

DRAFT

Noise Study Report Addendum

Florida Department of Transportation

District One

S.R. 710 from US 441 to the L-63N Canal

Okeechobee County, Florida

Financial Management Number: 419344-3-32-01



August 7, 2018

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

Date: August 7, 2018

To: Jeffrey James, FDOT District 1

From: Brian Kirkpatrick, RS&H

Subject : SR 710 Widening and Extension – Design-Phase Traffic Noise Study
Okeechobee County, Florida
FM Number: 419344-3-32-01

Introduction and Background

In March of 2012, the Florida Department of Transportation (FDOT) published a Noise Study Report (NSR) associated with the Project Development and Environment (PD&E) Study that was conducted for the segment of SR 710 from US 441 to County Road (CR) 714 (Okeechobee and Martin Counties). A thorough review of the PD&E noise study was conducted early in the design phase in order to identify any roadway design changes that have occurred. Since the completion of the PD&E Study, the FDOT identified the need to modify the proposed new alignment extension of SR 710 from State Road (SR) 70 to US 441 in order to improve highway operations, safety, and regional mobility. Modifications included shifting of the roadway's horizontal alignment in order to minimize impacts to various properties.

The purpose of this report is to summarize of the results of the highway traffic noise analysis that was performed during the final design phase. The current roadway design concept for the new alignment, as well as the evaluated noise receiver sites, are illustrated in **Figure 1**.

Project Description

The improvement consists of a new roadway on new alignment from US 441 to SR 70 and then connects to the existing SR 710, just west of the L-63N Canal bridge. The urban typical section will consist of 12-foot lanes with six and a half-foot bike lanes and outside shoulders varying from zero to four feet wide.

Methodology and Current Regulations

The design-phase noise study was prepared in accordance with Title 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. The evaluation used methodology established by the FDOT and documented in the PD&E Manual, Part 2, Chapter 18 "Highway Traffic Noise" (June 14, 2017). A review of current traffic noise policies was conducted as part of this study and it was determined that, while the PD&E Manual has been updated since the completion of the SR 710 PD&E Study, none of the policy changes affect the determination of traffic noise impacts for this project. Therefore, the criteria for the determination of noise impacts is unchanged. The noise analysis was conducted using FHWA's Traffic Noise Model (TNM), Version 2.5. The latest available roadway design data (60% plans) was used to develop the noise model for this study.

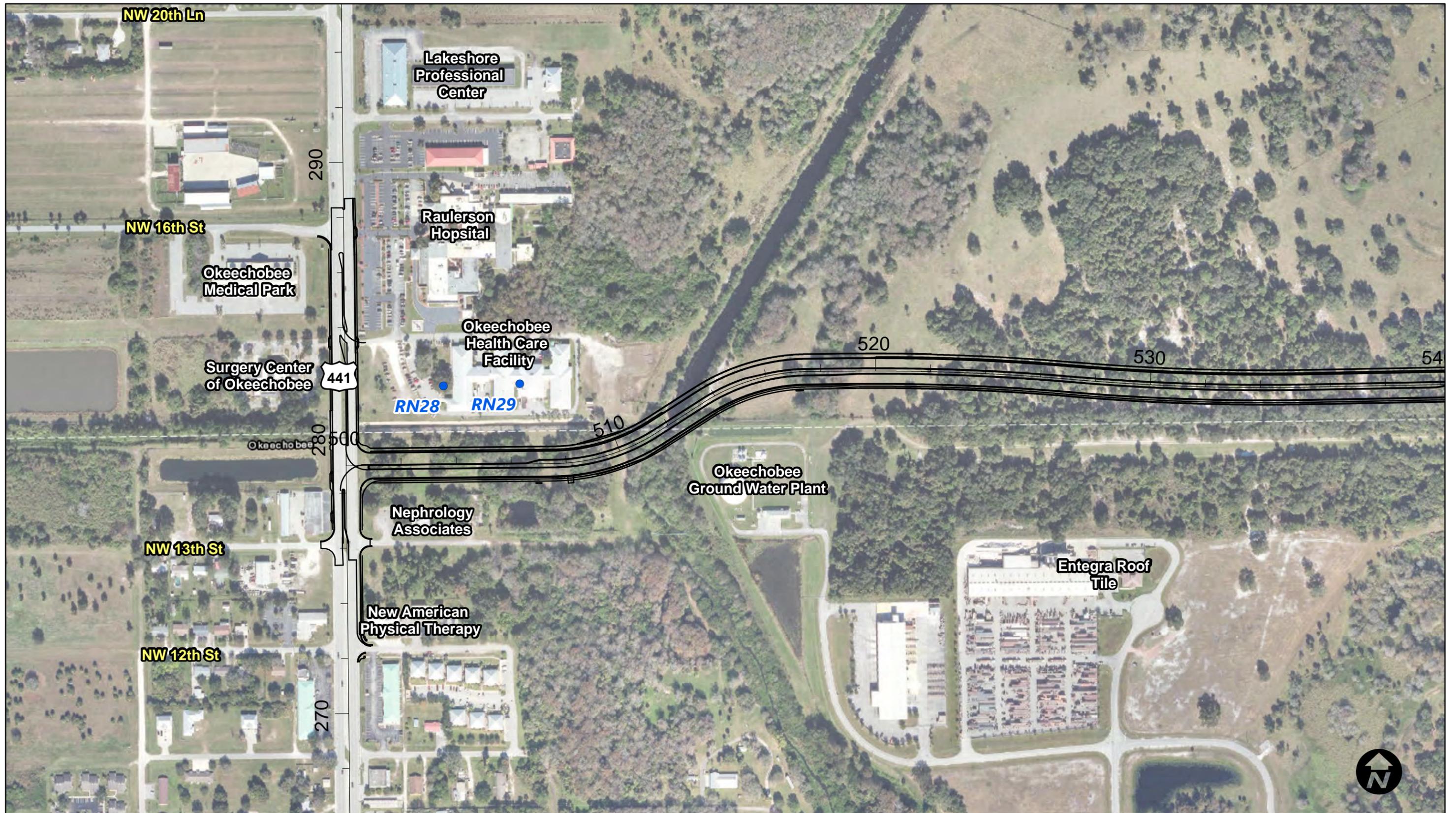
Predicted Noise Levels

During the PD&E Study, a land use review was conducted to identify noise sensitive sites in 2010, and again in 2011. The Date of Public Knowledge (DOPK) for the PD&E Study was March 16, 2017. Therefore, any new noise sensitive sites that received building permits prior to this date would be eligible for consideration for noise abatement, if warranted.

During the design phase, a field review was conducted in January 2018 to identify all noise sensitive sites located along the corridor. Additionally, a search for Okeechobee County building permits was conducted along the corridor to identify any new permitted developments that may be noise sensitive. This search determined that no building permits for noise sensitive land uses were issued prior to the DOPK along the corridor, except for the Okeechobee Health Care Facility (see **Figure 1**, Sheet 1), which was under construction for expansion during the 2018 field review.

The majority of the noise sensitive sites evaluated in the PD&E Study remain and were included in the design-phase noise analysis. At the Okeechobee Health Care Facility, there were no exterior areas of frequent human use identified in the field. However, the noise receiver sites that were analyzed for this property in the PD&E phase (i.e., RN28 and RN29) were carried forward into the design-phase noise study, for consistency.

The noise analysis results in the PD&E Study's Noise Study Report indicate that no noise sensitive sites located west of the L-63N Canal would be impacted by traffic noise as a result of this project. The more detailed design-phase noise analysis has also determined that no noise sensitive sites would be impacted by design year traffic noise (see **Table 1**). Because none of the sites would be impacted by traffic noise with the current roadway design, no noise barriers were evaluated. All FDOT approved traffic data sheets for this noise study are included as attachments to this document.



SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location



Figure 1:
 Noise Evaluation Map
 Sheet 1



SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location

0 140 280 420 560 700
 Feet



Figure 1:
 Noise Evaluation Map
 Sheet 2



SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location

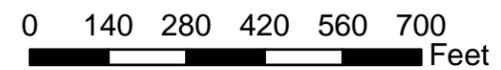
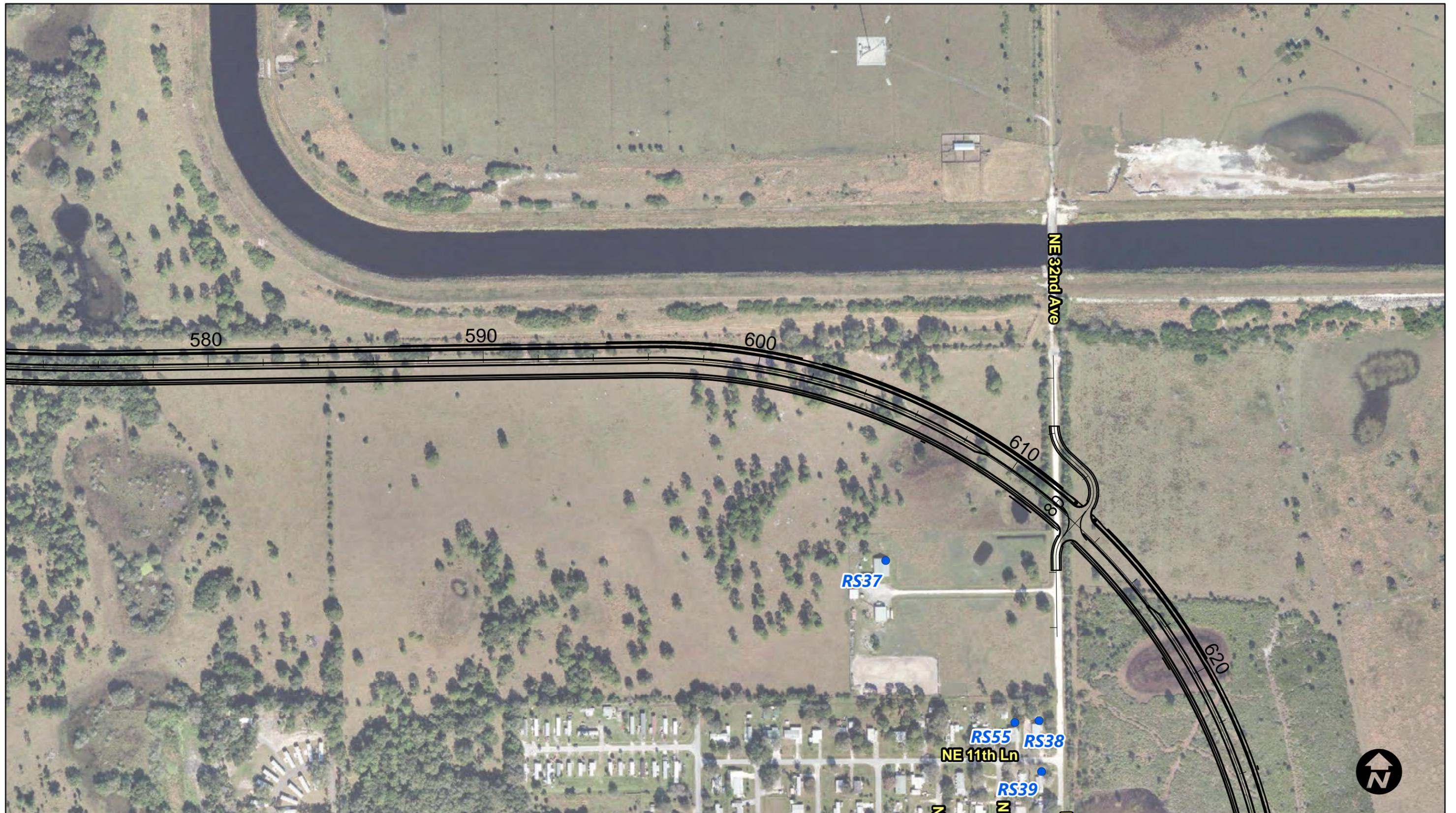


