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West Palm Beach, FL 33409
stormwaterj@gmail.com

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Fax 242-0109

February 10, 2017

Ms. Cindy Mulkey
Program Administrator
Siting Coordination Office (SCO)
2600 Blair Stone Road, MS 5500
Tallahassee, Florida 32399-2400

Subject: Amendment to Power Plant Siting Conditions of Certification PA 84-20N
Construction & Operation of a Vegetative Waste Loading Area
Palm Beach Renewable Energy Park
Solid Waste Authority of Palm Beach County

Dear Ms. Mulkey:

On behalf of the Solid Waste Authority of Palm Beach County (SWA), StormwaterJ Engineering, Inc. (SJE) is requesting an amendment to the Power Plant Siting Certification PA 84-20N to authorize the construction and operation of a Vegetative Waste Loading Area (VWLA). Figure 1 depicts the location of the proposed project which is an expansion of the Customer Convenience Drop-off Center (CCDC) that was approved in 2014.

The VWLA facility is designed to primarily accept vegetative waste (non-hazardous) from residential and commercial customers (i.e. landscapers) for temporary stockpile purposes, prior to being transported to the Palm Beach Renewable Energy Facility No. 2 (PBREF No. 2) for final disposal. Currently, the customers dispose of their vegetative waste directly at the PBREF No. 2, however it has been determined that a temporary stockpile area would allow for more-efficient and consistent operations of the PBREF No. 2. The hours of operation of the VWLA will be from 7:00 am to 5:00 pm, six days a week (Monday through Saturday).

The VWLA will serve as a drop-off point for vegetative waste and may serve as a sorting area to handle high volume of trash material from the CCDC. Similar to the CCDC, this facility will not accept waste from commercial waste haulers that collect municipal solid waste from multiple generators. Therefore, this facility is not subject to the requirements of FAC 62-701.710 Waste Processing Facilities.

The VWLA will have an elevated 135.5 ft by 156 ft concrete surface that will be used for the drop off of vegetative waste by customers. Vegetative waste will then be consolidated into

piles by SWA front-end loaders and loaded into SWA tractor-trailers for transport to PBREF No. 2. Loading will be performed by a SWA excavator, which will sit on top of an elevated platform. Vegetative waste will be dropped off and consolidated on the concrete surface on the south side of the platform and loaded into SWA tractor-trailers on the north side of the platform. The customers will access the VWLA facility from the east via the CCDC. SWA tractor-trailers will access the VWLA via an asphalt paved road. Customers and SWA tractor-trailers will exit the site via an asphalt road, which is shared with the CCDC exiting vehicles. The SWA will implement best management practices to minimize odors, litter, dust and other fugitive particles. The concrete pad will be cleared of vegetation on an as-needed basis and daily for sorted trash material.

The VWLA will be built just west of the CCDC in an area that was previously occupied by the Woody Waste Processing Facility. The existing surface of this site has compacted soils.

The increase in impervious area due to the construction of the VWLA will not impact the landfill's stormwater management system due to the following reasons:

1. The overall stormwater runoff from the landfill future cells is contained within the landfill footprint and it is not discharged to the existing landfill stormwater management system (perimeter ditch). Please refer to letter of June 3, 2014, by CDM Smith for Amendment to PA 84-20N.
2. The increase in impervious area and grading due to construction of the VWLA is not expected to affect the existing peak stage (20.64 ft NGVD29) of its drainage basin. Please note that the peak stage is based on the results of an ICPR Model by CDM, 2009, for existing conditions (see basin Internal 1). The above determination is based on the following pre vs. post stage-storage relationship and compensating storage provided for the basin. Any additional runoff volume required and loss of storage in the basin due to additional impervious area and grading, respectively, is offset by the creation of additional storage below existing grade in the proposed dry detention area.

Additional runoff produced by the 25yr-3day storm (13 in rainfall depth)

13 in x 1 ft/12 in x 73,318 ft² additional impervious area = 1.82 ac-ft

Volume displaced between existing grade of 19.9 ft NGVD and peak stage of basin of 20.62 ft NGVD29 due to grading of Entrance Road

0.72 ft x 17,022 ft² = 0.28 ac-ft

Volume lost due to filling of ditch at Entrance Road

Vertical Storage from El. 15.7 to El. 19.9 ft NGVD29

4.2 ft x 391 ft² = 0.04 ac-ft

Linear Storage from El. 15.7 to El. 19.9 ft NGVD29

4.2 ft x 965 ft² x 0.5 = 0.05 ac-ft

Total additional volume required below existing grade El. of 19.9 ft NGVD29 in area of proposed dry detention basin = 2.19 ac-ft

Total additional volume provided below existing grade El. of 19.9 ft NGVD29

Vertical (Dry Detention Area – bottom area 0.61 Ac) = 1.77 ac-ft

Linear (Side Slopes) = 0.51 ac-ft

Total Volume provided under El. 19.9 ft NGVD29 = 2.28 ac-ft

3. The VWLA will add an additional impervious area of approximately 1.68 acres. The additional 0.61 acres dry detention pond will provide water quality and additional volumetric storage (as discussed above) to replace the volume lost in the basin due to the proposed improvements.

Water quality (WQ) of 2.5 inches times the additional impervious area will be provided in the dry detention area as follows:

Required WQ Volume = 2.5 in x 1.68 acres x 1ft/12in = 0.35 ac-ft, which would have to be retained prior to discharge into the surrounding area.

WQ retention would occur at elevation 17.57 ft NGVD29 within the proposed dry detention basin.

A Type E inlet will be provided as a control structure with a weir elevation of 18.40 ft NGVD29, which will provide more than the required volume for WQ.

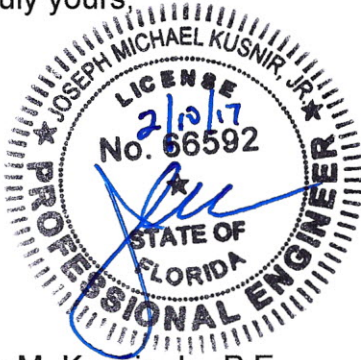
Bleed-down of the dry detention area will occur through vertical infiltration (4.08 inches per hour) and through a 3-inch orifice on the control structure.

4. The additional stormwater discharge from the VWLA will be contained within the drainage basin (Internal 1) and the landfill footprint area as discharge into the downstream basin (Internal 3) does not occur until the elevation of 19.9 ft NGVD29 is reached. Refer to the ICPR model by CDM and Figure 2.

The design of the VWLA is provided in the attached drawings Sheets C-3, C-5 and C-6.

On behalf of Solid Waste Authority of Palm Beach County, StormwaterJ Engineering, Inc. requests FDEP to include the proposed improvements discussed in this letter and illustrated in the attached design documents. If you have any questions or need additional information please do not hesitate to contact me at 561-242-0028.

