


**CITY OF OKEECHOBEE**  
**Application for Site Plan Review**


Pag 1 of 3

	<p><b>City of Okeechobee</b>  <b>General Services Department</b>  <b>55 S.E. 3<sup>rd</sup> Avenue, Room 101</b>  <b>Okeechobee, Florida 34974</b>  <b>Phone: (863) 763-3372, ext. 9820</b>  <b>Fax: (863) 763-1686</b>  <b>E-mail: <a href="mailto:pburnette@cityofokeechobee.com">pburnette@cityofokeechobee.com</a></b></p>	<p>Date Received: <b>1-3-23</b></p> <p>Application No.: <b>23-002-TKC</b></p> <p>Fee Paid: <b>1094.59</b></p> <p>Receipt No.: <b>59102</b></p> <p>Hearing Date: <b>2-16-23</b></p>
<b>APPLICANT INFORMATION</b>		
1	Name of property owner(s): Westlake Royal Roofing LLC.	
2	Owner mailing address: 2801 Post Oak Blvd, Suite 600 Houston TX 77056	
3	Name of applicant(s) if other than owner: --	
4	Applicant mailing address: --	
5	Name of contact person (state relationship): Project Manager	
6	Contact person daytime phone(s) and email address: Andy Medina (863) 800-3046	
7	Engineer: Name, address and phone number: Santos Medina III P.O. Box 253 Bartow FL 33831 863-800-3046	
8	Surveyor: Name, address and phone number: Robert Lazenby IV P.O. Box 253 Bartow FL 33831 863-800-3046	
<b>PROPERTY and PROJECT INFORMATION</b>		
9	Property address/directions to property: NE 9th Avenue Okeechobee	
10	Parcel Identification Number 3-15-37-35-0020-00000-0030	
11	Current Future Land Use designation: Industrial	
12	Current Zoning district: Industrial	
13	<p>Describe the project including all proposed uses, type of construction and conceptual building layout, how the business or use is expected to operate on the site, including but not limited to: number of employees expected; hours of operation; location, extent and type of any outdoor storage or sales, etc., and fire flow layout. Use additional page if necessary.</p> <p>The existing shell rock outdoor storage area will be paved and will be supported with appropriate storm water.</p>	
14	<p>Describe existing improvements on property (for example, the number and type of buildings, dwelling units, occupied or vacant, etc.). Use additional page if necessary.</p> <p>The site is currently being utilized as an outdoor storage area. this will stay the same.</p>	
15	Total land area in square feet (if less than two acres): or acres: 3.153	
16	Is proposed use different from existing or prior use <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

CITY OF OKEECHOBEE  
Application for Site Plan Review

Pag 2 of 3

17	Number and description of phases: <b>There will only be one phase.</b>
18	Source of potable water: <b>Unknown</b>
19	Method of sewage disposal: <b>Unknown</b>

ATTACHMENTS REQUIRED FOR ALL APPLICATIONS		
20	Applicant's statement of interest in property	
✓ 21	One (1) copy of last recorded warranty deed	
✓ 22	Notarized letter of consent from property owner (if applicant is different from property owner)	
✓ 23	<b>Three (3) CERTIFIED BOUNDARY and TOPOGRAPHIC</b> surveys, (one to be no larger than 11 x 17; scale not less than one inch to 20 feet; North point) containing: a. Date of survey, surveyor's name, address and phone number b. Legal description of property pertaining to the application c. Computation of total acreage to nearest tenth of an acre d. Location sketch of subject property, and surrounding area within one-half mile radius	
✓ 24	Two (2) sets of aerials of the site.	
✓ 25	Eleven (11) copies of sealed site plan drawings (see attached checklist for details of items to be included)	
N/A 26	Eleven (11) copies of drawing indicating facades for all buildings, including architectural elevations.	
27	Eleven (11) copies of landscape plan, including a separate table indicating the number of trees and shrubs by type and showing both the official and common name of each type of tree and shrub.	
28	Eleven (11) copies of photometric lighting plan (see Code of Ordinances & LDR's Section 78-71 (A) (5)).	
✓ 29	Three (3) copies of sealed drainage calculations.	
? 30	Attach a Traffic Impact Study prepared by a professional transportation planner or transportation engineer, if the rezoning or proposed use will generate 100 or more peak hour vehicle trip ends using the trip generation factors for the most similar use as contained in the Institute of Transportation Engineers most recent edition of <u>Trip Generation</u> . The TIA must identify the number of net new external trips, pass-bay calculations, internal capture calculations, a.m. and p.m. peak hour trips and level of service on all adjacent roadway links with and without the project.	
✓ 31	USB flash drive of application	
32	Nonrefundable application fee: \$1,000.00 plus \$30.00 per acre.  <b>NOTE: Resolution No. 98-11 Schedule of Land Development Regulation Fees and Charges - When the cost for advertising, publishing and mailing notices of public hearings exceeds the established fee, or when a professional consultant is hired to advise the City on the application, the applicant shall pay the actual costs.</b>	
<b>NOTE: Submissions will be reviewed by the General Services Coordinator and City Planner for all necessary documentation. The Applicant will be notified at least 10 days prior to the TRC meeting whether or not additional information is required to proceed or if the review will be rescheduled to the next TRC meeting.</b>		
<b>Confirmation of Information Accuracy</b>		
I hereby certify that the information in this application is correct. The information included in this application is for use by the City of Okeechobee in processing my request. False or misleading information may be punishable by a fine of up to \$500.00 and imprisonment of up to 30 days and may result in the summary denial of this application.		
	<u>Christopher Hedrick</u>	<u>9/7/2022</u>
Signature	Printed Name	Date

**For questions relating to this application packet, call the General Services Dept. at (863) 763-3372, Ext. 9820**

Rev. 04/20

CITY OF OKEECHOBEE  
Application for Site Plan Review  
City of Okeechobee  
Checklist for Site Plan Review

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	REQUIRED INFORMATION
✓1	Completed application (1)
✓2	Map showing location of site (may be on the cover sheet of site plan)
✓3	Eleven (11) copies of sealed site plan drawings prepared at a scale no smaller than one inch equals 60 feet, or in the case of small projects, the largest scale that can accommodate the entire site and all areas within 50 feet of the project boundary, and the scale, legend, and author block all on one 24" by 36" sheet. The site plan drawings shall include the location of all existing and proposed improvements, including, but not limited to:
✓	3.1 Water courses, water bodies, floodplains, wetlands, important natural features and wildlife areas, soil types, protected trees and vegetation or environmentally sensitive areas
	3.2 Streets, sidewalks, property lines and rights-of-way
	3.3 Utility lines/facilities, fire hydrants, septic tanks and drainfields
	3.4 Bridges, culverts and stormwater management facilities
	3.5 Buildings and structures and their distances from boundaries of the property, streets, and other structures
	3.6 Setback lines and required yards
	3.7 Ingress and egress to the site and buildings
	3.8 Vehicular use areas including off-street parking and loading areas
	3.9 On-site recreation and open space
	3.10 Landscaping, screens, buffers, walls, and fences,
	3.11 Method of solid waste collection and locations of and access to dumpsters
	3.12 Lighting and signs
4	Drawing notes and tabulations showing the following information shall be included along with the plan:
	4.1 Name, address and phone number of the owner
	4.2 Name, address and phone number of any agent, architect, engineer and planner
	4.3 Complete legal description of the property
	4.4 Future land use designation, current zoning and existing land use of the property and all abutting properties
	4.5 Total acreage of the property (square footage if less than two acres)
	4.6 Total # of dwelling units, by bedroom size; square footage of nonresidential uses by type of use (and/or seating, etc. as necessary to indicate the intensity)
	4.7 Number of off-street parking spaces provided (including handicapped spaces) and loading spaces and the calculation of, and basis for, the number of such spaces required by the Land Development Regulations
	4.8 Impervious surface calculations showing: the square footage and as a% of the total site for existing impervious surfaces, additional proposed impervious surfaces and the resulting proposed total impervious surfaces



#21

THIS INSTRUMENT PREPARED BY AND RETURN TO:

John E. Burdeshaw  
Lake Okeechobee Title Inc.  
425 SW Park Street  
Okeechobee, FL 34974

Property Appraisers Parcel Identification (Folio) Numbers: 3-15-37-35-0020-00000-0030

SPACE ABOVE THIS LINE FOR RECORDING DATA

## WARRANTY DEED

**THIS WARRANTY DEED**, made the 14th day of February, 2020 by MDC Industrial, LLC, A Florida Limited Liability Company, whose post office address is 3553 SE Doubleton Drive, Stuart, FL 34997 herein called the grantor, to Boral Roofing LLC, A Delaware Limited Liability Company whose post office address is 200 Mansell Court East Suite 305, Roswell, GA 30076, hereinafter called the Grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

**WITNESSETH:** That the grantor, for and in consideration of the sum of TEN AND 00/100'S (\$10.00) Dollars and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in OKEECHOBEE County, State of Florida, viz.:

Lot 3 CITY OF OKEECHOBEE COMMERCE CENTER, according to the plat thereof as recorded in Plat book 7, pages 10 through 14, public records of Okeechobee County, Florida

Subject to easements, restrictions and reservations of record and to taxes for the year 2020 and thereafter. None of which are intended to be reimposed hereby.

**TOGETHER**, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining. **TO HAVE AND TO HOLD**, the same in fee simple forever.

**AND**, the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land, and hereby warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2019.

**IN WITNESS WHEREOF**, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Paul Burdeshaw  
Witness #1 Signature

PAUL BURDESHAW  
Witness #1 Printed Name

John E. Burdeshaw  
Witness #2 Signature

JOHN E BURDESHAW  
Witness #2 Printed Name

MDC Industrial, LLC, A Florida Limited Liability Company

Michael D. Craig  
Michael D. Craig, Member



STATE OF FLORIDA  
COUNTY OF OKEECHOBEE

The foregoing instrument was acknowledged before me this 14th day of February, 2020 by Michael D. Craig Member of MDC Industrial, LLC, A Florida Limited Liability Company on behalf of the company. He is personally known to me or has produced \_\_\_\_\_ as identification.

SEAL



JOHN E BURDESHAW  
Commission # GG 108759  
Expires September 25, 2021  
Bonded Thru Budget Notary Services

John E. Burdeshaw  
Notary Signature

My Commission Expires:

Printed Notary Signature



[Department of State](#) / [Division of Corporations](#) / [Search Records](#) / [Search by Entity Name](#) /

## Detail by Entity Name

Foreign Limited Liability Company

**WESTLAKE ROYAL ROOFING LLC**

### Filing Information

**Document Number** M98000000264

**FEI/EIN Number** 33-0769563

**Date Filed** 03/04/1998

**State** DE

**Status** **ACTIVE**

**Last Event** **LC AMENDMENT AND NAME CHANGE**

**Event Date Filed** 02/22/2022

**Event Effective Date** NONE

### Principal Address

2801 Post Oak Boulevard  
Suite 600  
HOUSTON, TX 77056

Changed: 05/18/2022

### Mailing Address

2801 Post Oak Boulevard  
Suite 600  
HOUSTON, TX 77056

Changed: 05/18/2022

### Registered Agent Name & Address

NRAI SERVICES, INC  
1200 South Pine Island Road  
Plantation, FL 33324

Name Changed: 12/14/2011

Address Changed: 12/14/2011

### Authorized Person(s) Detail

#### **Name & Address**

Title Manager

Chao, Albert  
 2801 Post Oak Boulevard  
 Suite 600  
 HOUSTON, TX 77056

Title VP

Cyprian, Derrick  
 2801 Post Oak Boulevard  
 Suite 600  
 HOUSTON, TX 77056

Title Member

Westlake Royal Concrete Tile Inc.  
 2801 Post Oak Boulevard  
 Suite 600  
 HOUSTON, TX 77056

#### Annual Reports

Report Year	Filed Date
2020	03/17/2020
2021	02/11/2021
2022	05/18/2022

#### Document Images

<a href="#">05/18/2022 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">02/22/2022 -- LC Amendment and Name Change</a>	<a href="#">View image in PDF format</a>
<a href="#">02/11/2021 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">03/17/2020 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">11/04/2019 -- LC Amendment</a>	<a href="#">View image in PDF format</a>
<a href="#">02/11/2019 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">01/15/2018 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/25/2017 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/26/2016 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/22/2015 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/14/2014 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/04/2013 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/24/2012 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">12/21/2011 -- LC Name Change</a>	<a href="#">View image in PDF format</a>
<a href="#">12/14/2011 -- Reg. Agent Change</a>	<a href="#">View image in PDF format</a>
<a href="#">03/18/2011 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">01/26/2010 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">02/06/2009 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">06/13/2008 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/26/2007 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">04/28/2006 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>

<a href="#">01/27/2005 -- REINSTATEMENT</a>	<a href="#">View image in PDF format</a>
<a href="#">01/23/2003 -- LIMITED LIABILITY CORPORATION</a>	<a href="#">View image in PDF format</a>
<a href="#">08/01/2002 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">02/20/2001 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">05/01/2000 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">09/28/1999 -- ANNUAL REPORT</a>	<a href="#">View image in PDF format</a>
<a href="#">03/04/1998 -- Foreign Limited</a>	<a href="#">View image in PDF format</a>

Florida Department of State, Division of Corporations

Division of Corporations

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Florida Department of State  
Division of Corporations  
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Division of Corporations  
Fax Number : (850) 617-6383

From:

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Account Number : FCA000000023  
Phone : (954) 208-0845  
Fax Number : (614) 573-3996

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Email Address: \_\_\_\_\_

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**BORAL ROOFING LLC**

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# APPLICATION BY FOREIGN LIMITED LIABILITY COMPANY TO FILE AMENDMENT TO CERTIFICATE OF AUTHORITY TO TRANSACT BUSINESS IN FLORIDA

## SECTION I (1-4 must be completed)

1. Name of limited liability Company as it appears on the records of the Florida Department of

State: Boral Roofing LLCEnter new principal office address, if applicable: 2801 Post Oak Blvd., Suite 600(Principal office address  
MUST BE A STREET ADDRESS)Houston, TX 77056

Enter new mailing address, if applicable:

(Mailing address)MAY BE A POST OFFICE BOX)2801 Post Oak Blvd., Suite 600Houston, TX 770562. The Florida document number of this limited liability company is: M1980000002643. Jurisdiction of its organization: DE4. Date authorized to do business in Florida: 03/04/1998

## SECTION II (5-9 complete only the applicable changes)

5. New name of the limited liability company: \_\_\_\_\_  
(must contain "Limited Liability Company," "L.L.C." or "LLC.")WESTLAKE ROYAL ROOFING LLC

(If name unavailable, enter alternate name adopted for the purpose of transacting business in Florida and attach a copy of the written consent of the managers or managing members adopting the alternate name. The alternate name must contain "Limited Liability Company," "L.L.C." or "LLC.")

6. If amending the registered agent and/or registered officer address on our records, enter the name of the new registered agent and/or the new registered office address here:Name of New Registered Agent: \_\_\_\_\_New Registered Office Address: \_\_\_\_\_Enter Florida Street AddressCity Florida Zip CodeNew Registered Agent's Signature, if changing Registered Agent:

*I hereby accept the appointment as registered agent and agree to act in this capacity. I further agree to comply with the provisions of all statutes relative to the proper and complete performance of my duties, and I am familiar with and accept the obligations of my position as registered agent as provided for in Chapter 605, F.S. Or, if this document is being filed to merely reflect a change in the registered office address, I hereby confirm that the limited liability company has been notified in writing of this change.*

If Changing Registered Agent, Signature of New Registered Agent

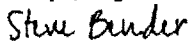
DocuSign Envelope ID: 3A1B2725-96B1-418A-B58B-DD7F9E92BED4

7. If the amendment changes the jurisdiction of organization, indicate new jurisdiction:

8. If the amendment changes person, title or capacity in accordance with 605.0902 (1)(c), indicate that change:

<u>Title/ Capacity</u>	<u>Name</u>	<u>Address</u>	<u>Type of Action</u>
MGR	Ernest C. McLean III	200 MANSELL COURT EAST SUITE 310	<input type="checkbox"/> Add
		ROSWELL, GA 30076	<input checked="" type="checkbox"/> Remove
MGR	DARREN SCHULTZ	200 MANSELL COURT EAST SUITE 310	<input type="checkbox"/> Add
		ROSWELL, GA 30076	<input checked="" type="checkbox"/> Remove
AMBR	ERIC MILLER	200 MANSELL COURT EAST SUITE 310	<input type="checkbox"/> Add
		ROSWELL, GA 30076	<input checked="" type="checkbox"/> Remove
AMBR	HUGH LAURIE	200 MANSELL COURT EAST SUITE 310	<input type="checkbox"/> Add
		ROSWELL, GA 30076	<input type="checkbox"/> Remove
AMBR	TIMOTHY MCCOY	200 MANSELL COURT EAST SUITE 310	<input type="checkbox"/> Add
		ROSWELL, GA 30076	<input checked="" type="checkbox"/> Remove

9. Attached is a certificate, if required: no more than 90 days old, evidencing the aforementioned amendment(s), duly authenticated by the official having custody of records in the jurisdiction under the law of which this entity is organized.



Signature of the authorized representative

Mark Steven Bender VP of member

Typed or printed name of signee

Filing Fee: \$25.00

ASST. SECRETARY MICHAEL MILDERHALL 10701 S RIVER FRONT PKWY, SUITE 300, SOUTH JORDAN, UT  
840995 – REMOVE

ADD ALL

MBR WESTLAKE ROYAL CONCRETE TILE INC. 2801 POST OAK BLVD STE 600, HOUSTON, TX - 77056

MGR Albert Chao 2801 Post Oak Blvd Ste 600, Houston, TX - 77056-6105

Asst. Secretary Julia Feng 2801 Post Oak Blvd Ste 600, Houston, TX - 77056-6105

# Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF  
DELAWARE, DO HEREBY CERTIFY THAT THE SAID 'BORAL ROOFING LLC',  
FILED A RESTATED CERTIFICATE, CHANGING ITS NAME TO 'WESTLAKE  
ROYAL ROOFING LLC' ON THE TWENTY-NINTH DAY OF OCTOBER, A.D.  
2021, AT 9:53 O'CLOCK A.M.

  
Jeffrey W. Bullock, Secretary of State

2783446 8320  
SR# 20220628368

Authentication: 202724095  
Date: 02-22-22

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

# Westlake

## Royal Building Products™

August 30, 2022

To the City of Okeechobee, Florida

I, Derrick Cyprian, Vice President of Westlake Royal Roofing LLC ("Company"), formally known as Boral Roofing LLC, do hereby confirm that Christopher Hedrick, Senior Project Manager, is authorized to act for and on behalf of the Company for matters related to city permits for the Company property located at 1289 NE 9th Avenue, Okeechobee, Florida 34972 and 858 Northeast 12th Street, lot 3 Okeechobee, FL 34972, including signing all forms and other documents related to such city permitting matters.

This authorization is valid until the Company provides further written notice.

Sincerely,



Derrick Cyprian

Vice President

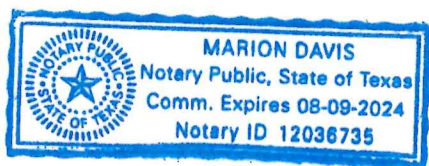
Westlake Royal Roofing LLC

713-960-9111

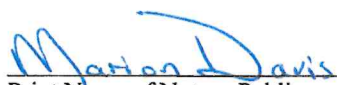
STATE OF TEXAS §  
COUNTY OF HARRIS §

On this 30<sup>th</sup> day of August 2022, before me, the undersigned officer, personally appeared Derrick Cyprian, who acknowledged himself to be the Vice President of Westlake Royal Roofing LLC and further acknowledged that he is authorized to execute this instrument as the act and deed of such limited liability company for the purposes contained herein.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 30<sup>th</sup> day of August 2022.



Notary Public in and for the State of Texas



Print Name of Notary Public

My Commission Expires: 8-9-24

#84



 <b>IMPERIAL TESTING and ENGINEERING, INC.</b> 3905 KIDRON ROAD LAKELAND FL 33811	<b>OKECHOBEE LOT 3</b> NE 9TH STREET OKEECHOBEE, FLORIDA	DATE OF DRAWING 3-17-22 MICHAEL H STILLINGER P.E. # 47011	<b>SITE LOCATION</b> PROJ. NO. 22701   FIGURE NO. 1
---	--	--	--

SURVEYORS NOTES:

1. LAST DATE OF FIELD WORK MAY 26, 2021.
2. BEARINGS BASED ON PLAT BEARING FOR THE CENTERLINE OF TRACT "R-1" (NE 9TH AVENUE) ACCORDING TO THE PLAT OF CITY OF OKEECHOBEE COMMERCE CENTER AS RECORDED IN PLAT BOOK 7, PAGE 10, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA, AS MEASURED BETWEEN RECOVERED PERMANENT REFERENCE POINTS SHOWN ON THIS MAP. PLAT BEARING BEING  $500^{\circ}16'18"E$ .
3. THE PROPERTY IS LOCATED WITHIN ZONE "X" MINIMAL FLOOD HAZARD AREA WITH THE PERMITER SWALES LYING WITHIN THE 0.2% ANNUAL FLOOD HAZARD AREA, ACCORDING TO FEMA MAP NUMBER 12093C0415C EFFECTIVE DATE 07/16/2015.
4. THE GROSS LAND AREA OF THE PROJECT PARCEL AS FIELD SURVEYED IS 3.153 ACRES
5. A PUBLISHED BENCHMARK WAS NOT FOUND IN THE VICINITY OF THIS PROPERTY. ELEVATIONS ARE BASED ON THE "CONTINENTALUS\_NGS2012.gsb" GEOID, AS MEASURED USING REAL TIME KINETIC GPS REFERENCED FROM FDOT FLORIDA PERMANENT REFERENCE NETWORK.
6. UNDERGROUND UTILITIES (SANITARY SEWER, STORM, POTABLE WATER, FIRE, ELECTRIC, GAS, CABLE, & TELEPHONE) WERE NOT LOCATED. ABOVE GROUND INDICATORS OF SUCH FACILITIES ARE SHOWN ON THIS MAP AS OBSERVED. NO INVESTIGATION WAS PERFORMED AS TO HOW THESE LOCATED FEATURES ARE CONNECTED BELOW THE GROUND.
7. UNDERGROUND ENCROACHMENTS WERE NOT LOCATED. ALL FEATURES SHOWN ON THIS MAP WERE LOCATED FROM VISIBLE EVIDENCE.
8. NO CEMETERIES OR BURIAL GROUNDS WERE OBSERVED ON THE PROPERTY.
9. VOLUME OF THE DIRT PILE ON SITE WAS NOT SURVEYED. THIS MAP SHOW THE PERIMETER AT EXISTING GROUND ONLY.
10. NO BUILDINGS WERE OBSERVED ON THE PROPERTY.
11. NO EVIDENCE OF EARTHWORK OR SOLID WASTE DUMPING WAS OBSERVED ON THE PROPERTY.
12. THIS MAP IS INTENDED TO BE DISPLAYED AT 1" = 30'.
13. THIS SURVEY IS WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE SEARCH. THERE MAY BE ADDITIONAL ENCUMBRANCES NOT SHOWN ON THE PLAT.