Figure 1:
 Noise Evaluation Map
 Sheet 3



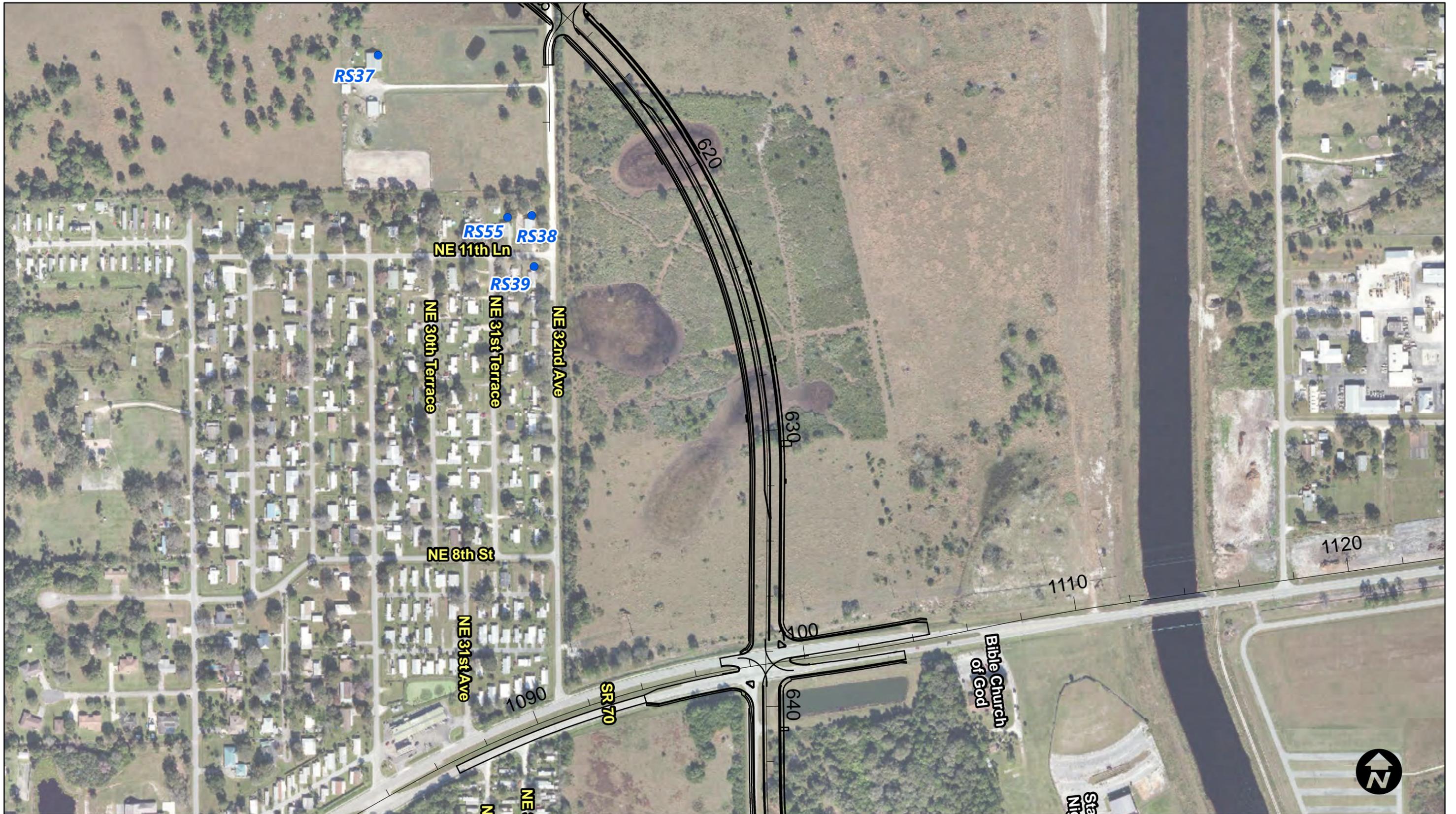
SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location



Figure 1:
 Noise Evaluation Map
 Sheet 4



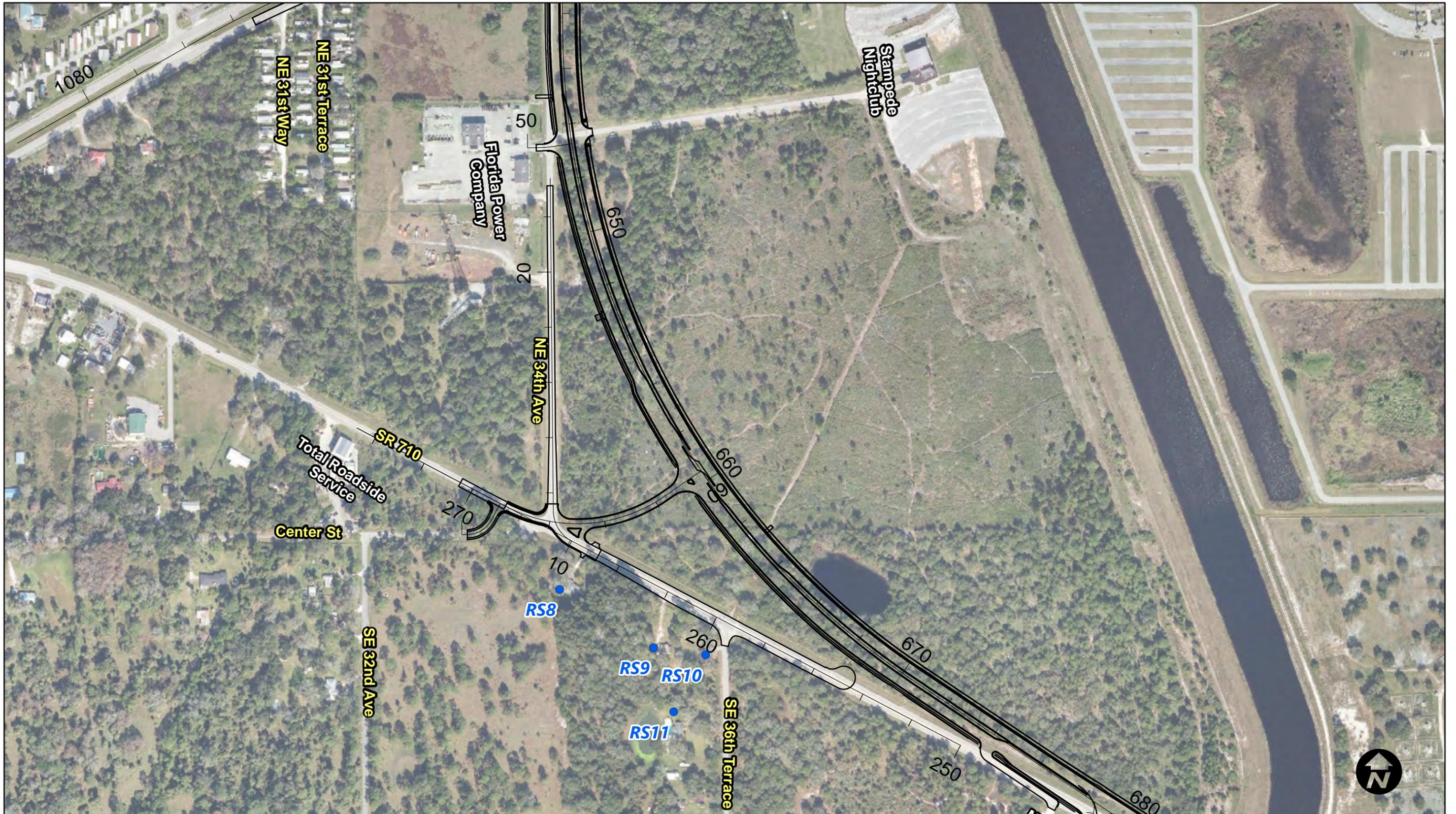
SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location



Figure 1:
 Noise Evaluation Map
 Sheet 5



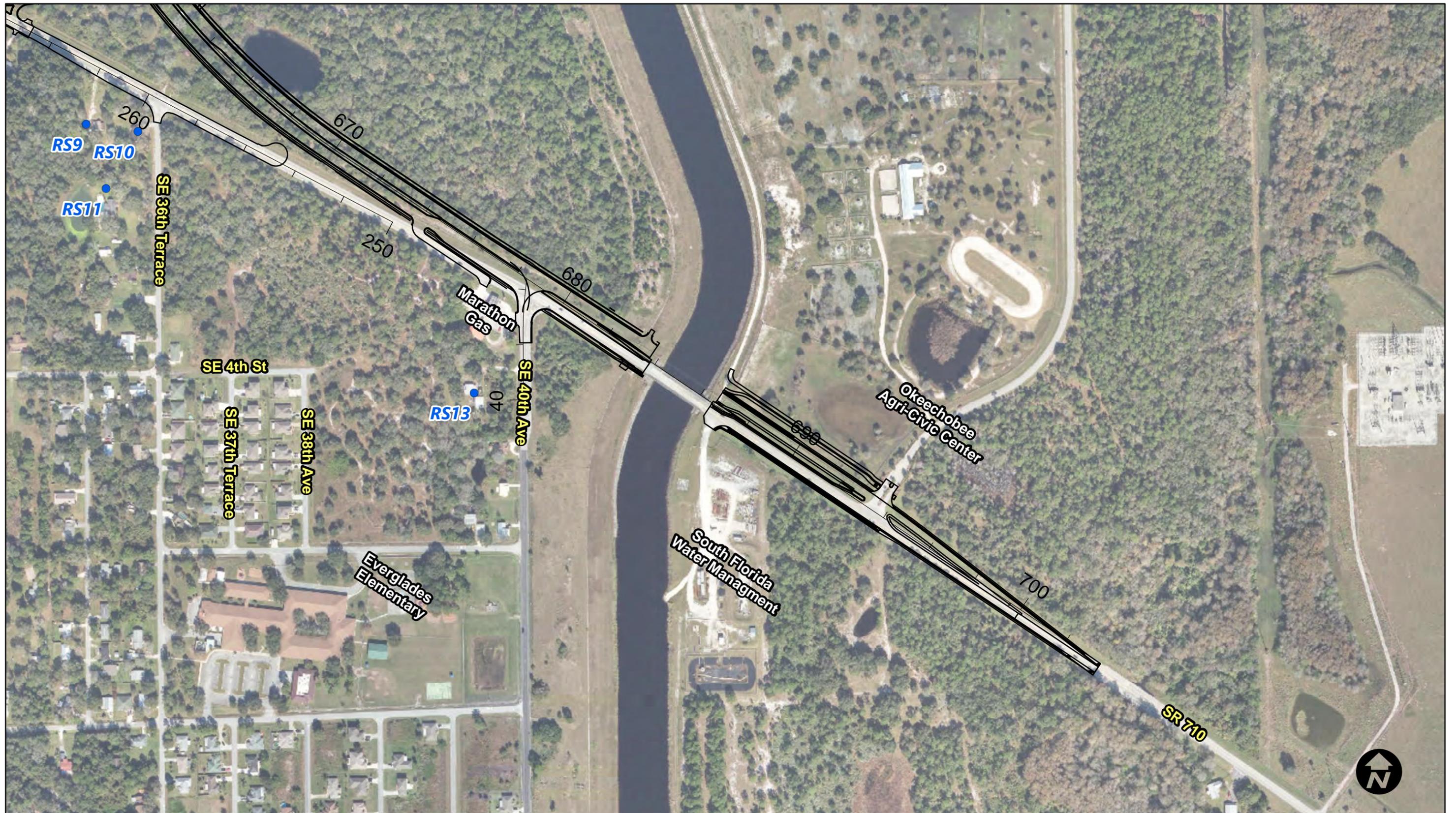
SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location



Figure 1:
 Noise Evaluation Map
 Sheet 6



SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location



Figure 1:
 Noise Evaluation Map
 Sheet 7



SR 710 Extension
Okeechobee County, Florida
 Project Number 41934433201
 Date: July 2018

Legend

RN28
 ● Noise Receiver Location



Figure 1:
 Noise Evaluation Map
 Sheet 8

Table 1 presents the predicted noise levels from the design-phase traffic noise analysis. The highest predicted level is 62.3 dB(A) at site RS13. The FDOT's Noise Abatement Criteria (NAC) for Activity Categories B and C is 66.0 dB(A).

The Okeechobee Health Care Facility has plans to expand their facilities (construction had begun in January 2018). The improvement plans were reviewed (included as an attachment) and it was determined that no new exterior noise sensitive land uses were proposed as part of the site plans.