Very truly yours,



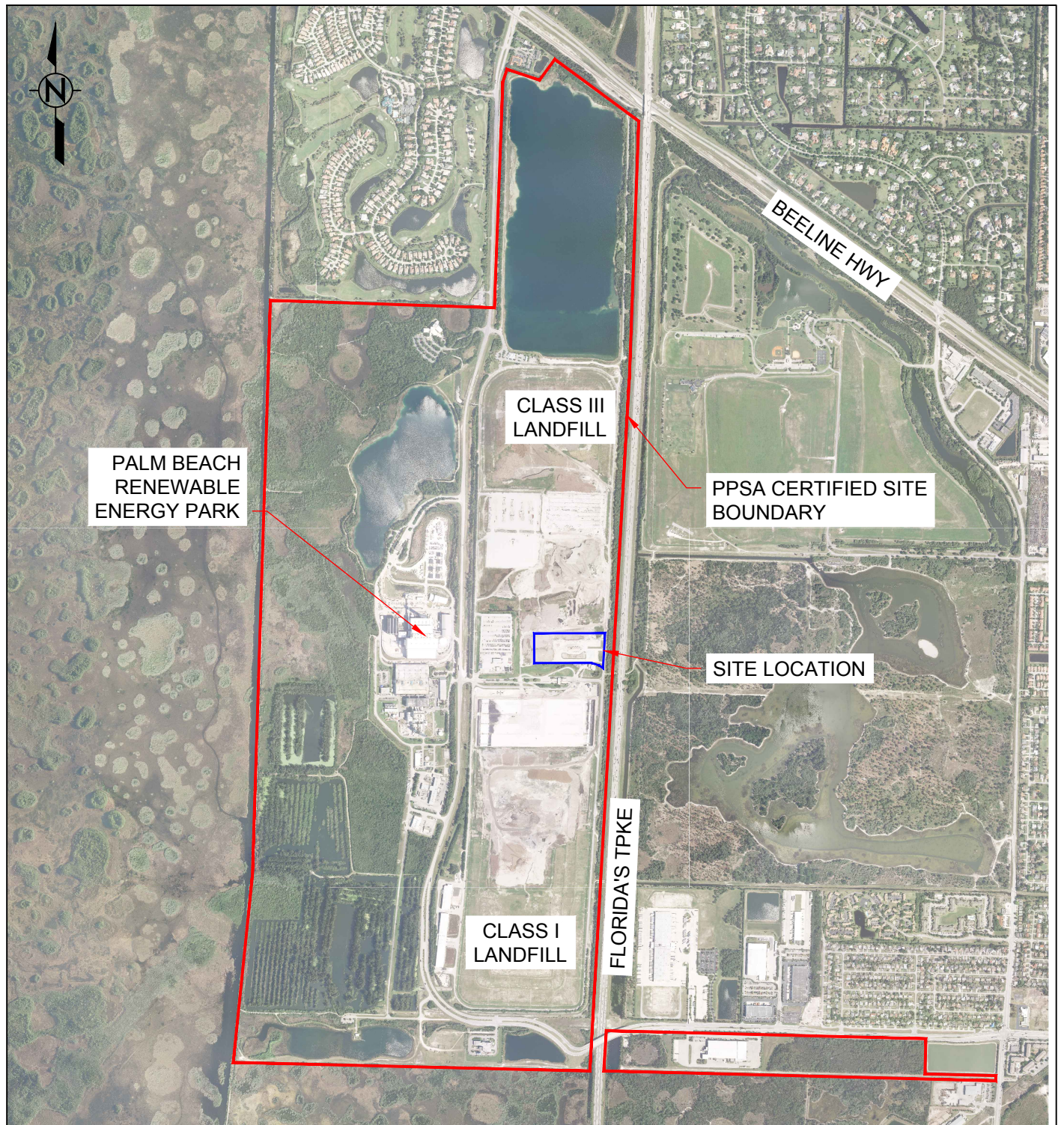
Joseph M. Kusnir, Jr., P.E.
FL License No. 66592
Senior Project Manager
StormwaterJ Engineering, Inc.
FL COA 9484

JMK/lgm

Cc: Mr. Patrick Carroll, SWA
Mr. Kenneth Haertig, SWA
Ms. Marybeth Morrison, SWA
Ms. Amy Hightower, CDM-Smith
Mr. Indar Jagnarine, FDEP, SE District Office

Enclosures

File: PW PL1 2678-214074.04.11



0 1,000 2,000
SCALE: 1" = 2,000'

