

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: _____
2. Address of Subject Property: _____
3. Parcel ID Number(s): _____
4. Existing Use of Property: _____
5. Future Land Use Map Designation : _____
6. Zoning Designation: _____
7. Acreage: _____

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ☐ Agent
2. Name of Applicant(s) or Contact Person(s): _____ Title: _____
 Company (if applicable): _____
 Mailing address: _____
 City: _____ State: _____ ZIP: _____
 Telephone: _____ FAX: _____ e-mail: _____
3. If the applicant is agent for the property owner*:
 Name of Owner (title holder): _____
 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.

Signature of Applicant

Signature of Co-applicant

Christopher A Gmuer, PE, President

Typed or printed name and title of applicant

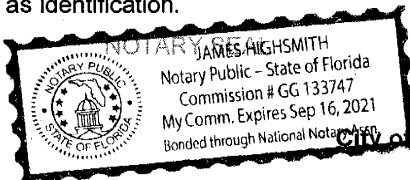
Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 16 day of Jan, 2020, by Christopher Gmuer

_____, who is/are personally known to me, or who has/have produced _____
 as identification.

a Valid FCOL
James Highsmith
 Signature of Notary Public, State of Florida



City of Alachua ♦ Planning and Community Development Department
 PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121



City of
ALACHUA

THE GOOD LIFE COMMUNITY

Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: US 441, approximately 400 ft. to the west of Jack's Small Engine Repair in Alachua, FL

Parcel ID Number(s): 03042-050-003

Acreage: 7.99

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Greg Gaylord

Title: President

Company (if applicable): Southern Wrecker & Recovery, LLC

Mailing Address: 6831 W. Beaver Street

City: Jacksonville

State: FL

ZIP: 32254

Telephone: (904) 626-3611

FAX: _____

e-mail: greg@southernwrecker.com

C. AUTHORIZED AGENT

Name: Christopher A. Gmuer, PE

Title: President

Company (if applicable): Gmuer Engineering, LLC

Mailing address: 2601 NW 13th Street, Box 314

City: Gainesville

State: FL

ZIP: 32609

Telephone: (352) 593-3134

FAX: _____

e-mail: chrisg@gmuereng.com

D. REQUESTED ACTION:

Site Plan approval to develop the property by constructing a ±6,500 sf commercial building with associated parking lot, driveway connection to US 441, stormwater management facility, and utility service connections.

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

[Signature]
Signature of Applicant

Signature of Co-applicant

Greg Gaylord, President

Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida

County of Duval

The foregoing application is acknowledged before me this 18th day of November, 2019 by Greg

Gaylord, who is/are personally known to me, or who has/have produced N/A
as identification.

NOTARY SEAL

Linda Aston Coleman
Signature of Notary Public, State of Florida

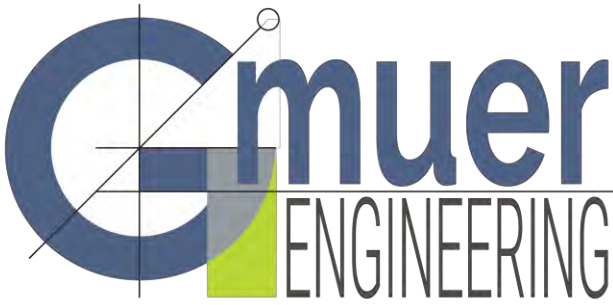
City of Alachua ♦ Planning and Community Development Department

PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121

Revised 9/30/2014



LINDA ASTON COLEMAN
Notary Public - State of Florida
Commission # GG 122995
My Comm. Expires Jul 11, 2021
Bonded through National Notary Assn.



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Re: Southern Wrecker and Recovery

Fire Flow Requirements for Buildings per NFPA 1 Section 18.4

Calculated: January 27, 2020

The project proposes the construction of a 6,500SF Building.

Type of Construction: Type II (000)

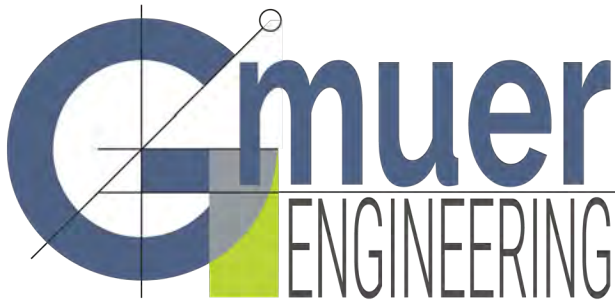
Fire Flow Area: 6,700 SF

Minimum Fire Flow and Duration: 1,750 GPM for 2 Hours (per 18.4.5.2)

Qualifies for Approved Automatic Sprinkler System Reduction: No

Final Minimum Fire Flow and Duration: 1,750 GPM for 2 Hours produced by a proposed Fire Tank.

Christopher Gmuer, PE
FL PE 71599



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

November 26, 2019

City of Alachua Planning & Zoning
15100 NW 142nd Terr
Alachua, FL 32615

Re: Southern Wrecker & Recovery
Concurrency Impact Analysis

The proposed development for the Southern Wrecker & Recovery project is located on US 441, approximately 400 ft. to the west of Jack's Small Engine Repair in Alachua, FL on TP#03042-050-003. The project proposes to construct a new commercial building with associated parking lot, driveway connection to US 441, stormwater management facility, and utility service connections. The following is a Concurrency Impact Analysis for this development and is submitted in accordance with the City of Alachua Site Plan requirements and includes roads, potable water facilities, sanitary sewer facilities, and solid waste facilities. Public facility capacities are based on the November 2019 Development Monitoring Report.

Transportation

The proposed US 441 Road Ranger facility will provide a parking and staging area for 6 road ranger patrol trucks that will provide emergency assistance to vehicles travelling along Interstate 75. A traffic study was completed for the development and it contains an estimated vehicular activity of the site summarized below:

Weekday AADT: 30 – Weekday AM Peak Hour: 13 – Weekday PM Peak Hour: 13

rip distribution is based on the traffic study completed by Buckholz Traffic dated November 19, 2019.

Affected Roadway Segments: Less than 1,000 ADT requires analysis of segments within one-half mile

Roadway Segment	Segment Description	AADT/Peak Hour	Comp Plan MSV^^	Existing Traffic*^	Reserved Trips	Available Capacity**	Percentage of Capacity Utilized
U.S. Hwy 441 (107/4107, 5)	From SR 235 to NCL of Alachua	AADT	39,000	25,926	3,637	9,437	75.80%
		Peak Hour	3,510	2,463	383	664	81.08%

Conclusion: The traffic generation of the development does not exceed the available capacities in the identified road segments and will not exceed the adopted LOS standards.

Potable Water

The development is not within the service area for potable water and will utilize an on-site well system.

Conclusion: The demand of the development will not exceed the adopted LOS standards.

Sanitary Sewer

The development is not within the service area for sanitary sewer and will utilize an on-site septic system.

Conclusion: The demand of the development will not exceed the adopted LOS standards.

Solid Waste

Existing Demand	40,620.00 lbs/day	7,413.15 tons/yr
Reserved Capacity	8,380.67 lbs/day	1,529.47 tons/yr
Proposed Demand	6.5 lbs/day	1.18 tons/yr

(1 lbs per day per 1,000 SF) * 6,500 SF Bldg * 365 days per year / 2,000 lbs per ton

Revised Reserved Capacity after Proposed	8,374.17 lbs/day	1,528.29 tons/yr
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Conclusion: The demand of the development will not exceed the adopted LOS standards.

Stormwater

A Grading and Drainage Plan and Stormwater Management Report is included as part of the development plan application. Runoff from the undisturbed area will continue to discharge to FDOT ROW via overland flow and shallow swale. The proposed drainage plan collects runoff from the building, parking lot, and pervious areas within Drainage Area 1 (DA1) and conveys it by overland flow, pipe system to Stormwater Management Facility 1 (SMF1). The system is designed to provide full retention for all designed storm events. The pond recovers the design storm events within 30 days and the WQTV within 72 hours. The design is consistent with LOS standards provided in the City's Comprehensive Plan Community Facilities and Natural Groundwater Aquifer Recharge Element Policy 3.1.a, and the Suwannee River Water Management District. A separate stormwater report has been provided along with the site grading plan.

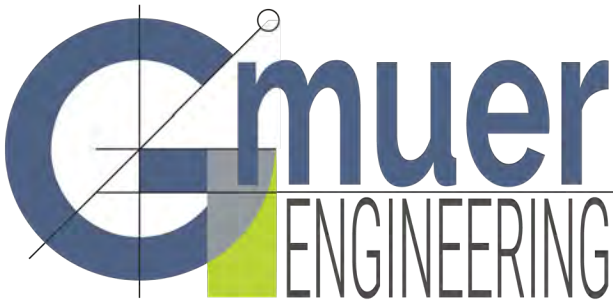
Please let us know if you need any additional information for your review.

Sincerely,

Gmuer Engineering, LLC



Christopher A Gmuer, PE
President



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

November 26, 2019

City of Alachua Planning & Zoning
15100 NW 142nd Terr
Alachua, FL 32615

Re: Southern Wrecker & Recovery
Consistency with the City of Alachua Comprehensive Plan

The proposed development for the Southern Wrecker & Recovery project is located on US 441, approximately 400 ft. to the west of Jack's Small Engine Repair in Alachua, FL on TP#03042-050-003. The project proposes to construct a new commercial building with associated parking lot, driveway connection to US 441, stormwater management facility, and utility service connections. The following is a Comprehensive Plan Consistency Analysis for this development in accordance with the City of Alachua Site Plan requirements.

The Comprehensive Plan language is provided and followed with the consistency statement in bold.

Goal One: Economic Development

The City of Alachua has a unique business climate. The City is home to corporations, technology incubators, local businesses, and start-up companies. The City will maintain its focus on a welcoming business environment and encourage business development in the downtown area and along the U.S. 441 corridor. Alachua desires to continue to be a home to innovative businesses and an employment center where jobs are provided at every level. The City will continue to encourage the growth and development of established industries, such as biotechnology, and encourage the diversification and expansion of commercial businesses which provide integral services to the City's residents.

The proposed development will provide emergency assistance along Interstate-75 to serve the commuting workers of the City of Alachua.

Policy 1.3.b: Commercial:

The Commercial land use category is established to provide for general commercial uses, as well as more intense commercial and highway commercial uses. This is the land use category in which large-scale, regional commercial uses may locate.

The proposed use is allowed and is especially applicable to the proximity of the property to the highway.

Policy 1.3.d:

The City shall develop performance standards for commercial development 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;

The driveway and lane configuration have been provided per the land development regulations.

2. Buffering from adjacent existing/potential uses;

All required buffers are provided and are specifically called out and shown on the landscaping plan.

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

Approximately 30% of the site will be pervious area/ open space. This far exceeds the 10% open space requirement in FLUE Policy 2.5.1 of the City's Comprehensive Plan. The proposed building has a FAR of 0.019, below the 0.50 FAR allowed for Commercial sites less than 10 acres yet greater than 5 acres.

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

Storm water management will be provided on site and is designed to SRWMD criteria.

5. Placement of signage;

Minimal signage will be placed along US 441 to identify the facility and will be consistent with LDR Sec. 6.5.

6. Adequacy of site lighting and potential impacts 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 overused or impacting areas where it is not intended;

Site lighting will follow the requirements of LDR Sec. 6.4 and not exceed twenty (20) foot-candles under canopies.

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

We have coordinated the proposed driveway connection at the northwest corner of the site on US 441 with FDOT and have provided a median turn lane within US 441 as well in coordination with FDOT.

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

All required landscaping requirements are provided and are specifically called out and shown on the landscaping plan.

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

The site is generally clear of significant trees and vegetation with no environmentally sensitive areas. Site soils consist of Arredondo fine sand, Fort Meade fine sand, and Gainesville sand, none of which will provide any significant limitation on development.

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

The proposed development will be used as a regional staging area for towing and wrecker services in support of a state highway contract and the Use Specific Standards of 4.3.4(J)(8) have been met.

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, .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.

The proposed building has a FAR of 0.019, below the 0.50 FAR allowed for Commercial sites less than 10 acres yet greater than 5 acres.

Objective 2.4: Landscaping and Tree Protection Standards:

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 plant pallet to assist in the landscape design. Landscape plans shall include a mixture of perimeter and internal landscaping.

All required landscaping requirements are provided and are specifically called out and shown on the landscaping plan.

Policy 2.4.2: Landscaping: Buffering - A buffer consists of horizontal space (land) and vertical elements (plants, berms, fences, walls) that physically separate and visually screen adjacent land uses that may not be fully compatible. The City shall establish buffer yard requirements that are based on the nature of the adjacent uses and the desired result of the buffer.

All required buffers are provided and are specifically called out and shown on the landscaping plan.

Objective 2.5: Open Space Standards:

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.

Approximately 30% of the site will be pervious area / open space. This far exceeds the 10% open space requirement.

Goal 4: Infill and Redevelopment: Objective 4.3: Redevelopment:

The City shall encourage the redevelopment of existing developed properties, vacant properties or buildings, or abandoned properties and buildings, particularly within the Community Redevelopment Area and the Central City Area.

The proposed development is not located in these areas but does propose development of a vacant property.

GOAL 5: Development Standards: The City shall include provisions through its comprehensive plan amendment process, development review process and in its land development regulations for development standards that address natural features and availability of facilities and services. These development standards will strive to protect natural resources and public facility resources while allowing for innovative and flexible development patterns.

No significant natural features exist on the site.

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 topography at the project site is gently to moderately sloping down toward the north from the southeast.

Policy 5.1.b: Soils: The City shall ensure soil protection and intervention measures are included in the development review process.

The site plans show the erosion control measures per state requirements.

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, minimum flood elevations shall be surveyed and established. The City shall also require finished floor elevations on subdivision plats, site plans and building permit plans. The City shall establish standards for a limitation on filling in flood prone areas.

The proposed project site does not include any FEMA 100 year floodplain.

Policy 5.1.d: Wetlands: The City shall utilize statewide wetland delineation methodology in accordance with Florida Administrative Code (FAC) and regulations adopted by the FDEP and the Suwannee River Water Management District.

The proposed project site does not include any delineated wetlands.

Objective 5.2: Availability of facilities and services:

All new development shall be planned and constructed concurrently with the availability of facilities and services necessary for the development.

The proposed development will be served by well and septic services, as the project site is located outside of the corporate limits.

Policy 5.2.a: All new development shall meet level of service requirements for roadways, potable water and sanitary sewer, storm water, solid waste, and improved recreation in accordance with LOS standards adopted in the elements addressing these facilities.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

GOAL 9: Water and Wastewater Service:

The City will ensure that new development 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 Comprehensive Plan shall connect to the City of Alachua's potable water and wastewater system.

The proposed building will be served by well and septic services, as the project site is located outside of the corporate limits.

Policy 9.1: Any new development within Commercial and Industrial Land Uses 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 development will not connect to the City centralized potable water and wastewater systems as it is located outside of the corporate limits.

Transportation Element

Objective 1.1: Level of Service

The City shall establish a safe, convenient and efficient level of service standard for all motorized and non-motorized transportation systems.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

Policy 1.3.a: The City shall establish minimum and maximum parking standards in order to avoid excessive parking areas.

The proposed development proposes the minimum number of parking spaces.

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

The proposed development currently proposes one handicap space as required per ADA.

Community Facilities and Natural Groundwater Aquifer Recharge Element

Policy 1.1.d: The City hereby establishes the following level of service standards for sanitary sewer facilities:

Levels of Service:

A. Quality: Compliance with all applicable standards of the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP).

The proposed development will comply with all applicable sanitary sewer quality standards of the EPA and FDEP.

B. Quantity: System-wide wastewater collection and treatment will be sufficient to provide a minimum of 250 gallons per day per equivalent residential unit (ERU) on an average annual basis. Plant expansion shall be planned in accordance with F.A.C. 62-600.405, or subsequent provision. This level of service standard shall be re-evaluated one year from the adoption date for the amended Plan.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

C. System capacity: If the volume of existing use in addition to the volume of the committed use of the City's wastewater facility reaches 85% of the permitted capacity design, no further development orders for projects without reserved capacity will be issued until additional capacity becomes available or funds to increase facility capacity are committed in accordance with a development agreement.

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

Objective 1.2:

Wastewater service will be made available to new development in a manner to promote compact urban growth, promoting development where wastewater service is available, and discouraging urban sprawl. For purposes of this objective, new development does not include remodeling of existing developments or additions of less than 33% to existing developments.

Wastewater service is not proposed for this project as it is outside of the corporate limits.

Policy 2.1.a: The City hereby establishes the following level of service standards for solid waste disposal facilities:

FACILITY TYPE LEVEL OF SERVICE STANDARD Solid Waste Landfill .73 tons per capita per year

A separate Concurrency Analysis is included as part of this site plan application package to address these concerns.

Policy 3.1.a: The City hereby establishes the following water quantity and quality level of service standards for drainage facilities:

LEVEL OF SERVICE STANDARD

For all projects which fall totally within a stream, or open Lake Watershed, detention systems must be installed such that the peak rate of post-development runoff will not exceed the peak-rate of predevelopment runoff for storm events up through and including either:

1. A design storm with a 10-year, 24-hour rainfall depth with Soil Conservation Service type II distribution falling on average antecedent moisture conditions for projects serving exclusively agricultural, forest, conservation, or recreational uses; or
2. A design storm with 100-year critical duration rainfall depth for projects serving any land use other than agricultural, silvicultural, conservation, or recreational uses.
3. The LOS standard for water quality treatment shall be treatment for the "first one inch" of runoff, and compliance with the design and performance standards established in Chapter 40C-42.025, FAC, and 42.035, FAC to ensure that the receiving water quality standards of Chapter 62.302.500, FAC are met and to ensure their water quality is not degraded below the minimum conditions necessary to maintain their classifications as established in Chapter 62-302, FAC. These standards shall apply to all new development and redevelopment and any exemptions, exceptions or -thresholds in these citations are not applicable. Infill residential development within improved residential areas or subdivisions existing prior to the adoption of this comprehensive plan must ensure that its post-development stormwater runoff will not contribute pollutants which will cause the runoff from the entire improved area or subdivision to degrade receiving water bodies and their water quality as stated above.

A Grading and Drainage Plan and Stormwater Management Report is included as part of the development plan application. Runoff from the undisturbed area will continue to discharge to FDOT ROW via overland flow and shallow swale. The proposed drainage plan collects runoff from the building, parking lot, and pervious areas within Drainage Area 1 (DA1) and conveys it by overland flow, pipe system to Stormwater Management Facility 1 (SMF1). The system is

designed to provide full retention for all designed storm events. The pond recovers the design storm events within 30 days and the WQTV within 72 hours. The design is consistent with LOS standards provided in the City's Comprehensive Plan Community Facilities and Natural Groundwater Aquifer Recharge Element Policy 3.1.a, and the Suwannee River Water Management District.

Objective 4.1:

Achieve and maintain acceptable levels of service for potable water quantity and quality.

Policy 4.2.a: New urban development will only occur within areas where potable water services are available concurrent with development. For purposes of this policy, new development does not include remodeling of existing developments or additions of less than 33% to existing developments.

The proposed building will not be served by City of Alachua potable water and wastewater services as the project site is located outside of the corporate limits.

Conservation and Open Space Element

OBJECTIVE 1.10: Wetlands The City shall protect and preserve wetland values and functions from adverse, human caused, physical and hydrologic disturbances.

There are no identified wetlands on the proposed project site.

Economic Element

GOAL 1: To emphasize economic principles consistent with the City's Vision that support the prosperity of the community and enhance its quality of life.

The proposed development will provide economic growth consistent with the City of Alachua's goal.

Please let us know if you need any additional information for your review.

Sincerely,

Gmuer Engineering, LLC



Christopher A Gmuer, PE

President



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Neighborhood Meeting

A Neighborhood Meeting will be held to discuss a site plan proposal to construct a new commercial building with associated parking lot, driveway connection to US 441, stormwater management facility, and utility service connections. The site is located on US 441, approximately 400 ft. to the west of Jack's Small Engine Repair in Alachua, FL on TP#03042-050-003.

Date: Thursday, September 5, 2019

Time: 5:00 pm

Place: Project Site, Tax Parcel 03042-050-003

Contact: Forrest Eddleton, (352) 593-3159, Gmuer Engineering, LLC

Gmuer Engineering, LLC will be holding a workshop to discuss the proposed site plan described above.

Per the City of Alachua Land Development Regulations, the property is zoned CI, Commercial Intensive District. The CI District is established and intended to provide lands and facilitate highway-oriented development opportunities within the City, for uses that require high public visibility and an accessible location.

The purpose of the workshop is to inform neighboring property owners about the nature of the proposal and to seek comments. We look forward to seeing you there.