Table 1: Predicted Noise Levels

Receptor ID	Noise Sensitive Site Represented	Noise Activity Category	Predicted Build Noise Levels (dB(A))	NAC Approached or Exceeded?
RN28	Okeechobee Health Care	C (Medical Facilities)	61.4	No
RN29	Okeechobee Health Care	C (Medical Facilities)	60.4	No
RS36	1 residence	B (Residential)	51.6	No
RS37	1 residence	B	57.5	No
RS38	1 residence	B	55.7	No
RS39	1 residence	B	55.4	No
RS55	1 residence	B	54.7	No
RS8	1 residence	B	55.4	No
RS9	1 residence	B	56.9	No
RS10	1 residence	B	59.7	No
RS11	1 residence	B	54.7	No
RS13	1 residence	B	62.3	No

Conclusions

The results of the design noise analysis determined there are no impacted noise sensitive sites above the FDOT noise abatement criteria level. Therefore, traffic noise abatement measures are not warranted with this project.

Attachment 1:

Approved Traffic Data Sheets for Noise Analysis

**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FOOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: US 441 to SR 70
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	2013	T24 =	20.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	10.00%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	2.78%	% of Design Hour Volume
Posted Speed:	45	HT =	7.05%	% of Design Hour Volume
		B =	0.18%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	0	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	0	MT =	0.00%	% of Design Hour Volume
Posted Speed:	0	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	2040	T24 =	20.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	1740	Tpeak =	10.00%	% of Design Hour Volume
Demand Peak Hour Volume:	918	MT =	2.78%	% of Design Hour Volume
Posted Speed:	45	HT =	7.05%	% of Design Hour Volume
		B =	0.18%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Brian Kirkpatrick [Signature] Date: 04/25/2018
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson [Signature] Date: 6/18/2018
 Print Name Signature

**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: SR 70 to Old SR 710
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	20.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	10.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.78%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	7.05%	% of Design Hour Volume
		B =	0.18%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	<u>2040</u>	T24 =	20.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	10.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1168</u>	MT =	2.78%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	7.05%	% of Design Hour Volume
		B =	0.18%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

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FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: Old SR 710 to SE 40th Ave
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	20.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	10.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.78%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	7.05%	% of Design Hour Volume
		B =	0.18%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
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Year:	<u>2040</u>	T24 =	20.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	10.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1468</u>	MT =	2.78%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	7.05%	% of Design Hour Volume
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FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: SE 40th Ave to South
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	58.00%	%
Year:	<u>2013</u>	T24 =	50.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	25.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	6.95%	% of Design Hour Volume
Posted Speed:	<u>55</u>	HT =	17.62%	% of Design Hour Volume
		B =	0.45%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	58.00%	%
Year:	<u>2040</u>	T24 =	50.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	25.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1296</u>	MT =	6.95%	% of Design Hour Volume
Posted Speed:	<u>55</u>	HT =	17.62%	% of Design Hour Volume
		B =	0.45%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

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FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: _____
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	13.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	6.50%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.52%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	3.86%	% of Design Hour Volume
		B =	0.10%	% of Design Hour Volume
		MC =	0.79%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	<u>2040</u>	T24 =	13.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	6.50%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1295</u>	MT =	2.52%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	3.86%	% of Design Hour Volume
		B =	0.10%	% of Design Hour Volume
		MC =	0.79%	% of Design Hour Volume

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FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: SR 70 East of SR 710
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	13.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	6.50%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.52%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	3.86%	% of Design Hour Volume
		B =	0.12%	% of Design Hour Volume
		MC =	0.79%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

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Year:	<u>2040</u>	T24 =	13.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	6.50%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1223</u>	MT =	2.52%	% of Design Hour Volume
Posted Speed:	<u>45</u>	HT =	3.86%	% of Design Hour Volume
		B =	0.12%	% of Design Hour Volume
		MC =	0.79%	% of Design Hour Volume

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FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: Old SR 710 East of NE 34th Ave
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	16.04%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	8.02%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.23%	% of Design Hour Volume
Posted Speed:	<u>35</u>	HT =	5.65%	% of Design Hour Volume
		B =	0.15%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	<u>2040</u>	T24 =	16.04%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>297</u>	Tpeak =	8.02%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>612</u>	MT =	2.23%	% of Design Hour Volume
Posted Speed:	<u>35</u>	HT =	5.65%	% of Design Hour Volume
		B =	0.15%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

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FDOT Reviewer: Christopher Simpson [Signature] Date: 6/18/2018
 Print Name Signature

TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: US 441 North of SR 710 Ext.
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	9.72%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	4.86%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.27%	% of Design Hour Volume
Posted Speed:	<u>35</u>	HT =	2.29%	% of Design Hour Volume
		B =	0.31%	% of Design Hour Volume
		MC =	0.51%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	<u>2040</u>	T24 =	9.72%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	4.86%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1311</u>	MT =	2.27%	% of Design Hour Volume
Posted Speed:	<u>35</u>	HT =	2.29%	% of Design Hour Volume
		B =	0.31%	% of Design Hour Volume
		MC =	0.51%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Brian Kinyatruck [Signature] Date: 04/25/2018
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**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: US 441 South of SR 710 Ext.
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	<u>2013</u>	T24 =	9.72%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	4.86%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1</u>	MT =	2.27%	% of Design Hour Volume
Posted Speed:	<u>35</u>	HT =	2.29%	% of Design Hour Volume
		B =	0.24%	% of Design Hour Volume
		MC =	0.51%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	<u>0</u>	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>0</u>	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>0</u>	MT =	0.00%	% of Design Hour Volume
Posted Speed:	<u>0</u>	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	<u>2040</u>	T24 =	9.72%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<u>1740</u>	Tpeak =	4.86%	% of Design Hour Volume
Demand Peak Hour Volume:	<u>1350</u>	MT =	2.27%	% of Design Hour Volume
Posted Speed:	<u>35</u>	HT =	2.29%	% of Design Hour Volume
		B =	0.24%	% of Design Hour Volume
		MC =	0.51%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Brian Kirkpatrick [Signature] Date: 04/25/2018
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson [Signature] Date: 6/18/2018
 Print Name Signature

**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT
FDOT DISTRICT 1**

Federal Aid Number(s): _____
 FPID Number(s): 419344-2-22-01
 State/Federal Route No.: _____
 Road Name: SR 710 Extension
 Project Description: Build
 Segment Description: SE 40th Ave (South of SR 710 Ext.)
 Section Number: 1
 Mile Post To/From: (new alignment)

Existing Facility:		D =	55.00%	%
Year:	2013	T24 =	16.04%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	8.02%	% of Design Hour Volume
Demand Peak Hour Volume:	1	MT =	2.23%	% of Design Hour Volume
Posted Speed:	35	HT =	5.65%	% of Design Hour Volume
		B =	0.15%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

No Build Alternative (Design Year):		D =	0.00%	%
Year:	0	T24 =	0.00%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	0	Tpeak =	0.00%	% of Design Hour Volume
Demand Peak Hour Volume:	0	MT =	0.00%	% of Design Hour Volume
Posted Speed:	0	HT =	0.00%	% of Design Hour Volume
		B =	0.00%	% of Design Hour Volume
		MC =	0.00%	% of Design Hour Volume

Build Alternative (Design Year):		D =	55.00%	%
Year:	2040	T24 =	16.04%	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	312	Tpeak =	8.02%	% of Design Hour Volume
Demand Peak Hour Volume:	493	MT =	2.23%	% of Design Hour Volume
Posted Speed:	35	HT =	5.65%	% of Design Hour Volume
		B =	0.15%	% of Design Hour Volume
		MC =	1.20%	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Brian Kirkpatrick [Signature] Date: 06/15/2018
 Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Christopher Simpson [Signature] Date: 6/18/2018
 Print Name Signature

Attachment 2:

Construction Plans

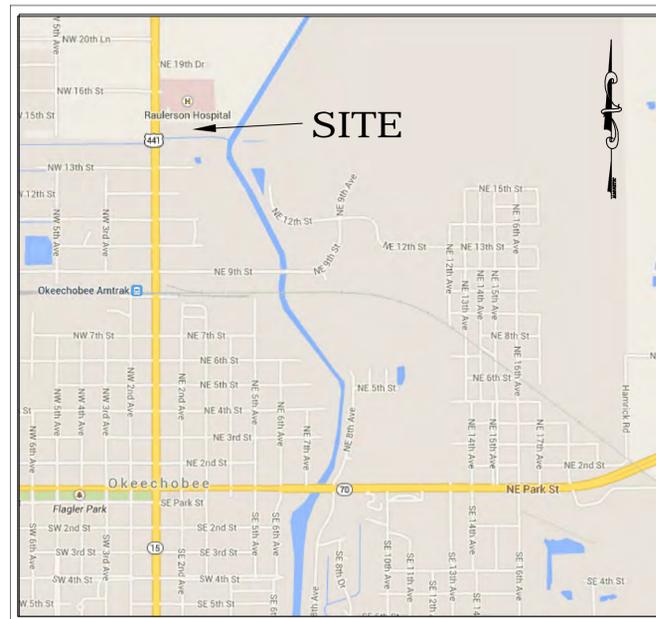
Okeechobee Healthcare Facility West Wing Expansion

Construction Plans Of Okeechobee Healthcare Facility West Wing Expansion Seniors "R" Able, Inc.

Lying In Sec. 9, Township 37 South, Range 35 East
Okeechobee County, Florida



VICINITY MAP



LOCATION MAP

SCALE: N.T.S.

INDEX OF SHEETS

01 of 14	TITLE SHEET
02 of 14	OVERALL PLAN & KEY SHEET
03 of 14	EXISTING CONDITIONS / DEMOLITION PLAN
04 of 14	HORIZONTAL CONTROL, STRIPING & SIGNAGE PLAN (WEST VIEW)
05 of 14	HORIZONTAL CONTROL, STRIPING & SIGNAGE PLAN (SOUTH EAST VIEW)
06 of 14	HORIZONTAL CONTROL, STRIPING & SIGNAGE PLAN (NORTH EAST VIEW)
07 of 14	PAVING, GRADING & DRAINAGE PLAN (WEST VIEW)
08 of 14	PAVING, GRADING & DRAINAGE PLAN (SOUTH EAST VIEW)
09 of 14	PAVING, GRADING & DRAINAGE PLAN (NORTH EAST VIEW)
10 of 14	PAVING, GRADING & DRAINAGE DETAILS
11 of 14	UTILITY DETAILS
12 of 14	UTILITY DETAILS
13 of 14	UTILITY DETAILS
14 of 14	GENERAL NOTES & SPECIFICATIONS

Survey Data

GSi
GEOMATICS SERVICES Inc.
PROFESSIONAL SURVEYORS & MAPPERS
1934 TUCKER COURT, FORT PIERCE, FLORIDA
(772) 419-8383 FAX (772) 408-4208
CERTIFICATE OF AUTHORIZATION LB# 7673

TRADEWINDS SURVEYORS
200 S.W. 3rd Avenue
Okeechobee, FL 34974
Tel: (863) 763-2887
Fax: (863) 763-4342
Email: kab.twps@yahoo.com

Kenneth A. Breaux, Jr. (PSM 4820)

ELEVATIONS SHOWN HEREON ARE IN FEET RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD), 1929 ADJUSTMENT.



