. **The existing traffic signal at US 441 & NW 157th Blvd (Publix) was omitted from the list of intersections to be analyzed.**
   b. **Add the intersection of US 441 & NW 157th Blvd to the list of intersections to be analyzed.**

   TMC Response: *The revised analysis includes the intersection of US 441 & NW 167th Blvd.*

2. **PM peak hour analysis period not stated:**
   a. **This section does not state that the analysis period is the PM peak hour.**
   b. **Include in this section that the analysis period is the PM peak hour and state the time period (5:00 - 6:00 PM, for example).**

   TMC Response: *The revised analysis states that the PM peak hour on the network generally occurs between the hours of 5:00 pm to 6:00 pm.*

SECTION 2.1 - EXISTING TRAFFIC VOLUMES

This section of the report describes and documents the existing traffic volumes that are used in the traffic impact analysis and whether or not a seasonal adjustment factor needs to be applied to the traffic volumes. This information is correctly stated.

This section should also state that the analysis period is the PM peak hour and state what that hour is. The PM peak hour information should also be documented on Figure 2 which shows the existing intersection volumes. Also, the traffic signal at US 441 & NW 157th Blvd needs to be included in the analysis.

Report Deficiencies & Recommended Action:

1. **PM peak hour analysis period not stated**
   a. **This section does not state that the analysis period is the PM peak hour.**

b. Include in this section that the analysis period is the PM peak hour and state the time period (5:00 - 6:00 PM, for example).

TMC Response: *The revised analysis states that the PM peak hour on the network generally occurs between the hours of 5:00 pm to 6:00 pm.*

2. Include the peak hour information in Figure 2.

TMC Response: *The revised analysis states on Figure 2 that the PM peak hour on the network generally occurs between the hours of 5:00 pm to 6:00 pm.*

3. Omitted traffic signal for analysis:

a. The existing traffic signal at US 441 & NW 157th Blvd (Publix) was omitted from the list of intersections to be analyzed.

b. Add the intersection of US 441 & NW 157th Blvd to the list of intersections to be analyzed and add the traffic volume information for this intersection to Figure 2.

TMC Response: *The revised analysis includes the intersection of US 441 & NW 167th Blvd.*

SECTION 2.2 - ROADWAY SEGMENT ANALYSIS

This section of the report describes and documents whether or not the roadway segments meet the level of service (LOS) criteria for US 441. This information is correctly stated on Table 2. The actual time period for the PM peak hour should be stated.

Report Deficiencies & Recommended Action:

1. PM peak hour analysis period:

a. This section does not state the actual PM peak hour analysis period.

b. Include in this section the actual PM peak hour time period (5:00 - 6:00 PM, for example).

TMC Response: *The revised analysis states that the PM peak hour on the network generally occurs between the hours of 5:00 pm to 6:00 pm.*

SECTION 2.3 - INTERSECTION ANALYSIS

This section of the report describes and documents whether or not the intersections (traffic signals) meet the LOS criteria for US 441. This information is correctly stated in Table 3. However, the traffic signal at US 441 & NW 167th Blvd (Publix) was not included in the analysis and needs to be added to Table 3.

Table 3 shows the existing intersection conditions. For informational purposes, a column should be added to Table 3 that shows the level of service standard for the intersections is LOS D.

Report Deficiencies & Recommended Action:

1. **Omitted traffic signal for analysis:**
   a. **The existing traffic signal at US 441 & NW 167th Blvd (Publix) was omitted from the list of intersections to be analyzed.**
   b. **Add the intersection of US 441 & NW 157th Blvd to the list of intersections to be analyzed.**

   TMC Response: *The revised analysis includes the intersection of US 441 & NW 167th Blvd.*

2. **LOS standard not shown:**
   a. **The intersection LOS standard is not shown on Table 3.**
   b. **Add the LOS standard (LOS D) to Table 3 for informational purposes.**

   TMC Response: The LOS Standard has been added to Table 3.

SECTION 3.1 TRIP GENERATION

This section of the report describes and documents the trip generation for the Project. The total and PM peak hour trips are correctly calculated per the ITE Trip Generation Manual, 9th Edition. The report correctly states that the pass-by trip percentage is 28%, per the Trip Generation Manual, and correctly calculates the trip reductions for the pass-by trips that are shown on Table 4 (Pass-by trips are trips that are already on the roadway and passing by the project, and enter/exit the project for convenience rather than make a separate trip to the project at another time.) The only issue with the pass-by trip percentage is whether or not the approving agency arbitrarily places a limit on the pass-by trip percentage. The City of Alachua staff advised they utilize the ITE pass-by trip percentage. After the reduction for pass-by trips, the project will generate a total of 5,898 new net daily trips (506 new PM peak hour trips).

TMC Response: *Noted.*

SECTION 3.2 - TRIP DISTRIBUTION/ ASSIGNMENT

This section of the report describes and documents the Project trip distribution and assignment. This information is derived from the Alachua County Transportation Demand Model (long range transportation planning model) and the FSUTMS. The trip distribution is correctly obtained from the trip distribution plot and shown on Figure 3.

The trip distribution shows that 52% of the trips have an origin/destination (O/D) from west of the new site access road (toward High Springs and I-75) and 48% of the trips have an

O/D from east of the new site access road (toward Alachua). Also, of the 52% of the trips that have an O/D west of the Project, one-third (33%) of those trips have an O/D on/off I-75.

TMC Response: *Noted.*

SECTION 4.1 - BACKGROUND TRAFFIC GROWTH

This section of the report describes and documents the background traffic growth on US 441. Background traffic growth is the increase in traffic volumes that occur on a roadway due to population increases and travel patterns in the area that are not related to the Project. The report uses FOOT traffic counts on US 441 to determine the annual increase in background traffic. A growth rate of 3% was calculated and correctly applied to the future traffic projections.

TMC Response: *Noted.*

SECTION 4.2 - ROADWAY SEGMENT ANALYSIS

This section of the report describes and documents the future traffic volumes for the buildout year and calculates the LOS for the roadway segments. The 2018 traffic volumes on the roadway segments (US441) for the buildout year have been correctly calculated (existing traffic volume plus background traffic growth). The total traffic (2018 traffic plus project trips) have been correctly calculated and the 2018 LOS has been correctly determined for 2018.

TMC Response: *Noted.*

OTHER ISSUES/COMMENTS ON THE ROADWAY SEGMENT ANALYSIS

The methodology in the report that is used to calculate the future traffic at project buildout (future traffic on US 441 plus project traffic) does not address the following issues:

1. **Reserved Trips: The City of Alachua maintains a list of reserved trips on the roadway network. A reserved trip is a trip from a future project that has not yet been built but the trips for that project are already assigned to the roadway network. If the project has not been built by its stated buildout year, the project trips are then removed from the roadway network. The City periodically updates the approved reserved trips on the roadway network in the City. The Report does not include any reserved trips on the impacted roadway segments (US 441). The approved reserved trips should be added to the roadway segments listed in Table 1(Significance Test) to determine the following:**

    a. **If any additional roadway segments meet the 5% test.**
    b. **Update the LOS for the three roadway segments in Table 1.**
    c. **Update the LOS for the eight signalized intersections being reviewed.**

TMC Response: *As agreed in the follow up discussions, the reserved trips were considered and compared to the growth rate applied. In order not to double count and overestimate growth, the higher of either the 3% annual growth rate or the reserved trips was applied in the revised analysis.*

2. **Internal Capture Trips: The Report has no discussion of internal capture trips. When a large site has multiple land uses within its boundary (shopping, eating establishments, motor vehicle services, etc.), customers do not have to leave the site boundaries to conduct business at multiple sites; they drive from one establishment to another without using the external pubic road system. These internal trips are called internal capture trips. The number of internal capture trips may or may not impact the total number of project trips at the build out year. The Report should have a short discussion on whether or not internal capture trips were required to be calculated for the Walmart site and the adjacent parcels to the Walmart site.**

   TMC Response: *While ultimately it is anticipated that some internalization of traffic will occur with additional development of the site, this analysis is only for the development of the Walmart Site. There is no information about anticipated development on the adjacent parcels. Therefore, it is not appropriate to address internally captured trips at this juncture.*

3. **Traffic from Adjacent Land Uses: On the project site plan there are parcels adjacent to the Walmart site that are called "Proposed Seller Retained Property". These parcels are locations for future businesses {retail/professional business offices/etc.) that will generate future trips that will primarily impact US 441 and the signalized intersection at US 441 & the new site access road. Per the City, the seller retained parcels adjacent to the Walmart site will be required to produce their own traffic impact statement as they are developed. The issue with a parcel by parcel approach is the geometry of the site access road approaches and the left/right turn lane approaches on US 441 at the new traffic signal are being determined based on only the traffic from the proposed Walmart, not all the traffic from the Walmart and adjacent future development. Once the new site access road, the roadway modifications on US 441 and the new traffic signal is constructed, it would be very difficult to make future roadway and traffic signal modifications at this location due to physical and/or right of way constraints. Although the traffic from the adjacent land uses is not technically an issue for the Walmart project, it is discussed in this independent review because requiring the future adjacent developments to make roadway and/or traffic signal modifications to the site access road and/or the new traffic signal at US 441 may not be practical. Therefore, the design of the site access road and the associated traffic signalization should be designed to provide as much future capacity as possible, even though the design may initially exceed the design requirements for just the Walmart project. The design of the traffic signal and roadway modifications on US 441 should be closely coordinated with the Florida Department of Transportation (FOOT).**

TMC Response: *This analysis is only for the development of the Walmart Site. There is no information about anticipated development on the adjacent parcels. The design of the signal is being coordinated with FDOT.*

Report Deficiencies & Recommended Action:

1. **Reserved trips not included in the Report:**
   a. **The City approved reserved trips were not included in the Report.**
   b. **Include the reserved trips in the calculation of future (2018) traffic.**

   TMC Response: *As agreed in the follow up discussions, the reserved trips were considered and compared to the growth rate applied. In order not to double count and overestimate growth, the higher of either the 3% annual growth rate or the reserved trips was applied in the revised analysis.*

2. **Internal capture trips not included in the Report:**
   a. **Internal capture trips were not discussed in the Report.**
   b. **Add a short discussion stating internal capture trips were not required to be a component of the Report.**

   TMC Response: *A statement has been added to the revised report explaining that internal capture trips are not a component of this analysis.*

3. **Traffic from adjacent land uses:**
   a. **There is no discussion in the Report about the traffic impact from the adjacent land uses.**
   b. **Add a discussion in the report about the traffic impact from the development of the adjacent land uses and the need to maximize the turn lane approaches at the new traffic signal at US 441 & the site access road.**

   TMC Response: *This analysis is only for the development of the Walmart Site. There is no information about anticipated development on the adjacent parcels. The design of the signal is being coordinated with FDOT.*

SECTION 4.3 - INTERSECTION ANALYSIS

This section of the report describes and documents the future traffic volumes for the buildout year and calculates the LOS for the intersections (traffic signals). The methodology utilized to calculate the future intersection LOS was correctly applied. The traffic signal at the new Publix (US 441 & NW 167th Blvd) and a column stating the intersection LOS standard should be added to Table 6. The approved reserved trips need to be added to the intersection analysis.

Report Deficiencies & Recommended Action:

1. **Omitted traffic signal for analysis:**
   a. **The existing traffic signal at US 441 & NW 157th Blvd (Publix) was omitted from the list of intersections to be analyzed.**
   b. **Add the intersection of US 441 & NW 157th Blvd to the list of intersections to be analyzed and to Figure 4.**

   TMC Response: *The revised analysis includes the intersection of US 441 & NW 167th Blvd.*

2. **LOS standard not shown:**
   a. **The intersection LOS standard is not shown on' Table 6.**
   b. **Add the LOS standard (LOS D) to Table 6 for informational purposes.**

   TMC Response: The LOS Standard has been added to Table 6.

3. **Reserved trips omitted from the intersection analysis:**
   a. **The reserved trips were omitted from the intersection analysis.**
   b. **Add the approved reserved trips to the intersection analysis for the 2018 buildout year traffic.**

   TMC Response: *As agreed in the follow up discussions, the reserved trips were considered and compared to the growth rate applied. In order not to double count and overestimate growth, the higher of either the 3% annual growth rate or the reserved trips was applied in the revised analysis.*

SECTION 4.4 - TURN LANE LENGTH ANALYSIS

This section of the Report describes and documents the calculation of the turn lanes for the new traffic signal at US 441 & the site access road. The methodology utilized to calculate the turn lane lengths was correctly applied.

The issue with the turn lane lengths is the future traffic volumes at project build out are calculated for only the Walmart development (see discussion in Section 4.2). A discussion on the appropriate lengths for the turn lanes at this location needs to occur with the City and the FDOT that will anticipate future traffic from the parcels adjacent to the Walmart project that will be developed in future years.

TMC Response: *This analysis is only for the development of the Walmart Site. There is no information about anticipated development on the adjacent parcels. Those developments may be required to evaluate and modify the turn lanes in the future. The design of the signal is being coordinated with FDOT.*

SECTION 5.0 - STUDY CONCLUSIONS AND EXECUTIVE SUMMARY

The Study Conclusions and the Executive Summary need to be modified to reflect the recommended changes discussed in this independent review.

TMC Response: *The Conclusions and Executive Summary have been updated to reflect the updated analysis.*

OTHER COMMENTS

METHODOLOGY LETTER

The City of Alachua did not require a methodology letter for the traffic impact analysis for the Walmart project. Although not required, a methodology letter is beneficial for large development projects because it address up front the components the traffic impact analysis must address. This includes trip generation, reserved trips, internal capture trips, acceptable software for data computations, other agencies involved in the project, etc. By knowing the study requirements and components before the study is started, it makes the job easier for all involved parties. The

City should be encouraged to address the methodology letter issue for large development projects like the Walmart project.

TMC Response: *Noted.*

END OF COMMENTS

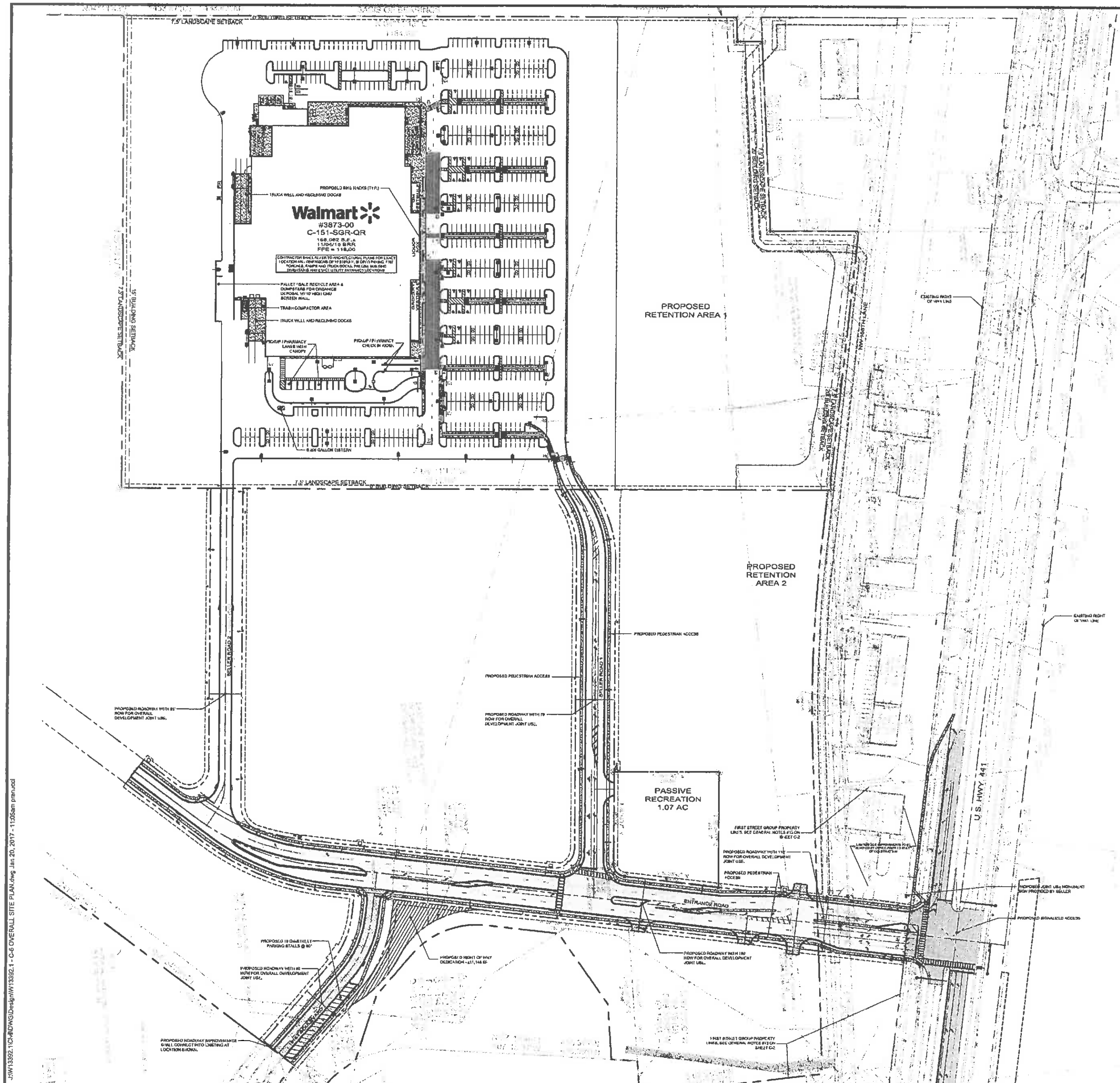
We trust these responses adequately address the review comments. A revised analysis has been provided under separate cover. We remain available to discuss this matter further or to answer any questions.

Regards,

Mohammed N. Abdallah, P.E.

Cc: Mr. Justin Tabor, AICP, City of Alachua

Appendix B
Proposed Site Plan



GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

SITE DATA

TAX PARCEL ID NO.: 03869-013-000 (WALMART PARCEL)
03869-000-000 (FIRST STREET GROUP)
03066-000-000 (FIRST STREET GROUP)
03869-014-000 (PASSIVE RECREATION)

PROJECT USE: WALMART RETAIL STORE

PROJECT DESCRIPTION: CONSTRUCTION OF WAL-MART RETAIL STORE (GROCERY AND GENERAL MERCHANDISE), DRIVE THROUGH PHARMACY AND GARDEN CENTER, ASSOCIATED PARKING, STORMWATER MANAGEMENT & REQUIRED INFRASTRUCTURE, CONSTRUCTION OF ACESS ROADWAY AND UTILITY INFRASTRUCTURE.

ZONING INFORMATION

ZONED (CI) COMMERCIAL INTENSIVE

LAND COVERAGE SUMMARY

	SITE AREA
WAL-MART TRACT:	1,315,094.54 S.F.± (30.19 AC±)
CROSS ACCESS ROAD ROW:	277,578.66 S.F.± (6.38 AC±)
PASSIVE RECREATION:	46,809.69 S.F.± (1.07 AC±)
SUB TOTAL:	1,639,482.89 S.F.± (37.64 AC±)
SELLER RETAINED PARCEL A:	323,230.61 S.F.± (7.42 AC±)
SELLER RETAINED PARCEL B:	491,654.17 S.F.± (11.29 AC±)
SELLER RETAINED PARCEL C:	1,059,244.60 S.F.± (24.32 AC±)
SELLER RETAINED PARCEL D:	290,755.60 S.F.± (6.67 AC±)
SELLER SUB TOTAL:	2,164,885.38 S.F.± (49.70 AC±)
TOTAL SITE:	3,804,368.27 S.F.± (87.34 AC±)

LAND COVERAGE SUMMARY

	SITE AREA	OPEN SPACE AREA	IMPERVIOUS AREA
WAL-MART TRACT:	1,315,094.54 S.F.± (30.19 AC±)	768,973.19 S.F.± (17.65 AC±) = 58.46%	546,121.35 S.F.± (12.54 AC±) = 41.54%
PASSIVE RECREATION:	46,809.69 S.F.± (1.07 AC±)	46,809.69 S.F.± (1.07 AC±) = 100.00%	0.00 S.F.± (0.00 AC±) = 0.0%
CROSS ACCESS ROAD ROW:	277,578.66 S.F.± (6.38 AC±)	38,563.96 S.F.± (0.89 AC±) = 13.95%	239,014.70 S.F.± (5.49 AC±) = 86.05%
SUB TOTAL:	1,639,482.89 S.F.± (37.64 AC±)	831,461.44 S.F.± (19.09 AC±) = 50.71%	808,021.45 S.F.± (18.56 AC±) = 49.29%
OFFSITE ROADWAY ROW	13,030.65 S.F.± (0.30 AC±)	3,767.85 S.F.± (0.09AC±) = 29%	9,263 S.F.± (0.21 AC±) = 71%
TOTAL:	1,652,513.74 S.F.± (37.94 AC±)	835,229.29 S.F.± (19.18 AC±) = 50.54%	817,284.45 S.F.± (18.76 AC±) = 49.46%

BUILDING INFORMATION

BUILDING SETBACKS:

REQUIRED:		PROPOSED:	
FRONT:	20'	FRONT:	707.38'
SIDE (EAST):	0'	SIDE (EAST):	365.05'
SIDE (WEST):	0'	SIDE (WEST):	181.01'
REAR:	15'	REAR:	223.33'

LANDSCAPE INFORMATION

LANDSCAPE SETBACKS:

REQUIRED:	
FRONT:	7.5'
SIDE (EAST):	0'
SIDE (WEST):	0'
REAR:	7.5'

WAL-MART:

PROPOSED WAL-MART SUPERCENTER BUILDING AREA:	158,562 S.F.±
PROPOSED SEASONAL GARDEN CENTER:	2,835 S.F.±
TOTAL WAL-MART BUILDING AREA:	161,397 S.F.±
FLOOR AREA RATIO:	0.12
MAX. BUILDING HEIGHT:	36'-8"

PARKING INFORMATION:

CITY OF ALACHUA PARKING REQUIREMENTS:
1 SPACE PER 305 S.F. OF TOTAL GROSS FLOOR AREA

WAL-MART: 158,562 S.F. / 305 S.F. = 520 SPACES REQUIRED

CITY OF ALACHUA MAXIMUM PARKING ALLOWED PER LDR:
25% INCREASE OVER REQUIRED

WAL-MART: 520 SPACES REQ'D X 1.25 = 650 SPACES MAX.