03042-006-001
GONZALES P S & ROSA LEE
16806 NW 175TH TER
ALACHUA, FL 32615

03042-050-000
SMYDER CHARLES & REGINA
PO BOX 842
ALACHUA, FL 32616-0842

03042-050-004
CARTER KEVIN L & SHIMA
7853 GUNN HIGHWAY
TAMPA, FL 33626

03042-006-000
PULLIAM R L
18021 NW 164TH LN
ALACHUA, FL 32615-4753

03042-050-010
GERARD GREGORY S
440 JEFF CLEMENTS RD
MARION, KY 42064-7512

03042-051-001
GOLDEN POND FARMS INC
PO BOX 357133
GAINESVILLE, FL 32635

03042-007-000
ROBINSON & ROBINSON
16527 NW US HIGHWAY 441
ALACHUA, FL 32615

03042-050-005
GOLDEN POND FARMS INC
PO BOX 357133
GAINESVILLE, FL 32635-7133

03042-050-003
ALACHUA FARM & LUMBER INC
PO BOX 2290
ALACHUA, FL 32616

03042-009-000
HOWARD & HOWARD CO-TRUSTEES
PO BOX 20263
TAMPA, FL 33622

03042-050-001
SMYDER CHARLES R
PO BOX 842
ALACHUA, FL 32616-0842

03046-004-000
NORTH FLA WATER SYSTEM INC
11814 NW 202ND ST
ALACHUA, FL 32615-5924

03042-005-000
WADFORD BETTY
4985 NW 39TH AVE
GAINESVILLE, FL 32606-5947

03042-008-000
BRYAN TAMMY D
5560 EMERALD RIDGE BLVD
LAKELAND, FL 33813-5211

03046-005-000
JEFFORDS LILLIE BELLE LIFE ES
608 PARHAM RD NW
MILLEDGEVILLE, GA 31061

**ANTOINETTE ENDELICATO
5562 NW 93RD AVENUE
GAINESVILLE FL 32653**

**BONNIE FLYNN
16801 NW 166TH DRIVE
ALACHUA, FL 32615**

**DAN RHINE
288 TURKEY CREEK
ALACHUA FL 32615**

**PRESIDENT, TCMOA
1000 TURKEY CREEK
ALACHUA FL 32615**

**TOM GORMAN
9210 NW 59TH STREET
ALACHUA FL 32653**

**MICHELE L. LIEBERMAN
ALACHUA COUNTY MANAGER
12 SE 1ST STREET
GAINESVILLE FL 32601**

**RICHARD GORMAN
5716 NW 93RD AVENUE
ALACHUA FL 32653**

**CITY MANAGER, CITY OF ALACHUA
P.O. BOX 9
ALACHUA FL 32616**

**PEGGY ARNOLD
410 TURKEY CREEK
ALACHUA FL 32615**

**CRAIG PARENTEAU
FL DEPT OF ENV PROTECTION
4801 CAMP RANCH ROAD
GAINESVILLE FL 32641**

**DAVID FOREST
23 TURKEY CREEK
ALACHUA FL 32615**

**LINDA DIXON, AICP
ASSISTANT DIRECTOR PLANNING
PO BOX 115050
GAINESVILLE FL 32611**

**LYNN COULLIAS
7406 NW 126TH AVE
ALACHUA FL 32615**

**JEANNETTE HINSDALE
P.O. BOX 1156
ALACHUA FL 32616**

**LYNDA COON
7216 NW 126 AVENUE
ALACHUA FL 32615**

**TAMARA ROBBINS
PO BOX 2317
ALACHUA FL 32616**

CALENDAR

WHAT'S AHEAD

TODAY

Startup mentoring: 9-10 a.m., Santa Fe College CIED, 530 W. University Ave. Free. All entrepreneurs welcome from elementary school to retirees, including Santa Fe College and UF students. Give a practice presentation for free feedback and mentoring.

Sweetnotes: Harmonizing group of women who perform for senior citizens at nursing homes and assisted living facilities. New members welcome. Rehearsals are 1 p.m., Covenant Church, 3115 NW 16th Ave. (682-1610)

Art In Motion — Loving The Hands That Shake: Arts and crafts workshops for individuals with Parkinson's and other movement disorders, 2-4 p.m., Criser Cancer Resource Center, Shands Cancer Hospital, 1515 Archer Road. Free. (733-0880)

Striking Down High Utility Bills bowling fundraiser: 5:30-8:30 p.m., Alley Gatorz Bowling Center, 2606 NE Waldo Road. Hosted by the Community Weatherization

Coalition. Sliding scale donation of \$15-\$30 includes bowling shoe rental, unlimited bowling, light snacks and two raffle tickets for a chance to win awesome prizes. Bowler or not, come by to get to know this non-profit organization and shop a silent auction with great items donated by generous local businesses including Gainesville Dojo, Fehrenbacher's Artisan Sausage, Bikes & More, Third House Books and more. (450-4965, communityweatherization.org)

Bingo: 5:30 p.m., VFW Post 2811, 1150 NE Waldo Road. Call 256-3066. 18 games, benefits war veterans and their families; food available for purchase.

Word Weavers Writing Group: 6 p.m. the first and third Wednesday of each month, Crone's Cradle Conserve, 6411 NE 217th Place, Citra. Writing group for women. Each meeting begins with a potluck dinner followed by writing, reading, discussion and sharing.

Eckankar Public Community events: The Sound of Soul, 6 p.m., SFCT Blount

Center, Board Room, 401 NW Sixth St. (TheSoundofSoul.org, 352-378-3504)

Non-violent communication: Skills workshop 6-8 p.m., Civic Media Center, 433 S. Main St. Free; donations accepted. Call 373-0010 or email coordinators@civicmediacenter.org.

Humanist Society Of Gainesville: Regular meetings, 7 p.m. the third Wednesday of each month, fellowship hall of the Gainesville Unitarian Universalist Church, 4225 NW 34th St. (sylvester0077@yahoo.com)

Survivors of Suicide (S.O.S.): 7-8:30 p.m., Alachua County Crisis Center, 218 SE 24th St. Call 264-6761. Group open to all adult survivors of suicide and those who have lost a loved one due to suicide whose loss is at least 6 months old.

Adventures in Spirit book study: 7 p.m., Unity of Gainesville, 8801 NW 39th Ave. Call 373-1030 or visit unitygainesville.org. Studying "Autobiography of a Yogi" by Paramhansa Yogananda. The reading

will be a revision of the original writing, which has a blue cover.

Native American Spirituality: 7 p.m., The Seraphim Center, 1409 NW Sixth St. Offerings accepted. Call 792-8075. Taught by a Native American, this class explores the cultural beliefs and traditions of various Native American tribes.

Mindful Meditation: 7-8 p.m., Unity of Gainesville, 8801 NW 39th Ave. Call 373-1030 or visit unitygainesville.org. Time of silent reflection.

THURSDAY

Slow-Pitch For Seniors: Trinity United Methodist Church offers slow-pitch senior softball for ages 55 and over. Games start at 9 a.m. every Tuesday and Thursday. 4000 NW 53rd Ave. (Ben Haines, 416-3072)

Soul Food book discussion group: 10 a.m.-noon, Unity of Gainesville, 8801 NW 39th Ave.. Call 373-1030 or visit unitygainesville.org. Book selected for discussion: "In the Flow of Life" by Eric Butterworth.

Gainesville Youth Choir auditions: 4-6 p.m. Thursday and Aug. 29, Glen Springs Elementary School, 2826 NW 31st Ave. Open for singers ages 8-18. Audition appointment Call 256-7283 or email deborahdesforges@cox.net.

Tai Chi with Yogi James: 5:30-6:30 p.m., Wilhelmina Johnson Resource Center, 321 NW 10th St. \$5-\$10 donations welcomed. (792-6166).

Free acupuncture clinic for veterans: Clinic for veterans and their immediate family, 6-7:15 p.m. Veterans, please bring DD214 or VA ID, Acupuncture and Chinese Herbs Clinic, 305 SE Second Ave. Free. (548-2332, Acupuncturist.edu)

Third Thursdays at Thornebrook: 6-9 p.m., The Square at Thornebrook Village, 2441 NW 43rd St., Gainesville. Free. Call 514-4996 or email annemaria.bello@gmail.com. Free, family-friendly concerts.

Gainesville Harmony Show Chorus: Part of Sweet Adelines International, group meets and welcomes women singers in all voice ranges, rehearsals are 7-9:30 p.m., Grace Presbyterian Church, 3146 NW 13th St.

(870-5555, www.GainesvilleChorus.com)

Gainesville Shambhala Meditation Group: Newcomers can receive meditation instruction 30 minutes before the start time on both days. 7-9 p.m. Tuesdays and 10:30 a.m.-12:30 p.m. Sundays. Anyone who has already received Shambhala meditation instruction can also attend 6:15-7:15 p.m. Thursdays, 1899 NE 23rd Ave. (214-1334, gainesville.shambhala.org)

Gainesville International Folk Dancers: Practice from 7-10 p.m., Rosa B. Williams Recreation Center, 524 NW First St. \$6. Email jbramb@gmail.com.

Duplicate bridge: 7:30 p.m., Oak Hammock, 5100 SW 25th Blvd. Prices vary. Visit gainesvillebridge.com.

Meditation for self healing: 7:30 p.m., Seraphim Center, 1409 NW Sixth St. Offerings accepted. Call 792-8075.

Poetry Jam: 8 p.m., Civic Media Center, 433 S. Main St. Free. Call 373-0010 or email coordinators@civicmediacenter.org. Gainesville's longest-running open mic poetry reading. All styles invited.

Country star Chase Rice to headline Gator Growl

By Danielle Ivanov
Correspondent

Cowboy hats and boots were the first clue. Students clad in the straw-and-leather ensembles stood in Turlington Plaza Tuesday for an announcement about the headlining singer for Gator Growl.

About 200 other students and faculty crowded around a white and blue spray-painted box in the plaza that read “Who is it?” is bright orange capital letters. They counted down from five, and on one, a man popped out from under the box with a sign that revealed Chase Rice’s face and name.

Cheers erupted through the plaza as Rice’s hit single “Lonely If You Are” played. His past hits include “Eyes On You” and “Three Chords & The Truth.”

The country singer and North Carolina native

is now traveling internationally for his “Eyes On You Tour.” He will perform at Flavet Field on Oct. 4, one day before the University of Florida football Homecoming game against Auburn University. Rice attended the University of North Carolina at Chapel Hill before starting his music career and was a linebacker on its football team. After graduating, he won runner-up on “Survivor: Nicaragua” in 2010, the show’s 21st season. Corben Champoux, 21, a first-year graduate student at UF, was the producer for Gator Growl this year as part of Florida Blue Key. She said picking Rice was easy.

“Our theme this year is ‘This is Gator Country,’ ” Champoux said, “so we wanted a country artist ... it was a very quick decision.”

Both she and roughly half of the audience

members appeared to be big fans of the singer.

“I think The Swamp is gonna have a great reaction to Chase Rice,” she added. “He’s just such a great artist and has so many top hits.”

Kailyn Scully, 21, is a senior applied physiology and kinesiology major at UF. She waited after the announcement to take video of Rice’s sign and chat with her friends.

“I had no idea who it was going to be,” she said. “I’m ecstatic about it. I love him.”

The amount UF will pay Rice to perform was not disclosed.

Tickets for the event are on sale online from Ticketmaster. General admission costs \$25 and pit access costs \$50. UF students can buy cheaper tickets for \$15 once a special discount code is emailed out, Champoux said.

Hawthorne mayor named ‘Municipal Official of the Year’

Hawthorne Mayor Matt Surrency has been named “Municipal Official of the Year” by the Florida League of Cities, the organization’s most prestigious award.



Surrency

Surrency, 39, was presented the with E. Harris Drew Municipal Official Lifetime Achievement Award, named after the late Florida Supreme Court justice, at the league’s annual conference in Orlando on Friday. He was selected among all elected officials in the state.

“It’s pretty humbling, especially knowing the people that had won it before myself,” he said.

The Florida League of Cities, formed in 1922, is a municipal resource organization that helps more than 400 cities around the state and promotes self-governance.

Surrency, who served

as league president from 2015 to 2016, said he was unaware he was receiving the award and was surprised on stage by his wife and three sons, who he thought were at home.

“It made it extra special,” he said. “I don’t even know what I said when I was up there, I just kind of got lost in the moment.”

League President and Bartow Mayor Leo E. Longworth presented Surrency with the award.

“Mayor Surrency is a true supporter of home rule,” Longworth said during the presentation. “He has a passion for our local communities and the families who call them home, and he’s committed to protecting their right to self govern.”

Surrency was first elected to the Hawthorne City Commission in 2009 before being appointed mayor in 2011, a position his mother had previously held.

He serves on the board of directors for

the national and Florida League of Cities. During his term, he created the Florida Regional Impact Initiative, allowing hundreds of other government officials around the state to network and tackle transportation and environmental issues.

While in office, Surrency has been on several committees for local and state groups, including the Florida Transportation Transportation Planning Committee. He is the one of the founders of Hope for Hawthorne, a community organization that works with local leaders to improve the city in many facets. He was a leader in fighting to keep Hawthorne Middle/High School open when it was faced closure by the state for poor test scores and has helped with economic development in the city.

Aside from his work in office, Surrency is an avid volunteer for several local organizations and has spent nearly 20 years coaching youth sports.

Jury awards up to \$13M in fatal 2016 crash

By Emily Mavrakis
Staff writer

A Gainesville jury on Friday unanimously agreed to award up to \$13 million to the family of a Williston woman who died in a car accident nearly three years ago.

On Nov. 14, 2016, Michelle Anderson, 36, was driving south on Southwest Williston Road near Southwest Wacahoota Road in Gainesville, heading from her job in the fiscal department at the University of Florida to drop off a permit for the house her family was building, said Jupiter attorney Rich Slinkman, who represents the Anderson family.

Another driver, 29-year-old Calvin Lee Adams III of Crystal River, was heading north on the same road when he tried to pass another

car in a no-passing zone, according to a crash report from the Florida Highway Patrol. Adams’ vehicle hit Anderson’s head-on while both traveled at about 60 mph in a 60 mph zone, according to the report.

Both drivers died in the crash.

Michelle Anderson’s widower, Emanuel Anderson, sued Adams’ estate on behalf of himself and her three children, Elijah Decoursey, Aaliyah Decoursey and Natalia Anderson.

Michelle Anderson was a dedicated mother and wife, Slinkman said. The family still resides in Williston.

Adams’ car was insured through Progressive, but he did not have enough coverage for the accident, Slinkman said. The Andersons will now file a bad faith insurance lawsuit against Progressive,

he said.

The insurance company will ultimately pay any money awarded, rather than the Adams family, Slinkman said.

Peter Molk, an associate professor at the University of Florida Levin College of Law, said insurers generally pay only up to the amount of liability insurance that was bought, which would be far less than the \$13 million jury award.

In rare circumstances, he said, insurers may be liable beyond that amount if they committed a wrongdoing during the claims handling process.

“It’s a wonderful family that experienced a terrible tragedy,” Slinkman said. “And they can finally have some closure.”

Glen Abbott, who represented Adams’ estate, could not be reached by phone Tuesday afternoon.

Human trafficking case tied to local massage parlor

By Cindy Swirko
Staff writer

A downtown Gainesville massage parlor was the site of an undercover investigation into human trafficking for sex that led to the arrest last week of a Pensacola man on allegations of trafficking in Florida and other states.

On July 1, an undercover Gainesville Police Department officer went to Tokyo Massage, 211 SW Fourth Ave., and bought a \$40 massage, according to the arrest affidavit for David Clayton Williams, 41.

“During the massage, the massage therapist offered to perform a sexual act on the undercover officer. The undercover officer declined,” the affidavit states. “During the prostitution detail, the undercover officer noticed the front door to the massage parlor was kept locked. The front door was unlocked and opened by an Asian female each time a customer arrived and/or left the massage parlor.”

A website on which

massage parlor customers can post reviews lists various types of sexual activity available at Tokyo Massage for “tips” of \$40 to \$100.

It was one of 22 parlors that Williams owned or was associated with in Florida, Pennsylvania, Massachusetts and Virginia.

Records show Williams placed about 6,827 advertisements about various locations on Backpage.com at a cost of \$63,952, officials reported. The website was commonly used for prostitution before it was shut down last year when leaders were charged with various crimes, including money laundering and conspiracy to facilitate prostitution.

Meanwhile, statements from Williams’ American Express credit card show Williams bought 24 airline tickets for more than a dozen Asian women over a few months in 2017. Authorities suspect the tickets were used to move women to different massage parlors.

An FBI investigation of Williams began with

anonymous tips through the National Human Trafficking Hotline about massage parlors in Pensacola and Panama City.

It branched out as investigators learned how many other parlors with which Williams is associated.

The investigation included checking trash cans behind a Gulf Breeze parlor, which turned up ledgers that noted payments and Delta Airlines boarding passes.

It also included surveillance outside several parlors — but not Tokyo Massage in Gainesville — in which Williams was seen. A warrant was obtained for authorities to track Williams’ cellphone.

Details about 12 of the women who worked at the parlors were provided in the affidavit. All came to the U.S. from China and had traveled extensively throughout the country. Six had been arrested on prostitution charges in other states.

Some women had valid visas while others had expired visas.

PUBLIC NOTICE

A Neighborhood Meeting will be held to discuss a site plan proposal to construct a new commercial building with associated parking lot, driveway connection to US 441, stormwater management facility, and utility service connections. The site is located on US 441, approximately 400 ft. to the west of Jack's Small Engine Repair in Alachua, FL on TP#03042-050-003.

The meeting will be held Thursday, September 5, 2019 at 5:00pm at parcel number 03042-050-003.

Contact Person: Forrest Eddleton, (352) 593-3159, Gmuer Engineering, LLC.

GF-GH049433

Call, 1-800-281-6980

to apply for a PERSONAL LOAN

up to \$2500 right over the phone!!!

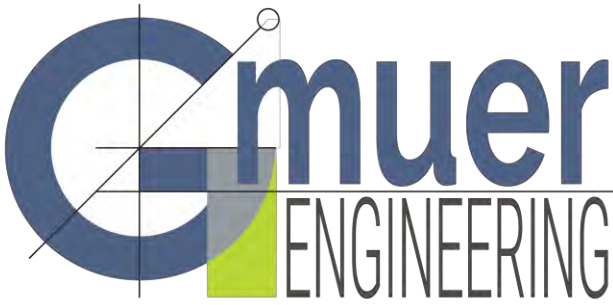
Bad credit ok!!!

98% approval rate!!!

Must have checking account to qualify.

Join NOW and setup your account right over the phone for ONLY \$4.95.

Visa/MC accepted !!!



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Meeting Agenda and Notes

Re: Southern Wrecker – Neighborhood Workshop

Date Time: September 5, 2019 at 5:00pm

Explanation of the development proposal and application

Explanation of the character and nature of the process for review

Comments and questions and discussion of potential conflicts

No attendees. Meeting adjourned at 6:30pm.



SOUTHERN WRECKER

TAX PARCEL 03042-050-003

LEGAL DESCRIPTION

A PART OF THE E1/2 OF THE SW1/4 OF SECTION 8, TOWNSHIP 8 SOUTH, RANGE 18 EAST, ALACHUA COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 8 AND RUN THENCE N.87°26'55"E., ALONG THE SOUTH BOUNDARY OF SAID SECTION, 1316.02 FEET TO THE WEST LINE OF SAID E1/2 OF SW1/4, THENCE N.05°57'06"W., ALONG SAID WEST LINE, 2491.84 FEET TO A CONCRETE MONUMENT (PLS 509) ON THE SOUTHERLY RIGHT-OF-WAY LINE OF U.S. HIGHWAY 441 (200' R/W) (AKA STATE ROAD 25), THENCE S.79°04'33"E., ALONG SAID RIGHT-OF-WAY LINE, 875.32 FEET TO REBAR AND CAP (PLS 1824) AND THE POINT OF BEGINNING; THENCE CONTINUE S.79°04'33"E. ALONG SAID RIGHT-OF-WAY LINE, 310.97 FEET TO A REBAR AND CAP (PLS 1824), THENCE S.05°28'46"E., 454.09 FEET TO A REBAR AND CAP (PLS 1824), THENCE S.79°04'33"E., 200.00 FEET TO A REBAR AND CAP (PLS 1824), THENCE S.05°28'46"E., 378.77 FEET TO A REBAR AND CAP (PLS 2047), THENCE S.88°18'49"W., 491.25 FEET TO A REBAR AND CAP (PLS 1824), THENCE N.05°28'46"W., 944.66 FEET TO THE P.O.B.



2019 Roll Details — Real Estate Account At UNASSIGNED LOCATION RE

Real Estate Account #03042 050 003

[Parcel details](#)[Latest bill](#)[View/Print full bill history](#)[Print this page](#)

2019	2018	2017	2016	...	2002
PAID	PAID	PAID	PAID		PAID

[Get Bills by Email](#)

PAID 2019-11-20 \$63.68
Receipt #19-0026351

Owner: ALACHUA FARM & LUMBER INC
 PO BOX 2290
 ALACHUA, FL 32616
Situs: UNASSIGNED LOCATION RE

Account number: 03042 050 003
Alternate Key: 12469
Millage code: 1700
Millage rate: 22.8734

Assessed value: 2,900
School assessed value: 2,900
Unimproved land value: 172,498



Location is not guaranteed to be accurate.

Property Appraiser

2019 Annual bill

[View](#)

Ad valorem: \$66.33
Non-ad valorem: \$0.00
Total Discountable: 66.33
No Discount NAVA: 0.00
Total tax: \$66.33

Legal description

COM SW COR SEC E 50.03 FT TO E R/W LINE E TO THE W LINE OF E1/2 OF SW1/4 N 5 DEG W 2491.84 FT TO S R/W LINE US-441 S 79 DEG E 875.32 FT POB S 79 DEG E 510.97 FT S 5 DEG E 832.86 FT W 491.25 FT N 5 DEG W 944.66 FT POB AKA PARCEL ERIC 441-D (LESS THE N 454.09 FT OF THE E 200 FT PER OR 2363/1949) (LESS MINERAL RIGHTS) OR 2363/1983

Location

Book, page, item: 2363-1983-
Geo number: 08-08-18-03042050003
Range: 18
Township: 08
Section: 08
Neighborhood: 233200.00
Use code: 065
Total acres: 7.920



Prepared by and return to:
Marvin W. Bingham, Jr.
Attorney at Law
Bingham & Mikolaitis, P. A.
P. O. Box 1930
Alachua, FL 32616-1930
386-462-5120
File #19-177

Sale Price: 450,000.-
Recording: 18.50
Doc. Stamp: 3150.-

Doc Stamp-Deed: \$3,150.00


Tax Parcel #: 03042-050-003

[Space Above This Line For Recording Data]

Special Warranty Deed

This Special Warranty Deed made this 7th day of October, 2019 between and between **Alachua Farm & Lumber, Inc., a Florida corporation** (the "Grantor"), whose post office address is P. O. Box 2290, Alachua, FL 32616, and **Southern Wrecker & Recovery, L.L.C., a Florida limited liability company**, (the "Grantee") whose address is 6831 W. Beaver Street, Jacksonville, FL 32254.

