



# Construction Environmental Compliance

Sara Stevenson - DC Environmental Administrator

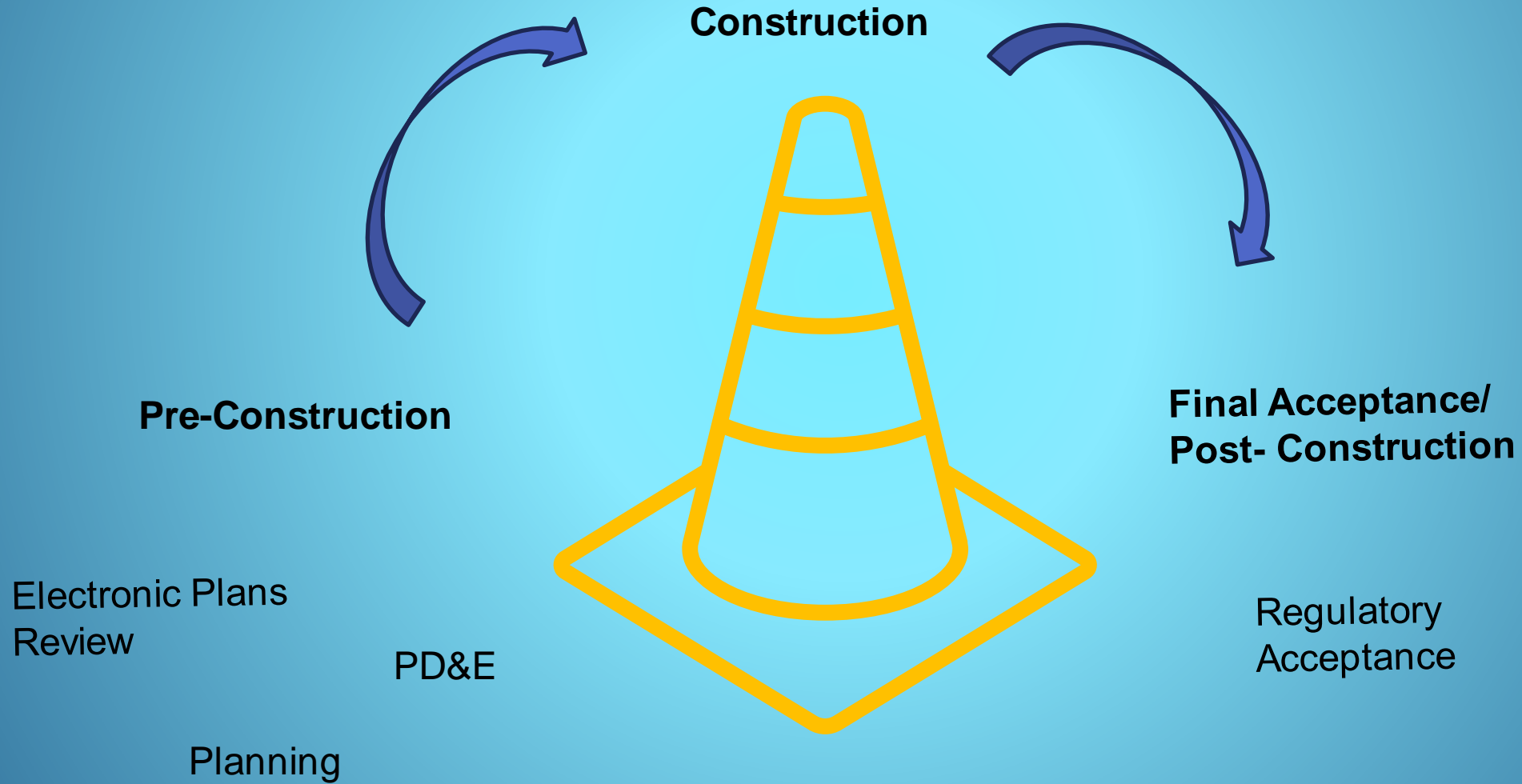
Megan Arp - DC Environmental Administrator

Leilani Farrell - Senior Scientist, RES

District 1 Construction



# The Big Picture



# Starting the Review Process

Before the Job comes to Construction during ERC it will be reviewed by Drainage, Permits and Environmental Management

Reviews include the following-

- SHPO Review includes Cultural and Historic Preservation, i.e. Unmarked graves, Native middens, Historic Markers, etc.
- Endangered Species Consultation Areas  
Florida Panther, Wood Stork, Scrub Jay, Burrowing Owl, Audubon's Crested Caracara, Bald Eagle, Sand Skink, Blue Mole Tailed Skink, Florida Bonneted Bat, West Indian Manatee, Small Tooth Saw Fish, Gulf Sturgeon, Indigo Snake
- Scenic highways  
Project impacts to designated scenic highways
- Section 4(f)  
Review of federally protected recreational resources (i.e. parks, trails, wildlife preserves)
- Contamination  
Review of petroleum contamination, hazardous material structures
- Wetlands  
Wetland impacts- mitigation, revegetation and or natural recruitment





# Pre-Construction Review

Environmental Liaison will do both a desk top review and a physical site assessment prior to Pre-Construction Meeting

- Many conditions may change significantly from the time of PD&E (for major projects) or the environmental certification (for minor projects) and the actual job starting
- Examples new eagle nest, no Gopher Tortoises no longer present (trapped and relocated) or newly present (adjacent development driving them into roadway shoulders)
- Illegal dumping, New development within ROW
- Regulatory Agency has concurrent project working at the same site, at the same time





# Pre-Construction Meeting

- Environmental Liaison will go over Permits, Staging Area, Dewatering
- Discuss at the Pre-Con the SWPPP if required, The site-specific Erosion and Sedimentation Control Plan including a Narrative and Plan Set
- Discuss any permits on the job and their “General and Specific Conditions”
- Discuss any Threatened or Endanger Species or Cultural site or BMPs like GT Exclusionary Fencing, and or Lighting for night work, need to contact EMO in advance of tree removal (i.e. Florida Bonneted Bat surveys) or excavation of certain areas (i.e. archeological monitoring)
- Discuss work, spill containment, dewatering, concrete BMP’s, off-site staging and any critical habitat such as Xeric or OFW’s



# **Project Administration Responsibility in Construction**

- **Reads all permits for the job**
- **Discusses requirements for each different permit action**
- **Coordination with Office of Environmental Management**
- **Threatened or Endangered Species (Work Dates and BMP's)**
- **Erosion and Sedimentation Control Plan and SWPPP**
- **QAR's, EFR's and Audits**
- **Close Out Documentation, signed and sealed plans and As- built requirements**



# Permitting Agencies

- US Coast Guard (USCG)
- US Fish and Wildlife Service (USFWS)
- Southwest Florida Water Management District (SWFWMD)
- South Florida Water Management District (SFWMD)
- Florida Department of Environmental Protection (FDEP)
  - Replaces the ACOE Permitting in many circumstances
- FDEP Wild and Scenic Rivers
- Florida Fish and Wildlife Conservation Commission (FWC)
  - Gopher tortoise relocation permits
- National Pollution Discharge Elimination System (NPDES)

**Our most common permit on a job**

Commenting agencies to state and federal permits:

- US Fish and Wildlife Services (USFWS)
- FWC





# US COAST GUARD

- Needed for: bridge replacements, new bridges, bridge widening
- Not needed for: minor improvements such as bridge repairs, guardrail, any work that does not change the vertical clearance under the bridge



# Florida Fish and Wildlife Conservation Commission (FWC)

## Attention Builders!

### Got Gophers? Get Permits.

Before you begin clearing for a building project, you must obtain a permit from the Florida Fish and Wildlife Conservation Commission (FWC) if either gopher tortoises or their burrows are present on the development site.



Gopher Tortoise



Gopher Tortoise Burrow

The gopher tortoise is protected under Florida law, Chapter 68A-27 of the Florida Administrative Code. Protect yourself and this imperiled species. Learn more at [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise) or contact the nearest office of the FWC.