FIGURE 1

PALM BEACH RENEWABLE ENERGY PARK
VEGETATIVE WASTE LOADING AREA

Conditions of Certification
PA84-20N Site Delineation

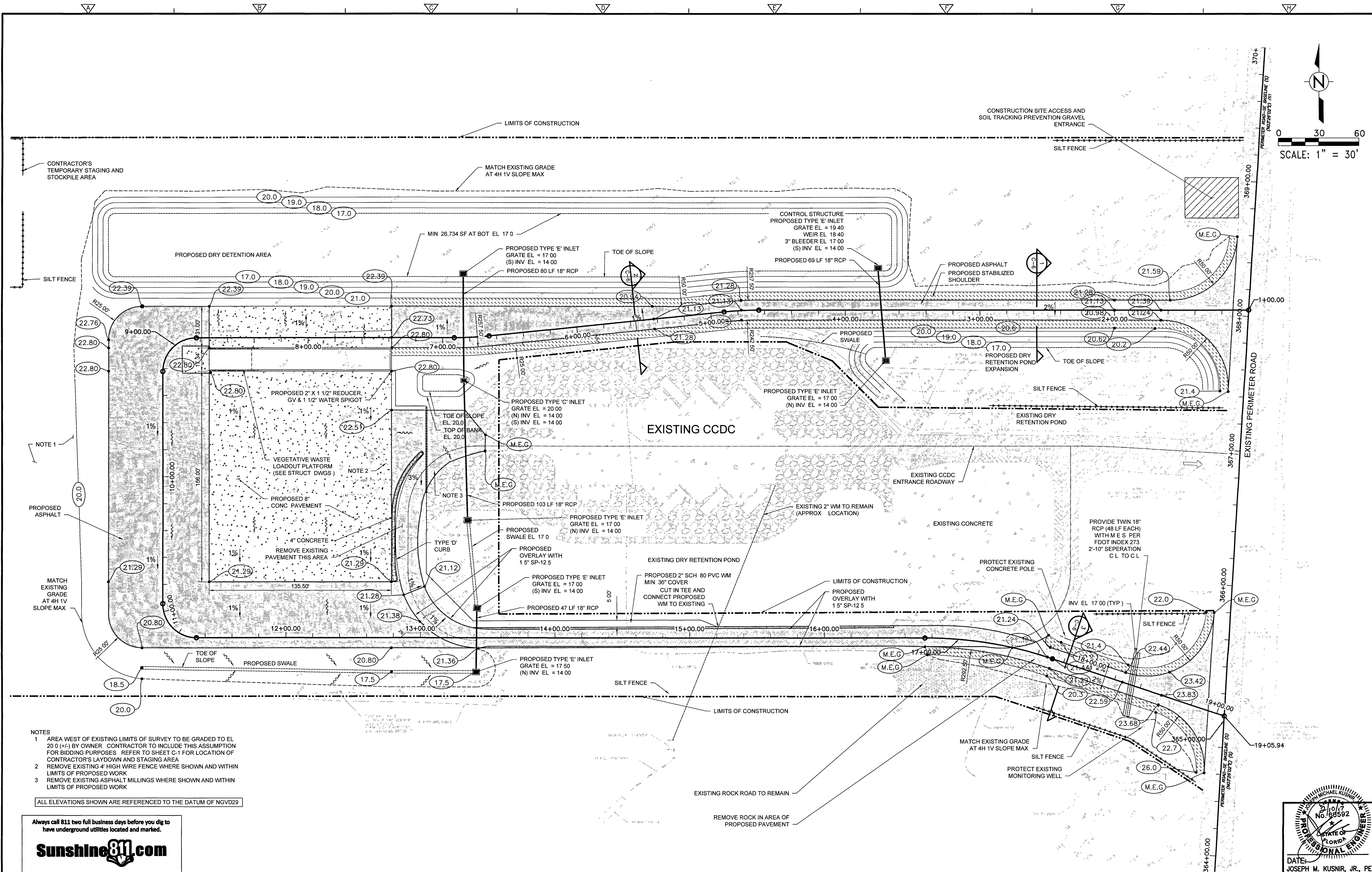


Solid Waste Authority
of Palm Beach County

Figure 2



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- NOTES
- 1 AREA WEST OF EXISTING LIMITS OF SURVEY TO BE GRADED TO EL 20.0 (+/-) BY OWNER. CONTRACTOR TO INCLUDE THIS ASSUMPTION FOR BIDDING PURPOSES. REFER TO SHEET C-1 FOR LOCATION OF CONTRACTOR'S LAYDOWN AND STAGING AREA.
 - 2 REMOVE EXISTING 4' HIGH WIRE FENCE WHERE SHOWN AND WITHIN LIMITS OF PROPOSED WORK.
 - 3 REMOVE EXISTING ASPHALT MILLINGS WHERE SHOWN AND WITHIN LIMITS OF PROPOSED WORK.

ALL ELEVATIONS SHOWN ARE REFERENCED TO THE DATUM OF NGVD29

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY J. KUSNIR
DRAWN BY P. LIM
SHEET CHK'D BY J. FOY
CROSS CHK'D BY J. KUSNIR
APPROVED BY J. KUSNIR
DATE FEBRUARY 2017

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Boca Raton, FL 33487
Tel: (561) 571-3800
FL COA No. EB-0000020

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FL COA No. 00009484

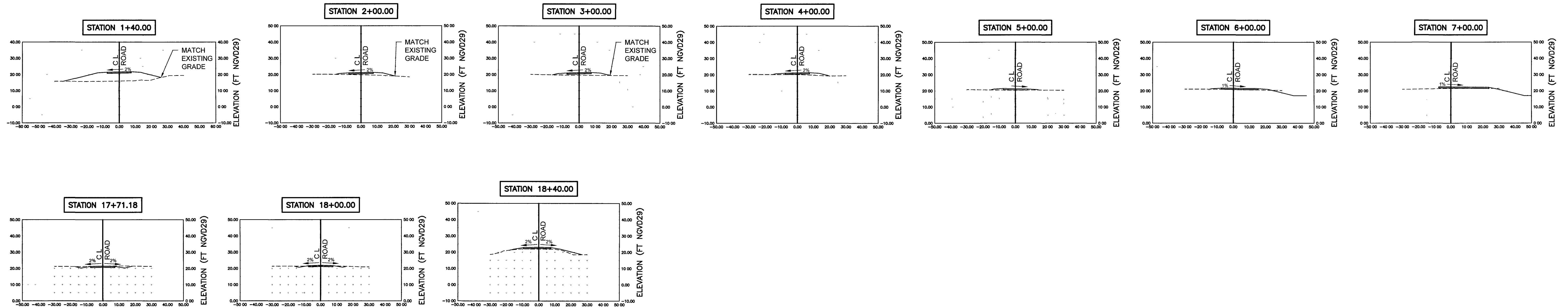
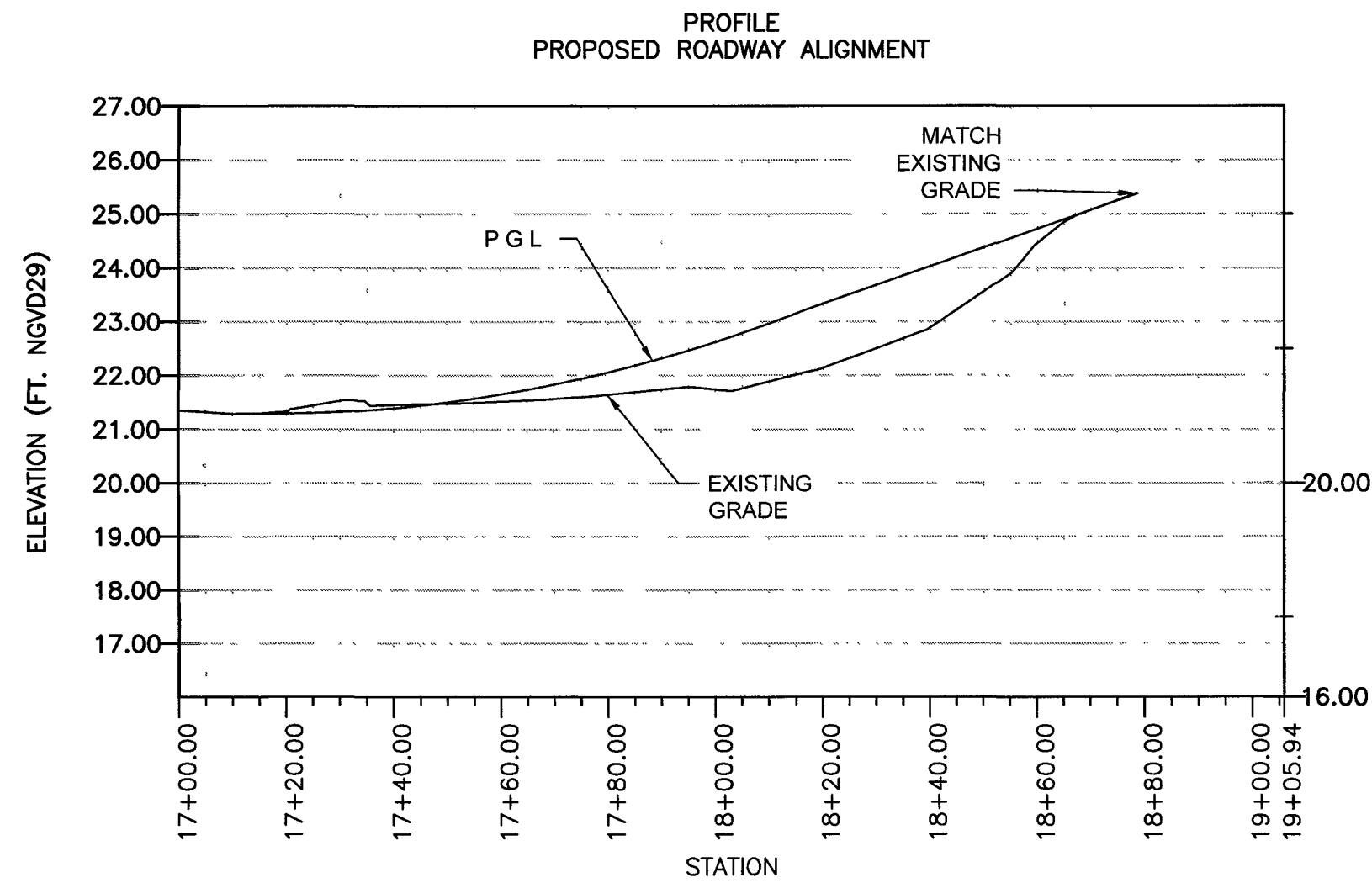
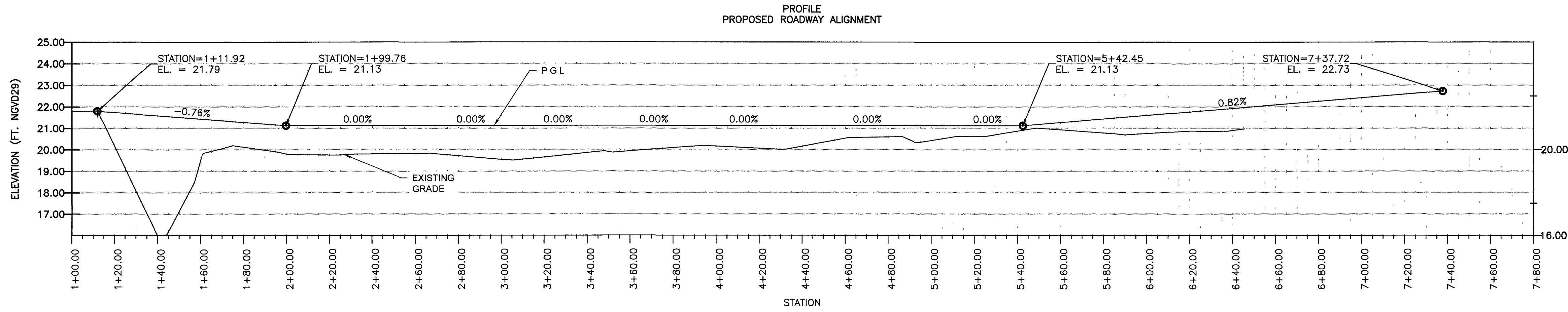
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY
PALM BEACH COUNTY, FLORIDA
**PALM BEACH RENEWABLE ENERGY PARK
VEGETATIVE WASTE LOADING AREA**

