leon county
DEPARTMENT OF DEVELOPMENT SUPPORT AND ENVIRONMENTAL MANAGEMENT
PERMIT EXPIRES THIRTY-SIX (36) MONTHS FROM ISSUANCE PER ARTICLE 5, SECTION 7-41(4)(A)(1), ENVIRONMENTAL MANAGEMENT ACT


BOARD OF COUNTY COMMISSIONERS LEON COUNTY<br>DEPARTMENT OF DEVELOPMENT SUPPORT AND ENVIRONMENTAL MANAGEMENT

# CENTERVILLE TRACE OUTFALL STRUCTURE REPLACEMENT 

## ENVIRONMENTAL MANAGEMENT PERMIT LEM18-00044

## A Pre-Construction Conference with the County Environmental Inspector is required. (Contact Ms. Brittany Varn at 850-606-1358 or 850-544-0828 to schedule.)

This environmental management permit authorizes construction (i.e. grading, stormwater conveyance, berm stabilization, etc.) associated with the proposed outfall structure replacement of parcel ID. No.: 11-10-04- -000 1, 11-10-04- -000 2, 11-10-04- C-001 0, 11-10-04- C-002 0, \& 11-10-04- C-024 0 in Leon County, consistent with the attachments and exhibits identified below.

Attachment A: Permit Conditions
Exhibit A: Approved Plans (Permit Plan Set)
The permittee should be familiar with the permit conditions and all other attachments and exhibits included in this permit prior to the commencement of development activity. Failure to conform to this permit may cause appropriate enforcement action to be taken that could include a "Stop Work Order" or a "Notice of Violation".

Approved By:

## ATTACHMENT "A" PERMIT CONDITIONS: CENTERVILLE TRACE OUTFALL STRUCTURE REPLACEMENT

## GENERAL CONDITIONS:

1. The permittee shall conduct all development activity consistent with the "Environmental Management Act," Article VII, Chapter 10 of the Leon County Land Development Code. Reference Section 104.105.
2. Posting of placards. A placard indicating issuance of a valid permit shall be posted in a conspicuous place on site at all times during the development activity. Reference Section 10-4.203(c)(1).
3. Permit and plans on-site. A copy of the approved permit and plans (Exhibit "A" and subsequent approved contractor "Shop Drawings") shall be available on site at all times when any development activity is occurring on the site. Reference Section 10-4.203(c)(2).
4. Notice of intent to proceed and Pre-Construction Conference. A notice of intent to proceed shall be filed with the Director at least three (3) working days prior to initiation of any physical development activity on the site. The notice shall specify the site location and the permit number(s) applicable to the activity and shall specify the date and approximate time at which such physical development activity is to commence. A pre-construction conference will be scheduled and required prior to the commencement of any development activity. Reference Section 10-4.203(c)(3).
5. Environmental Management Officer. This individual shall be in responsible charge of all on-going work on the site and ensure that all work is proceeding according to the approved plans and permit. The designated environmental management officer must ensure that during such time as the officer is not personally present on the site a designated alternate remains in responsible charge of the project. For this project, the Environmental Management Officer shall be determined at the pre-construction conference. Reference Section 10-4.203(c)(6).
6. Permit Expiration. This Environmental Management Permit expires 36 months after issuance. Reference Section 10-4.214(1)(a).
7. Extensions. Permits may be extended, by request of the applicant and approval of the Director, for successive periods of time not to exceed 36 months each, provided the request for extension is made prior to the expiration of the prior approval and provided continuous good faith efforts have been made to complete the development. Reference Section 10-4.214(1)(b).
8. Early expiration for cause. If no substantial and readily observable site development activity has taken place within 18 months of the issuance of the permit or, once development is started, if no such development activity occurs for any 12 consecutive months, the Director may, after notifying the permittee and providing an opportunity for hearing, determine the permit to be expired and shall so notify the permittee. Such a permit may not thereafter be extended. Reference Section 104.214)1)(c).
9. Effect of permit expiration. Once a permit has expired, no further development activity may proceed on the permitted development site unless and until a new permit is received for the development site and activity. Reference Section 10-4.214(3).
10. Continued responsibility under expired permit. An expired permit shall not relieve the permittee from the responsibility of continued compliance with this permit and the Code. Where development has commenced and no final inspection completed before expiration of a permit, the permittee may be required to submit, and obtain the Director's approval of a new environmental management permit application or an application for amendment of the expired permit. As an option, the permittee may be required to complete and maintain the landscaping, trees, or stormwater management systems and facilities which were required by the expired permits, as necessary to prevent significant adverse environmental impacts as a result of development activity which has occurred on the site. Reference Section 10-4.214(3).
11. Notice of transfer of permit. No later than ten (10) days after the sale or legal transfer of property upon which a stormwater management facility has been, or is approved to be, constructed pursuant to a permit issued by the County, a notice of transfer of permit shall be submitted to the Director. The notice shall be made using a form provided by the Director. Reference Section 10-4.214(5)(a).
12. Transfer liability. Until a proper notice of permit transfer is provided to the Director, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions required as a result of any violations occurring prior to transfer. For facilities that have received final inspection approval prior to the time of legal transfer, the original permittee shall remain liable for performance of warranty obligations as set forth in Section 4.208(d), absent an express assumption of liability as to such warranty obligations by the subsequent holder of the property. Reference Section 10-4.214(5)(b).
13. Amendments. Any minor change or deviation from the approved plans shall require an amendment to this permit. Substantial changes, including significant increases in impervious area, changes in intended land use, modification of stormwater management system, new phases of development, or other additions, shall not be treated as amendments, but shall require a new permit application. Reference Section 10-4.215.
14. During development. All environmental management controls and facilities shall be maintained in a manner which will ensure proper functioning and protection from unnecessary environmental degradation, throughout the development process. Reference Section 10-4.210(a).
15. Post-development. Upon completion of development activities and construction, the permittee shall ensure that each site is properly stabilized, and that swales and other stormwater management features shown in the permit are in place in a manner consistent with the permit, approved plans and specifications. Reference Section 10-4.210(b).
16. Post-construction inspection. Prior to requesting a final inspection by the Director, the permittee shall have a qualified professional to personally inspect the site and facilities and certify as provided for in Section 10-4.208(b).