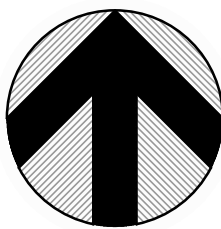
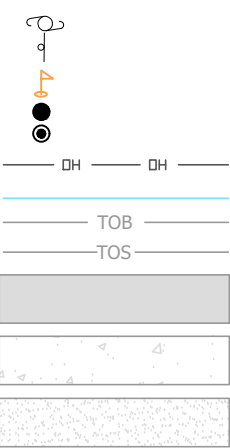
LEGAL DESCRIPTION

LOT 3 CITY OF OKEECHOBEE COMMERCE CENTER, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 7, PAGES 10 THROUGH 14, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

Legend:

FIRC = FOUND IRON ROD AND CAP  
FIR = FOUND IRON ROD  
SIRC = SET 1/2" IRON ROD WITH CAP STAMPED "LB8112"  
FCM = FOUND CONCRETE MONUMENT  
FN&D = FOUND NAIL & DISK  
SN&D = SET NAIL & DISK STAMPED "PRM / PCP LB8112"  
FIP = FOUND IRON PIPE  
NOID = NO IDENTIFICATION  
ORB = OFFICIAL RECORD BOOK  
PG = PAGE  
PB = PLAT BOOK  
R/W = RIGHT-OF-WAY  
C/L = CENTERLINE  
(M) = MEASURED, (D) = DESCRIPTION / DEED,  
(C) = CALCULATED, (P) PLAT  
POB = POINT OF BEGINNING  
POC = POINT OF COMMENCEMENT  
SET 1/2" IRON ROD WITH CAP STAMPED "TRAV PT LB8112"  
NAVD = NORTH AMERICAN VERTICAL DATUM  
NAD = NORTH AMERICAN DATUM  
LB = LICENSED BUSINESS

POWER POLE  
HIGHWAY SIGN  
UTILITY MARKING FLAG  
STEEL ROD  
NAIL & DISK  
OVERHEAD POWER LINE  
FLOOD HAZARD LINE  
TOB = TOP OF BANK  
TOS = TOE OF SLOPE  
ASPHALT AREA  
PAVERS  
SHELL PARKING  
OAK TREE  
PALM TREE

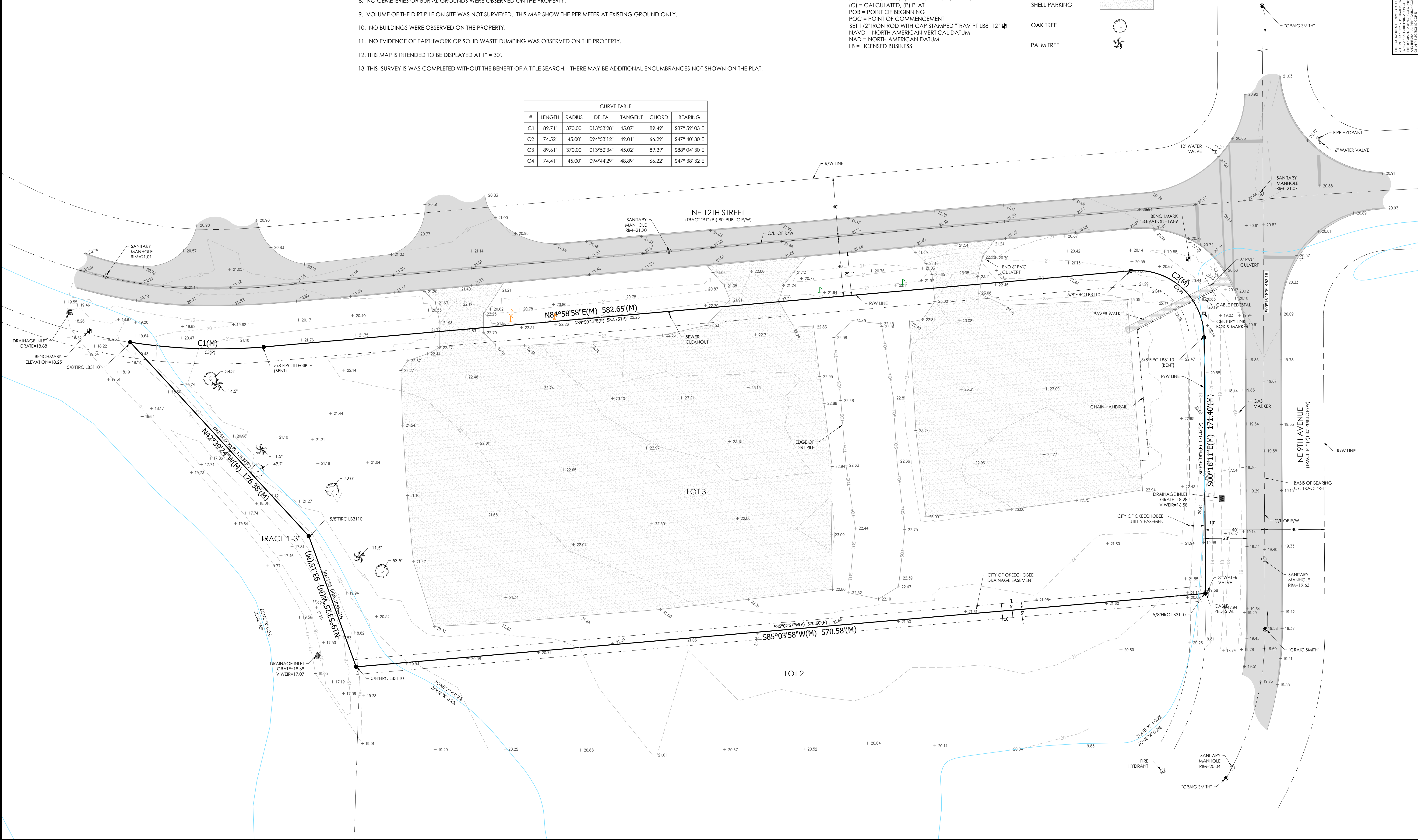


NORTH

SCALE: 1" = 30'  
0' 30' 60'

THIS DRAWING HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE SURVEYOR. ANY CHANGES TO THIS DRAWING MUST BE MADE IN THE ORIGINAL FILE. ANY CHANGES TO THIS DRAWING MUST BE MADE IN THE ORIGINAL FILE. ANY CHANGES TO THIS DRAWING MUST BE MADE IN THE ORIGINAL FILE.

CURVE TABLE					
#	LENGTH	RADIUS	DELTA	TANGENT	CHORD BEARING
C1	89.71'	370.00'	013°53'28"	45.07'	89.49° S87° 59' 03"E
C2	74.52'	45.00'	09°45'31.2"	49.01'	66.29° S47° 40' 30"E
C3	89.61'	370.00'	013°52'34"	45.02'	89.39° S88° 04' 30"E
C4	74.41'	45.00'	09°44'44.29"	48.89'	66.22° S47° 38' 32"E



NO.	DATE	APPROVED	DESCRIPTION
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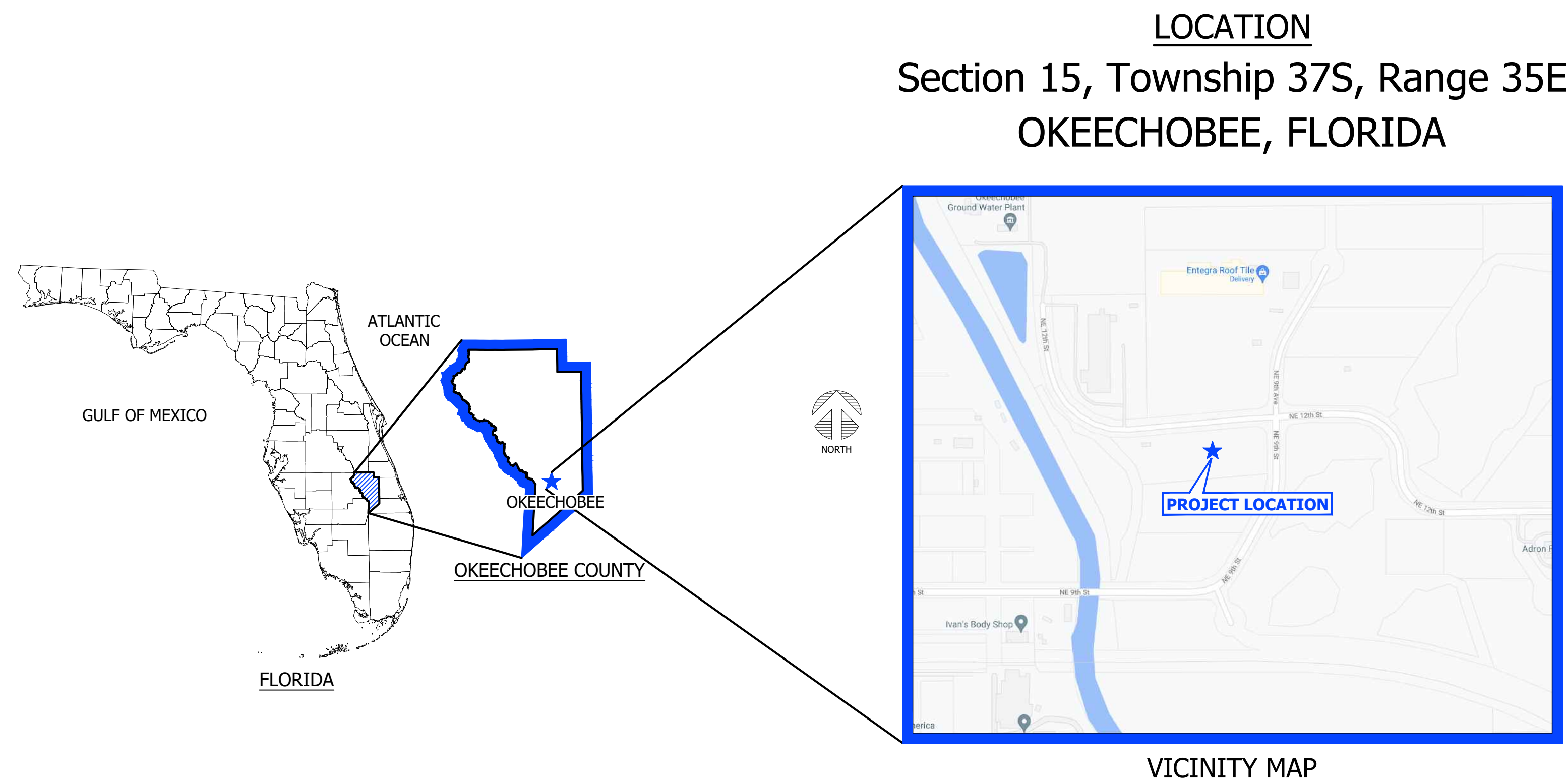
EMAIL: tozinty@basepointsurveying.com  
basepointsurveying.com  
MAILING P.O. BOX 253  
BARTON, FL 33831  
JENNIFER L. TOZINTY  
WOODBURN AVENUE  
BARTON, FL 33850  
FLORIDA CERTIFICATE OF  
AUTORIZATION # 13 8172



CLIENT:	BORAL
PROJECT:	OKEECHOBEE LOT 3
Boundary and Topographic Survey	
NE 9TH AVENUE, OKEECHOBEE, FL 34972	
PROJECT NO.	10583
SHEET	1 OF 1

# CITY OF OKEECHOBEE COMMERCE CENTER

## LOT 3 IMPROVEMENTS



**PREPARED FOR**  
WESTLAKE ROYAL ROOFING, LLC  
2801 POST OAK BLVD, STE 600  
HOUSTON, TX 77056

**PREPARED BY**



**SLOAN**  
Engineering Group

150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830    PHONE: (863) 800-3046    FAX: (863) 800-1159  
FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) #26247

SHEET INDEX				
#	SHEET TITLE	ISSUE DATE	REV #	REV DATE
C100	COVER	12/29/2022	--	--
C101	NOTES & SPECIFICATIONS	12/29/2022	--	--
C200	SWPP & DEMOLITION PLAN	12/29/2022	--	--
C300	SITE PLAN	12/29/2022	--	--
C400	GRADING & DRAINAGE PLAN	12/29/2022	--	--
C500	CROSS SECTIONS	12/29/2022	--	--
C600	SITE & DRAINAGE DETAILS	12/29/2022	--	--

REVISION HISTORY				
No.	DATE	DESCRIPTION	DESIGNED BY:	CHECKED BY:
			KL	SM

SUBMITTAL HISTORY				
No.	DATE	DESCRIPTION	DESIGNED BY:	CHECKED BY:
1	12/29/2022	INITIAL SUBMITTAL TO THE CITY OF OKEECHOBEE AND SPWMID	KL	SM

UTILITY SERVICE PROVIDERS:				
CENTURYLINK BILL MCCLOUD (850) 599-1444	COMCAST-FIBR TONY SPRINGS (772) 321-3425	FLA PUBLIC UTILITIES BRAD COLLINS (561) 252-3308	CITY OF OKEECHOBEE UTILITIES DE ERIC PHILLIPS 863-298-4174 JOHN HAYFORD (863) 763-9460	FLORIDA POWER & LIGHT--OKEECHOBEE JOEL BRAY (386) 586-6403

CONSTRUCTION MATERIALS QUALITY AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CITY OF OKEECHOBEE SPECIFICATIONS AND STANDARDS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



CLIENT: WESTLAKE ROYAL ROOFING, LLC

PROJECT: CITY OF OKEECHOBEE COMMERCE CENTER

PROJECT NO. 2373

COVER

NE 9TH AVENUE, OKEECHOBEE, FL 34972

SHEET C100

DESIGNED BY: KL

DRAWN BY: KL

CHECKED BY: SM

REVISION BLOCK

12/29/2022

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
LICENSE NO. 74538

STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
LICENSE NO. 74538

SLOAN Engineering Group

150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830  
(863) 800-3046  
FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) #26247

ASBUILT/RECORD DRAWING NOTES FOR CONTRACTOR

ALL ASBUILT/RECORD DRAWING INFORMATION SHALL BE PROVIDED FROM A LICENSED PROFESSIONAL LAND SURVEYOR IN BOTH HARD COPY SIGNED & SEALED PRINTS AND DIGITAL FORMAT. ALL DATA SHALL BE ON THE SAME BENCHMARK AS THE DESIGN PLANS AND IN THE STATE PLANE COORDINATE SYSTEM. DIGITAL COPIES OF THE CONSTRUCTION PLANS WILL BE PROVIDED FOR A BASIS OF THE ASBUILT/RECORD DRAWINGS. THE FOLLOWING IS A LIST OF ITEMS TO BE PROVIDED TO THE ENGINEER FOR REVIEW BEFORE FINAL CERTIFICATIONS CAN BE ISSUED. THIS LIST, WHILE EXHAUSTIVE, IS NOT MEANT TO BE ALL-INCLUSIVE. PLEASE USE IT AS A GUIDELINE FOR MINIMUM STANDARDS. ALL DATA PROVIDED SHALL ALSO MEET MINIMUM STANDARDS OF THE UTILITY COMPANY, WATER MANAGEMENT DISTRICT, AND LOCAL GOVERNMENT AS APPLICABLE.

GENERAL:

1. AUTOCAD POINTS WITH DESCRIPTIONS TO BE PROVIDED ON A LOGICAL LAYERING SYSTEM.
2. ALL ITEMS IDENTIFIED ON THE SITE PLAN SHOULD BE SHOWN ON THE ASBUILT/RECORD DRAWING UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THIS INCLUDES ITEMS SUCH AS LIGHT POLES, BINE RACKS, CURBING, SIDEWALKS, FENCING, UTILITY PADS, ETC.
3. VERTICAL AND HORIZONTAL SEPARATION BETWEEN MAINS SHALL BE DIMENSIONED ON THE ASBUILT/RECORD DRAWING. AT A MINIMUM, SEPARATION DIMENSIONS SHALL BE ADDED IN LOCATIONS WHERE IDENTIFIED ON THE CONSTRUCTION PLANS TO SHOW THE ITEMS WERE CONSTRUCTED PER APPLICABLE STANDARDS.
4. ANY CONFLICT SEPARATIONS LESS THAN THOSE ALLOWABLE ARE TO BE SPECIFICALLY NOTED AND DIMENSIONED.

DRAINAGE & GRADING:

1. CONTROL STRUCTURE DATA INCLUDING ELEVATIONS, DIMENSIONS, AND PIPE SIZE/INVERT SHOWN ON THE CONTROL STRUCTURE DETAIL.
2. POND AND SWALE TOP AND TOE OF SLOPE ELEVATIONS AT INTERVALS NOT TO EXCEED 100 FEET OR CHANGE IN DIRECTION. VISIBLY LOW OR HIGH AREAS SHOULD ALSO BE DETAILED. SUFFICIENT SPOT GRADES SHOULD BE PROVIDED SO THAT THE POND OR SWALE CAN BE RECREATED DIGITALLY AS IT IS CONSTRUCTED FOR THE ENGINEER TO DETERMINE COMPLIANCE WITH THE DESIGN.
3. DRAINAGE STRUCTURE AND PIPE ASBUILT DATA SHOULD BE PROVIDED ADJACENT TO DESIGN DATA AND IN THE SAME FORMAT AS THE DESIGN.
4. SUFFICIENT LOT GRADES TO DEMONSTRATE LOTS DRAIN IN ACCORDANCE WITH THE DESIGN. MINIMUM SPOT GRADE AT EACH LOT CORNER FOR TYPE A OR TYPE C LOTS AND AN ADDITIONAL MID-LOT LINE GRADE FOR TYPE B LOTS. ASBUILT PAV GRADING IS NOT REQUIRED FOR RESIDENTIAL DEVELOPMENTS UNLESS DESIRED BY THE OWNER.
5. SUFFICIENT PAVEMENT GRADES, TYPICALLY AT INTERVALS NOT TO EXCEED 100 FEET OR CHANGE IN DIRECTION OR SLOPE.

DATUM

1. A PUBLISHED BENCHMARK WAS NOT FOUND IN THE VICINITY OF THIS PROPERTY. ELEVATIONS ARE BASED ON THE "CONTINENTAL\_NGSD2012B.gpr" GEOID, AS MEASURED USING REAL TIME KINETIC GOS REFERENCED FROM FOOT PERMANENT REFERENCE NETWORK.

DRAINAGE STRUCTURES

1. ALL DRAINAGE STRUCTURE SHALL CONFORM TO THE LATEST FOOT STANDARD PLANS UNLESS OTHERWISE NOTED.
2. GRATE ELEVATIONS FOR ALL TYPE 5 AND TYPE 6 INLETS REFER TO EDGE OF PAVEMENT.
3. GRATE ELEVATIONS FOR ALL DITCH BOTTOM INLETS REFER TO THE FLOW LINE OF PAVEMENT.

SEQUENCE OF ACTIVITIES

1. INSTALL SILT BARRIERS & TIRE BARRICADES AS SHOWN ON PLANS AS APPLICABLE.
2. ROUGH GRADE THE STORMWATER POND AS WELL AS TEMPORARY SWALES TO FORCE DELIVERY OF RUNOFF TO THE POND. THE POND WILL ACT AS A SEDIMENTATION BASIN.
3. STABILIZE CLEARED AREAS WITHIN 7 DAYS OF LAST DISTURBANCE IF RUNOFF IS NOT CAPTURED BY THE STORMWATER POND.
4. INSTALL STORM SEWER CONVEYANCE SYSTEMS.
5. CONSTRUCT ENTRANCE(S) AND PAVEMENT.
6. COMPLETE GRADING AND INSTALL PERMANENT SODDING OR OTHER PERMANENT STABILIZATION FEATURES.
7. WHEN ALL CONSTRUCTION IS COMPLETE, STABILIZE ANY REMAINING DISTURBED AREAS.
8. REMOVE INSTALLED SILT BARRIERS AFTER ALL DISTURBED AREAS ARE STABILIZED.