OFFSTREET PARKING LOCATION (NO MORE THAN 50% LOCATED BETWEEN BUILDING AND STREET FRONTAGE):

REQUIRED PARKING = 520 SPACES

50% REQUIRED PARKING = 260 SPACES

PROPOSED FRONT PARKING = 275 SPACES

PROPOSED PARKING PROVIDED:

WAL-MART: 620 SP. (32 SP. FOR CARTS EXCLUDED)

WALMART PARKING RATIO = 3.91 SPACES PER 1,000 S.F.
(28 SP. FOR CARTS EXCLUDED)
OR 1 SPACE PER 256 S.F. BUILDING AREA
BASED ON GROSS FLOOR AREA OF 158,562 S.F.

CITY OF ALACHUA ADA PARKING:

REQUIRED:

501 TO 1,000 SPACES PROVIDED = 2% OF TOTAL

PROVIDED:

620 SPACES X 2% = 13 SPACES REQUIRED

WAL-MART REQUIREMENT:

2% + 2 ADDITIONAL SPACES OF REGULAR PARKING PROVIDED FOR MEDIAN AGE LESS THAN 40 YEARS.

MEDIAN AGE: 37.1 YEARS
REQUIRED: 15 SPACES
PROVIDED: 24 SPACES

BICYCLE PARKING REQUIRED:
1 SPACE PER 10 REQUIRED PARKING SPACES
520 REQUIRED PARKING SPACES / 10 = 52 SPACES
PROVIDED: 116 SP. ON-SITE

SPECIAL EXCEPTIONS REQUESTED:
1. BUILDINGS GREATER THAN 80,000 SF
2. AUTOMOBILE REPAIR & SERVICING

LEGEND

PAVEMENT LEGEND

- *HEAVY DUTY CONCRETE (WAL-MART ON-SITE ONLY)
- *HEAVY DUTY ASPHALT OR *HEAVY DUTY CONCRETE (WAL-MART ON-SITE ONLY)
- *STANDARD DUTY ASPHALT OR *STANDARD DUTY CONCRETE (WAL-MART ON-SITE ONLY)
- *LIGHT DUTY PERVIOUS CONCRETE (WAL-MART ON-SITE ONLY)
- CONCRETE PER ARCH. SPECIFICATIONS, REFER TO ARCH. PLANS. (WAL-MART ON-SITE ONLY)
- *HEAVY DUTY ASPHALT - OFF-SITE ROADWAY (PER WAL-MART PAVEMENT SPECIFICATIONS)
- *LIGHT DUTY ASPHALT - OFF-SITE ROADWAY (PER WAL-MART PAVEMENT SPECIFICATIONS)
- S.R. 441 (PAVEMENT SECTION TO MEET OR EXCEED FDOT SPECIFICATIONS)
- STAMPED CONCRETE CROSSWALK (ADA CROSSWALK WITH DECORATIVE STAMPED CONCRETE, IMPRINTED CONCRETE PAVEMENT @ 4,000 PSI PER BOMANITE OR APPROVED EQUAL, RUNNING BOND SANDBLAST LIMESTONE PATTERN PER MANUFACTURER'S SPECIFICATIONS. COLOR TO BE DETERMINED.)

* NOTE: SEE SHEET C-13.1 FOR PAVEMENT MATERIALS.

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BRIAN P. CASSIDY, P.E. 57373

		No.	Date	Revision	By
Designed by:	B.P.C.				
Drawn by:	P.W.R.				
Checked by:	H.L.W				
Approved by:	B.P.C.				
Scale:	1"=100'				
Date:	2/17/15				
Job No.:	W13392.1				

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Plans Prepared By:
CPH, Inc.
5200 Belfort Rd., Suite 220
Jacksonville, FL 32256
Ph: 904.332.0999
Licenses:
Eng. C.O.A. No. 3215
Survey L.B. No. 7143
Arch. Lic. No. AA2600926
Lndscp. Lic. No. LC0000298

OVERALL SITE PLAN

Walmart
STORE NO. 3873-00, ALACHUA (SEC I-75 HWY 441), FLORIDA

Sheet No.
C-6

Appendix C

Existing Intersection Counts, Seasonal Factors, and Service Volumes

15 MINUTE TURNING MOVEMENT COUNTS

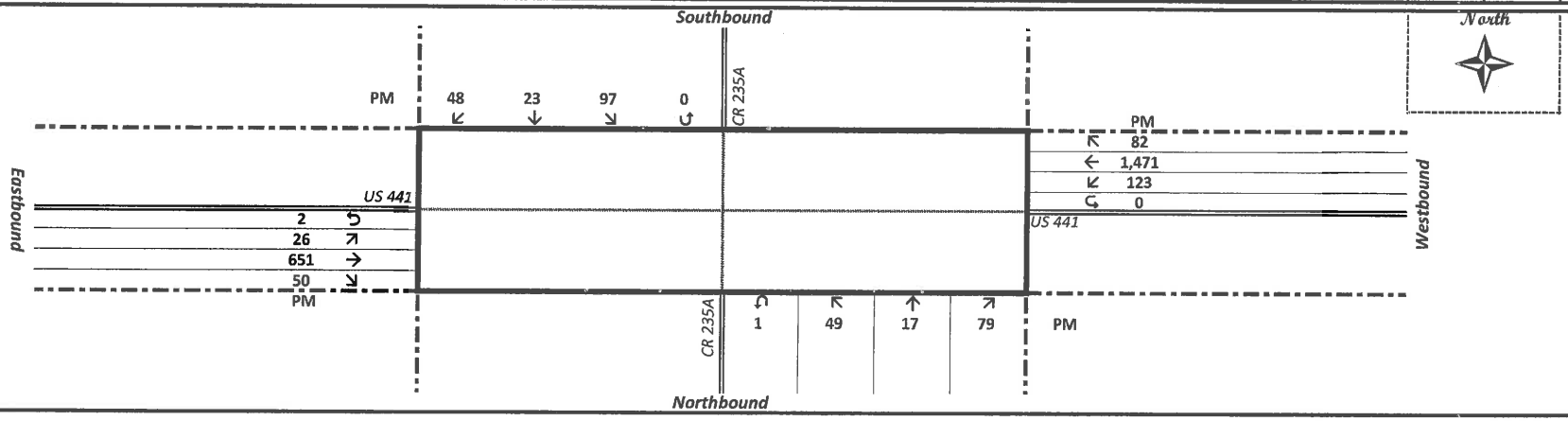
(Cars and Trucks)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua

LOCATION: CR 235A & US 441 **COUNTY:** Alachua Co

TIME BEGIN	CR 235A NORTHBOUND L	T	R	U-turn	TOTAL	CR 235A SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	12	3	3	0	**18**	9	2	8	0	**19**	**37**	2	186	6	0	**194**	17	300	20	0	**337**	**531**	**568**
04:15 PM	11	4	1	0	**16**	14	4	12	0	**30**	**46**	13	104	10	1	**128**	22	324	31	1	**378**	**504**	**550**
04:30 PM	10	4	6	0	**20**	15	3	4	0	**22**	**42**	6	175	8	1	**190**	17	302	21	0	**340**	**529**	**571**
04:45 PM	13	5	9	0	**27**	18	4	4	0	**26**	**53**	9	144	9	0	**162**	21	297	28	0	**346**	**508**	**561**
TOTAL	46	16	19	0	**81**	56	13	28	0	**97**	**178**	30	609	33	2	**674**	77	1,223	100	1	**1,401**	**2,072**	**2,250**
05:00 PM	12	2	21	0	**35**	23	6	10	0	**39**	**74**	9	167	17	0	**193**	25	340	18	0	**383**	**576**	**650**
05:15 PM	10	5	18	0	**33**	20	7	10	0	**37**	**70**	7	161	5	1	**174**	23	421	25	0	**469**	**642**	**712**
05:30 PM	16	7	22	1	**45**	25	7	14	0	**46**	**92**	6	147	13	1	**167**	40	401	18	0	**459**	**625**	**717**
05:45 PM	11	3	18	0	**32**	29	3	14	0	**46**	**78**	4	176	15	0	**195**	35	309	21	0	**365**	**560**	**638**
TOTAL	49	17	79	1	**145**	97	23	48	0	**168**	**314**	26	651	50	2	**729**	123	1,471	82	0	**1,676**	**2,403**	**2,717**
PM Peak 05:00 PM to 06:00 PM	49	17	79	1	145	97	23	48	0	168	314	26	651	50	2	729	123	1,471	82	0	1,676	2,403	2,717

Peak Hour Factor: 0.947



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua

LOCATION: CR 235A & US 441 **COUNTY:** Alachua Co

TIME BEGIN	CR 235A NORTHBOUND L	T	R	U-turn	TOTAL	CR 235A SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	2	2	1	0	**5**	0	0	0	0	**0**	**5**	1	0	0	0	**1**	5	4	1	0	**10**	**11**	**16**
04:15 PM	1	0	2	0	**3**	0	0	0	0	**0**	**3**	1	4	0	0	**5**	8	3	1	0	**12**	**17**	**20**
04:30 PM	0	1	2	0	**3**	0	0	0	0	**0**	**3**	3	2	0	0	**5**	2	5	2	0	**9**	**14**	**17**
04:45 PM	1	0	3	0	**4**	0	0	0	0	**0**	**4**	0	1	0	0	**1**	6	2	1	0	**9**	**10**	**14**
TOTAL	4	3	8	0	**15**	0	0	0	0	**0**	**15**	5	7	0	0	**12**	21	14	5	0	**40**	**52**	**67**
05:00 PM	0	0	4	0	**4**	0	0	0	0	**0**	**4**	0	4	0	0	**4**	5	3	0	0	**8**	**12**	**16**
05:15 PM	0	1	2	0	**3**	0	0	1	0	**1**	**4**	0	0	0	0	**0**	7	1	3	0	**11**	**11**	**15**
05:30 PM	1	0	1	0	**2**	0	0	1	0	**1**	**3**	3	3	0	0	**6**	12	1	0	0	**13**	**19**	**22**
05:45 PM	1	0	3	0	**4**	0	0	0	0	**0**	**4**	1	2	0	0	**3**	6	4	2	0	**12**	**15**	**19**
TOTAL	2	1	10	0	**13**	0	0	2	0	**2**	**15**	4	9	0	0	**13**	30	9	5	0	**44**	**57**	**72**
PM Peak 05:00 PM to 06:00 PM	**2**	**1**	**10**	**0**	**13**	**0**	**0**	**2**	**0**	**2**	**15**	**4**	**9**	**0**	**0**	**13**	**30**	**9**	**5**	**0**	**44**	**57**	**72**

15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: August 17, 2016 (Wednesday)

CITY: Alachua

LATITUDE: 0

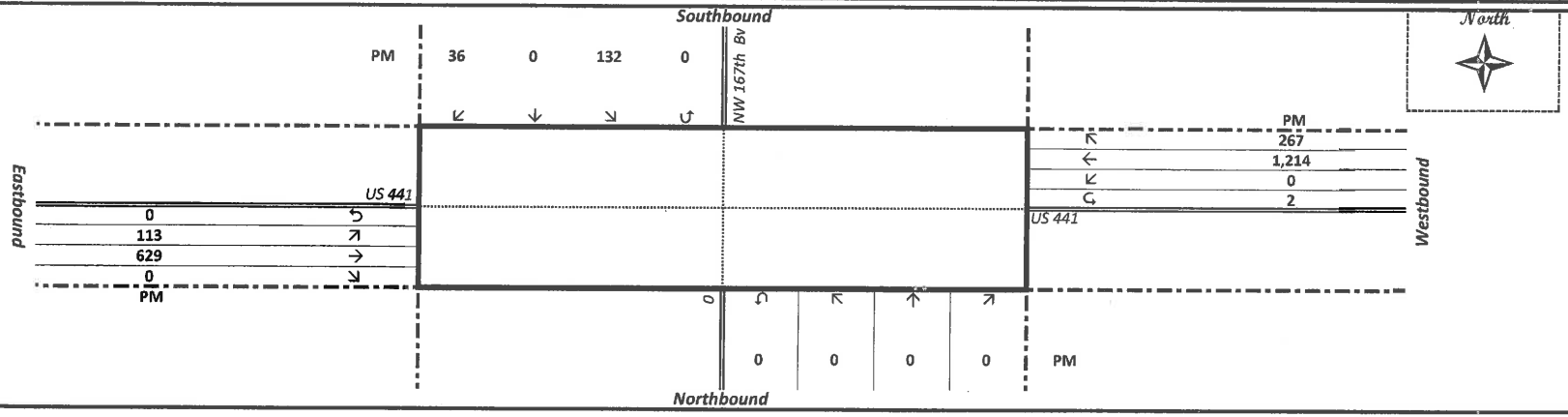
LOCATION: NW 167th Bv & US 441

COUNTY: Alachua County

LONGITUDE: 0

	NW 167th Bv											US 441					US 441						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	U-turn	TOTAL	L	T	R	U-turn	TOTAL	TOTAL	L	T	R	U-turn	TOTAL	L	T	R	U-turn	TOTAL	TOTAL	TOTAL
04:15 PM	0	0	0	0	**0**	35	0	8	0	**43**	**43**	22	192	0	0	**214**	0	274	29	0	**303**	**517**	**560**
04:30 PM	0	0	0	0	**0**	28	0	9	0	**37**	**37**	31	174	0	0	**205**	0	265	50	4	**319**	**524**	**561**
04:45 PM	0	0	0	0	**0**	14	0	4	0	**18**	**18**	20	150	0	0	**170**	0	268	61	1	**330**	**500**	**518**
TOTAL	0	0	0	0	**0**	77	0	21	0	**98**	**98**	73	516	0	0	**589**	0	807	140	5	**952**	**1,541**	**1,639**
05:00 PM	0	0	0	0	**0**	32	0	6	0	**38**	**38**	31	184	0	0	**215**	0	288	66	0	**354**	**569**	**607**
05:15 PM	0	0	0	0	**0**	34	0	13	0	**47**	**47**	33	178	0	0	**211**	0	333	76	0	**409**	**620**	**667**
05:30 PM	0	0	0	0	**0**	37	0	7	0	**44**	**44**	25	107	0	0	**132**	0	302	59	0	**361**	**493**	**537**
05:45 PM	0	0	0	0	**0**	29	0	10	0	**39**	**39**	24	160	0	0	**184**	0	291	66	2	**359**	**543**	**582**
TOTAL	0	0	0	0	**0**	132	0	36	0	**168**	**168**	113	629	0	0	**742**	0	1,214	267	2	**1,483**	**2,225**	**2,393**
PM Peak 05:00 PM to 06:00 PM	0	0	0	0	0	132	0	36	0	168	168	113	629	0	0	742	0	1,214	267	2	1,483	2,225	2,393

Peak Hour Factor: 0.897



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: August 17, 2016 (Wednesday)

CITY: Alachua

LATITUDE: 0

LOCATION: NW 167th Bv & US 441

COUNTY: Alachua County

LONGITUDE: 0

	0					NW 167th Bv						US 441					US 441						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
04:15 PM	0	0	0	0	**0**	1	0	0	0	**1**	**1**	2	4	0	0	**6**	0	12	0	0	**12**	**18**	**19**
04:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	3	4	0	0	**7**	0	12	0	0	**12**	**19**	**19**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	3	7	0	0	**10**	0	7	0	0	**7**	**17**	**17**
TOTAL	0	0	0	0	**0**	1	0	0	0	**1**	**1**	8	15	0	0	**23**	0	31	0	0	**31**	**54**	**55**
05:00 PM	0	0	0	0	**0**	3	0	1	0	**4**	**4**	0	3	0	0	**3**	0	14	0	0	**14**	**17**	**21**
05:15 PM	0	0	0	0	**0**	2	0	0	0	**2**	**2**	0	6	0	0	**6**	0	10	0	0	**10**	**16**	**18**
05:30 PM	0	0	0	0	**0**	1	0	0	0	**1**	**1**	0	3	0	0	**3**	0	7	2	0	**9**	**12**	**13**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	12	0	0	**12**	0	15	0	0	**15**	**27**	**27**
TOTAL	0	0	0	0	**0**	6	0	1	0	**7**	**7**	0	24	0	0	**24**	0	46	2	0	**48**	**72**	**79**
PM Peak 05:00 PM to 06:00 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**7**	**7**	**0**	**24**	**0**	**0**	**24**	**0**	**46**	**2**	**0**	**48**	**72**	**79**

15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: March 8, 2016 (Tuesday)

CITY: Alachua

LATITUDE:

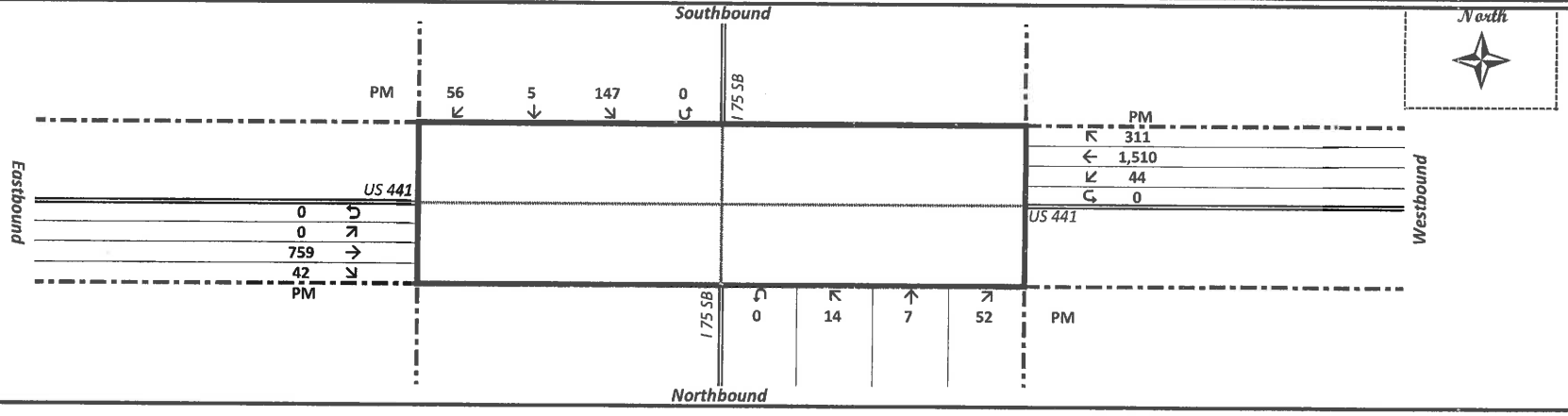
LOCATION: I 75 SB & US 441

COUNTY: Alachua Co

LONGITUDE:

	I 75 SB					I 75 SB						US 441					US 441						
TIME BEGIN	NORTHBOUND					SOUTHBOUND					N/S TOTAL	EASTBOUND					WESTBOUND					E/W TOTAL	GRAND TOTAL
	L	T	R	U-turn	TOTAL	L	T	R	U-turn	TOTAL		L	T	R	U-turn	TOTAL	L	T	R	U-turn	TOTAL		
04:00 PM	2	0	12	0	**14**	30	3	9	0	**42**	**56**	0	201	30	0	**231**	5	239	57	1	**302**	**532**	**588**
04:15 PM	4	0	18	0	**22**	39	5	4	0	**48**	**70**	0	154	12	0	**166**	7	234	56	0	**297**	**463**	**533**
04:30 PM	2	0	16	0	**18**	27	1	14	0	**42**	**60**	0	126	15	0	**141**	17	347	41	1	**406**	**546**	**606**
04:45 PM	4	0	10	0	**14**	45	2	5	0	**52**	**66**	0	145	16	0	**161**	6	322	50	0	**378**	**539**	**605**
TOTAL	12	0	56	0	**68**	141	11	32	0	**184**	**252**	0	626	73	0	**699**	35	1,142	204	2	**1,383**	**2,080**	**2,332**
05:00 PM	3	0	9	0	**12**	36	2	13	0	**51**	**63**	0	193	8	0	**201**	8	369	62	0	**439**	**640**	**703**
05:15 PM	1	7	13	0	**21**	38	2	8	0	**48**	**69**	0	166	10	0	**176**	7	328	124	0	**459**	**635**	**704**
05:30 PM	5	0	9	0	**14**	47	0	17	0	**64**	**78**	0	204	15	0	**219**	16	453	67	0	**536**	**755**	**833**
05:45 PM	5	0	21	0	**26**	26	1	18	0	**45**	**71**	0	196	9	0	**205**	13	360	58	0	**431**	**636**	**707**
TOTAL	14	7	52	0	**73**	147	5	56	0	**208**	**281**	0	759	42	0	**801**	44	1,510	311	0	**1,865**	**2,666**	**2,947**
PM Peak 05:00 PM to 06:00 PM	14	7	52	0	**73**	147	5	56	0	**208**	**281**	0	759	42	0	**801**	44	1,510	311	0	**1,865**	**2,666**	**2,947**

Peak Hour Factor: 0.884



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: March 8, 2016 (Tuesday)

CITY: Alachua

LATITUDE:

LOCATION: I 75 SB & US 441

COUNTY: Alachua Co

LONGITUDE:

TIME BEGIN	I 75 SB NORTHBOUND L	T	R	U-turn	TOTAL	I 75 SB SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	0	0	0	0	**0**	0	0	2	0	**2**	**2**	0	12	12	0	**24**	0	8	2	0	**10**	**34**	**36**
04:15 PM	0	0	0	0	**0**	4	0	3	0	**7**	**7**	0	6	4	0	**10**	0	14	0	0	**14**	**24**	**31**
04:30 PM	0	0	0	0	**0**	3	0	8	0	**11**	**11**	0	5	0	0	**5**	0	7	0	0	**7**	**12**	**23**
04:45 PM	0	0	0	0	**0**	0	0	5	0	**5**	**5**	0	6	0	0	**6**	0	10	1	0	**11**	**17**	**22**
TOTAL	0	0	0	0	**0**	7	0	18	0	**25**	**25**	0	29	16	0	**45**	0	39	3	0	**42**	**87**	**112**
05:00 PM	0	0	0	0	**0**	0	0	4	0	**4**	**4**	1	3	0	0	**4**	0	10	1	0	**11**	**15**	**19**
05:15 PM	0	0	0	0	**0**	2	0	3	0	**5**	**5**	0	6	0	0	**6**	0	8	1	0	**9**	**15**	**20**
05:30 PM	0	0	0	0	**0**	3	0	3	0	**6**	**6**	0	9	0	0	**9**	0	4	1	0	**5**	**14**	**20**
05:45 PM	0	0	0	0	**0**	1	0	8	0	**9**	**9**	0	10	0	0	**10**	0	2	0	0	**2**	**12**	**21**
TOTAL	1	0	0	0	**0**	6	0	18	0	**24**	**24**	1	28	0	0	**29**	0	24	3	0	**27**	**56**	**80**
PM Peak 05:00 PM to 06:00 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**18**	**0**	**24**	**24**	**1**	**28**	**0**	**0**	**29**	**0**	**24**	**3**	**0**	**27**	**56**	**80**

15 MINUTE TURNING MOVEMENT COUNTS

(B A N K 2 Only)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua **LATITUDE:**

LOCATION: I 75 & US 441 SB Ramp **COUNTY:** Alachua Co **LONGITUDE:**

TIME BEGIN	I 75 SB NORTHBOUND L	T	R	U-turn	TOTAL	I 75 SB SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	I 75 SB Ramp EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	43	0	**43**	0	0	0	0	**0**	**43**	**43**
04:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	49	0	**49**	0	0	0	0	**0**	**49**	**49**
04:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	40	0	**40**	0	0	0	0	**0**	**40**	**40**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	36	0	**36**	0	0	0	0	**0**	**36**	**36**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	168	0	**168**	0	0	0	0	**0**	**168**	**168**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	45	0	**45**	0	0	0	0	**0**	**45**	**45**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	59	0	**59**	0	0	0	0	**0**	**59**	**59**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	50	0	**50**	0	0	0	0	**0**	**50**	**50**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	69	0	**69**	0	0	0	0	**0**	**69**	**69**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	0	223	0	**223**	0	0	0	0	**0**	**223**	**223**

15 MINUTE TURNING MOVEMENT COUNTS

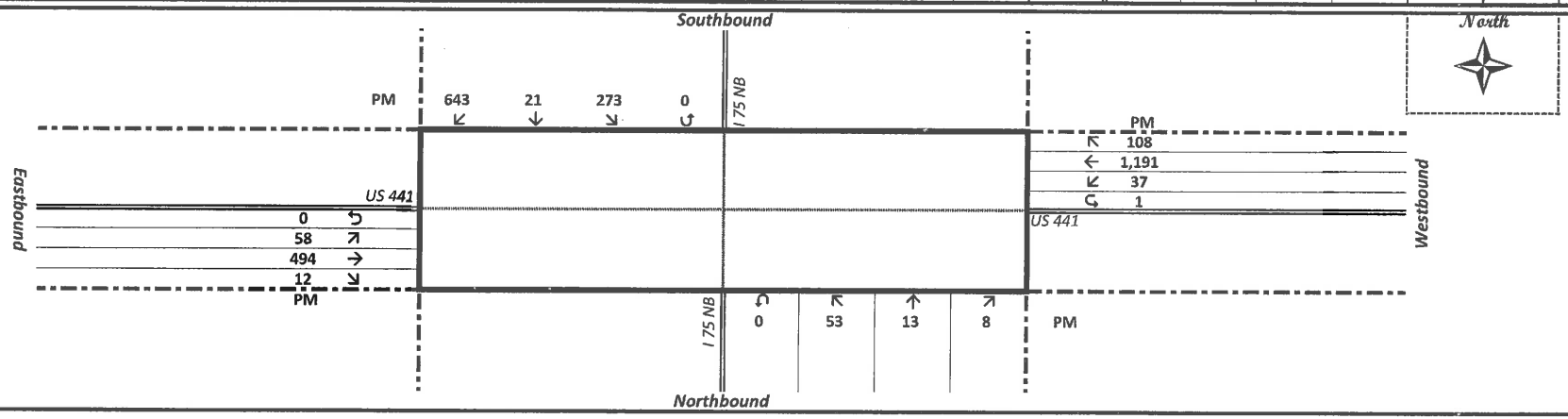
(Cars and Trucks)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua

LOCATION: I 75 NB & US 441 **COUNTY:** Alachua Co

TIME BEGIN	I 75 NB NORTHBOUND L	T	R	U-turn	TOTAL	I 75 NB SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	15	1	4	1	**20**	35	3	93	0	**131**	**152**	22	166	5	3	**196**	8	158	40	1	**207**	**399**	**551**
04:15 PM	16	1	2	0	**19**	56	5	151	0	**212**	**231**	17	114	4	0	**135**	14	141	28	1	**184**	**318**	**549**
04:30 PM	9	1	2	0	**12**	45	0	99	0	**144**	**156**	10	179	2	0	**191**	18	303	33	0	**354**	**545**	**701**
04:45 PM	21	3	0	0	**24**	57	3	163	0	**223**	**247**	13	112	2	0	**127**	10	188	36	1	**235**	**361**	**608**
TOTAL					**75**					**710**	**786**					**649**					**980**	**1,623**	**2,409**
05:00 PM	7	4	4	0	**15**	62	5	101	0	**168**	**183**	13	94	4	0	**111**	10	260	36	0	**306**	**417**	**600**
05:15 PM	10	2	3	0	**15**	91	12	218	0	**321**	**336**	19	123	2	0	**144**	10	231	18	0	**259**	**403**	**739**
05:30 PM	15	4	1	0	**20**	63	1	161	0	**225**	**245**	13	165	4	0	**182**	7	512	18	0	**537**	**719**	**964**
05:45 PM	12	1	1	0	**14**	48	5	113	1	**167**	**181**	5	138	10	1	**154**	6	224	18	0	**248**	**401**	**582**
TOTAL	44	11	9	0	**64**	264	23	593	1	**881**	**945**	50	520	20	1	**591**	33	1,227	90	0	**1,350**	**1,940**	**2,885**
PM Peak 04:45 PM to 05:45 PM	**53**	**13**	**8**	**0**	**74**	**273**	**21**	**643**	**0**	**937**	**1,011**	**58**	**494**	**12**	**0**	**564**	**37**	**1,191**	**108**	**1**	**1,337**	**1,900**	**2,911**

Peak Hour Factor: 0.755



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: March 8, 2016 (Tuesday)

CITY: Alachua

LOCATION: I 75 NB & US 441

COUNTY: Alachua Co

	I 75 NB					I 75 NB						US 441					US 441						
TIME BEGIN	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
04:00 PM	0	0	0	0	**0**	1	0	7	0	**8**	**8**	6	2	0	0	**8**	0	5	2	0	**7**	**15**	**23**
04:15 PM	0	0	0	0	**0**	2	0	4	0	**6**	**6**	3	7	0	0	**10**	1	5	3	0	**9**	**19**	**25**
04:30 PM	0	1	0	0	**1**	0	0	5	0	**5**	**6**	3	4	0	0	**7**	0	3	2	0	**5**	**12**	**18**
04:45 PM	0	0	0	0	**0**	1	0	4	0	**5**	**5**	5	2	0	0	**7**	0	5	2	0	**7**	**14**	**19**
TOTAL	0	1	0	0	**1**	4	0	20	0	**24**	**25**	17	15	0	0	**32**	1	18	9	0	**28**	**60**	**85**
05:00 PM	0	0	0	0	**0**	1	0	3	0	**4**	**4**	0	1	0	0	**1**	0	7	0	0	**7**	**8**	**12**
05:15 PM	0	0	0	0	**0**	1	0	15	0	**16**	**16**	3	2	0	0	**5**	0	1	0	0	**1**	**6**	**22**
05:30 PM	0	0	0	0	**0**	0	0	3	0	**3**	**3**	3	5	0	0	**8**	0	2	1	0	**3**	**11**	**14**
05:45 PM	0	0	0	0	**0**	0	0	6	0	**6**	**6**	1	4	0	0	**5**	0	1	1	0	**2**	**7**	**13**
TOTAL	1	0	0	0	**0**	2	0	27	0	**29**	**29**	7	12	0	0	**19**	0	11	2	0	**13**	**32**	**61**
PM Peak 04:45 PM to 05:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**25**	**0**	**28**	**28**	**11**	**10**	**0**	**0**	**21**	**0**	**15**	**3**	**0**	**18**	**39**	**67**

15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: March 8, 2016 (Tuesday)

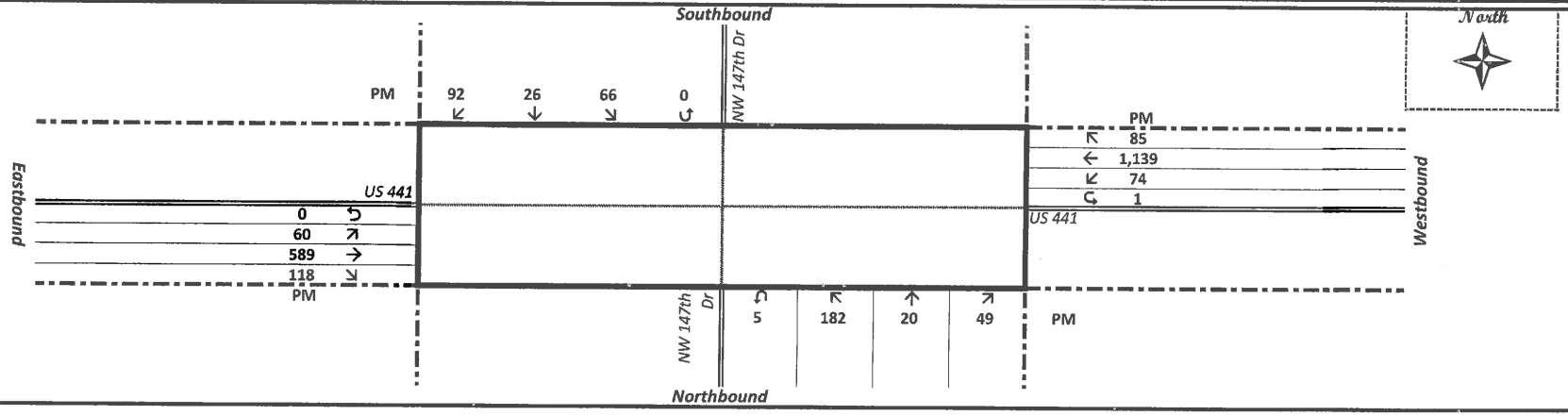
CITY: Alachua

LOCATION: NW 147th Dr & US 441

COUNTY: Alachua Co

TIME BEGIN	NW 147th Dr NORTHBOUND L	T	R	U-turn	TOTAL	NW 147th Dr SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	28	7	24	0	**59**	26	4	20	0	**50**	**109**	20	141	35	0	**196**	12	281	16	0	**309**	**505**	**614**
04:15 PM	41	5	22	0	**68**	15	5	14	0	**34**	**102**	16	140	28	0	**184**	11	162	21	1	**195**	**378**	**480**
04:30 PM	42	6	11	0	**59**	22	5	21	0	**48**	**107**	24	167	28	1	**220**	16	193	34	0	**243**	**462**	**569**
04:45 PM	54	1	8	0	**63**	22	5	24	1	**52**	**115**	22	142	32	1	**197**	19	211	22	0	**252**	**448**	**563**
TOTAL					**249**					**184**	**433**					**797**					**999**	**1,793**	**2,226**
05:00 PM	48	3	14	0	**65**	18	7	29	0	**54**	**119**	15	135	36	0	**186**	15	262	29	0	**306**	**492**	**611**
05:15 PM	35	9	9	0	**53**	11	8	30	0	**49**	**102**	11	117	29	0	**157**	17	289	15	0	**321**	**478**	**580**
05:30 PM	62	4	11	3	**77**	21	9	21	0	**51**	**131**	18	120	22	0	**160**	20	389	11	0	**420**	**580**	**711**
05:45 PM	37	4	15	2	**56**	16	2	12	0	**30**	**88**	16	217	31	0	**264**	22	199	30	1	**252**	**515**	**603**
TOTAL	182	20	49	5	**251**	66	26	92	0	**184**	**440**	60	589	118	0	**767**	74	1,139	85	1	**1,299**	**2,065**	**2,505**
PM Peak 05:00 PM to 06:00 PM	**182**	**20**	**49**	**5**	**251**	**66**	**26**	**92**	**0**	**184**	**440**	**60**	**589**	**118**	**0**	**767**	**74**	**1,139**	**85**	**1**	**1,299**	**2,065**	**2,505**

Peak Hour Factor: 0.881



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua

LOCATION: NW 147th Dr & US 441 **COUNTY:** Alachua Co

	NW 147th Dr					NW 147th Dr						US 441					US 441						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
04:00 PM	1	0	1	0	**2**	0	0	0	0	**0**	**2**	1	3	0	0	**4**	0	8	0	0	**8**	**12**	**14**
04:15 PM	3	0	0	0	**3**	0	1	0	0	**1**	**4**	0	10	0	0	**10**	1	19	0	0	**20**	**30**	**34**
04:30 PM	0	0	1	0	**1**	0	0	0	0	**0**	**1**	0	7	0	0	**7**	0	3	0	0	**3**	**10**	**11**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	4	0	0	**4**	0	5	0	0	**5**	**9**	**9**
TOTAL	4	0	2	0	**6**	0	1	0	0	**1**	**7**	1	24	0	0	**25**	1	35	0	0	**36**	**61**	**68**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	7	0	0	**7**	**8**	**8**
05:15 PM	1	0	0	0	**1**	0	0	0	0	**0**	**1**	0	3	0	0	**3**	0	4	0	0	**4**	**7**	**8**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	4	0	0	**4**	0	2	0	0	**2**	**6**	**6**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	3	0	0	**3**	0	0	0	0	**0**	**3**	**3**
TOTAL	2	0	0	0	**1**	0	0	0	0	**0**	**1**	0	11	0	0	**11**	0	13	0	0	**13**	**24**	**25**
PM Peak 05:00 PM to 06:00 PM	1	0	0	0	1	0	0	0	0	0	1	0	11	0	0	11	0	13	0	0	13	24	25

15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: March 8, 2016 (Tuesday)

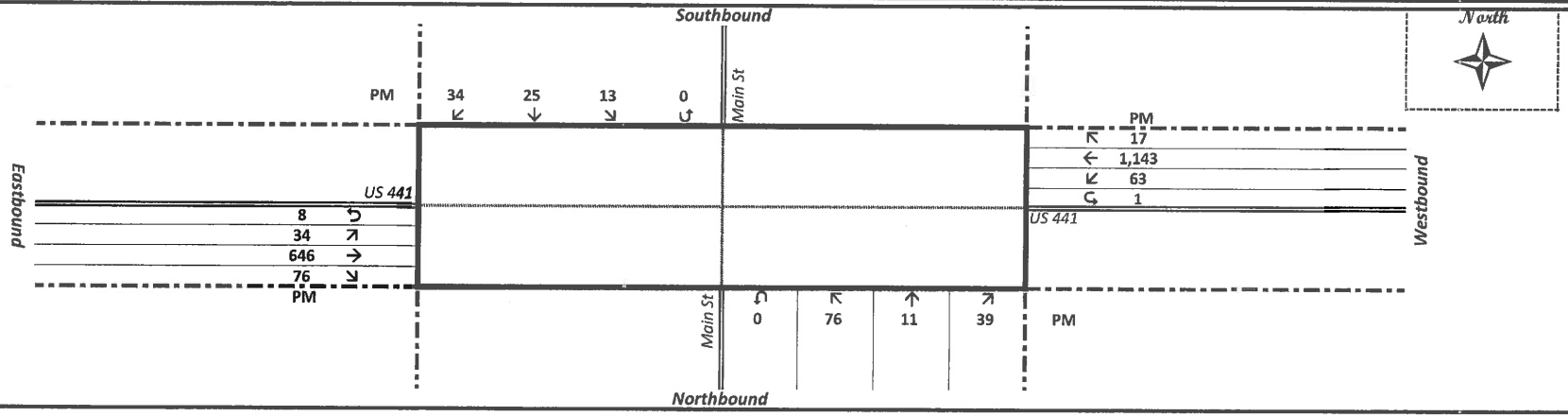
CITY: Alachua

LOCATION: Main St & US 441

COUNTY: Alachua Co

	Main St					Main St						US 441					US 441						
TIME BEGIN	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
04:00 PM	11	2	19	0	**32**	2	2	19	0	**23**	**55**	9	209	17	5	**240**	5	243	1	0	**249**	**484**	**539**
04:15 PM	11	1	12	0	**24**	0	3	10	0	**13**	**37**	15	201	14	0	**230**	14	260	2	0	**276**	**506**	**543**
04:30 PM	9	4	4	0	**17**	3	4	12	0	**19**	**36**	11	136	14	2	**163**	14	348	7	0	**369**	**530**	**566**
04:45 PM	18	4	11	0	**33**	3	0	8	0	**11**	**44**	10	127	32	0	**169**	13	218	5	0	**236**	**405**	**449**
TOTAL					**106**					**66**	**172**					**802**					**1,130**	**1,925**	**2,097**
05:00 PM	18	1	10	0	**29**	0	5	12	0	**17**	**46**	5	187	11	5	**208**	12	291	2	0	**305**	**508**	**554**
05:15 PM	27	1	11	0	**39**	4	7	4	0	**15**	**54**	9	161	20	0	**190**	10	243	2	1	**256**	**445**	**499**
05:30 PM	14	8	6	0	**28**	6	7	8	0	**21**	**49**	8	157	25	3	**193**	22	366	4	0	**392**	**582**	**631**
05:45 PM	17	1	12	0	**30**	3	6	10	0	**19**	**49**	12	141	20	0	**173**	19	243	9	0	**271**	**444**	**493**
TOTAL	76	11	39	0	**126**	13	25	34	0	**72**	**198**	34	646	76	8	**764**	63	1,143	17	1	**1,224**	**1,979**	**2,177**
PM Peak 05:00 PM to 06:00 PM	76	11	39	0	**126**	13	25	34	0	**72**	**198**	34	646	76	8	**764**	63	1,143	17	1	**1,224**	**1,979**	**2,177**