Northwest Region  
3911 Highway 2321

Southwest Region  
3900 Drane Field Road



FWC reviews state environmental resource permits and may request:

- specific permit conditions for listed species pre-construction surveys
- During-construction precautions

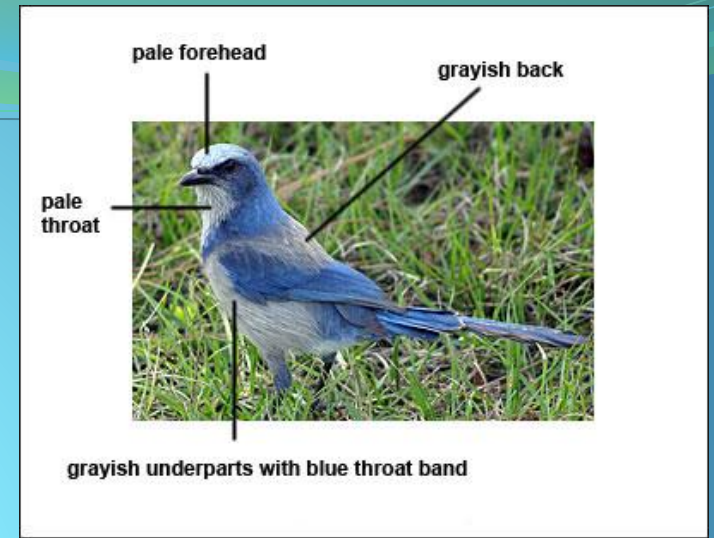


# USF&W Service

If a project *may* affect any federally listed species or critical habitat, a formal consultation is conducted.

*If so*, additional terms may be included in permit conditions and/or within a USFWS Biological Opinion.

Informal consultation is conducted if project is not anticipated to affect listed species, but for which a standard species "key" does not exist





# **Section 7-1.4 Compliance with Federal Endangered Species on the Job**

- **If you encounter protected species during construction, stop all work in the area call the Environmental Administrator (EA), and Send a picture**
- **Coordinate with DEMO to conduct a survey or relocation**
- **If you find a dead protected species, let your EA know right away. They need to be reported (picture with day, time, and location)**
- **Check with our EA or DEMO for breeding season dates and or nest occupancy protection dates**
- **If unforeseen Gopher Tortoise burrow appears in ROW contact EA for further instruction**

# Night-Time Work



# Section 7-1.4 Compliance with Federal Endangered Species

- **Other species include:**
- Audubon's Crested Caracara
- Florida Scrub Jay
- Piping Plover
- Wood Stork
- Eastern Indigo Snake
- Sea Turtles
- Sand Skink and Blue-tailed Mole Skink
- Florida Panther
- West Indian Manatee
- Gulf Sturgeon
- Smalltooth Sawfish
- Florida Bonneted Bats
- Gopher Tortoises





# Gopher Tortoise Exclusionary Fencing





# SOUTH AND SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICTS

- Southwest Florida Water Management District (SWFWMD)
- South Florida Water Management District (SFWMD)
  - 2<sup>nd</sup> MOST COMMON PERMIT FOUND ON THE JOB

Permits usually contain General and Special Conditions regarding the following

- Notice of Commencement must be submitted prior to conducting work – all timelines contained within permit depend on this date (for Individual Permits).
- Erosion Control
- Wetland Impacts
- Navigation
- Compensatory Mitigation
- As-Builts
- Fill Criteria
- Listed Species
- Cultural Resources



# SWFWMD/SFWMD COMPLIANCE

- WMD attends *some* pre-con meetings
- Permittee to submit “Construction Commencement Notice” to the agency at least 48 hours prior to beginning the authorized activities, if required
- Submit Erosion and Sediment Control Plan to and WMD (if required)
  - Sometimes signed and sealed is required
  - Keep a copy on site
- Mark all wetlands, and Other Surface Water prior to construction





# Contractor Obtains Dewatering Permit from Water Management District

- Will dewatering operate for less than 90 days?
- Is the maximum daily pumpage  $\leq 5$  million gallons/day or less than 100 million gallons total ?
- Is your project greater than 1,000 sq ft of a wetland?
- Will you be discharging offsite?

*If You answered “Yes” to any of the above, please apply for a dewatering permit from your Water Management District. (SWFWMD/SFWMD)*



# FDEP/NPDES COMPLIANCE ON THE JOB

- Prepare Site-specific Erosion and Sedimentation Control Plan (ESCP)
- Contractor/Subcontractor certification form
- Delegation of Authority form
- Contractor to submit NPDES NOI and fees at least 48 hours prior to any work
- Keep NOI and ESCP on-site at a visible location
- Submit SWPPP reports weekly and after 0.5" of rain.
- Submit Closeout documents



# NPDES – NOI Application Response



## FLORIDA DEPARTMENT OF Environmental Protection

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

**Ron DeSantis**  
Governor

**Jeanette Nuñez**  
Lt. Governor

**Shawn Hamilton**  
Secretary

March 16, 2022

[REDACTED]

13350 Rickenbacker Pkwy  
Fort Myers, FL 33913 8847

**RE: Facility ID: FLR10VA80-001**

US 17 Repaving Project  
County: Charlotte

Dear Permittee:



# Dewatering Permit NPDES (Short Term/Temporary)

Short Term/ Temporary Dewatering is only permitted under the NPDES when the dewatering box is checked.

H. Construction Period:	Start Date: 7/11/22	Completion Date: 11/14/23
<b>VI. DEWATERING INFORMATION:</b>		
A. Will dewatering operations be performed as part of the construction activities? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <b>If yes, complete</b>		
below. If no, skip this part and go to Part VII.		
B. Is the project site currently identified as contaminated, or is there a site within 500 feet of the dewatering project identified as contaminated by a DEP or EPA cleanup/restoration program? You may use the Quick Link to DEP's Contamination Locator Map (CLM) and DEP's Institutional Controls Registry (ICR) Web Viewer to determine cleanup restoration status. You may access the CLM at: <a href="http://webapps.dep.state.fl.us/DepCleanup/welcome.do">http://webapps.dep.state.fl.us/DepCleanup/welcome.do</a> or		
Page 2 of 6		
DEP Form 62-621.300(4)(b) Effective Date: 02/2015		<b>Received</b> <b>07/01/2022</b> <b>FL Department of</b> <b>Environmental Protection</b> <b>NPDES Stormwater Notices Cent</b>
<a href="http://ca.dep.state.fl.us/mapdirect/?focus=contamlocator">http://ca.dep.state.fl.us/mapdirect/?focus=contamlocator</a> . The ICR may be accessed at: <a href="http://www.dep.state.fl.us/waste/categories/brownfields/pages/ICR.htm">http://www.dep.state.fl.us/waste/categories/brownfields/pages/ICR.htm</a> , or <a href="http://ca.dep.state.fl.us/mapdirect/?focus=icr">http://ca.dep.state.fl.us/mapdirect/?focus=icr</a>		
<input type="checkbox"/> YES Continue to VI.C, below. <input checked="" type="checkbox"/> NO Continue to Part VII.		



# NPDES Required Sub Contractor Form included in the ESCP

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

650-040-07  
CONSTRUCTION  
04/18

## CONTRACTOR/SUBCONTRACTOR CERTIFICATION NPDES GENERIC PERMIT FOR STORM WATER DISCHARGES FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES

Financial Project #

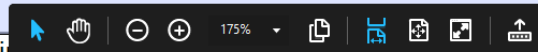
"I certify under penalty of law that I understand and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."