## SPECIFIC CONDITIONS:

1. Permit Scope. As shown in Exhibit "A" (the permit plan set), this permit authorizes the construction of infrastructure (i.e. grading, stormwater conveyance, berm stabilization, etc.) associated with the proposed outfall structure replacement of parcel ID. No.: 11-10-04- -000 1, 11-10-04- -000 2, 11-10-04- C-001 0, 11-10-04- C-002 0, \& 11-10-04- C-024 0 in Leon County consistent with the attachments and exhibits accompanying this permit.
2. Licensed contractors. All excavation, grading work, and other site work shall be performed under the supervision of a certified or registered general contractor, building contractor, residential contractor, commercial or residential pool/spa contractor, or underground utility contractor, or by an excavation, grading and site contractor duly licensed by the County Contractors Licensing Board. Reference Section 10-4.203(c)(5).
3. Notification of Easements. A copy of any required easements, with proof of recording, shall be provided to the county administrator or designee prior to final inspection. Where transfer of title for any affected parcel is proposed, the owner shall provide clear information to each prospective buyer prior to execution of any contracts, about the existence, impacts, and responsibilities associated with any easements on the property. A copy of the applicable easements shall be provided by the owner to each prospective purchaser prior to closing, and the copy shall be initialed by the parties and attached to such closing documents upon execution. Reference Section 10-4.203(c)(8).
4. Stormwater management facility operating permit. No stormwater management facility shall be utilized until a stormwater management operating permit is obtained. An operating permit is not required for facilities which have as their primary function the conveyance of stormwater, facilities under construction as part of an approved development plan, and temporary facilities which are part of an erosion and sediment control plan. Reference Section 10-4.209(a).
5. Required disclaimers. Any contract for the conveyance of title to land for which stormwater management is provided by a system or facility not maintained by the County or the City of Tallahassee shall contain the following statement: "Neither Leon County nor the City of Tallahassee is responsible for the maintenance, upkeep or improvement of any stormwater management facility utilized by the land described herein. Title to this property carries with it the requirement that the current and all subsequent owners or their authorized agent obtain a stormwater management facility operating permit from the County. The owner of this property shall be legally responsible, jointly with other owners using the facility and based on pro rata share, for compliance with all stormwater management facility operating permit maintenance and operation requirements, as well as all other permit conditions, unless such maintenance and operation obligations have been specifically assumed by some other entity pursuant to Director approval and appropriate documentation recorded in the public records of Leon County." Reference Section 10-4.210(d).
6. Landscape and tree maintenance, if applicable. All landscaping, landscaped areas, landscape development, buffer areas, and trees required as part of this permit shall be maintained and used pursuant to Sections 10-4.348(b), 10-4.355, 10-4.209(f)(1)(h), 10-4.209(g)(7) and 10-4.211 of the Land Development Code and shall be checked for compliance during the operating permit renewal process.
7. Intergovernmental Transfer. If at any time, the City of Tallahassee (the "City") annexes the permitted development into its corporate boundary, then this permit shall be transferred to the City with all
provisions fully enforceable by the City. The City shall assume the role of the County in each provision of this permit.
8. System Evaluation \& Redesign. At any time, should the County determine that the stormwater management system, stormwater pollution prevention plan, landscape plan, or any maintenance program is not functioning as designed, the County may request a system evaluation to determine compliance. The Permittee shall have thirty (30) days to evaluate the discrepancy and respond. Should the Permittee verify that a discrepancy exists, then the Permittee shall have sixty (60) days to redesign and implement the appropriate redesign necessary to correct the discrepancy. This process does not apply to any event of noncompliance with the permit and approved plans, in which case the enforcement provisions of the Environmental Management Act shall apply.
9. Termination of Permit. The requirements, responsibilities and obligations of the Permittee in the General Conditions, Specific Conditions, and Special Conditions shall never expire with this permit. The Permittee may terminate such requirements, responsibilities and obligations either by an appropriate transfer as prescribed in Paragraph 12 of the General Conditions or by closing the development in a manner guaranteeing the preservation of natural areas, conservation easement areas, and/or other protected areas. Such closure shall require the submittal and approval of a short form environmental management permit which states appropriate plans to close the project in a manner that will ensure compliance with the Environmental Management Act upon and after termination of responsibility. Reference Section 10-4.214(1)(c).
10. Other Permits. This permit is issued with the condition that the applicant procure and comply with all other necessary federal, state, and local agency permits, including but not limited to the Florida Department of Environmental Protection (FDEP) permit, Florida Department of Transportation (FDOT) drainage and/or access connection permits, NPDES permit and Leon County driveway connection permit. These permits must be provided to the environmental inspector prior to the start of construction. Reference Section 10-4.201(f).
11. Construction or repair of buildings, excavation of streets and highways: The construction, demolition, alteration or repair of any building or the excavation of streets and highways other than between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays and between 9:00 a.m. and 5:00 p.m. on Sundays. This prohibition does not apply to the delivery and installation of concrete and other materials associated with residential slab installation. In cases of emergency, construction or repair noises are exempt from this provision. Reference Section 12-56(10).

## SPECIAL CONDITIONS:

As shown in Exhibit "A" (the permit plan set), this permit authorizes the construction of infrastructure (i.e. grading, stormwater conveyance, berm stabilization, etc.) associated with the proposed outfall structure replacement of parcel ID. No.: 11-10-04--000 1, 11-10-04- -000 2, 11-10-04- C-001 0, 11-10-04- C-002 0 , \& 11-10-04- C-024 0 in Leon County consistent with the attachments and exhibits accompanying this document.