WITNESSETH:

THAT THE GRANTOR, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) to Grantor in hand paid by the Grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the Grantee, and does hereby grant, bargain and sell to the Grantee, its successors and assigns forever, the following described lands, situate, lying and being in the County of Alachua, State of Florida (the "Land") to-wit:

The land referred to herein below is situated in the County of Alachua, State of Florida and described as follows:

(Official Records Book 2363, Page 1983)

A part of the E 1/2 of the SW 1/4 of Section 8, Township 8 South, Range 18 East, Alachua County, Florida, being more particularly described as follows:

Commence at the Southwest corner of said Section 8 and run thence North 87 deg. 26 min. 55 sec. East, along the South line of said Section, 1316.02 feet to the West line of said E 1/2 of SW 1/4, thence North 05 deg. 57 min. 06 sec. West, along said West line, 2491.84 feet to a concrete monument (PSL 509) on the Southerly right-of-way line of U.S. Highway 441 (200' R/W) (aka State Road 25), thence South 79 deg. 04 min. 33 sec. East, along said right-of-way line, 875.32 feet to rebar and cap (PLS 1824) and the Point of Beginning; thence continue South 79 deg. 04 min. 33 sec. East, along said right-of-way line, 310.97 feet to a rebar and cap (PLS 1824), thence South 05 deg. 28 min. 46 sec. East, 454.09 feet to a rebar and cap (PLS 1824), thence South 79 deg. 04 min. 33 sec. East, 200.00 feet to a rebar and cap (PLS 1824), thence South 05 deg. 28 min. 46 sec. East, 378.77 feet to a rebar and cap (PLS 2047), thence South 88 deg. 18 min. 49 sec. West, 491.25 feet to a rebar and cap (PLS 1824), thence North 05 deg. 28 min. 46 sec. West, 944.66 feet to the Point of Beginning.

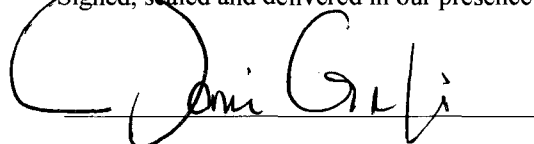
TOGETHER WITH all of the improvements now or hereafter erected on the Land, and all easements, appurtenances, and fixtures now or hereafter a part of the Land (collectively, the "Property"), subject to the Mineral Right and Royalty Transfer recorded in Miscellaneous Book 33, Page 106, conveyed and reconveyed to diverse parties - right of entry barred. (NOTE: Subsequent conveyances not shown herein.), (the "Permitted Exceptions").

To Have and to Hold, the property in fee simple forever.

Subject To the Permitted Exceptions, Grantor does hereby fully warrant the title to said Property, and will defend the same against the lawful claims of all persons claiming by, through or under the Grantor, but against none other.

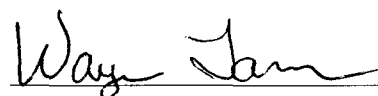
In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

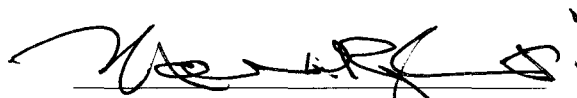


Witness Name: JANE P. GRIFFIN

Alachua Farm & Lumber, Inc., a Florida corporation

By: 

Wayne Tanner, President



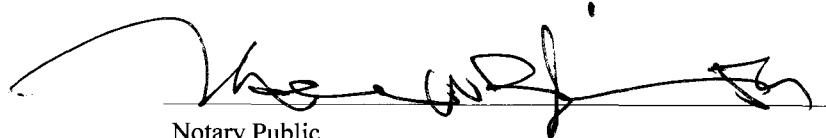
Witness Name: Marvin W. Bingham, Jr.

State of Florida

County of Alachua

The foregoing instrument was acknowledged before me this 7th day of October, 2019 by Wayne Tanner, as President of Alachua Farm & Lumber, Inc., a Florida corporation, who ☐ is personally known or ☒ has produced a Florida driver's license as identification.

[Notary Seal]


Notary Public



Printed Name: Marvin W. Bingham, Jr.

My Commission Expires: _____



FLORIDA DEPARTMENT OF
Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

**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**

Owner(s)/Permittee(s):	Southern Wrecker and Recovery, LLC
File No:	0383981001EG
File Name:	SOUTHERN WRECKER AND RECOVERY
Site Address:	16600 NW US Highway 441 Alachua FL - 32615 5271
County:	Alachua
Latitude:	29° 48' 18.7491"
Longitude:	-82° 32' 10.496"
Total Project Area:	7.99
Total Impervious Surface Area:	1.1
Approximate Date of Commencement of Construction:	06/01/2020
Registered Florida Professional:	Christopher Gmuer
License No.:	71599
Company:	Gmuer Engineering, LLC

Date: January 23, 2020

Christopher Gmuer certified through the Department's Enterprise Self-Service Application portal that the project described above was designed by the above-named Florida registered professional to meet the following requirements:

- (a) The total project area involves less than 10 acres and less than 2 acres of impervious surface;
- (b) Activities will not impact wetlands or other surface waters;
- (c) Activities are not conducted in, on, or over wetlands or other surface waters;
- (d) Drainage facilities will not include pipes having diameters greater than 24 inches, or the hydraulic equivalent, and will not use pumps in any manner;
- (e) The project is not part of a larger common plan, development, or sale; and
- (f) The project does not:
 - 1. Cause adverse water quantity or flooding impacts to receiving water and adjacent lands;

- 2.Cause adverse impacts to existing surface water storage and conveyance capabilities;
- 3.Cause a violation of state water quality standards; or
- 4.Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to s. 373.042 or a work of the district established pursuant to s. 373.086, F.S.

This certification was submitted before initiation of construction of the above project. The system is designed, and will be operated and maintained in accordance with applicable rules adopted pursuant to part IV of chapter 373, F.S. There is a rebuttable presumption that the discharge from such system will comply with state water quality standards. Therefore, construction, alteration, and maintenance of the stormwater management system serving this project is authorized in accordance with s.403.814(12), F.S.

In accordance with s. 373.416(2), F.S., if ownership of the property or the stormwater management system is sold or transferred to another party, continued operation of the system is authorized only if notice is provided to the Department within 30 days of the sale or transfer. This notice can be submitted to:

FDEP Northeast District
8800 Baymeadows Way West
Jacksonville, FL 32256

This certification was submitted along with the following electronic documents:

File Description
GradingDrainage

If you have submitted this certification as a Florida Registered Professional, you may wish to sign and seal this certification, and return a copy to the Department, in accordance with your professional practice act requirements under Florida Statutes.

I, Christopher Gmuer, License No. 71599, do hereby certify that the above information is true and accurate, based upon my knowledge, information and belief. In the space below, affix signature, date, seal, company name, address and certificate of authorization (if applicable).

This sealed certification may be submitted to the Department, either electronically (as an attachment in Adobe PDF or other secure, digital format) at Erp.selfcerts@dep.state.fl.us, or as a hardcopy, at the postal address below:

FDEP Northeast District
8800 Baymeadows Way West
Jacksonville, FL 32256

Access: 2020-A-291-00002

Status: Completeness Check

Project Name: Southern Wrecker - US 441 - Access

Substatus: Completeness Check

Application [Manage Permit](#) Payment:

Important Notices

[Request Application Revision](#)

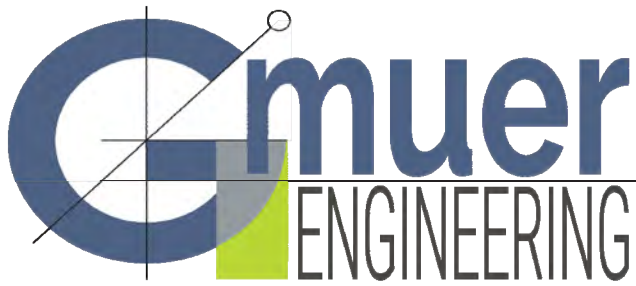
FDOT Permit Coordinator

User	Email	Phone	Assignment
Robert Emmons (MT291RE)	robert.emmons@dot.state.fl.us	(352) 381-4314	Permit Coordinator

Permit Status History

[Hide Comments and Attachments](#)

Status	Substatus	User	Actual Date/Time	Effective Date
Saved	Saved	CHRISTOPHER GMUER	9/24/19 10:44 AM	09/24/2019
Saved	Pending Payment	CHRISTOPHER GMUER	1/16/20 11:45 AM	01/16/2020
Submitted to FDOT	Submitted to FDOT	Adam Doyle (MT291AD)	1/30/20 2:43 PM	01/30/2020
Completeness Check	Completeness Check	Adam Doyle (MT291AD)	1/30/20 3:12 PM	01/30/2020



2603 NW 13th St, Box 314
Gainesville, FL 32609
Ph. (352) 281-4928

gmuereng.com

Stormwater Management Report

for

Southern Wrecker

US441 (West of NW 173rd St)
Alachua, FL

Prepared for
Southern Wrecker & Recovery, LLC

Date: February 18, 2020

Christopher A. Gmuer, PE
FL PE # 71599
cagmuer@gmuereng.com
Gmuer Engineering, LLC
FL CA # 31533
2603 NW 13th ST Box 314
Gainesville, FL 32609
www.gmuereng.com
(352) 281-4928

Project Description

The project is located in the City of Alachua, FL off US 441, just west of NW 173rd St / TP # 03042-050-003. The project proposes the developemnt of an commercial site with associated roadway, parking lot, stormwater management facility, and water & sewer infrastructure. Alachua County encourages the integration of LID techniques to further minimize, convey, pretreat, treat, and reduce the volume of stromwater runoff.

Pre-Development Drainage Narrative

The existing site consists of vacant grassed parcel. Site runoff flows south to to northwest and discharges to the US 441 / FDOT ROW.

Post-Development Drainage Narrative

The proposed development is expected to disturb ± 1.57 acres. Runoff from the undisturbed area will continue to discharge to FDOT ROW via overland flow and shallow swale. The proposed drainage plan collects runoff from the building, parking lot, and pervious areas within Drainage Area 1 (DA1) and conveys it by overland flow, pipe system to Stormwater Management Facility 1 (SMF1). The system is designed to provide full retention for all designed storm events. The pond recovers the design storm events wtihin 30 days and the WQTV within 72 hours. Projects in sensitive karst Areas require an additonal treatment area outside of the retention area and reduce the Nitrogen and Phosphorous loads by 70% and 80% respectively.

Drainage Area Runoff Calculations

Post-Development DA-A	Hyd Soil	CN	C	Sq Ft	Acres	
Buildings		98.0	0.95	6,700	0.1538	9.8%
Asphalt / Sidewalk / Hardscape		98.0	0.95	41,052	0.9424	60.0%
Landscape / Grass	A	39.0	0.30	5,979	0.1372	8.7%
Pre-Treatment LID		100.0	1.00	4,164	0.0956	6.1%
Stormwater Pond		100.0	1.00	10,548	0.2421	15.4%
TOTAL (weighted ave)		93.3	0.90	68,443	1.5712	100.0%

WQTV (Water Quality Treatment Volume)

	C	Sq Ft	Acres
Impervious (Parking, etc)	0.95	47,752	1.0962
Open / Landscape	0.30	20,691	0.4750
TOTAL (weighted ave)	0.75	68,443	1.5712

On-Line Dry Retention	C	Inch	Sq Ft	Acres	Cu Ft	Ac-Ft
SRWMD TOTAL	0.75	1.00	68,443	1.5712	4,298	0.0987

BMP Design Criteria

	C	Sq Ft	Acres
Impervious (Parking, etc)	0.95	47,752	1.0962
Open / Landscape	0.30	1,357	0.0311
TOTAL (weighted ave)	0.93	49,109	1.1274

Pre-treatment Volume	C	Inch	Sq Ft	Acres	Cu Ft	Ac-Ft
SRWMD TOTAL	0.93	1.00	49,109	1.1274	3,814	0.0876

Soils Data

	SMF-A		
	Rel Depth	NAVD88	
Ave Ex Ground Elevation	0	92	
Ave SHWT	-15	77	
Ave Confining Layer	-15	77	
Layer Thickness	10.00	N/A	
	Ft / Day	Safety	Ft / Day
Unsat Vert Conductivity	5.00	2	2.50
Horz Hyd Conductivity	7.00	2	3.50
Fillable Porosity	20 %		

Stage-Storage

Dry Retention BMP

90.50	1,213	0.0278	0	0.0000	
91.50	3,150	0.0723	2,181	0.0501	
92.00	4,164	0.0956	4,010	0.0921	Pre-Treatment Volume
92.50	5,203	0.1194	6,351	0.1458	Recovers <72 hours

Discharge Structure	Invert	Length	
Type H structure	92.00	23.2'	(Horizontal)

SMF-A	Stage Feet	Area		Cumulative Volume	
		Sq Ft	Acre	Cu Ft	Ac-Ft
Dry Retention					
	86.00	1,562	0.0359	0	0.0000
	87.00	2,631	0.0604	3,000	0.0689
	87.40	6,720	0.1543	4,298	0.0987
	88.00	3,815	0.0876	6,223	0.1429
	89.00	5,115	0.1174	10,688	0.2454
	90.00	6,535	0.1500	16,513	0.3791
	91.00	8,061	0.1851	23,811	0.5466
	92.00	9,695	0.2226	32,689	0.7504
	92.50	10,548	0.2421	37,750	0.8666

Storm Event Stage Elevations, Discharge Rates, & Recovery

SMF-A Storm Event	Post-Development			
	SMF1	Recovery	7 Days	30 Days
WQTV	87.40	6 hrs	-	-
SRWMD100Y001H	89.75	-	87.00	87.00
SRWMD100Y002H	90.20	-	87.00	87.00
SRWMD100Y004H	90.70	-	87.00	87.00
SRWMD100Y008H	91.09	-	87.00	87.00
SRWMD100Y024H	91.19	-	87.00	87.00
SRWMD100Y072H	89.55	-	88.20	87.00
SRWMD100Y168H	88.94	-	88.60	87.00
SRWMD100Y240H	89.81	-	89.19	87.00

Freeboard

Pond Top Elevation	92.50	12" SRWMD
Design High Water Elev	91.19	
Provided Freeboard	15.72 "	

BMP Load Reduction

Retention BMPs were used to achieve the level of load reduction. The volume below the discharge structure was considered to evaluate the load reduction. One inch of treatment is provided in the retention BMP, and one inch of treatment is provided in SMF-A.

Effective Load Removal	Post-Development		Post-Treatment		Removal %
	N (kg/yr)	P (kg/yr)	N (kg/yr)	P (kg/yr)	
Dry Retention BMP	2.55	0.55	0.28	0.06	89%

Project: Southern Wrecker

Date: 2/16/2020

Retention Design

Retention Depth (in) 2.000

Retention Volume (ac-ft) 0.187

Watershed Characteristics

Catchment Area (acres) 1.12

Contributing Area (acres) 1.120

Non-DCIA Curve Number 93.30

DCIA Percent 0.00

Rainfall Zone Florida Zone 2

Rainfall (in) 53.00

Surface Water Analysis

Required TN Treatment Efficiency (%) 70

Provided TN Treatment Efficiency (%) 89

Required TP Treatment Efficiency (%) 80

Provided TP Treatment Efficiency (%) 89

Media Mix Information

Type of Media Mix Not Specified

Media N Reduction (%)

Media P Reduction (%)

Ground Water Analysis

Recharge Rate (MG/yr) 0.000

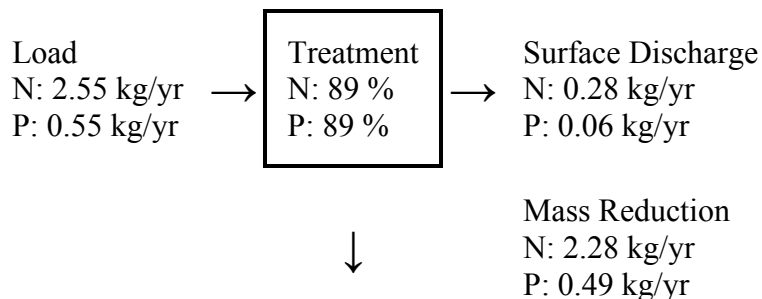
TN Mass Load (kg/yr) 2.277

TN Concentration (mg/L) 0.000

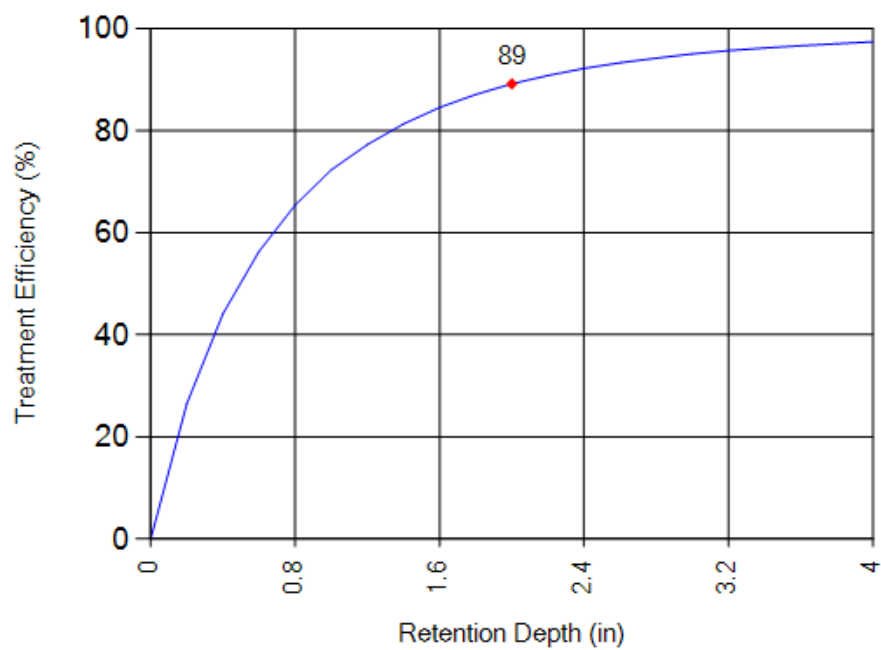
TP Mass Load (kg/yr) 0.493

TP Concentration (mg/L) 0.000

Load Diagram for Retention (stand-alone)



Plot of Retention Storage Curve



Retention System - NDCIA
CN: 93 DCIA %: 0.00 Rainfall
Zone: Florida Zone 2
System Efficiency at Treatment
Depth (in over watershed):
2.00

Hydrologic Soil Group—Alachua County, Florida



MAP LEGEND**Area of Interest (AOI)**
 Area of Interest (AOI)
Soils**Soil Rating Polygons**

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Lines

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Points

-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available

Water Features
 Streams and Canals
Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background
 Aerial Photography
MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Alachua County, Florida
Survey Area Data: Version 20, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 26, 2014—Dec 9, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
3	Arredondo fine sand, 0 to 5 percent slopes	A	1.0	13.2%
5	Fort Meade fine sand, 0 to 5 percent slopes	A	5.2	65.9%
79	Gainesville sand, 5 to 8 percent slopes	A	1.6	20.9%
Totals for Area of Interest			7.8	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

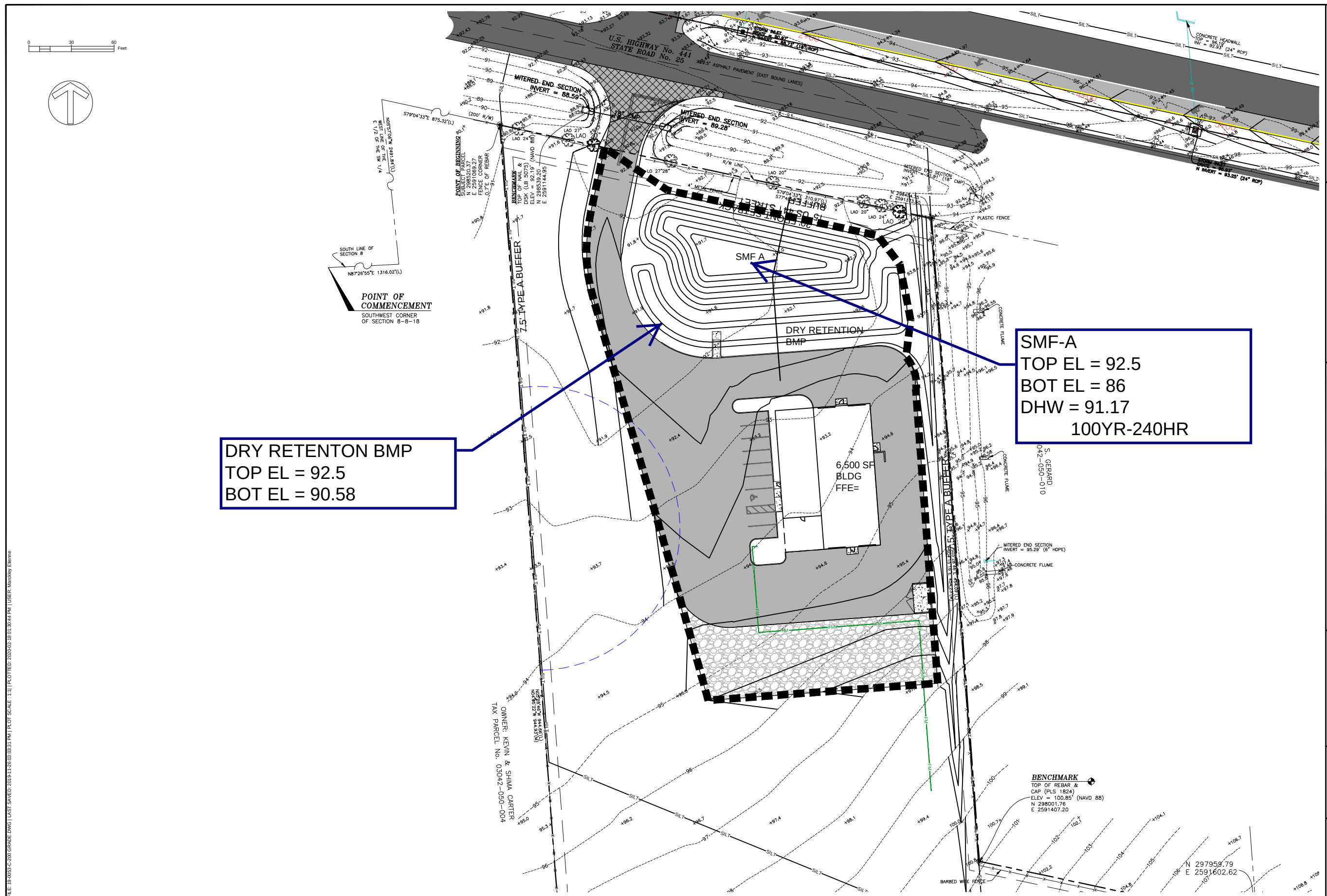
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