Signature of Contractor/Subcontractor

Date

Name and Title

Name of Contracting or Subcontracting Firm



# RESPONSIBLE AUTHORITY & DELEGATION OF AUTHORITY

## 62-620.305 F.A.C. Signatories to Permit Applications and Reports

- All permit applications under this chapter shall be signed as follows:
  - (a) for a corporation, a responsible corporate officer shall sign all applications for permit. A responsible corporate officer is considered to be:
    - 1. A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation or....
- (4) Any person signing a document under subsection (1) or (2), of this rule, shall make the following certification:

“I certify under penalty of law.... I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”





**Written Authorization of Duly Authorized Representative Pursuant to Rule 62-620.305, F.A.C.**

I, \_\_\_\_\_, a person authorized as described in Rule 62-620.305(1),  
(Print name of Responsible Corporate Officer)

F.A.C., Responsible for the facility known as \_\_\_\_\_ do hereby designate  
(Facility Name)

\_\_\_\_\_ as a Duly Authorized Representative (DAR)  
(Print Name and/or Title of Representative)

of \_\_\_\_\_ for the purpose of signing reports documents,  
(Operator/Company/Permittee)

certifications or providing other information as required NPDES Stormwater Generic Permit for the following:

facility(ies) \_\_\_\_\_ in accordance with the certification below:  
(Facility ID #(s))

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
(Signature of Responsible Corporate Officer) \_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature of DAR) \_\_\_\_\_  
(Date)



# Staging Area Clearance Request Letter for DEMO

*(Put this form on your Company's letterhead stationery along with the information requested)*

*(Please Note! Legible maps MUST be received before a field review will be performed! This letter must be emailed directly to the recipient emails listed at the top; response time for FDOT does not begin until the correct persons have been directly notified and all attachments are provided.)*

(Date)

Sent via email to: [Kristin.Caruso@dot.state.fl.us](mailto:Kristin.Caruso@dot.state.fl.us)  
[Jonathon.Bennett@dot.state.fl.us](mailto:Jonathon.Bennett@dot.state.fl.us)

Florida Department of Transportation District  
Environmental Management Office Post Office Box 1249  
Bartow, Florida 33831

Attention: **Kristin Caruso**

Subject: **New Staging Area/Borrow Pit/Mixture Plant/Construction Field Office**  
Project Name: **XXXXXXXXXXXXXXXXXXXXXXX**  
Financial Project ID: **XXXXXXXX-X-XX-XX**  
Contract Number: **XXXXX**

We propose to establish an off-site area for project activity in conjunction with construction of the above-referenced Department of Transportation project. We understand that the Florida Department of Transportation, District One, will review this proposed area for involvement with protected species and wetlands and that use of the proposed off-site area is dependent on the outcome of this review.

The proposed site is owned by (Name of Property Owner), and is located as follows:

Township: ..... Range: .....  
Section: ..... County: .....  
City: .....  
Description of Off-Site Activity: .....

Attached: County map AND Plat map (with parcel #) of the site showing an outline of the activity location.

Please initiate a field review of this site to determine the possible impact of our operation on any endangered or threatened species which might be located in this area. (The contractor's representative) will be available to meet you on site at your earliest convenience. (Construction Company name) requests the use of this proposed off-site area by (Date) but understands that it may take the FDOT District One up to 30 days to complete the review and clearance of this site(s).

Please contact us at (contractor's phone number) to answer any questions with regard to this request, and to establish a meeting time for a field review.

Sincerely,

*(Put this form on your Company's letterhead stationery along with the information requested)*

Attachments

Cc: Project Administrator  
Environmental Administrator (pick from: Sara Stevenson  
Syeda Zaidi)

District Materials Engineer (Sam Joseph, P.E.)  
Construction Engineer (pick from: Bartow Ops- Kevin Morrissey, P.E.  
Heartland Ops- Leighton Elliot, P.E.  
Manatee Ops- Alex Adames, P.E.  
Ft. Myers Ops- Jerry Byrne, P.E.  
Interstate/Push Button- Kati Sherrard, P.E.)



# Spill Reporting and Containment Plan

## Containment and Spill Prevention Plan

Project Name \_\_\_\_\_

Location \_\_\_\_\_

Emergency Phone ( \_\_\_ ) \_\_\_ - \_\_\_\_\_

Construction Work: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This Containment and Spill Plan is designed to handle the requirements for this project location and types of hazardous substances. The plan should be updated if the work or substance inventory changes.

### Spill Prevention

The following are general requirements for any hazardous substances stored and used at this facility.

#### General Requirements

- Ensure all hazardous substances are properly labeled.
- Store, dispense, and/or use hazardous substances in a way that prevents releases.
- Provide secondary containment when working on and removing materials from a bridge
- Provide secondary containment storing hazardous substances in bulk quantities (~55 g).
- Maintain good housekeeping practices for all chemical materials at the facility.
- Routine/Daily checks in the hazardous substance storage area to be performed by \_\_\_\_\_
- Monthly inspections of the hazardous substance storage area, secondary containment, and annular space (interior cavity of double wall tank) on any stored substances (paint, solvent etc.) or Above-ground Storage Tanks (AST) need to be logged in this plan. See Appendix A - Inspection Log.

### Spill Containment

The general spill response procedure on this project is to

1. Stop the source of the spill,
2. Contain any spilled material
3. Report spill to District One Contamination Coordinator Jeff James 863-\_\_\_\_\_
4. Clean up the spill in a timely manner to prevent accidental injury, off site migrations or other damage.

Small spills will be contained by site personnel if they are able to do so without risking injury. Spill kits are located at the following location(s). See attached site map:

### Emergency Procedures:

## Containment and Spill Prevention Plan

(Secondary) ( \_\_\_ ) \_\_\_ - \_\_\_\_\_

(After Hours Emergency Contact) ( \_\_\_ ) \_\_\_ - \_\_\_\_\_

### • In the event of a large spill, a properly trained employee should:

- Assess the area for any immediate dangers to health or safety (i.e. a wrecked car on fire). If any dangers are present, move away from the area, **call 911**.
- Notify the primary and/or secondary contact from the list above and then continue your spill response. The primary contact should assess additional notification requirements.
- Retrieve the spill kit from the closest location.
- Assess the size of the leak and any immediate threat of the spill reaching the floor/storm drains or permeable surfaces in the area. If there is an immediate threat and there are no safety concerns, then attempt to block the spill from coming in contact with the floor/storm drain or permeable surface. If no drain covers are available, then try to use absorbent (cat litter) and/or sock booms or rags to stop the spill from getting into the drains or to any permeable surfaces.
- If the spill can be contained with absorbent booms, deploy them around the spill. Use the booms to direct the spill away from any immediate hazards (i.e. a wrecked car).
- If there is no immediate threat to the floor/storm drains or permeable surfaces, or after controlling the spill, try to plug or stop the leak, if possible. If applicable, put on protective gear (gloves, goggles, protective clothing, etc.) and plug the leak.
- Once the spill has been contained and any immediate threat to storm drains or permeable surfaces has been minimized, contact the spill cleanup contractor and dispatch them to clean up the spill or commence spill cleanup procedures.

Spill cleanup for large spills should be handled by the Spill Cleanup Contractor  
Company Name \_\_\_\_\_ 24-Hour Phone ( ) \_\_\_\_\_

### Spill Reporting

If a hazardous substance spill exceeds 25 gallons or if any amount has been released to soil, surface water, or storm drains, notify the following agencies:

Nikki Vallandingham, District Contamination (FDOT) 863 519- 2375

National Response Center (NRC) (800) 424-8802

Florida State Warning Point (SWP) (800) 320-0519

# • SRCC & Erosion Control

- SRCC is designed by drainage engineer and provided in the plans for bidding
- Contractor later provides a site-specific ESCP

CONTRACT PLANS COMPONENTS  
ROADWAY PLANS  
SIGNALIZATION PLANS  
STRUCTURES PLANS

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS  
FINANCIAL PROJECT ID 434502-1-52-01  
(FEDERAL FUNDS)  
POLK COUNTY (16000607)  
EWELL ROAD