STORMWATER POLLUTION PREVENTION NOTES

**A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS REQUIRED BEFORE ANY EARTHMOVING ACTIVITIES COMMENCE. THE CONTRACTOR OR THEIR ASSIGNS SHALL BE THE RESPONSIBLE AUTHORITY FOR IMPLEMENTING THE SWPP. EACH PERSON MUST SIGN A CERTIFICATION TO CERTIFY THAT THEY UNDERSTAND AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GENERAL PERMIT FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORM WATER POLLUTION PREVENTION PLAN.**

GENERAL POLLUTION CONTROL NOTES

1. PRIOR TO ANY CLEARING OR CONSTRUCTION COMMENCEMENT, SILT FENCES SHALL BE INSTALLED IN THE AREAS DESIGNATED ON THIS PLAN. THOSE AREAS DESIGNATED TO BE REINFORCED SHALL HAVE INSTALLED A SECOND ROW OF SILT FENCE. THE SILT FENCE SHALL BE TRENCHED IN 4 INCHES DEEP AND BACKFILLED ON THE UPHILL SIDE.
2. AFTER SILT FENCES ARE INSTALLED, A ROCK CONSTRUCTION ENTRANCE 50 FEET LONG AND 10 FEET WIDE WITH 6 INCH DEEP FOOT #57 STONE LINED WITH FILTER FABRIC SHALL BE CONSTRUCTED AT EACH CONSTRUCTION ENTRANCE SHOWN ON THIS PLAN.
3. ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN A DUMPSTER AND HAULED OFF SITE TO A LANDFILL OR OTHER PROPER DISPOSAL SITE. THE DUMPSTER SHALL BE LOCATED IN DESIGNATED LOCATION SHOWN ON THIS PLAN.
4. DUST SHALL BE CONTROLLED WITH THE USE OF WATER IF NECESSARY.
5. ALL TOXIC MATERIALS USED IN CONSTRUCTION SHALL BE KEPT IN A COVERED SHED AS SHOWN IN DESIGNATED LOCATION SHOWN ON THIS PLAN.
6. A DOUBLE WALL FUEL TANK WILL BE PLACED ON A DRIP PAN TO CONTAIN AND PREVENT ANY FUEL LEAKS FROM BEING DISCHARGED IN STORM WATER RUNOFF.
7. PORT-O-LETS SHALL BE PLACED IN AREAS DESIGNATED ON THIS SITE PLAN.
8. NO VEHICLE MAINTENANCE WILL BE ALLOWED ON SITE.
9. A WASHDOWN SITE SHALL BE PLACED IN THE AREAS DESIGNATED. A SMALL VEGETATIVE BERM SHALL BE PLACED AROUND THE WASH DOWN AREA.
10. FILTER SOCKS SHALL BE PLACED AT THE ENTRANCE TO ALL EXISTING INLETS TO PREVENT THE STORM SEWER SYSTEM FROM DISCHARGING SEDIMENTS INTO THE RETENTION PONDS.
11. CONTRACTOR TO DEMO TREES AS REQUIRED TO ACCOMMODATE PROPOSED SITE DESIGN(REMOVE ROOT BASE OF ALL EXISTING TREES TO BE DEMOLISHED).
12. ALL CLEARED TREES AND VEGETATION SHALL BE BURNED ONSITE AFTER CONTRACTOR OBTAINS A BURN PERMIT. IF BURNING IS PROHIBITED, TREES TO BE HAULED AWAY.
13. SEDIMENTS MAY NOT BE ALLOWED TO ACCUMULATE MORE THAN HALF THE HEIGHT OF THE SILT FENCE. SEDIMENTS MUST BE PROPERLY DISPOSED OF. AFTER REMOVAL OF SILT FENCES, ALL DISTURBED AREAS SHALL BE GRASSED & MULCHED.
14. PONDS & BASIN CONTROL SHALL BE THE FIRST ITEMS CONSTRUCTED. SIDE SLOPES SHOULD BE IMMEDIATELY SODDED UPON COMPLETION.
15. OUTLETS OF ALL PIPES SHALL BE INSPECTED REGULARLY AND ANY BLOCKAGES REMOVED. ALL FLOW MUST BE MAINTAINED WITH ANY FENCING CONSTRUCTED TO ALLOW FLOW THROUGH OR UNDER THE FENCE.
16. DEWATERING, ALTHOUGH NOT ANTICIPATED, MAY BE REQUIRED FOR INSTALLATION OF UTILITIES, STORM SEWER, OR PAVEMENT. THE DURATION IS DEPENDANT ON THE SCHEDULE OF CONSTRUCTION. THE DEWATERING DISCHARGE WILL BE CONTAINED WITHIN A SETTLING AREA INSIDE THE NEAREST STORMWATER POND. THE SETTLING AREAS WILL BE PROVIDED WITH TURBIDITY BARRIERS IN ACCORDANCE WITH FOOT INDEX 102 & 103. AFTER DEWATERING WORK HAS BEEN COMPLETED, THE SETTLING AREAS WILL BE EXCAVATED AND/OR RESHAPED TO FINALIZE THE PONDS. DEWATERING STRUCTURES SHALL REMAIN IN PLACE UNTIL TRENCHING HAS BEEN COMPLETED. ALL DISCHARGE SHALL BE CONTAINED WITHIN THE PROJECT AREA AS DESCRIBED. NO GROUNDWATER SHALL BE PUMPED DIRECTLY OFFSITE.
17. DURING CLEARING AND GRUBBING AND SITE GRADING STAGES, AREAS THAT ARE DISTURBED AND INACTIVE FOR MORE THAN 7 DAYS SHALL BE STABILIZED WITH KYE GRASS APPLIED AT MANUFACTURERS RECOMMENDATIONS. AFTER SEEDING EACH AREA SHALL BE MULCHED WITH 4000 POUNDS OF STRAW PER ACRE.

MAINTENANCE PLAN DURING CONSTRUCTION

1. SILT FENCE REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
2. MAINTENANCE SHALL BE PERFORMED ON THE CONSTRUCTION ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENT.
3. MULCH AND SOD THAT HAS WASHED OUT SHALL BE REPLACED IMMEDIATELY. ALL OTHER AREAS ARE TO BE SEEDED UNTIL VEGETATION IS ESTABLISHED.
4. ANY WASH OUTS GOING INTO RETENTION PONDS SHALL BE CORRECTED BY INSTALLING A TEMPORARY BERM UPHILL AND ADJACENT TO THE RETENTION POND. ONE SECTION OF 12 INCH PVC PIPE SHALL BE INSTALLED AT THE UPHILL TOE OF BERM AND THROUGH THE BERM INTO THE RETENTION POND. PIPE AND BERM SHALL BE REMOVED WHEN SURROUNDING GROUND IS PERMANENTLY STABILIZED.
5. INSPECTIONS SHALL BE PERFORMED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A RAIN EVENT THAT IS 0.5 INCHES OR GREATER.
6. THE INSPECTOR SHALL INSPECT ALL POINTS OF DISCHARGE. ALL DISTURBED AREAS OF CONSTRUCTION THAT HAVE NOT BEEN STABILIZED, AREAS WHERE VEHICLES ENTER AND EXIT THE SITE, AND SEDIMENT CONTROL STRUCTURES.
7. THE INSPECTOR SHALL FURNISH A STORM WATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM IN THE FORMAT DESCRIBED IN THE "SAMPLE COPY OF THE STORM WATER POLLUTION PREVENTION PLAN" AS OUTLINED ON THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION WEBSITE.

MAINTENANCE PLAN AFTER CONSTRUCTION

THE STORMWATER FACILITY MUST BE MAINTAINED CORRECTLY IF IT IS TO PERFORM IN THE MANNER IT WAS DESIGNED. THE STATEMENTS BELOW ARE INTENDED TO BE A GUIDE TO THE CORRECT WAYS TO MAINTAIN THIS FACILITY. THIS IS ONLY A GUIDE AND SHOULD BE REVISED AS FIELD CONDITIONS REQUIRE. THE MAINTENANCE ENTITY SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE. FACILITIES SHALL BE INSPECTED BY A PROFESSIONAL ENGINEER AT INTERVALS OUTLINED IN THE ENVIRONMENTAL RESOURCE PERMIT.

1. ALL STORMWATER PIPES, INLETS, CATCH BASINS, MANHOLES, FLUMES, POND INFLOW AND OUTFALL STRUCTURES (INCLUDING OIL SKIMMERS), AND DISCHARGE PIPES SHOULD BE INSPECTED ON A REGULAR BASIS (MONTHLY OR QUARTERLY) AND AFTER MAJOR RAINFALLS. THEY SHOULD BE MAINTAINED BY REMOVING BUILT-UP DEBRIS AND VEGETATION AND REPAIRING DETRIORATING STRUCTURES.
2. MOW GRASS (WEEKLY DURING THE SUMMER MONTHS AND BI-WEEKLY DURING THE REMAINDER OF THE YEAR) WITHIN THE STORMWATER RETENTION AREAS. GRASS CLIPPINGS SHALL BE COLLECTED AND PROPERLY DISPOSED OF.
3. CHEMICALS, OILS, GREASES OR SIMILAR WASTES ARE NOT TO BE DISPOSED OF DIRECTLY TO THE STORMWATER FACILITY OR THROUGH STORM SEWERS. TREATMENT PONDS ARE DESIGNED TO TREAT NORMAL ROAD, PARKING LOT, ROOF AND YARD RUNOFF ONLY. SOME CHEMICALS MAY INTERFERE WITH A TREATMENT POND'S FUNCTIONS OR KILL VEGETATION AND WILDLIFE. DISPOSE OF THESE POTENTIALLY DANGEROUS MATERIALS PROPERLY BY TAKING THEM TO RECYCLING FACILITIES OR TO COLLECTION LOCATIONS SPONSORED BY MANY LOCAL GOVERNMENTS. ALSO, DO NOT DISPOSE OF GRASS CLIPPINGS IN A SWIM. GRASS CLIPPINGS POSE PROBLEMS BY SMOTHERING DESIRABLE VEGETATION, CLOGGING OUTFALL STRUCTURES AND, WHEN THEY DECOMPOSE, MAY CAUSE UNSIGHTLY ALGAL BLOOMS THAT CAN KILL FISH.
4. ACCUMULATED POND SEDIMENTS MAY CONTAIN HEAVY METALS SUCH AS LEAD, CADMIUM AND MERCURY, AS WELL AS OTHER POTENTIALLY HAZARDOUS MATERIALS. THEREFORE, SEDIMENTS REMOVED FROM STORM SEWERS, INLETS, PIPES AND PONDS SHOULD BE DISPOSED OF AT AN APPROVED FACILITY (CHECK WITH YOUR COUNTY SOLID WASTE DEPARTMENT OR THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR DISPOSAL FACILITIES APPROVED TO ACCEPT TREATMENT POND SEDIMENT).
5. DURING ANY REPAIR OR MAINTENANCE ACTIVITY, USE CARE TO AVOID CAUSING EROSION OR SILTATION TRANSFER TO ADJACENT OR OFF-SITE AREAS.
6. ALTERATIONS (FILLING, ENLARGING, ETC.) OF ANY PART OF THE STORMWATER FACILITY IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM ALL APPLICABLE GOVERNING AGENCIES.
7. THE APPROVED OPERATION AND MAINTENANCE PERMIT AND AS-BUILT DRAWINGS ARE AVAILABLE AT YOUR LOCAL WATER MANAGEMENT DISTRICT SERVICE OFFERING OR FROM THE PERMITTING AGENCY HAVING JURISDICTION. REFER TO THOSE PLANS AND PERMITS FOR ADDITIONAL RESTRICTIONS, INSTRUCTIONS AND CONDITIONS.
8. IT IS USUALLY MORE COST-EFFECTIVE TO MONITOR AND PERFORM ROUTINE MAINTENANCE ON A STORMWATER MANAGEMENT SYSTEM, RATHER THAN LET IT FAIL AND HAVE TO RECONSTRUCT THE ENTIRE SYSTEM.
9. MOSQUITO GROWTH CAN BE MINIMIZED IN A STORMWATER MANAGEMENT SYSTEM, BY THE FOLLOWING MEASURES:
  - DO NOT DUMP GRASS CLIPPINGS OR OTHER ORGANIC DEBRIS INTO A SWIM
  - DECAYING GRASS CLIPPINGS AND OTHER DECOMPOSING VEGETATION CREATE IDEAL CONDITIONS FOR BREEDING MOSQUITOES.
  - CLEAN OUT ANY OBSTRUCTIONS THAT GET INTO THE SYSTEM. DEBRIS CAN OBSTRUCT FLOW AND HARBOR MOSQUITO EGGS AND LARVAE.
  - REMOVE WATER LETTUCE AND WATER HYACINTH, WHICH NOURISH AND SHELTER MOSQUITO LARVAE.

PAVING OPERATION NOTES

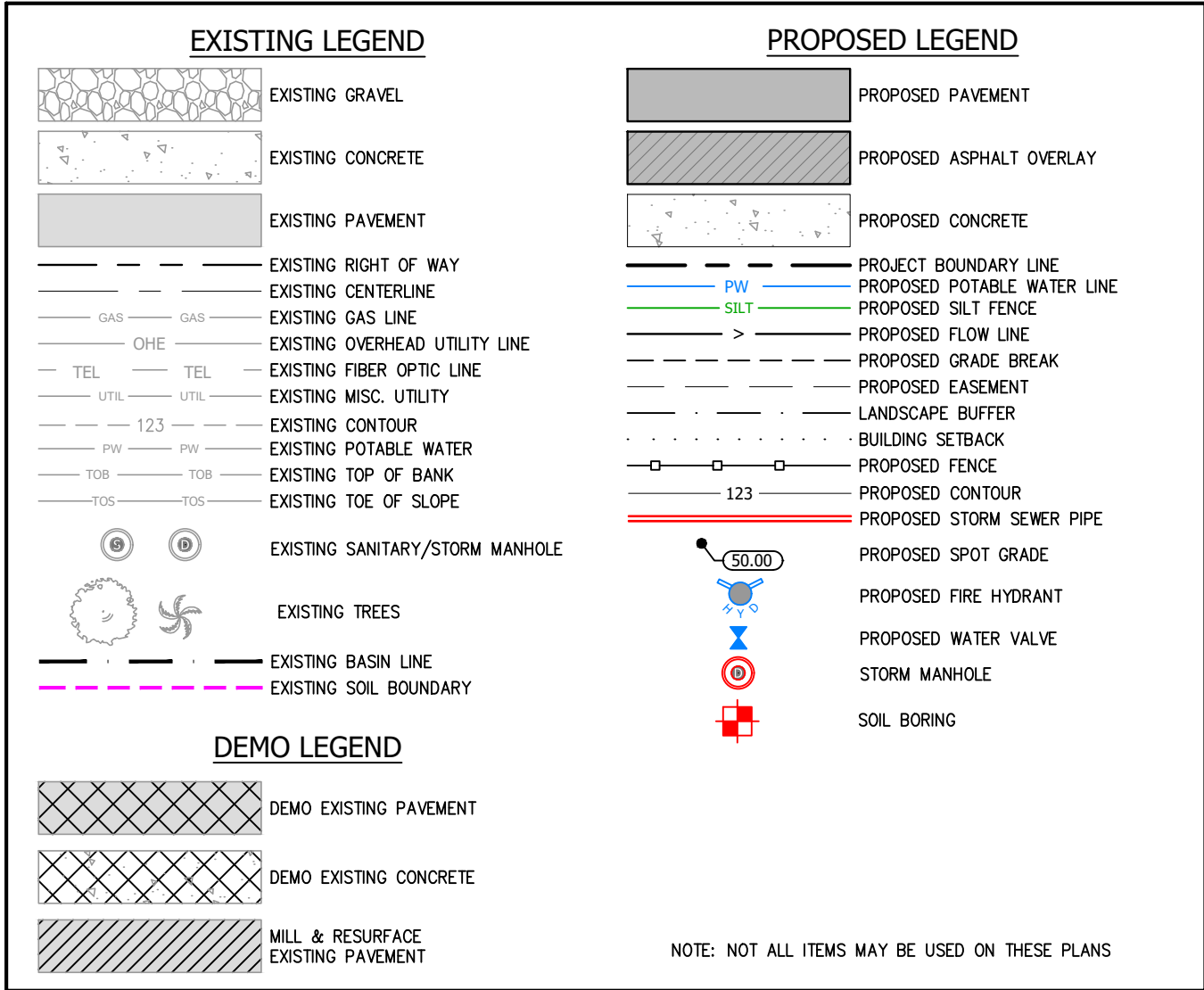
1. BEFORE PAVING OPERATIONS BEGIN, THE ENGINEER SHALL BE PROVIDED WITH ALL DENSITY TESTING INCLUDING PIPE BACKFILL, SUBGRADE, AND ROAD BASE. TESTING SHALL BE PROVIDED BEFORE ANY PAVING MEETINGS ARE SCHEDULED.
2. ASPHALT MIX DESIGNS MUST BE PROVIDED TO THE ENGINEER FOR APPROVAL PRIOR TO PAVING. MIXES MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR SUPPLIED BY AN APPROVED FOOT PLANT.
3. ANY DEVIATIONS IN ASPHALT TYPE, LIFT THICKNESS, OR COMPACTION MUST BE PRESENTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION. DEVIATIONS MAY REQUIRE APPROVAL BY THE A.E.C.
4. IT IS RECOMMENDED THE CONTRACTOR SUBMIT A TESTING PLAN TO THE ENGINEER BEFORE COMMENCING PAVING OPERATIONS SO ANY DEFICIENCIES CAN BE DETERMINED BEFORE STARTING.
5. TESTS FOR IN-PLACE DENSITY AND LAYER THICKNESS, FOR EACH COURSE, SHALL BE CONDUCTED AT A FREQUENCY OF ONE TEST PER 300 LINEAR FEET OF ROADWAY (MINIMUM 3 TESTS PER ROAD).
6. IF PAVEMENT CORES ARE TO BE TAKEN AT A MINIMUM FREQUENCY OF 3 CORE PER 500 TONS OF ASPHALT. DENSITY, THICKNESS, AND GRADATION REPORT IS TO BE PROVIDED FOR ASPHALT, BASE, AND SUBGRADE. MINIMUM ASPHALT DENSITY SHALL BE 89% GMM, WITH A MINIMUM AVERAGE BETWEEN 3 CORES OF 92% GMM.
7. MINIMUM LIFT THICKNESS SHALL CONFORM TO FOOT SPECIFICATIONS 334-1.4.1.
8. WHEN THE DEFICIENCY IN THICKNESS IS IN EXCESS OF THE MINIMUM THICKNESS REQUIRED ON APPROVED PLANS, LESS THE ALLOWABLE CONSTRUCTION TOLERANCE, THE CONTRACTOR SHALL CORRECT THE DEFICIENCY EITHER BY REPLACING THE FULL THICKNESS FOR A LENGTH EXTENDING AT LEAST 50 FEET FROM EACH END OF THE DEFICIENT AREA, OR WHEN PERMITTED BY THE COUNTY ENGINEER BY OVERLAYING THE ENTIRE WIDTH OF THE AREA. NORMALLY AN OVERLAY WILL NOT BE PERMITTED IN A CONCRETE CURB SECTION.
9. ASPHALT SHALL BE UNIFORM IN TEXTURE AND SLOPE TO THE GREATEST EXTEND POSSIBLE. AREAS OF POOR GRADATION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
10. TESTS FOR SUBGRADE STABILIZATION SHALL BE LOCATED NO MORE THAN 400 FEET APART (FOR ROADWAYS) OR EVERY 8,000 SF (FOR PARKING LOTS) AND SHALL BE STAGGERED TO THE LEFT, RIGHT, AND ON THE CENTERLINE OF THE ROAD.