Steven L. Dobbs Engineering, LLC
Consulting Engineers

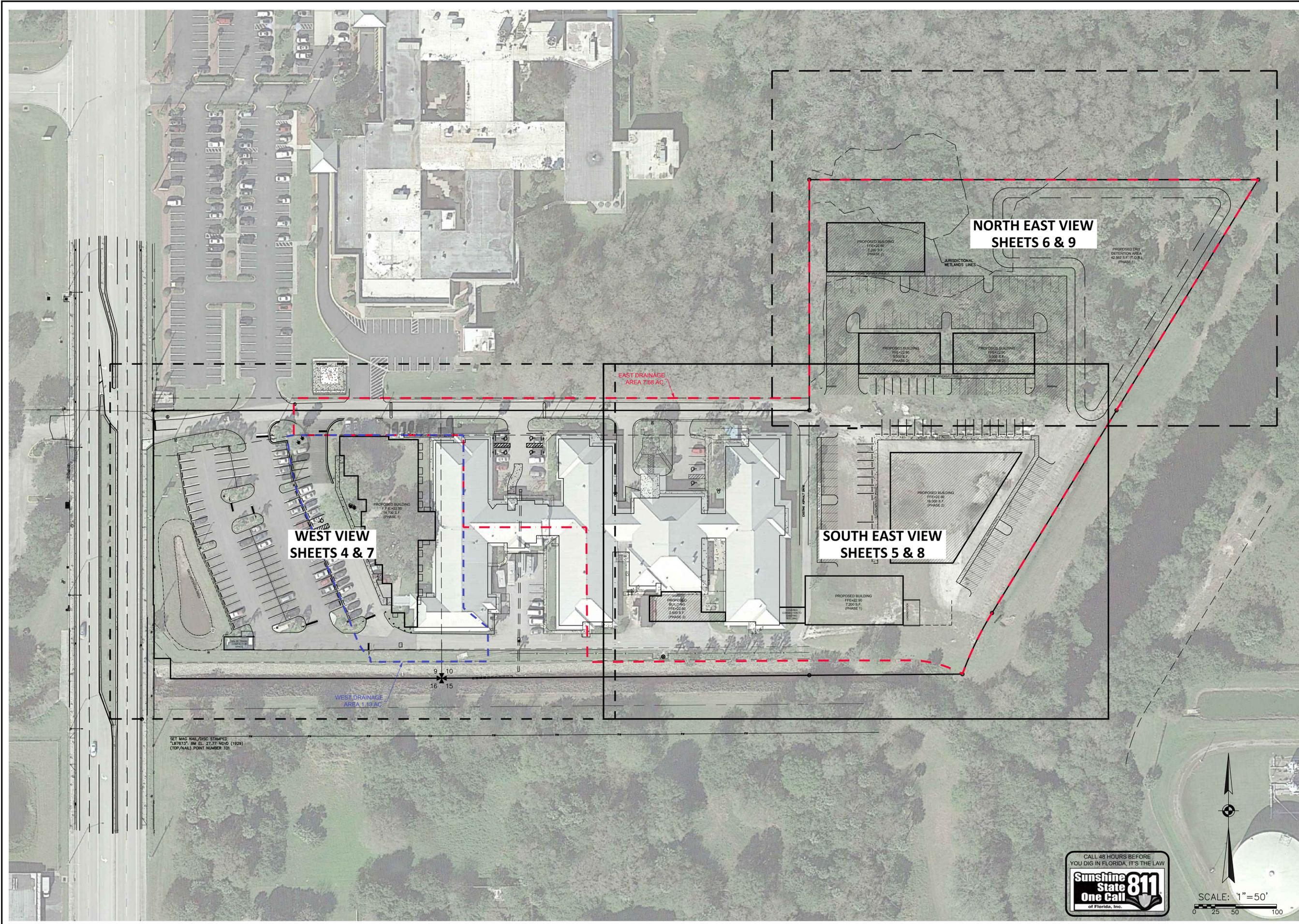
1062 Jakes Way - Okeechobee, FL 34974

Phone: (863) 824-7644

FLORIDA CERTIFICATE OF AUTHORIZATION No. 00029206



ENGINEERS PROJECT No. 2014-042
OKEECHOBEE HEALTHCARE FACILITY



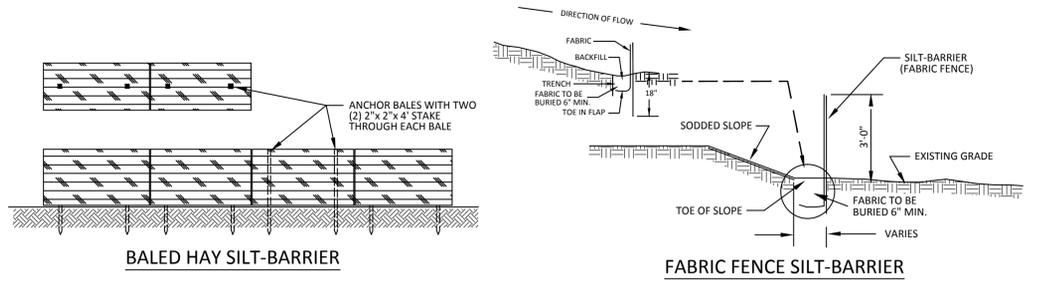
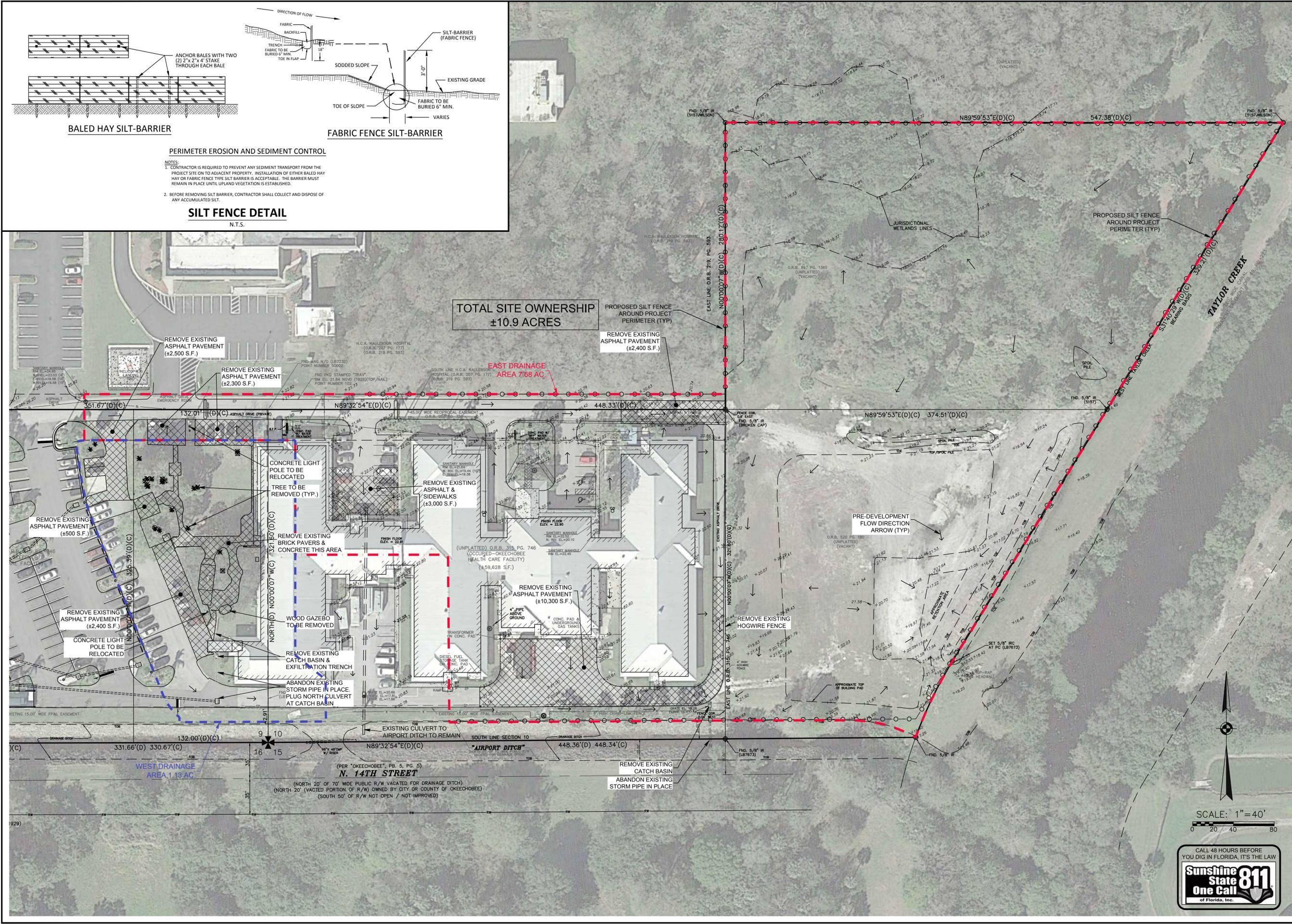
**Okeechobee Healthcare Facility
West Wing Expansion**
OKEECHOBEE, FLORIDA

**OVERALL PLAN
& KEY SHEET**

**Steven L. Dobbs
Engineering, LLC**
1062 JAKES WAY
Okeechobee, FL 34974
Phone: (863) 824-7644
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00092906

No.	DATE	BY	REVISIONS
1	01-27-17	CMB	REVISED PER COMMENTS

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, IS AN INSTRUMENT OF SERVICE. IT IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY INFORMATION OR RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BY STEVEN L. DOBBS, P.E., SHALL BE WITHOUT LIABILITY TO STEVEN L. DOBBS ENGINEERING, LLC.



PERIMETER EROSION AND SEDIMENT CONTROL

NOTES:

- CONTRACTOR IS REQUIRED TO PREVENT ANY SEDIMENT TRANSPORT FROM THE PROJECT SITE ON TO ADJACENT PROPERTY. INSTALLATION OF EITHER BALED HAY OR FABRIC FENCE TYPE SILT BARRIER IS ACCEPTABLE. THE BARRIER MUST REMAIN IN PLACE UNTIL UPLAND VEGETATION IS ESTABLISHED.
- BEFORE REMOVING SILT BARRIER, CONTRACTOR SHALL COLLECT AND DISPOSE OF ANY ACCUMULATED SILT.

SILT FENCE DETAIL
N.T.S.

Steven L. Dobbs Engineering, LLC
1062 JAKES WAY
Okeechobee, FL 34974
Phone: (863) 824-7644

NO.	DATE	BY	REVISIONS
1	01-27-17	CMB	REVISED PER COMMENTS

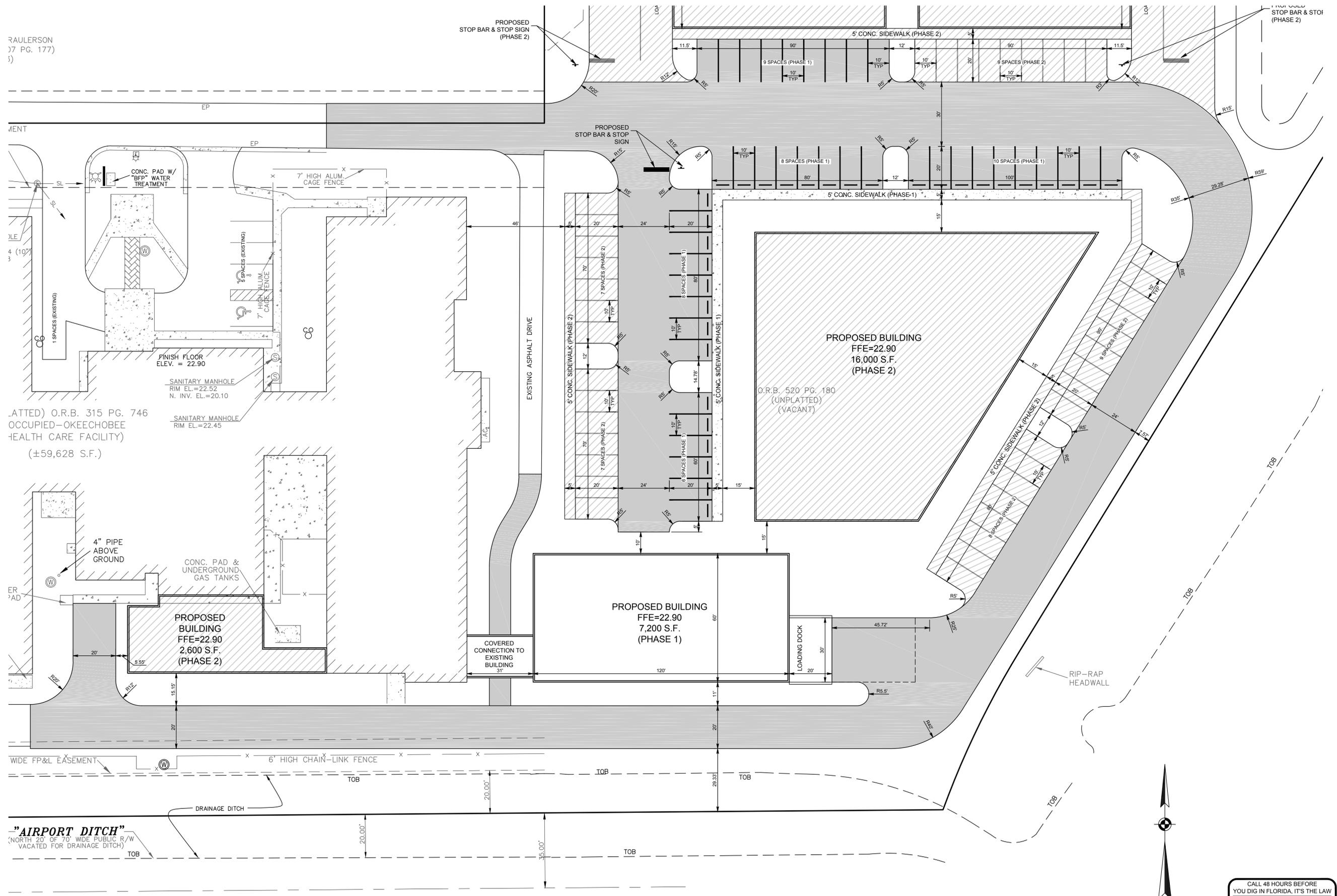
Okeechobee Healthcare Facility West Wing Expansion
OKEECHOBEE, FLORIDA