**POINT OF
COMMENCEMENT**
SOUTHWEST CORNER
OF SECTION 8-8-18

DRY RETENTION BMP
TOP EL = 92.5
BOT EL = 90.58

TOP EL = 92.5
BOT EL = 86
DHW = 91.17
100YR-2

S. GERRARD
042-050-010

BUDGETING

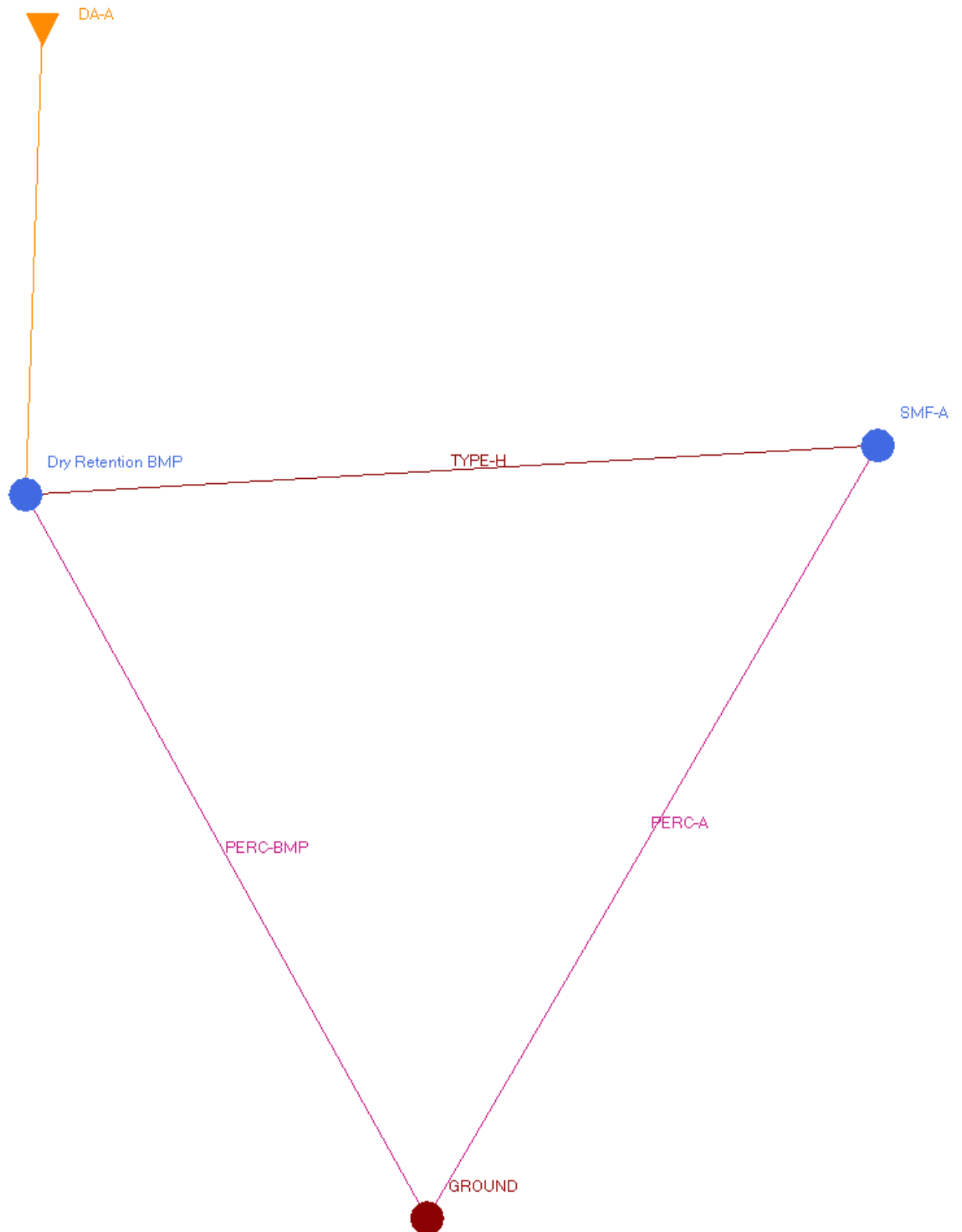
2020-01-16 INITIAL SUBMITTAL - CITY OF ALACHUA, FDOT, FDEP 10-2
2020-01-27 RESUBMITTAL - CITY OF ALACHUA



SOUTHERN WRECKER AND RECOVERY, LLC	C.A. GMAUER, PE	TBD
	C.A. GMAUER, PE	TBD
DESIGN :		TBD
QUALITY CONTROL :		TBD
		TBD
SITE PLAN APP #		19-0053
WMD APP #		
FOOT DRIVEWAY #		
FOOT DRAINAGE #		
Genlg PROJECT #		

POST DA-MAP

Nodal Diagram



Simple Basin: DA-A

Scenario: Southern Wrecker
Node: Dry Retention BMP
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 1.5712 ac
Curve Number: 93.3
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Node: Dry Retention BMP

Scenario: Southern Wrecker
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 90.50 ft
Warning Stage: 92.00 ft

Stage [ft]	Area [ac]	Area [ft2]
90.50	0.0278	1211
91.50	0.0723	3149
92.00	0.0956	4164
92.50	0.1194	5201

Comment:

Node: GROUND

Scenario: Southern Wrecker
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 68.00 ft
Warning Stage: 68.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	68.00
0	0	0	9999.0000	68.00

Comment:

Node: SMF-A

Scenario: Southern Wrecker
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 86.00 ft
Warning Stage: 91.50 ft

Stage [ft]	Area [ac]	Area [ft2]
86.00	0.0359	1564
87.00	0.0604	2631
88.00	0.0876	3816
89.00	0.1174	5114
90.00	0.1500	6534
91.00	0.1851	8063
92.00	0.2226	9696
92.50	0.2421	10546

Comment:

Percolation Link: PERC-A

Scenario:	Southern Wrecker	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	SMF-A	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GROUND	Perimeter 1:	476.94 ft
Link Count:	1	Perimeter 2:	665.43 ft
Flow Direction:	Both	Perimeter 3:	2550.40 ft
Aquifer Base Elevation:	76.99 ft	Distance P1 to P2:	30.00 ft
Water Table Elevation:	77.00 ft	Distance P2 to P3:	300.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	3.500 fpd	# of Cells P2 to P3:	30
Vertical Conductivity:	2.500 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	9.00 ft		

Comment:

Percolation Link: PERC-BMP

Scenario:	Southern Wrecker	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Dry Retention BMP	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GROUND	Perimeter 1:	525.90 ft
Link Count:	1		

Input Report

Flow Direction: Both
 Aquifer Base Elevation: 76.99 ft
 Water Table Elevation: 77.00 ft
 Annual Recharge Rate: 0 ipy
 Horizontal Conductivity: 3.500 fpd
 Vertical Conductivity: 2.500 fpd
 Fillable Porosity: 0.200
 Layer Thickness: 14.00 ft

Perimeter 2: 556.30 ft

Perimeter 3: 580.05 ft

Distance P1 to P2: 5.00 ft

Distance P2 to P3: 4.00 ft

of Cells P1 to P2: 1

of Cells P2 to P3: 4

Comment:

Drop Structure Link: TYPE-H

Upstream Pipe

Downstream Pipe

Scenario: Southern Wrecker

Invert: 87.00 ft

Invert: 86.00 ft

From Node: Dry Retention BMP

Manning's N: 0.0110

Manning's N: 0.0110

To Node: SMF-A

Geometry: Circular

Geometry: Circular

Link Count: 1

Max Depth: 2.00 ft

Max Depth: 2.00 ft

Flow Direction: Both

Bottom Clip

Solution: Combine

Default: 0.00 ft

Default: 0.00 ft

Increments: 0

Op Table:

Op Table:

Pipe Count: 1

Ref Node:

Ref Node:

Damping: 0.0000 ft

Manning's N: 0.0000

Manning's N: 0.0000

Length: 32.00 ft

Top Clip

FHWA Code: 0

Default: 0.00 ft

Default: 0.00 ft

Entr Loss Coef: 0.00

Op Table:

Op Table:

Exit Loss Coef: 0.00

Ref Node:

Ref Node:

Bend Loss Coef: 0.00

Manning's N: 0.0000

Manning's N: 0.0000

Bend Location: 0.00 ft

Energy Switch: Energy

Pipe Comment:

Weir Component

Weir: 1

Bottom Clip

Weir Count: 1

Default: 0.00 ft

Weir Flow Direction: Both

Op Table:

Damping: 0.0000 ft

Ref Node:

Weir Type: Horizontal

Top Clip

Geometry Type: Rectangular

Default: 0.00 ft

Invert: 92.00 ft

Op Table:

Control Elevation: 92.00 ft

Ref Node:

Max Depth: 99999.00 ft

Discharge Coefficients

Max Width: 10.16 ft

Weir Default: 3.200

Fillet: 0.00 ft

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Drop Structure Comment:

Input Report

Simulation: SRWMD 100Y001H

Scenario: Southern Wrecker
 Run Date/Time: 2/16/2020 3:39:05 PM
 Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	100.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	2.0000	30.0000
0	0	0	720.0000	1400.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	2.0000	30.0000
0	0	0	720.0000	1400.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

 Unit Hydrograph
 Folder:

Lookup Tables

 Boundary Stage Set:
 Extern Hydrograph Set:
 Curve Number Set:

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set:

Tolerances & Options

Time Marching: SAOR

IA Recovery Time: 24.0000 hr

Input Report

Max Iterations: 6
 Over-Relax Weight 0.5 dec
 Fact:
 dZ Tolerance: 0.0010 ft
 Smp/Man Basin Rain Global
 Opt:
 Max dZ: 1.0000 ft
 Link Optimizer Tol: 0.0001 ft
 Rainfall Name: ~FDOT-1
 Rainfall Amount: 4.40 in
 Storm Duration: 1.0000 hr
 Edge Length Option: Automatic
 Dflt Damping (1D): 0.0050 ft
 Min Node Srf Area 100 ft2
 (1D):
 Energy Switch (1D): Energy

Comment:

Simulation: SRWMD 100Y002H

Scenario: Southern Wrecker
 Run Date/Time: 2/16/2020 3:39:11 PM
 Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	100.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	5.0000	30.0000
0	0	0	746.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	5.0000	30.0000
0	0	0	746.0000	1440.0000

Restart File
Save Restart: False

Resources & Lookup Tables

Resources	Lookup Tables
Rainfall Folder:	Boundary Stage Set:
Unit Hydrograph Folder:	Extern Hydrograph Set:
	Curve Number Set:
	Green-Ampt Set:
	Vertical Layers Set:
	Impervious Set:

Tolerances & Options

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain Global
	Opt:
Max dZ: 1.0000 ft	Rainfall Name: ~FDOT-2
Link Optimizer Tol: 0.0001 ft	Rainfall Amount: 5.40 in
Edge Length Option: Automatic	Storm Duration: 2.0000 hr
	Dflt Damping (1D): 0.0050 ft
	Min Node Srf Area 100 ft2
	(1D):
	Energy Switch (1D): Energy

Comment:

Simulation: SRWMD 100Y004H

Scenario: Southern Wrecker
Run Date/Time: 2/16/2020 3:39:18 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

Year	Month	Day	Hour [hr]
------	-------	-----	-----------

Input Report

Start Time: 0 0 0 0.0000
 End Time: 0 0 0 100.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	6.0000	30.0000
0	0	0	746.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	6.0000	30.0000
0	0	0	746.0000	1440.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
 Extern Hydrograph Set:
 Curve Number Set:

Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set:

Tolerances & Options

Time Marching: SAOR
 Max Iterations: 6
 Over-Relax Weight: 0.5 dec
 Fact:
 dZ Tolerance: 0.0010 ft
 Max dZ: 1.0000 ft
 Link Optimizer Tol: 0.0001 ft
 Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
 Smp/Man Basin Rain Global
 Opt:
 Rainfall Name: ~FDOT-4
 Rainfall Amount: 6.72 in
 Storm Duration: 4.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: SRWMD 100Y008H

Scenario: Southern Wrecker
Run Date/Time: 2/16/2020 3:39:26 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	150.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	10.0000	30.0000
0	0	0	750.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	10.0000	30.0000
0	0	0	750.0000	1440.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Lookup Tables

Southern Wrecker
Input Report

9

Rainfall Folder:

Unit Hydrograph
Folder:

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Global
Opt:

Rainfall Name: ~FDOT-8
Rainfall Amount: 8.00 in
Storm Duration: 8.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: SRWMD 100Y024H

Scenario: Southern Wrecker
Run Date/Time: 2/16/2020 3:39:37 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	250.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	30.0000	30.0000
0	0	0	750.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	30.0000	30.0000
0	0	0	750.0000	1440.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set:

Green-Ampt Set:

Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Global
Opt:

Rainfall Name: ~FDOT-24

Rainfall Amount: 11.04 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area 100 ft2

(1D):

Energy Switch (1D): Energy

Comment:

Input Report

Simulation: SRWMD 100Y072H

Scenario: Southern Wrecker
 Run Date/Time: 2/16/2020 3:39:54 PM
 Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	450.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	75.0000	30.0000
0	0	0	792.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	75.0000	30.0000
0	0	0	792.0000	1440.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
 Extern Hydrograph Set:
 Curve Number Set:

Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set:

Tolerances & Options

Time Marching: SAOR

IA Recovery Time: 24.0000 hr

Input Report

Max Iterations: 6
 Over-Relax Weight 0.5 dec
 Fact:
 dZ Tolerance: 0.0010 ft
 Max dZ: 1.0000 ft
 Link Optimizer Tol: 0.0001 ft
 Edge Length Option: Automatic

Smp/Man Basin Rain Global
 Opt:
 Rainfall Name: ~FDOT-72
 Rainfall Amount: 13.80 in
 Storm Duration: 72.0000 hr
 Dflt Damping (1D): 0.0050 ft
 Min Node Srf Area 100 ft2
 (1D):
 Energy Switch (1D): Energy

Comment:

Simulation: SRWMD 100Y168H

Scenario: Southern Wrecker
 Run Date/Time: 2/16/2020 3:41:04 PM
 Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	650.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	170.0000	30.0000
0	0	0	888.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	170.0000	30.0000
0	0	0	888.0000	1440.0000

Restart File
Save Restart: False

Resources & Lookup Tables

Resources	Lookup Tables
Rainfall Folder:	Boundary Stage Set:
Unit Hydrograph Folder:	Extern Hydrograph Set:
	Curve Number Set:
	Green-Ampt Set:
	Vertical Layers Set:
	Impervious Set:

Tolerances & Options

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain Global
	Opt:
Max dZ: 1.0000 ft	Rainfall Name: ~FDOT-168
Link Optimizer Tol: 0.0001 ft	Rainfall Amount: 16.00 in
Edge Length Option: Automatic	Storm Duration: 168.0000 hr
	Dflt Damping (1D): 0.0050 ft
	Min Node Srf Area 100 ft2
	(1D):
	Energy Switch (1D): Energy

Comment:

Simulation: SRWMD 100Y240H

Scenario: Southern Wrecker
Run Date/Time: 2/16/2020 3:43:05 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

Year	Month	Day	Hour [hr]
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Input Report

Start Time: 0 0 0 0.0000
 End Time: 0 0 0 850.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	240.0000	60.0000
0	0	0	250.0000	600.0000
0	0	0	960.0000	1440.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	240.0000	60.0000
0	0	0	250.0000	600.0000
0	0	0	960.0000	1440.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
 Extern Hydrograph Set:
 Curve Number Set:

Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set:

Tolerances & Options

Time Marching: SAOR
 Max Iterations: 6
 Over-Relax Weight 0.5 dec
 Fact:
 dZ Tolerance: 0.0010 ft
 Max dZ: 1.0000 ft
 Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Global
 Opt:

Rainfall Name: ~FDOT-240

Southern Wrecker
Input Report

15

Edge Length Option: Automatic

Rainfall Amount: 18.00 in
Storm Duration: 240.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: WQTV

Scenario: Southern Wrecker
Run Date/Time: 2/16/2020 3:59:54 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	72.0000	30.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	30.0000
0	0	0	72.0000	30.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Lookup Tables

Rainfall Folder:

Unit Hydrograph
Folder:

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain No Rainfall
Opt:

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Southern Wrecker
Min-Max Report

1

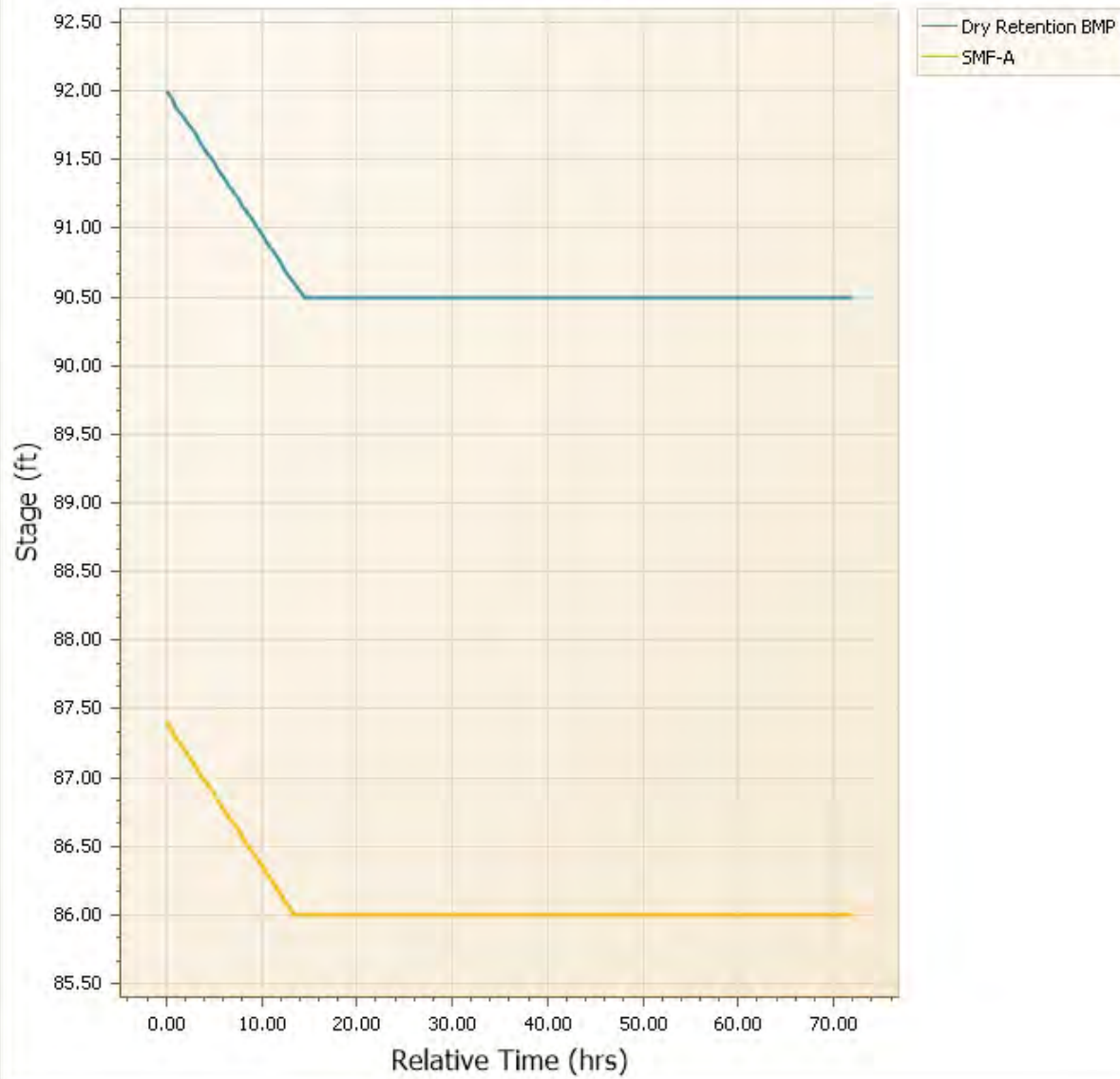
Sim	Warning Stage [ft]	Maximum Stage [ft]
SRWMD 100Y001H	91.50	89.75
SRWMD 100Y002H	91.50	90.20
SRWMD 100Y004H	91.50	90.70
SRWMD 100Y008H	91.50	91.09
SRWMD 100Y024H	91.50	91.19
SRWMD 100Y072H	91.50	89.55
SRWMD 100Y168H	91.50	88.94
SRWMD 100Y240H	91.50	89.81
WQTV	91.50	87.40

Southern Wrecker
Min-Max Report BMP

1

Sim	Warning Stage [ft]	Maximum Stage [ft]
SRWMD 100Y001H	92.00	92.00
SRWMD 100Y002H	92.00	92.00
SRWMD 100Y004H	92.00	92.00
SRWMD 100Y008H	92.00	92.00
SRWMD 100Y024H	92.00	92.00
SRWMD 100Y072H	92.00	92.00
SRWMD 100Y168H	92.00	92.00
SRWMD 100Y240H	92.00	92.00

Sim: WQTV



Node: SMF-A



US 441 ROAD RANGER FACILITY TRAFFIC ACCESS STUDY

ALACHUA COUNTY, FLORIDA

November 2019



BUCKHOLZ TRAFFIC



**BUCKHOLZ TRAFFIC
3585 KORI ROAD
JACKSONVILLE, FLORIDA 32257
(904) 886-2171 jwbuckholz@aol.com**

November 19, 2019

Mr. Greg Gaylord, President
Southern Wrecker & Recovery
5169-A West 12th Street
Jacksonville, Florida 32254

Re: US 441 Road Ranger Facility, Traffic Access Study

Dear Mr. Gaylord:

Attached is the requested traffic study. If there are any questions or comments regarding this study, please contact me.