Peak Hour Factor: 0.863



15 MINUTE TURNING MOVEMENT COUNTS

(Trucks Only)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua

LOCATION: Main St & US 441 **COUNTY:** Alachua Co

TIME BEGIN	Main St NORTHBOUND L	T	R	U-turn	TOTAL	Main St SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	2	0	0	**2**	0	6	0	0	**6**	**8**	**8**
04:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	7	0	0	**7**	0	12	0	0	**12**	**19**	**19**
04:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	8	0	0	**8**	0	4	0	0	**4**	**12**	**12**
04:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	7	0	0	**7**	0	5	0	0	**5**	**12**	**12**
TOTAL	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	24	0	0	**24**	0	27	0	0	**27**	**51**	**51**
05:00 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	1	0	0	**1**	0	6	0	0	**6**	**7**	**7**
05:15 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	4	0	0	**4**	0	3	0	0	**3**	**7**	**7**
05:30 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	0	3	0	0	**3**	0	1	0	0	**1**	**4**	**4**
05:45 PM	0	0	0	0	**0**	0	0	0	0	**0**	**0**	1	4	0	0	**5**	0	0	0	0	**0**	**5**	**5**
TOTAL	1	0	0	0	**0**	0	0	0	0	**0**	**0**	1	12	0	0	**13**	0	10	0	0	**10**	**23**	**23**
PM Peak 05:00 PM to 06:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**12**	**0**	**0**	**13**	**0**	**10**	**0**	**0**	**10**	**23**	**23**

15 MINUTE TURNING MOVEMENT COUNTS

(Cars and Trucks)

DATE: March 8, 2016 (Tuesday)

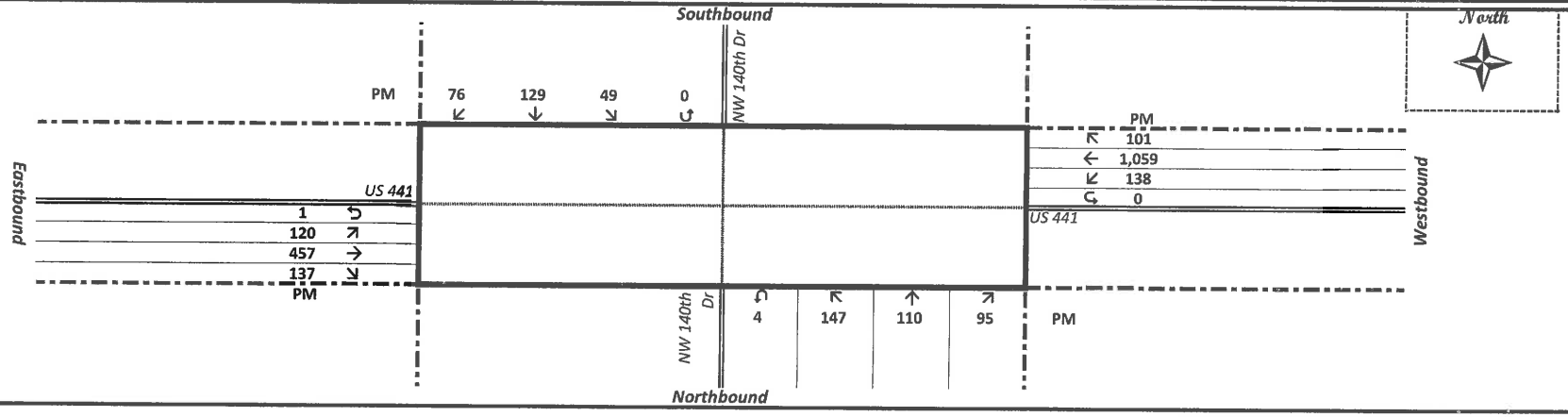
CITY: Alachua

LOCATION: NW 140th Dr & US 441

COUNTY: Alachua Co

TIME BEGIN	NW 140th Dr NORTHBOUND L	T	R	U-turn	TOTAL	NW 140th Dr SOUTHBOUND L	T	R	U-turn	TOTAL	N/S TOTAL	US 441 EASTBOUND L	T	R	U-turn	TOTAL	US 441 WESTBOUND L	T	R	U-turn	TOTAL	E/W TOTAL	GRAND TOTAL
04:00 PM	35	35	21	0	**91**	14	18	13	0	**45**	**136**	20	110	25	1	**156**	29	192	11	0	**232**	**387**	**523**
04:15 PM	24	32	20	0	**76**	9	28	13	0	**50**	**126**	19	167	30	1	**217**	23	168	20	0	**211**	**427**	**553**
04:30 PM	42	37	20	0	**99**	13	36	14	0	**63**	**162**	26	159	25	0	**210**	50	198	17	0	**265**	**475**	**637**
04:45 PM	52	34	23	0	**109**	21	24	28	0	**73**	**182**	25	132	26	0	**183**	43	159	26	0	**228**	**411**	**593**
TOTAL					**375**					**231**	**606**					**766**					**936**	**1,700**	**2,306**
05:00 PM	53	29	22	4	**104**	11	20	15	0	**46**	**154**	20	98	26	0	**144**	29	291	28	0	**348**	**492**	**646**
05:15 PM	45	30	21	0	**96**	11	32	22	0	**65**	**161**	32	112	41	0	**185**	32	249	22	0	**303**	**488**	**649**
05:30 PM	29	28	24	0	**81**	15	24	24	0	**63**	**144**	27	130	39	0	**196**	32	287	11	0	**330**	**526**	**670**
05:45 PM	20	23	28	0	**71**	12	53	15	0	**80**	**151**	41	117	31	1	**190**	45	232	40	0	**317**	**506**	**657**
TOTAL	147	110	95	4	**352**	49	129	76	0	**254**	**610**	120	457	137	1	**715**	138	1,059	101	0	**1,298**	**2,012**	**2,622**
PM Peak 05:00 PM to 06:00 PM	147	110	95	4	**352**	49	129	76	0	**254**	**610**	120	457	137	1	**715**	138	1,059	101	0	**1,298**	**2,012**	**2,622**

Peak Hour Factor: 0.978



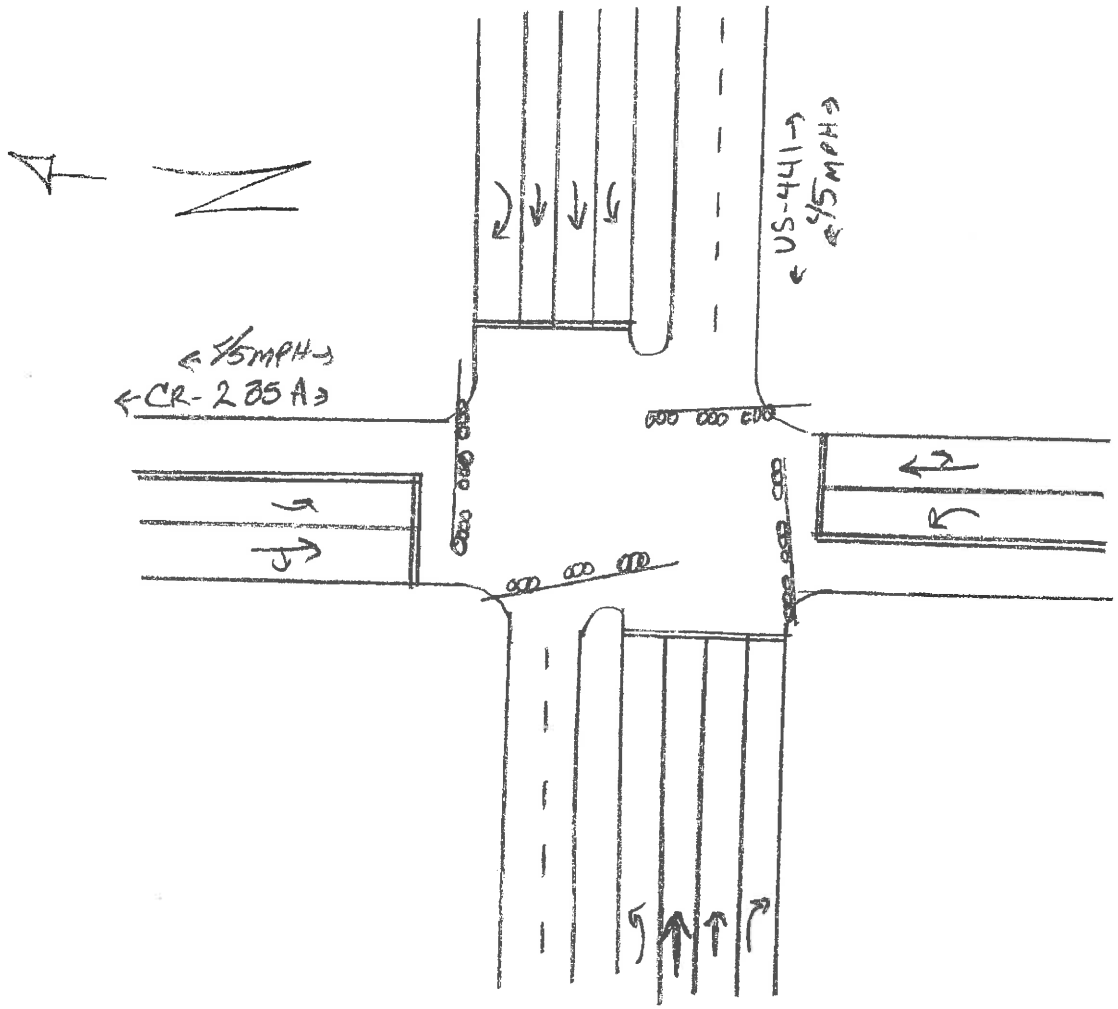
15 MINUTE TURNING MOVEMENT COUNTS

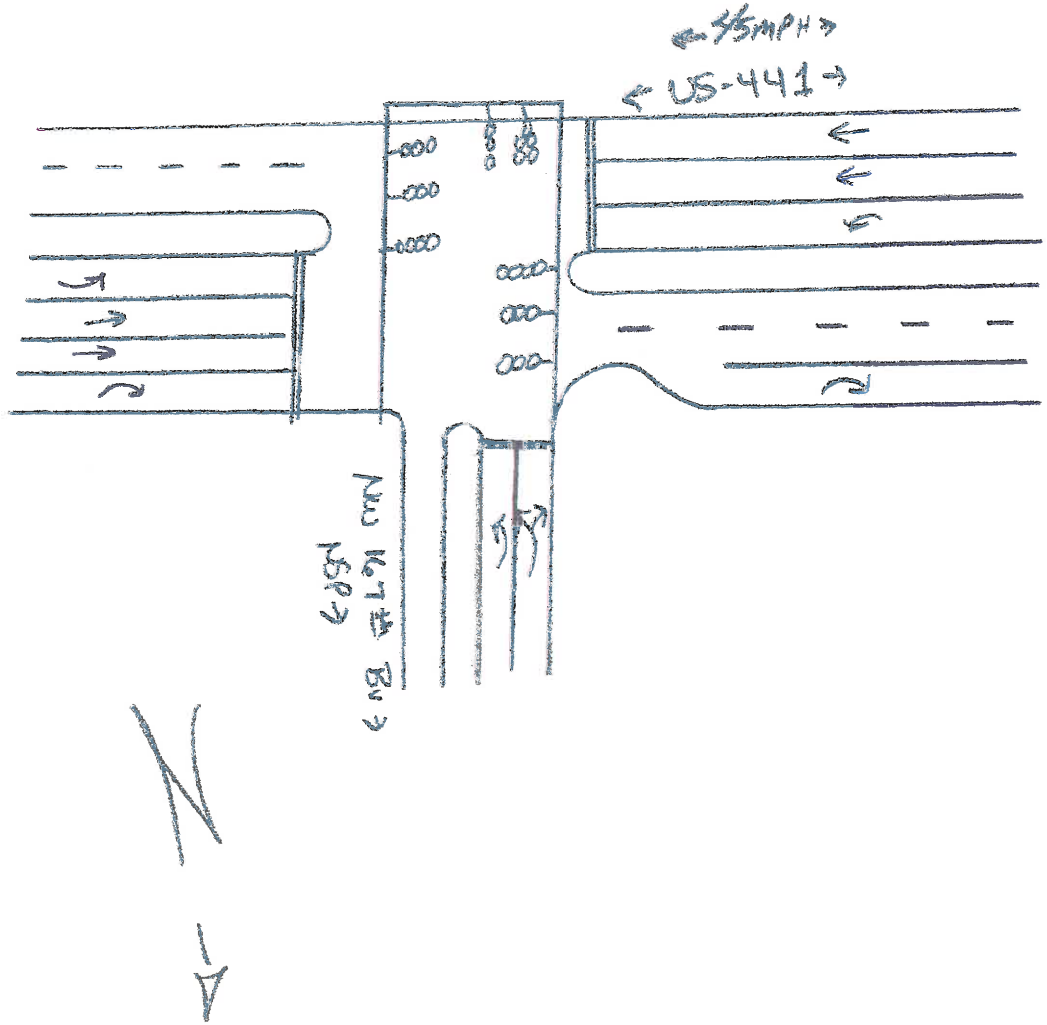
(Trucks Only)

DATE: March 8, 2016 (Tuesday) **CITY:** Alachua

LOCATION: NW 140th Dr & US 441 **COUNTY:** Alachua Co

	NW 140th Dr					NW 140th Dr						US 441					US 441						
TIME	NORTHBOUND					SOUTHBOUND					N/S	EASTBOUND					WESTBOUND					E/W	GRAND
BEGIN	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	L	T	R	*U-turn*	TOTAL	L	T	R	*U-turn*	TOTAL	TOTAL	TOTAL
04:00 PM	1	1	1	0	**3**	1	0	0	0	**1**	**4**	0	2	0	0	**2**	2	6	0	0	**8**	**10**	**14**
04:15 PM	3	0	1	0	**4**	1	1	0	0	**2**	**6**	0	7	0	0	**7**	2	8	1	0	**11**	**18**	**24**
04:30 PM	0	1	8	0	**9**	1	3	1	0	**5**	**14**	1	3	0	0	**4**	2	2	1	0	**5**	**9**	**23**
04:45 PM	2	4	0	0	**6**	1	1	1	0	**3**	**9**	2	2	0	0	**4**	2	5	1	0	**8**	**12**	**21**
TOTAL	6	6	10	0	**22**	4	5	2	0	**11**	**33**	3	14	0	0	**17**	8	21	3	0	**32**	**49**	**82**
05:00 PM	0	0	5	0	**5**	0	3	0	0	**3**	**8**	1	0	0	0	**1**	0	3	0	0	**3**	**4**	**12**
05:15 PM	0	0	2	0	**2**	0	2	0	0	**2**	**4**	0	7	0	0	**7**	3	3	0	0	**6**	**13**	**17**
05:30 PM	1	1	1	0	**3**	0	1	0	0	**1**	**4**	0	3	0	0	**3**	0	2	1	0	**3**	**6**	**10**
05:45 PM	0	1	0	0	**1**	0	1	0	0	**1**	**2**	0	4	0	0	**4**	0	3	1	0	**4**	**8**	**10**
TOTAL	1	2	8	0	**11**	0	7	0	0	**7**	**18**	1	14	0	0	**15**	3	11	2	0	**16**	**31**	**49**
PM Peak 05:00 PM to 06:00 PM	1	2	8	0	11	0	7	0	0	7	18	1	14	0	0	15	3	11	2	0	16	31	49