GENERAL SITE NOTES

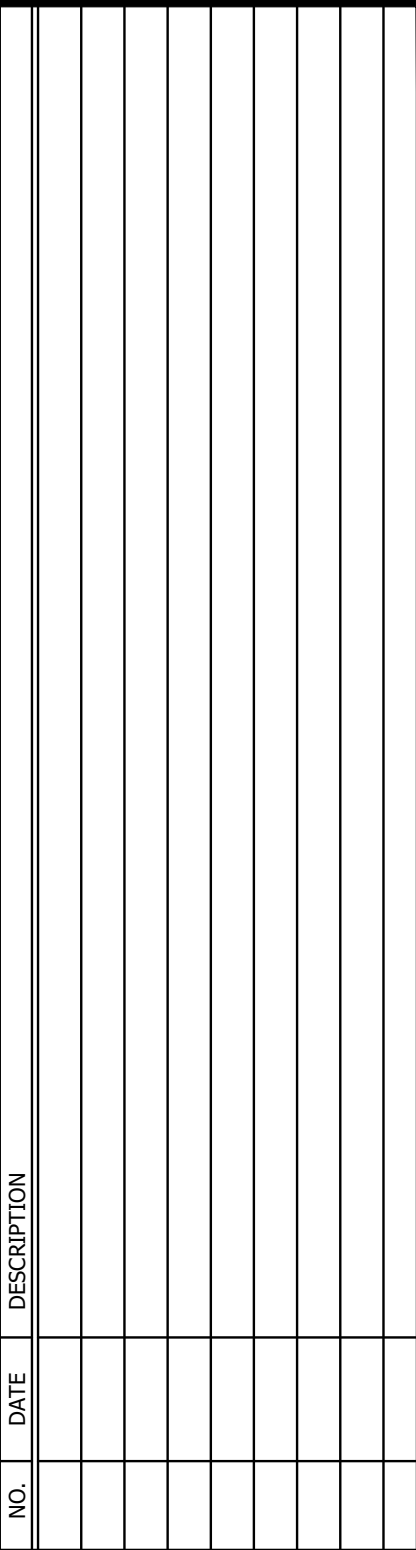
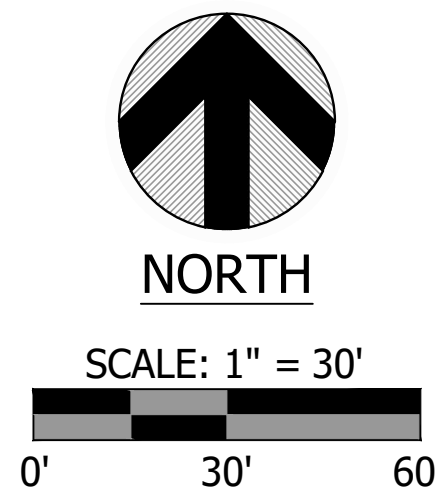
1. SEE BOUNDARY & TOPOGRAPHY SURVEY FOR LEGAL DESCRIPTION & BENCHMARK INFO.
2. ALL PAVEMENT MARKINGS SHALL BE PAINTED, UNLESS OTHERWISE NOTED, AND SHALL BE ACCOMPLISHED WITH USE OF PAINTING MACHINES AND/OR STENCILS. ALL PAINT FOR PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF SOLVENTBORNE APPLICATION RECOMMENDATIONS.
3. CONTRACTOR TO SAW CUT EXISTING PAVEMENT AT PROPOSED DRIVEWAY TIE INS TO PROVIDE A CLEAN EDGE FOR NEW PAVEMENT AND BASE CONNECTION.
4. CONTRACTOR TO BECOME FAMILIAR WITH AND ADHERE TO ALL ADA STANDARDS.
5. CONTRACTOR TO PROVIDE SMOOTH TRANSITION AT LOCATIONS WHERE EXISTING FEATURES MEET PROPOSED FEATURES (CONCRETE, ASPHALT, ETC.).
6. ALL "NEED" (NATURAL EXISTING GRADE) ELEVATIONS ON ROADWAY SURFACES OR EDGES AND UNDERGROUND STORM/UTILITY PIPES SHOWN ARE APPROXIMATE.
7. AT A MINIMUM, ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED WITH EITHER SOD OR SEED. SOD OR SEED AREAS SHOULD BE WATERED BY EITHER IRRIGATION OR TANKER TRUCKS UNTIL ESTABLISHED. SOD SHALL BE STAKED AS REQUIRED IN SLOPED AREAS AND MONITORED FOR WASHOUTS. ONCE THE SOD IS ESTABLISHED, GC MAY REMOVE STAKES. SEEDED AREAS MUST BE WATERED AS NECESSARY TO ALLOW GRASS TO BEGIN GROWING.
8. CONTRACTOR SHALL OBTAIN THE LATEST EDITION OF THE SOIL REPORT FOR THIS PROJECT. GC SHALL ADHERE TO ALL RECOMMENDATIONS AND INSTRUCTIONS INCLUDED IN SOIL REPORT.
9. A COPY OF THE APPROVED PERMIT AND DRAWINGS MUST BE ON THE JOBSITE AT ALL TIMES.
10. ANY SIDEWALKS DISTURBED DURING CONSTRUCTION ARE TO BE REPLACED.
11. IF CONSTRUCTION, RECONSTRUCTION, REPAIR OR MAINTENANCE ACTIVITY NECESSITATES THE CLOSING OF ONE OR MORE TRAVEL LANES OF ANY ROAD ON THE STATE PRIMARY, COUNTY ROAD OR CITY STREET SYSTEM FOR A PERIOD OF THE EXCEEDING TWO HOURS, THE PARTY PERFORMING SUCH WORK WILL BE RESPONSIBLE TO GIVE NOTICE TO THE APPROPRIATE LAW ENFORCEMENT AGENCY WHICH HAS JURISDICTION WHERE SUCH ROAD IS LOCATED PRIOR TO COMMENCING WORK ON THIS PROJECT.
12. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF FOOT INDEX 102-600 THROUGH 102-670.
13. TRAFFIC SHALL BE MAINTAINED THROUGH THE WORK ZONE AT THE ESTABLISHED SPEED LIMIT.
14. DURING NON-WORKING HOURS, THE DROP-OFF BETWEEN THE TRAVEL LANES AND THE WORK AREA SHALL BE MAINTAINED IN ACCORDANCE WITH INDEX 102-600.
15. ALL EXISTING MARKINGS THAT ARE IN CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED.
16. THE PERMANENT REMOVAL OF SIGNS WITHIN THE CONSTRUCTION LIMITS ARE NOT REQUIRED UNLESS SHOWN IN THE PLANS. ALL ADJUSTMENTS SHALL BE IN ACCORDANCE WITH FOOT SPECIFICATIONS.
17. DO NOT PLACE THERMOPLASTIC STRIPES AND MARKINGS ON NEWLY CONSTRUCTED FINAL SURFACES COURSES PRIOR TO 30 CALENDAR DAYS AFTER PLACEMENT OF THE FINAL SURFACE COURSE. THE ENGINEER MAY REQUIRE LONGER CURE PERIODS. PROVIDE TEMPORARY MARKINGS IF THE ROAD IS OPEN TO TRAFFIC.
18. THE LOCATIONS OF EXISTING UTILITIES SUCH AS WATER MAINS, SEWER, GAS LINES, ETC., AS SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION, AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE SIZES AND LOCATIONS SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF THE SIZE AND LOCATION OF ALL EXISTING UTILITIES SHOWN AND NOT SHOWN ON THESE PLANS AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND HAVE THEIR FACILITIES LOCATED IN THE FIELD PRIOR TO ANY WORK.
19. BENCHMARKS AND OTHER REFERENCE POINTS SHALL BE CAREFULLY MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IF DISTURBED OR DESTROYED, THESE POINTS SHALL BE REPLACED BY A FLORIDA P.L.S. AT CONTRACTORS EXPENSE.
20. THE CONTRACTOR IS DIRECTED TO NOTIFY SLOAN ENGINEERING GROUP, INC., PHONE (863) 800-3046, FOR PROBLEMS REQUIRING DEVIATION FROM THESE PLANS AND SPECIFICATIONS.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING STRUCTURES, ETC., UNLESS OTHERWISE NOTED. ALL SOIL STRIPPINGS AND ANY UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
22. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES AND UTILITIES NOTED TO REMAIN, FROM DAMAGE OR DISPLACEMENT DURING CONSTRUCTION. IN THE EVENT OBSTRUCTIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER AND THE UTILITY COMPANY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR DAMAGE OR CORRECT DISPLACEMENT.
23. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ALL TREES AND OTHER VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION.
24. WHEN DETAILS ARE PROVIDED, CONTRACTOR SHALL CONSTRUCT JOB PER SPECIFIC DETAILS, AND NOT BY SCALING FROM THESE PLANS.
25. THE CONTRACTOR SHALL RESTORE OFF-SITE CONSTRUCTION AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO COMMENCEMENT OF CONSTRUCTION. IT IS RECOMMENDED TO PROVIDE A VIDEO OF EXISTING CONDITIONS TO THE ENGINEER.
26. THE CONTRACTOR SHALL TAKE SPECIAL NOTICE THAT ALL SPECIFICATIONS AND DETAILS SHOWN HEREON ARE BELIEVED TO BE THE LATEST AND MOST ACCURATE AT THE TIME OF DESIGN AND SUBMITTAL, HOWEVER THE ENGINEER DOES NOT WARRANTY ANY OF THE PROVIDED SPECIFICATIONS AND DETAILS. THESE SPECIFICATIONS AND DETAILS ARE SUBJECT TO REVISION BY THE ISSUING MUNICIPALITIES AND AGENCIES. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL CONSTRUCTION, TESTING AND MATERIALS CONFORM TO THE LATEST EDITIONS OF THE DESIGN REFERENCES INCLUDING, BUT NOT LIMITED TO THE MUNICIPAL LAND DEVELOPMENT REGULATIONS, FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, FOOT MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS (GREEN BOOK) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
27. THE STORMWATER MANAGEMENT SYSTEM IS TO BE MAINTAINED BY THE PROPERTY OWNER.
28. WITHIN CITY OF OKEECHOBEE RIGHT OF WAY, ALL STREET SIGNS SHALL BE SECURED TO 2" MIN ROUND POLES AND ALL OTHER TRAFFIC SIGNS SHALL BE SECURED TO 2.5" MIN ROUND POLES. ALL SIGNAGE WITHIN PRIVATE RIGHT OF WAY MAY BE DECORATIVE.

BACKFILL, COMPACTION, AND INSPECTION NOTES

1. IT IS RECOMMENDED THE CONTRACTOR SUBMIT A TESTING PLAN TO THE ENGINEER BEFORE COMMENCING CONSTRUCTION SO ANY DEFICIENCIES CAN BE DETERMINED BEFORE STARTING.
2. PROCTOR TESTS SHALL BE PERFORMED ON ALL MATERIAL TO BE USED AS BACKFILL. TESTING FREQUENCY SHALL BE PER FOOT SPECIFICATIONS SECTION 125-9. MINIMUM 1 TEST PER SOIL TYPE OR REPRESENTATIVE SAMPLE.
3. ALL PIPE SHALL BE CAREFULLY LAID, TRUE TO THE LINES AND GRADES AS SHOWN ON THE PLANS. ALL PIPE SHALL BE LAID IN DRY BEDDING CONDITIONS.
4. BACKFILLING SHALL PROGRESS AS RAPIDLY AS THE CONSTRUCTION AND TESTING OF THE WORK WILL PERMIT. ALL BACKFILL MATERIAL SHALL BE SUITABLE AND FREE OF DELETERIOUS MATERIAL.
5. MATERIAL, NOT SUITABLE FOR BACKFILL, INCLUDES ROCK, MOSS, ROCK, CLAY, PHOSPHATE SLIMES, OR OTHER PLASTIC MATERIALS INCLUDING A-2-6, A-2-7, A-5, A-6, AND A-7. NOTE: A-7 MAY BE USED AS SPECIFIED IN FOOT SPECIFICATIONS SECTION 125-8. THESE SOILS, IF ENCOUNTERED DURING SITE PREPARATION, SHOULD BE REMOVED WITHIN A 6' MARGIN OF THE CONSTRUCTION AREA AND FOOT #57 AGGREGATE BEDDING MATERIAL SHALL BE PLACED UNDER THE PIPE IN ACCORDANCE WITH THE TYPE A BEDDING DETAIL.
6. THE INITIAL BACKFILL SHALL BE CAREFULLY DEPOSITED ON BOTH SIDES OF THE PIPE AT THE SAME TIME AND UNIFORMLY COMPACTED AROUND THE BARREL OF THE PIPE UNTIL ENOUGH HAS BEEN PLACED TO PROVIDE A COVER OF 12" ABOVE THE CROWN OF THE PIPE. IN NO CASE SHALL BACKFILL MATERIAL BE PLACED IN THE TRENCH IN A MANNER THAT WILL CAUSE SHOCK TO OR UNEQUAL PRESSURE ON THE PIPE.
7. INITIAL LIFTS OF 6" SHALL BE PLACED UP TO THE TOP OF PIPE. LIFT MAY CONTINUE AT 12" INTERVALS THEREAFTER IF COMPACTION REQUIREMENTS CAN BE ACHIEVED.
8. IN AREAS WITHIN 6' OF ANY PAVED SURFACE, BACKFILL SHALL BE COMPACTED TO 100% OF T-99. IN ALL OTHER AREAS, BACKFILL SHALL BE COMPACTED TO 95% OF T-100.
9. EXCAVATABLE FLOWABLE FILL IS ACCEPTABLE.
10. BACKFILL AROUND STRUCTURES SHALL BE COMPACTED TO 100% OF T-99.
11. COMPACTION TESTS SHALL BE IN ACCORDANCE WITH SECTION 125-8 OF THE FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE CITY/COUNTY ENGINEER MAY DETERMINE THAT MORE COMPACTION TESTS ARE REQUIRED TO CERTIFY THE INSTALLATION DEPENDING ON FIELD CONDITIONS. THE LOCATIONS OF COMPACTION TESTS WITHIN THE TRENCH SHALL BE IN CONFORMANCE WITH THE FOLLOWING SCHEDULE:
  - 11.1. CROSS DRAIN CULVERTS SHALL HAVE A MINIMUM OF TWO DENSITY TESTS PER LIFT.
  - 11.2. ONE TEST AT THE SPRING LINE OF THE PIPE.
  - 11.3. AT LEAST ONE TEST FOR EACH 12-INCH LAYER OF BACKFILL WITHIN THE PIPE BEDDING ZONE FOR PIPES 24 INCHES AND LARGER.
  - 11.4. ONE TEST AT AN ELEVATION OF ONE FOOT ABOVE THE TOP OF THE PIPE.
  - 11.5. ONE TEST FOR EACH TWO FEET OF BACKFILL PLACED FROM ONE FOOT ABOVE THE TOP OF THE PIPE TO FINISHED GRADE ELEVATION.
12. CONTRACTOR TO INSPECT ALL STORM PIPES AND GRAVITY SANITARY SEWER MAINS UTILIZING A CLOSED CIRCUIT TELEVISION SYSTEM PREPARING A DVD OF THE RESULTS. THE INSPECTION SHALL DETERMINE THE CONDITION OF THE PIPE FOR ACCEPTABILITY. VIDEO SHALL EXTEND TO THE END OF ALL PIPES.



CLIENT: WESTLAKE ROYAL ROOFING, LLC	PROJECT: CITY OF OKEECHOBEE COMMERCE CENTER	NOTES & SPECIFICATIONS	150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830 (863) 867-8800 FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) 126247	DESIGNED BY: KL	DRAWN BY: KL	CHECKED BY: SM
				REVISION BLOCK		
				SLOAN Engineering Group 150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830 (863) 867-8800 FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) 126247		
PROJECT NO. 2373		SHEET C101				



DESIGNED BY:

KL


DRAWN BY:

KL

CHECKED BY:

SM

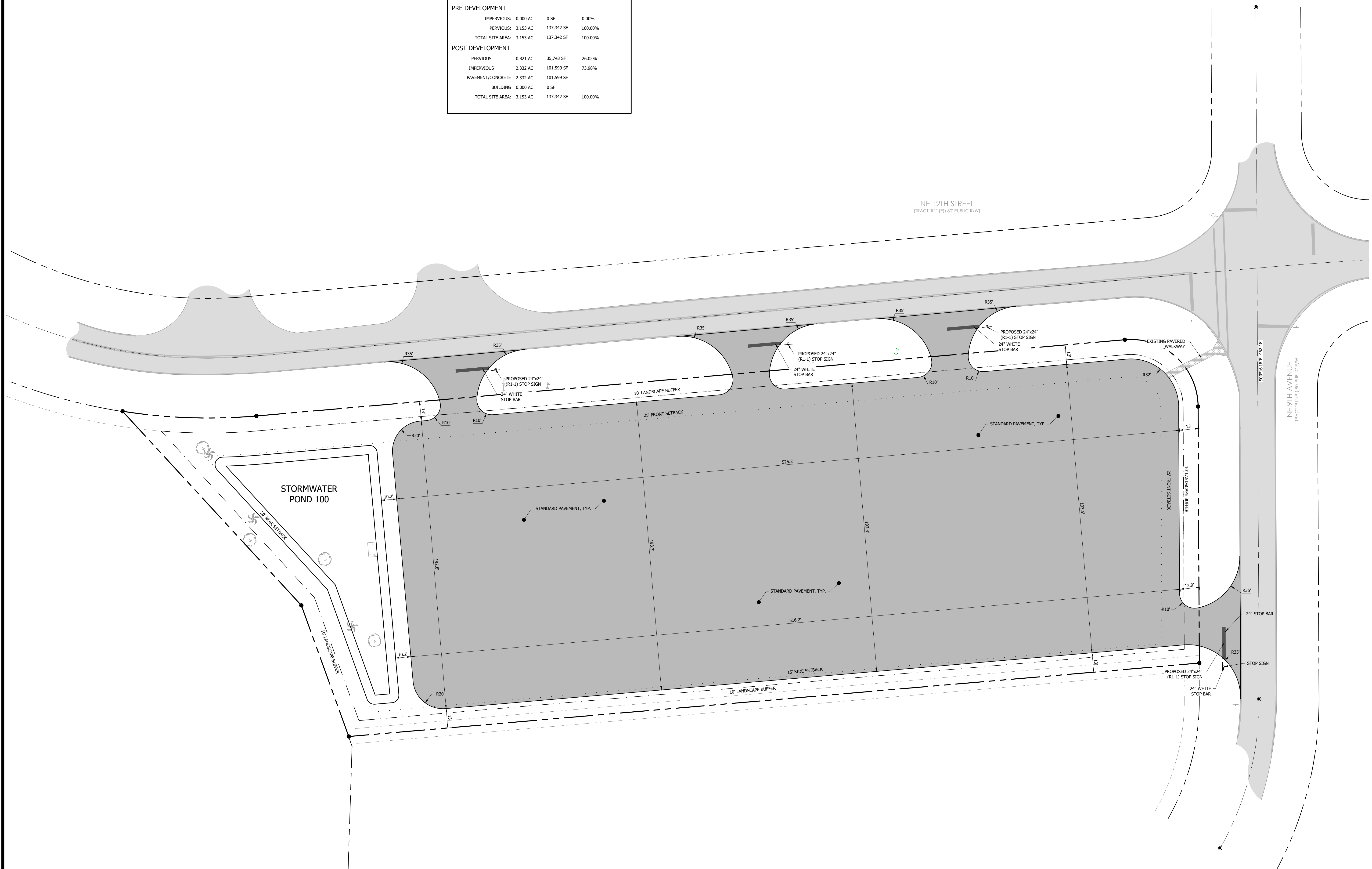
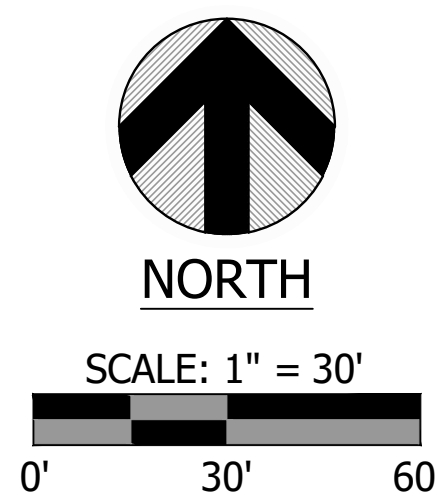
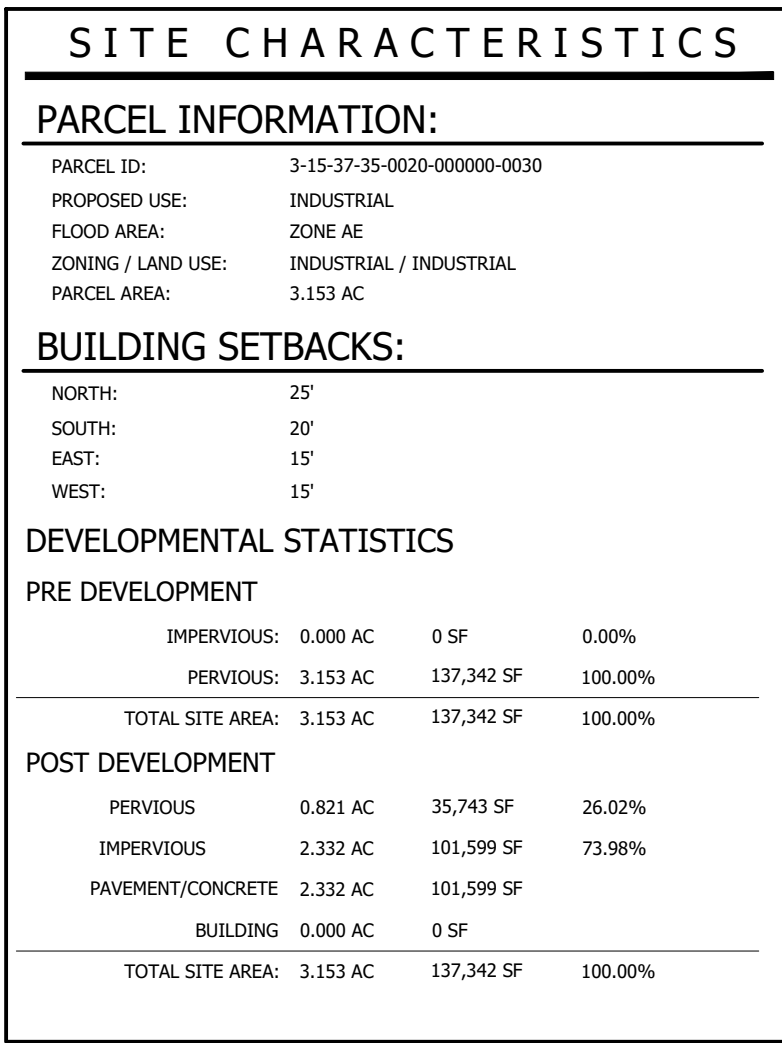
**SANTOS MEDINA, III, P.E.**  
**STATE OF FLORIDA**  
**PROFESSIONAL ENGINEER**  
**LICENSE NO. 74539**



**12/29/2022**  
**NO SIGNATURE REQUIRED**  
**DIGITALLY ELECTRONICALLY**  
**SIGNED AND SEALED**



CLIENT: WESTLAKE ROYAL ROOFING, LLC PROJECT: CITY OF OKEECHOBEE COMMERCE CENTER		NE 9TH AVENUE, OKEECHOBEE, FL 34972	
PROJECT NO. 2373		SHEET C200	

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SANTOS MEDINA, III, P.E.  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
LICENSE NO. 74539

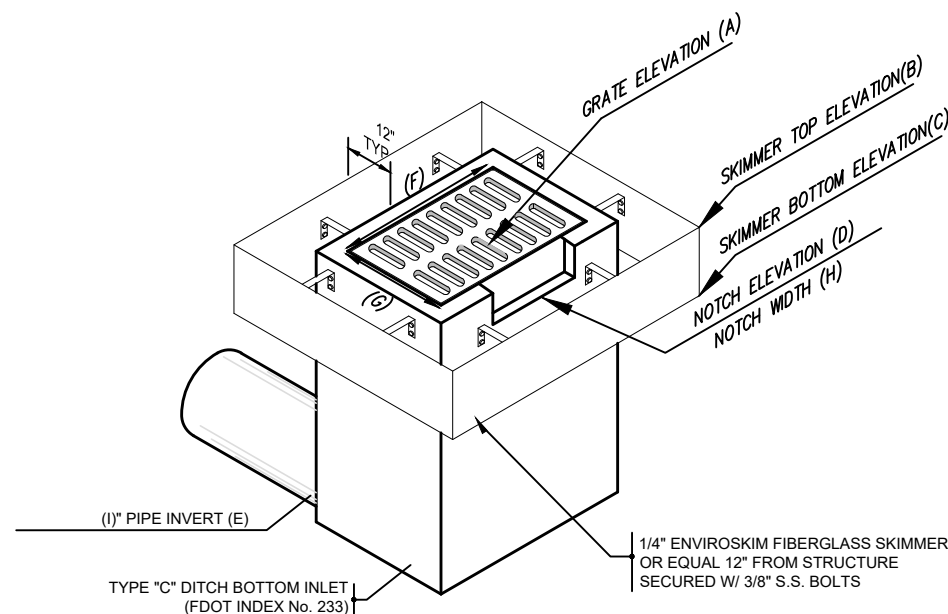
12/29/2022

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DIGITALLY, OR ELECTRONICALLY  
SIGNED AND SEALED

DESIGNED BY:	
KL	
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KL	
CHECKED BY:	
SM	