1. As used herein, the term "permittee" shall refer to Leon County. This permit may be transferred to another party in accordance with the General Conditions. Upon the Director's approval of a Notice of Transfer of Permit, the term "permittee" shall refer to the new property owner(s) identified in this approved notice. The permittee shall ensure that all contractors and other agents authorized by the permittee to conduct the permitted development activities abide by the terms and conditions of this permit
2. The permittee or permittee's authorized agent shall contact the County Environmental Inspector (hereinafter "inspector") to arrange a pre-construction conference prior to the commencement of any construction/development activities. The inspector for this project is Ms. Brittany Varn who may be contacted at 850-606-1358 or 850-544-0828.
3. Development activities involving any retaining wall greater than two feet in height shall not commence until a building permit has been secured for such wall. All retaining walls higher than two feet shall require design and certification by a registered professional engineer retained by the applicant.
4. Additional silt fences or other sediment/erosion control devices and measures may be required, as specified by the inspector. Proposed staging areas shall be discussed with the inspector and explicitly demarcated within the site.
5. All soil excavated as part of this project shall be used on-site or properly disposed of at an approved location.
6. Prior to project completion and request for final inspection, the reforestation requirements shall be met by replanting the project area with the required 35 tree credits. All trees planted in the project area shall be rated as Florida No. 1 or better and suitable for the individual site characteristics of soil, slope, aspect, wetness, and microclimate.
7. Notwithstanding the general and specific conditions contained in this permit, this project will require submittal of the following items to the Director at least 20 days prior to the permittee/applicant's request for final inspection and ensuing request for final certificate of occupation:
a. As-built plans (record drawings) with specific topographic information and a reference to the Official Record book and page of the conservation area, signed/sealed by a Florida licensed land surveyor.
b. Compliance Certification signed/sealed by a Florida licensed Professional Engineer.
i. The compliance certification shall include post-construction certification for any retaining walls greater than $2^{\prime}$ and specifically address whether such structure was built consistently with the approved plans and that required slope compaction and elevation have been achieved.

In the event that any condition of this permit is subject to multiple interpretations and becomes the source of conflict that cannot be resolved onsite by the contractor and the environmental inspector, the matter shall be forwarded to the Environmental Services Director for clarification/interpretation.

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GOVERNING STANDARDS AND SPECIFICATIONS:
Florida Department of Transportation, FY 2018-19 Standards Plans and
revised Index Drawings as appended herein, and July 2018 Standard revised Index Drawings as appended herein, and July 2018 Standard
Specifications for Road and Bridge Construction, as amended by Specifications for Road and Bridge Construction, as amended by
Contract Documents. Contract Documents.
For Design Standards
For Design Standards click on the "Design Standards" link at the following web site:
http://www.dot.state.fl.us/rddesign/
For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site: http://www.dot.state.fl.us/programmanagement/

## LEON COUNTY <br> DEPARTTMENT OF PUBLIC WORKS

CONS TTRUCTTION PLANS

LOCATION OF PROJECT
PROJECT LAYOUT
GENERAL NOTES
typical section details
TREE REMOVAL
M EROSION CONTROL
PLAN GRADING PLAN

CROSS SECTIONS
ACCESS ROAD CROSS SECTIONS VETLAND IMPACTS
TRAFFIC CONTROL GENERAL NOTES
MISCELLANEOUS DRAINAGE DETAILS Rainage structure detalls
CONSTRUCTION DETAILS
STEEL SHEET PILE NOTES
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SKIMMER DETAILS (2 OF
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REINFORCING BAR LIST
FOUNDATION LAYOUT
boardwalk structural notes BOARDWALK DETAILS (1 OF 4) BOARDWALK DETALLS (2 OF 4) BOARDWALK DETAILS (3 OF 4)
BOARDWALK DETALLS (4 OF 4)

STORMWATER MANAGEMENT CONTROL OFFICER:
FELTON ARD, P.E. (850) 606-1500
CENTERVILLE TRACE POND
OUTFALL STRUCTURE REPLACEMENTT



## $\frac{T-2-N}{T-1-N}$

## EXHIBI'T A

> PLANS PREPARED BY:

REGISTE, SLIGER ENGINEERING, INC.
IVIL AND STRUCTURAL ENGINEERING CONSULTANT
CERT. OF AUTHONIZATION I 3370 CAPITAL CIRCLE NE, SUITE J


NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.
engineer of record: john f. sliger, il
APPROVED
P.E. NO.: 55550

| FISCAL <br> YEAR | SHEET <br> NO. |
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    -
    THIS DOCUMENT HAS BEEN DIGITALLY
SIGNED AND SEALED BY
John F Sliger II
2019．01．04 15：35：53－05＇00＇
on the date adjacent to the seal
PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED SIGNED AND SEALED AND NOT CONSIDERED SIGNED AND SEALED A
THE SIGNATURE MUST BE VERIFIED THE SIGNATURE MUST BE VERII
ON ANY ELECTRONIC COPIES．
REGISTE，SLIGER ENGINEERING，INC
3370 CAPITAL CIRCNE NE SUTE 3370 CAPITAL CIRCLE NE，
TALAHSSEE，FL 32308 TALLAHASSEE，FL 32308
CERTIFIAE OF AUTHORIZATION： 9292
JOHN F．SLIGER IL，P．E．NO． 55550

THE AboVE NAMED PROFESSIONAL ENGINEER SHALL BE RESponsible FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE $61615-23.004$ ，F．A．C．

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    WEIR DETAILS (1 OF
    WEIR DETAILS (2 OF 4)
    WEIR DETAILS (4 OF 4)
    SKIMMER DETAILS (1 OF 2)
    SEINFORCING BAR LIST
    FOUNDATION LAYOUT
    BOARDWALK STRUCTURAL NOTES
    BOARDWALK PLAN AND ELEVATION
    BOARDWALK DETAILS (1 OF 4)
    BOARDWALK DETAILS (2 OF 4)
    BOARDWALK DETAILS (3 OF 4)
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sheet no. sheet description






