N
US-441
45MPH
45MPH
CR-235A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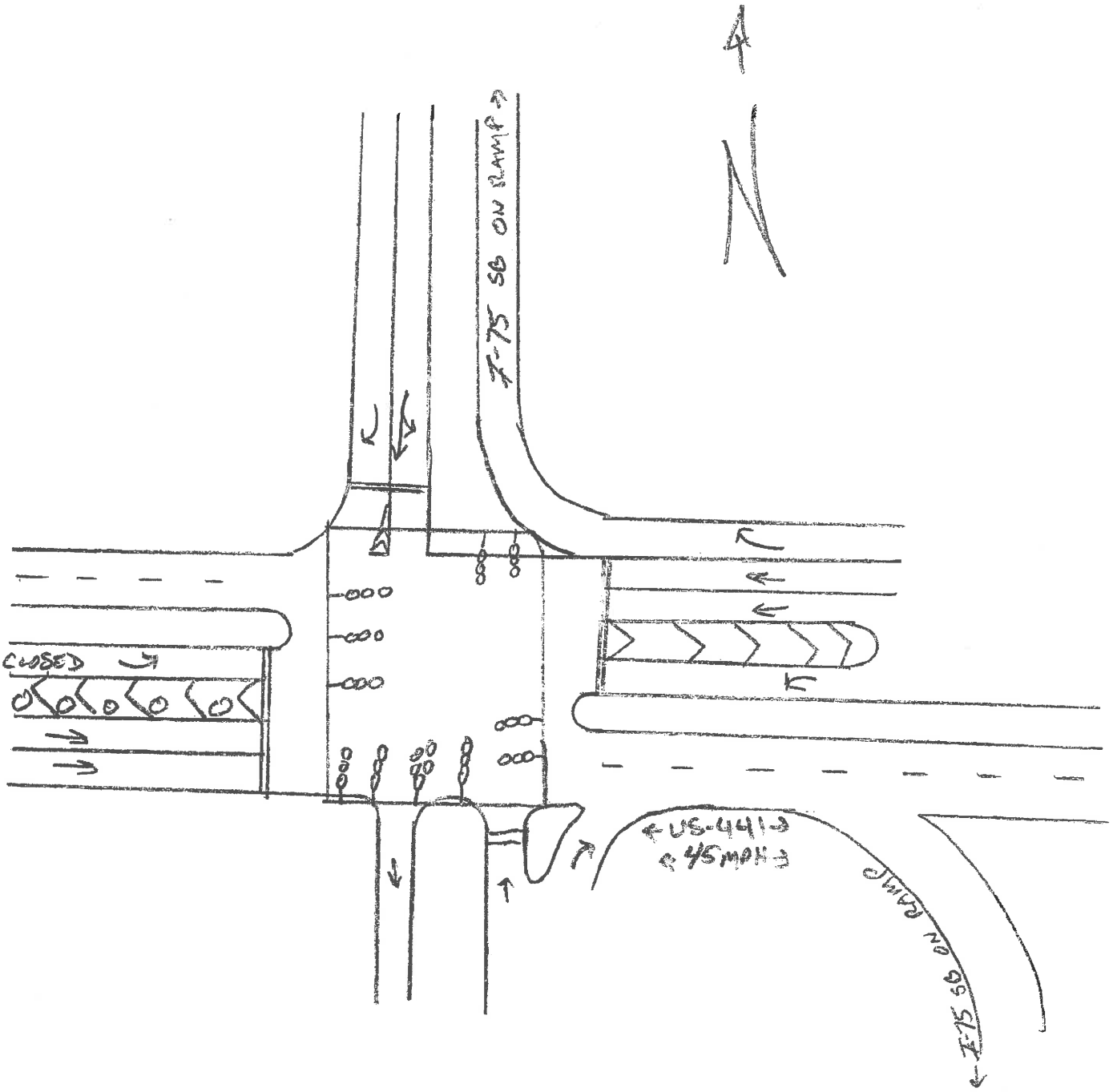
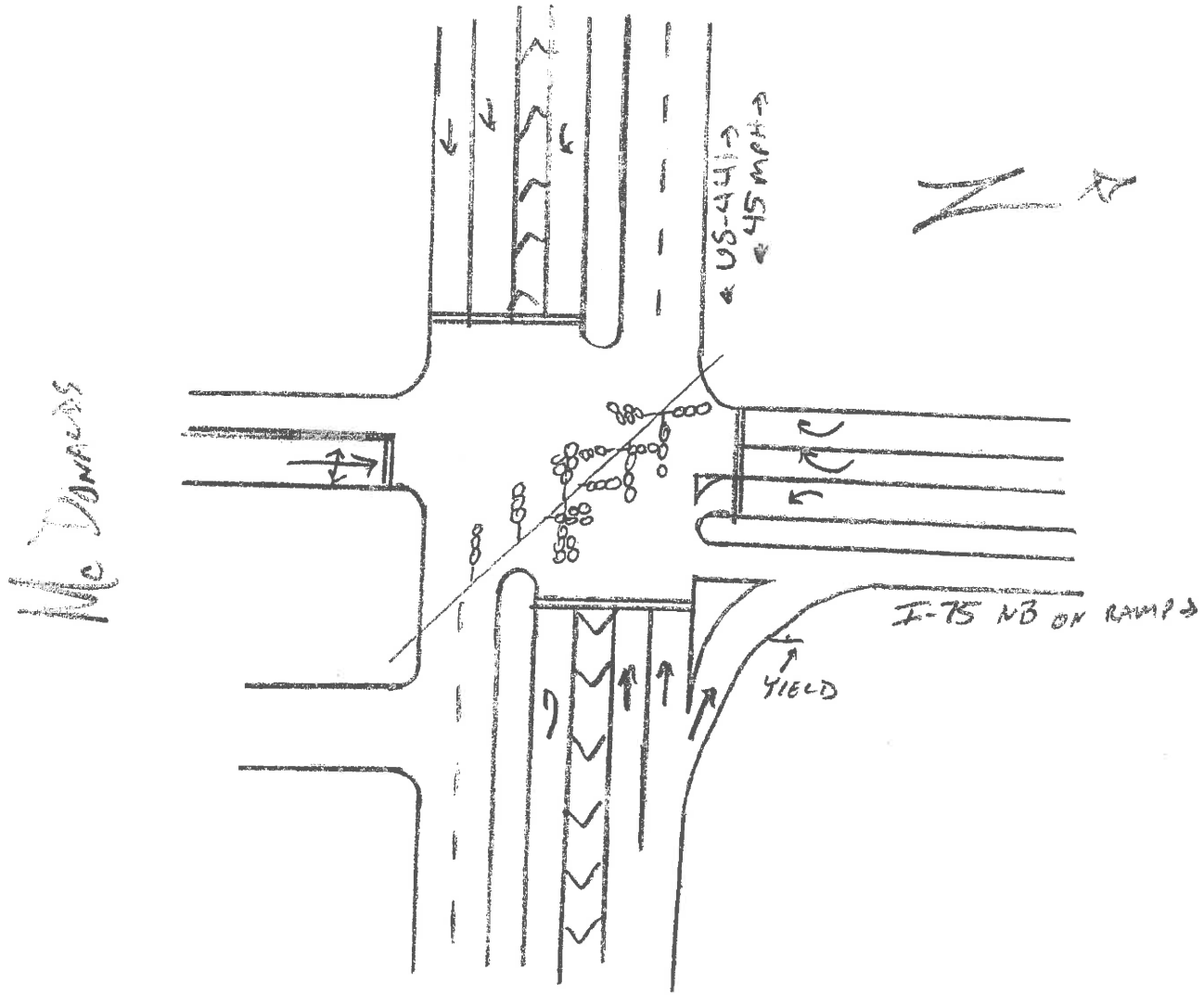
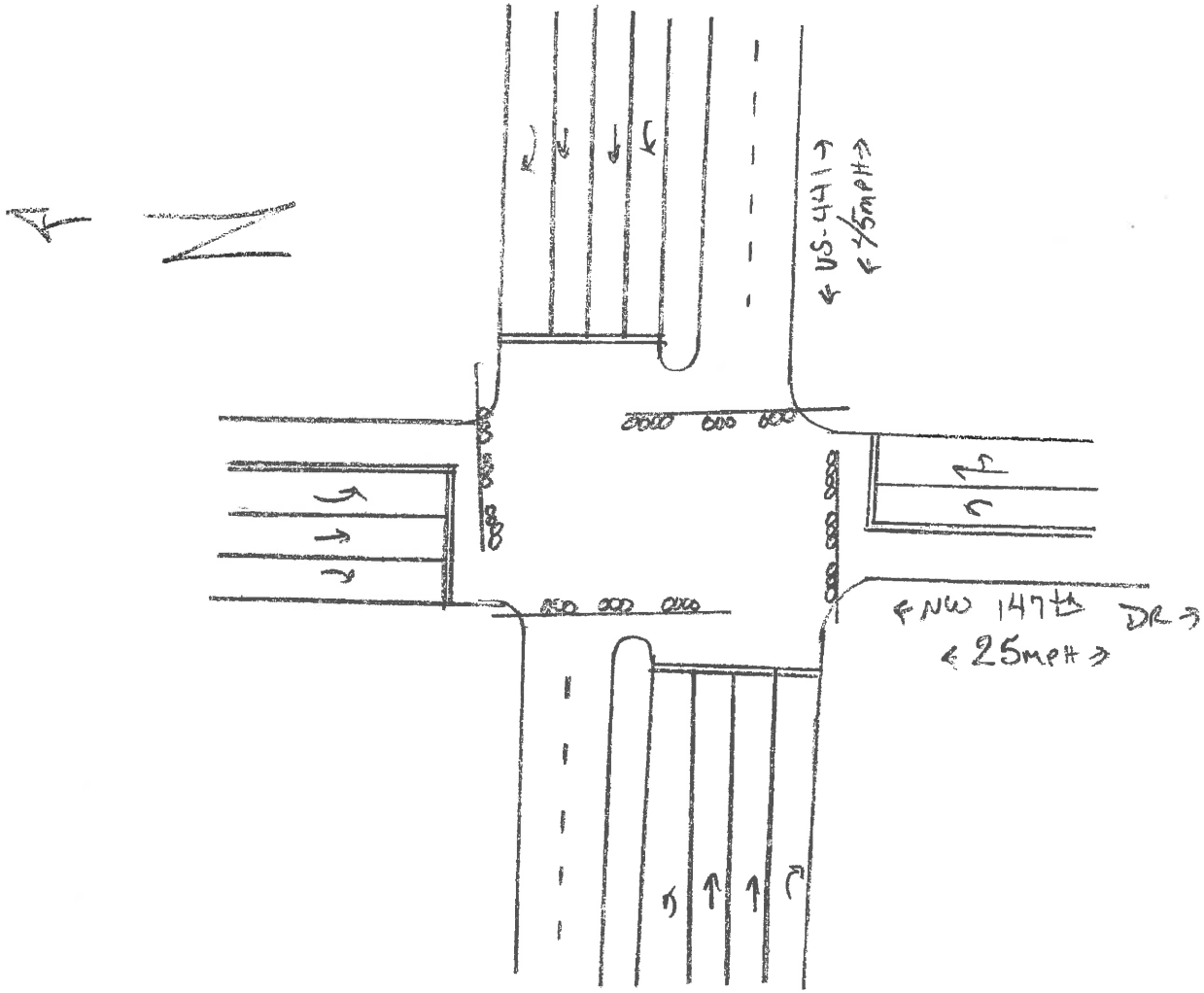
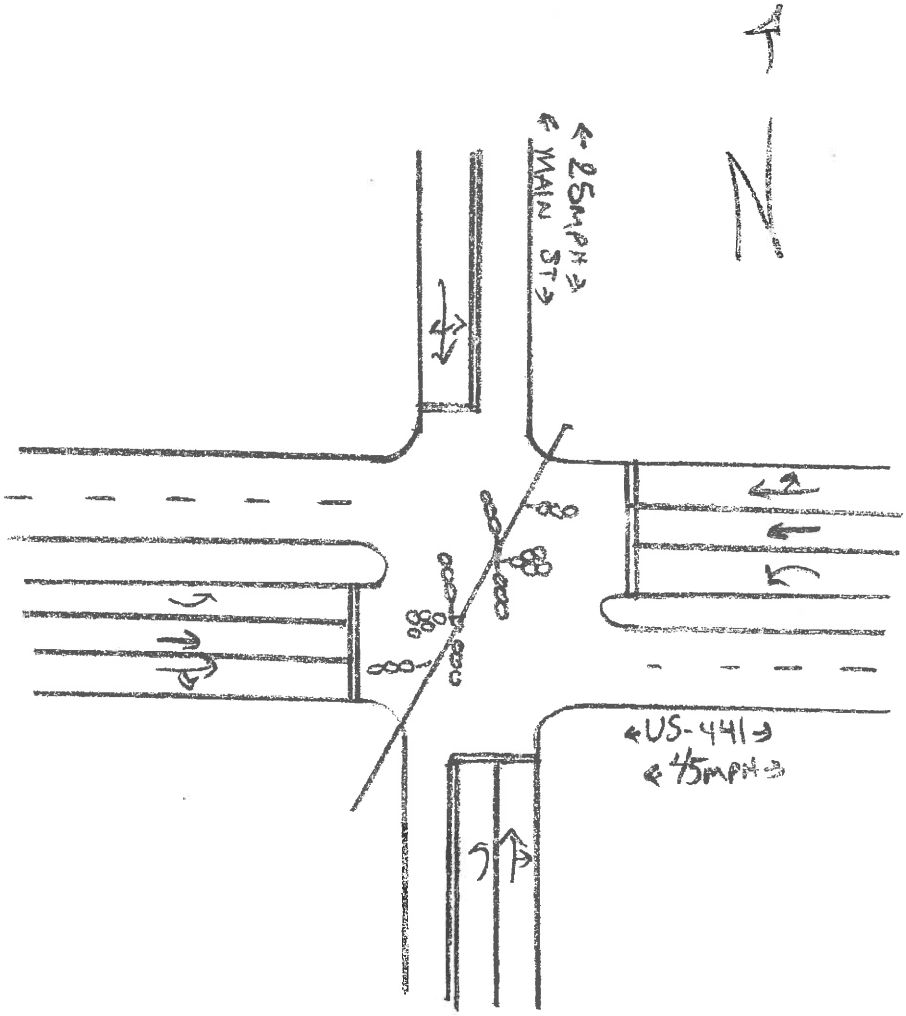
US-441
NB
N


N
I-75 SB ON RAMP
CLOSED
US-441
45 MPH
I-75 SB ON RAMP


US-441
45 MPH
I-75 NB ON RAMP
YIELD


N
US-441
45mph
NW 147th DR
25mph

N
NW 1st ST
30mph
US 441
45mph


N
25MPH
MAIN ST
US-441
45MPH

TER
NW 142
25MPH
Stop
Stop
Stop
Stop
NW 151st BV
25MPH
N

2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 2600 ALACHUA COUNTYWIDE

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2014 - 01/04/2014	1.01	1.03
2	01/05/2014 - 01/11/2014	1.04	1.06
3	01/12/2014 - 01/18/2014	1.07	1.09
4	01/19/2014 - 01/25/2014	1.05	1.07
5	01/26/2014 - 02/01/2014	1.04	1.06
6	02/02/2014 - 02/08/2014	1.02	1.04
7	02/09/2014 - 02/15/2014	1.01	1.03
* 8	02/16/2014 - 02/22/2014	0.99	1.01
* 9	02/23/2014 - 03/01/2014	0.99	1.01
*10	03/02/2014 - 03/08/2014	0.98	1.00
*11	03/09/2014 - 03/15/2014	0.98	1.00
*12	03/16/2014 - 03/22/2014	0.97	0.99
*13	03/23/2014 - 03/29/2014	0.97	0.99
*14	03/30/2014 - 04/05/2014	0.96	0.98
*15	04/06/2014 - 04/12/2014	0.96	0.98
*16	04/13/2014 - 04/19/2014	0.95	0.97
*17	04/20/2014 - 04/26/2014	0.97	0.99
*18	04/27/2014 - 05/03/2014	0.98	1.00
*19	05/04/2014 - 05/10/2014	0.99	1.01
*20	05/11/2014 - 05/17/2014	1.00	1.02
21	05/18/2014 - 05/24/2014	1.01	1.03
22	05/25/2014 - 05/31/2014	1.01	1.03
23	06/01/2014 - 06/07/2014	1.01	1.03
24	06/08/2014 - 06/14/2014	1.02	1.04
25	06/15/2014 - 06/21/2014	1.02	1.04
26	06/22/2014 - 06/28/2014	1.03	1.05
27	06/29/2014 - 07/05/2014	1.03	1.05
28	07/06/2014 - 07/12/2014	1.04	1.06
29	07/13/2014 - 07/19/2014	1.05	1.07
30	07/20/2014 - 07/26/2014	1.04	1.06
31	07/27/2014 - 08/02/2014	1.03	1.05
32	08/03/2014 - 08/09/2014	1.02	1.04
33	08/10/2014 - 08/16/2014	1.01	1.03
34	08/17/2014 - 08/23/2014	1.00	1.02
35	08/24/2014 - 08/30/2014	1.01	1.03
36	08/31/2014 - 09/06/2014	1.01	1.03
37	09/07/2014 - 09/13/2014	1.01	1.03
38	09/14/2014 - 09/20/2014	1.01	1.03
39	09/21/2014 - 09/27/2014	1.00	1.02
40	09/28/2014 - 10/04/2014	0.99	1.01
41	10/05/2014 - 10/11/2014	0.97	0.99
42	10/12/2014 - 10/18/2014	0.96	0.98
43	10/19/2014 - 10/25/2014	0.97	0.99
44	10/26/2014 - 11/01/2014	0.98	1.00
45	11/02/2014 - 11/08/2014	0.98	1.00
46	11/09/2014 - 11/15/2014	0.99	1.01
47	11/16/2014 - 11/22/2014	1.00	1.02
48	11/23/2014 - 11/29/2014	1.00	1.02
49	11/30/2014 - 12/06/2014	1.01	1.03
50	12/07/2014 - 12/13/2014	1.01	1.03
51	12/14/2014 - 12/20/2014	1.01	1.03
52	12/21/2014 - 12/27/2014	1.04	1.06
53	12/28/2014 - 12/31/2014	1.07	1.09

* PEAK SEASON

TABLE 5

Generalized **Peak Hour Two-Way** Volumes for Florida's **Transitioning** and **Areas Over 5,000 Not In Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,300	1,460	**
4	Divided	*	3,060	3,200	**
6	Divided	*	4,690	4,820	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	580	1,200	1,280
4	Divided	*	890	2,590	2,850
6	Divided	*	1,440	4,040	4,280

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	140	550	1,760
50-84%	170	500	1,650	>1,760
85-100%	670	1,760	>1,760	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,410
85-100%	340	950	1,540	>1,760

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	3,970	5,190	6,200	6,460
6	5,860	7,710	9,190	9,990
8	7,660	10,230	12,170	13,500
10	9,550	12,750	15,190	17,010

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	820	1,550	2,190	2,990
4	Divided	3,170	4,460	5,660	6,260
6	Divided	4,750	6,700	8,480	9,400

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

Appendix D
Existing Intersection Analysis

HCM 2010 Signalized Intersection Summary
3: CR 235A & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	651	50	123	1471	82	50	17	79	97	23	48
Future Volume (veh/h)	28	651	50	123	1471	82	50	17	79	97	23	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1583	1863	1863	1863	1863	1583	1863	1863	1900
Adj Flow Rate, veh/h	29	685	37	129	1548	49	53	18	36	102	24	46
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	20	2	2	2	2	20	2	2	2
Cap, veh/h	197	1947	871	421	2035	910	283	248	179	331	86	165
Arrive On Green	0.03	0.55	0.55	0.06	0.57	0.57	0.04	0.13	0.13	0.06	0.15	0.15
Sat Flow, veh/h	1774	3539	1583	1508	3539	1583	1774	1863	1346	1774	572	1097
Grp Volume(v), veh/h	29	685	37	129	1548	49	53	18	36	102	0	70
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1508	1770	1583	1774	1863	1346	1774	0	1669
Q Serve(g_s), s	0.8	13.0	1.3	4.4	39.6	1.6	3.0	1.0	2.9	5.9	0.0	4.5
Cycle Q Clear(g_c), s	0.8	13.0	1.3	4.4	39.6	1.6	3.0	1.0	2.9	5.9	0.0	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	197	1947	871	421	2035	910	283	248	179	331	0	250
V/C Ratio(X)	0.15	0.35	0.04	0.31	0.76	0.05	0.19	0.07	0.20	0.31	0.00	0.28
Avail Cap(c_a), veh/h	197	1947	871	421	2035	910	283	248	179	331	0	250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.7	15.1	12.4	10.9	19.3	11.2	42.1	45.5	46.3	41.6	0.0	45.2
Incr Delay (d2), s/veh	1.6	0.5	0.1	1.9	2.7	0.1	1.5	0.6	2.5	2.4	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	10.6	1.1	3.6	27.2	1.3	2.9	1.0	2.1	5.5	0.0	4.1
LnGrp Delay(d),s/veh	18.3	15.6	12.5	12.8	22.0	11.3	43.6	46.1	48.8	44.0	0.0	48.0
LnGrp LOS	B	B	B	B	C	B	D	D	D	D		D
Approach Vol, veh/h		751			1726			107			172	
Approach Delay, s/veh		15.5			21.0			45.8			45.6	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	22.0	13.0	72.0	11.0	24.0	10.0	75.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	16.0	7.0	66.0	5.0	18.0	4.0	69.0
Max Q Clear Time (g_c+I1), s	7.9	4.9	6.4	15.0	5.0	6.5	2.8	41.6
Green Ext Time (p_c), s	0.0	0.4	0.0	27.4	0.0	0.4	0.0	18.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
12: US441 & NW 167th Blvd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	113	629	2	1214	267	132	36
Future Volume (veh/h)	113	629	2	1214	267	132	36
Number	7	4		8	18	1	16
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1863	1863	1900
Adj Flow Rate, veh/h	126	699		1349	297	94	97
Adj No. of Lanes	1	2		2	1	1	1
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	0
Cap, veh/h	307	2477		1888	844	355	323
Arrive On Green	0.23	1.00		1.00	1.00	0.20	0.20
Sat Flow, veh/h	1774	3632		3632	1583	1774	1615
Grp Volume(v), veh/h	126	699		1349	297	94	97
Grp Sat Flow(s),veh/h/ln	1774	1770		1770	1583	1774	1615
Q Serve(g_s), s	1.6	0.0		0.0	0.0	5.4	6.1
Cycle Q Clear(g_c), s	1.6	0.0		0.0	0.0	5.4	6.1
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	307	2477		1888	844	355	323
V/C Ratio(X)	0.41	0.28		0.71	0.35	0.26	0.30
Avail Cap(c_a), veh/h	307	2477		1888	844	355	323
HCM Platoon Ratio	2.00	2.00		2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0		0.0	0.0	40.5	40.9
Incr Delay (d2), s/veh	4.0	0.3		2.3	1.2	1.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.2	0.2		1.1	0.5	5.1	10.0
LnGrp Delay(d),s/veh	28.8	0.3		2.3	1.2	42.4	43.2
LnGrp LOS	C	A		A	A	D	D
Approach Vol, veh/h		825		1646		191	
Approach Delay, s/veh		4.6		2.1		42.8	
Approach LOS		A		A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				90.0		30.0	20.0	70.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				74.0		24.0	14.0	64.0
Max Q Clear Time (g_c+I1), s				2.0		8.1	3.6	2.0
Green Ext Time (p_c), s				29.3		0.5	0.2	27.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Notes

HCM 2010 Signalized Intersection Summary
6: US441 & I-75 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	759	42	44	1510	311	14	7	52	147	5	56
Future Volume (veh/h)	0	759	42	44	1510	311	14	7	52	147	5	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	799	23	46	1589	0	15	7	23	155	5	33
Adj No. of Lanes	0	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1435	41	177	1976	884	164	76	211	273	9	251
Arrive On Green	0.00	0.82	0.82	0.20	1.00	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	0	3607	101	1774	3539	1583	1228	573	1583	1721	56	1583
Grp Volume(v), veh/h	0	402	420	46	1589	0	22	0	23	160	0	33
Grp Sat Flow(s),veh/h/ln	0	1770	1845	1774	1770	1583	1801	0	1583	1777	0	1583
Q Serve(g_s), s	0.0	9.2	9.2	2.6	0.0	0.0	1.3	0.0	1.5	10.0	0.0	2.1
Cycle Q Clear(g_c), s	0.0	9.2	9.2	2.6	0.0	0.0	1.3	0.0	1.5	10.0	0.0	2.1
Prop In Lane	0.00		0.05	1.00		1.00	0.68		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	0	723	753	177	1976	884	240	0	211	281	0	251
V/C Ratio(X)	0.00	0.56	0.56	0.26	0.80	0.00	0.09	0.00	0.11	0.57	0.00	0.13
Avail Cap(c_a), veh/h	0	723	753	177	1976	884	240	0	211	281	0	251
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.3	7.3	44.3	0.0	0.0	45.6	0.0	45.7	46.7	0.0	43.4
Incr Delay (d2), s/veh	0.0	3.1	3.0	3.5	3.6	0.0	0.8	0.0	1.0	8.1	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.5	8.7	2.6	1.8	0.0	1.2	0.0	1.3	9.4	0.0	1.8
LnGrp Delay(d),s/veh	0.0	10.4	10.3	47.8	3.6	0.0	46.4	0.0	46.8	54.8	0.0	44.5
LnGrp LOS		B	B	D	A		D		D	D		D
Approach Vol, veh/h		822			1635			45			193	
Approach Delay, s/veh		10.4			4.8			46.6			53.0	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		22.0	18.0	55.0		25.0		73.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s		16.0	12.0	49.0		19.0		67.0
Max Q Clear Time (g_c+I1), s		3.5	4.6	11.2		12.0		2.0
Green Ext Time (p_c), s		0.1	0.0	24.1		0.5		32.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Notes