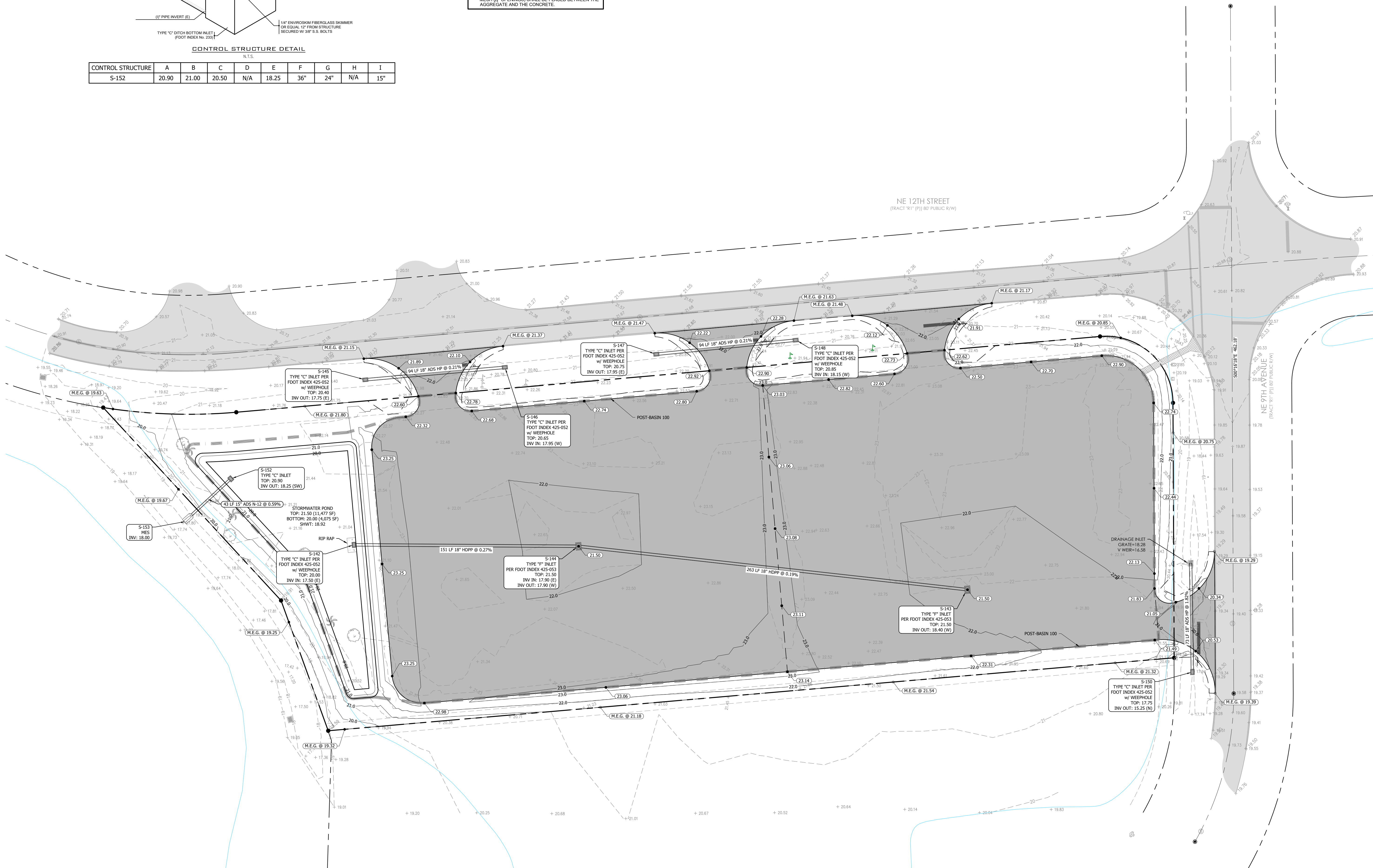
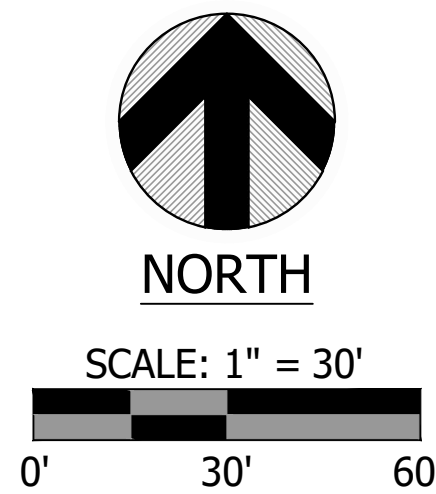
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PROJECT:	CITY OF OKEECHOBEE COMMERCE CENTER
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NE 9TH AVENUE, OKEECHOBEE, FL 34972	
PROJECT NO.	2373
SHEET	C300



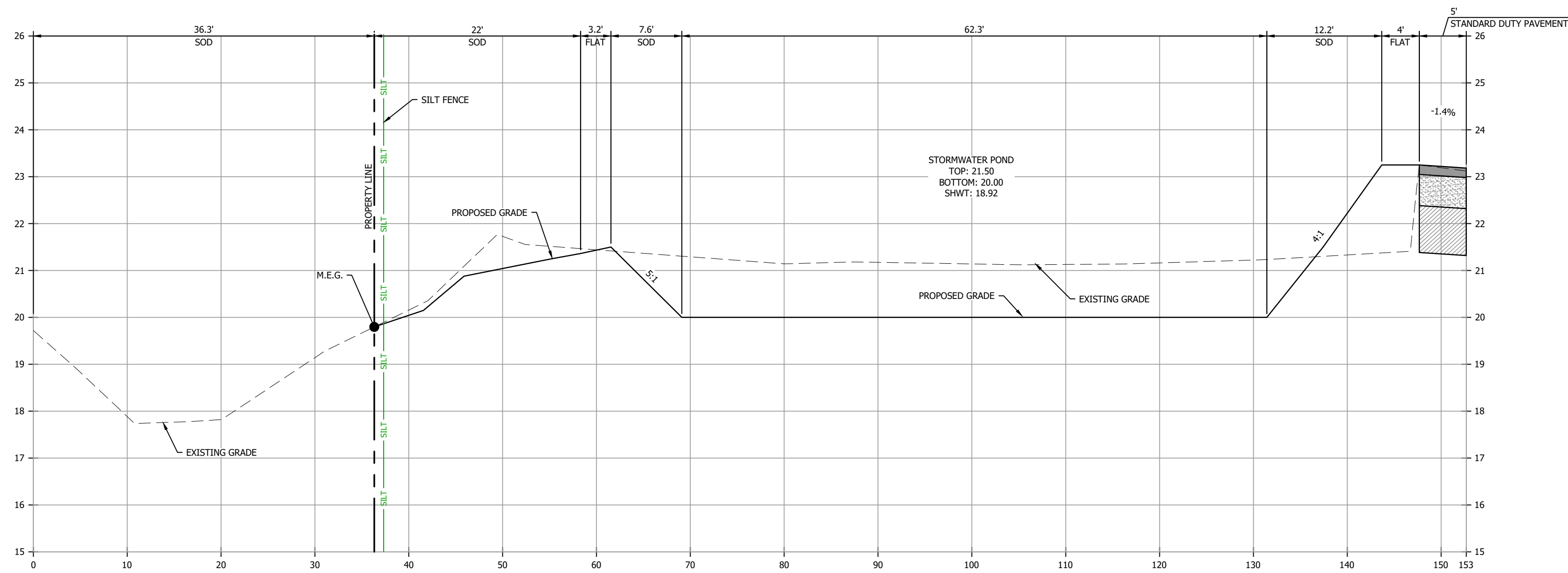
CONTROL STRUCTURE DETAIL  
N.T.S.

CONTROL STRUCTURE	A	B	C	D	E	F	G	H	I
S-152	20.90	21.00	20.50	N/A	18.25	36"	24"	N/A	15"

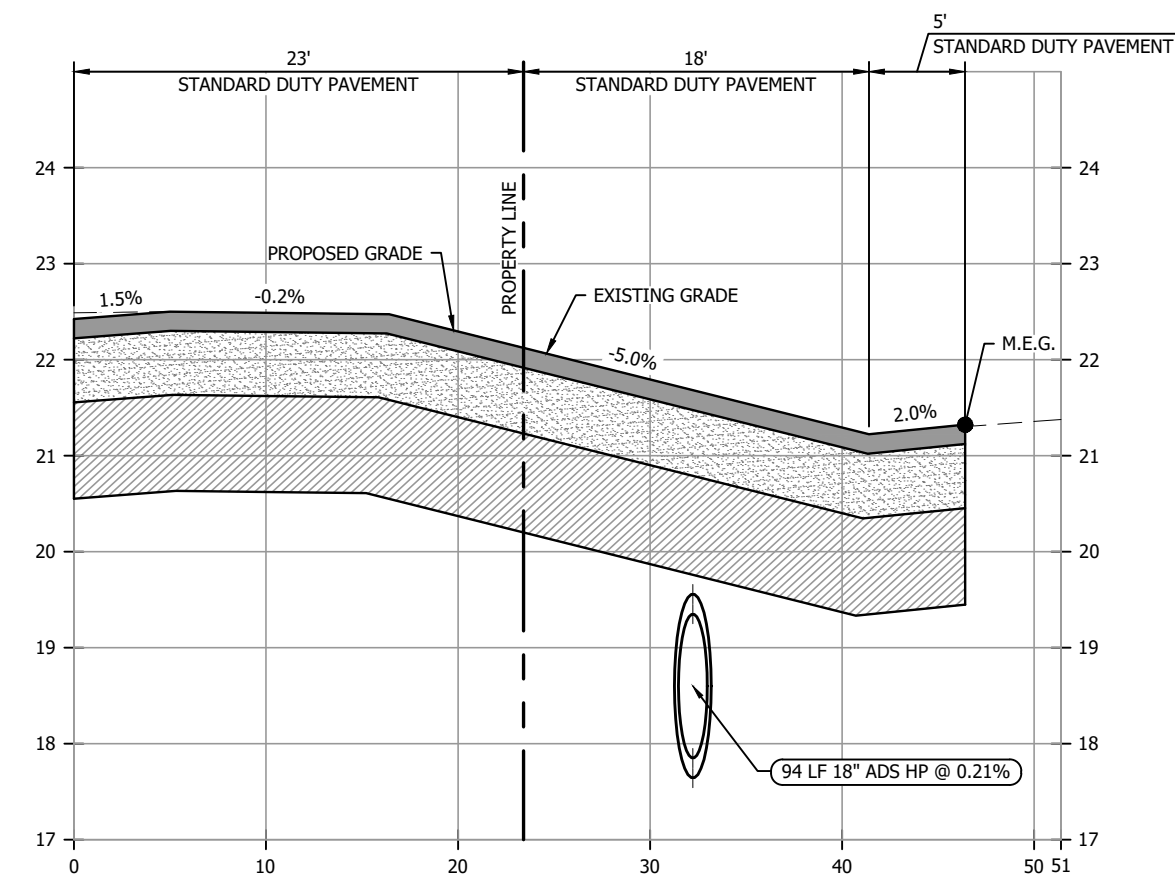
WEEP HOLE NOTE  
1. ALL WEEP HOLES TO BE 5" DIAMETER CIRCLE HOLE ON THE BOTTOM OF THE STRUCTURE. 0.5 CUBIC FEET (127.2727) OF NO. 8 AGGREGATE TO BE PLACED UNDER EACH HOLE. 1 SQ. FT. OF GALVANIZED WIRE MESH (2" OPENINGS) SHALL BE PLACED BETWEEN THE AGGREGATE AND THE CONCRETE.



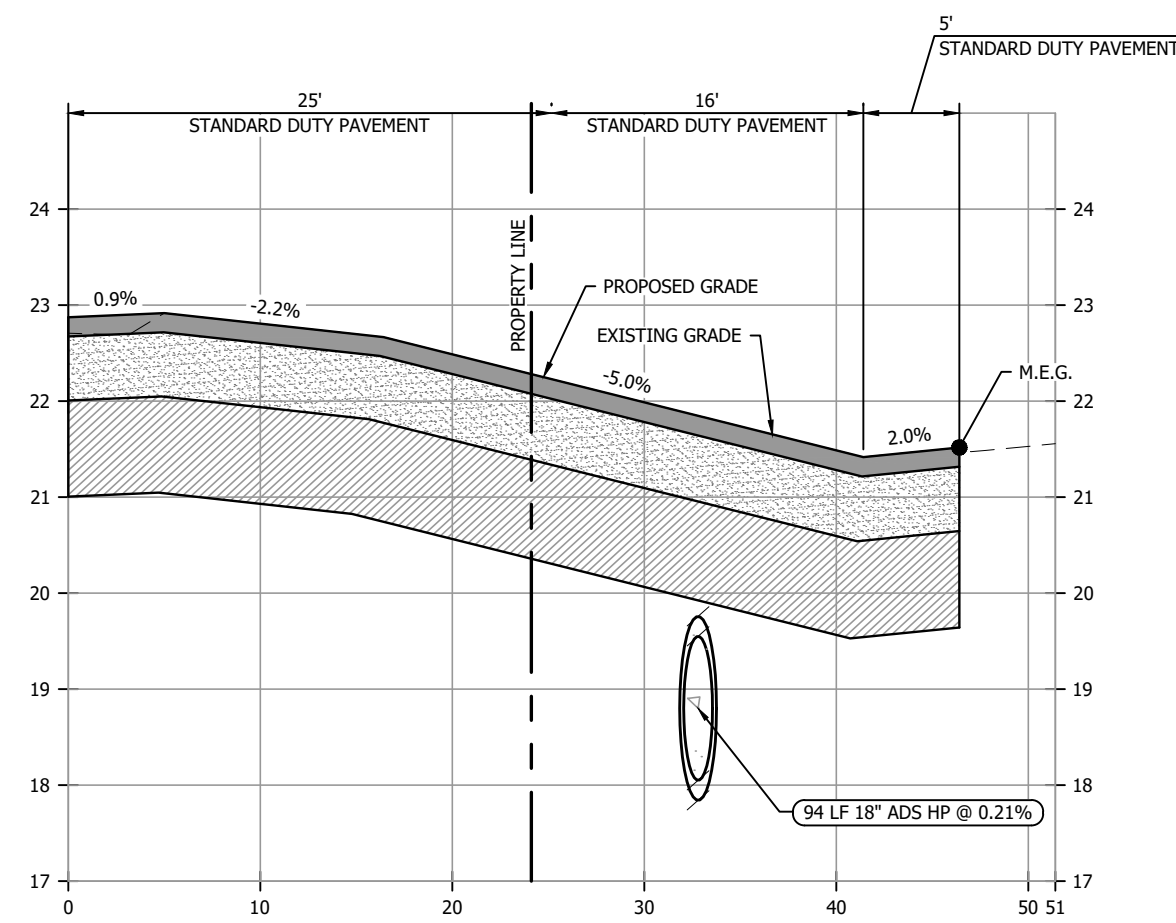
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CHECKED BY: SM		DATE: 12/29/2022	
REVISION BLOCK		STATE OF FLORIDA PROFESSIONAL ENGINEER LICENSE NO. 74538	
SLOAN Engineering Group		150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830	
FLORIDA CERTIFICATE OF AUTHORIZATION (FLC) 126547		NE 9TH AVENUE, OKEECHOBEE, FL 34972	



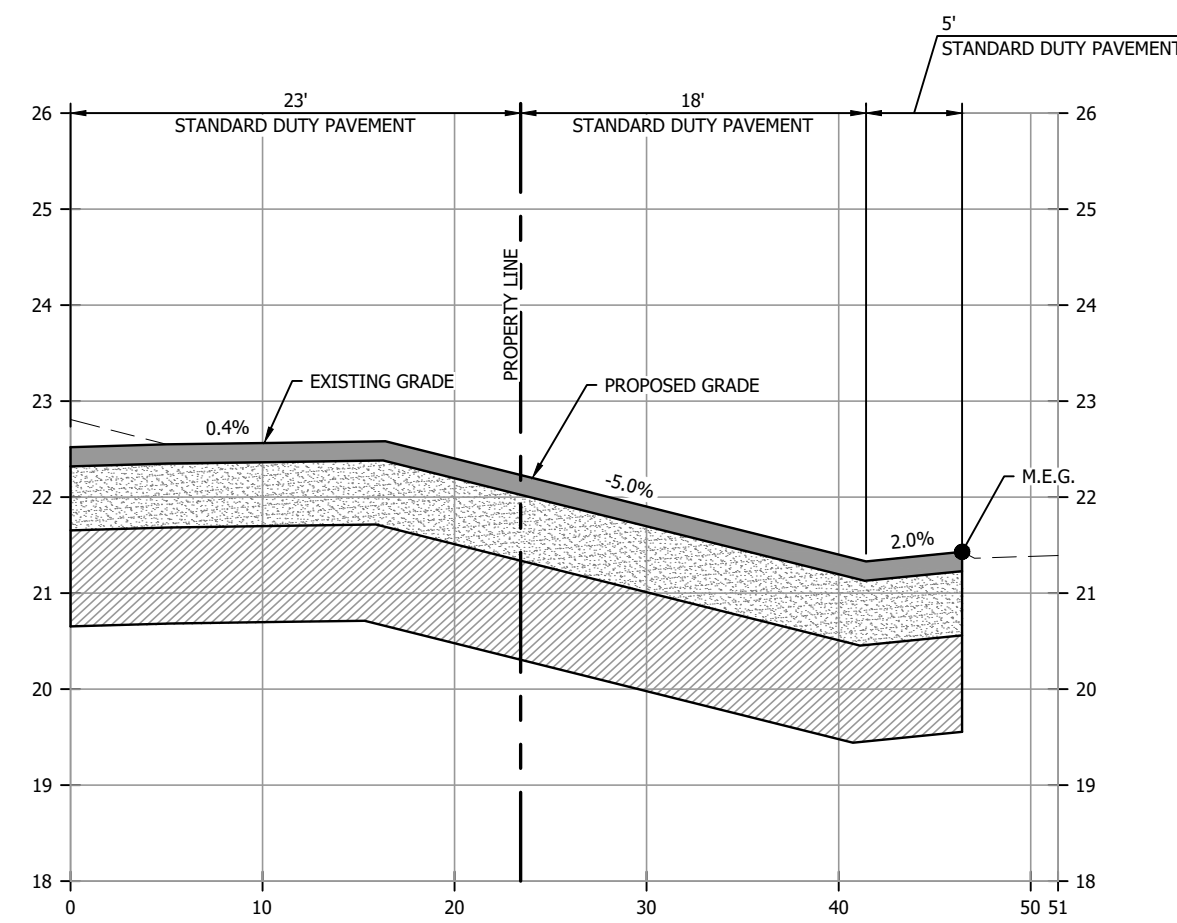
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HORIZ. SCALE: 1" = 1'



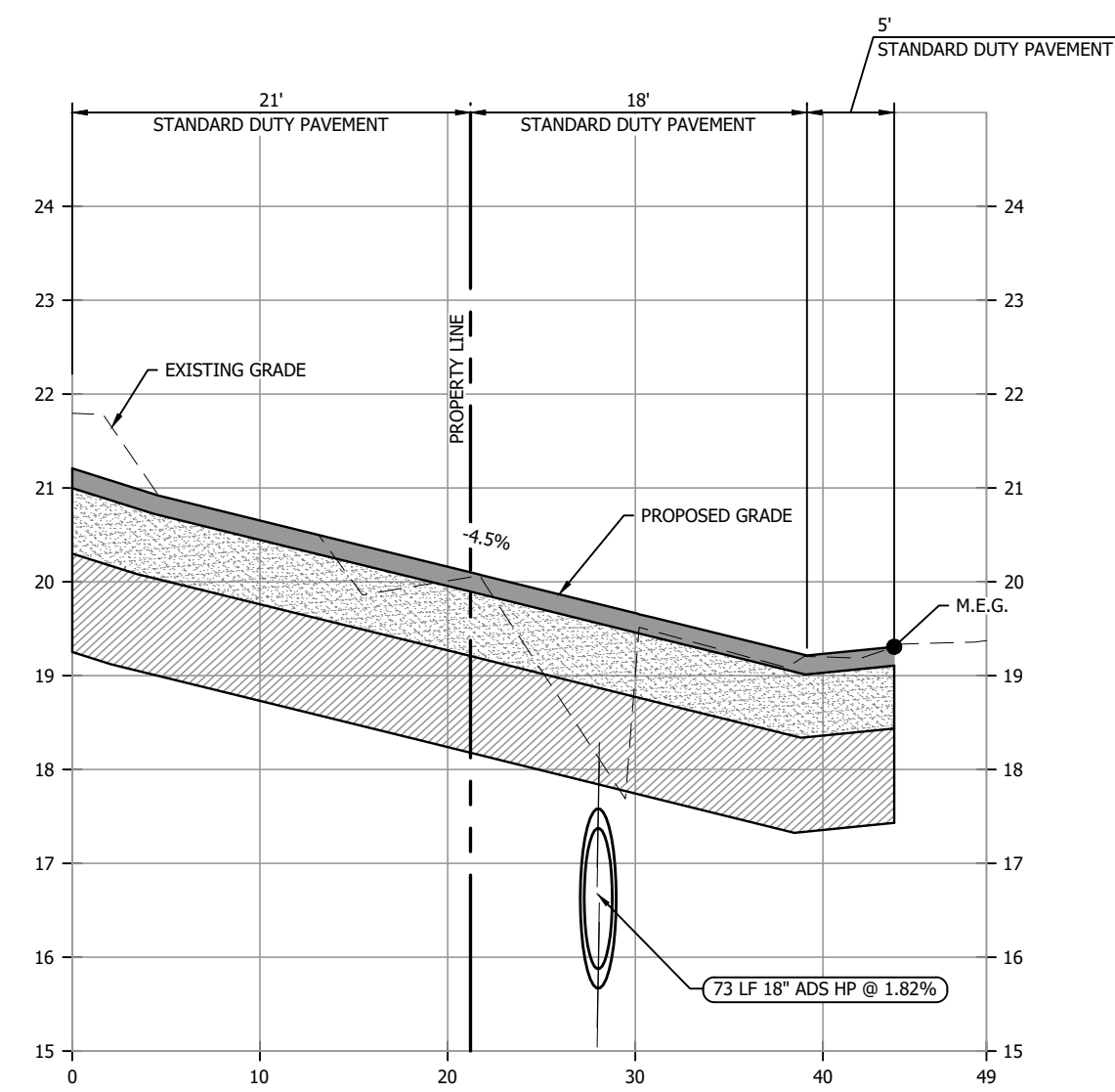
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HORIZ. SCALE: 1" = 1'