Sincerely,

Jeffrey W. Buckholz, P.E., PTOE
Principal

This item has been digitally signed and sealed by Jeffrey W. Buckholz, P.E. on 11/19/19. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

INTRODUCTION

The proposed US 441 Road Ranger facility will provide a parking and staging area for 6 road ranger patrol trucks that will provide emergency assistance to vehicles travelling along Interstate 75. It will be located on the south side of US 441 approximately 1.3 miles west of I-75 in Alachua County, Florida. Access to the facility will be provided via a single driveway on US 441 located at an existing median break situated just west of Jack's Small Engine Repair. An exclusive westbound left turn lane into the site will be provided at this median opening.

US 441 in the vicinity of the site is a four lane divided rural principal arterial with a wide grass median. US 441 has an FDOT access management class of 3 and a posted speed limit of 65 mph in the vicinity of the site. Figure 1 shows the site location and surrounding road network while Appendix A contains the proposed site plan. The development is expected to be completed and fully operational by the end of 2020. Consequently, 2020 was chosen as the design year for this study.

EXISTING TRAFFIC VOLUMES

Manual turning movement counts (see Appendix B) were previously conducted by Buckholz Traffic personnel during mid-January of 2018 at the nearby US 441/CR 235A intersection as part of the Ellianos Coffee Traffic Study. The counts were conducted during weekday peak periods (6:45-9:00 AM and 4:00-6:00 PM) with school in session. The data was recorded at 15-minute intervals and includes a separate tabulation for trucks and pedestrians. Figures 7 and 8 from that study are provided in Appendix B. The left side of the last panel of those figures shows the 2019 weekday AM and PM peak hour traffic volumes along US 441 approximately 2/3 of a mile east of the Road Ranger site. These volumes can reasonably serve as conservatively high base volumes for subsequent analysis.

Appendix C provides traffic volume data from the FDOT annual traffic counting program for two stations near the site. The current Average Daily Traffic (ADT) on the portion of US 441 in the vicinity of the site is about 22,000 vehicles per day.

TRIP GENERATION

Appendix D contains an email which describes anticipated vehicular activity at the site. Making the conservative assumption that all employee commute trips will occur within the peak hour and that all service truck trips will also occur within the peak hour, the following peak hour trip generation is estimated:

Weekday AM Peak Hour:

- 5 employees arrive from the east
- 2 employees arrive from the west
- 6 service trucks depart to the east

Weekday PM Peak Hour:

- 6 service trucks return from the east
- 5 employees depart to the east
- 2 employees depart to the west

FUTURE TRAFFIC VOLUMES

The expected weekday AM and PM peak hour background (No Build) traffic volumes and total (Build) traffic volumes at the US 441/Site Drive intersection are graphically depicted in Figures 2 and 3. The 2020 background traffic volumes were obtained by multiplying the base traffic volumes provided in Appendix B by a corresponding growth factor of 1.049 (4.9% average annual growth for 1 year). The supporting data and calculations for this 4.9% average annual growth rate are included in Appendix C. The 2020 total traffic volumes were then obtained by adding the traffic generated by the new facility to the 2020 background traffic volumes.

TURN LANE ANALYSIS

Since right turn volumes into the facility are expected to be extremely low, an exclusive right turn lane is clearly not warranted and no formal analysis was conducted.

UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS

The unsignalized US 441/Site Drive intersection was analyzed using the two-way stop control methodology contained in Chapter 20 of the Sixth Edition of the Highway Capacity Manual. Table 1 summarizes the capacity analysis results for 2020 Build conditions. The supporting calculations are provided in Appendix E.

Under 2020 Build conditions, all minor movements at the intersection will operate at level of service D or better with minimal queueing and with a volume-to-capacity ratio that is much less than one.



(S) = TRAFFIC SIGNAL

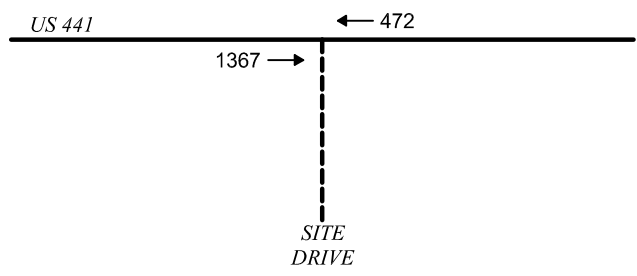
Buckholz Traffic

FIGURE 1

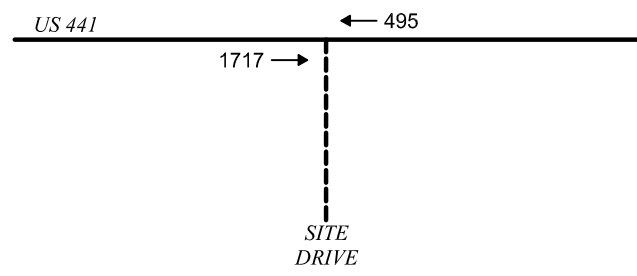
SITE LOCATION



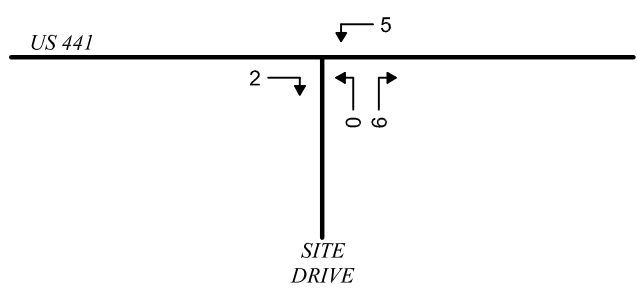
N: \\19-1589\CAD\FIG_02.dwg Date: 11-19-19 T: 16:48 By: AVDelacruz



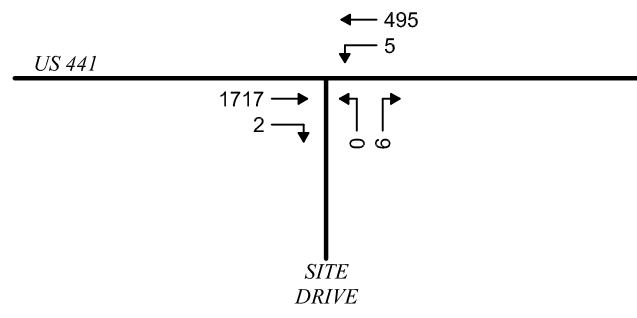
2019 TRAFFIC



NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 4.9%



SITE TRAFFIC



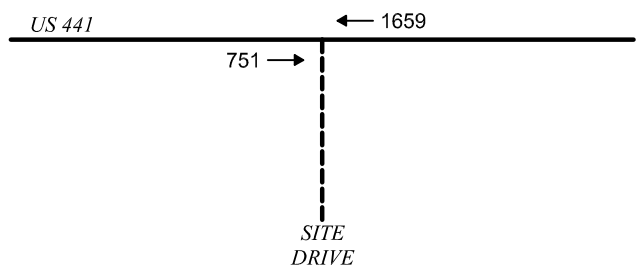
BUILD TRAFFIC

Buckholz Traffic

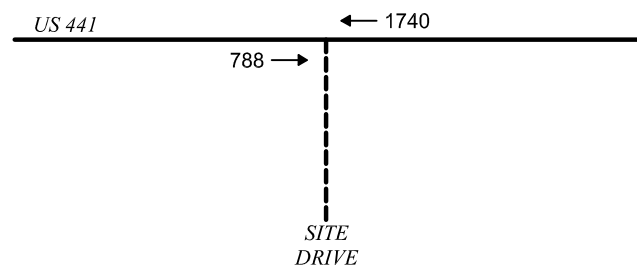
FIGURE 2
BUILD TRAFFIC
US 441 AT SITE DRIVE
WEEKDAY AM PEAK HOUR



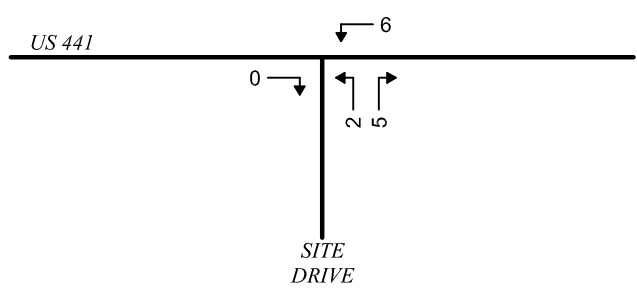
N: \\19-1589\CAD\FIG_03.dwg Date: 11-19-19 T: 16:59 By: AVDelacruz



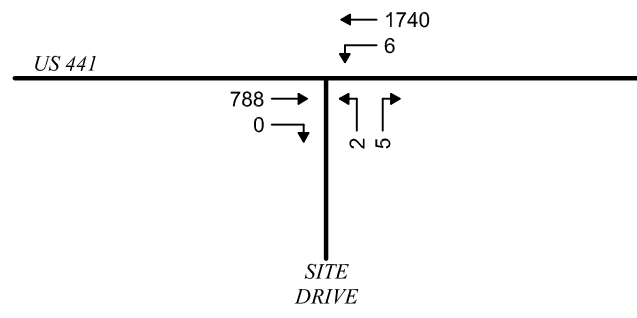
2019 TRAFFIC



NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 4.9%



SITE TRAFFIC



BUILD TRAFFIC

Buckholz Traffic

FIGURE 3
BUILD TRAFFIC
US 441 AT SITE DRIVE
WEEKDAY PM PEAK HOUR



TABLE 1**UNSIGNALIZED INTERSECTION CAPACITY RESULTS****US 441 / SITE DRIVE**

2020 BUILD CONDITIONS	WEEKDAY AM PEAK HOUR			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Westbound Left Turn	C	16.2 sec/veh	0.02	1
Northbound Approach	D	32.4 sec/veh	0.05	1

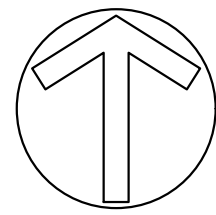
2020 BUILD CONDITIONS	WEEKDAY PM PEAK HOUR			
Movement	LOS	Delay	v/c Ratio	95th % Queue (vehicles)
Westbound Left Turn	B	14.9 sec/veh	0.02	1
Northbound Approach	D	25.5 sec/veh	0.04	1

BUCKHOLZ TRAFFIC

APPENDIX A

SITE PLAN



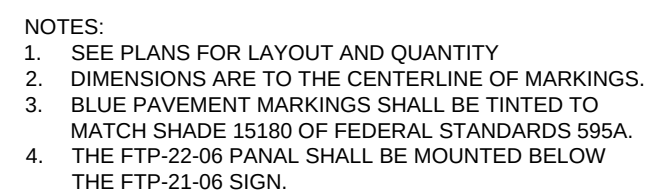


POINT OF BEGINNING

S79°04'33"E 8

POINT OF COMMENCEMENT

SOUTHWEST CORNER OF SECTION 8-8-18



NOTES:

1. SEE PLANS FOR LAYOUT AND QUANTITY
2. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
3. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
4. THE FTP-22-06 PANEL SHALL BE MOUNTED BELOW THE FTP-21-06 SIGN.

ACCESSIBLE PARKING PAVEMENT MARKING DETAIL

MARKED
NOT TO SCALE

OWNER: KEVIN & SHIMA CARTER
TAX PARCEL No. 03042-050-004

N05°28'46"W 944.66'(L)
N04°15'22"W 944.93'(M)

WORK WITHIN THE FDOT RIGHT-OF-WAY

1. ALL WORK PERFORMED WITHIN THE DEPARTMENT'S RIGHT-OF-WAY SHALL CONFORM TO THE MOST CURRENT EDITION OF THE FOLLOWING PUBLICATIONS:
 - 1.1 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (ENGLISH)
 - 1.2 FDOT STANDARDS INDEX (ENGLISH)
 - 1.3 FDOT PLANS PREP MANUAL
2. FDOT FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION (STANDARD A) IS A REQUIREMENT BETWEEN THE DETAILS SHOWN IN THE PLANS AND THE DEPARTMENT OF TRANSPORTATION STANDARDS THE ENGINEER/APPLICANT SHALL IMMEDIATELY CONFER WITH THE DEPARTMENT'S ENGINEER IN ORDER TO RESOLVE THE DISCREPANCY.)
3. ALL EXISTING STRIPING SHALL BE REMOVED AND TO BE REPLACED WITH NON-SOLVENT BASED THERMOPLASTIC.
4. REMOVAL OF EXISTING STRIPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FDOT STANDARDS.
5. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.
6. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.
7. ALL CURB AND GUTTER AND SIDEWALK WILL BE REMOVED AND REPLACED JOINT TO JOINT.
8. ALL DISTURBED AREAS ON DRIVEWAYS MUST BE FULLY REPAIRED AND TO BE REPLACED.
9. ALL DISTURBED AREA WITH THE DEPARTMENT'S RIGHT-OF-WAY WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SODDING THE AREA DISTURBED (BERMUDA IN RURAL, CENTPEDE IN UTILITY STRIPS).
10. BURNING OF ANY MATERIAL OR DEBRIS IS PROHIBITED IN FOOT RIGHT-OF-WAY.
11. ALL LANE CLOSURES MUST BE OPERATED IN A SPECIFIC DIRECTION OF TRAFFIC DURING A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT.
12. PRIOR TO BEGINNING CONSTRUCTION, A LANE CLOSURE ANALYSIS (PER PLANS PREPARATION MANUAL, 10.12.7) MUST BE COMPLETED AND SUBMITTED FOR FDOT REVIEW AND APPROVAL TO DETERMINE ALLOWABLE LANE CLOSURE HOURS.

OWNER: GREGORY S. GERARD
TAX PARCEL No. 03042-050-010

PRELIMINARY

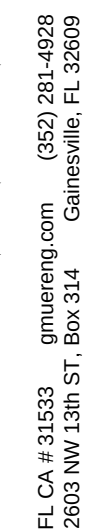
BUDGETING

PRICING :

CONSTRUCTION :

ERMITTING / DESIGN REVISIONS :