THIS PROJECT TO BE LET TO CONTRACT WITH FINANCIAL PROJECT ID 434502-1-56-01

INDEX OF ROADWAY PLANS  
SHEET NO. SHEET DESCRIPTION

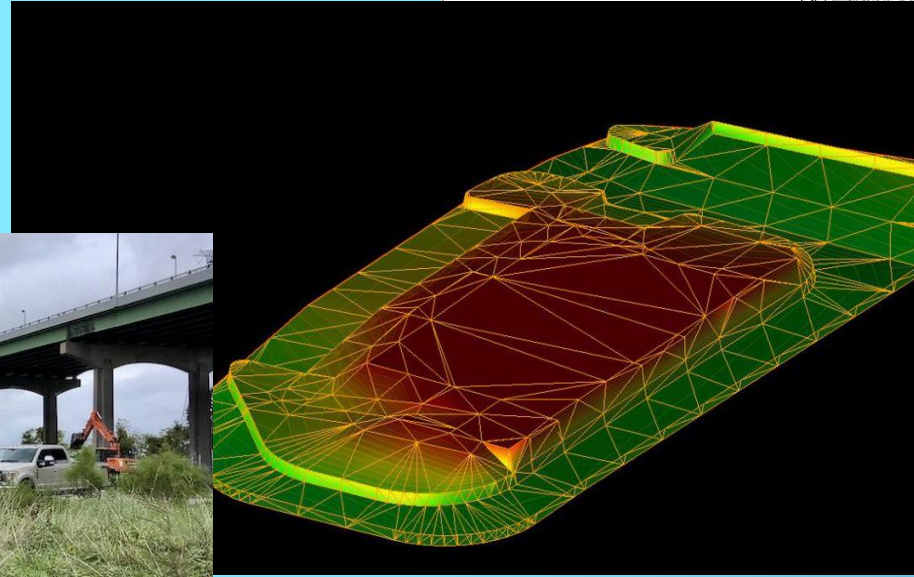
1	KEY SHEET
2 - 3	SIGNATURE SHEET
4 - 6	SUMMARY OF PAY ITEMS
7 - 9	DRAINAGE MAP
10 - 15	TYPICAL SECTIONS
16 - 17	TYPICAL SECTION DETAIL
50-1 - 50-15	SUMMARY OF QUANTITIES
18 - 19	SUMMARY OF DRAINAGE STRUCTURES
20	OPTIONAL MATERIALS TABULATION
21 - 22	TABULATION OF QUANTITIES
23	PROJECT LAYOUT
24 - 29	GENERAL NOTES
30	ROADWAY PLAN
31 - 41	ROADWAY PROFILE
42 - 43	SPECIAL PROFILE
44	DRAINAGE DETAILS
45 - 56	DRAINAGE STRUCTURES
57	DRAINAGE DETAILS
58	ROADWAY SOILS SURVEY
59 - 61	CROSS SECTIONS
62 - 107	DIVERSIFIED BASE SECTIONS
108 - 113	STORMWATER POLLUTION PREVENTION PLAN
114 - 116	TEMPORARY TRAFFIC CONTROL PLAN
117 - 121	TEMPORARY SIGNALIZATION
122 - 123	EROSION CONTROL PLAN
124 - 144	UTILITY ADJUSTMENTS
145 - 155	SIGNING AND PAVEMENT MARKING PLAN
156	GUIDE SIGN WORK SHEET
UTV-1 - UTV-5*	VERIFIED UTILITY LOCATE SHEET

LOCATION OF PROJECT

ROADWAY PLANS  
ENGINEER OF RECORD:  
DONALD G. BEYER JR., P.E.  
P.E. NO. 28684  
ELEMENT ENGINEERING GROUP  
373 E. 9th AVENUE  
TAMPA, FL 33605  
(813) 286-7205  
CONSULTANT CONTRACT NUMBER C021  
VENDOR NO. 56-256548  
CERTIFICATE OF AUTHORIZATION NUMBER 26921

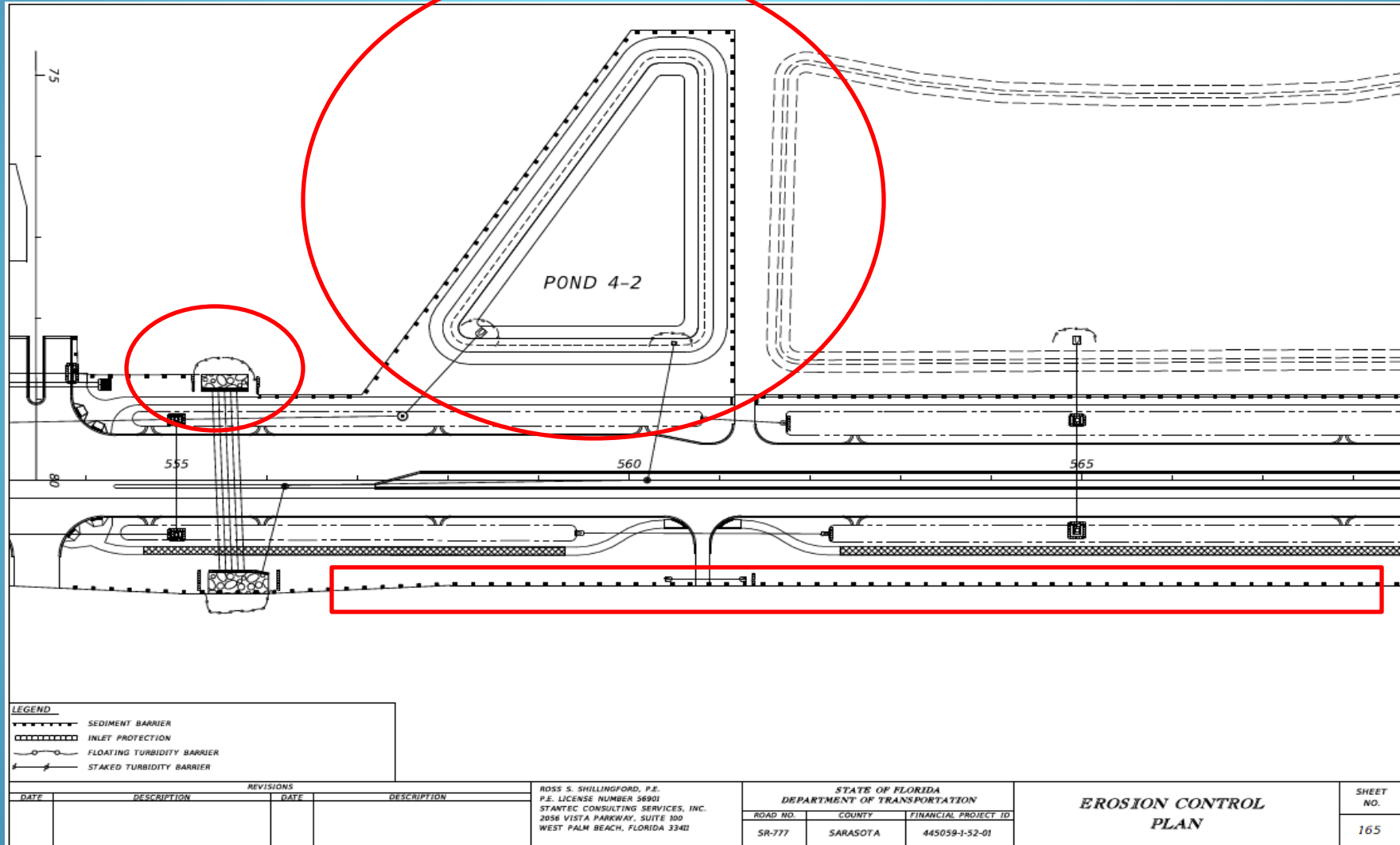
FDOT PROJECT MANAGER:  
JUSTIN R. BECK

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
T1693	18	1





# Design



Ch,Ch,Ch,Ch,Ch,Ch,Ch



CHANGES





## FDM Changes

- Removal of SWPPP chapters and plans requirements
- Addition of Stormwater Runoff Control Concept (SRCC)
- SRCC requires conceptual layout of erosion and sediment control items
- Construction Stormwater Pollution Prevention Plan Template ([floridadep.gov](http://floridadep.gov))