SHEET No. SHEET DESCRIPTION
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LEON COUNTY DEPARTMENT OF PUBLIC WORKS
 CENTREVULLE TRACE POND
STRUCTURE REPLACR MENT



## GENERAL NOTES:

1. horizontal coordinates are based on a survey completed by nobles consultiv 5/2/2017. ELEVATIONS ARE BASED ON NOATH ANERICAN VERTICAL DATUM (NAVD88).
2. THE LOCATIONS OF THE UTILITIIES SHOWN IN THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND ARE

信
3. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS THROUGH SUNSHINE STATE ONE CALL OF FLORIDA (1-800-432-4770) TWO WATERS days in advance of beginning construction on the job site (or 10 days advance notice if digging under
4. ANY PUBLIC LAND CORNER OR BENCHMARK WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NO BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIF THE COUNT
SURVEYOR, WITHOUT DELAY, BY TELEPHONE. ANY MONUMENT OTHERWISE DESTROYED, DURING CONSTRUCTION WILL BE RESET BY SURVEYOR, WITHOUT DELAY, BY TELEPHONE. ANY MONUMENT OTHERWISE
A FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH COUNTY ENGINEER. THE CONTRACTOR SHALL PROVIDE THE COUNTY ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. BECAUSE STATE LAW DOES NOT TREAT PETROLEUM PRODUCTS THAT ARE PROPERLY CONTAINERIZED AND INTENDED FOR EQUIPMENT USE AS A HAZARDOUS MATERIAL, SUCH
PRODUCTS DO NOT NEED A MSDS SUBMITTAL.
6. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY CONTAMINATION FROM FURTHER ACCESS. THE COUNTY WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF the hazardous material. the contractor shall not return to the area of contamination until approval is
provided by the countr.
7. ALL SOD MATERIALS SHALL BE SUBJECT TO INSPECTION BY THE COUNTY PRIOR TO PLACEMENT. ANY SOD WITH NOXIOUS WEEDS AND GRASSES SHALL BE REJECTED FOR USE ON THE PROJECT. THE CONTRACTOR SHALL FURNISH THE COUNTYY, PRIOR TO
INCORPORATION INTO THE PROJECT, A CERTIFICATION FROM THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES DIVISION OF PLANT INDUSTRY, STATING THAT THE SOD, HAY, STRAW AND MULCH MATERIALS ARE FREE OF NOXIOUS
VEEDS, INCLUDING TROPICAL SODA APPLE. ALL SOD SHALL BE OVER SEEDED AT THE DIRECTION OF THE COUNTY. THE COST OF OVER SEEDING SHALL BE INCLUDED IN THE COST OF THE SOD.
8. THE CONTRACTOR WILL RESTRICT PERSONNEL, THE USE OF EQUIPMENT, AND THE STORAGE OF MATERIALS TO AREAS WITHIN THE LIMITS OF CONSTRUCTION AS NOTED ON THE PLAN SHEETS. ALL STAGING AREAS NOT SHOWN IN THE PLANS SHALL REQUIRE
APPROVAL BY LEON COUNTY PUBLIC WORK PRIOR TO CONSTRUCTION STAGING AND STOCKPIING AREAS OUTSIDE THOSE SHOWN ON THE PLAN ALSO REOUIRE APPROVAL BY LEON COUNTY DEVELOPMENT SUPPORT \& ENVIRONMENTAL MANAGEMENT (DSEM) AND ON THE PLAN ALSO REQUTRE APPROVAL BY LEON COUNTY DEVELOPMENT SUPPP
MAY REQURE A SEPARATE ENVIRONMENTAL MANGGEMENT PERMIT FROM DSEM.
9. contractor shall be responsible for maintaining all work under improvement, at his cost, until such time as the COUNTY ISSUES A CERTIFICATE OF COMPLETION.
10. No deviations or revisions from these plans by the contractor shall be allowed without written prior approval
11. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, 3 SETS OF PLANS, CALCULATIONS, AND SPECIFICATIONS SIGNED AND SEALED BY licensed professional engineer in the state of florida, for any proposed changes to the contract documents,
12. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY
REPRODUCTION THIS MUST BE TAKEN INTO CONSIDERATION WHEN OBTAINING SCALED DATA
13. IF ARCHAEOLOGICAL FEATURES OR ARTIFACTS ARE ENCOUNTERED DURING PROJECT ACTIVITIES, IMMEDIATELY CONTACT THE
DEPARTMENT OF STATE, DIVISION OF HISTORIC RESOURCES. RA. GRAY BUILDING 500 SOUTH BRONOUGH STREET TALLAHASSEE, FL 32399-0250 (850) 245-6333
14. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ADDITIONAL PERMITS NOT PREVIOUSLY ACQUIRED DURING DESIGN THAT ARE
NECESSARY TO COMPLETE THE PROJECT ALL COSTS FOR ALL ADDITIONAL PERMITS ARE THE RESPONSIBIITY OF THE contractor. contracto
15. DURING ALL NON-WORK HOURS, NO EQuIpment, VEHICLES OR MATERIALS SHALL be STORED within the roadway. all storage
ANDIOR STAGING AREAS USED SHAlL BE APPROVED BY LEON COUNTY.
16. ALL EXISTING FENCING THAT WILL BE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REMOVED AND REPLACED in KIND AT CONTRACTOR'S EXPENSE
17. IF A STRUCTURAL FAILURE IS OBSERVED DURING CONSTRUCTION THAT HAS THE POTENTIAL TO CAUSE THE DIRECT DISCHARGE
 PREPARED BY A REGISTERED PROFESSIONAL TO THE COUNTY FOR REVIEW AND APRROVAL THAT PRTV
ASSURANCE THAT THE BREACH WILL BE PERMANENLY CORRECTED AT NO EXPENS TO THE COUNTY.
18. THE CONTRACTOR SHALL COMPLY WITH THE STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE PROVIDED B the us fish and wildlife service. additional information regarding required preiduring/post construction ACTIVITIES CAN BE FOUND AT THE FOLLOWING WEBSITE:
sures.htm

## SEQUENCE OF CONSTRUCTION.

all work shall be performed in accordance with the following construction sequence unless a separate sequence is submitted in writing by the contractor and approved by leon county development support and environmental MANAGEMENT (DSEM).