ENGINEER OF RECORD :
CHRISTOPHER A. GMUER
FL PE # 71599
2019-10-31



DESIGN :	C.A. GMUER, PE
QUALITY CONTROL :	C.A. GMUER, PE

SITE PLAN APP #	TBD
WMD APP #	TBD
ENG PROJECT #	19-0053

SOUTHERN
WRECKER
AND
RECOVERY
ALACHUA

HORIZONTAL
CONTROL &
SITE PLAN

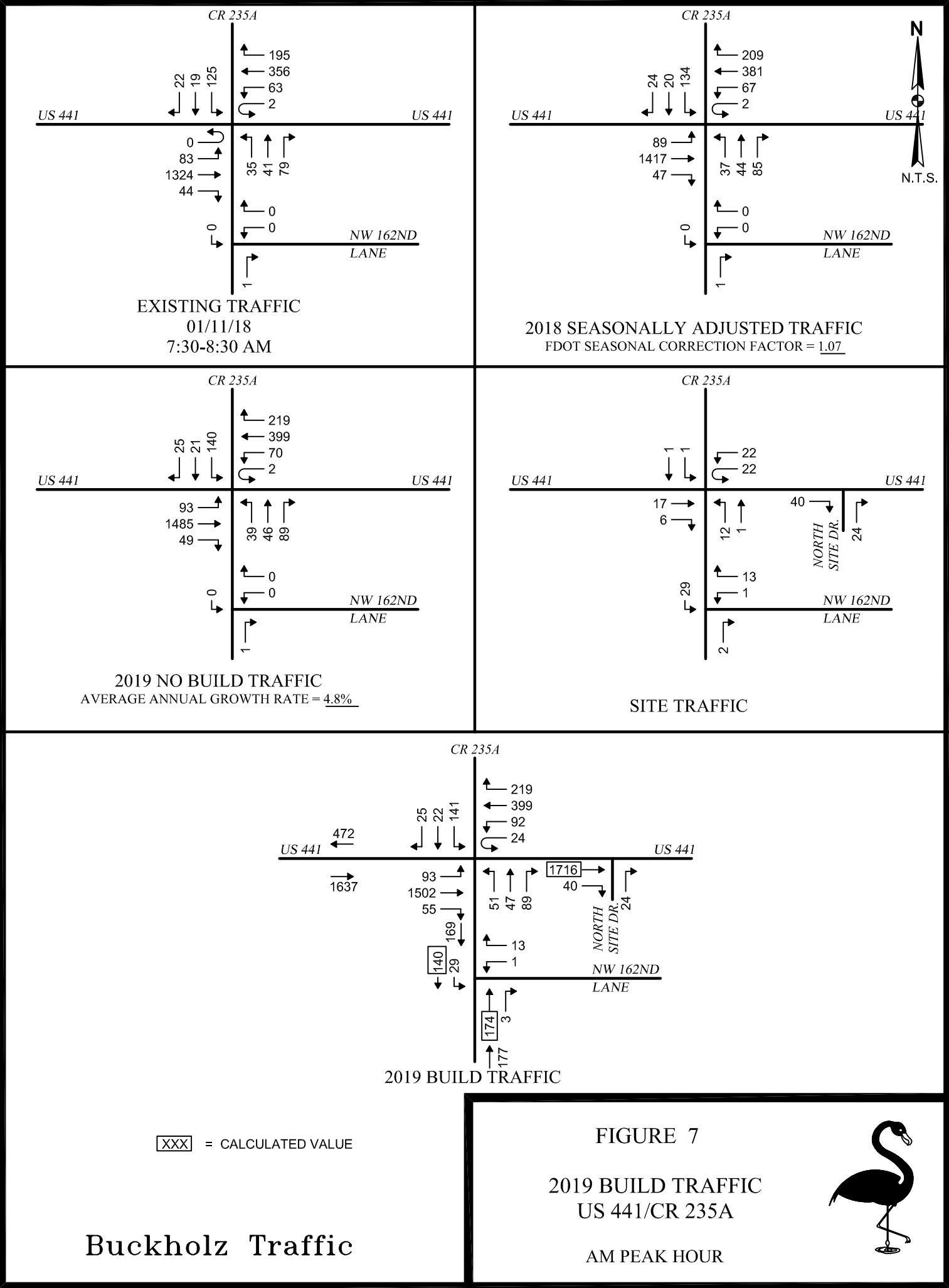
C-100

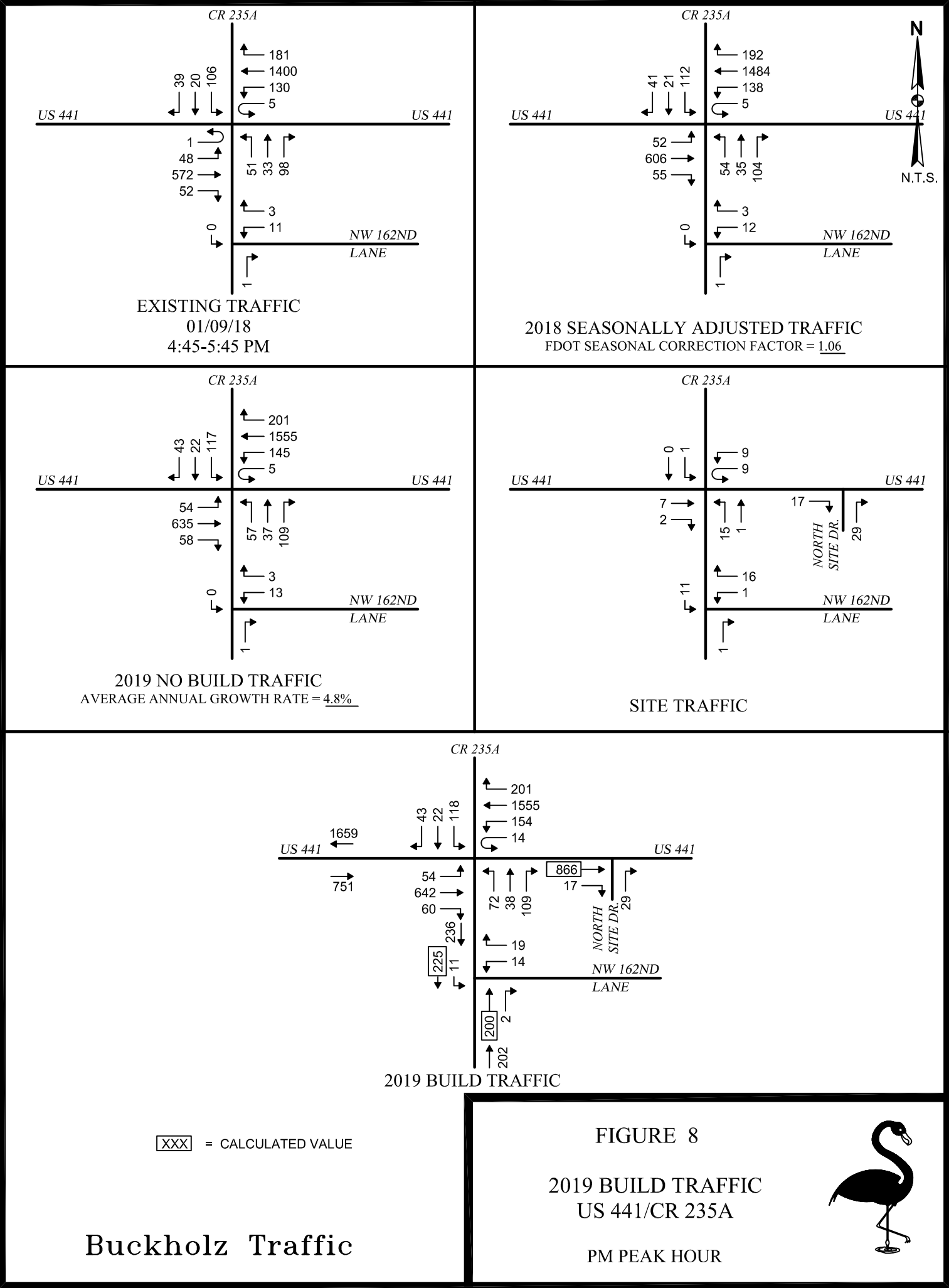
APPENDIX B

FIGURES FROM ELLIANOS COFFEE TRAFFIC STUDY



N:\19-1589\CAD\FIG_07.dwg Date: 11-19-19 T: 17:04 By: AVDelacruz





APPENDIX C

FDOT TRAFFIC DATA

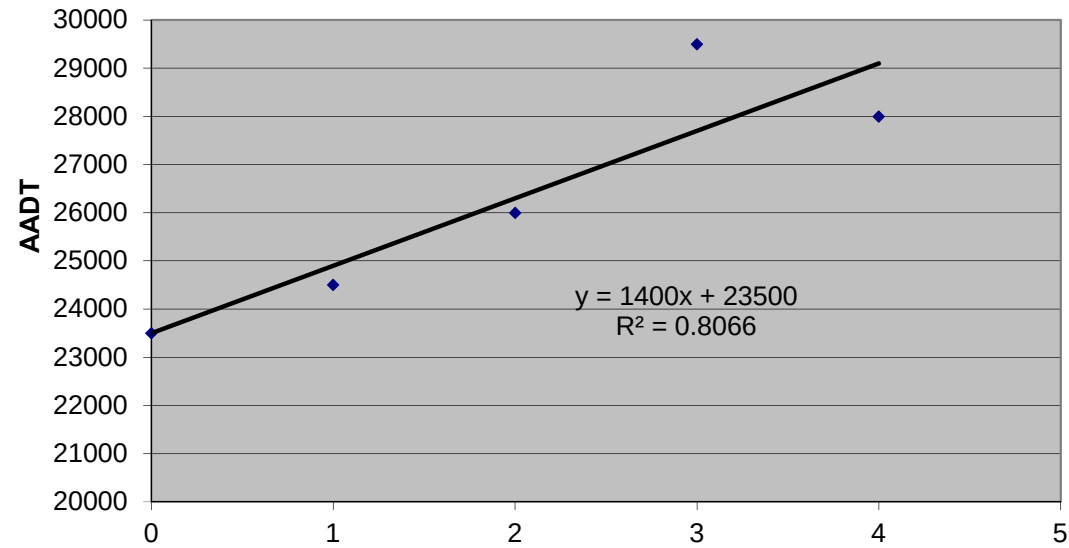


**TABLE C-1
LINEAR REGRESSION ANALYSIS**

US 441 (SR 20), West of I-75

<u>Year</u>	<u>X</u>	Actual <u>AADT (Y)</u>	Predicted <u>AADT</u>
2014	0	23500	23500
2015	1	24500	24900
2016	2	26000	26300
2017	3	29500	27700
2018	4	28000	29100
2019	5		30500
2020	6		31900

i = 5.2%



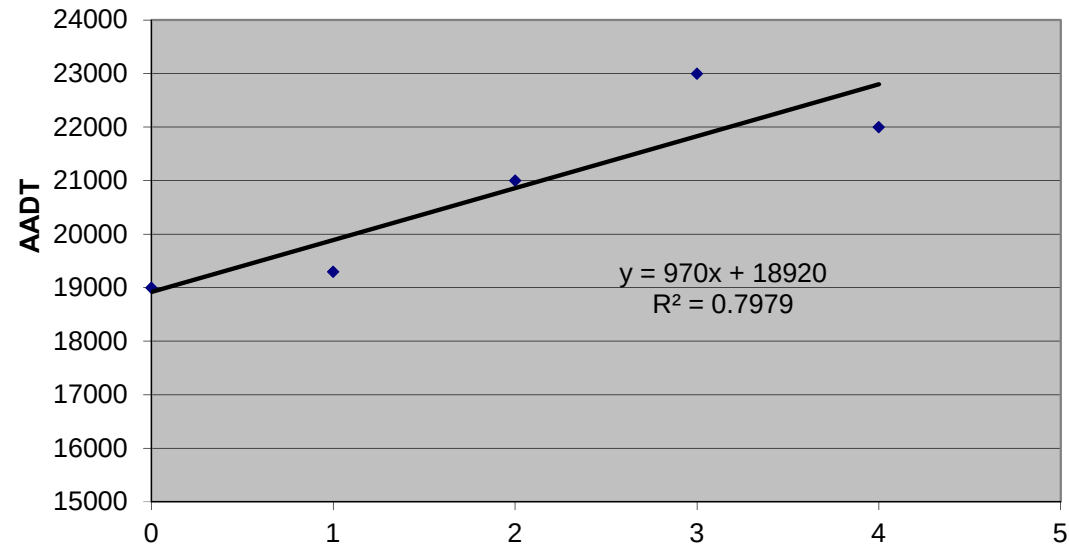
BUCKHOLZ TRAFFIC

TABLE C-2
LINEAR REGRESSION ANALYSIS

US 441 (SR 20), Southeast of 222nd Street

<u>Year</u>	<u>X</u>	Actual <u>AADT (Y)</u>	Predicted <u>AADT</u>
2014	0	19000	18920
2015	1	19300	19890
2016	2	21000	20860
2017	3	23000	21830
2018	4	22000	22800
2019	5		23770
2020	6		24740

i = 4.6%



BUCKHOLZ TRAFFIC

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0245 - SR 20 300' S. OF 222ND ST.(HIGH SPRINGS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2018	22000	C	N 11000		S 11000	9.50	57.90	4.90
2017	23000	C	N 11500		S 11500	9.50	53.80	4.60
2016	21000	C	N 10500		S 10500	9.50	53.60	4.90
2015	19300	C	N 9500		S 9800	9.50	57.00	5.20
2014	19000	C	N 9500		S 9500	9.50	57.40	5.40
2013	16900	C	N 8100		S 8800	9.50	57.80	5.00
2012	17300	C	N 8600		S 8700	9.50	58.40	4.90
2011	16900	C	N 8500		S 8400	9.50	58.80	5.50
2010	16900	C	N 8400		S 8500	10.13	59.87	5.10
2009	19200	C	N 9600		S 9600	10.04	57.81	6.20
2008	17500	C	N 8800		S 8700	10.17	57.73	7.30
2007	19500	C	N 9800		S 9700	10.22	58.44	5.70
2006	19300	C	N 9600		S 9700	9.98	59.05	6.70
2005	19200	C	N 9500		S 9700	10.10	58.20	19.60
2004	18800	C	N 9400		S 9400	10.20	62.30	9.10
2003	16900	C	N 8500		S 8400	10.20	59.50	12.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = 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

COUNTY: 26
STATION: 0245
DESCRIPTION: SR 20 300' S. OF 222ND ST.(HIGH SPRINGS)
START DATE: 04/25/2018
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	25	28	9	22	84	12	5	10	4	31	115	
0100	16	18	20	14	68	11	13	8	7	39	107	
0200	16	25	20	14	75	3	5	12	12	32	107	
0300	9	7	22	13	51	13	16	18	27	74	125	
0400	16	4	10	10	40	25	28	58	40	151	191	
0500	14	14	21	24	73	55	90	112	139	396	469	
0600	24	54	59	82	219	152	262	273	275	962	1181	
0700	77	132	131	133	473	348	352	404	330	1434	1907	
0800	102	99	96	94	391	250	309	237	176	972	1363	
0900	106	89	119	96	410	188	175	182	172	717	1127	
1000	124	118	130	134	506	157	132	153	131	573	1079	
1100	135	126	123	181	565	167	172	188	182	709	1274	
1200	188	165	203	182	738	153	144	173	185	655	1393	
1300	182	166	183	179	710	198	154	156	152	660	1370	
1400	163	194	198	231	786	157	163	155	163	638	1424	
1500	195	230	274	249	948	142	147	152	139	580	1528	
1600	310	288	285	302	1185	172	177	164	146	659	1844	
1700	347	351	352	322	1372	190	175	182	156	703	2075	
1800	271	241	225	180	917	176	148	138	114	576	1493	
1900	186	149	127	142	604	113	100	78	74	365	969	
2000	135	129	143	136	543	69	75	67	72	283	826	
2100	118	111	99	66	394	70	57	61	35	223	617	
2200	67	51	44	34	196	39	29	40	26	134	330	
2300	39	41	24	22	126	24	9	15	20	68	194	
24-HOUR TOTALS:					11474						11634	23108

PEAK VOLUME INFORMATION						
DIRECTION: N			DIRECTION: S		COMBINED DIRECTIONS	
A.M.	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
	715	498	700	1434	700	1907
P.M.	1700	1372	1230	710	1700	2075
DAILY	1700	1372	700	1434	1700	2075

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2018 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
----	-----		-----		-----	-----	-----	-----
2018	28000	C	N 14000		S 14000	9.50	57.90	4.90
2017	29500	C	N 14500		S 15000	9.50	53.80	4.60
2016	26000	C	N 13000		S 13000	9.50	53.60	4.90
2015	24500	C	N 12500		S 12000	9.50	57.00	5.20
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

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = 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

COUNTY: 26
STATION: 0461
DESCRIPTION: SR 20 .2 MI. NW OF SR 93
START DATE: 04/24/2018
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	12	9	11	15	47	27	27	22	16	92	139	
0100	20	32	30	16	98	24	14	15	24	77	175	
0200	9	13	15	27	64	15	21	14	22	72	136	
0300	44	17	30	25	116	22	10	16	21	69	185	
0400	29	29	46	42	146	15	31	53	49	148	294	
0500	80	86	120	150	436	38	56	60	44	198	634	
0600	172	297	298	360	1127	33	82	72	114	301	1428	
0700	376	406	494	411	1687	122	140	144	186	592	2279	
0800	335	304	346	251	1236	187	204	189	152	732	1968	
0900	231	257	254	194	936	149	175	169	177	670	1606	
1000	192	222	170	195	779	164	198	186	204	752	1531	
1100	210	201	230	196	837	198	195	191	208	792	1629	
1200	205	243	212	226	886	213	227	229	219	888	1774	
1300	217	233	219	242	911	216	223	241	221	901	1812	
1400	215	216	225	202	858	236	236	277	261	1010	1868	
1500	229	285	300	232	1046	287	293	294	320	1194	2240	
1600	194	203	183	243	823	349	366	363	373	1451	2274	
1700	200	226	201	207	834	417	401	451	420	1689	2523	
1800	191	171	165	155	682	344	367	260	248	1219	1901	
1900	149	135	109	120	513	226	196	192	190	804	1317	
2000	114	140	153	108	515	156	131	153	140	580	1095	
2100	82	64	67	50	263	112	114	106	89	421	684	
2200	59	26	36	37	158	74	55	45	35	209	367	
2300	25	25	22	18	90	48	41	42	41	172	262	
24-HOUR TOTALS:					15088						15033	30121

PEAK VOLUME INFORMATION					
DIRECTION: N			DIRECTION: S		COMBINED DIRECTIONS
A.M.	HOUR	VOLUME	HOUR	VOLUME	HOUR VOLUME
	700	1687	745	766	715 2303
P.M.	1500	1046	1700	1689	1700 2523
DAILY	700	1687	1700	1689	1700 2523

COUNTY: 26
STATION: 0461
DESCRIPTION: SR 20 .2 MI. NW OF SR 93
START DATE: 04/25/2018
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	13	20	25	24	82	26	34	17	29	106	188	
0100	29	36	31	14	110	14	21	9	21	65	175	
0200	14	22	22	27	85	23	31	20	13	87	172	
0300	28	24	26	36	114	16	13	20	22	71	185	
0400	29	31	41	41	142	18	22	57	38	135	277	
0500	59	89	103	156	407	41	39	61	52	193	600	
0600	198	291	311	341	1141	44	71	82	113	310	1451	
0700	418	435	445	424	1722	99	130	152	182	563	2285	
0800	309	291	345	252	1197	175	192	191	143	701	1898	
0900	220	237	226	192	875	122	132	165	154	573	1448	
1000	189	180	199	169	737	181	149	173	183	686	1423	
1100	196	213	224	220	853	178	174	225	226	803	1656	
1200	238	223	210	207	878	243	228	248	224	943	1821	
1300	288	239	202	218	947	208	245	231	226	910	1857	
1400	219	202	204	218	843	229	226	288	245	988	1831	
1500	185	262	265	209	921	270	310	288	343	1211	2132	
1600	211	221	202	191	825	355	364	376	384	1479	2304	
1700	211	218	205	212	846	410	426	423	392	1651	2497	
1800	191	236	183	153	763	317	322	264	256	1159	1922	
1900	153	142	126	107	528	196	193	189	189	767	1295	
2000	104	113	69	102	388	176	178	172	163	689	1077	
2100	119	72	81	50	322	136	137	102	87	462	784	
2200	52	30	50	40	172	79	61	59	49	248	420	
2300	36	21	31	25	113	46	46	44	33	169	282	
24-HOUR TOTALS:					15011						14969	29980

PEAK VOLUME INFORMATION						
DIRECTION: N			DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	700	1722	745	740	700	2285
P.M.	1300	947	1700	1651	1700	2497
DAILY	700	1722	1700	1651	1700	2497

COUNTY: 26
STATION: 0245
DESCRIPTION: SR 20 300' S. OF 222ND ST.(HIGH SPRINGS)
START DATE: 04/26/2018
START TIME: 0000

TIME	DIRECTION: N					DIRECTION: S					COMBINED TOTAL	
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL		
0000	25	21	19	19	84	11	8	9	7	35	119	
0100	18	30	16	15	79	3	13	4	15	35	114	
0200	18	14	13	22	67	5	12	9	10	36	103	
0300	15	9	22	15	61	18	16	13	27	74	135	
0400	15	14	13	6	48	28	36	48	47	159	207	
0500	17	15	24	32	88	59	98	120	128	405	493	
0600	34	37	47	89	207	172	212	288	268	940	1147	
0700	111	142	136	128	517	336	397	438	306	1477	1994	
0800	80	105	115	113	413	287	300	241	208	1036	1449	
0900	107	113	117	149	486	166	186	183	164	699	1185	
1000	126	144	132	138	540	189	182	182	165	718	1258	
1100	156	141	185	188	670	153	173	186	156	668	1338	
1200	181	190	168	216	755	165	195	200	173	733	1488	
1300	166	200	180	191	737	165	164	162	161	652	1389	
1400	201	227	203	203	834	193	174	200	154	721	1555	
1500	211	269	301	259	1040	163	175	160	140	638	1678	
1600	276	264	283	257	1080	172	189	166	146	673	1753	
1700	322	343	328	338	1331	182	188	204	167	741	2072	
1800	275	254	210	191	930	167	154	140	111	572	1502	
1900	157	175	184	145	661	110	88	98	84	380	1041	
2000	147	138	113	134	532	82	65	57	73	277	809	
2100	106	111	87	86	390	64	62	50	39	215	605	
2200	54	56	50	49	209	36	26	29	29	120	329	
2300	30	54	41	26	151	13	22	18	11	64	215	
24-HOUR TOTALS:					11910						12068	23978

PEAK VOLUME INFORMATION				COMBINED DIRECTIONS			
DIRECTION: N		DIRECTION: S		DIRECTION: N		DIRECTION: S	
A.M.	HOUR	VOLUME		P.M.	HOUR	VOLUME	
	700	517			700	1477	
P.M.	1700	1331			1700	741	
DAILY	1700	1331			1700	1477	

APPENDIX D

TRIP GENERATION MEMO



Subject: **Traffic Study**
Date: 11/9/2019 7:15:53 AM Eastern Standard Time
From: greg@southernwrecker.com
To: jwbuckholz@aol.com
Cc: chrisg@gmuereng.com

This is the daily operation for the Alachua/ I 75 corridor and I 10.

Monday thru Friday:

Road Ranger patrols (6) trucks begin at 6:30 and stay on routes until they return at shift change 12:30.
The second shift begins at 1:00 and stays on route till 7:00 p.m.
Weekends they deploy only (2) trucks with the same schedule.

One supervisor remains at facility Monday thru Friday.

There is one Medium duty wrecker that is staged for quick incident clearance.

 1494878431645_PastedImage

Greg Gaylord

President

Wreckmaster Certified #051018

greg@southernwrecker.com

Jacksonville

5169-A W. 12th Street

Jacksonville, Florida 32254

Phone: 904.378.8000 Fax: 904.378.8121

St. Augustine-North

-

2130 State Road 16

St. Augustine, Florida 32084

Phone: 904.824.8641 Fax: 904.826.0947

St. Augustine-South

-

1350 State Road 207

St. Augustine, Florida 32086

Phone: 904.797-5183 Fax: 904.584.1895

APPENDIX E

UNSIGNALIZED INTERSECTION CAPACITY CALCULATIONS



HCS7 Two-Way Stop-Control Report

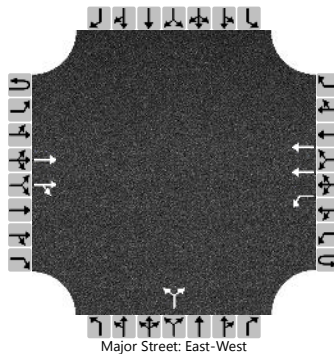
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	11/12/2019
Analysis Year	2020
Time Analyzed	AM Peak Hour - BUILD
Intersection Orientation	East-West
Project Description	#19-1585

Site Information

Intersection	US 441/Site Drive
Jurisdiction	Alachua County
East/West Street	US 441
North/South Street	Site Drive
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	1	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			1717	2	0	5	495			0		6				
Percent Heavy Vehicles (%)					0	0				0		100				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.5		6.9				
Critical Headway (sec)						4.10				6.80		8.90				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		4.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					5					7						
Capacity, c (veh/h)					327					138						
v/c Ratio					0.02					0.05						
95% Queue Length, Q ₉₅ (veh)					0.1					0.1						
Control Delay (s/veh)					16.2					32.4						
Level of Service (LOS)					C					D						
Approach Delay (s/veh)					0.2				32.4							
Approach LOS									D							

HCS7 Two-Way Stop-Control Report

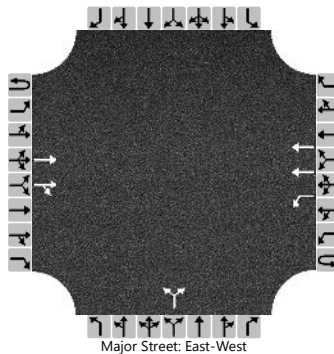
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	11/12/2019
Analysis Year	2020
Time Analyzed	PM Peak Hour - BUILD
Intersection Orientation	East-West
Project Description	#19-1585

Site Information

Intersection	US 441/Site Drive
Jurisdiction	Alachua County
East/West Street	US 441
North/South Street	Site Drive
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	1	0		0	0	0
Configuration			T	TR		L	T				LR					
Volume (veh/h)			788	0	0	6	1740			2		5				
Percent Heavy Vehicles (%)					0	100				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.5		6.9				
Critical Headway (sec)						6.10				6.80		6.90				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						3.20				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						7					8					
Capacity, c (veh/h)						372					183					
v/c Ratio						0.02					0.04					
95% Queue Length, Q ₉₅ (veh)						0.1					0.1					
Control Delay (s/veh)						14.9					25.5					
Level of Service (LOS)						B					D					
Approach Delay (s/veh)					0.1				25.5							
Approach LOS									D							



Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Options					Finish
							Dimming controls	Motion sensing lens	Photo-sensing	Electrical	Luminaire	
ECF-S												
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	530 530 mA 700 700 mA 1A 1050 mA 1.2A 1200 mA	WW-G2 Warm White 3000K, 70 CRI Generation 2 NW-G2 Neutral White 4000K, 70 CRI Generation 2	AR Arm Mount (standard) ² <i>The following mounting kits must be ordered separately (See accessories)</i> SF Slip Fitter Mount ³ (fits to 2 3/8" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ²	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270° Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270° Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270° Type 5 5 Type 5 5W Type 5W AFR Auto Front Row AFR-90 Auto Front Row, Rotated left 90° AFR-270 Auto Front Row, Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	DD 0-10V External dimming (by others) ⁴ DCC Dual Circuit Control ^{4,5,6} FAWS Field Adjustable Wattage Selector ^{4,5} SW Interface module for SiteWise ^{4,6,7} LLC Integral wireless module ^{4,6,8} BL Bi-level functionality ⁴ DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming, 7 hours ^{4,8} CM50 Median 50% Dimming, 8 hours ^{4,8} CE50 Economy 50% Dimming, 9 hours ^{4,8} DA50 All Night 50% Dimming ^{4,8} CS30 Safety 30% Dimming, 7 hours ^{4,8} CM30 Median 30% Dimming, 8 hours ^{4,8} CE30 Economy 30% Dimming, 9 hours ^{4,8} DA30 All Night 30% Dimming ^{4,8}	IMRI3 Integral with #3 lens ¹⁵ IMRI7 Integral with #7 lens ¹⁶ IMRO Pole mounted motion sensor ¹⁵ (see accessories)	PCB Photocontrol Button ^{8,9} TLRD5 Twist Lock Receptacle 5 Pin ¹⁰ TLRD7 Twist Lock Receptacle 7 Pin ¹⁰ TLRPC Twist Lock Receptacle w/ Photocell ^{9,11}	Fusing F1 Single (120, 277, 347VAC) ⁹ F2 Double (208, 240, 480VAC) ⁹ Pole Mount Fusing FP1 Single (120, 277, 347VAC) ⁹ FP2 Double (208, 240, 480VAC) ⁹ FP3 Canadian Double Pull (208, 240, 480VAC) ⁹ Surge Protection (10kA standard) SP2 Increased 20kA	Square Pole Adapter included in standard product TB Terminal Block ¹² RPA Round Pole Adapter (fits to 3"-3.9" O.D. pole) ¹³ HIS Internal Housing Side Shield ¹⁴	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)

- BL-IMRI3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- Mounts to a 4" round pole with adapter included for square poles.
- Limited to a maximum of 45 degrees aiming above horizontal.
- Not available with other dimming control options.
- Not available with motion sensor.
- Not available with photocontrol.