EXISTING CONDITIONS & DEMOLITION PLAN

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA. IT'S THE LAW

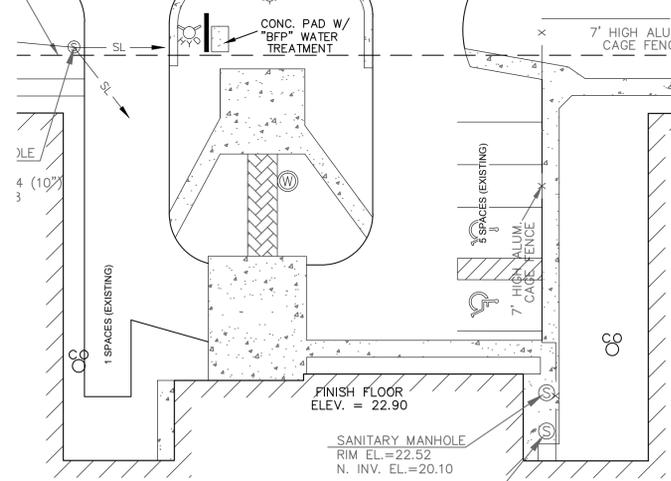
JOB No.: 2014-042
SHEET 03 OF 14

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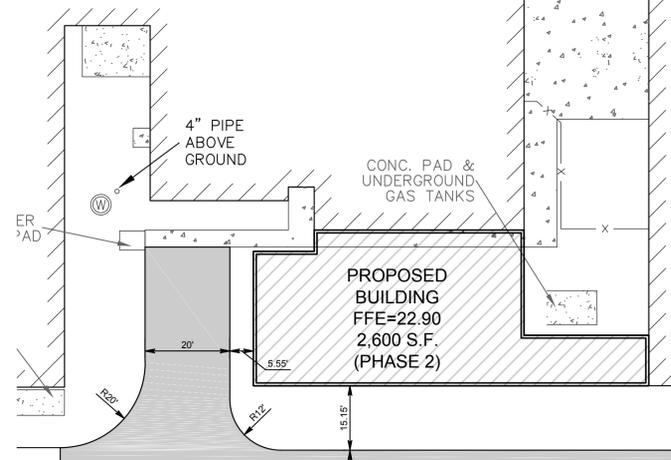


RAULERSON
07 PG. 177)
i)

MENT



(ATTACHED) O.R.B. 315 PG. 746
OCCUPIED-OKEECHOBEE
HEALTH CARE FACILITY)
(±59,628 S.F.)



WIDE FP&L EASEMENT
6' HIGH CHAIN-LINK FENCE

"AIRPORT DITCH"
(NORTH 20' OF 70' WIDE PUBLIC R/W
VACATED FOR DRAINAGE DITCH)

OBEE)

SCALE: 1" = 20'



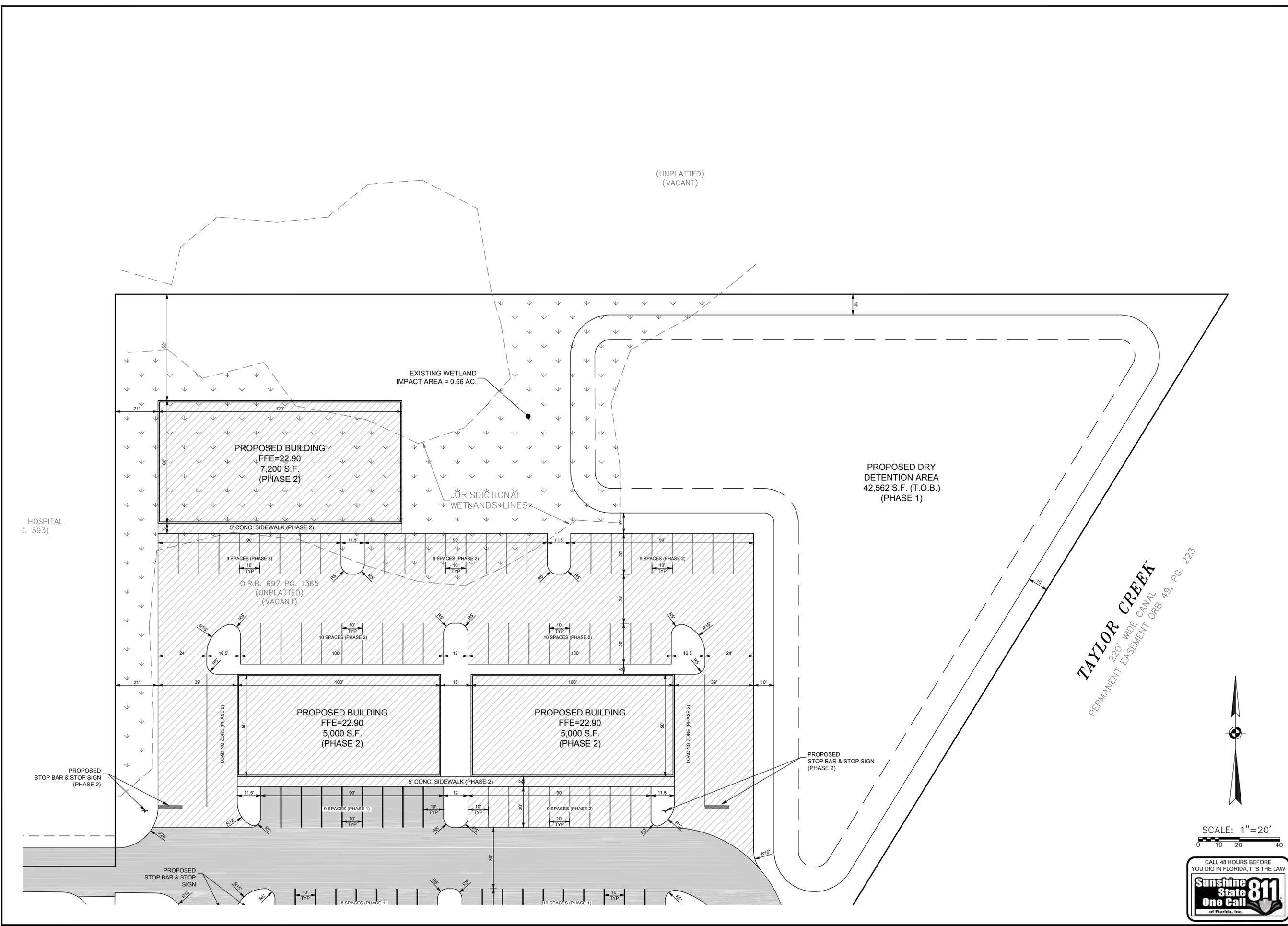
Steven L. Dobbs
Engineering, LLC
 1062 JAKES WAY
 Okeechobee, FL 34974
 Phone: (863) 824-7644



REVISIONS			
No.	DATE	BY	REVISION PER COMMENTS
1	01-27-17	CMB	REVISED PER COMMENTS

Okeechobee Healthcare Facility
West Wing Expansion
 OKEECHOBEE, FLORIDA
HORIZONTAL CONTROL, STRIPING
and SIGNAGE PLAN
(SOUTH EAST VIEW)

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, IS AN INSTRUMENT OF SERVICE. IT IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BY STEVEN L. DOBBS, P.E., SHALL BE WITHOUT LIABILITY TO STEVEN L. DOBBS ENGINEERING, LLC.



SCALE: 1"=20'

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA. IT'S THE LAW

of Florida, Inc.

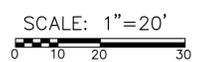
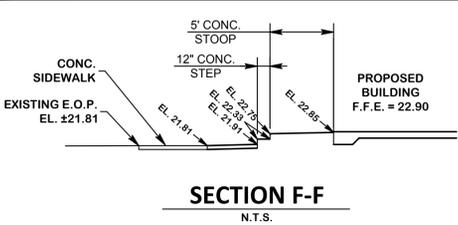
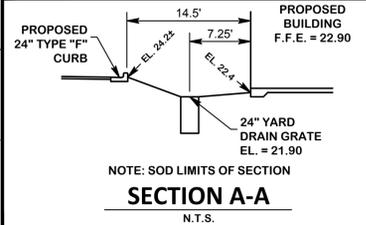
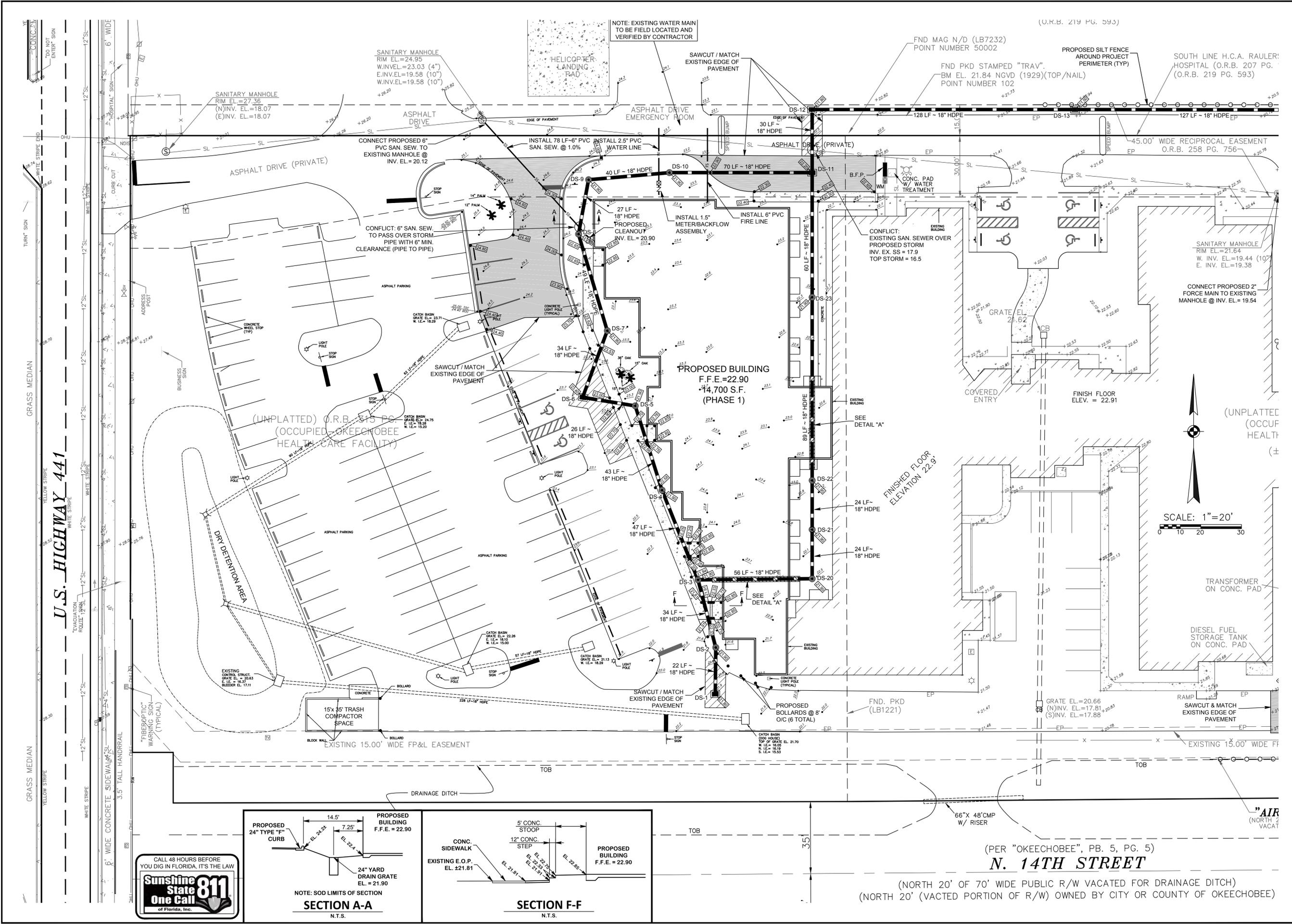
Steven L. Dobbs Engineering, LLC
 1062 JAKES WAY
 Okeechobee, FL 34974
 Phone: (863) 824-7644