HCM 2010 Signalized Intersection Summary
9: US441 & I-75 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	494	12	38	1191	108	53	13	8	273	21	643
Future Volume (veh/h)	58	494	12	38	1191	108	53	13	8	273	21	643
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	61	520	4	40	1254	0	56	14	3	287	22	0
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1620	12	495	1593	712	102	26	5	400	31	673
Arrive On Green	0.07	0.90	0.90	0.03	0.45	0.00	0.08	0.08	0.08	0.24	0.24	0.00
Sat Flow, veh/h	1774	3600	28	1774	3539	1583	1367	342	73	1653	127	2787
Grp Volume(v), veh/h	61	256	268	40	1254	0	73	0	0	309	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1858	1774	1770	1583	1781	0	0	1780	0	1393
Q Serve(g_s), s	2.2	2.4	2.4	1.4	36.2	0.0	4.7	0.0	0.0	19.1	0.0	0.0
Cycle Q Clear(g_c), s	2.2	2.4	2.4	1.4	36.2	0.0	4.7	0.0	0.0	19.1	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.77		0.04	0.93		1.00
Lane Grp Cap(c), veh/h	184	796	836	495	1593	712	134	0	0	430	0	673
V/C Ratio(X)	0.33	0.32	0.32	0.08	0.79	0.00	0.55	0.00	0.00	0.72	0.00	0.00
Avail Cap(c_a), veh/h	184	796	836	495	1593	712	134	0	0	430	0	673
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	3.4	3.4	16.4	28.1	0.0	53.5	0.0	0.0	41.8	0.0	0.0
Incr Delay (d2), s/veh	4.7	1.1	1.0	0.3	4.0	0.0	15.1	0.0	0.0	9.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	2.5	2.6	1.3	25.5	0.0	5.2	0.0	0.0	15.9	0.0	0.0
LnGrp Delay(d),s/veh	26.9	4.5	4.4	16.7	32.1	0.0	68.6	0.0	0.0	51.6	0.0	0.0
LnGrp LOS	C	A	A	B	C		E			D		
Approach Vol, veh/h		585			1294			73			309	
Approach Delay, s/veh		6.8			31.7			68.6			51.6	
Approach LOS		A			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	10.0	60.0		35.0	10.0	60.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		9.0	4.0	54.0		29.0	4.0	54.0
Max Q Clear Time (g_c+I1), s		6.7	3.4	4.4		21.1	4.2	38.2
Green Ext Time (p_c), s		0.0	0.0	17.3		1.1	0.0	9.9

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
13: NW 147th St & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	589	118	75	1139	85	187	20	49	66	26	92
Future Volume (veh/h)	60	589	118	75	1139	85	187	20	49	66	26	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	63	620	124	79	1199	89	197	21	52	69	27	97
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	1681	752	452	1681	752	415	95	236	336	264	224
Arrive On Green	0.08	0.47	0.47	0.15	0.95	0.95	0.11	0.20	0.20	0.05	0.14	0.14
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	476	1179	1774	1863	1583
Grp Volume(v), veh/h	63	620	124	79	1199	89	197	0	73	69	27	97
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	0	1655	1774	1863	1583
Q Serve(g_s), s	2.0	13.4	5.4	2.4	6.3	0.4	11.0	0.0	4.4	3.9	1.5	6.7
Cycle Q Clear(g_c), s	2.0	13.4	5.4	2.4	6.3	0.4	11.0	0.0	4.4	3.9	1.5	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	373	1681	752	452	1681	752	415	0	331	336	264	224
V/C Ratio(X)	0.17	0.37	0.16	0.17	0.71	0.12	0.47	0.00	0.22	0.21	0.10	0.43
Avail Cap(c_a), veh/h	373	1681	752	452	1681	752	415	0	331	336	264	224
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	20.0	17.9	12.4	1.7	1.6	36.4	0.0	40.2	40.8	44.9	47.1
Incr Delay (d2), s/veh	1.0	0.6	0.5	0.8	2.6	0.3	3.9	0.0	1.5	1.4	0.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	10.9	4.4	2.3	5.3	0.4	9.7	0.0	3.9	3.6	1.5	6.0
LnGrp Delay(d),s/veh	13.8	20.7	18.4	13.3	4.3	1.9	40.2	0.0	41.7	42.2	45.6	53.1
LnGrp LOS	B	C	B	B	A	A	D		D	D	D	D
Approach Vol, veh/h		807			1367			270			193	
Approach Delay, s/veh		19.8			4.7			40.6			48.1	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	30.0	15.0	63.0	19.0	23.0	15.0	63.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	24.0	9.0	57.0	13.0	17.0	9.0	57.0
Max Q Clear Time (g_c+I1), s	5.9	6.4	4.4	15.4	13.0	8.7	4.0	8.3
Green Ext Time (p_c), s	0.0	0.8	0.1	19.0	0.0	0.5	0.0	20.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
17: Main St & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	646	76	64	1143	17	76	11	39	13	25	34
Future Volume (veh/h)	42	646	76	64	1143	17	76	11	39	13	25	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	44	680	61	67	1203	14	80	12	29	14	26	23
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	1917	172	545	2060	24	376	109	264	98	176	136
Arrive On Green	0.10	1.00	1.00	0.08	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3286	295	1774	3583	42	1351	485	1171	271	781	605
Grp Volume(v), veh/h	44	366	375	67	594	623	80	0	41	63	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1811	1774	1770	1855	1351	0	1656	1656	0	0
Q Serve(g_s), s	1.1	0.0	0.0	1.8	0.0	0.0	1.2	0.0	2.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.8	0.0	0.0	4.7	0.0	2.4	3.5	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.02	1.00		0.71	0.22		0.37
Lane Grp Cap(c), veh/h	411	1032	1056	545	1018	1067	376	0	373	409	0	0
V/C Ratio(X)	0.11	0.35	0.36	0.12	0.58	0.58	0.21	0.00	0.11	0.15	0.00	0.00
Avail Cap(c_a), veh/h	411	1032	1056	545	1018	1067	376	0	373	409	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.2	0.0	0.0	8.8	0.0	0.0	37.8	0.0	37.0	37.4	0.0	0.0
Incr Delay (d2), s/veh	0.5	1.0	0.9	0.5	2.4	2.3	1.3	0.0	0.6	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.5	0.5	1.6	1.2	1.2	4.1	0.0	2.1	3.2	0.0	0.0
LnGrp Delay(d),s/veh	8.7	1.0	0.9	9.2	2.4	2.3	39.1	0.0	37.5	38.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	D		
Approach Vol, veh/h		785			1284			121			63	
Approach Delay, s/veh		1.4			2.7			38.5			38.2	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		33.0	11.0	76.0		33.0	12.0	75.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		27.0	5.0	70.0		27.0	6.0	69.0
Max Q Clear Time (g_c+I1), s		6.7	3.8	2.0		5.5	3.1	2.0
Green Ext Time (p_c), s		0.7	0.0	19.5		0.8	0.0	19.5

Intersection Summary	
HCM 2010 Ctrl Delay	5.2
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
20: NW 140th St & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	457	137	138	1059	101	151	110	95	49	129	76
Future Volume (veh/h)	121	457	137	138	1059	101	151	110	95	49	129	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	127	481	102	145	1115	77	159	116	68	52	136	57
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	1261	266	569	1484	102	307	257	151	290	229	96
Arrive On Green	0.18	0.87	0.87	0.10	0.44	0.44	0.08	0.23	0.23	0.03	0.18	0.18
Sat Flow, veh/h	1774	2910	614	1774	3360	232	1774	1102	646	1774	1248	523
Grp Volume(v), veh/h	127	291	292	145	587	605	159	0	184	52	0	193
Grp Sat Flow(s),veh/h/ln	1774	1770	1754	1774	1770	1822	1774	0	1749	1774	0	1770
Q Serve(g_s), s	4.3	3.9	4.0	5.0	33.3	33.3	8.5	0.0	10.8	2.8	0.0	12.0
Cycle Q Clear(g_c), s	4.3	3.9	4.0	5.0	33.3	33.3	8.5	0.0	10.8	2.8	0.0	12.0
Prop In Lane	1.00		0.35	1.00		0.13	1.00		0.37	1.00		0.30
Lane Grp Cap(c), veh/h	299	767	760	569	782	805	307	0	408	290	0	325
V/C Ratio(X)	0.42	0.38	0.38	0.25	0.75	0.75	0.52	0.00	0.45	0.18	0.00	0.59
Avail Cap(c_a), veh/h	299	767	760	569	782	805	307	0	408	290	0	325
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	4.8	4.8	14.3	28.0	28.0	34.8	0.0	39.4	38.0	0.0	44.9
Incr Delay (d2), s/veh	4.4	1.4	1.5	1.1	6.6	6.4	6.1	0.0	3.6	1.3	0.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	3.8	3.8	4.6	24.4	25.0	8.2	0.0	9.5	2.7	0.0	10.7
LnGrp Delay(d),s/veh	22.6	6.2	6.3	15.4	34.6	34.4	40.9	0.0	43.0	39.4	0.0	52.7
LnGrp LOS	C	A	A	B	C	C	D		D	D		D
Approach Vol, veh/h		710			1337			343			245	
Approach Delay, s/veh		9.2			32.4			42.0			49.9	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	18.0	58.0	16.0	28.0	17.0	59.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	28.0	12.0	52.0	10.0	22.0	11.0	53.0
Max Q Clear Time (g_c+I1), s	4.8	12.8	7.0	6.0	10.5	14.0	6.3	35.3
Green Ext Time (p_c), s	0.0	2.0	0.1	15.4	0.0	1.4	0.1	10.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Appendix E
ITE Trip Generation Information

Land Use: 813
Free-Standing Discount Superstore

Description

The discount superstores in this category are similar to the free-standing discount stores described in Land Use 815 with the exception that they also contain a full service grocery department under the same roof that shares entrances and exits with the discount store area. The stores usually offer a variety of customer services, centralized cashiering and a wide range of products. They typically maintain long store hours 7 days a week. The stores included in this land use are often the only ones on the site, but they can also be found in mutual operation with a related or unrelated garden center and/or service station, or as a part of a shopping center, with or without their own dedicated parking area. Free-standing discount store (Land Use 815) is a related use.

Additional Data

Peak hours of the generator—

The weekday A.M. peak hour was generally between 10:00 a.m. and 11:00 a.m. The weekday P.M. peak hour varied between 12:00 p.m. and 5:00 p.m. The Saturday and Sunday peak hours varied between 12:00 p.m. and 5:00 p.m.

The weighted average truck trip generation rates from approximately 30 sites surveyed for this land use are summarized in the table below. The average gross floor area of these facilities is 206,000 square feet.

Day/Time Period	Weighted Average Truck Trip Generation Rate (trip ends per 1,000 square feet)
Weekday	0.87
Weekday A.M. Peak Hour of Adjacent Street Traffic	0.05
Weekday P.M. Peak Hour of Adjacent Street Traffic	0.03
Weekday A.M. Peak Hour of Generator	0.06
Weekday P.M. Peak Hour of Generator	0.04
Saturday	0.59
Saturday Peak Hour of Generator	0.04
Sunday	0.43
Sunday Peak Hour of Generator	0.02

One source provided information on trip generation rates for what the study defined as "typical" and "peak" seasons. These data indicated that weekday trip generation rates were similar in both seasons. However, trip generation rates on Saturdays during peak season were 13 to 20 percent higher than a typical season; Sunday rates were found to be 6 to 10 percent higher. For the purposes of this analysis, "peak" season was defined as the period between the week after

Thanksgiving and the week prior to Christmas. "typical" season was defined as September through mid-November when transactions are close to average. The seasonal trip generation information provided was based on a sample of five sites.

Information on approximate hourly variation in free-standing discount superstore traffic is shown in the table below. It should be noted, however, that the information contained in this table is based on a limited sample size. Therefore, caution should be exercised when applying the data. Also, some information provided in the table may conflict with the results obtained by applying the average rate or regression equations. When this occurs, it is suggested that the results from the average rate or regression equations be used, as they are based on a larger number of studies.

Hourly Variation in Free-Standing Discount Superstore Traffic

	Average Weekday[a]		Average Saturday[b]		Average Sunday[c]	
Time	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic	Percent of 24-Hour Entering Traffic	Percent of 24-Hour Exiting Traffic
6 a.m.–7 a.m.	1.5	1.2	1.0	1.1	0.9	1.3
7 a.m.–8 a.m.	2.6	2.4	2.2	2.1	2.0	2.3
8 a.m.–9 a.m.	4.1	3.3	3.8	3.2	3.4	3.4
9 a.m.–10 a.m.	6.0	4.6	5.7	4.6	5.4	5.1
10 a.m.–11 a.m.	7.3	6.0	7.0	6.2	7.2	5.8
11 a.m.–12 p.m.	7.5	7.3	8.4	7.4	8.6	7.5
12 p.m.–1 p.m.	8.3	7.7	9.0	8.0	9.4	8.0
1 p.m.–2 p.m.	7.8	7.7	8.9	8.6	9.5	9.2
2 p.m.–3 p.m.	8.0	7.7	8.4	7.9	8.3	8.6
3 p.m.–4 p.m.	7.7	7.7	7.6	7.9	8.4	8.7
4 p.m.–5 p.m.	7.8	8.0	7.4	7.7	7.9	7.8
5 p.m.–6 p.m.	7.1	7.3	7.0	7.5	6.9	7.2
6 p.m.–7 p.m.	6.7	6.7	6.3	6.8	6.4	6.7
7 p.m.–8 p.m.	5.7	6.1	5.4	5.9	5.0	5.1
8 p.m.–9 p.m.	4.4	5.2	4.4	5.0	4.0	3.6
9 p.m.–10 p.m.	3.0	4.0	3.5	3.7	2.9	2.9
10 p.m.–6 a.m.	4.5	7.2	3.9	6.4	3.8	6.8

Sites ranged in size from 123,000 to 224,000 square feet gross floor area.
[a] Source numbers – 354, 595 and 618; based on 11 studies.
[b] Source numbers – 354 and 618; based on nine studies.
[c] Source number – 354; based on eight studies.

Garden centers contained within the principal outside faces of the exterior building walls were included in the gross square floor areas reported. Outdoor or fenced-in areas outside the principal

faces of the exterior walls were excluded. Please refer to Volume 1, User's Guide, for a more detailed definition of gross floor area.

Several sites included in this land use indicated the presence of fenced/covered space.

The sites were surveyed between the 1990s and the 2000s throughout the United States.

To assist in the future analysis of this land use, it is important to collect and include information on the presence and size of garden centers, outdoor fenced-in space and service stations in trip generation data submissions.

Source Numbers

354, 522, 577, 595, 607, 609, 612, 618, 625, 630, 636, 651, 652, 661, 700, 731, 735

Free-Standing Discount Superstore
(813)

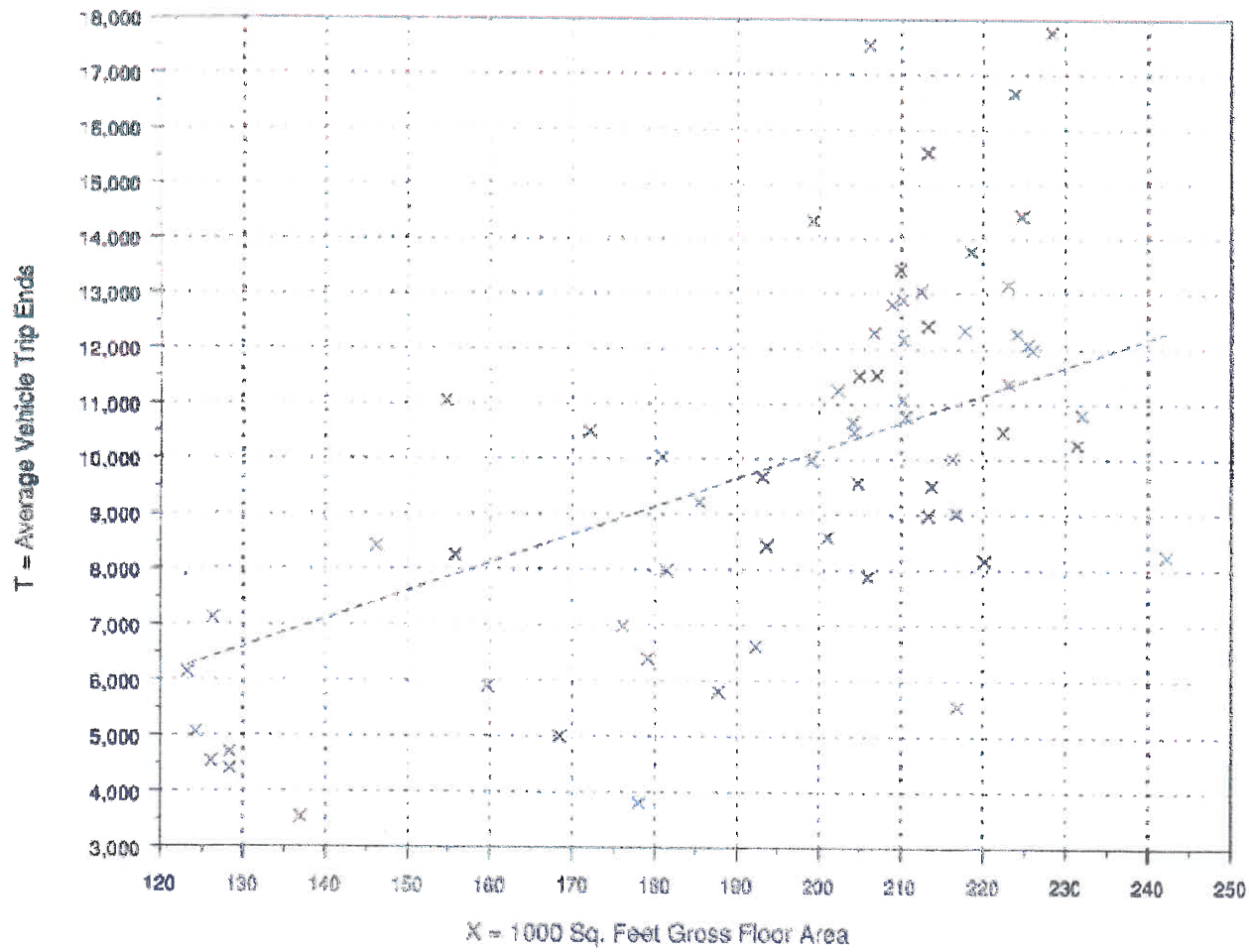
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 65
Average 1000 Sq. Feet GFA: 196
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
50.75	21.39 - 85.01	14.73

Data Plot and Equation



Fitted Curve Equation: Not given

R^2 = ****

Free-Standing Discount Superstore
(813)

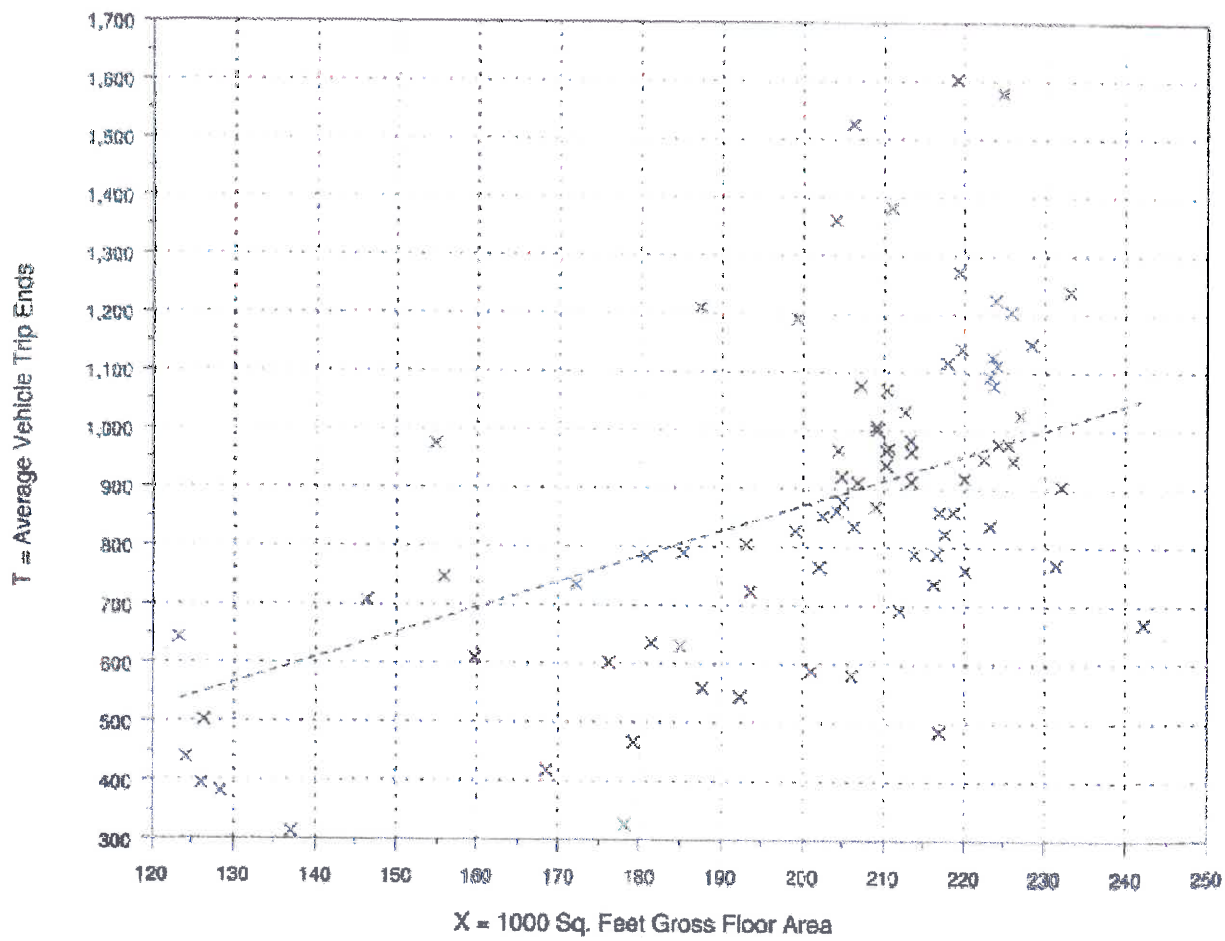
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 86
Average 1000 Sq. Feet GFA: 200
Directional Distribution: 49% entering, 51% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.35	1.83 - 7.40	2.36