- Available only in 120 or 277V.
- Not available in 347 or 480V
- Must specify input voltage.
- Dimming will not be connected to NEMA receptacle if ordering with other control options.
- Not available in 480V.
- Not available with DCC.
- Not available with SF and WS. RPAs provided with black finish standard.

- HIS not available with Type 5 and 5W optics.
- Available only with SW, LLC, and BL control options.
- Available only with SW and BL control options.

ECF-S EcoForm small

Area luminaire

EcoForm Accessories (ordered separately, field installed)

Controls Accessories

Pole Mount Motion Sensor

MS-A-120V 120V Input
MS-A-277V 277V Input

Wireless system

Remote mount module

LLCR3-(F) #3 lens

Central Remote Motion Response

(used connected to SiteWise main panel)

MS2-A-FVR-3

MS2-A-FVR-7

Shielding Accessories

House Side shield

Standard optic orientation:

HIS-80-H¹⁴ Internal House Side Shield for 80 LEDs (5 modules)

HIS-96-H¹⁴ Internal House Side Shield for 96 LEDs (6 modules)

Optic at 90 or 270 orientation:

HIS-80-V¹⁴ Internal House Side Shield for 80 LEDs (5 modules)

HIS-96-V¹⁴ Internal House Side Shield for 96 LEDs (6 modules)

14. Not available with Type 5 or 5W optics

Luminaire Accessories

ECF-BD-G2

Bird deterrent

ECF-RAM-G2-(F)

Retrofit Arm mount kit

ECF-SF-G2-(F)

Slip Fitter Mount (fits to 2 3/8" O.D. tenon)

ECF-W5-G2-(F)

Wall mount with surface conduit rear entry permitted

EcoForm PTF2

(pole top fitter fits 23/8-21/2" OD x 4" depth tenon)

PTF2-ECF-S/L-1-90-(F) 1 luminaire at 90°

PTF2-ECF-S/L-2-90-(F) 2 luminaires at 90°

PTF2-ECF-S/L-2-180-(F) 2 luminaires at 180°

PTF2-ECF-S/L-3-90-(F) 3 luminaires at 90°

PTF2-ECF-S/L-4-90-(F) 4 luminaires at 90°

PTF2-ECF-S/L-3-120-(F) 3 luminaires at 120°

EcoForm PTF3

(pole top fitter fits 3-31/2" OD x 6" depth tenon)

PTF3-ECF-S/L-1-90-(F) 1 luminaire at 90°

PTF3-ECF-S/L-2-90-(F) 2 luminaires at 90°

PTF3-ECF-S/L-2-180-(F) 2 luminaires at 180°

PTF3-ECF-S/L-3-90-(F) 3 luminaires at 90°

PTF3-ECF-S/L-4-90-(F) 4 luminaires at 90°

PTF3-ECF-S/L-3-120-(F) 3 luminaires at 120°

EcoForm PTF4

(pole top fitter fits 31/2-4" OD x 6" depth tenon)

PTF4-ECF-S/L-1-90-(F) 1 luminaire at 90°

PTF4-ECF-S/L-2-90-(F) 2 luminaires at 90°

PTF4-ECF-S/L-2-180-(F) 2 luminaires at 180°

PTF4-ECF-S/L-3-90-(F) 3 luminaires at 90°

PTF4-ECF-S/L-4-90-(F) 4 luminaires at 90°

PTF4-ECF-S/L-3-120-(F) 3 luminaires at 120°

(F) = Specify finish

Predicted Lumen Depreciation Data

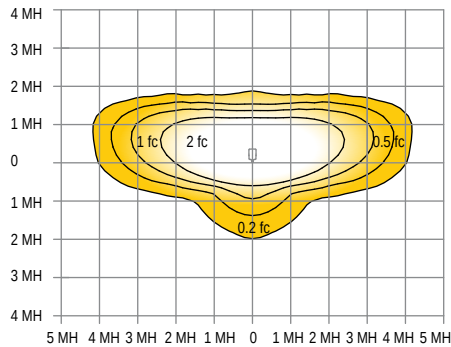
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology.

Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

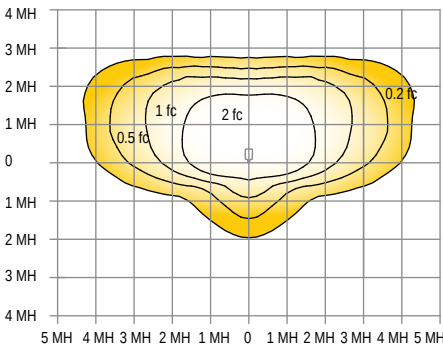
Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>60,000 hours	>88%

Optical distribution

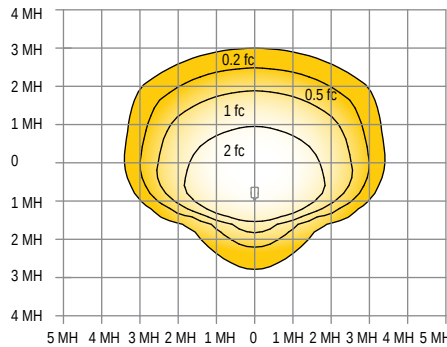
Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.



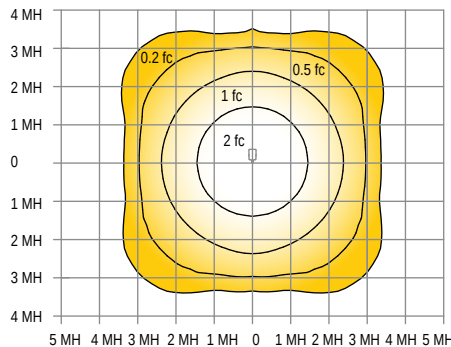
Type 2



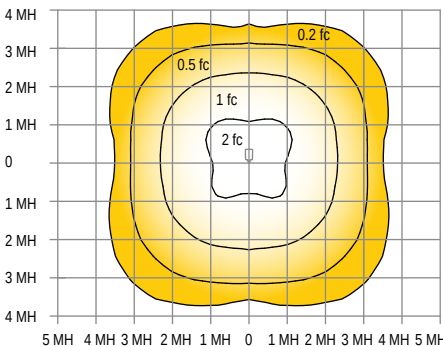
Type 3



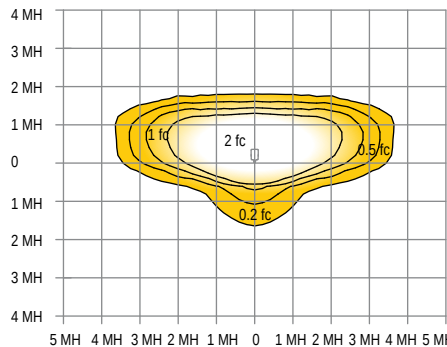
Type 4



Type 5



Type 5W



AFR

ECF-S EcoForm small

Area luminaire

3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-WW-G2-x	32	530	3000	56	6,178	B2-U0-G1	111	6,044	B1-U0-G2	109	6,323	B1-U0-G2	114
ECF-S-32L-700-WW-G2-x	32	700	3000	73	7,968	B2-U0-G2	109	7,795	B1-U0-G2	107	8,156	B1-U0-G2	112
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	11,218	B2-U0-G2	106	10,974	B2-U0-G2	104	11,482	B2-U0-G2	109
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	12,443	B3-U0-G2	102	12,173	B2-U0-G2	100	12,736	B2-U0-G3	105
ECF-S-48L-900-WW-G2-x	48	900	3000	135	14,768	B3-U0-G3	109	14,448	B2-U0-G3	107	15,116	B2-U0-G3	112
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	16,723	B3-U0-G3	105	16,360	B3-U0-G3	103	17,116	B2-U0-G3	108
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	18,564	B3-U0-G3	102	18,162	B3-U0-G3	99	19,001	B3-U0-G4	104
ECF-S-64L-900-WW-G2-x	64	900	3000	178	19,545	B3-U0-G3	110	19,121	B3-U0-G3	108	20,005	B3-U0-G4	113
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	22,020	B3-U0-G3	107	21,543	B3-U0-G4	105	22,538	B3-U0-G4	109

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 5			Type 5W			Type AFR		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-WW-G2-x	32	530	3000	56	6,400	B2-U0-G1	115	6,672	B3-U0-G2	120	6,458	B3-U0-G2	116
ECF-S-32L-700-WW-G2-x	32	700	3000	73	8,254	B2-U0-G1	113	8,606	B3-U0-G2	118	8,330	B4-U0-G2	114
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	11,621	B3-U0-G2	110	12,116	B4-U0-G2	115	11,727	B4-U0-G2	111
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	12,890	B3-U0-G2	106	13,440	B4-U0-G2	111	13,008	B4-U0-G2	107
ECF-S-48L-900-WW-G2-x	48	900	3000	135	15,299	B3-U0-G2	113	15,951	B4-U0-G2	118	15,438	B4-U0-G2	114
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	17,324	B3-U0-G2	109	18,062	B4-U0-G2	114	17,482	B5-U0-G3	110
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	19,231	B3-U0-G2	105	20,051	B5-U0-G3	110	19,407	B5-U0-G3	106
ECF-S-64L-900-WW-G2-x	64	900	3000	178	20,247	B3-U0-G2	114	21,111	B5-U0-G3	119	20,432	B5-U0-G3	115
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	22,811	B3-U0-G2	111	23,784	B5-U0-G3	116	23,020	B5-U0-G3	112

4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-NW-G2-x	32	530	4000	56	6,864	B2-U0-G2	123	6,715	B1-U0-G2	121	7,025	B1-U0-G2	126
ECF-S-32L-700-NW-G2-x	32	700	4000	73	8,853	B2-U0-G2	121	8,661	B2-U0-G2	119	9,062	B1-U0-G2	124
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	12,464	B3-U0-G2	118	12,194	B2-U0-G2	115	12,757	B2-U0-G3	121
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	13,826	B3-U0-G3	114	13,526	B2-U0-G3	111	14,151	B2-U0-G3	116
ECF-S-48L-900-NW-G2-x	48	900	4000	135	16,409	B3-U0-G3	121	16,053	B2-U0-G3	119	16,795	B2-U0-G3	124
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	18,581	B3-U0-G3	117	18,178	B3-U0-G3	115	19,018	B2-U0-G4	120
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	20,627	B3-U0-G3	113	20,180	B3-U0-G4	110	21,112	B3-U0-G4	116
ECF-S-64L-900-NW-G2-x	64	900	4000	178	21,717	B3-U0-G3	122	21,246	B3-U0-G4	119	22,228	B3-U0-G4	125
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	24,467	B3-U0-G3	119	23,936	B3-U0-G4	116	25,043	B3-U0-G4	122

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 5			Type 5W			Type AFR		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,414	B3-U0-G2	133	7,175	B3-U0-G2	129	7,111	B2-U0-G1	128
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,563	B3-U0-G2	131	9,255	B4-U0-G2	127	9,172	B2-U0-G1	126
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,462	B4-U0-G2	127	13,030	B4-U0-G2	123	12,912	B3-U0-G2	122
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	14,933	B4-U0-G2	123	14,453	B4-U0-G2	119	14,322	B3-U0-G2	118
ECF-S-48L-900-NW-G2-x	48	900	4000	135	17,723	B4-U0-G2	131	17,154	B5-U0-G3	127	16,999	B3-U0-G2	126
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,069	B5-U0-G3	126	19,424	B5-U0-G3	122	19,248	B3-U0-G2	121
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,279	B5-U0-G3	122	21,563	B5-U0-G3	118	21,368	B3-U0-G2	117
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,456	B5-U0-G3	132	22,702	B5-U0-G3	128	22,497	B3-U0-G2	127
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,427	B5-U0-G3	128	25,577	B5-U0-G4	124	25,346	B3-U0-G2	123

ECF-S EcoForm small

Area luminaire

5000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-CW-G2-x	32	530	5000	56	6,658	B2-U0-G2	120	6,514	B1-U0-G2	117	6,815	B1-U0-G2	122
ECF-S-32L-700-CW-G2-x	32	700	5000	73	8,588	B2-U0-G2	118	8,402	B2-U0-G2	115	8,790	B1-U0-G2	121
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	12,090	B3-U0-G2	114	11,828	B2-U0-G2	112	12,375	B2-U0-G3	117
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	13,411	B3-U0-G3	110	13,120	B2-U0-G3	108	13,726	B2-U0-G3	113
ECF-S-48L-900-CW-G2-x	48	900	5000	135	15,917	B3-U0-G3	118	15,572	B2-U0-G3	115	16,291	B2-U0-G3	121
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	18,023	B3-U0-G3	114	17,633	B3-U0-G3	111	18,447	B2-U0-G4	116
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	20,008	B3-U0-G3	110	19,574	B3-U0-G4	107	20,479	B3-U0-G4	112
ECF-S-64L-900-CW-G2-x	64	900	5000	178	21,065	B3-U0-G3	118	20,609	B3-U0-G4	116	21,561	B3-U0-G4	121
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	23,733	B3-U0-G3	115	23,218	B3-U0-G4	113	24,291	B3-U0-G4	118

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 5			Type 5W			Type AFR		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-CW-G2-x	32	530	5000	56	6,897	B2-U0-G1	124	7,191	B3-U0-G2	129	6,960	B3-U0-G2	125
ECF-S-32L-700-CW-G2-x	32	700	5000	73	8,896	B2-U0-G1	122	9,276	B3-U0-G2	127	8,978	B4-U0-G2	123
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	12,524	B3-U0-G2	119	13,058	B4-U0-G2	124	12,639	B4-U0-G2	120
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	13,893	B3-U0-G2	114	14,485	B4-U0-G2	119	14,020	B4-U0-G2	115
ECF-S-48L-900-CW-G2-x	48	900	5000	135	16,489	B3-U0-G2	122	17,192	B4-U0-G2	127	16,639	B5-U0-G3	123
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	18,671	B3-U0-G2	118	19,467	B5-U0-G3	123	18,841	B5-U0-G3	119
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	20,727	B3-U0-G2	113	21,611	B5-U0-G3	118	20,916	B5-U0-G3	114
ECF-S-64L-900-CW-G2-x	64	900	5000	178	21,822	B3-U0-G2	123	22,753	B5-U0-G3	128	22,021	B5-U0-G3	124
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	24,586	B3-U0-G2	119	25,634	B5-U0-G3	124	24,810	B5-U0-G4	120

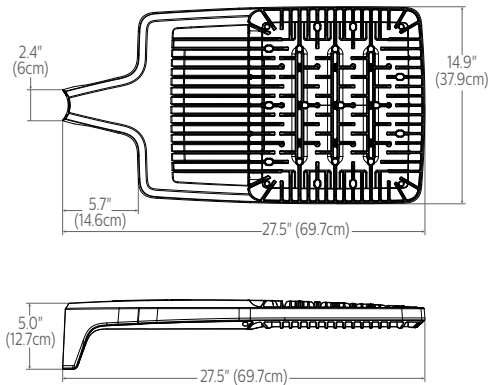
ECF-S EcoForm small

Area lumineuse

Dimensions

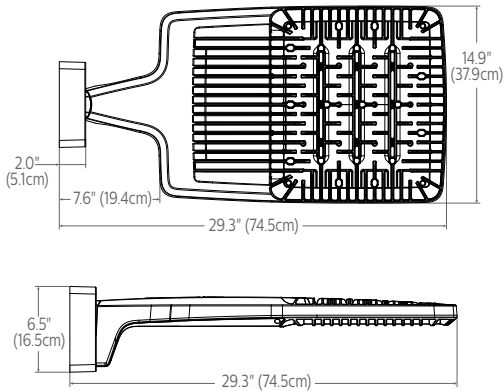
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



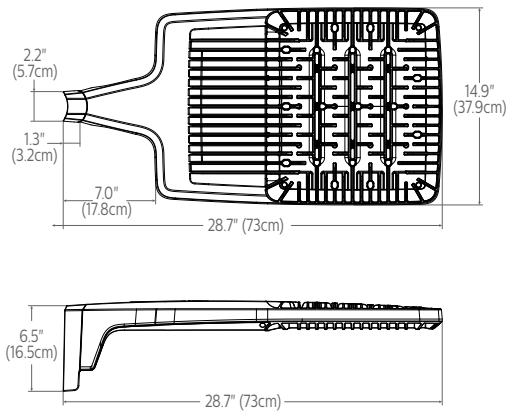
Wall (WS)

Weight: 27 Lbs. (12. 2Kg) EPA: 0.27ft² (.025m²)



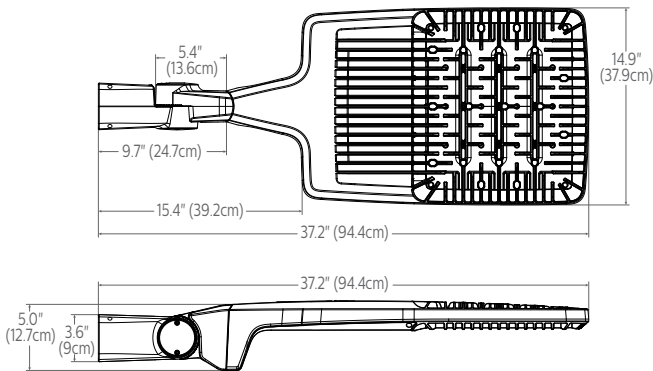
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

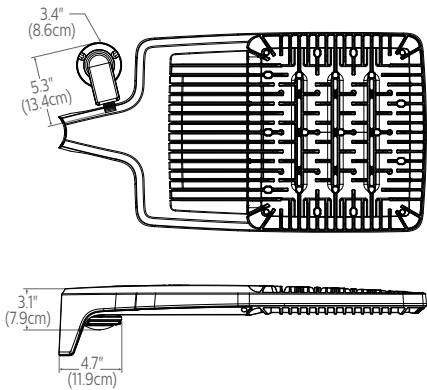


Slip fitter (SF)

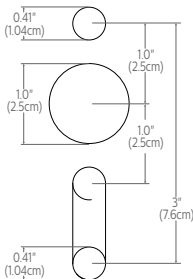
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



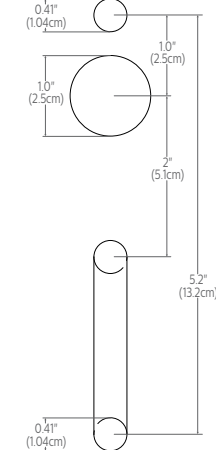
Outboard IMR-HVU sensor



Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern



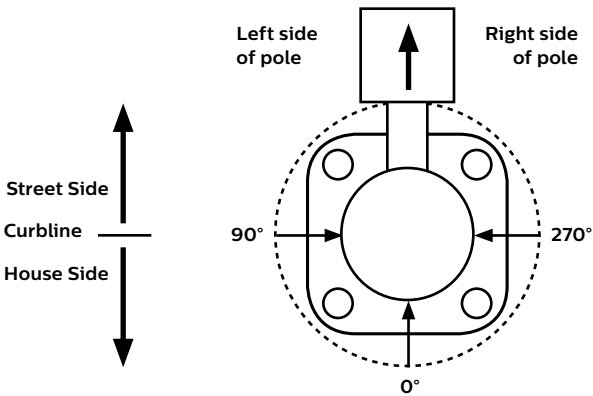
ECF-S EcoForm small

Area luminaire

Optical Orientation Information

Standard Optic Position

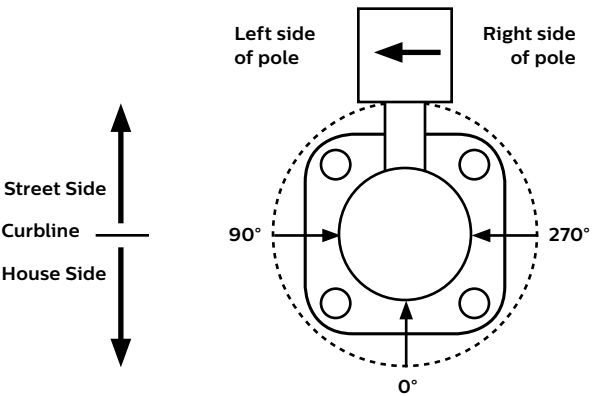
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

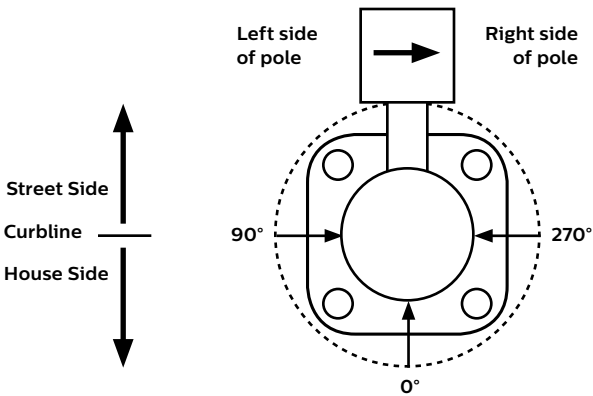
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