FLORIDA CERTIFICATE OF AUTHORIZATION No. 00029206

REVISIONS			
No.	DATE	BY	
1	01-27-17	CMB	REVISED PER COMMENTS
2	09-15-17	CMB	ADDED AREA OF EXISTING WETLAND IMPACT

Okeechobee Healthcare Facility
 West Wing Expansion
 OKEECHOBEE, FLORIDA

HORIZONTAL CONTROL, STRIPING and SIGNAGE PLAN (NORTH EAST VIEW)



(PER "OKEECHOBEE", PB. 5, PG. 5)
N. 14TH STREET

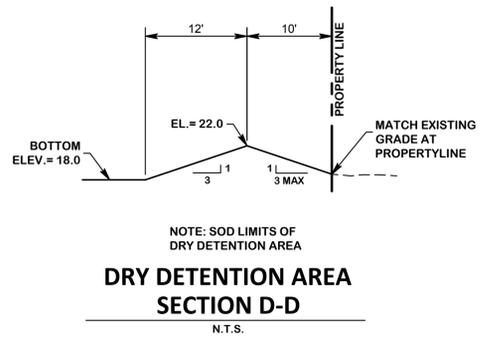
(NORTH 20' OF 70' WIDE PUBLIC R/W VACATED FOR DRAINAGE DITCH)
 (NORTH 20' (VACTED PORTION OF R/W) OWNED BY CITY OR COUNTY OF OKEECHOBEE)

Steven L. Dobbs
Engineering, LLC
 1062 JAKES WAY
 Okeechobee, FL 34974
 Phone: (863) 824-7644



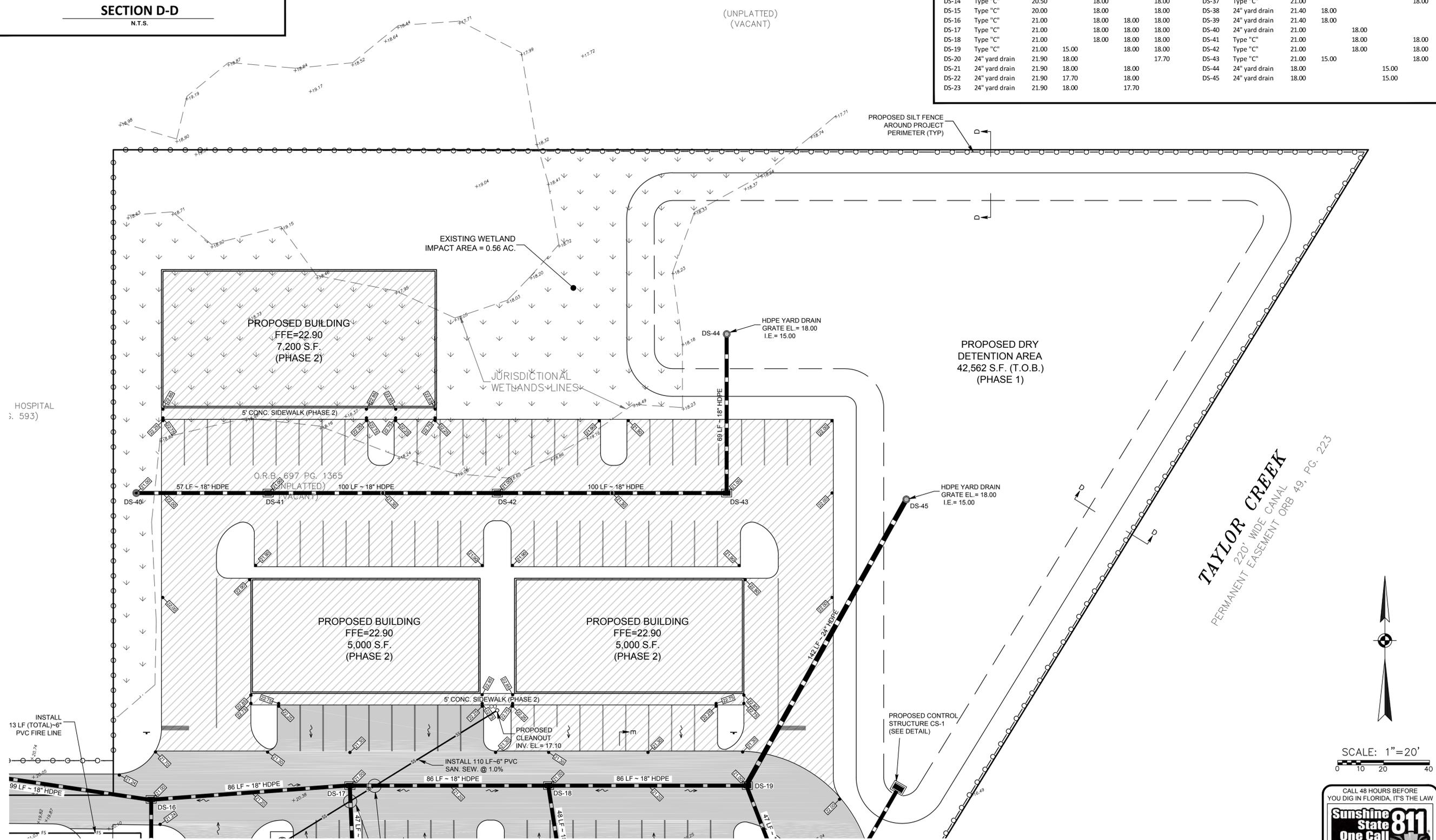
No.	DATE	BY	REVISIONS
1	01-27-17	CMB	REVISED PER COMMENTS

Okeechobee Healthcare Facility
West Wing Expansion
 OKEECHOBEE, FLORIDA
PAVING, GRADING, DRAINAGE
and UTILITY PLAN
(WEST VIEW)



Okeechobee Health Care Facility
East Wing Expansion
Drainage Structure Elevation Chart (All Elevations in NGVD '29)

Structure	Type	Rim EL	North Inv	East Inv	South Inv	West Inv	Structure	Type	Rim EL	North Inv	East Inv	South Inv	West Inv
DS-1	Type "C"	21.80	18.00				DS-24	Type "C"	21.40			18.00	
DS-2	24" yard drain	21.90	18.00		18.00		DS-25	Type "C"	21.40	17.70	18.00		18.00
DS-3	24" yard drain	21.90	18.00	17.70	18.00		DS-26	Type "C"	21.40		18.00		18.00
DS-4	24" yard drain	21.90	18.00		18.00		DS-27	Type "C"	21.40	15.00			18.00
DS-5	24" yard drain	21.90			18.00	18.00	DS-28	Type "E"	19.40		15.00	15.00	
DS-6	Type "C"	23.40	18.00	18.00			DS-29	24" yard drain	21.00	18.00			18.00
DS-7	24" yard drain	21.90	18.00		18.00		DS-30	24" yard drain	21.00	18.00			18.00
DS-8	24" yard drain	21.90	18.00		18.00		DS-31	24" yard drain	21.40	18.00			18.00
DS-9	24" yard drain	21.90		18.00	18.00		DS-32	24" yard drain	21.40			17.70	
DS-10	24" yard drain	21.90		18.00		18.00	DS-33	24" yard drain	21.40	18.00			
DS-11	Type "C"	22.20	15.00		18.00	18.00	DS-34	24" yard drain	21.00	18.00	18.00		18.00
DS-12	Type "C"	21.80		18.00	15.00		DS-35	24" yard drain	21.00	18.00	18.00	18.00	
DS-13	Type "C"	21.00		18.00		18.00	DS-36	Type "C"	21.00				18.00
DS-14	Type "C"	20.50		18.00		18.00	DS-37	Type "C"	21.00				18.00
DS-15	Type "C"	20.00		18.00		18.00	DS-38	24" yard drain	21.40	18.00			
DS-16	Type "C"	21.00		18.00	18.00	18.00	DS-39	24" yard drain	21.40	18.00			
DS-17	Type "C"	21.00		18.00	18.00	18.00	DS-40	24" yard drain	21.00			18.00	
DS-18	Type "C"	21.00		18.00	18.00	18.00	DS-41	Type "C"	21.00			18.00	18.00
DS-19	Type "C"	21.00	15.00		18.00	18.00	DS-42	Type "C"	21.00			18.00	18.00
DS-20	24" yard drain	21.90	18.00			17.70	DS-43	Type "C"	21.00	15.00			18.00
DS-21	24" yard drain	21.90	18.00			18.00	DS-44	24" yard drain	18.00			15.00	
DS-22	24" yard drain	21.90	17.70			18.00	DS-45	24" yard drain	18.00			15.00	
DS-23	24" yard drain	21.90	18.00			17.70							



TAYLOR CREEK
220' WIDE CANAL
PERMANENT EASEMENT ORB 49, PG. 223

SCALE: 1"=20'

CALL 48 HOURS BEFORE YOU DIG IN FLORIDA, IT'S THE LAW

Steven L. Dobbs Engineering, LLC
1062 JAKES WAY
Okeechobee, FL 34974
Phone: (863) 824-7644

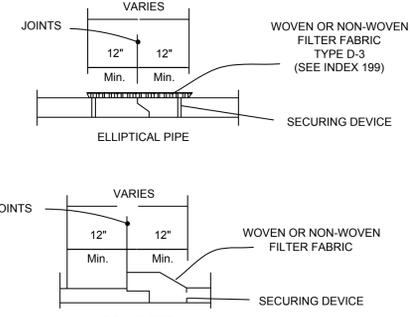
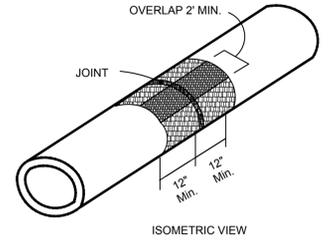
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00029206

REVISIONS		No.	DATE	BY
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1	01-27-17	CMB	REVISED PER COMMENTS	

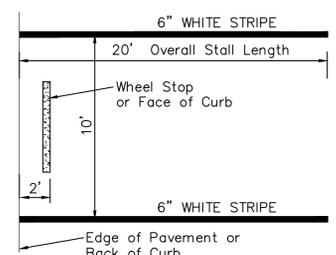
Okeechobee Healthcare Facility West Wing Expansion
OKEECHOBEE, FLORIDA

PAVING, GRADING, DRAINAGE and UTILITY PLAN (NORTH EAST VIEW)

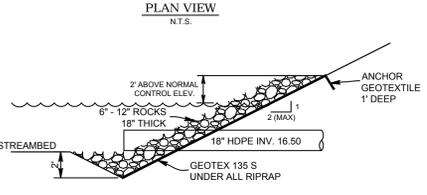
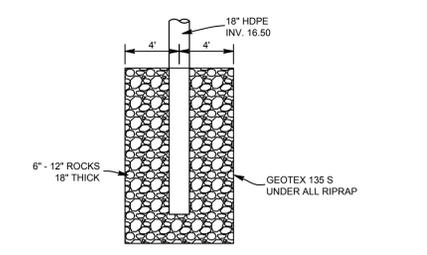
JOB No.: 2014-042
SHEET 09 OF 14



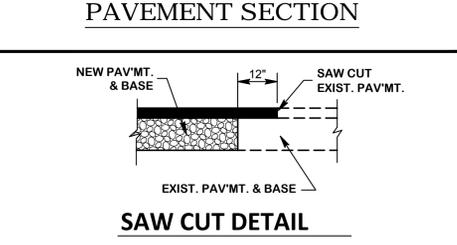
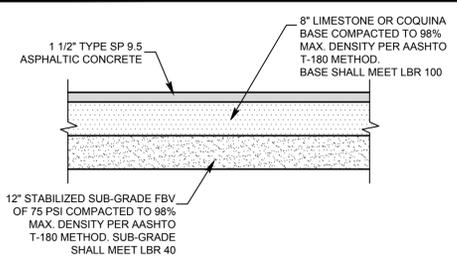
FILTER FABRIC JACKET



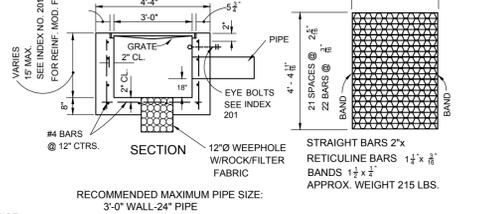
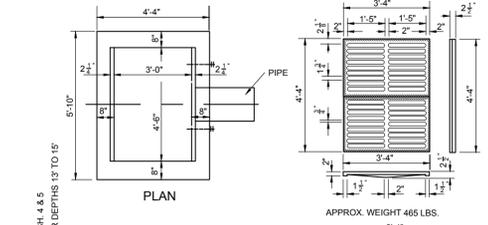
TYPICAL PARKING STALL
FOR PAVED AREAS



CROSS SECTION OF RIPRAP PLACEMENT
N.T.S.