As a result, the Department removed the SWPPP chapter from the FDM 900 series. FDM 251 was modified to remove SWPPP and/or E&SC plan requirements and the new Stormwater Runoff Control Concept (SRCC) was created. The name was changed to avoid confusion with department's "old" SWPPP and Contractor's CGP SWPPP, The SRCC eliminates the language formerly included in the SWPPP write-up. The Contractor has access to a template on FDEP's website describing how the requirements of the NPDES permit may be satisfied. The SRCC, however, does require a concept layout of E&SC items that would establish an estimate of quantities prior to letting the project using reasonable assumptions would assist in controlling erosion, sediments, and siltation during construction



# **Ok, so, what does this mean & who is responsible for completing**

- **FDOT → Provides SRCC, no longer provides SWPPP**
- **Contractor → Creates SWPPP using the DEP template AND the SRCC**
- **Contractor → Creates ESCP**
- **Contractor → obtains CGP**
- **Environmental Liaison/admin → collects and reviews ESCP, NOI, etc.**



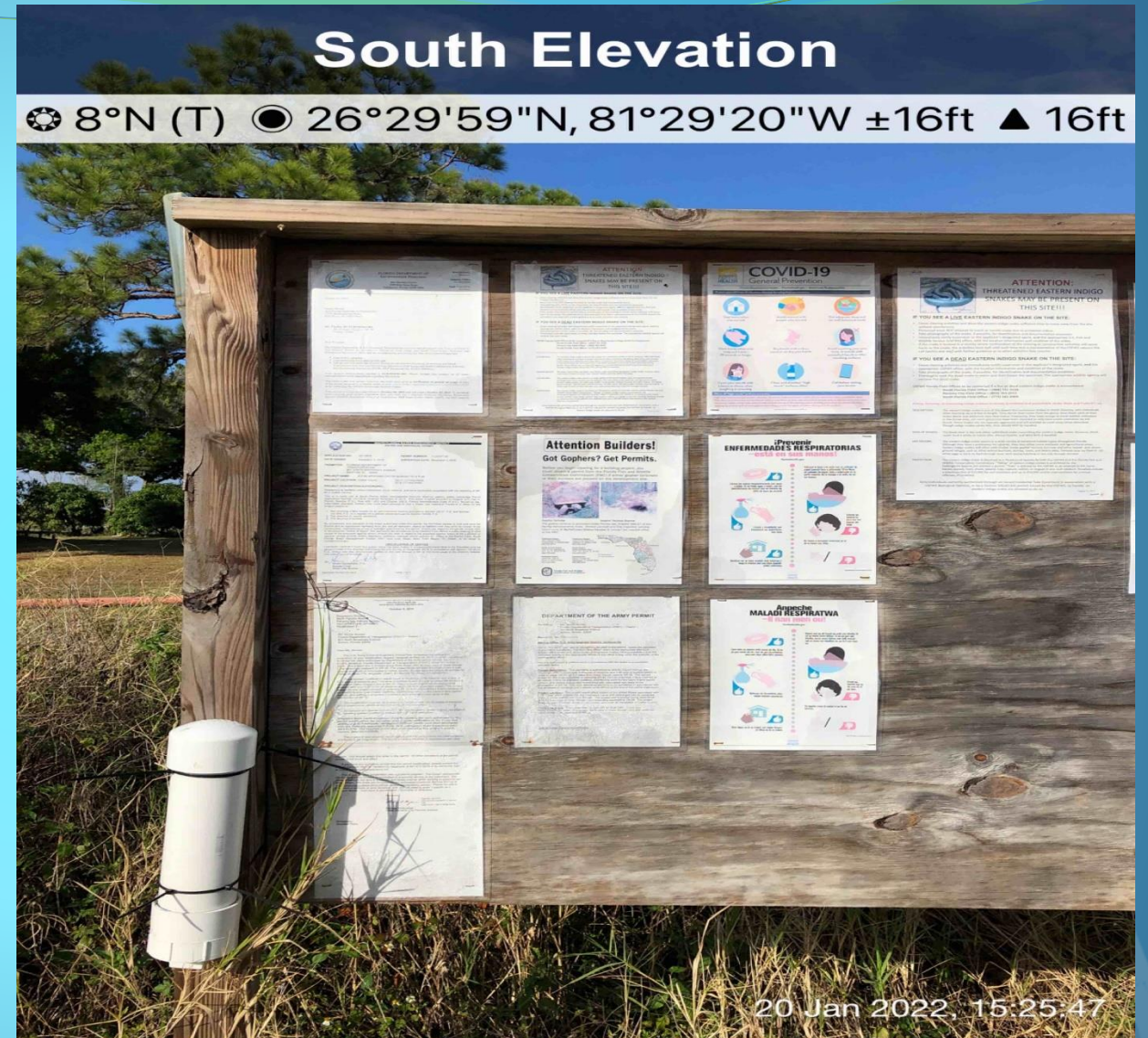
# During Construction Inspect Frequently

- Check for compliance:
  - EFR's
  - QAR's
  - Drive-thru inspections



# Construction Environmental Compliance - Job Board

- Permits (NPDES, WMD, FDEP)
- Threatened Endangered Species poster
- Rain gauge





# Threatened Endangered Species (TED) Poster

## Attention Builders!

### Got Gophers? Get Permits.

Before you begin clearing for a building project, you must obtain a permit from the Florida Fish and Wildlife Conservation Commission (FWC) if either gopher tortoises or their burrows are present on the development site.



Gopher Tortoise

The gopher tortoise is protected under Florida law, Chapter 68A-27 of the Florida Administrative Code. Protect yourself and this imperiled species. Learn more at [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise) or contact the nearest office of the FWC.



Gopher Tortoise Burrow

Northwest Region  
3911 Highway 2321

Southwest Region  
3900 Drane Field Road



**ATTENTION:**  
THREATENED EASTERN INDIGO  
SNAKES MAY BE PRESENT ON  
THIS SITE!!!

#### IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site without interference.
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate U.S. Fish and Wildlife Service (USFWS) office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

#### IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

#### USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336  
Panama City Field Office – (850) 769-0552  
South Florida Field Office – (772) 562-3909

**Killing, harming, or harassing indigo snakes is strictly prohibited and punishable under State and Federal Law.**

**DESCRIPTION:** The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed.

# Construction

- Examples



The Good  
The Bad  
The Ugly





# Erosion Control





# Best Management Practices

## Commonly Used BMPs

- Silt Fence
- Staked turbidity barrier
- Floating turbidity barrier
- Inlet protection
- Synthetic bales
- Temporary soil and slope erosion control
- Soil tracking prevention device
- Concrete washout
- Dewatering BMPs
- Chemical treatment
- Sedimentation basins
- Secondary containment



# Best Management Practices

## Silt Fence

- When to use
  - Capture sediment under sheet flow conditions
  - Drainage area should be  $\frac{1}{4}$  acre per 100 ft fence
- When not to use
  - Areas of concentrated flows
  - Within standing water
- Ends need to be wrapped and staked
- Ensure it is buried
- Remove sediment when it is  $\frac{1}{2}$  height of silt fence



# Best Management Practices





# Best Management Practices





## Best Management Practices





# Best Management Practices





## Best Management Practices





# Best Management Practices



<https://siltsaver.com/belted-silt-retention-fence-bsrf-priority-1/>



# Best Management Practices

## Staked Turbidity Barrier

- When to use
  - Areas of standing water that is 3 ft or less
- When not to use
  - Standing water that is greater than 3 ft
  - Across the flow of water
- Ends need to be wrapped and staked
- Ensure it is buried
- Remove sediment when it is  $\frac{1}{2}$  height of barrier





# Best Management Practices





# Best Management Practices





## Best Management Practices





## Best Management Practices



# Best Management Practices

## Floating Turbidity Barrier

- When to use
  - Areas of standing water that is 3 ft or more
- When not to use
  - Standing water that is less than 3 ft
  - Across the flow of water
- No gaps between curtains
- Anchored to shore
- Should encapsulate the whole work area