Data Plot and Equation



Fitted Curve Equation: Not given

R^2 = ****

Table 5.2
Pass-By Trips and Diverted Linked Trips
Weekday, p.m. Peak Period
Land Use 813—Free-Standing Discount Superstore

SIZE (1,000 SQ. FT. GFA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PRIMARY TRIP (%)	NON-PASS-BY TRIP (%)	DIVERTED LINKED TRIP (%)	PASS-BY TRIP (%)	SOURCE
146	North Olmstead, OH	Sept. 1996	210	2:45–6:45 p.m.	—	69	—	31	Mid-Ohio Regional Planning Commission
130	Ashtabula, OH	Sept. 1996	204	2:45–6:45 p.m.	—	75	—	25	Mid-Ohio Regional Planning Commission
102	Bryan, OH	Nov. 1996	100	2:45–6:45 p.m.	—	60	—	40	Mid-Ohio Regional Planning Commission
102	Oxford, OH	Oct. 1996	137	2:45–6:45 p.m.	—	72	—	28	Mid-Ohio Regional Planning Commission
218	Euclid, OH	Sept. 1996	185	2:45–6:45 p.m.	—	77	—	23	Mid-Ohio Regional Planning Commission
173	Mansfield, OH	Oct. 1996	158	2:45–6:45 p.m.	—	76	—	24	Mid-Ohio Regional Planning Commission
167	Hillsboro, OH	Oct. 1996	172	2:45–6:45 p.m.	—	70	—	30	Mid-Ohio Regional Planning Commission
167	Mentor, OH	Sept. 1996	205	2:45–6:45 p.m.	—	75	—	25	Mid-Ohio Regional Planning Commission

Average Pass-By Trip Percentage: 28

Appendix F
Trip Distribution Plot

Appendix G
Growth Rate Calculations

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2014 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 5106 - SR 20 .4 MI. NW OF SR 235

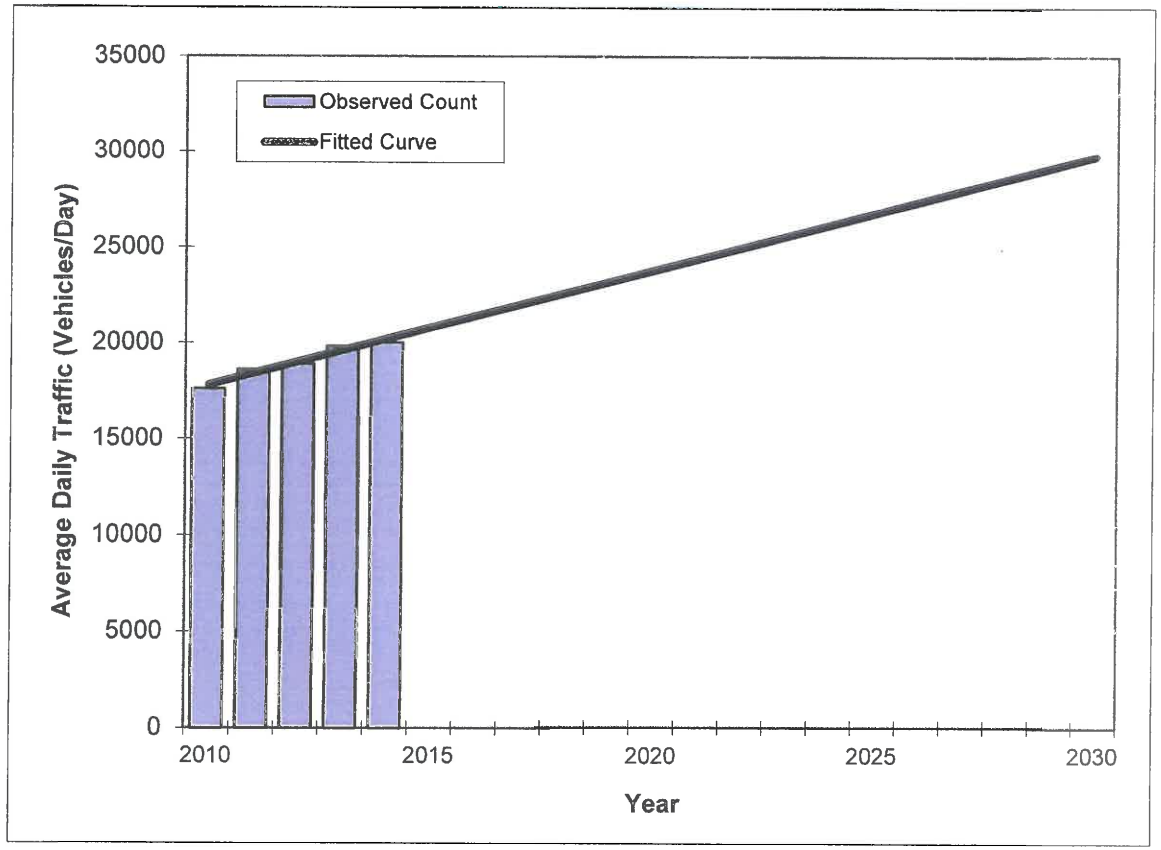
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2014	20000 C	N 10000	S 10000	9.50	57.40	5.40
2013	19800 C	N 9800	S 10000	9.50	57.80	5.00
2012	18900 C	N 9600	S 9300	9.50	58.40	4.90
2011	18600 C	N 9200	S 9400	9.50	58.80	5.50
2010	17600 C	N 8700	S 8900	10.13	59.87	5.10
2009	19600 C	N 9600	S 10000	10.04	57.81	6.20
2008	19400 C	N 9800	S 9600	10.17	57.73	7.30
2007	20000 C	N 10000	S 10000	10.22	58.44	5.70
2006	20500 C	N 10000	S 10500	9.98	59.05	6.70
2005	20000 C	N 10000	S 10000	10.10	58.20	19.60
2004	19900 C	N 10000	S 9900	10.20	62.30	9.10
2003	21000 C	N 10500	S 10500	10.20	59.50	12.10
2002	19200 C	N 9400	S 9800	10.00	56.10	11.80
2001	19400 C	N 9700	S 9700	10.50	61.30	8.70
2000	18400 C	N 9200	S 9200	10.30	61.40	7.50
1999	18100 C	N 8700	S 9400	10.70	59.50	6.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

TRAFFIC TRENDS

US 441 -- 0.4 MI NW of SR 235

County:	Alachua
Station #:	5106
Highway:	US 441



Year	Traffic (ADT/AADT) Count*	Trend**
2010	17600	17800
2011	18600	18400
2012	18900	19000
2013	19800	19600
2014	20000	20200
2017 Opening Year Trend		
2017	N/A	22000
2018 Mid-Year Trend		
2018	N/A	22600
2019 Design Year Trend		
2019	N/A	23200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	600
Trend R-squared:	95.5%
Trend Annual Historic Growth Rate:	3.37%
Trend Growth Rate (2014 to Design Year):	2.97%
Printed:	25-Mar-16
Straight Line Growth Option	

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2014 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0461 - SR 20 .2 MI. NW OF SR 93

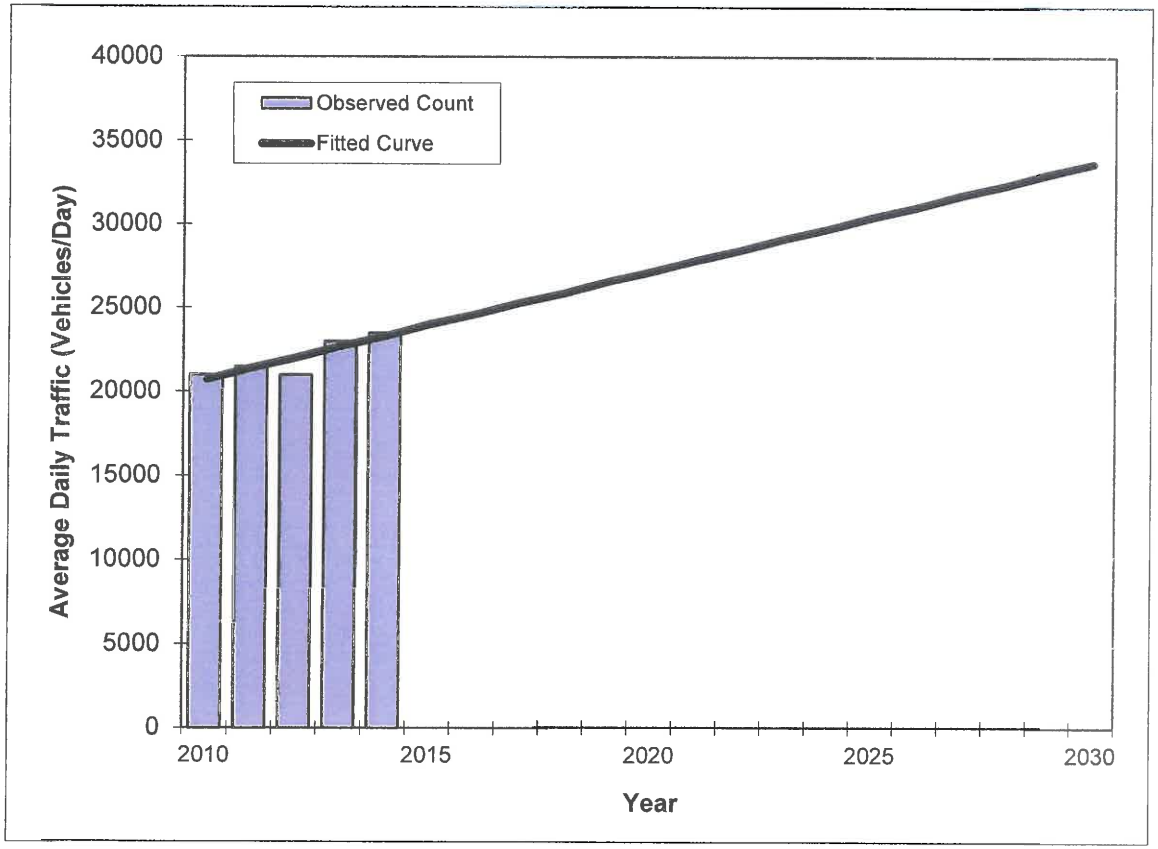
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2014	23500 C	N 11500	S 12000	9.50	57.40	5.40
2013	23000 C	N 11500	S 11500	9.50	57.80	5.00
2012	21000 C	N 10500	S 10500	9.50	58.40	4.90
2011	21500 C	N 10500	S 11000	9.50	58.80	5.50
2010	21000 C	N 10500	S 10500	10.13	59.87	5.10
2009	24000 C	N 12000	S 12000	10.04	57.81	6.20
2008	22500 C	N 11000	S 11500	10.17	57.73	7.30
2007	26000 C	N 13000	S 13000	10.22	58.44	5.70
2006	24500 C	N 12000	S 12500	9.98	59.05	6.70
2005	21000 C	N 10500	S 10500	10.10	58.20	19.60
2004	22500 C	N 11500	S 11000	10.20	62.30	9.10
2003	21000 C	N 10500	S 10500	10.20	59.50	12.10
2002	21000 C	N 10500	S 10500	10.00	56.10	11.80
2001	19300 C	N 9700	S 9600	10.50	61.30	8.70
2000	17700 C	N 8900	S 8800	10.30	61.40	7.50
1999	16900 C	N 8000	S 8900	10.70	59.50	6.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

TRAFFIC TRENDS

US 441 -- 0.2 MI NW of SR 93

County:	Alachua
Station #:	461
Highway:	US 441



Year	Traffic (ADT/AADT) Count*	Trend**
2010	21000	20700
2011	21500	21400
2012	21000	22000
2013	23000	22700
2014	23500	23300
2017 Opening Year Trend		
2017	N/A	25300
2018 Mid-Year Trend		
2018	N/A	25900
2019 Design Year Trend		
2019	N/A	26600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend increase:	650
Trend R-squared:	76.8%
Trend Annual Historic Growth Rate:	3.14%
Trend Growth Rate (2014 to Design Year):	2.83%
Printed:	25-Mar-16
Straight Line Growth Option	

Table 1. Final Development Orders with Valid Concurrency Reservations

Current Through: July 12, 2016 Planning & Zoning Board Meeting

Project	Final Development Order Granted	Project Status	Building Permit Issuance Date	CO Issued?	CO Issuance Date	Water (GPD)	Sewer (GDP)	Traffic (AADT)*	Solid Waste (lbs/day)	Drainage	Parks (acres)
All Projects						112,897	73,307		4866.01		0.52
Subdivisions											
Alachua Partners SP	September 11, 2007	*Extension granted through May 15, 2016*	*5/11/2016*	*No*	*N/A*	12,150	150	327 (3/4)	32	OK	*No impact*
Nanotherapeutics SP	September 23, 2013	*Certificate of Occupancy Issued (1 of 3 Permits)*	*12/10/2013*	*Yes (1 of 3 Permits)*	*4/13/2016*	70,000	44,500	332 (CR 2054 E)	1,980	OK	*No impact*
Upland Industrial Park, Lot 6 SP	September 9, 2014	*Certificate of Occupancy Issued*	*5/26/2015*	*Yes*	*12/2/2015*	1,000	1,000	38 (3/4)	120	OK	*No impact*
Alachua Market Place SP	November 18, 2014	*Certificate of Occupancy Issued*	*12/7/2014*	*Yes*	*9/17/2015*	4,295	4,296	77 (1); 613 (2); 2,261 (5), 77 (CR 235A N); 498 (CR 235A S)	672	OK	*No impact*
Family Dollar/AutoZone SP	November 18, 2014	*Certificate of Occupancy Issued*	*5/27/2015*	*Yes*	*8/27/2015*	1,912	1,912	181 (3/4); 903 (5), 271 (8), 271 (9)	304.28	OK	*No impact*
Alachua Research Park SP	December 9, 2014	*Certificate of Occupancy Issued*	*5/18/2015*	*Yes*	*12/17/2015*	6,375	6,375	259 (3/4); 86 (CR 2054 E)	510	OK	*No impact*
PePeDogs SP	July 14, 2015	*Building Permit Application Submitted*	*N/A*	*No*	*N/A*	990	0	41 (3/4); 13 (CR 2054 E)	79.2	OK	*No impact*
Public Services Operations Center SP	December 8, 2015	*No Action*	*N/A*	*No*	*N/A*	2,685	2,685	586 (3/4)	214.85	OK	*No impact*
Legacy Park, Phase 1 SP	March 7, 2016	*Building Permit Application Submitted*	*N/A*	*No*	*N/A*	520	520	1,338 (CR 2054 W)	474.68	OK	*No impact*
Heritage Oaks Phase II Final Plat	June 13, 2016	*Final Plat Recorded, Infrastructure Under Construction*	*N/A*	*N/A*	*N/A*	12,100	11,000	109 (1); 133 (2); 419 (5); 102 (CR 235A S), 75 (CR235A N)	417	OK	0.52
Emencr Pediatric Office SP	July 12, 2016	*No Action*	*N/A*	*N/A*	*N/A*	870	870	186 (5)	62	OK	No impact

Source: City of Alachua Final Development Orders (Project Staff Reports)

*City Comp Plan Segments and other roads shown in parenthesis (see Tables 6a and 6b for aggregate impacts by segment)

Units (GPD, AADT, lbs/day) automatically update all other tables. Figures in Table 1 must be updated manually on subsequent sheets as new DOs are issued.

Table 8.Traffic Impacts Segment by Segment

Segment Name/Number	Segment 5	
Roadway	US 441	
Roadway Description	From SR 235 to NCL of Alachua	
	AADT	Peak Hour
Total Development Impact	3769	362
Alachua Partners SP	0	0
Nanotherapeutics SP	0	0
Upland Industrial Park, Lot 6 SP	0	0
Alachua Market Place SP	2261	204
Family Dollar/AutoZone SP	903	91
Alachua Research Park SP	0	0
PePeDogs SP	0	0
Public Services Operations Center SP	0	0
Legacy Park, Phase 1 SP	0	0
Heritage Oaks Phase II Final Plat	419	45
Emerick Pediatric Office SP	186	22

Notes: Peak Hour trip distribution was not provided for all projects prior to November 2008. Any

This table is not automatically updated; please add trips to the appropriate segments as

NOTE: OF THE 3,769 DAILY AND 362 PEAK HOUR VESTED TRIPS, 3,164 DAILY AND 295 PEAK HOUR TRIPS ARE ASSOCIATED WITH DEVELOPMENT THAT HAS BEEN COMPLETED AND IS INCLUDED IN THE EXISTING TRAFFIC COUNTS

<u>REMAINING VESTED TRIPS</u>
3,769 - 3,164 = 605 DAILY TRIPS
362 - 295 = 67 PEAK HOUR TRIPS

Appendix H
Projected Intersection Volumes

Wal-Mart 3873

Intersection Volumes

Period	PM Peak			Pass By			GR	Years
Tgen	In/Out	246	260	In/Out	98	98	0.03	2

Intersection: US 441 & CR 235A

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L	50	1.06	53			0			0	53
NB	T	17	1.06	18			0			0	18
	R	79	1.06	84	7%		17			0	101
	L	97	1.06	103	5%		12			0	115
SB	T	23	1.06	24			0			0	24
	R	48	1.06	51			0			0	51
	L	28	1.06	30			0			0	30
EB	T	651	1.06	690	20%		49			0	739
	R	50	1.06	53			0			0	53
	L	123	1.06	130		7%	18			0	148
WB	T	1,471	1.06	1559		20%	52			0	1611
	R	82	1.06	87		5%	13			0	100

Intersection: US 441 & Access

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L		1.06	0		52%	135		55%	54	189
NB	T		1.06	0			0			0	0
	R		1.06	0		38%	99		45%	44	143
	L		1.06	0			0			0	0
SB	T		1.06	0			0			0	0
	R		1.06	0			0			0	0
	L		1.06	0			0			0	0
EB	T	775	1.06	822			0	-45%		-44	778
	R		1.06	0	52%		128	45%		44	172
	L		1.06	0	38%		94	55%		54	148
WB	T	1,337	1.06	1417			0	-55%		-54	1363
	R		1.06	0			0			0	0

Intersection: US 441 & NW 167th Blvd

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L		1.06	0			0			0	0
NB	T		1.06	0			0			0	0
	R		1.06	0			0			0	0
	L	132	1.06	140	3%		7			0	147
SB	T		1.06	0			0			0	0
	R	36	1.06	38			0			0	38
	L	113	1.06	120			0			0	120
EB	T	629	1.06	667	32%		79			0	746
	R		1.06	0			0			0	0
	L	2	1.06	2			0			0	2
WB	T	1,214	1.06	1287		32%	83			0	1370
	R	267	1.06	283		3%	8			0	291

Intersection: US 441 & NW 147th Dr

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L	187	1.06	198			0			0	198
NB	T	20	1.06	21			0			0	21
	R	49	1.06	52			0			0	52
	L	66	1.06	70			0			0	70
SB	T	26	1.06	28			0			0	28
	R	92	1.06	98	2%		5			0	103
	L	60	1.06	64		2%	5			0	69
EB	T	589	1.06	624		36%	94			0	718
	R	118	1.06	125			0			0	125
	L	75	1.06	80			0			0	80
WB	T	1,139	1.06	1207	36%		89			0	1296
	R	85	1.06	90			0			0	90

Intersection: US 441 & I-75 SB Ramp

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L	14	1.06	15			0			0	15
NB	T	7	1.06	7			0			0	7
	R	52	1.06	55			0			0	55
	L	147	1.06	156	5%		12			0	168
SB	T	5	1.06	5			0			0	5
	R	56	1.06	59			0			0	59
	L		1.06	0			0			0	0
EB	T	759	1.06	805	35%		86			0	891
	R	42	1.06	45			0			0	45
	L	44	1.06	47			0			0	47
WB	T	1,510	1.06	1601		35%	91			0	1692
	R	311	1.06	330		12%	31			0	361