1. pre-construction conference with the county environmental inspector.
2. SUBMIT A DEWATERING AND TURBIDITY CONTROL PLAN TO LEON COUNTY PUBLIC WORKS FOR APPROVAL. PLANS SHALL INCLUDE PLAN SHALL BE SIGNED AND SEALED BY A FLORIDA RECISTERED PROFESSIONAL ENGINEER AND INCLUDE TURBIDITY TESTING PLAN SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFE
REQUIREMENTS TO MEET LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. install tree protection barricades. contractor shall use extreme care to not damage the root system of nearby trees. no equipment, supplies, or vehicles shall be stored or parked within the drip line of trees to remain.
4. install erosion control devices (Silt fence, turbidity barriers, etc.) in accordance with the project plans,
5. establish limits of clearing and grubbing.
6. CONSTRUCT HARPER'S FERRY DRIVE MAINTENANCE ACCESS ROAD
dewater per the leon county public works approved contractor dewatering plan.
7. REMOVE all demolition items, including existing control structure, discharge pipe, and sand filter. dispose of all demolition items off site in a legal manner.
8. construct rock filter at toe of berm.
9. INSTALL STEEL SHEET PILES IN ACCORDANCE WITH THE WALL CONTROL DRAWING AND THE STEEL SHEET PILE NOTES AND
DETAILS. ALL PILE DRIVING ACTIVITIES SHALL OCCUR DURING NORMAL BUSINESS HOURS OF BAM-5PM. MONDAY THRU FRIDAY.
10. install weir support helical piles and construct the concrete weir.
11. Re-grade the existing berm as shown on the grading plan and cross sections. install proposed side bank sand FILTER AND CONCRETE LINED EMERGENCY SPILLWAY.
12. construct timber boardwalk
13. finish grade and sod as shown in the plans.
14. Remove all erosion control devices at the end of construction and after site is stabilized, with approval from THE COUNTY ENVIRONMENTAL INSPECTOR.
15. SITE SHALL BE CLEANED, DEBRIS REMOVED, AND CORRECTIONS MADE TO ENSURE A PRISTINE AND NEW CONDITION FOR THE
PROJECT PER THE CONSTRUCTION PLANS AND SPECIFICATIONS. SPECIFICALLY, ALL TRASH WILL BE COLLECTED. SOD REPLACED PROJEC PER THE CONSTRULTION PLANS AND SPECLFICATIONS.
WHERE DAMGGED, AND SOILED STRUCTURES SHALL BE CLEANED.
additional notes:
16. AS-BUILT PLANS WITH SPECIFIC TOPOGRAPHIC INFORMATION, SIGNED AND SEALED BY A FLORIDA LICENSED LAND SURVEYOR AND A COMPLIANCE EERTFICATE SIGNED AND SEALED BY A FLORDA LICENSED PROFESSIONAL ENGNEER WILL BE REQUIRED AND SHOULD BE SUBMITTED TO THE COUNTY AT LEAST 20 DAYS PRIOR TO THE PERMITTEE/APPLICANT'S REQUEST FOR FINAL INSPECTION. LANDSCAPE AS-BUILTS (IF REQUIRED) WILL BE SUBMITED TO LEON COUNTY DSEM.

| REVIIIIONS |  | REVISIINS |  | REGISTE, SLIGER ENGINEERING, INC.ENGINEER OF REOR: JOHN F. SIGER II, P.E. | $\bigcirc$ LEON COUNTY DEPARTMENT OF PUBLIC WORKS | GENERAL NOTES | $\begin{gathered} \text { SHEET } \\ \text { NO. } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | DESCRIPTIION | DATE | DESCRIPTION |  |  |  |  |
|  |  |  |  | CERTIFICATE OF AUTHORIZATION: 9292 3370 CAITAL CIRCLE NE SUITE TALLAHASSEE, FL 32308 PHONE: $(850)$ 894-4521- FAX: $(850)$ 224-0505 | $\begin{aligned} & \text { 2280 MICCOSUKEE ROAD, TALLAHASSE, FLORIOA } 32308 \\ & \text { PHONE (850) } 606-1500^{*} \text { FAX (850) } 606-1501 \end{aligned}$ | PROJECT NAME: CENTERVILLE TRACE POND STRUCTURE RE PLACEMENT | 5 | (800) 548-3424 OR ONLINE AT WWW.PRESTOGEO.COM

2. PRIOR TO installation, the contractor shall submit for approval by the engineer calculations for GEOWEB LOAD SUPPORT AND ANCHORAGE REQULREMENTS FOR HSL2-44 LOADING AND OR ANTIIIP PTED
CONSTRUCTION LOADS, WHICHEVER IS GREATER, SIGNED AND SEALED BY A PROFESSIONAL NGGINEER LICENSED IN
THE STATE OF FLORIDA.
3. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER
INCLUDING MANUFACTURER'S PRODUCT DATA, SAMPLES AND SECTION LAYOUT.
4. install cellular confinement geoweb system in accordance with the manufacturer's specifications AND RECOMMENDATIONS
5. THE CELLULAR CONFINEMENT SYSTEM MATERIAL SHALL BE PROVIDED FROM A SINGLE MANuFACTURER FOR THE ENTIRE PROJECT.
6. THE MANUFACTURER'S QUALITY MANAGEMENT SYSTEM SHALL bE CERTIFIED AND in accordance with iso 9001:2008 AND CE CERTIFICATION. ANY SUBSTITUTE MATERIALS SUBMITTED SHALL PROVIDE A CERTIFICATION
THAT THEIR CELLULAR CONFINEMENT MANUFACTURING PROCESS IS PART OF AN ISO PROGRAM AN A CERTIFIC
 WILL BE REQUIRED SPECIFICALLY STATING THAT THEIR TESTING FACILITY IS CERTIFIED AND IN ACCORDANCE
WITH ISO. AN ISO CERTIICICATION FOR THE SUBSTITUTE MATERIAL WILL NOT BE ACCEPTABLE UNLESS IT IS WITH ISO. AN ISO CERTIFICATION FOR THE SUBSTITUTE MATERIAL WILL NOT BE ACCE
PROVEN IT PERTAINS SPECIFICALLY TO THE GEOCELL MANUFACTURING OPERATIONS.
7. THE MANUFACTURER SHALL PROVIDE CERTIFICATION OF COMPLIANCE TO ALL APPLICABLE TESTING PROCEDURES AND RELATED SPECIFICATIONS. THE MANUFACTURER SHALL HAVE A MINIMUM OF 20 YEARS EXPERIENCE
PRODUCING CELUULAR CONFINEMENT SYSTEMS.
8. GEOTEXTILE SEPARATION LAYER SHALL BE ADVANCED DRAINAGE SYSTEMS (ADS) O601T D-4 NONWOVEN GEOTEXTILE OR APPROVED EQUAL. ADS CAN BE CONTACTED AT:
(800) $821-6710$ OR ONLINE AT WWW.ADS-PIPE.COM