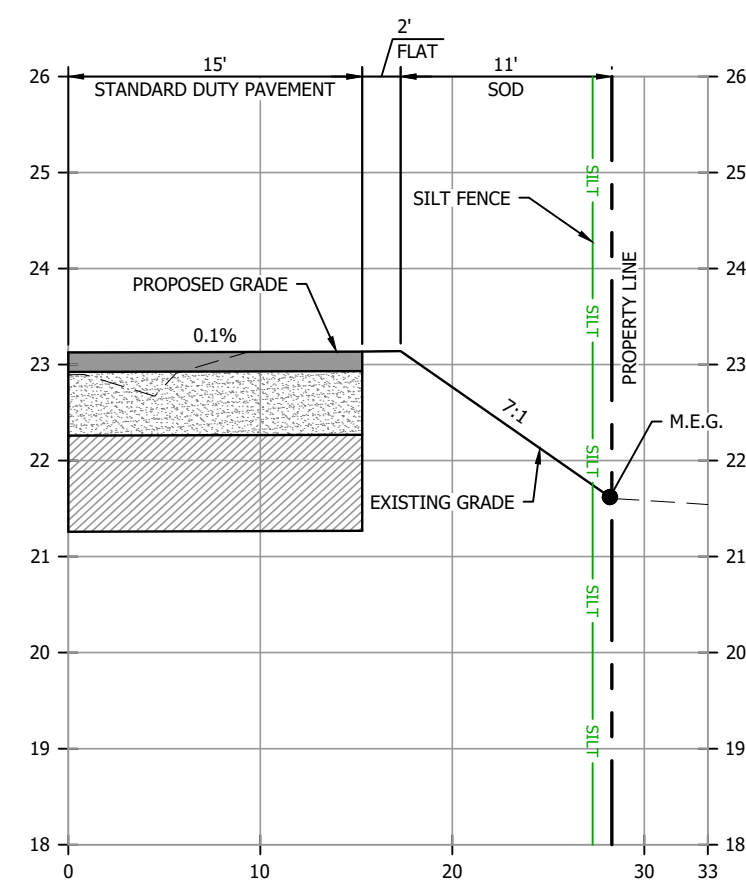
SECTION C-C  
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SECTION D-D  
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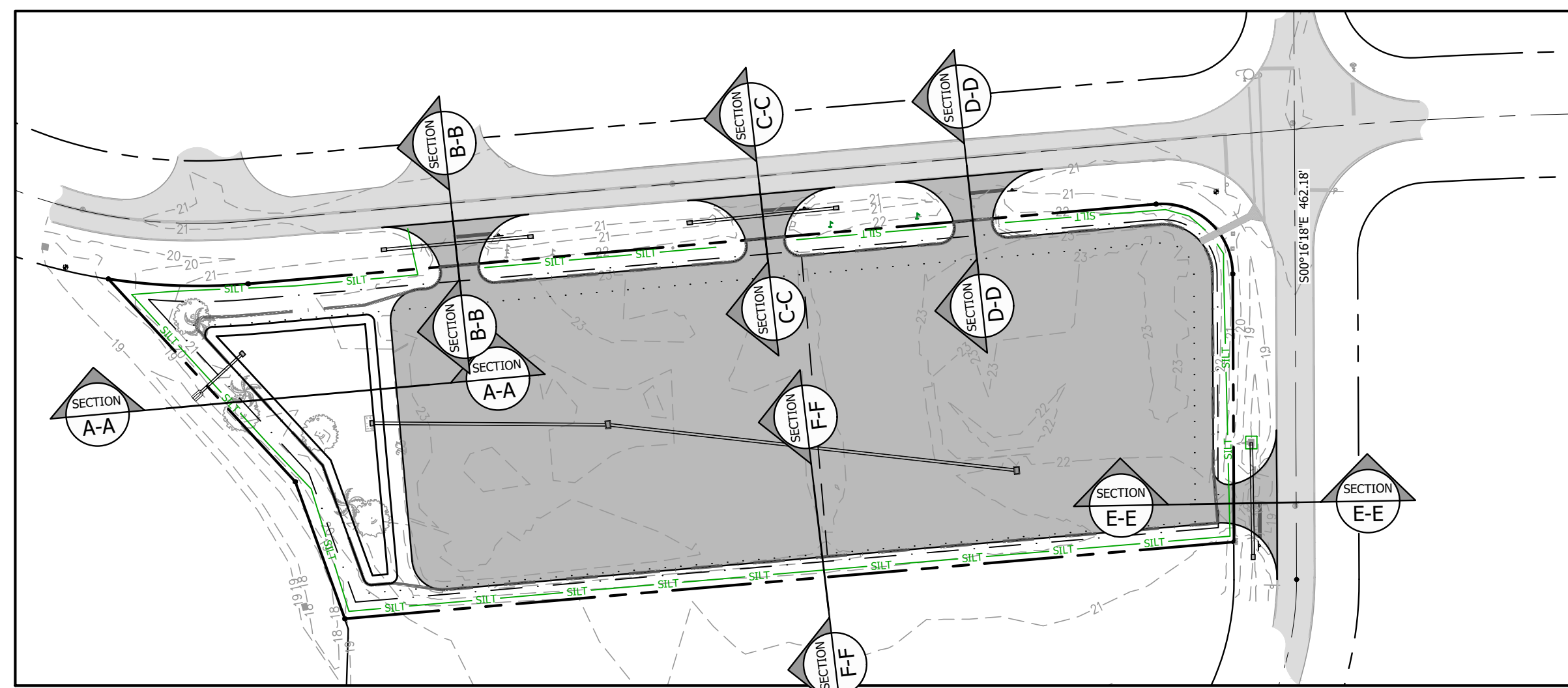


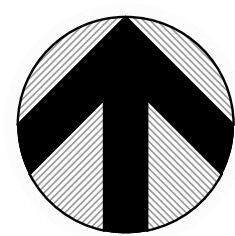
SECTION E-E  
VERT. SCALE: 1" = 0'  
HORIZ. SCALE: 1" = 1'



SECTION F-F  
VERT. SCALE: 1" = 0'  
HORIZ. SCALE: 1" = 1'

NOTE  
ALL GRADED AREAS TO BE SODDED WITH EXCEPTION OF POND BOTTOM



  
NORTH  
SCALE: 1" = 80'

CLIENT: WESTLAKE ROYAL ROOFING, LLC		PROJECT: CITY OF OKEECHOBEE COMMERCE CENTER		CROSS SECTIONS		PROJECT NO. 2373		SHEET C500	
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DESIGNED BY: KL		DRAWN BY: KL		CHECKED BY: SM		PROJECT NO. 2373		SHEET C500	
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69		69		69					



<div> <div>CLIENT:</div> <div>WESTLAKE ROYAL ROOFING, LLC</div> </div>	
<div> <div>PROJECT:</div> <div>CITY OF OKEECHOBEE COMMERCE CENTER</div> </div>	
<div> <div>SITE &amp; DRAINAGE DETAILS</div> <div>NE 9TH AVENUE, OKEECHOBEE, FL 34972</div> </div>	
PROJECT NO.	SHEET
2373	C600

# **SURFACE WATER MANAGEMENT SYSTEM REPORT**

**FOR**

## ***CITY OF OKEECHOBEE COMMERCE CENTER LOT 3 IMPROVEMENTS***

**LOCATED AT:**

**FORT MYERS, FL**

**PREPARED FOR:**

**WESTLAKE ROYAL ROOFING**  
2801 Post Oak Boulevard, Suite 600  
Houston, Texas 77056

**PREPARED BY:**



**SLOAN**  
Engineering Group

**Florida Certificate of Authorization (FLCA) #26247**  
150 South Woodlawn Avenue  
Bartow, Florida 33830

**DECEMBER, 2022**

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- 1.4 Floodplain
- 1.5 Water Quality & Quantity
- 1.6 On-Site Drainage Basins

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- 2.1 Remaining Storm Water Management Areas to be Constructed
- 2.2 Basin Information
- 2.3 Dry Pre-Treatment Calculations

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Exhibits

### Appendix B – SUPPORTING DOCUMENTATION

Geotechnical Report

Santos Medina III, P.E.  
Florida Registration #74539  
Sloan Engineering Group, Inc.  
P.O. Box 253  
Bartow, Florida 33831  
Certificate of Authorization #26247  
(863) 800-3046



# **CHAPTER 1**

Stormwater Management Design Summary



SLOANEG.COM

### **1.1 Objective**

This application for an Environmental Resource Permit (ERP) requests the construction and operation authorization of a stormwater management system serving 3.153 acres of industrial development (outdoor storage yard facility). This industrial development will be located on parcel 3-15-37-35-0020-000000-0030. The subject site is within an existing industrial park. This industrial park has an existing ERP Permit #47-00638-P. The total basin area of the industrial park is 117.78 acres. This parcel is allowed 90% impervious area (50% building and 40% pavement) and is required to provide ½" of pre-treatment before discharging to the master wet detention storm water system.

While no building structure is proposed, the city supports the layout of the site plan and the pavement utilizing area set aside for building. According to staff coordination, recent aeriels, obtainable as-built record drawings, permitting history and partial certifications, there is sufficient storm water management constructed to service the subject site. The master permitting area downstream of the site have been constructed. All pre-master permit wetlands are up to date in their monitoring periods and are preserved per the master permit. No additional wetland modifications are included with this permit. Per coordination with city staff, a breakdown table of the Remaining Storm Water Management Areas to be Constructed is included (See Table 2.1).

### **1.2 Project Summary**

This application requests the construction of an outdoor storage yard facility, which includes the following: 2.332 acres of pavement and 0.239 acres of dry pre-treatment. The project proposes three (3) entrances to NE 12<sup>th</sup> Street and one (1) to NE 9<sup>th</sup> Avenue. Landscaping is proposed along the parcel perimeter, and the project does not propose a building structure.

### **1.3 Vertical Datum Reference**

A published benchmark was not found in the vicinity of this property. Elevations are based on the "CONTINENTAL\_NGS2012B.gsb" GEOID, as measured using real time kinetic GOS referenced from FDOT permanent reference network.

### **1.4 Floodplain**

According to FEMA Flood Insurance Rate Map (FIRM) # 12093C0415C (07/16/2015), the site is within Flood Zone 'AE-16.0'.

### **1.5 Water Quality & Water Quantity**

Water quality pre-treatment will be provided via a storm water pond located along the western side of the subject site. Information on this pond is provided in Chapter 2 of this report.

This project also includes implementation of a Stormwater Pollution Prevention Plan as additional reasonable assurance of compliance with water quality criteria during construction and operation.

The project is within the approved land use and site grading assumptions from the design of the master stormwater management system. Therefore, the stormwater management system has not been designed to limit discharge for the design event to a specified rate.

#### **1.6 On-Site Drainage Basins**

There is one (1) pre-development basin, Pre Basin 'A'. The post-development basin is Basin '100'. See Appendix A for pre and post development basin maps. The subject site is to have stormwater runoff routed to the existing master stormwater system.



# **CHAPTER 2**

## Calculations



## **2.1 Remaining Storm Water Management Areas to be Constructed**



The following table is to serve as reference to the overall permitted project land use components and the percent of land constructed, to date. The city has plans to finalize the completion of the remaining dry pre-treatment areas under a separate application. This separate application will include intermediate control structures as well as the remaining portion of the wet detention area (0.4 acres).

**Table 2.1 - Remaining Storm Water Management Areas to be Constructed**

Land Use	Land Use Breakdown and Percent of Project		Currently Preserved and/or Constructed		Remaining Storm Water Mgmt. System to be Constructed
<b>Total</b>	117.78%	100.0%	≈44.39	37.7%	
<b>Building</b>	34.36	29.2%	4.35	12.7%	
<b>Roads/Parking /Paved Area</b>	32.49	27.6%	24.43	75.2%	Note: Constructing more paved areas creates more storage of surface waters
<b>Total Building/ Pavement</b>	66.85		28.78		38.07 acres (not expected to reach this acreage)
<b>Preserved Wetlands</b>	18.51	15.7%	18.51	100.0%	
<b>Lakes</b>	4.49	3.8%	4.09	91.1%	0.4 acres (portion of Water Management Tract L-2)
<b>Green Area/ Dry Retention</b>	27.93	23.7%	16.66	59.7%	≈2.30 acres (Water Management Tract L-1 by wetland ≈1.25 acres (portion of Water Management Tract L-2 by wetlands 2 & 4 (3.55 acres total)



## **2.2 Basin Information**



# Curve Number Calculation

Okeechobee Lot 3, SEG Job #2373

A. Pre Basin: A

B. Total Area (ac): 2.609

C. Curve Number:

Cover Type	Condition	Soil Group	CN	Area	Product
<i>Pervious Areas</i>					
OpenSpace	Good	D	80	2.609	208.731
<i>Impervious Areas</i>					
Impervious	Stormwater TOB	A	100	0.000	0.000
Impervious	Building/Misc.	A	100	0.000	0.000
Impervious	Pavement/Conc.	A	98	0.000	0.000

Sum: 2.609 208.731

Total impervious area =	0.000
% DCIA for contributing area =	0.00%

Weighted Curve Number:  $\frac{208.731}{2.609} = 80$

Notes:

\* All information is referenced from TR-55, Urban Hydrology for Small Watersheds, Second Edition, June 1986

- 1 Poor condition (cover <50% or heavily grazed)
- 2 Fair condition (cover 50% to 75% or not heavily grazed)
- 3 Good condition (cover >75% or lightly grazed)
- 4 Roadway cover types include right-of-way
- 5 Open Space cover types include lawns, parks, golf courses, etc.
- 6 Pasture cover types include grasslands or ranges



# Curve Number Calculation

Okeechobee Lot 3, SEG Job #2373

A. Post Basin: 100

B. Total Area (ac): 2.609

C. Curve Number:

Cover Type	Condition	Soil Group	CN	Area	Product
<i>Pervious Areas</i>					
OpenSpace	Good	D	80	0.036	2.845
<i>Impervious Areas</i>					
Impervious	Stormwater TOB	A	100	0.241	24.118
Impervious	Building/Misc.	A	100	0.000	0.000
Impervious	Pavement/Conc.	A	98	2.332	228.576

Sum: 2.609 255.538

Total impervious area =	2.332
% DCIA for contributing area =	89.39%

Weighted Curve Number:  $\frac{255.538}{2.609} = 98$

Notes:

\* All information is referenced from TR-55, Urban Hydrology for Small Watersheds, Second Edition, June 1986

- 1 Poor condition (cover <50% or heavily grazed)
- 2 Fair condition (cover 50% to 75% or not heavily grazed)
- 3 Good condition (cover >75% or lightly grazed)
- 4 Roadway cover types include right-of-way
- 5 Open Space cover types include lawns, parks, golf courses, etc.
- 6 Pasture cover types include grasslands or ranges



## **2.3 Dry Pre-Treatment Calculations**



## Treatment Volumes - SFWMD

Okeechobee Lot 3, SEG Job #2373

Basin	Treatment Type	Basin Area (ac)	Treatment Volume (ac-ft)		OFW?	Req'd Vol (ac-ft)	Req'd Vol (cf)
			per Nutrient Loading	WMD Basin Criteria			
100	On-line Retention	2.609		0.109		0.109	4,736
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SFWMD Basin Criteria	Wet Detention	1 " over basin
	Impair Treatment	0.7 " over basin
	Exfiltration	0.5 " over basin
	On-line Retention	0.5 " over basin
	Off-line Retention	0.5 " over basin

Discharge to Outstanding Florida Waters: Treat 50% more than WMD basin criteria.



# Retention Stage-Storage & Treatment Elevation

## Okeechobee Lot 3, SEG Job #2373

Pond: 100

	Elevation	Area (ft <sup>2</sup> )	Area (ac)
Top	21.50	10,406	0.239
Control	20.00	3,301	0.076

STAGE (ft)	DEPTH (ft)	VOLUME (ft <sup>3</sup> )	VOLUME (ac-ft)
20.00	0.00	0	0.000
20.05	0.05	184	0.004
20.11	0.11	381	0.009
20.16	0.16	592	0.014
20.21	0.21	816	0.019
20.27	0.27	1,054	0.024
20.32	0.32	1,306	0.030
20.38	0.37	1,571	0.036
20.43	0.43	1,850	0.042
20.48	0.48	2,142	0.049
20.54	0.54	2,448	0.056
20.59	0.59	2,768	0.064
20.64	0.64	3,101	0.071
20.70	0.70	3,448	0.079
20.75	0.75	3,808	0.087
20.80	0.80	4,182	0.096
20.86	0.86	4,569	0.105
20.91	0.91	4,971	0.114
20.96	0.96	5,385	0.124
21.02	1.02	5,814	0.133
21.07	1.07	6,256	0.144
21.13	1.12	6,711	0.154
21.18	1.18	7,180	0.165
21.23	1.23	7,663	0.176
21.29	1.29	8,159	0.187
21.34	1.34	8,669	0.199
21.39	1.39	9,193	0.211
21.45	1.45	9,730	0.223
21.50	1.50	10,280	0.236

	ft <sup>3</sup>	ac-ft
Req. Treatment Vol:	4,736	0.109

Min Req. Treatment Elev: 20.88 ft

	ft <sup>3</sup>	ac-ft
Provided Treatment Vol:	4,736	0.109

Weir Design Elev: 20.88 ft

Notes:

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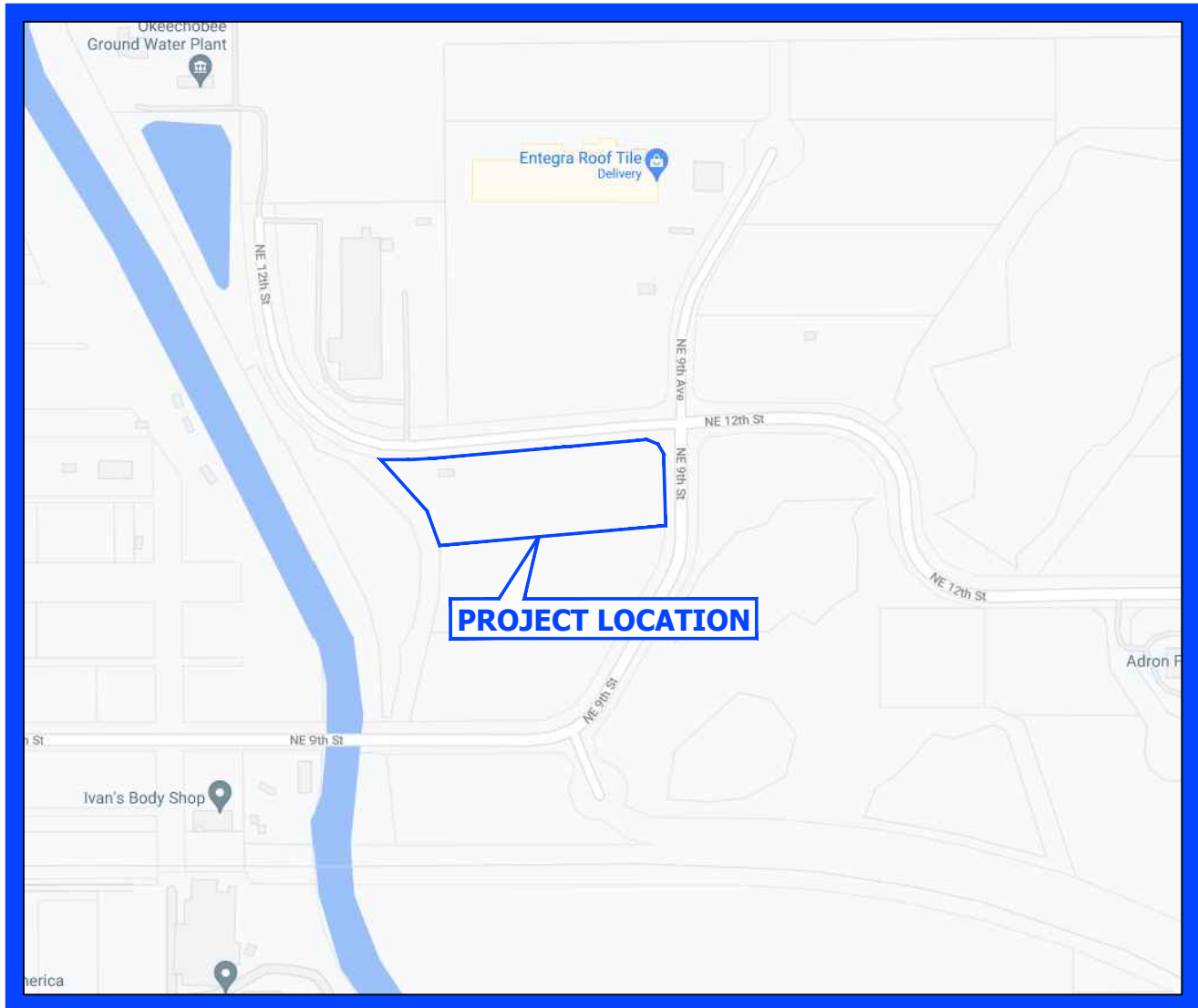
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# **APPENDIX A**

Maps

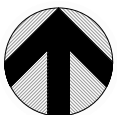




## VICINITY MAP

OKEECHOBEE COUNTY

OKEECHOBEE



NORTH

SCALE: N.T.S.



**SLOAN**  
Engineering Group

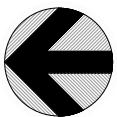
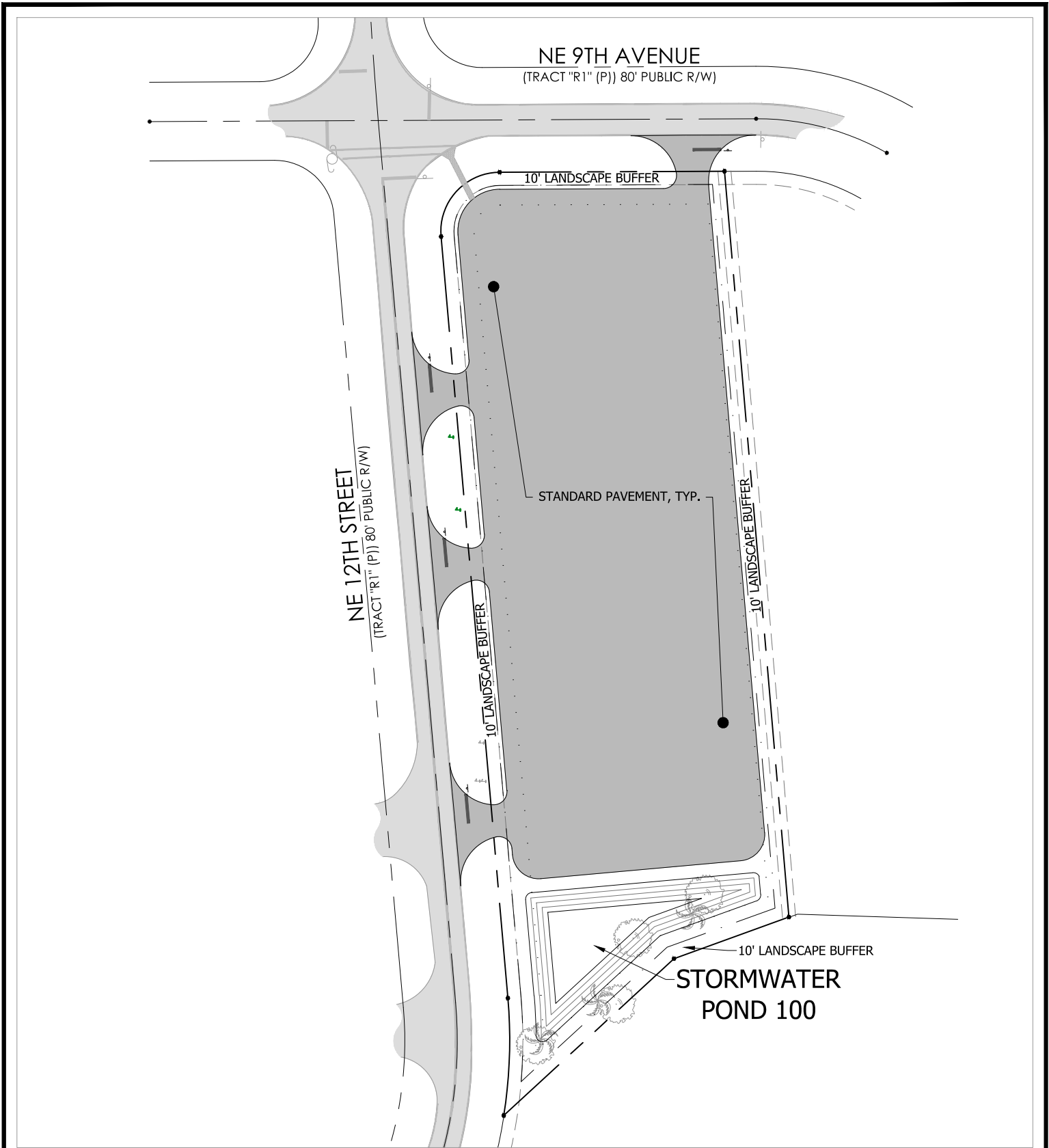
150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830  
PHONE: (863) 800-3046 - FAX: (863) 800-1159  
FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) #26247

OKEECHOBEE LOT 3  
Section 15, Township 37S, Range 35E

*VICINITY MAP*

SLOAN ENGINEERING GROUP, INC.