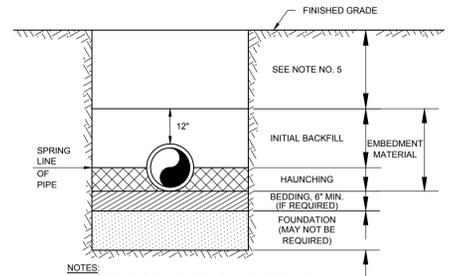


SAW CUT DETAIL



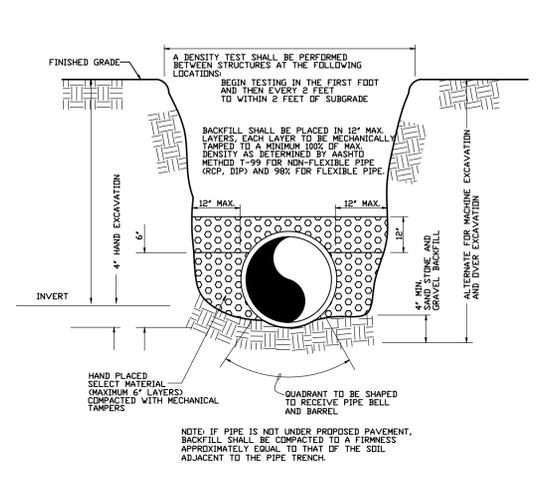
PRE-CAST TYPE 'E' CATCH BASIN

NOTICE:
1) STEEL GRATES ARE REQUIRED ON INLETS WITH TRAVERSABLE SLOTS AND ON INLETS WHERE BICYCLE TRAFFIC IS ANTICIPATED.
2) ALL INLETS WILL BE CAST TO PROVIDE A 18" SUMP BELOW LOWEST CULVERT INVERT

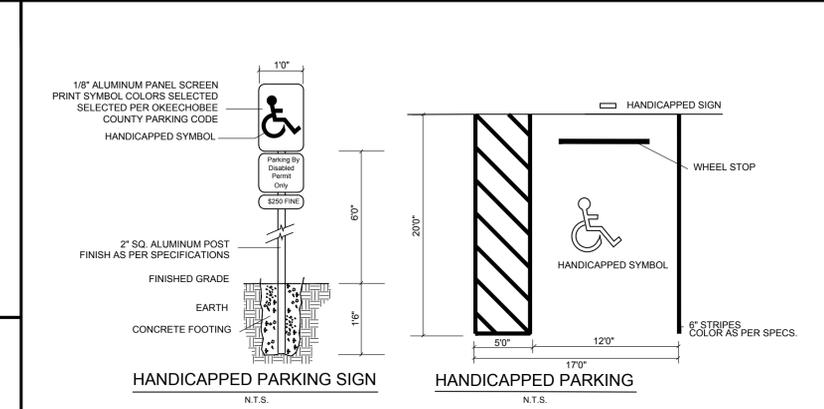


NOTES:
1. IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2. BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3. HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
4. INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.
5. DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTOR'S EXPENSE.

BACKFILLING REQUIREMENTS

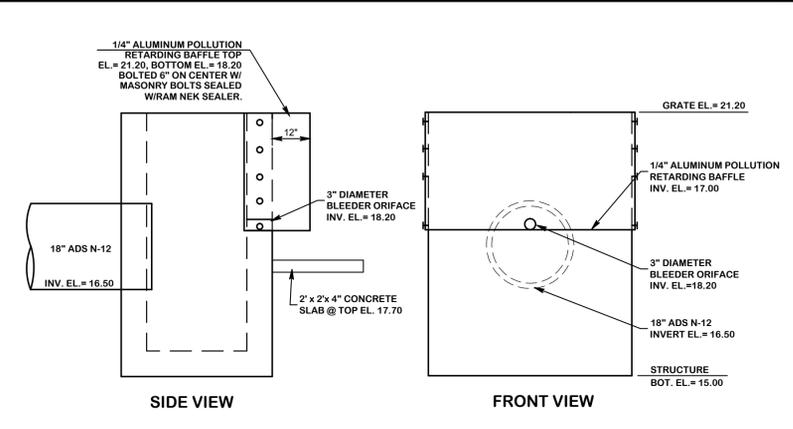


TYPICAL TRENCH DETAIL
N.T.S.

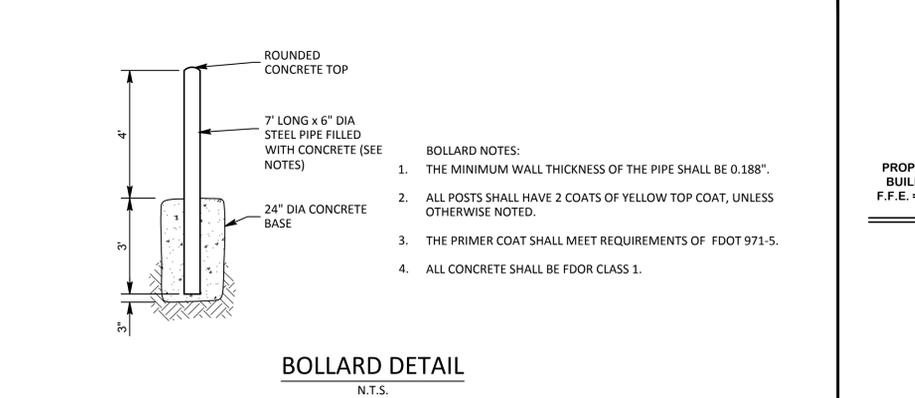
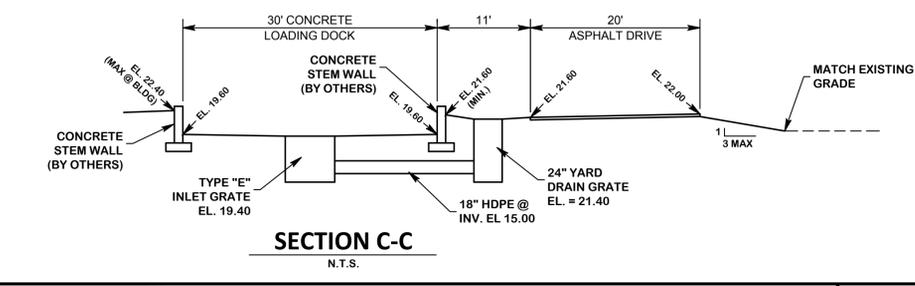


HANDICAPPED PARKING SIGNAGE/STRIPING DETAIL

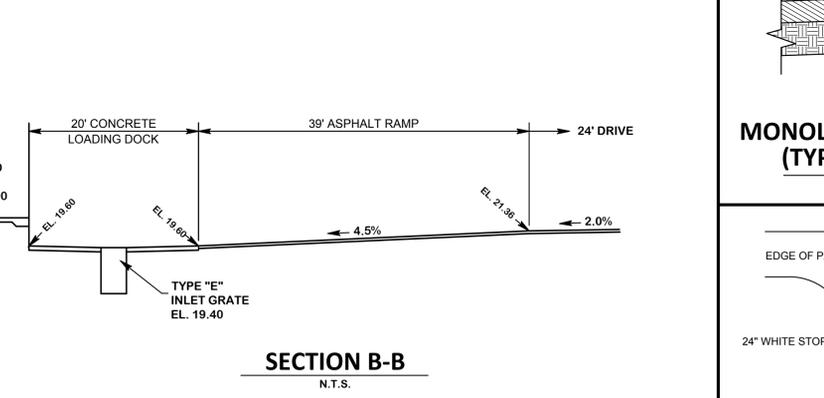
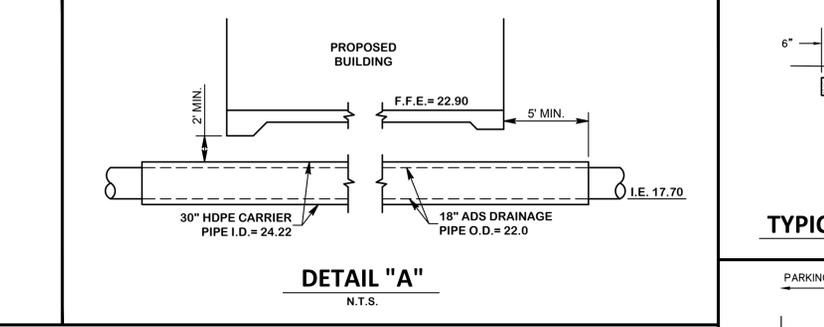
Note: All Paved Parking Stalls are to be double striped.



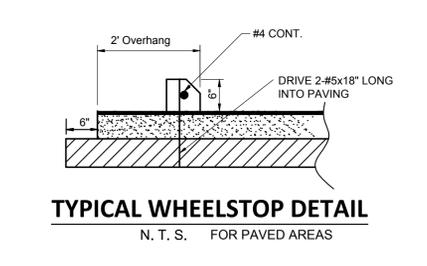
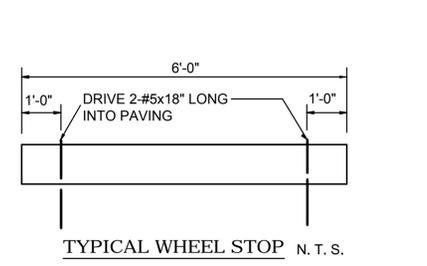
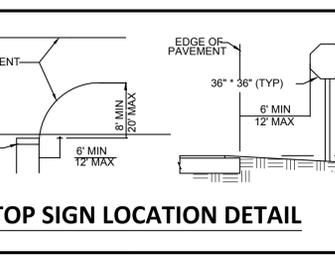
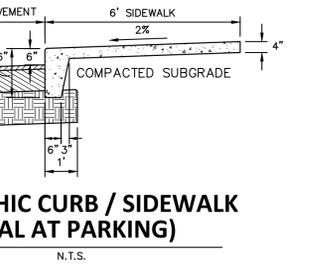
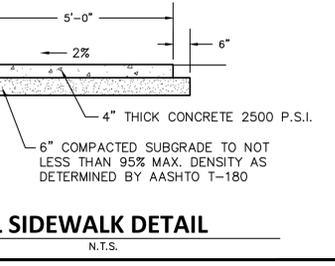
CONTROL STRUCTURE CS-1 TYPE "C" INLET (MODIFIED)



BOLLARD DETAIL
N.T.S.



SECTION B-B
N.T.S.



CALL 48 HOURS BEFORE YOU DIG IN FLORIDA. IT'S THE LAW
Sunshine State 811
of Florida, Inc.