# Best Management Practices





# Best Management Practices





# Best Management Practices





## Best Management Practices





## Best Management Practices





# Best Management Practices

## Inlet Protection

- When to use
  - Curb inlets
  - Drop inlets
- Sediment should be removed as needed i.e. after a rain event



# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices



## Best Management Practices



<https://ertecsystems.com/products/top-guard-drain-inlet-protection/curb-inlet-guard>



<https://www.geosolutionsinc.com/geo-products/geocurve.php>





# Best Management Practices

## Synthetic Bales

- When to use
  - Areas of concentrated flow
  - Small sediment trap
  - Temporary check dam
- When not to use
  - Not to be used as a perimeter control
  - Not a filtration device
- Needs to be staked into place
- Sediment needs to be removed after runoff event



# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices

## Temporary soil and slope erosion control

- When to use
  - Temporarily prevent erosion from rain and reduce velocity of overland flow
  - Area has been shaped and graded prior to installation
  - Within 7 calendar days after construction activities have temporarily or permanently ceased for any portion of the site
- When not to use
  - Chemical mulch may not be effective on slopes without additional erosion control BMPs
- Installed from top of slope or channel to bottom
- Need to be anchored
- Inspect after rain events for rill erosion and contact with soil



# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices



# Best Management Practices

## Soil tracking prevention device

- When to use
  - Points of egress from project site where there is disturbed soils
  - Lay-down yards
- When not to use
  - Points of egress without disturbed soils
- Needs regular maintenance
- May still need to utilize street sweeping





# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices





# Best Management Practices

## Concrete Washout

- When to use
  - Anywhere concrete washout will take place
- When not to use
  - If there is no concrete on project
- Needs regular maintenance
- Signs throughout the construction site to identify the location
- Needs a containment structure



# Best Management Practices





# Best Management Practices



# Best Management Practices

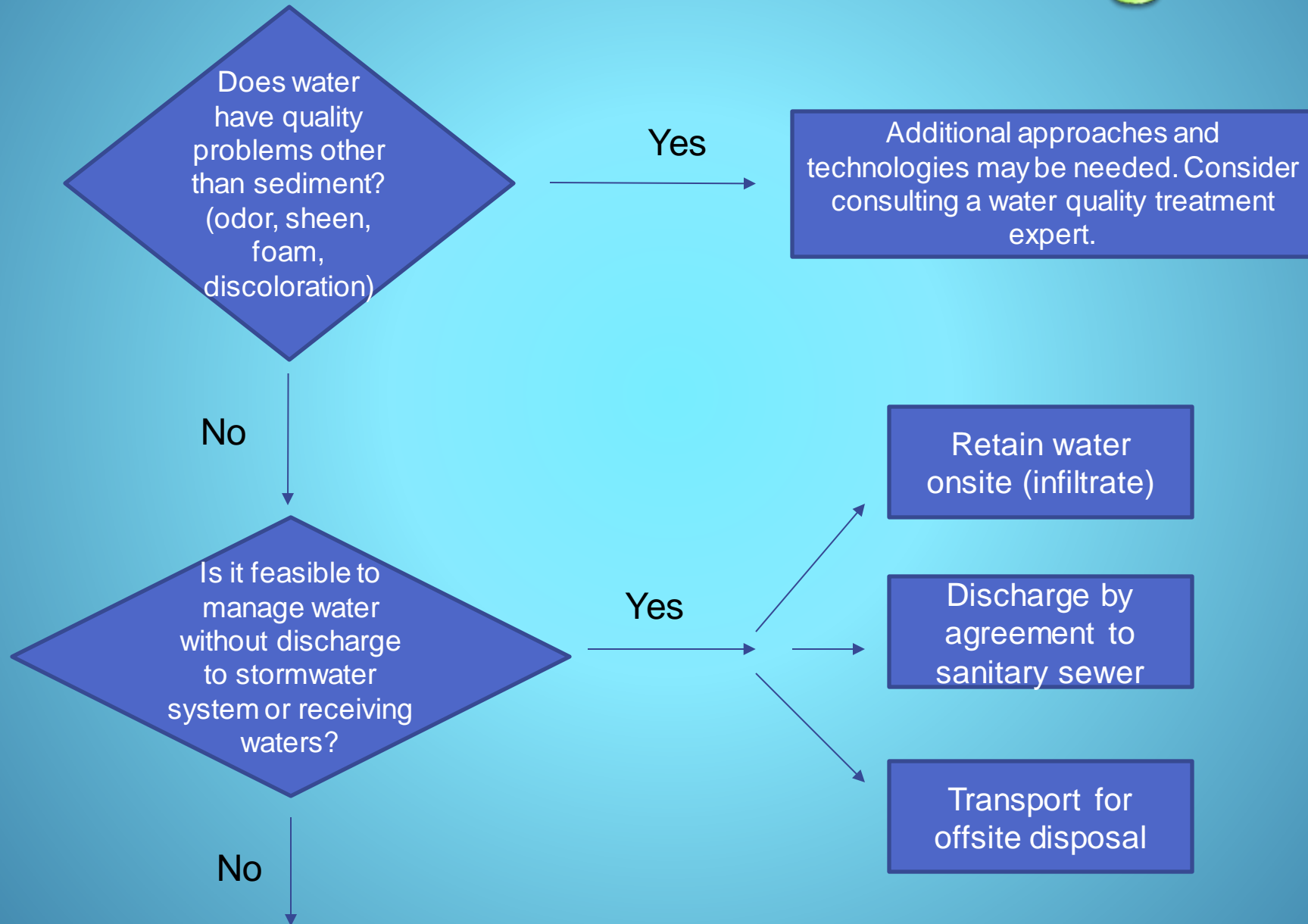
## Dewatering BMPs

- When to use
  - Sediment or turbidity in dewatering discharge
  - Dewatering discharge is greater than 29 Nephelometric Turbidity Units (NTUs) above background levels
  - In Outstanding Florida Waters (OFWs) cannot exceed 0 NTUs above background
  - Water cannot be managed without discharge to stormwater system or receiving waters
- When not to use
  - Water quality problems other than sediment (odor, sheen, foam, discoloration)
  - Water can be retained onsite, discharged to sanitary sewer (by agreement), or transported for offsite disposal
  - Contaminated site within 500 feet of dewatering operations
  - Will cause scouring/erosion at discharge point