**PAVING, GRADING, DRAINAGE
AND POTABLE WATER PLAN**

PROFESSIONAL ENGINEER
DATE: 2/10/17
JOSEPH M. KUSNIR, JR., PE
P.E. NO. 66592
PROJECT NO. 2678-214074
FILE NAME: C010STPL.DWG
SHEET NO.
C-3

PERMIT SET - NOT FOR CONSTRUCTION

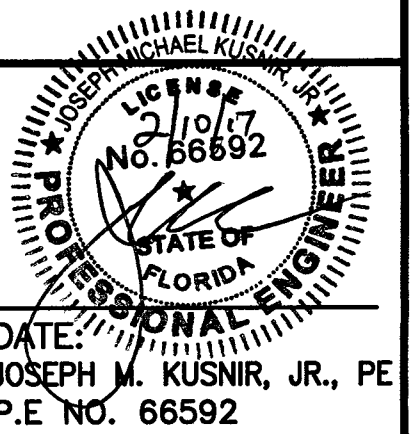
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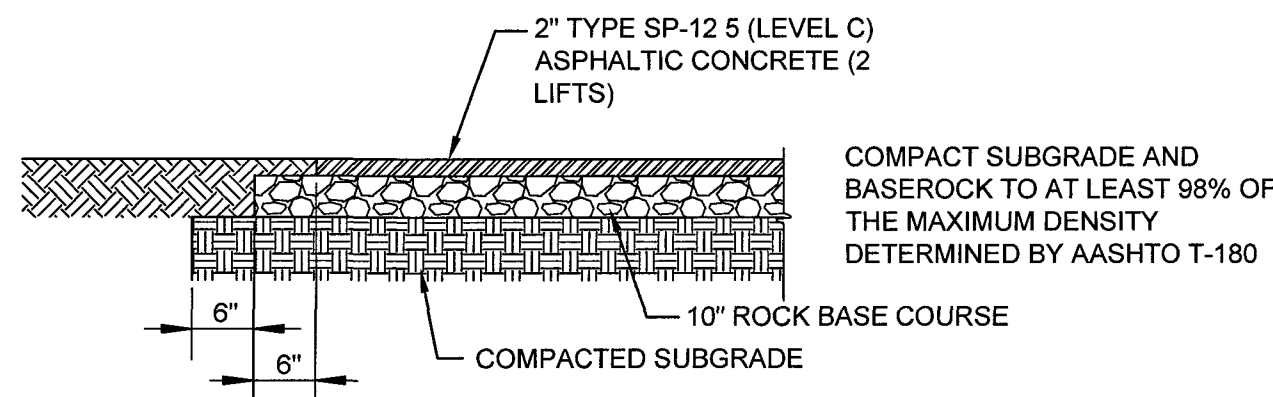
NOTES