JOB # 2373



NORTH

SCALE: 1" = 100'



**SLOAN**  
Engineering Group

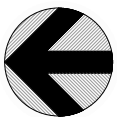
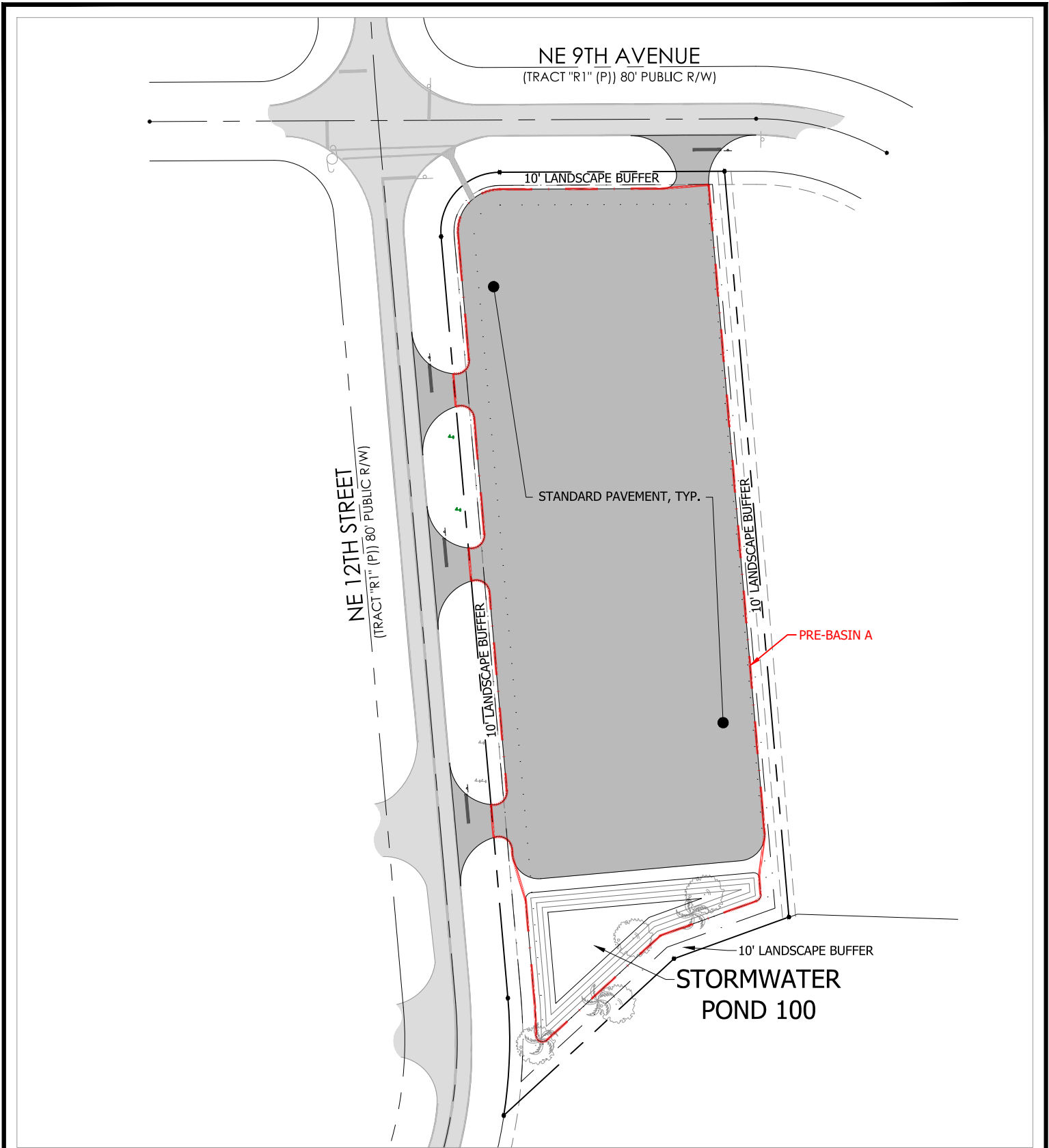
150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830  
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FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) #26247

OKEECHOBEE LOT 3  
Section 15, Township 37S, Range 35E

**PRELIMINARY SITE PLAN**

SLOAN ENGINEERING GROUP, INC.

JOB # 2373



NORTH

SCALE: 1" = 100'



**SLOAN**  
Engineering Group

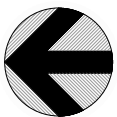
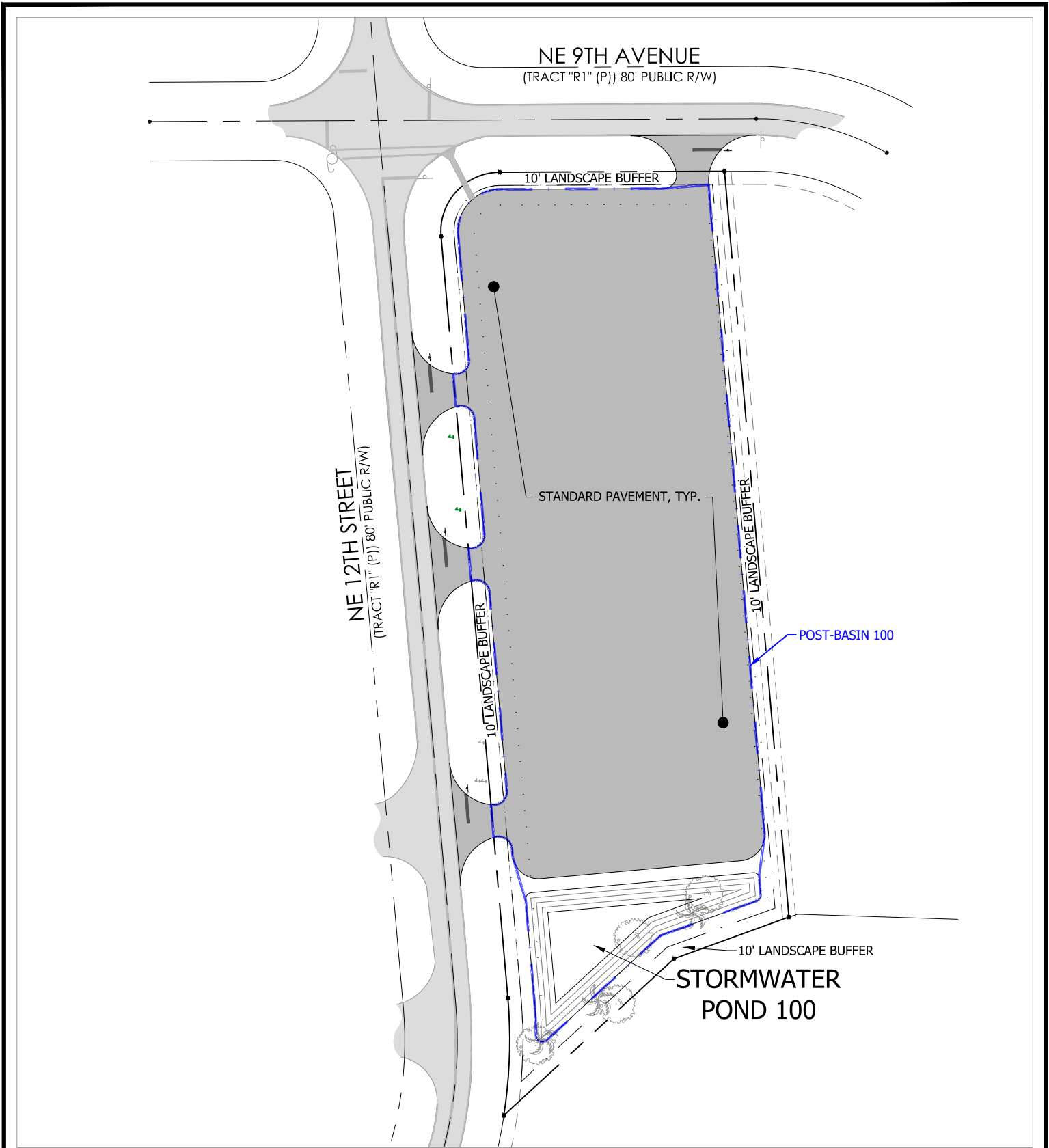
150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830  
PHONE: (863) 800-3046 - FAX: (863) 800-1159  
FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) #26247

OKEECHOBEE LOT 3  
Section 15, Township 37S, Range 35E

*PRE-BASIN MAP*

SLOAN ENGINEERING GROUP, INC.

JOB # 2373



NORTH

SCALE: 1" = 100'



**SLOAN**  
Engineering Group

150 SOUTH WOODLAWN AVENUE, BARTOW, FL 33830  
PHONE: (863) 800-3046 - FAX: (863) 800-1159  
FLORIDA CERTIFICATE OF AUTHORIZATION (FLCA) #26247

OKEECHOBEE LOT 3  
Section 15, Township 37S, Range 35E

*POST-BASIN MAP*

SLOAN ENGINEERING GROUP, INC.

JOB # 2373

# **APPENDIX B**

Supporting Documentation





**Soil Profile, Infiltration Analysis and Pavement Recommendations**

Okeechobee Lot 3  
Okeechobee, FL  
Imperial Project No. 22701

*Prepared for:*  
Whitehead Construction  
Attn: Frank Pierce  
601 6<sup>th</sup> Street SW  
Winter Haven, FL 33880

*Prepared by:*  
**Imperial Testing and Engineering, Inc.**  
3905 Kidron Road  
Lakeland, Florida 33811

March 23, 2022

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March 23, 2022

Whitehead Construction  
Attn: Frank Pierce  
601 6<sup>th</sup> Street SW  
Winter Haven, FL 33880

Re: Okeechobee Lot 3, NE 9<sup>th</sup> St, Okeechobee, FL  
Soil Profile, Infiltration Analysis and Pavement Recommendations

Dear Mr. Pierce,

As requested, Imperial Testing and Engineering, Inc. (Imperial) has performed three (3) soil borings at the above-mentioned site. Two (2) shallow borings were completed in the proposed parking area to develop a soil profile for roadway design. These borings were designated as RB-1 and RB-2. One (1) soil boring was installed in the proposed storm water pond for seasonal high-water table and groundwater elevation determination. The pond boring was designated as PB-1. An infiltration analysis was also requested at the proposed stormwater pond. We performed a total of two (2) permeability tests at the proposed pond location. The permeability tests were designated as PV-1 and PH-1. The field work was completed on March 3, 2022. The general site location can be found on **Figure 1**. The test locations can be found on **Figure 2**. The following is the report of our findings.

The purpose of the soil borings was to determine the lithological profile at the tested locations. The borings would also identify the in-situ groundwater table and an estimation of the seasonal high-water table for design purposes. The roadway borings RB-1 and RB-2 were installed to a depth of 10 feet. The pond boring PB-1 was installed to a depth of 20 feet. The borings were installed using hand auger techniques and with a drilling rig using Direct Push Technology (DPT). The borings were conducted in accordance with the standard method of *Soil Investigation and Sampling by Auger Borings*, as found in ASTM D1452 or Direct Push Soil Sampling as found in ASTM D6282. Visual Classifications of all soil samples were accomplished with the aid of the *Unified Soil Classification System*. The driller's field reports are attached in **Appendix A**.

### **Subsurface Conditions**

According to the *Soil Survey of Okeechobee County, Florida* (USDA-NRCS) there are two (2) available soil types for the property. The available soil types are as follows. Soil number 2 (Basinger fine sand) that contains fine sand to about 80 inches with a water table of land surface to 12 inches and are poorly drained. Soil number 8 (Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes) that contain fine sand to about 80 inches intermixed with sandy loam from 36 inches to 54 inches with a water table of 6 inches to 18 inches and are poorly drained.



Concerning the roadway borings, the borings contained a layer of crushed concrete/shell with a thickness of about 6-7 inches. The borings transitioned to fine sands to boring termination depth. The soils were reported in the SP/SM and SM group indicating varying degrees of silt. Generally suitable soils were encountered below typical surface clearing depth.

Like the roadway borings, the stormwater pond borings also contained an upper sandy layer that extended to about 7.5 feet deep at PB-1. The upper sandy layer was reported in the SP/SM and SM group. The pond borings yielded clayey sands (SC soils) below the sandy layer and extended from 7.5 feet to 14.5 feet before transitioning to SP/SM soils to boring termination depth.

Organics and unsuitable material were not encountered during the drilling campaign. The encountered soils in the SP/SM and SM group can be considered for use as backfill. Soils reported in the SM can be sensitive to moisture and may require additional drying efforts and compaction. The encountered SC soils would be considered semi confining and were encountered at PB-1 from 7.5 feet to 14.5 feet below land surface.

### **Groundwater Conditions**

The in-situ water table was encountered between 6.25 feet and 6.4 feet at the roadway boring locations and 4.6 feet at the pond boring location. The resultant seasonal high-water tables were estimated between 19 inches and 48 inches below land surface at the various locations.

The site contains a soil type with a seasonal high-water table at land surface to 18 inches as reported in the soil survey. The current groundwater levels were reported between 55 inches and 76 inches during our drilling campaign. The soil conditions encountered on site generally correspond with the published document except for isolated areas. The seasonal high-water table reported for the proposed pond area was generally consistent with the soil survey. The seasonal high-water table reported for the parking area was reported higher than the reported rates in the published document. It is our opinion that the soil profile and seasonal high-water table varies from the soil survey due to disturbance from previous development. The soil survey report can be found in **Appendix B**.

### **Permeability Data**

1. Permeability test samples were secured by use of a Shelby Tube sampler at the proposed pond location. One (1) vertical (PV-1) and one (1) horizontal (PH-1) sample was secured at the requested depth. The vertical and horizontal permeability sample was secured at 36 inches below land surface (bls). The samples were obtained via a small excavation to gain access to the subsurface soils at the required sampling depth. The tests were performed in general accordance with ASTM D2434, with applicable modifications. The following calculation was obtained from the referenced test method and was used to determine the coefficient of permeability.



Permeability Calculation:  $K = \frac{QL}{Ath}$

Where: K=permeability, cm/sec  
Q=constant rate of flow, cm<sup>3</sup>  
L=length of portion tested, cm  
A=cross sectional area of specimen, cm<sup>2</sup>  
t=total time of discharge, sec  
h=constant head measured, cm

Applying the above calculation with test water viscosity corrections and test correction factors, Imperial estimates the average permeabilities as follows:

Test No.	Depth of Sample (inches)	Permeability Type	Average Coefficient of Permeability	
			(cm/sec)	(ft/day)
PV-1	36	Vertical	.0013	3.8
PH-1	36	Horizontal	.0028	7.8

The permeability at the site was reported at 3.8 feet per day and 7.8 feet per day. The soil survey indicates expected values between about 3.96 feet per day and 39.9 feet per day for the available soil types. The reported permeability rates are consistent with the published document and the SP/SM-SM soils discovered at the site.

As shown on the driller's field reports, the site is underlain by fine grain sands in the upper layers. The soils were classified in the SP/SM and SM group. SC soils were reported below 7.5 feet at the pond boring location. Organic or unsuitable material was not encountered during the drilling campaign. A true confining layer, consisting of fatty clays, was not encountered to the boring termination depth.

## PAVEMENT RECOMMENDATIONS

The roadway soil borings, like the pond borings, indicate the presence of sandy soils in the upper zone. These soils should be compacted prior to construction of the proposed roadway. Imperial recommends that the roadway and curb areas be proof rolled prior to roadway construction. The roadway should then be watered, and proof rolled with a large vibratory roller with a minimum of 10,000 pounds vibratory capacity. A significant amount of water should be available due to the sandy soil conditions. Proof roll the roadway areas until the soil is compacted to 100 percent of a standard proctor (ASTM D698) to the depth of one foot below the proposed stabilized subgrade elevation. Verify proper soil compaction at a minimum of one test every 200 feet. Following compaction verification, the roadway can then be constructed as recommended.

Traffic type and frequency have not been provided for this site; however, it is anticipated to consist of lightly to medium loaded traffic. Standard pavement design can also be used at the site. For a pavement design life of 20 years, we recommend the following pavement section where an asphalt surface will be used. The proposed pavement design should be modified if high



traffic loads are anticipated. Limerock should be used in areas where the separation of the seasonal high-water table and the bottom of the base is at least 2 feet or greater. Crushed Concrete having a minimum LBR of 150 and compacted to at least 98 percent FM5-515 (Structural Coefficient (0.18) (6 inches) = (1.08) should be used in areas where the seasonal high-water mark is less than 2 feet below bottom of the proposed base.

General Roadway Areas Section Using Limerock and RCA Base and Stabilized Subgrade	Minimum Thickness (in)
<b>Surface Course</b> Asphalt Superpave Surface - Type SP-9.5 or 12.5 Fine, Traffic level "C". Structural Coefficient (0.44) (1.5 inches) = (0.66)	1.5
<b>Base Course</b> Limerock having a minimum LBR of 100 or Crushed Concrete having a minimum LBR 150 and compacted to at least 98 percent of FM5-515. Structural Coefficient (0.18) (6 inches) = (1.08)	6
<b>Subgrade</b> Stabilized* to a minimum LBR of 40 and compacted to at least 98 percent of FM5-515. Structural Coefficient (0.08) (12 inches) = (0.96)	12
<b>Total Structural Coefficient = 2.70</b>	

\*Requires blending either clay, shell, or limerock (or equivalent) with in-place surficial sand. Typical composite samples of subgrade are comprised of 50% in-place sand and 50% imported stabilization material (clay, shell, limerock or equivalent).

We trust the information contained herein will fulfill your present requirements. However, should you need any additional information, or if we may be of any further assistance, please contact us. We sincerely appreciate this opportunity to be of service to you.

Respectfully submitted,

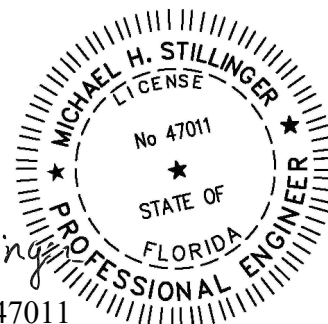
IMPERIAL TESTING and ENGINEERING, INC.