note:
geoweb gwzov system or approved equal shall be anchored with tendons and atra anchors, and shall consist of the
GW2OV-CELL WITH $8^{\prime \prime}$ nominal CELL DEPTH
ATRA CLIPS
ATRA KEYS
ATRA ANCHORS
woven kevlar tendon anchors
atra tendon clips



| REVISIONS |  | REVISIIONS |  |  | LEON COUNTY DEPARTMENT OF PUBLIC WORKS 2280 MICCOSUKEE ROAD, TALLAHASSEE, FLORIDA 32308 PHONE (850) 606-1500 * FAX (850) 606-150 | TREE REMOVAL | SHEET NO. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | DESCRIPTION | DATE | DESCRIPTION |  |  |  |  |
|  |  |  |  |  |  | PROJECT NAME: CENTERVILLE TRACE POND STRUCTURE REPLACE MENT | 7 |












1. Contractor shall submit maintenance of traffic plans to the leon COUNTY PROJECT MANAGER FOR APPROVAL. MAINTENANCE OF TRAFFIC PLANS SHALL BE SIGNED AND SEALED BY A FLLRIDA REGISTERED PROFESSIONAL ADVANCED MOT PRACTITIONER CERTIFICATE.
2. traffic is to be maintained in accordance with fdot standard plans 102-603 AND 102-604, DEPENDANT UPON THE OPERATION TO BE PERFORMED. FOR
GENERAL TCZ REQUIREMENTS AND ADDITIONAL INFORMATION, REFER TO STANDARD LANS INDEX 102-600
3. The traffic shall be maintained in accordance with the "Manual on UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, ND THE FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD PLANS FOR ROAD CONSTRUCTION.
4. EXISTING SPEED LIMIT SIGNS SHALL BE MAINTAINED WITHIN THE LIMITS OF THE
ACTIVE WORK ZONES ALONG PROJECT.
5. positive drainage shall be maintained prior to, during, and after Cust
6. ALL LANES MUST BE REOPENED TO NORMAL TRAFFIC WITHIN 12 hours during AN EVACUATION NOTICE OF A HURRICANE OR ANY OTHER CATASTROPHIC EVENT
AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT AS DIRECTED BY THE LEON COUNTY PROJECT MANAGER
7. PUBLIC ACCESS TO RESIDENCES muSt be maintained at all times during
construction. contractor
8. CONTRACTOR IS RESPONSIBLE FOR KEEPING UP ROAD MAINTENANCE DURING CONSTRUCTION. CONTRACTOR SHALL STREL SWEEP DAILY OR AS NECESSARY TO KEEP STREETS FREE OF SEDIMENT AND DEBRIS.
9. ALL LANE Closures Shall require approval from leon countr. requests shall
be submitted to leon county 2 WeEk Prior to lane closure operations.


note: vertical joints shall be sealed.

drain hole detail


PLAN

1 CONCRETE LINED EMERGENCY SPILLWAY DETAIL

DETAIL A



1. ROCK SHALL BE RUBBLE RIPRAP DITCH LINING IN ACCORDANCE WITH FDOT STANDARD
2. FOR LIFICATIONS SECTION 530 .
3. FOR LOCATION AND LIMITS OF ROCK FILTER, SEE GRADING PLAN. EXCAVATION SLOPES FOR INSTALLATION OF ROCK FILTER SHALL NOT EXCEED IV:2H.
(1) DOWNSTREAM ROCK FILTER DETAIL


oUtlet pipe apronSIDE BANK SAND FILTER DETAIL
4. Fine aggregate shall be quartz sand meeting the requirements of section 902-4 of the fdot STANDARD SPECIFICATIONS
5. COARSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTIONS 901-2 OR 901-3. GRADATION SHALL BE ACCORDING TO SECTION 901, GRADES 4 , 467, 5, 56 OR 57 STONE
位
6. FILTER FABRIC SOCK SHALL MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 948.
7. ALL FILTER FABRIC JOINTS SHALL OVERLAP A MINIMUM OF ELBOWS. 90 deg. bends shall be constructed with two $1 / 8$ ELBOWS SEPARATED by at least 1 ' of
8. STRAIGHT PIPE. Shall be in accordance with the perforation requirements given in aAshto m36 or aAshto m 96

LEON COUNTY DEPARTMENT OF PUBLIC WORKS
2280 MICCOSUKEE ROAD, TALLAHASSEE, FLORIDA 32308
PHONE (850) $606-1500 *$ FAX (850) $606-1501$
MIS CELLAANEOUS DRAINAGE