- 1 ALL ELEVATIONS ARE IN FT NGVD29
- 2 PROFILES AND SECTIONS PROVIDED FOR INFORMATION ONLY

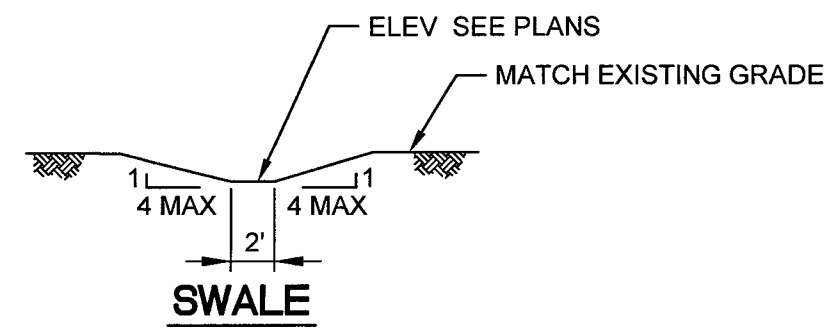
						DESIGNED BY: J. KUSNIR	 621 N W 53rd Street, Suite 205 Boca Raton, FL 33487 Tel: (561) 571-3800 FL COA No EB-0000020	 1855 Indian Road, Suite 202 West Palm Beach, FL 33409 Tel: (561) 242-0028 Fax: (561) 242-0109 FL COA No 00009484	SOLID WASTE AUTHORITY OF PALM BEACH COUNTY PALM BEACH COUNTY, FLORIDA PALM BEACH RENEWABLE ENERGY PARK VEGETATIVE WASTE LOADING AREA	PROFILES AND SECTIONS	PROJECT NO. 2678-214074 FILE NAME: C011STSC.DWG SHEET NO. C-5
					DRAWN BY: P. LIM						
					SHEET CHK'D BY: J. FOY						
					CROSS CHK'D BY:						
REV.	DATE	DRWN	CHKD	REMARKS	APPROVED BY: J. KUSNIR DATE: FEBRUARY 2017						



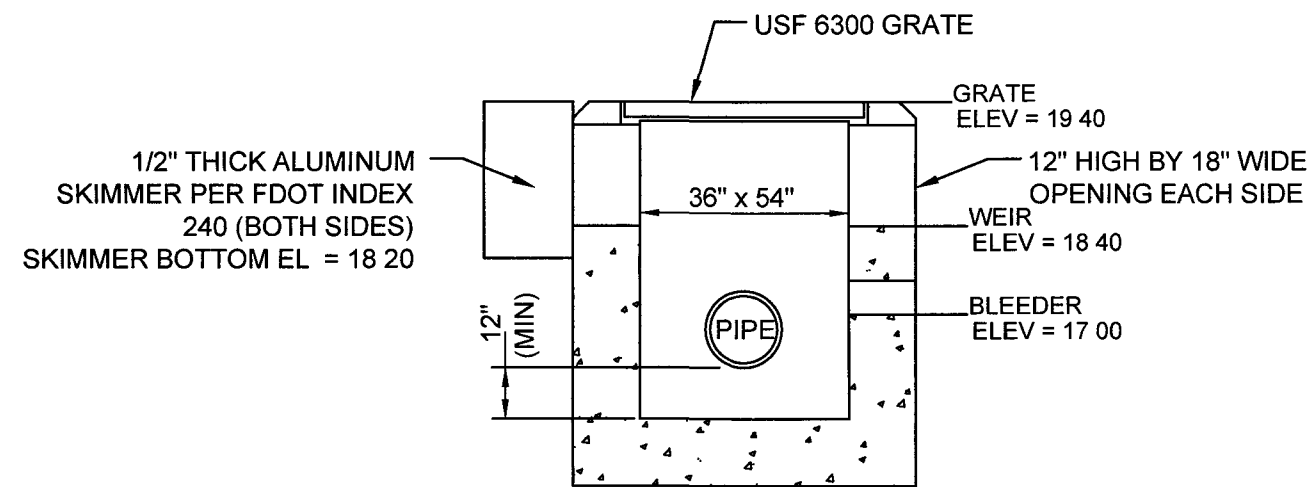
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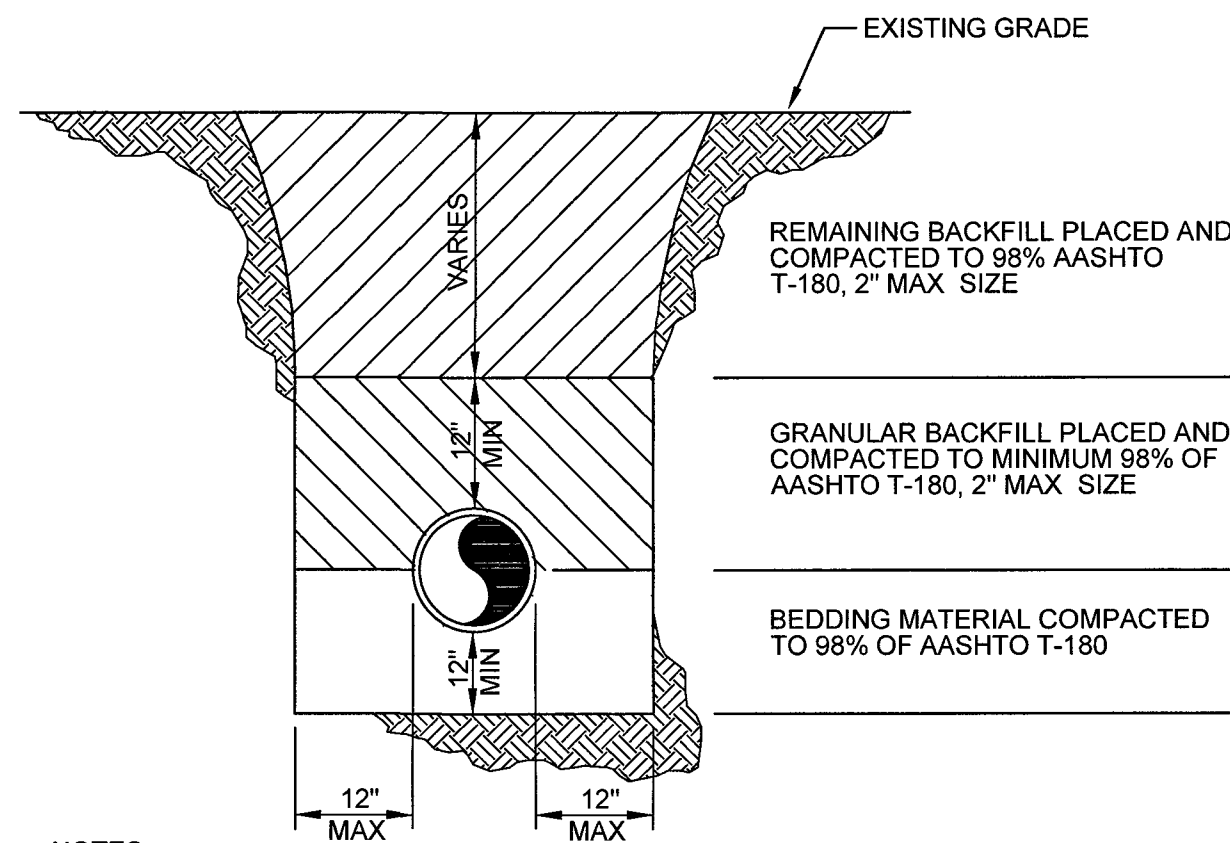
ASPHALT PAVEMENT SECTION