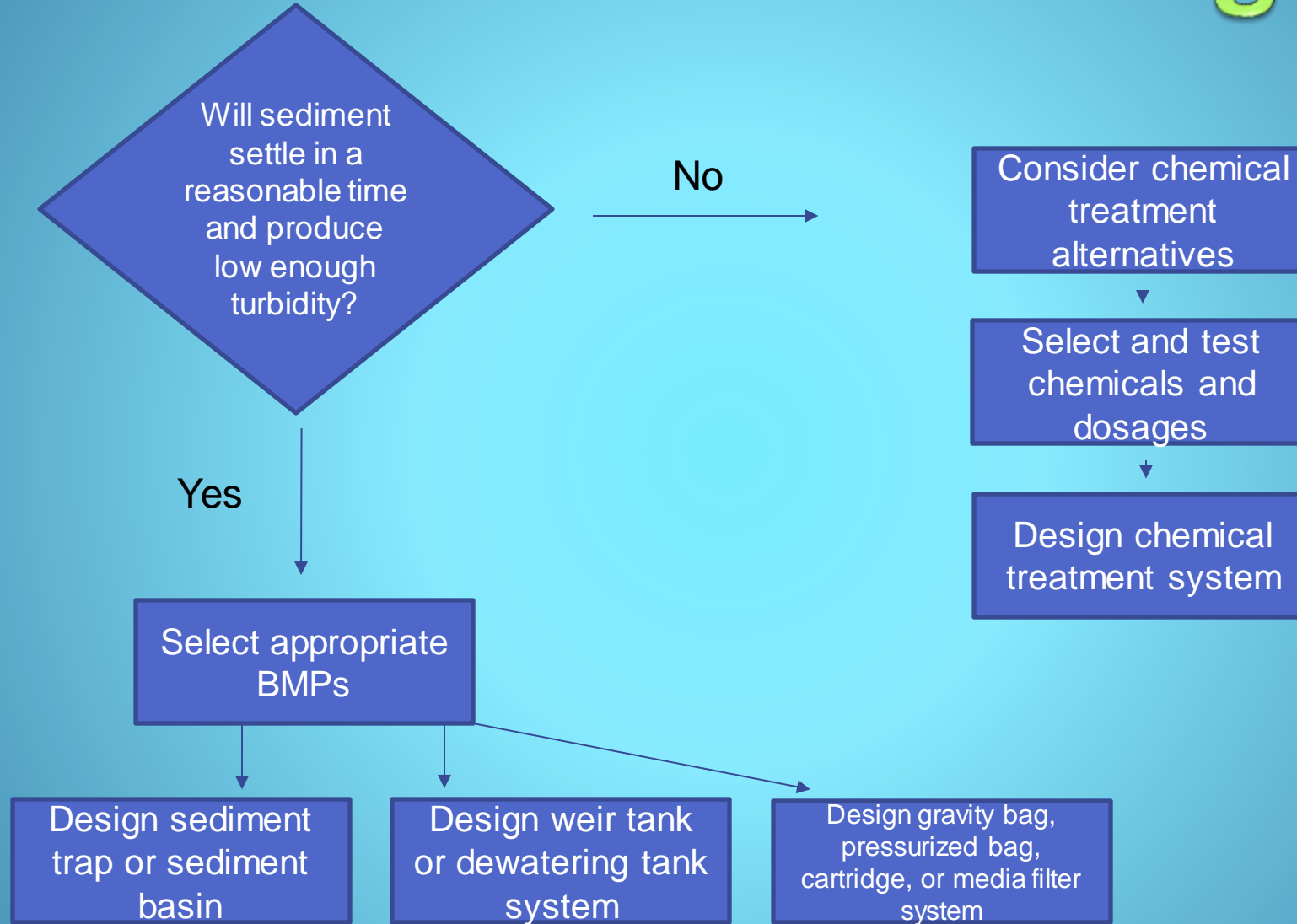
Turbidity needs to be frequently monitored



# Refresher Training



# Refresher Training





# Best Management Practices





# Best Management Practices





# Best Management Practices



# Best Management Practices

## Chemical Treatment (i.e., PAM, alum)

- When to use
  - When turbidity cannot be removed by standard practices
- When not to use
  - Standing water
- Needs to be tested for correct chemical and dosing
- Needs agitation to be effective
- Needs adequate time to settle out before discharge off-site
- Needs an organic material for the floc to settle on
- Typically used in conjunction with other BMPs
- Requires additional monitoring





# Best Management Practices





## Best Management Practices





## Best Management Practices



## Best Management Practices





# Sedimentation Basins

## Sedimentation Basin Containment

### Per the CGP

- For drainage basins with 10 or more disturbed acres at one time, a temporary (or permanent) sediment or wet detention basin providing 3,600 cubic feet of storage per acre drained must be provided until final stabilization of the site.
- Does not apply to off-site flows.
- Rough-grade ponds per ERP.



# Sedimentation Basins





# Sedimentation Basins



# Secondary Containment Systems

## Secondary Containment

- When to use
  - Around dewatering pumps
  - Around fuel tanks
  - Around any chemical storage

**Double-walled tanks DO NOT count as spill prevention**





## Secondary Containment Systems





## Secondary Containment Systems





## Secondary Containment Systems





## Secondary Containment Systems





## Potential Contamination Occurrences

### EPA 40 CFR 112 Oil Pollution Prevention

- Section 8.2.8 of the CPAM
- Total of 1,320 gallons of oil stored on-site
- Oil containers with capacity of 55 gallons or more shall be accounted
- A Spill Prevention, Control, and Countermeasures (SPCC) Plan will need to be developed by the contractor

### Reportable Incidents

- Petroleum-based spills greater than 25 gallons
- Chemical or sanitary spills into or involving state waterways (any amount)
- Spills requiring any state/federal notifications or assistance

### Public Notice of Pollution – Reporting

- <http://prodenv.dep.state.fl.us/DepPNP/user/pnpRequest>



# Potential Contamination Occurrences





# Potential Contamination Occurrences



# Lessons Learned and Recommendations

## Source Controls

- Rough excavation of ponds
- Minimize clearing and grubbing to active work areas (phasing)
- Chemical treatment can be very effective when used correctly
- Temporarily stabilize inactive work areas
- Slow velocity of water

## Perimeter Controls

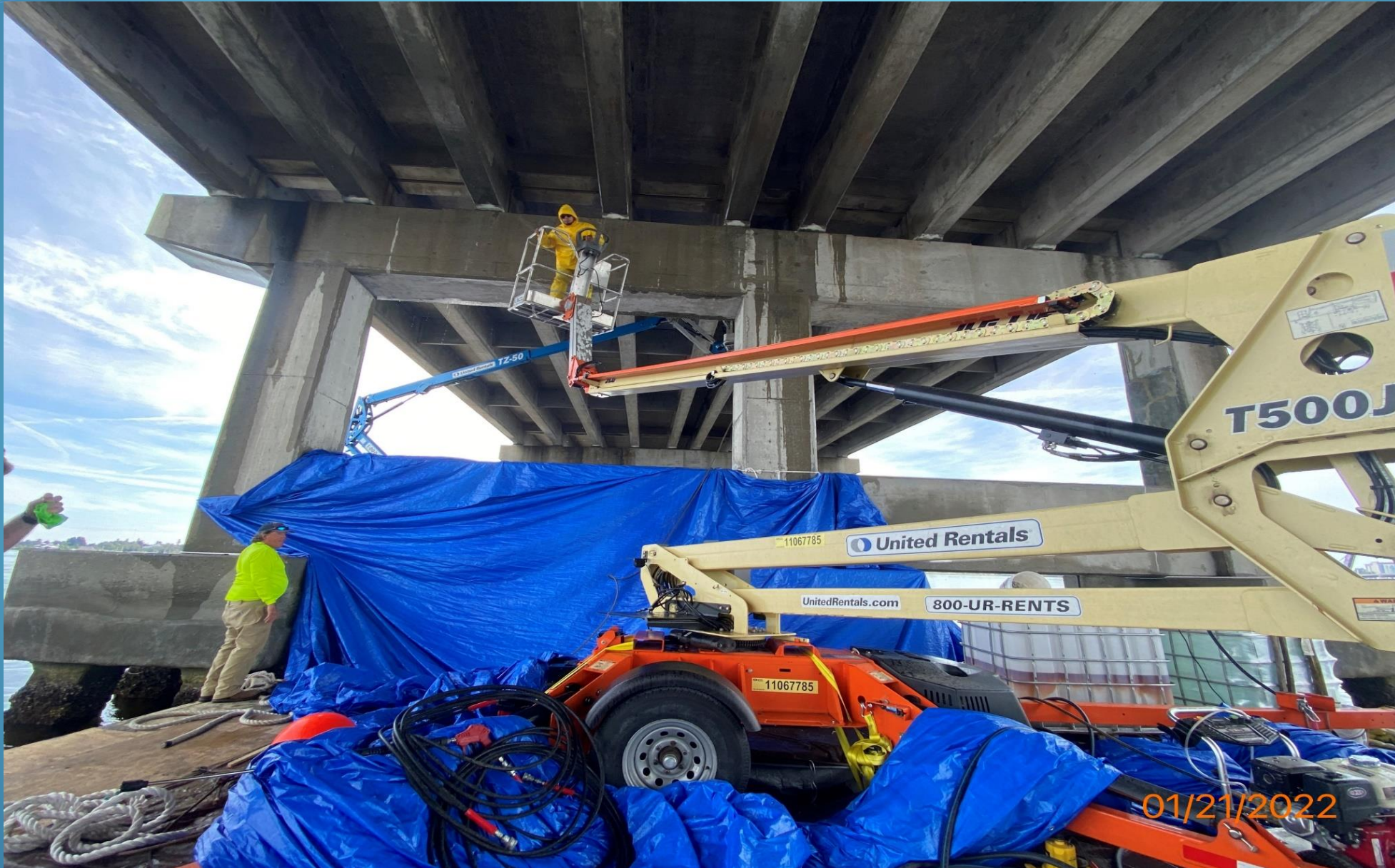
- Maintenance of BMPs
  - Remove sediment once it has reached ½ height
  - Replacing damaged BMPs
  - Upgrading BMPs that are consistently failing
- Perimeter controls are your last line of defense

**All BMPs must be maintained until final stabilization**





What's wrong with this picture??