Rodney Carter  
Quality Control Supervisor



Michael Stillinger, P.E. #47011  
Vice President of Engineering



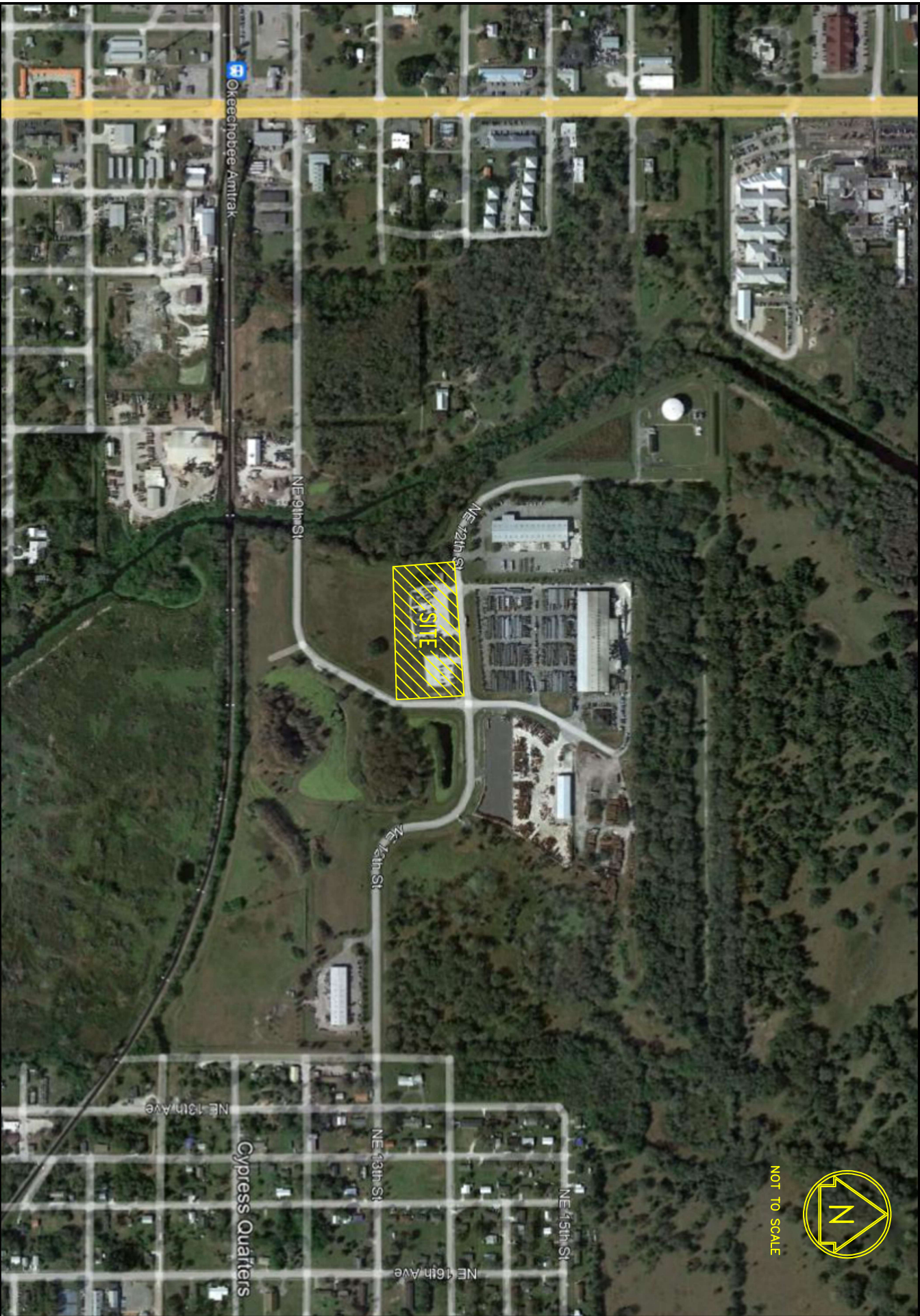
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File 22701



## FIGURES



NOT TO SCALE





IMPERIAL TESTING  
and ENGINEERING, INC.  
3905 KIDRON ROAD LAKELAND FL 33811

OKECHOBEE LOT 3  
NE 9TH STREET  
OKEECHOBEE, FLORIDA

DATE OF DRAWING 3-17-22  
MICHAEL H STILLINGER P.E. # 47011

SITE  
LOCATION  
PROJ. NO. 22701 FIGURE NO. 1



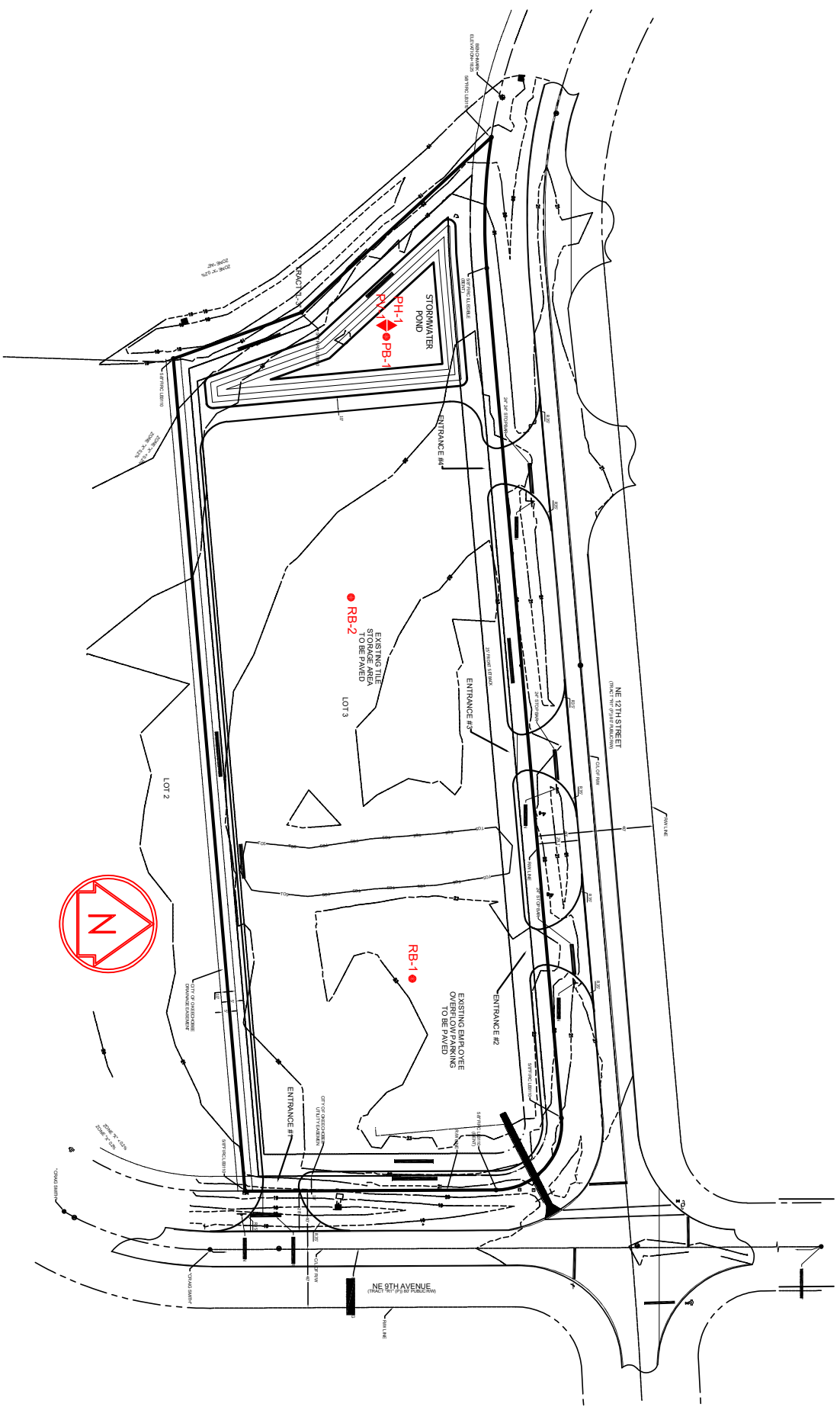
IMPERIAL TESTING  
and ENGINEERING, INC.  
3905 KIDRON ROAD LAKELAND FL 33811

OKECHOBEE LOT 3  
NE 9TH STREET  
OKEECHOBEE, FLORIDA

DATE OF DRAWING 3-17-22  
MICHAEL H STILLINGER P.E. # 47011

SITE PLAN  
WITH TEST LOCATIONS  
PROJ. NO. 22701 FIGURE NO. 2

- 0 50 100  
SCALE: FEET
- LEGEND:
- STANDARD PENETRATION TEST
  - ▲ HORIZONTAL PERMEABILITY TEST
  - ▼ VERTICAL PERMEABILITY TEST



**APPENDIX A**

**DRILLERS FIELD REPORTS**



## DRILLERS FIELD REPORT

Page 1 of 1

CLIENT: Whitehead Construction PROJECT NUMBER: 22701 HOLE NUMBER: PB -1

PROJECT LOCATION: NE 9th St., Okeechobee - Okeechobee Lot 3

DATE STARTED: March 3, 2022 DATE COMPLETED: March 3, 2022

HOLE LOCATION: Proposed pond area ; West end of property center ;See location map

DRILLER(S): J.Moreno.T.McGhin, M.Hallman LAND SURFACE TYPE: Soil

ESTIMATED SHWM: 19" SLOPE OF LAND/ DEGREE: Flat

SAMPLER DIAMETER AND TYPE: 3" HA /2" DPT

GROUNDWATER DEPTH- IMMEDIATE: ~ 4.6' AFTER 24 HRS: N/A

BORING TERMINATION DEPTH: 20' ELEVATION DIFFERENCE (+/-): N/A

Sample Type	Sample Depth Interval (inches)	Sample Recovery (inches)	SPT Blows (per six inches)	"N" Value	Sample Description (inches and order of each material) (sand; clayey sand; sandy clay; clay)	Plasticity	Roots/ Organic %	USCS Symbol	Moisture Content
HA	0-8				Brown and light gray mixed slightly silty fine sand	N	---	SP/SM	D
HA	8-10				Orangish brown slightly silty fine sand	N	---	SP/SM	D
HA	10-19				Dark brown, brown and very light brown mottled slightly silty fine sand	N	---	SP/SM	D
HA	19-23				Gray,brown and very light brown mottled slightly silty fine sand	N	---	SP/SM	D
HA	23-32				Dark brown,brown,very light brown mottled slightly silty fine sand	N	---	SP/SM	D
HA	32-35				Dark brown and brownmottled slightlt silty to silty fine sand	N	---	SP/SM-SM	D/M
HA	35-40				Dark brown and orangish brown mottled slightly silty fine sand	N	---	SP/SM	M
HA	40-48				Brown and light brown mottled slightly silty fine sand	N	---	SP/SM	M
HA	48-60				Brown and grayish brown mottled silty fine sand	N	---	SM	M/W
DPT	60-86				Brown and grayish brown mottled silty fine sand	N	---	SM	W/S
DPT	86-91				Very dark brown slightly silty fine sand with root organics	N	---	SP/SM	S
DPT	91-160				Brownish gray and light brown mottled very silty to clayey fine sand	N/L	---	SM/SC	S
DPT	160-174				Brown and gray mottled clayey sand	L/M	---	SC	S
DPT	174-196				Light gray and light brown mottled slightly silty fine sand	N	---	SP/SM	S
DPT	196-240				Gray,light brown and very light brown mottled slightly silty fine sand	N	---	SP/SM	S

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings AF= Auger Flight

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated Plasticity: L = Low M = Moderate H = High N = Non Plastic

Visual Unified Soil Class: (GW GP GC SW SP SM SC) (ML CL OL MH CH OH PT)



## DRILLERS FIELD REPORT

Page 1 of 1

CLIENT: Whitehead Construction PROJECT NUMBER: 22701 HOLE NUMBER: RB -1

PROJECT LOCATION: NE 9th St., Okeechobee - Okeechobee Lot 3

DATE STARTED: March 3, 2022 DATE COMPLETED: March 3, 2022

HOLE LOCATION: Proposed pavement area ;South of entrance 2 ; Center ;See location map

DRILLER(S): J.Moreno , T.McGhin , M.Hallman LAND SURFACE TYPE: Crushed concrete and shell

ESTIMATED SHWM: 48" SLOPE OF LAND/ DEGREE: Flat

SAMPLER DIAMETER AND TYPE: 3" HA

GROUNDWATER DEPTH- IMMEDIATE: ~ 6.4' AFTER 24 HRS: N/A

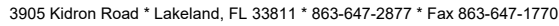
BORING TERMINATION DEPTH: 10' ELEVATION DIFFERENCE (+/-): N/A

Sample Type	Sample Depth Interval (inches)	Sample Recovery (inches)	SPT Blows (per six inches)	"N" Value	Sample Description (inches and order of each material) (sand; clayey sand; sandy clay; clay)	Plasticity	Roots/ Organic %	USCS Symbol	Moisture Content
HA	0-6				Crushed concrete	---	---	---	D
HA	6-11				Dark brown, gray and light gray mottled slightly silty fine sand	N	---	SP/SM	D
HA	11-15				Light gray, very light gray and brown mottled slightly silty fine sand	N	---	SP/SM	D
HA	15-27				Brownish gray ,gray and very light brown mottled slightly silty fine sand	N	---	SP/SM	D
HA	27-32				Very light gray and brown mottled slightly silty fine sand	N	---	SP/SM	D/M
HA	32-48				Brown,dark brown and very light tan mottled slightly silthy fine sand	N	---	SP/SM	M
HA	48-50				Brown, dark brown and very light brown mottled slightly silty fine sand	N	---	SP/SM	M
HA	50-59				Dark brown silty fine sand	N	---	SM	M/W
HA	59-70				Dark grayish brown slightly silty fine sand to silty fine sand	N	---	SM	W
HA	70-77				Very dark brown silty fine sand with very dark brown cemented sands	N	---	SM	W/S
HA	77-120				Dark brown and brown mottled slightly silty to silty fine sand	N	---	SM	S

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings AF= Auger Flight

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated Plasticity: L = Low M = Moderate H = High N = Non Plastic

Visual Unified Soil Class: (GW GP GC SW SP SM SC) (ML CL OL MH CH OH PT)



## Page 1 of 1

[illegible]

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings **AF** = Auger Flight  
Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated Plasticity: **L** = Low **M** = Moderate **H** = High **N** = Non Plastic  
**Visual Unified Soil Class:** (GW GP GC SW SP SM SC) (ML CL OL MH CH OH PT)

**APPENDIX B**

**NRCS SOIL SURVEY DATA**



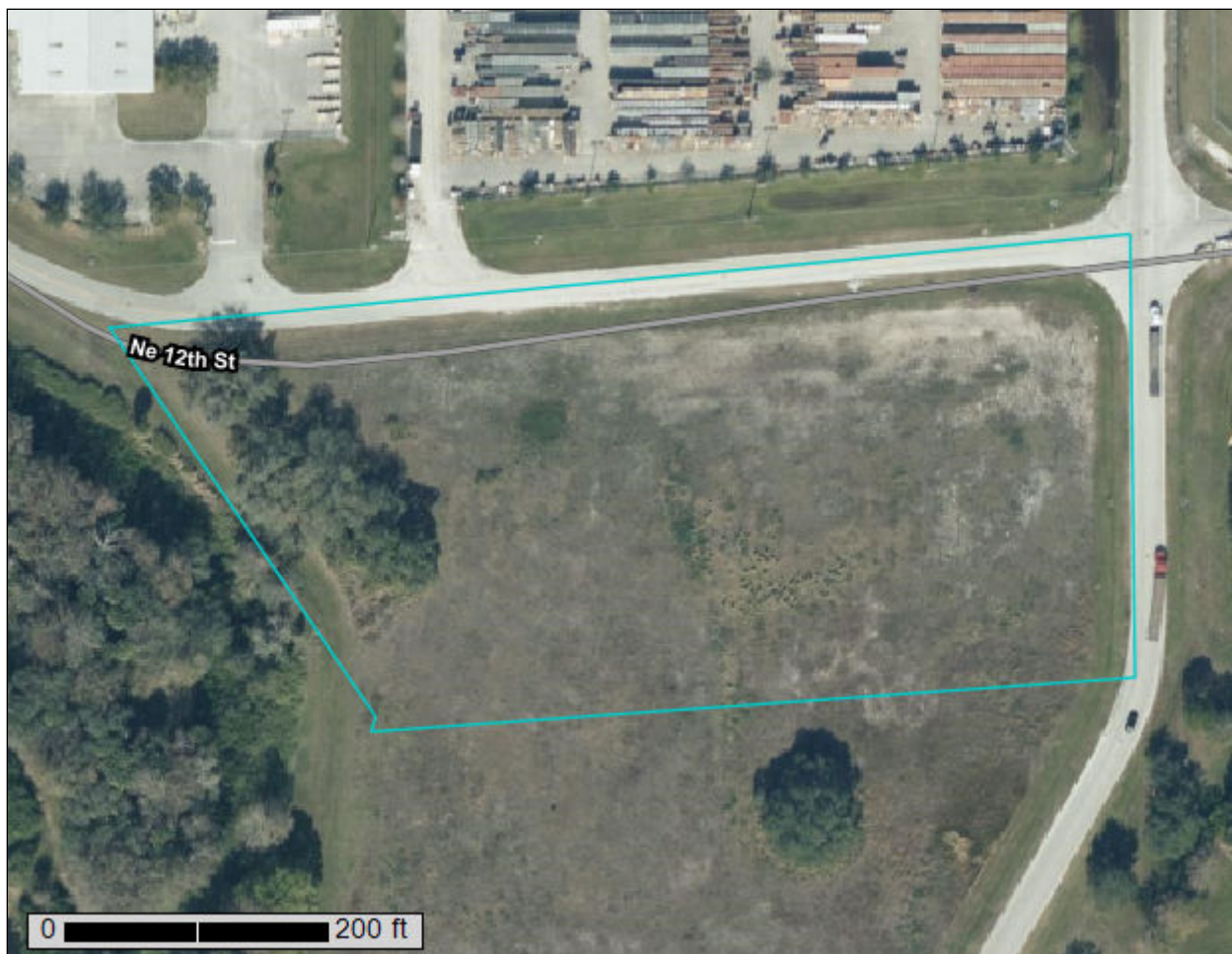
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Okeechobee County, Florida**



February 28, 2022

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


# Custom Soil Resource Report Soil Map



## Custom Soil Resource Report


### MAP LEGEND

#### Area of Interest (AOI)

 Area of Interest (AOI)


#### Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

#### Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

#### 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 1:24,000.

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: Okeechobee County, Florida  
Survey Area Data: Version 19, Aug 26, 2021

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

Date(s) aerial images were photographed: Jan 25, 2019—Jan 29, 2019

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.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Basinger fine sand, 0 to 2 percent slopes	1.0	19.7%
8	Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes	4.1	80.3%
<b>Totals for Area of Interest</b>		<b>5.1</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

## Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Okeechobee County, Florida

### 2—Basinger fine sand, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2svym  
*Elevation:* 0 to 100 feet  
*Mean annual precipitation:* 42 to 63 inches  
*Mean annual air temperature:* 68 to 77 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Farmland of unique importance

#### Map Unit Composition

*Basinger and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Basinger

##### Setting

*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, concave  
*Parent material:* Sandy marine deposits

##### Typical profile

*Ag - 0 to 2 inches:* fine sand  
*Eg - 2 to 18 inches:* fine sand  
*Bh/E - 18 to 36 inches:* fine sand  
*Cg - 36 to 80 inches:* fine sand

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 4.0  
*Available water supply, 0 to 60 inches:* Low (about 5.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Forage suitability group:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Slough (R155XY011FL)  
*Hydric soil rating:* Yes

## Minor Components

### Myakka

*Percent of map unit:* 6 percent

*Landform:* Flatwoods on marine terraces, drainageways on marine terraces

*Landform position (three-dimensional):* Tread, talf, dip

*Down-slope shape:* Linear

*Across-slope shape:* Linear, concave

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

*Hydric soil rating:* No

### Pompano

*Percent of map unit:* 4 percent

*Landform:* Flats on marine terraces, drainageways on marine terraces

*Landform position (three-dimensional):* Tread, dip

*Down-slope shape:* Linear

*Across-slope shape:* Concave, linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Slough (R155XY011FL)

*Hydric soil rating:* Yes

### Immokalee

*Percent of map unit:* 4 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Riser, talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

*Hydric soil rating:* No

### Placid

*Percent of map unit:* 4 percent

*Landform:* Depressions on marine terraces, drainageways on marine terraces

*Landform position (three-dimensional):* Tread, dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

*Hydric soil rating:* Yes

### Anclote

*Percent of map unit:* 1 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Tread, dip

*Down-slope shape:* Concave, convex

*Across-slope shape:* Concave, linear

*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

*Hydric soil rating:* Yes

### Felda

*Percent of map unit:* 1 percent

*Landform:* Drainageways on marine terraces, flats on marine terraces

*Landform position (three-dimensional):* Tread, dip, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave, linear  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Slough (R155XY011FL)  
*Hydric soil rating:* Yes

## **8—Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2svyp  
*Elevation:* 0 to 100 feet  
*Mean annual precipitation:* 42 to 63 inches  
*Mean annual air temperature:* 68 to 77 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Pineda and similar soils:* 45 percent  
*Pineda, wet, and similar soils:* 40 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Pineda**

#### **Setting**

*Landform:* Drainageways on marine terraces, flatwoods on marine terraces  
*Landform position (three-dimensional):* Tread, dip, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave, linear  
*Parent material:* Sandy and loamy marine deposits

#### **Typical profile**

*A - 0 to 1 inches:* fine sand  
*E - 1 to 5 inches:* fine sand  
*Bw - 5 to 36 inches:* fine sand  
*Btg/E - 36 to 54 inches:* fine sandy loam  
*Cg - 54 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent

## Custom Soil Resource Report

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 4.0

*Available water supply, 0 to 60 inches:* Low (about 5.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Forage suitability group:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), South Florida Flatwoods (R155XY003FL)

*Hydric soil rating:* No

### Description of Pineda, Wet

#### Setting

*Landform:* Drainageways on marine terraces, flats on marine terraces

*Landform position (three-dimensional):* Tread, dip, talf

*Down-slope shape:* Linear

*Across-slope shape:* Concave, linear

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 1 inches:* fine sand

*E - 1 to 5 inches:* fine sand

*Bw - 5 to 36 inches:* fine sand

*Btg/E - 36 to 54 inches:* fine sandy loam

*Cg - 54 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* About 0 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 4.0

*Available water supply, 0 to 60 inches:* Low (about 5.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Forage suitability group:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Slough (R155XY011FL)

*Hydric soil rating:* Yes

## Minor Components

### Felda

*Percent of map unit:* 6 percent

*Landform:* Drainageways on marine terraces, flats on marine terraces

*Landform position (three-dimensional):* Tread, dip, talf

*Down-slope shape:* Linear

*Across-slope shape:* Concave, linear

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Slough (R155XY011FL)

*Hydric soil rating:* Yes

### Wabasso

*Percent of map unit:* 3 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Tread, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

*Hydric soil rating:* No

### Valkaria

*Percent of map unit:* 2 percent

*Landform:* Drainageways on flats on marine terraces

*Landform position (three-dimensional):* Tread, dip, talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear, concave

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Slough (R155XY011FL)

*Hydric soil rating:* Yes

### Cypress lake

*Percent of map unit:* 2 percent

*Landform:* Flats on marine terraces, drainageways on marine terraces

*Landform position (three-dimensional):* Tread, talf, dip

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), South Florida Flatwoods (R155XY003FL)

*Hydric soil rating:* Yes

### Brynwood

*Percent of map unit:* 2 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Tread, talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

*Hydric soil rating:* Yes



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United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

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# Copy of SFWMD Permit

## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

### Permitting

**Application #:** 221230-37060    **Permit#:** 47-00638-P    **Received Date:** 03-Jan-2023  
**Issuing Office:** OKE/SFWMD    **Application Status:** Under Review  
**Permit Type:** Environmental Resource (New Construction/Operation)    **30-Day Deadline:** 02-Feb-2023  
**Project Name:** City Of Okeechobee Commerce Center Lot 3 Improvements    **Project Acres:** 3.15  
**Landuse(s):** Industrial Including Utilities    **Location:** Okeechobee  
**Receiving Body:**  
**SWM Reviewer:** Glen Gareau (863)462-5260  
**ENV Reviewer:** Elizabeth Allen (863)462-5260  
**TRS Reviewer:** Tammy Parker  
**Applicant:** Westlake Royal Roofing Llc Christopher Hedrick  
 2801 Post Oak Blvd Suite 600 Houston TX 77056  
**Engr Consultant:** Sloan Engineering Group Inc. Santos Medina  
 P.O. Box 253 Bartow FL 33830

#### Project Description:

**Contact Email Id:** [permits@sfwmd.gov](mailto:permits@sfwmd.gov)

#### Documents

#### List by date

	<u>Document Type</u>	<u>Date Posted</u>	<u>Size</u>	<u>Seal</u> <u>Verified?</u>
Applications(4)				
Application Documents(16)				
Correspondence(6)				
Legal Documents(1)				
MAI Information(6)				
Plans - Design Plans(2)				
Plans - Engineering(3)				
Plans - Environmental(4)				
Plans - Other(1)				
Permits(2)				
Permit File History(1)				