SWALE



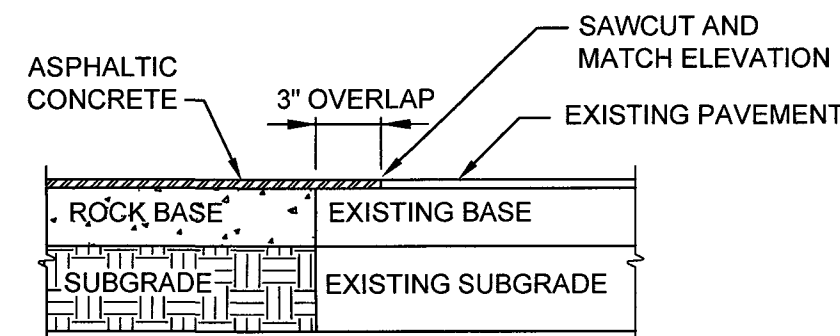
CONTROL STRUCTURE TYPE E DRAINAGE INLET



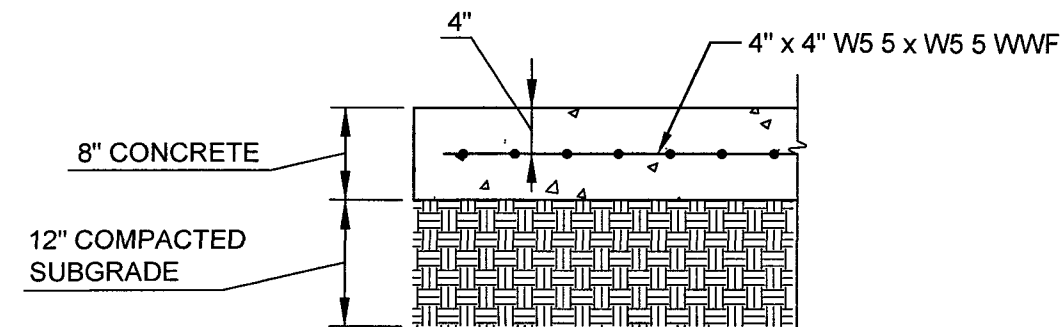
NOTES

- BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8" - 7/8" SIZING UNSTABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED
- THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES
- THE PIPE SHALL BE PLACED IN A DRY TRENCH
- BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGER ROCK, MUCK AND DEBRIS
- TRENCHING METHODS AND SHORING TO MEET OSHA REQUIREMENTS