# Contamination – A Spill Can Happen Any Time!





# 90% Walk Through and Final Acceptance

- **Please INVITE** Environmental Liaison & [Steven.kelley@dot.state.fl.us](mailto:Steven.kelley@dot.state.fl.us) to the 90% and 100%
- Triggers Closing Out of Permits and Final Agency Reports Due
- Inspect condition of Job,
  - pond, slopes adjacent waterways
  - erosion, sod, Invasive Vegetation
- **After Final Acceptance you have-**
  - 60 Days for any As-Builts for the 404 Assumption FDEP Permits (Replaces ACOE)
  - 30 Days for any As-Built for the WMD
  - **PLEASE ASK FOR THE AS-BUILTS TO BE REDUCED IN FILE SIZE 25 MB's or LESS**
  - 14 Days to Terminate the NPDES Permit
  - All of these are submitted digitally now these agencies do not want them to come in US Post





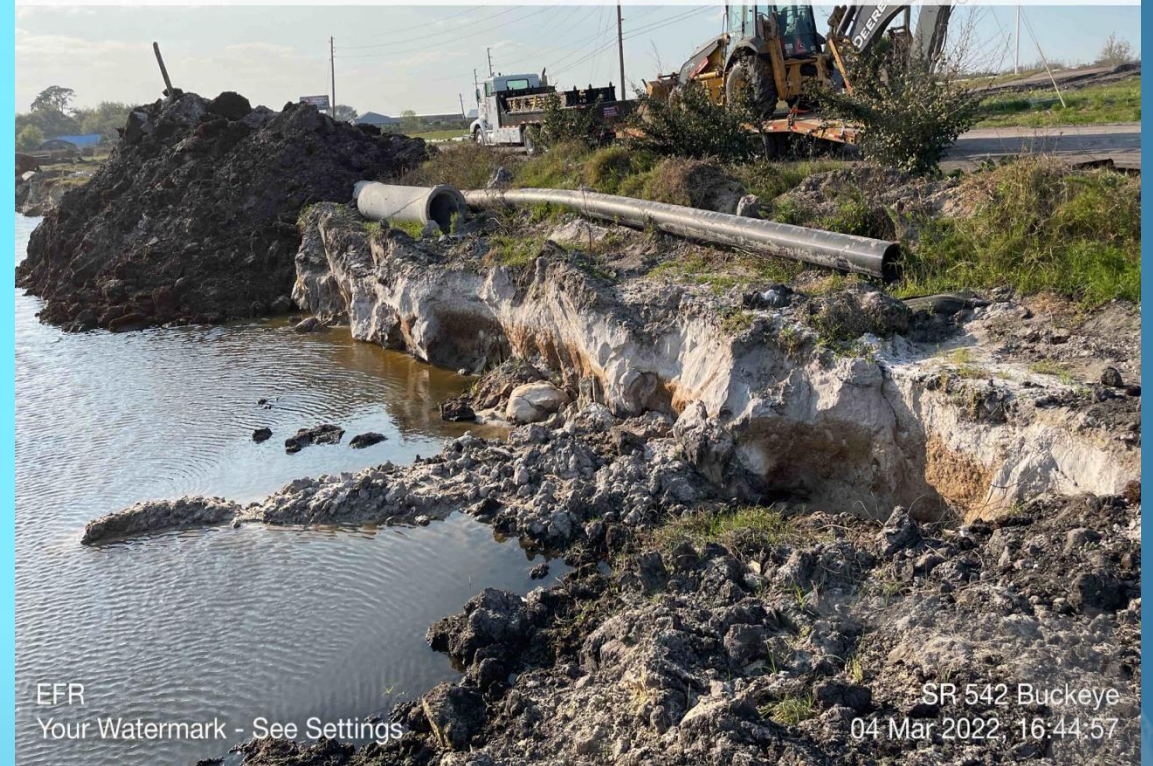
SE S SW W NW  
150 180 210 240 270 300

☉ 228°SW (T) ☉ 28°1'6"N, 81°39'11"W ±16ft ▲ 125ft



## 1099 Clubhouse Rd Winter Haven FL

☉ 302°NW (T) ☉ 28°1'6"N, 81°39'13"W ±16ft ▲ 111ft





SOD!!





# Approved Year Round FDOT Sod

- Bahia
- Bermuda
- Zoysia

Seeds Don't Germinate easily in South Florida – You won't be able to apply for NOT until you have 80% full grass coverage!

Job stays open, Contractor will have to maintain the job site (moving and litter removal) till final acceptance.





# SOD and SEED Varieties of Florida



Zoysia

Bahia

*There's pineapple shrimp and lemon shrimp, coconut shrimp, pepper shrimp,*



# Temporary/Seasonal Approved FDOT Seeds (Dies in Summer)



Florida Winter Rye



Florida Brown Millet



# SOD Full of Weed – Bidens Alba



2013/10/29



# Weed and Exotics Alert



Invasive plants degrade and diminish Florida's conservation lands and waterways.

- **Australian Pine Tree**
- **Melaleuca Tree**
- **Brazilian Pepper Tree**
- **Tropical Soda Apple**
- **Cogon Grass**
- **Lygodium Climbing Fern**
  
- **Hydrilla**
- **Water-hyacinth**
- **Water-lettuce**
- **Wild taro**





# Weed Alerts – Tropical Soda Apple, *Solanum viarum*

Its fruit is poisonous to humans – Do Not Eat.





# Exotic Plants- Brazilian Pepper, *Schinus terebinthifolia*





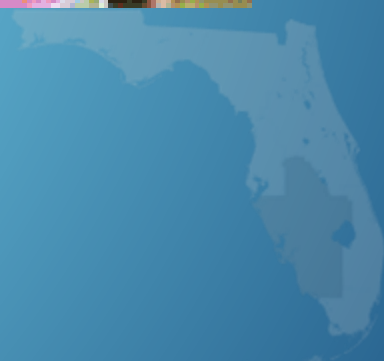
# Final Acceptance

- Once project has final dressing and the contractor has moved equipment offsite and the punch list is complete...



# Closing Out Permits

**Thought you were  
done with permits?**





# Construction Environmental Compliance For Closing Permits

- Achieve final stabilization i.e., sod cover with a density of at least 80%
- Submit **NPDES NOT** within 14 calendar days
- Restore temporary wetland impacts to existing conditions (elevation) and revegetate
- As-builts need to be signed and sealed by the Construction Engineer and sent to **WMD AND STEVEN KELLY** within 30 days.
  - **Reduce file size if possible, files need to be <25MB**
- Submit a monitoring report for any endangered species required by permit (eastern indigo snake, crested caracara, etc. ) to FWC.



# Florida Stormwater, Erosion, and Sedimentation Control Inspector Training & Certification Program

<https://www.fsesci.com/schedule/>

June	Online	Ryan Murray
June	Online	Fred Heitman
June	Online	Laurie Murphy
June	In-Person (Tampa) or Online	Cheryl Moore
June	Online	Don Green
June	Online	Halton Lunsford
June	Online	Ryan Murray
June	Online	Jared Taylor
June	Online	Fred Heitman
June	Online	Halton Lunsford
June	Online	Laurie Murphy
June	Online	Don Green
July	Online	Fred Heitman





**ITS OVER...**

**ITS FINALLY OVER...**

*Thank you*