Intersection: US 441 & Main St

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L	76	1.06	81			0			0	81
NB	T	44	1.06	47			0			0	47
	R	39	1.06	41			0			0	41
	L	13	1.06	14			0			0	14
SB	T	25	1.06	27			0			0	27
	R	34	1.06	36	2%		5			0	41
	L	42	1.06	45		2%	5			0	50
EB	T	646	1.06	685		34%	88			0	773
	R	76	1.06	81			0			0	81
	L	64	1.06	68			0			0	68
WB	T	1,143	1.06	1212	34%		84			0	1296
	R	17	1.06	18			0			0	18

Intersection: US 441 & I-75 NB Ramp

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L	53	1.06	56			0			0	56
NB	T	13	1.06	14			0			0	14
	R	8	1.06	8			0			0	8
	L	273	1.06	289	12%		30			0	319
SB	T	21	1.06	22			0			0	22
	R	643	1.06	682			0			0	682
	L	58	1.06	61			0			0	61
EB	T	494	1.06	524	40%		98			0	622
	R	12	1.06	13			0			0	13
	L	38	1.06	40			0			0	40
WB	T	1,191	1.06	1262		47%	122			0	1384
	R	108	1.06	114		5%	13			0	127

Intersection: US 441 & NW 140th St

Approach	Mvmt	Existing	Factor	Backgd	Enter	Exit	Project	PB Ent	PB Ex	Passby	Total
	L	151	1.06	160	8%		20			0	180
NB	T	110	1.06	117			0			0	117
	R	95	1.06	101			0			0	101
	L	49	1.06	52			0			0	52
SB	T	129	1.06	137			0			0	137
	R	76	1.06	81	6%		15			0	96
	L	121	1.06	128		6%	16			0	144
EB	T	457	1.06	484		19%	49			0	533
	R	137	1.06	145		8%	21			0	166
	L	138	1.06	146			0			0	146
WB	T	1,059	1.06	1123	19%		47			0	1170
	R	101	1.06	107			0			0	107

Appendix I
Projected Intersection Conditions

HCM 2010 Signalized Intersection Summary
3: CR 235A & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	739	53	148	1611	100	53	18	101	115	24	51
Future Volume (veh/h)	30	739	53	148	1611	100	53	18	101	115	24	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1583	1863	1863	1863	1863	1583	1863	1863	1900
Adj Flow Rate, veh/h	32	778	40	156	1696	68	56	19	59	121	25	49
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	20	2	2	2	2	20	2	2	2
Cap, veh/h	169	1947	871	387	2035	910	280	248	179	327	85	166
Arrive On Green	0.03	0.55	0.55	0.06	0.57	0.57	0.04	0.13	0.13	0.06	0.15	0.15
Sat Flow, veh/h	1774	3539	1583	1508	3539	1583	1774	1863	1346	1774	563	1104
Grp Volume(v), veh/h	32	778	40	156	1696	68	56	19	59	121	0	74
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1508	1770	1583	1774	1863	1346	1774	0	1668
Q Serve(g_s), s	0.9	15.2	1.4	5.4	46.9	2.3	3.2	1.1	4.8	7.0	0.0	4.7
Cycle Q Clear(g_c), s	0.9	15.2	1.4	5.4	46.9	2.3	3.2	1.1	4.8	7.0	0.0	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	169	1947	871	387	2035	910	280	248	179	327	0	250
V/C Ratio(X)	0.19	0.40	0.05	0.40	0.83	0.07	0.20	0.08	0.33	0.37	0.00	0.30
Avail Cap(c_a), veh/h	169	1947	871	387	2035	910	280	248	179	327	0	250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.7	15.6	12.5	11.6	20.8	11.3	42.2	45.5	47.1	42.1	0.0	45.4
Incr Delay (d2), s/veh	2.5	0.6	0.1	3.1	4.2	0.2	1.6	0.6	4.8	3.2	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	12.0	1.1	4.6	32.1	1.9	3.1	1.1	3.6	0.7	0.0	4.3
LnGrp Delay(d),s/veh	22.2	16.2	12.6	14.7	25.0	11.5	43.8	46.1	52.0	45.3	0.0	48.4
LnGrp LOS	C	B	B	B	C	B	D	D	D	D		D
Approach Vol, veh/h		850			1920			134			195	
Approach Delay, s/veh		16.2			23.7			47.7			46.5	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	22.0	13.0	72.0	11.0	24.0	10.0	75.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	16.0	7.0	66.0	5.0	18.0	4.0	69.0
Max Q Clear Time (g_c+I1), s	9.0	6.8	7.4	17.2	5.2	6.7	2.9	48.9
Green Ext Time (p_c), s	0.0	0.4	0.0	31.2	0.0	0.5	0.0	16.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
23: US441 & NW 167th Blvd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	120	746	2	1370	291	147	39
Future Volume (veh/h)	120	746	2	1370	291	147	39
Number	7	4		8	18	1	16
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863		1863	1863	1863	1900
Adj Flow Rate, veh/h	133	829		1522	323	103	107
Adj No. of Lanes	1	2		2	1	1	1
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	0
Cap, veh/h	300	2477		1888	844	355	323
Arrive On Green	0.23	1.00		0.71	0.71	0.20	0.20
Sat Flow, veh/h	1774	3632		3632	1583	1774	1615
Grp Volume(v), veh/h	133	829		1522	323	103	107
Grp Sat Flow(s),veh/h/ln	1774	1770		1770	1583	1774	1615
Q Serve(g_s), s	1.7	0.0		35.0	9.8	5.9	6.8
Cycle Q Clear(g_c), s	1.7	0.0		35.0	9.8	5.9	6.8
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	300	2477		1888	844	355	323
V/C Ratio(X)	0.44	0.33		0.81	0.38	0.29	0.33
Avail Cap(c_a), veh/h	300	2477		1888	844	355	323
HCM Platoon Ratio	2.00	2.00		1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	0.0		13.2	9.6	40.8	41.1
Incr Delay (d2), s/veh	4.7	0.4		3.8	1.3	2.1	2.7
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	0.2		24.5	8.0	5.6	10.9
LnGrp Delay(d),s/veh	30.1	0.4		17.0	10.9	42.8	43.9
LnGrp LOS	C	A		B	B	D	D
Approach Vol, veh/h		962		1845		210	
Approach Delay, s/veh		4.5		16.0		43.4	
Approach LOS		A		B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				90.0		30.0	20.0	70.0
Change Period (Y+Rc), s				6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s				74.0		24.0	14.0	64.0
Max Q Clear Time (g_c+I1), s				2.0		8.8	3.7	37.0
Green Ext Time (p_c), s				37.8		0.5	0.2	20.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Notes

HCM 2010 Signalized Intersection Summary
6: US441 & I-75 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	891	45	47	1692	361	15	7	55	168	5	59
Future Volume (veh/h)	0	891	45	47	1692	361	15	7	55	168	5	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	938	26	49	1781	0	16	7	26	177	5	36
Adj No. of Lanes	0	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1436	40	177	1976	884	167	73	211	274	8	251
Arrive On Green	0.00	0.82	0.82	0.20	1.00	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	0	3611	98	1774	3539	1583	1252	548	1583	1728	49	1583
Grp Volume(v), veh/h	0	472	492	49	1781	0	23	0	26	182	0	36
Grp Sat Flow(s),veh/h/ln	0	1770	1846	1774	1770	1583	1800	0	1583	1776	0	1583
Q Serve(g_s), s	0.0	12.6	12.6	2.8	0.0	0.0	1.3	0.0	1.7	11.5	0.0	2.3
Cycle Q Clear(g_c), s	0.0	12.6	12.6	2.8	0.0	0.0	1.3	0.0	1.7	11.5	0.0	2.3
Prop In Lane	0.00		0.05	1.00		1.00	0.70		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	0	723	754	177	1976	884	240	0	211	281	0	251
V/C Ratio(X)	0.00	0.65	0.65	0.28	0.90	0.00	0.10	0.00	0.12	0.65	0.00	0.14
Avail Cap(c_a), veh/h	0	723	754	177	1976	884	240	0	211	281	0	251
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.7	7.7	44.3	0.0	0.0	45.7	0.0	45.8	47.4	0.0	43.5
Incr Delay (d2), s/veh	0.0	4.6	4.4	3.8	7.2	0.0	0.8	0.0	1.2	11.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	10.9	11.2	2.8	3.5	0.0	1.3	0.0	1.5	10.7	0.0	2.0
LnGrp Delay(d),s/veh	0.0	12.2	12.0	48.1	7.2	0.0	46.4	0.0	47.0	58.3	0.0	44.7
LnGrp LOS		B	B	D	A		D		D	E		D
Approach Vol, veh/h		964			1830			49			218	
Approach Delay, s/veh		12.1			8.3			46.7			56.1	
Approach LOS		B			A			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		22.0	18.0	55.0		25.0		73.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s		16.0	12.0	49.0		19.0		67.0
Max Q Clear Time (g_c+I1), s		3.7	4.8	14.6		13.5		2.0
Green Ext Time (p_c), s		0.1	0.0	26.1		0.5		40.3

Intersection Summary	
HCM 2010 Ctrl Delay	13.5
HCM 2010 LOS	B

Notes

HCM 2010 Signalized Intersection Summary
9: US441 & I-75 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	622	13	40	1384	127	56	14	8	319	22	682
Future Volume (veh/h)	61	622	13	40	1384	127	56	14	8	319	22	682
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	64	655	5	42	1457	0	59	15	3	336	23	0
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1620	12	444	1593	712	102	26	5	402	28	673
Arrive On Green	0.07	0.90	0.90	0.07	0.90	0.00	0.08	0.08	0.08	0.24	0.24	0.00
Sat Flow, veh/h	1774	3600	27	1774	3539	1583	1366	347	69	1665	114	2787
Grp Volume(v), veh/h	64	322	338	42	1457	0	77	0	0	359	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1858	1774	1770	1583	1782	0	0	1779	0	1393
Q Serve(g_s), s	2.3	3.4	3.4	1.5	28.0	0.0	5.0	0.0	0.0	23.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	3.4	3.4	1.5	28.0	0.0	5.0	0.0	0.0	23.0	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.77		0.04	0.94		1.00
Lane Grp Cap(c), veh/h	198	796	836	444	1593	712	134	0	0	430	0	673
V/C Ratio(X)	0.32	0.40	0.40	0.09	0.91	0.00	0.58	0.00	0.00	0.83	0.00	0.00
Avail Cap(c_a), veh/h	198	796	836	444	1593	712	134	0	0	430	0	673
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.8	3.5	3.5	15.9	4.7	0.0	53.7	0.0	0.0	43.2	0.0	0.0
Incr Delay (d2), s/veh	4.3	1.5	1.5	0.4	9.7	0.0	16.8	0.0	0.0	17.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	3.2	3.3	1.4	20.0	0.0	5.6	0.0	0.0	19.3	0.0	0.0
LnGrp Delay(d),s/veh	24.1	5.0	4.9	16.3	14.4	0.0	70.5	0.0	0.0	60.4	0.0	0.0
LnGrp LOS	C	A	A	B	B		E			E		
Approach Vol, veh/h		724			1499			77			359	
Approach Delay, s/veh		6.7			14.4			70.5			60.4	
Approach LOS		A			B			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	10.0	60.0		35.0	10.0	60.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		9.0	4.0	54.0		29.0	4.0	54.0
Max Q Clear Time (g_c+I1), s		7.0	3.5	5.4		25.0	4.3	30.0
Green Ext Time (p_c), s		0.0	0.0	22.9		0.8	0.0	15.5

Intersection Summary	
HCM 2010 Ctrl Delay	20.1
HCM 2010 LOS	C

HCM 2010 Signalized Intersection Summary
12: Site Access & US441

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	778	172	148	1363	189	143
Future Volume (veh/h)	778	172	148	1363	189	143
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	819	102	156	1435	199	67
Adj No. of Lanes	2	1	2	2	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1593	712	545	2330	832	673
Arrive On Green	0.45	0.45	0.32	1.00	0.24	0.24
Sat Flow, veh/h	3632	1583	3442	3632	3442	2787
Grp Volume(v), veh/h	819	102	156	1435	199	67
Grp Sat Flow(s),veh/h/ln	1770	1583	1721	1770	1721	1393
Q Serve(g_s), s	19.9	4.5	4.1	0.0	5.6	2.2
Cycle Q Clear(g_c), s	19.9	4.5	4.1	0.0	5.6	2.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1593	712	545	2330	832	673
V/C Ratio(X)	0.51	0.14	0.29	0.62	0.24	0.10
Avail Cap(c_a), veh/h	1593	712	545	2330	832	673
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	19.4	35.9	0.0	36.6	35.4
Incr Delay (d2), s/veh	1.2	0.4	1.3	1.2	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.1	3.7	3.6	0.7	4.9	1.6
LnGrp Delay(d),s/veh	24.8	19.8	37.2	1.2	37.3	35.6
LnGrp LOS	C	B	D	A	D	D
Approach Vol, veh/h	921			1591	266	
Approach Delay, s/veh	24.3			4.8	36.9	
Approach LOS	C			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		35.0	25.0	60.0				85.0
Change Period (Y+Rc), s		6.0	6.0	6.0				6.0
Max Green Setting (Gmax), s		29.0	19.0	54.0				79.0
Max Q Clear Time (g_c+I1), s		7.6	6.1	21.9				2.0
Green Ext Time (p_c), s		0.9	0.4	21.0				32.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
13: NW 147th St & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	718	125	80	1296	90	198	21	52	70	28	103
Future Volume (veh/h)	69	718	125	80	1296	90	198	21	52	70	28	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	73	756	132	84	1364	95	208	22	55	74	29	108
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	1681	752	478	1681	752	412	95	236	335	264	224
Arrive On Green	0.15	0.95	0.95	0.10	0.63	0.63	0.11	0.20	0.20	0.05	0.14	0.14
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	473	1182	1774	1863	1583
Grp Volume(v), veh/h	73	756	132	84	1364	95	208	0	77	74	29	108
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	0	1654	1774	1863	1583
Q Serve(g_s), s	2.2	2.2	0.6	2.7	34.9	2.9	11.7	0.0	4.7	4.2	1.6	7.5
Cycle Q Clear(g_c), s	2.2	2.2	0.6	2.7	34.9	2.9	11.7	0.0	4.7	4.2	1.6	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	260	1681	752	478	1681	752	412	0	331	335	264	224
V/C Ratio(X)	0.28	0.45	0.18	0.18	0.81	0.13	0.50	0.00	0.23	0.22	0.11	0.48
Avail Cap(c_a), veh/h	260	1681	752	478	1681	752	412	0	331	335	264	224
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	1.6	1.6	12.4	18.0	12.1	36.6	0.0	40.3	40.9	44.9	47.4
Incr Delay (d2), s/veh	2.7	0.9	0.5	0.8	4.4	0.3	4.4	0.0	1.6	1.5	0.8	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	1.9	0.6	2.5	24.6	2.4	10.2	0.0	4.1	4.0	1.6	6.8
LnGrp Delay(d),s/veh	20.0	2.5	2.1	13.2	22.4	12.5	41.0	0.0	41.9	42.4	45.7	54.7
LnGrp LOS	C	A	A	B	C	B	D		D	D	D	D
Approach Vol, veh/h		961			1543			285			211	
Approach Delay, s/veh		3.8			21.3			41.2			49.1	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	30.0	15.0	63.0	19.0	23.0	15.0	63.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	24.0	9.0	57.0	13.0	17.0	9.0	57.0
Max Q Clear Time (g_c+I1), s	6.2	6.7	4.7	4.2	13.7	9.5	4.2	36.9
Green Ext Time (p_c), s	0.0	0.8	0.1	26.6	0.0	0.5	0.0	14.6

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary
17: Main St & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	773	81	68	1296	18	81	47	41	14	27	41
Future Volume (veh/h)	50	773	81	68	1296	18	81	47	41	14	27	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	53	814	66	72	1364	15	85	49	31	15	28	30
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	374	1934	157	495	2062	23	373	240	152	90	164	152
Arrive On Green	0.10	1.00	1.00	0.08	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3316	269	1774	3586	39	1340	1068	676	240	728	675
Grp Volume(v), veh/h	53	434	446	72	673	706	85	0	80	73	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1815	1774	1770	1856	1340	0	1744	1643	0	0
Q Serve(g_s), s	1.4	0.0	0.0	1.9	0.0	0.0	1.2	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	1.9	0.0	0.0	5.2	0.0	4.5	4.1	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.02	1.00		0.39	0.21		0.41
Lane Grp Cap(c), veh/h	374	1032	1059	495	1018	1067	373	0	392	406	0	0
V/C Ratio(X)	0.14	0.42	0.42	0.15	0.66	0.66	0.23	0.00	0.20	0.18	0.00	0.00
Avail Cap(c_a), veh/h	374	1032	1059	495	1018	1067	373	0	392	406	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.2	0.0	0.0	8.8	0.0	0.0	38.0	0.0	37.8	37.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	1.3	1.2	0.6	3.4	3.2	1.4	0.0	1.2	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.7	0.7	1.8	1.7	1.7	4.4	0.0	4.1	3.7	0.0	0.0
LnGrp Delay(d),s/veh	9.0	1.3	1.2	9.4	3.4	3.2	39.4	0.0	38.9	38.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	D		
Approach Vol, veh/h		933			1451			165			73	
Approach Delay, s/veh		1.7			3.6			39.2			38.6	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		33.0	11.0	76.0		33.0	12.0	75.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		27.0	5.0	70.0		27.0	6.0	69.0
Max Q Clear Time (g_c+I1), s		7.2	3.9	2.0		6.1	3.4	2.0
Green Ext Time (p_c), s		1.0	0.0	26.2		1.1	0.0	26.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

HCM 2010 Signalized Intersection Summary
20: NW 140th St & US441

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	533	166	146	1170	107	180	117	101	52	137	96
Future Volume (veh/h)	144	533	166	146	1170	107	180	117	101	52	137	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	152	561	133	154	1232	84	189	123	74	55	144	78
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1232	291	529	1485	101	283	255	153	280	209	113
Arrive On Green	0.18	0.87	0.87	0.10	0.44	0.44	0.08	0.23	0.23	0.03	0.18	0.18
Sat Flow, veh/h	1774	2842	672	1774	3363	229	1774	1091	656	1774	1138	616
Grp Volume(v), veh/h	152	349	345	154	647	669	189	0	197	55	0	222
Grp Sat Flow(s),veh/h/ln	1774	1770	1744	1774	1770	1822	1774	0	1747	1774	0	1754
Q Serve(g_s), s	5.3	5.2	5.2	5.3	38.7	38.8	10.0	0.0	11.7	3.0	0.0	14.2
Cycle Q Clear(g_c), s	5.3	5.2	5.2	5.3	38.7	38.8	10.0	0.0	11.7	3.0	0.0	14.2
Prop In Lane	1.00		0.39	1.00		0.13	1.00		0.38	1.00		0.35
Lane Grp Cap(c), veh/h	272	767	756	529	782	805	283	0	408	280	0	322
V/C Ratio(X)	0.56	0.45	0.46	0.29	0.83	0.83	0.67	0.00	0.48	0.20	0.00	0.69
Avail Cap(c_a), veh/h	272	767	756	529	782	805	283	0	408	280	0	322
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.1	4.9	4.9	14.5	29.5	29.5	36.1	0.0	39.7	38.1	0.0	45.8
Incr Delay (d2), s/veh	8.1	1.9	2.0	1.4	9.9	9.7	11.9	0.0	4.1	1.6	0.0	11.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.7	4.9	4.9	5.0	28.5	29.3	9.8	0.0	10.1	2.8	0.0	12.6
LnGrp Delay(d),s/veh	29.2	6.8	6.9	15.8	39.4	39.3	48.0	0.0	43.8	39.7	0.0	57.3
LnGrp LOS	C	A	A	B	D	D	D		D	D		E
Approach Vol, veh/h		846			1470			386			277	
Approach Delay, s/veh		10.9			36.9			45.9			53.8	
Approach LOS		B			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	18.0	58.0	16.0	28.0	17.0	59.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	28.0	12.0	52.0	10.0	22.0	11.0	53.0
Max Q Clear Time (g_c+I1), s	5.0	13.7	7.3	7.2	12.0	16.2	7.3	40.8
Green Ext Time (p_c), s	0.0	2.2	0.1	18.8	0.0	1.2	0.1	8.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.2
HCM 2010 LOS	C

UNIVERSAL
ENGINEERING SCIENCES

INITIAL
GEOTECHNICAL EXPLORATION SERVICES
PROPOSED WAL-MART STORE No. 3873-00
SEC I-75 AND US HIGHWAY 441
ALACHUA, ALACHUA COUNTY, FLORIDA

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