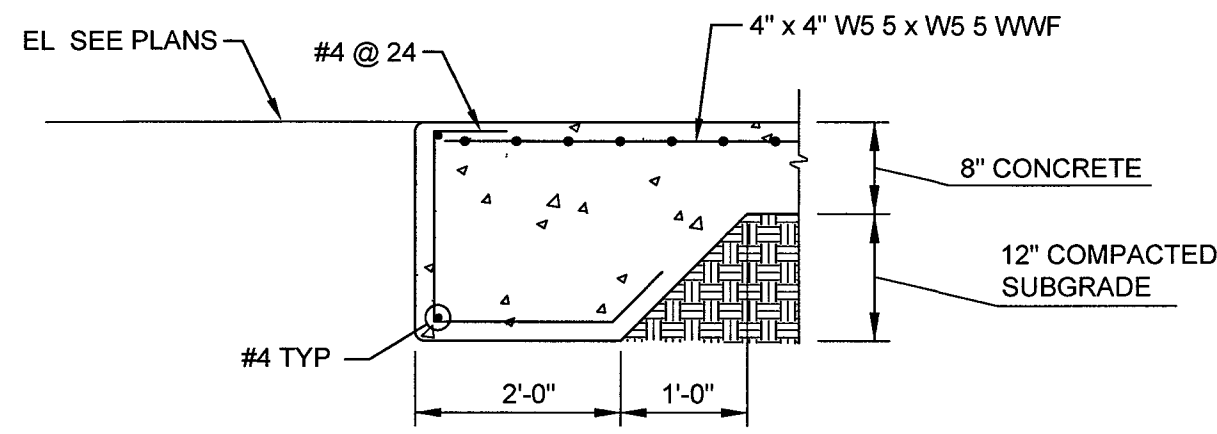
TRENCHING



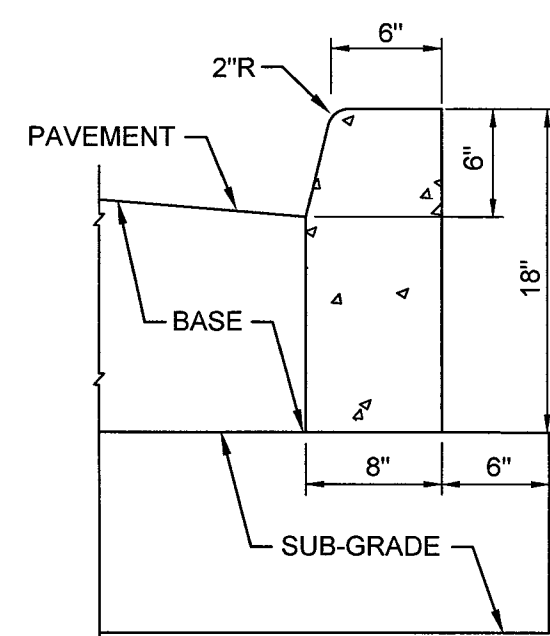
ASPHALT PAVEMENT JOINT



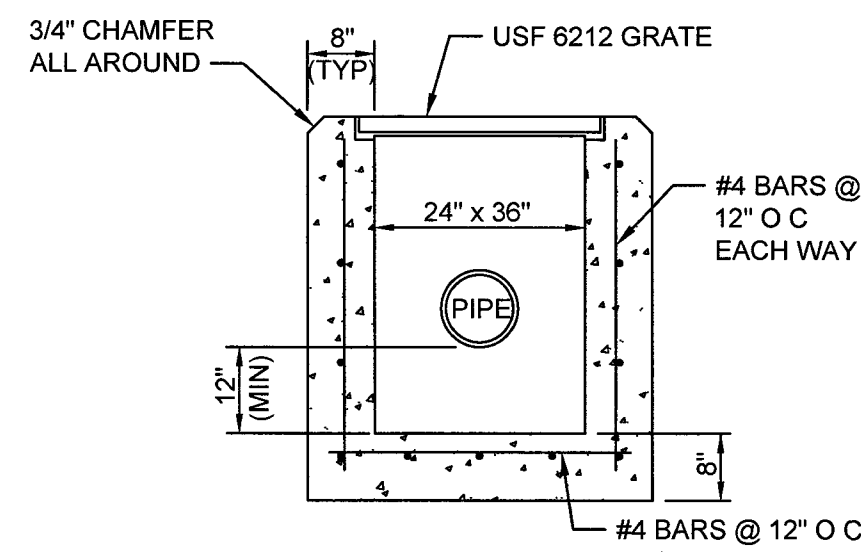
TYPICAL 8" CONCRETE PAVEMENT SECTION



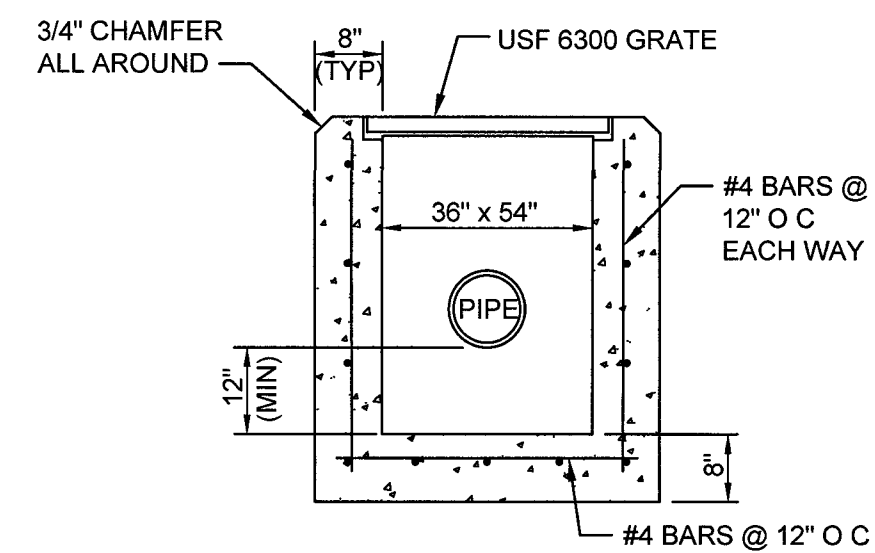
CONCRETE PAVEMENT EDGE



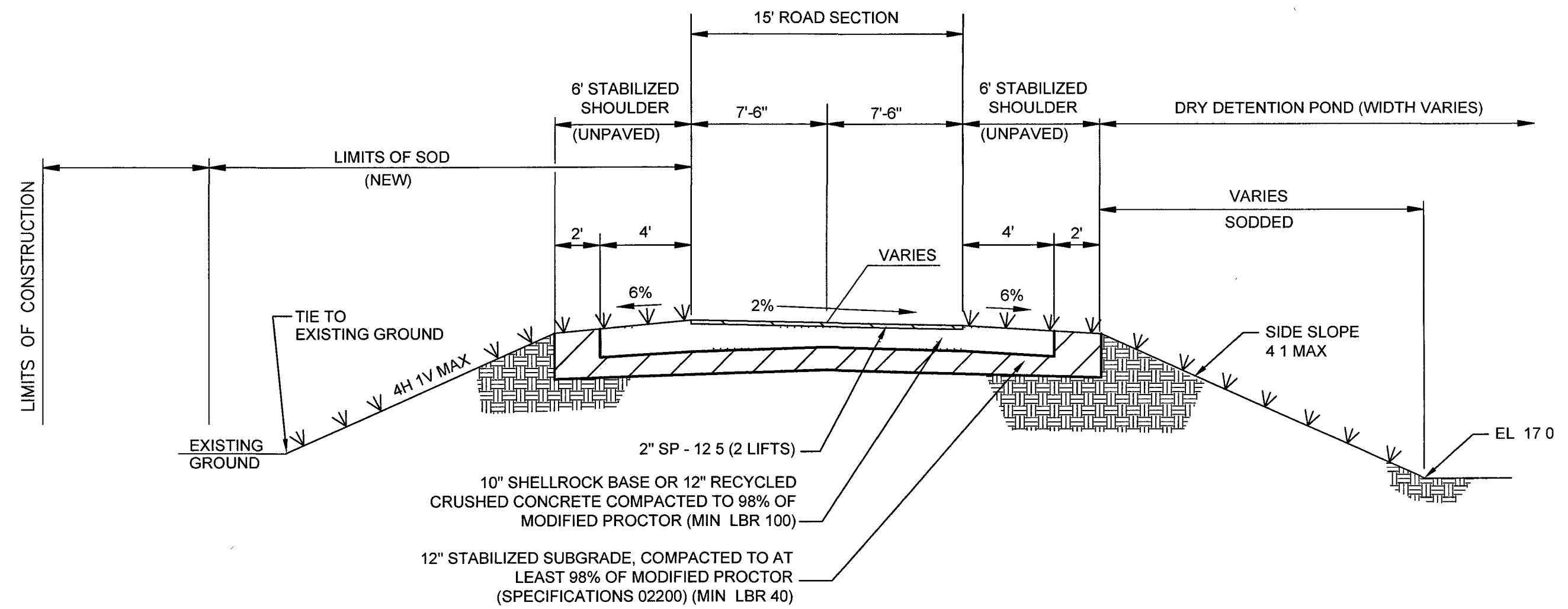
TYPE \"D\" CURB



TYPE C DRAINAGE INLET

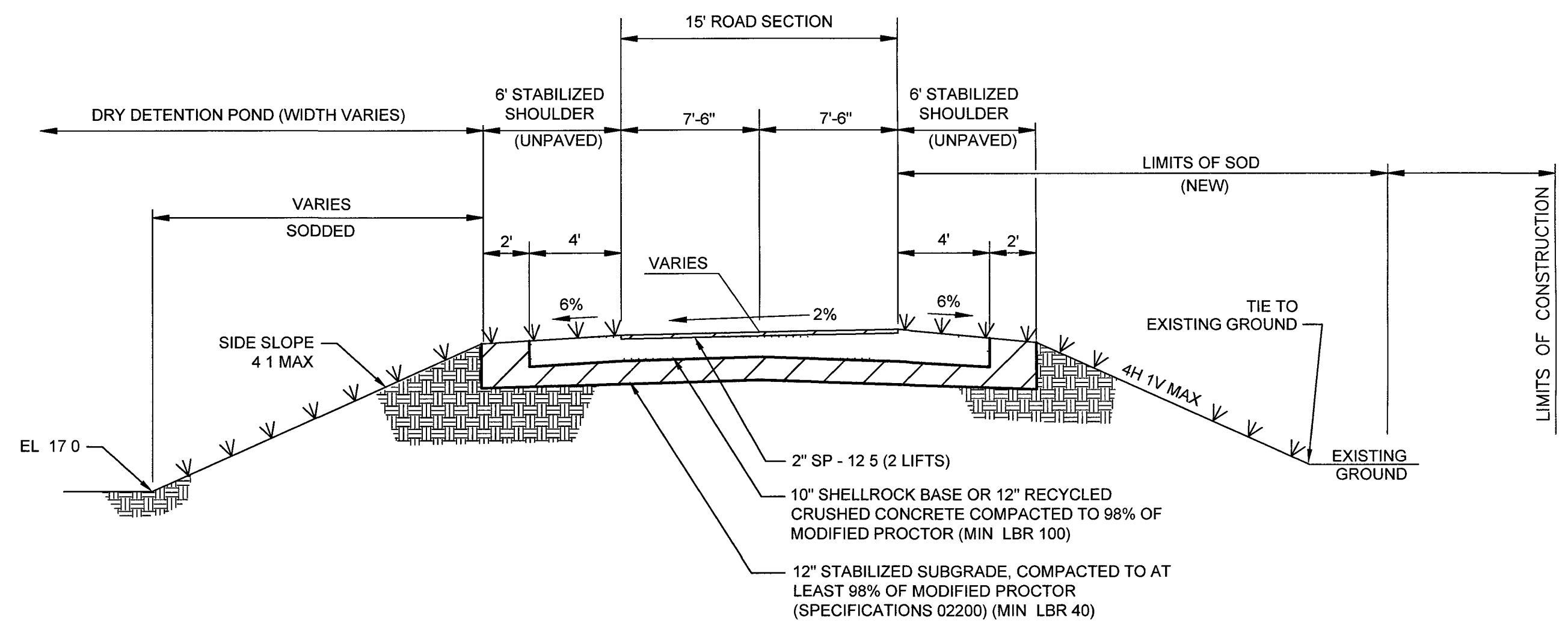


TYPE E DRAINAGE INLET



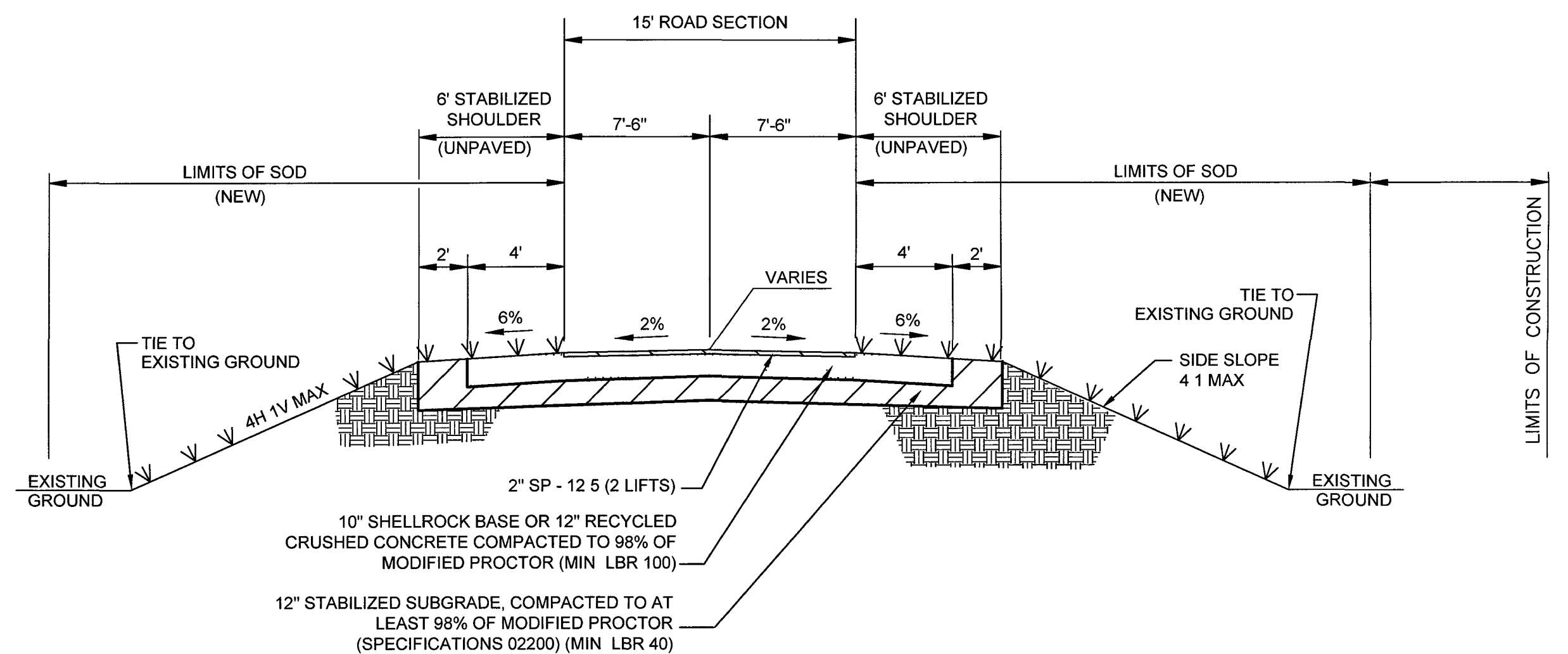
TYPICAL 15' ROAD SECTION

SECTION 1
NTS C-3



TYPICAL 15' ROAD SECTION