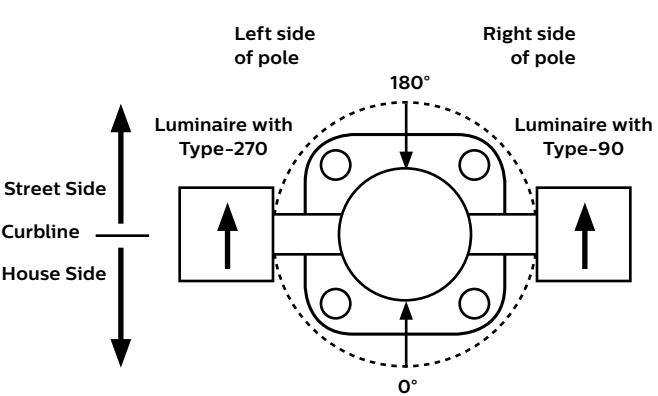
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S EcoForm small

Area luminaire

Specifications

Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP66, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2010. Testing includes vibration in three axes, all performed on the same luminaire.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 133 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions. Types 2, 3, 4, and AFR when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

SiteWise (SW): SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profile of 30% or 50% provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM – 6 AM)
- **CE50/CE30:** Economy for 9 hours night duration (Ex., 9 PM – 6 AM)
- **CA50/CA30:** for all night (during all dark hours)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1, 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

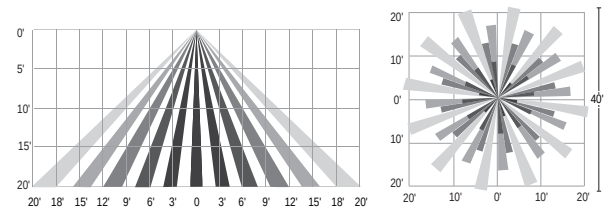
Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC wireless controller with #3 lens



Motion response options

Bi-Level Infrared Motion Response (BL-IMRI): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

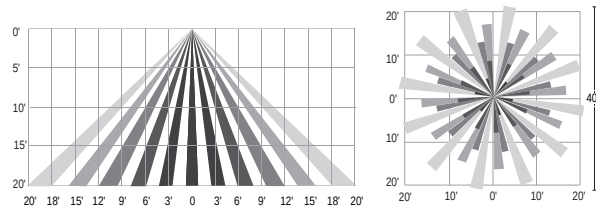
ECF-S EcoForm small

Area luminaire

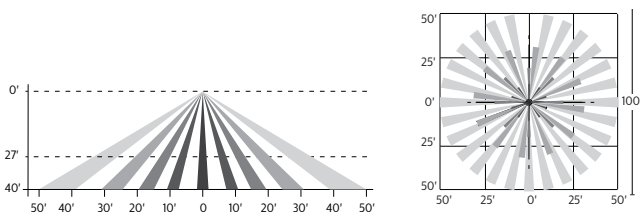
Specifications

Infrared Motion Response Lenses (IMRI3/IMRI7): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

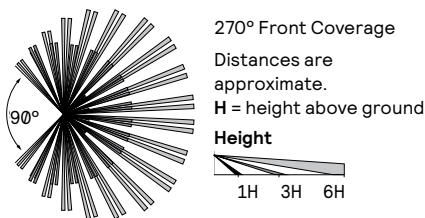
IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens



Infrared Motion Response Outboard (IMRO): Infrared Motion Response Outboard can be used in combination with automatic profile dimming and stand alone motion response. The pole mounted motion sensor is a PIR (passive infrared) device that can be mounted to a pole. One motion sensor per pole is required. Sensor finish is white Wattstopper EW-200-120-W or the EW-200-277-W. Order MS-A-120 or MS-A-277 separately. IMRO sensors require single voltage 120V or 277V input. If motion is detected during the time that the luminaire is operating at profile dimming mode specified, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns back to automatic profile dimming. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes. The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor (see chart for approximate detection patterns).



Pole Details: IMRO requires that the pole include additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option

which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole (see Gardco Poles specification sheets for more information).

Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering Twist-lock receptacle (TLRD5 or TLRD7), photocell or shorting cap is not included.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: signify.com

Warranty

EcoForm luminaires feature a 5-year limited warranty. See signify.com/warranties for complete details and exclusions.

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.



Wall Mount

LED Wall Sconce

101L



Project:	
Location:	
Cat.No:	
Type:	
Lamps:	Qty:
Notes:	

Gardco 101 LED wall sconces feature a low-profile design that provides wide flexibility in high performance exterior wall illumination. Full cutoff performance, usable illumination patterns, and powerful wattages combine into a compact and architecturally pleasing design. 101L sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 9500 lumens. Energy saving control options increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path of egress.

Ordering guide

example: 101L-32L-700-NW-G1-3-120-IMRI2-BZ

							Options			
Prefix	Number of LEDs	Drive Current	LED Color – Generation	Distribution	Emergency	Voltage	Controls	Electrical	Finish	
101L										
101L 101L LED Wall Sconce	16L 16 LEDs (1 module)	530 530mA	CW-G1 Cool White 5700K, 70CRI Generation 1	2 Type 2 3 Type 3 4 Type 4	EBPC Emergency Battery Pack Cold Weather ^{3,4,6,12} Leave blank to omit an emergency option	UNV 120-277V HVU 347-480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DD 0-10V Dimming Driver ^{5,6} DCC Dual Circuit Control ^{6,7,8} DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming (7 hours) ^{7,9,10} CM50 Median 50% Dimming (8 hours) ^{7,9,10} CE50 Economy 50% Dimming (9 hours) ^{7,9,10} DA50 All Night 50% Dimming ^{7,9,10} Photoelectric/Receptacle systems (Twist Lock Receptacle) PCB Photocontrol Button ^{5,10,11,12} TLRD5 Twist Lock Receptacle 5-Pin ¹³ TLRD7 Twist Lock Receptacle 7-Pin ¹³ TLRPC Twist Lock Receptacle w/ Photocell ^{11,12,16} Infrared Motion Response systems IMRI2 Integral with #2 lens ^{9,12,14} IMRI3 Integral with #4 lens ^{9,12,14} Network system (SiteWise) SW SW Integral module ^{4,17} Wireless system LLC2 Integral module with #2 lens ^{5,7,9,15} LLC3 Integral module with #3 lens ^{5,7,9,15}	Fusing F1 Single (120, 277, 347VAC) ¹² F2 Double (208, 240, 480VAC) ¹² F3 Canadian Double Pull (208, 240, 480VAC) ¹²	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote)	
		650 650mA ¹								
		700 700mA								
		1000 1000mA								
		1200 1200mA								
	32L 32 LEDs (2 module)	530 530mA	NW-G1 Neutral White 4000K, 70 CRI Generation 1							
		650 650mA ¹								
		700 700mA								WW-G1 Warm White 3000K, 70 CRI Generation 1
		1000 1000mA ²								

- 650mA only available with Emergency Battery Pack Cold Rated (EBPC) option
- 32L rated for 30°C at 1000mA
- Available for use with 16L and 32L in 530mA or 650mA only. Rated for -20°C to 35°C.
- Available in 120 or 277V only.
- Not available with Dual Circuit Control (DCC) option.
- EBPC is not available with DCC.
- Not available with Dimming Driver (DD) option.

- Available in 32L with 530mA. Consult technical support center for use with photocell and CS/CM/CE/DA.
- Available in 120-277V (UNV) only.
- Not available with LLC, TLR and DCC.
- Not available with 480V.
- Must specify input voltage.
- TLRD5/7 option not available with LLC, PCB, DCC. Works with 3 or 5 pin NEMA photocell dimming. Dimming will not be connected to TLR if ordering with DD, CS/CM/CE/DA and IMRI.
- Not available with DD, DCC or LLC.

- LLC2/3 Not available with TLR, PCB, IMRI, CS/CM/CE/DA. Ships with WS accessory attached to wireless module. Not for use with LLCR accessory.
- Not available with PCB, TLRD5/7, DCC, LLC.
- SW option is not available with any other control options with the exception of IMRI2, IMRI3 motion response options.

101L Sconce LED

Wall Mount

Luminaire Accessories (order separately)

Mounting accessories

Wall Mount

WS Wall Mounted Box for Surface Conduit

System accessories

Wireless system remote mount module

LLCR2-(F) #2 lens - specify finish in place of (F)
LLCR3-(F) #3 lens - specify finish in place of (F)

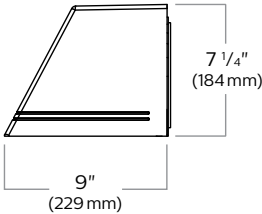
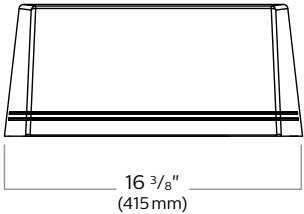
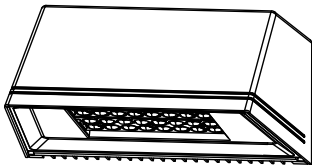
Central Remote Motion Response
(used connected to SiteWise main panel)

MS2-A-FVR-3
MS2-A-FVR-7

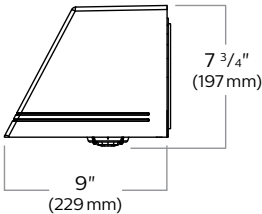
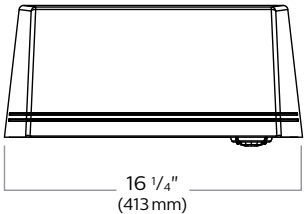
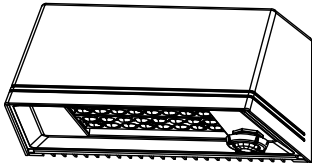
Wireless system remote controller accessory

Wireless system offers a remote radio/sensor module that allows to connected to a Limelight system (sold by other). Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers. See page 4 for Wireless system details.

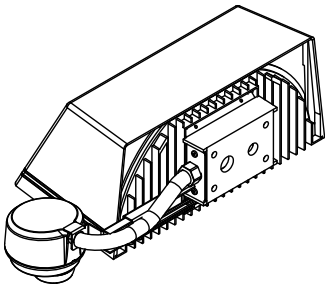
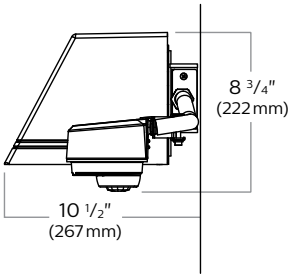
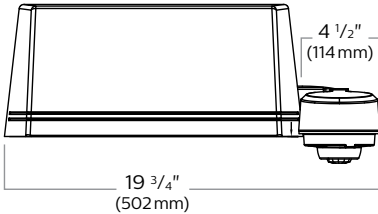
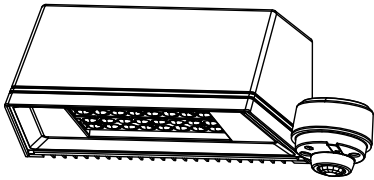
Dimensions



Motion Response



Wireless Controls



Luminaire Weights

LED Wall Sconce 101L	Weight
Luminaire	13.5 lbs
Luminaire - EBPC (EM battery pack)	17.0 lbs
Luminaire - Integrated system controls	16.3 lbs

101L Sconce LED

Wall Mount

LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts ¹	Type 2			Type 3			Type 4		
					Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)
101L-16L-530-NW-G1	16	530	4000K	28	2944	B1-U0-G0	106	2687	B1-U0-G1	97	2747	B1-U0-G1	99
101L-16L-700-NW-G1	16	700	4000K	37	3789	B1-U0-G1	103	3458	B1-U0-G1	94	3535	B1-U0-G1	96
101L-16L-1000-NW-G1	16	1000	4000K	55	5050	B1-U0-G1	92	4609	B1-U0-G1	84	4712	B1-U0-G1	86
101L-16L-1200-NW-G1	16	1200	4000K	65	5744	B2-U0-G1	89	5242	B1-U0-G2	81	5359	B1-U0-G2	83
101L-32L-530-NW-G1	32	530	4000K	52	5698	B2-U0-G1	110	5200	B1-U0-G2	100	5316	B1-U0-G2	102
101L-32L-700-NW-G1	32	700	4000K	70	7242	B2-U0-G1	103	6609	B1-U0-G2	94	6757	B1-U0-G2	96
101L-32L-1000-NW-G1	32	1000	4000K	107	9797	B2-U0-G1	92	8941	B2-U0-G2	84	9140	B2-U0-G2	86

LED Wattage and Lumen Values (Emergency Mode)³

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Ave. System Watts (charging mode)	Type 2	Type 3	Type 4
101L-16L-NW-EBPC	16	N/A	4000K	14	1345	1228	1255
101L-32L-NW-EBPC	32	N/A	4000K	14	1754	1600	1636

1. Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.
3. For emergency EBPC option, publish values are based on initial lumens.

Luminaire options

DD: 0-10V dimming driver with leads supplied through back of luminaire (for secondary dimming controls by others).

Dynadimmer Automatic Profile Dimming: Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). Other dimming settings are also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Schedule	Duration	Level
Economy	9 PM - 6 AM	9 hours	50%
Median	10 PM - 6 AM	8 hours	50%
Safety	11 PM - 6 AM	7 hours	50%
Reactive 50	all night	dynamic	50%

TLRD5: Twist Lock Receptacle with 5 pins enabling dimming, can be used with a twistlock photoelectric cell or a shorting cap. Can also be used with third party control system.

TLRD7: Twist Lock Receptacle with 7 pins enabling dimming and additional functionality, can be used with twistlock photoelectric cell or a shorting cap. Can also be used with third party control system.

TLRDPC: Receptacle with twistlock photoelectric cell (must specify voltage). Receptacle located on top of luminaire housing.

IMRI2, IMRI3: Infrared Motion Response Integral (IMRI). IMRI module is mounted integral to the luminaire door and is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts for approximate detection patterns). Motion response used in combination of Dynadimmer and SiteWise are not programmable and used to override controllers schedule when motion is detected. When used not combined with any controller, IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to 100% light output. Dimming on low is factory set to 50% with 5 minute default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50% of the normal constant wattage reducing the light level. IMRI can also be specified with automatic profile dimming for the added benefit of a combined dimming profile with sensor detection, where the PIR sensor will override the dimming profile when occupancy is detected. Passive infrared (PIR) motion sensor, WattStopper FSP-211, equipped with lens choice specified. Available from 120V to 277V input only. Motion sensor off state power is 0.0 watts. The FSP-211 can also be reprogrammed with WattStopper's FSIR-100 remote programming tool accessory.

DCC: Dual Circuit Control permits separate switching of 32L models only, where a quantity of (2) 16 LED modules are controlled independently by use of two sets of leads, one for each module.

SW

SiteWise option is a fully integrated controller that connects to SiteWise system in order to offer a complete area lighting management system. The communication signal is based on patented central dimming technology. SiteWise delivers it deliver optimal energy savings using your site's existing cabling. No additional wiring required, installation and commissioning are simple. An intuitive, mobile app makes it easy for authorized users to set schedules to meet site specific lighting needs, local regulations, and energy codes.

Wireless system: 101L luminaires are available with optional wireless controllers ready to be connected to a Limelight system (sold by other). The system allows you to Wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless System can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor.

101L Sconce LED

Wall Mount

Luminaire options (continued)

F1: Fusing Single (for 120, 277 or 347VAC)

F2: Fusing Double (for 208, 240 or 480VAC)

F3: Fusing Canadian Double Pull
(for 208, 240 or 480VAC)

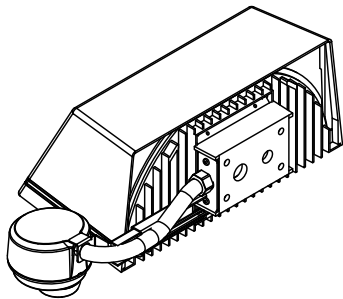
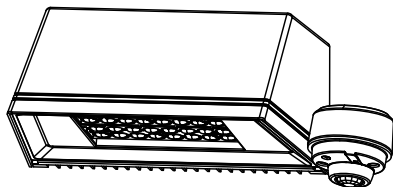
EBPC: Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Dual light engines (32L) are wired in parallel, both operating in emergency mode to meet various redundancy lamp

requirements. Also available with single light engine (16L). Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost.

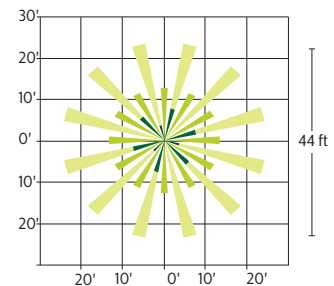
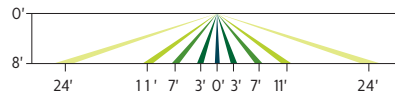
Infrared Motion Response and Wireless system sensor coverage patterns

LLC2/3 Luminaire mounted controller

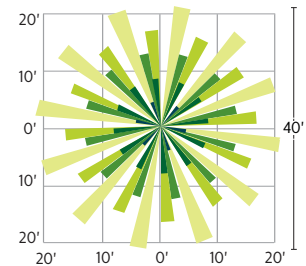
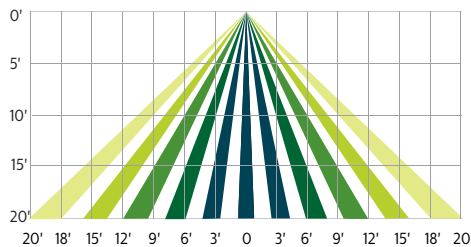
Controller attached to luminaire and Includes radio, photocell and motion sensor with #2 or #3 lens for 8-20' mounting heights.



IMRI2/LLC2/LLCR2

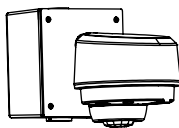


IMRI3/LLC3/LLCR3

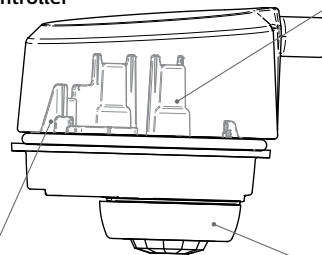


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

101L Sconce LED

Wall Mount

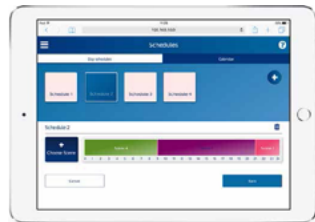
SiteWise system

SiteWise is a complete area lighting management system including a luminaire integrated controller, dimming signal transmitter cabinet, and locally accessible user interface. Installation and commissioning are simple. The cabinet communicates with the luminaires using a patented central dimming technology. The control signal is embedded on the existing electrical line – no new cabling is required. An intuitive, locally accessible interface makes it easy for authorized users to set schedules in order to meet site specific lighting needs, local regulations, and energy codes.

SiteWise system diagram



SiteWise system interface



SiteWise has an intuitive user interface that makes it easy to plan, edit, and implement lighting schedules for your site. Authorized users can access the interface via a local app.

To ensure that only authorized users can access your lighting, SiteWise offers two user types, each with different permissions. An advanced user, or administrator, can set and edit schedules using the ten pre-set scenes, assign those schedules to calendar days, and check system status.

For everyday use, a basic user can manually override a schedule that is currently running but cannot create or edit schedules.

SiteWise system specifications

The SiteWise system includes both luminaires and controls. The controls used for SiteWise are circuit load dependent. Required for a complete installation are the following SiteWise components: user interface, control kit, dimming signal transmitter cabinet, and dimming signal receiver located in the luminaire (**SW** option). Optional luminaire-integrated or external motion sensors may also be specified as required. Within the electrical closet, the control kit and dimming signal transmitter cabinet are installed into the electrical system between the existing breaker panel and the site luminaires. New LED luminaires containing the dimming signal receiver are installed on the site. Once completed, use of the interface allows for scheduling and override capabilities. Wireless access point and tablet should be supplied by others. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise

101L Sconce LED

Wall Mount

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion, 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Light Engine

Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver. Electrical components are RoHS compliant. IP66 sealed light engines. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink

Integral door/heat sink design made of low copper die cast Aluminum alloy for a high resistance to corrosion.

LED Module

Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000K nominal (+/- 275K), CRI 70 Min. Available in other color temperatures including Cool White, 5700K and Warm White, 3000K.

SiteWise Network System

SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems.

Hardware

All exposed screws shall be stainless and/or corrosion resistant and captive.

Optical System

The advanced LED optical systems provide IES Types 2, 3, 4. Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Dark sky compliant with 0% uplight and U0 per IESNA TM-15.

Driver

High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Surge Protection

Each luminaire is provided as standard with surge protector (designed SP1) tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA.

Wiring (supplied by others)

Splices must be made in the junction box.

Finish

Five standard colors offered in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom color matching available.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with EC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

LED Useful Life

Luminaire Useful Life accounts for LED lumen maintenance. Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, LED LM-80/TM-21, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C.

Certifications and Compliance

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when inverted upward facing when mounted in covered ceiling application. Emergency Battery Pack option is tested and listed to UL924 and CSA C22.2 No. 141-10 DesignLights Consortium qualified on models as listed on DLC QPL. Luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F).

Limited Warranty

5-year limited warranty. See [philips.com/warranties](https://www.philips.com/warranties) for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

101L Sconce LED

Wall Mount

LED Performance

Predicted lumen depreciation data ¹				
Ambient Temperature (°C)	Driver mA	Calculated L ₇₀ hours ^{1,2}	L ₇₀ per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
25°C	up to 1200 mA	>100,000	>60,000	88%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours.





Tree no. 107

Tree no.101

Tree no.102

Tree no.103

Trees no.
104,105,106



Tree no. 108

Tree no. 109



Tree outside of property line

Tree no. 111

Tree no. 112