(1) GUTTER TRANSITION DETAIL



3 $\frac{\text { CURB TRANSITION DETAIL }}{\text { N.T.S. }}$


SECTION A-A

SECTION B-B

(4) TYPICAL SECTION: CONCRETE TURNOUT

|   <br> DATE REVISIONS |  |  | REVIIIIONS |  | LEON COUNTY DEPARTMENT OF PUBLIC WORKS 2280 miccosukee road, tallahassee, florida 32308 PHONE (850) 606-1500 * FAX (850) 606-1501 | CONS TRUCTION DETATLS | sheet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE |  | DATE | DESCRIPTION |  |  | CONS ARUCTION DETALLS | No. |
|  |  |  |  |  |  | PROJECT NAME: CENTERULLE TRACE POND STRUCTURE REPLACEMENT | 28 |



1. the design parameters indicated in the tables were used in the sheet pile wall analysis. if the ENGINEER WILL REDESIGN THE WALL TO RESIST CONSTRUCTION LOADS AT A MAXIMUM DEFLECTION OF 3.O INCHES.
2. the embankment seepage investigation was performed by environmental and geotechnical specialists, INC SEE REPORT OF CORE BORINGS FOR BORING LOCATION AND SONVIL PROPERTIES.
3. the environmental classification for the structure is extremely aggressive.

Sheet pile driving notes:

1. Steel sheet piles shall be driven by use of vibratory or press in methods only
2. ALL SHEET PILE SECTIONS SHALL BE DRIVEN TO THE MINIMUM DEPTHS SHOWN IN THE PLANS. PILES SHALL BE DRIVEN SO AS NOT TO SUBJECT THE PILES TO DAMAGE AND TO ENSURE PROPER IITERLOCK THROUGHOUT THEIR
LENGTHS. CONTRACTOR SHALL REMOVE AND REPLACE ANY SECTION DAMAGED DURING HANDLING AND/OR INSTALLATION or piles driven out of interlock at no cost to the county
3. ALL STEEL PILING SHALL HAVE SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO the walls. contractor shall submit a pile driving installation plan to the engineer 14 days prior to pile installation for approval including:

DETAILED DRAWINGS OF TEMPLATES
SEQUENCE ORER'S DATA SHEETS ON HAMMERS
LIST AND SIIE OF ALL EQUIPMENT INCLUDING CRANES AND DRIVING EQUIPMEN
MONITORING PLAN
CONTRACTOR SHALL PROVIDE A FIXED TEMPLATE, ADEQUATE TO MAINTAIN THE PILE IN PROPER POSITION AND alignment during driving. where practical, place the template so that the pile can be driven to CUT-OFF ELEVATION BEFORE REMOVING THE TEMPLATE. ENSURE THAT TEMPLATES DO NOT RESTRICT THE VERTICAL MOVEMENT OF THE PILE. SUPPLY A STABLE REFERENCE CLOSE TO THE PILE, WHICH IS SATISFACTORY IN THE
OPINION OF THE ENGINEER, FOR DETERMINATION OF THE PILE PENETRATION. AT THE TIME OF DRIVING PILES, furnish the engineer with elevations of the original ground and template at each pile.
4. TEMPORARY SOIL EXCAVATION, EMBANKMENT ANDIOR DEWATERING OF THE SITE MAY BE REQUIRED AS MEANS AND METHODS TO INSTALL THE SHEET PILE SECTIONS. ALL EXCAVATION SUPPORT AND DEWATERING DESIGN SHALL BE years experience with similar design work.
5. Sheet pile sections shall be driven plumb within a tolerance of $1 \%$ in any direction.
6. jetting of steel sheet piles shall not be permitted.

Sheet pile installation notes:

1. Sheet piles shall be installed such that the leading interlock in the direction of driving does not contain the water-swelling product.
2. PRIor to threading the trailing interlock of the following sheet (treated with water-swelling product ( LEANING TOOL AS PROVIDED BY THE MANUFACTURER FOR
3. THE WATER-SWELLING PRODUCT SHall be lubricated immediately prior to sheet pile installation using a
cOMMERCIAL SOAP Product applied to the interlock with a paint brush.
4. Individual sheet piles shall be driven to grade in their final position within 2 hours to avoid EXPANSION AND STRIPPING OF THE WATER-SWELLING PRODUCT. PARTIALLY DRIVEN PILES SUSPENDED OR NOT DRIVEN TO GRADE AND IN FINAL POSITION IN EXCESS OF 2 HOURS SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE. THE解 MANUFACTURER'S RECOMMENDATIONS AND THESE NOTES.
5. THE CONTRACTOR SHALL MONITOR THE TEMPERATURE OF THE SHEET PILE INTERLOCKS DURING INSTALLATION. SUBMIT
FOR APPROVAL PRIOR TO SHEET PILE DRIVING OPERATIONS A MONITORING PLAN INCLUDING TEMPERATURE GAUGING FOR APPROVAL PRIOR TO SHEET PILE DRIVING OPERATIONS A MONITORING PLAN INCLUDING TEMPERATURE GAUGING TECNS, THE INTERLOCK TEMPERATURE EXCEEDS 270 ${ }^{\circ}$ F, THE SHEET SHALL BE REMOVED AT THE CONTRACTOR'S expense. the sheet may be reused upon removal and reapplication of the water swelling product in accordance with the manufacturer's recommendations and these notes.
6. HOT ROLLED STEEL SHEET PILE SHaLL BE PROVIDED BY SKYLINE STEEL OR APPROVED EQual. STEEL SHEET PILE 1-866-875-9546 BE NZ 28. SKYLINE STEEL MAY BE CONTACTED AT

| NZ 28 SECTION PROPERTIES |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { STEEL } \\ \text { REQUIREMENTS } \\ \text { A-572 } \\ \text { (ksi) } \end{gathered}$ | MINIMUMSECTION modulus (in ${ }^{3} / f t$ ) | MINIMUM REQUIREDMOMENT OF INERTIA (in ${ }^{4} / f t$ ) | SECTIONHEIGHT (in) |  | тHIC | NESS |
|  |  |  |  | WIDTH (in) | $\underset{\text { (in) }}{\text { FLANGE }}$ | $\underset{\text { (in) }}{\text { WALL }}$ |
| $f y=50$ | 52.62 | 457.4 | 17.38 | 27.56 | 0.56 | 0.56 |