SECTION 2
NTS C-3



TYPICAL 15' ROAD SECTION

SECTION 3
NTS C-3

REV. NO.	DATE	DRWN	CHKD	REMARKS

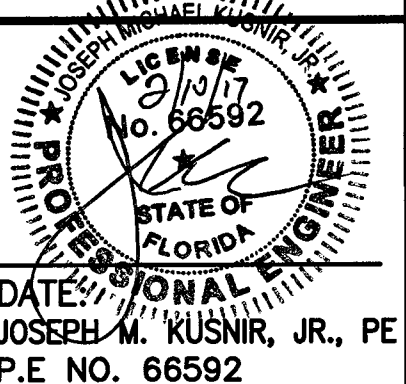
DESIGNED BY: J. KUSNIR
DRAWN BY: P. LIM
SHEET CHK'D BY: _____
CROSS CHK'D BY: _____
APPROVED BY: _____
DATE: FEBRUARY 2017

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SOLID WASTE AUTHORITY OF PALM BEACH COUNTY
PALM BEACH COUNTY, FLORIDA
PALM BEACH RENEWABLE ENERGY PARK
VEGETATIVE WASTE LOADING AREA

CIVIL DETAILS



PROJECT NO. 2678-214074
FILE NAME: C012STD.TDWG

SHEET NO.

C-6