Steven L. Dobbs Engineering, LLC
1062 JAKES WAY
Okeechobee, FL 34974
Phone: (863) 824-7644
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00029206

NO.	DATE	BY	REVISIONS
1	01-27-17	CMB	REVISED PER COMMENTS

Okeechobee Healthcare Facility West Wing Expansion
OKEECHOBEE, FLORIDA
DETAILS
JOB No.: 2014-042
SHEET 10 OF 14

GENERAL NOTES

- 1. Contractor is responsible for checking actual site conditions before starting construction.
2. Any discrepancies on the drawings shall be brought to the attention of the engineer before commencing work.
3. Contractor shall obtain all required building permits before commencing work.
4. Contractor shall be responsible for location of all existing utilities.
5. No field changes or deviations from design to be made without prior approval of the engineer.
6. All construction shall be completed in accordance with the applicable ordinances of Glades County, Florida.
7. Contractor shall supply density tests to engineer on all sub-grade and base.
8. Slope grades from elevations shown to existing grade at property line.
9. Engineer shall be notified at least 48 hours in advance for any inspection.
10. All traffic control devices shall be in accordance with M.U.T.C.D. Standards.

- 11. Erosion and sedimentation control techniques shall be incorporated during construction as follows:
(1) silt screens shall be maintained at the project perimeter.
(2) No off-site discharges shall occur during construction.
12. Before temporary or newly constructed stormwater conveyance channels are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.
13. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction.
14. When a live watercourse must be crossed by construction vehicles, a temporary stream crossing constructed of nonerodible material shall be provided.
15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.

EROSION AND SEDIMENTATION CONTROL NOTES

Construction activities can result in the generation of significant amounts of pollutants which may reach surface or ground waters. One of the primary pollutants of surface waters is sediment due to erosion. Excessive quantities of sediment which reach water bodies of floodplains have been shown to adversely affect their physical, biological and chemical properties.

MINIMUM STANDARDS:

- 1. Sediment basin and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-distributing activity and shall be made functional before unslope land disturbance takes place.
2. All sediment control measures are to be adjusted to meet field conditions at the time of construction and be constructed prior to any grading or disturbance of existing surface material on balance of site.
3. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site.
4. During construction of the project, soil stockpiles shall be stabilized or protected with sediment trapping measures.
5. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized.
6. Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after installation.

EROSION AND SEDIMENTATION CONTROL NOTES - (continued)

- 7. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin.
8. After any significant rainfall, sediment control structures will be inspected for integrity.
9. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.
10. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
11. Sediment will be prevented from entering any storm drain system, ditch or channel.
12. Before temporary or newly constructed stormwater conveyance channels are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.
13. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction.
14. When a live watercourse must be crossed by construction vehicles, a temporary stream crossing constructed of nonerodible material shall be provided.
15. The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.
16. Periodic inspection and maintenance of all sediment control structures must be provided to ensure intended purpose is accomplished.
17. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria.
18. Where construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment by tracking onto the paved surface.
19. All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed.
20. Properties and waterways downstream from construction site shall be protected from sediment disposition and erosion.
21. Phased projects should be cleared in conjunction with construction of each phase.
22. Erosion control design and construction shall follow the requirements in Index Nos. 101, 102 and 103 of FDOT Roadway and Traffic Design Standards.
23. The Reviewer may approve modifications or alter plans to these erosion control criteria due to site specific conditions.

ENGINEER OF RECORD INSPECTION REQUIREMENTS
CONTRACTOR TO CALL CONTRACT ENGINEER OF RECORD
48 HOURS ADVANCE FOR FOLLOWING INSPECTIONS:
1. PRECONSTRUCTION MEETING
2. DRAINAGE PIPE (UNCOVERED)
3. PAVEMENT SUBGRADE
4. PAVEMENT BASE
5. FINAL

Table with columns: F.B.V., DENSITY, L.B.R., THICKNESS. Sub-columns: MAX. SPACING, LINEAR, SQUARE, FEET. Rows: COMPACTED OR STABILIZED GRADE, ROCK BASE, SHELL ROCK, ASPHALT.

Earthwork and Drainage Specifications

1. Clearing and Grubbing: Clearing and grubbing shall be performed within the limits of the project work in accordance with Section 110, Florida Department of Transportation (FDOT) Specifications. This item shall include, but is not limited to, the complete removal and legal disposal of all trees, brush, stumps, roots, grass, weeds, rubbish and other undesirable material to a depth of 18 inches below natural ground or proposed finished grade, whichever is lower.

All material shall be removed from the site and shall be legally disposed of in accordance with all local, state and federal requirements.

2. Earthwork and Grading: All earthwork and grading shall be performed as required to achieve the final grades, typical sections and elevations shown on the plans. In all other respects, materials and construction methods for earthwork, embankment, excavation and grading shall conform to the requirements of FDOT Specifications, Section 120.

3. Paving Improvements: All areas proposed for paving shall be constructed in accordance with the design grades and typical sections shown on the drawings, and in conformance to the requirements of the City of Okeechobee and Florida Department of Transportation.
A. Asphalt: Prime Coat and tack coat for base course and between lifts of asphalt shall conform to the requirements of Sections 300-1 through 300-7 of the FDOT Specifications.

Asphalt surface course thickness and material shall be as shown on the typical sections and shall in all ways conform to the requirements of FDOT.

B. Base: Limerock base material shall be compacted to 98% of maximum density per AASHTO T-180. All limerock shall meet the minimum requirements of FDOT Section 911. As an alternate, cemented coquina conforming to FDOT Section 915 may be substituted and shall be subject to the compaction specifications detailed above and included in the Soils Engineer's report.

C. Sub-grade: Sub-grade shall be compacted to 98% of maximum density per AASHTO T-180, and stabilized to a minimum FBV of 50psi. Sub-grade shall be thoroughly rolled with a pneumatic tired roller prior to scheduling any sub-grade inspection.

D. Valley Gutter/ F-Curb/D-Curb/Flush Curb: Shall be constructed per the typical section by extruding machine or forms as shown on the plans. Minimum concrete compressive strength shall be 3,000psi after 28 days. Sub-grade shall be moistened at the time concrete is placed to insure a uniformly damp surface.

E. Sod: A minimum of a two-foot wide strip of sod, or as otherwise shown on the plans, shall be placed along the back of curb of all constructed pavement to aid in prevention of erosion and soil stability. Sod shall be placed in conformance to FDOT Section 570, 575 and 981. Generally, the sodding requirements shall be as specified on the landscape plans, prepared by Others.

F. Seed, Fertilize and Mulch: All disturbed areas shall be stabilized with seed, fertilizer and mulch upon completion and acceptance by Engineer of final grading. Seed, fertilizer and mulch shall be in conformance to FDOT Sections 570, 575 and 981. The Contractor is responsible for establishing a stand of grass sufficient to prevent erosion prior to removal of the temporary silt fences. This applies only to those areas not covered by the sodding specified in the landscape plans, prepared by Others.

G. Testing: The Contractor shall secure the services of an approved independent testing laboratory to conduct all required testing on sub-grade, base, asphalt and concrete. Locations required for these tests shall be as required by the City of Okeechobee, and/or in the case of the turn-lane improvements as required by the City of Okeechobee. At a minimum, testing shall be as recommended by FDOT. Should any tests fail, contractor shall at his own expense, repair the deficiencies and retest the work until compliance with the specifications is demonstrated.

H. Traffic Control: The installation of Traffic Control Devices shall be in conformance to the requirements of the Manual of Uniform Traffic Control Devices, The City of Okeechobee. Maintenance of traffic During Construction shall be as required by FDOT.

Earthwork and Drainage Specifications - (continued)

4. Drainage Improvements: All labor, materials and construction methods shall be in conformance to the minimum engineering and construction standards of the City of Okeechobee and FDOT Specifications. Trench excavation and back-filling operations shall meet or exceed the requirements of FDOT Specifications, Section 125. The Contractor shall provide the necessary back-fill compaction testing required to demonstrate compliance with this section.

The Contractor shall comply with Chapter 90-96, Laws of Florida, which requires the Contractor performing trench excavations over five feet in depth comply with all applicable trench safety standards and shoring requirements as set forth in the Occupational Safety and Health Administration's (OSHA) excavation and safety standards, 29 C.F.R. 1992.6.650, Sub-part P and incorporated as the State of Florida standard, as revised and/or updated. The cost of compliance with this requirement shall be included as a separate line item on the Contractor's bid. Otherwise, Contractor certifies that the cost of compliance is included in the unit cost of all items of work to which this requirement applies.

A. Reinforced Concrete Pipe (RCP): RCP shall conform to the requirements of ASTM Specifications C-76, Class III, Wall Thickness "B", latest revision. All joints shall be soil-tight. Pipe gasket shall conform to FDOT Specifications, Section 942.

B. Corrugated Metal Pipe (CMP): All CMP shall be Steel, round, helical-wound corrugated pipe conforming to AASHTO-M 36 and FDOT Section 943. Pipe ends at joints shall be reformed to a minimum of 2 annular corrugations for the complete band width. All joints shall be soil-tight. All connecting bands shall be corrugated annular coupling bands.

C. Corrugated Aluminum Pipe (CAP): All CAP shall be aluminum alloy, round, helical-wound corrugated pipe conforming to AASHTO-M 196 and FDOT Section 945. Pipe ends at joints shall be reformed to a minimum of 2 annular corrugations for the complete band width. All joints shall be soil-tight. All connecting bands shall be corrugated annular coupling bands.

D. Corrugated High Density Polyethylene Pipe (HDPE): All HDPE Pipe shall be resin conforming to ASTM D3350 minimum cell classification 435400C, round, only annular corrugations and conforming to FDOT Section 948-2.3. All joints shall be soil-tight. All connecting bands shall be corrugated annular coupling bands.

E. Contech A-2000 PVC drainage pipe (A-2000): All A-2000 corrugated pipe with a smooth interior shall conform to the requirements of ASTM Designation F949 & F794 Dual Wall Corrugated Profile (DWCP) Pipe. Pipe and fittings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions or other injurious defects.

F. PVC Drainage Pipe: PVC Drainage Pipe shall be C-900 with push-on joints (no glued joints) and shall be as specified for sanitary sewer construction, except that it shall be white in color. Any portion of the PVC storm pipe that may be exposed to sunlight, such as its outlet to the detention pond, shall be painted to protect it from UV light.

G. Inlets, Manholes, and Junction Boxes: All drainage inlets, manholes, and junction boxes shall be precast concrete conforming to ASTM C-478 and 64T. All concrete shall have not less than 4000-psi compressive strength at 28 days. Structure sections shall be joined with a mastic sealing compound. The remaining space shall be filled with the cement mortar and finished so as to produce a smooth continuous surface inside and outside the wall sections.

H. Trench Backfill shall be as shown in the Drainage Details. In addition, testing under paved areas shall be as follows: One test location midway between structures and one test location adjacent to each structure. Engineer may request additional locations. Testing in each location shall begin in the first foot above the culvert with tests every two feet to within two feet of the sub-grade. Density shall be to 100 percent of maximum as determined by AASHTO T-99.

I. Control Structures: Shall be constructed per the above specifications for Inlets, Manholes, and Junction Boxes except that the structures shall include the bleeders and weirs as shown on the detail.

J. Rip-Rap Energy Dissipaters: Shall be constructed per the details and as shown on the drawings at the control structures CS-1B and CS-2B, the downstream bubble-up structures. The rubble shall be of material and placed in accordance to FDOT Section 530-2.3 (material) and FDOT Section 530-3.3 (Construction Methods). Should broken concrete be used as the rubble, it shall be free from reinforcing bars or wire mesh. The contractor shall use care in the placement of the stone so that it is not dropped on new fabric in such a fashion that tears the fabric.

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Okeechobee, FL 34974
Phone: (863) 824-7644



Table with columns: No., DATE, BY, REVISIONS. Row 1: 1, 01-27-17, CMB, REVISED PER COMMENTS

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Okeechobee Healthcare Facility West Wing Expansion
OKEECHOBEE, FLORIDA
GENERAL NOTES & SPECIFICATIONS



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FLORIDA CERTIFICATE OF AUTHORIZATION No. 00029206