| NZ 28 STEEL SHEET PILE WALL <br> CANTILEVER DATA TABLE |  |  |
| :---: | :---: | :---: | :---: |
| WALL LOCATION | MINIMUM <br> WALL IIP <br> ELEVATION <br> (ft) | WALL TOP <br> ELEV. <br> (ft) |
| STATION <br> (BEGIN TO END) |  |  |
| $3+90.00$ TO 3+76.00 | 118.33 | $159.93-156.33$ |
| $3+76.00$ TO $2+76.00$ | 118.33 | 156.33 |
| $2+76.00$ TO $2+70.00$ | 118.33 | $156.33-158.33$ |
| $2+70.00$ TO $2+52.20$ | 118.33 | 158.33 |
| $2+52.20$ TO $2+38.42$ | 118.33 | 151.87 |
| $2+38.42$ TO $1+15.14$ | 118.33 | 158.33 |
| $1+15.14$ TO $0+90.00$ | 118.33 | $158.33-160.84$ |

SHeET Pile interlock welding

1. AlL Welds shall conform to ansi/aws d1.1-96 utilizing e7oxx electrodes. welds shall be a minimum of $1 / 4{ }^{4}$ THICK.
2. Piles shall be supplied to the site in double units with the center interlocks ithreaded at the PERFORMED PER THE MANUFACTURER'S RECOMMENDATIONS,
3. When the gap between adjacent interlocks is small enough, it is possible to create a seal by applying A SIMPLE FILET WELD ACROSS THE JOINT.
4. WHERE THE GAP IS tOO LARGE TO be bRidged in a single pass, introduction of a small diameter bar can be effective with a weld run applied to either side of the joint to create the seal.
sheet pile coating requirements
5. coat entire surface of steel sheet piles with the exception of non-welded interlock chambers.
6. STEEL SHEET PILE COATING SHALL be a shop applied coating, consisting of an inorganic zinc primer coat AND 2 COATS OF COAL TAR EPOXY IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 560
7. COATING APPLICATION EQUIPMENT SHALL BE in accordance with the coating manufacturer's technical data REQUIREMENTS.
8. Steel sheet pile surfaces in contact or encased in concrete shall not be coated.
S. 49 PY
He product shall be a hydrophilic urethane paste and shall meet the minimum performance criteria

HARDNESS HS-
TENSLIE STRENGT A45
ELONGATION- $850 \%$
SPECIFIC GRAVITY- 1.25
VOLUME EXPANSION- 100\%
mass change
IOT GREATER THAN 5.0\%
2. THE Water-SWelling product shall be field applied using the roxan sealant system or approved equal. the FOLLOWING SPECIFICATIONS SHALL be applied along with the manufacturer's specifications and
RECOMMENDATIONS. RECOMMENDATIONS:

1. the interlock must be dry prior to application.
2. Lay out the piling in the horizontal position.
3. recently rolled piles need to be cleaned with a jet of compressed air. in the event of corrosion in the interlock, cleaning with a steel wire brush andor high pressure water jet is necessary
4. apply to the sheet pile interlock using an airless or extrusion pump at a rate of 90 lf per gallon.
5. In order to ensure adequate coating of the sheet pile interlock use the manufacturer supplied profilarbed patented template to extrude and spread the water-swelling product.
6. Fill in the interlock taking into account the direction of the driving.
7. THE PILES SHALL be SUPPLIED AND FItTED TOGETHER IN DOUBLE UNits. THE INTERMEDIATE INTERLOCK SHALL be shop welded. only the trailing interlock shall be filled with the water-Swelling product.
8. piles with water-Swelling product shall be transported with the openings of the sealed, free INTERLOCKS FACING DOWNWARDS.
9. THE WATER-SWELLING PRODUCT SHALL BE APPLIED UNDER SHELTER AT AMBIENT TEMPERATURES. PRIOR TO DRIVING OF SHEETS, ALLOW FOR A MINIMUM CURE DURATION OF 48 HOURS AFTER APPLICATION OF
WATER-SWELLING PRODUCT. STORE SHEETS DURING CURE PERIOD WITH THE OPEN ENDS OF THE SEALED interlocks facing downward and under shelter.
sheet pile splicing.
10. at the contractor's option, the steel sheet piles may be supplied in full length sections or partial ength sections. If the contractor elects to have the sheets supplied in partial sections, the sections shall be field spliced in accordance with the steel sheet pile splicing details.
1) SHEET PILE PARTIAL ELEVATION

SHEET PILE SECTION
N.T.S.

(4) $\frac{\text { DRIVING DETAILS }}{\text { N.T.S. }}$



| SHEET PILE SPLICE |
| :---: |
| AZ-28 STEEL |
| SHEET PILE |
| LOCATION (TYP.) |

1 SHEET PILE SPLICE LOCATION
N.T.S.
NOTES

1. ALTERNATE SPLICE LOCATIONS EVERY OTHER SHEET SECTION.
2. SHEET PILE SPLICE TO BE LOCATED $3^{\prime}-0^{\prime \prime}$ ABOVE OR BELOW
previous section splice location


BUTT WELD SPLICE
SEE WELD DETAIL


NOTES:

1. ALL WELDING SHALL CONFORM TO AWS (D1.1).
2. SPLICE PLATES SHALL MATCH THE GRADE REQUIREMENTS OF THE STEEL SHEET PILES.
3. INTERLOCKS SHALL be fREE OF WELD MATERIAL. CONTRACTOR SHALL GRIND THE INTERLOCKS OF SPLICED SHEET sections in the event that weld material enters the interlock to the satisfaction of the engineer,
4. Sheet pile splice locations shall be placed a minimum of $10^{\prime}-0^{\prime \prime}$ and a maximum of $13^{\prime}-0^{\prime \prime}$ from the bottom OF THE STEEL SHEET PILE SECTIONS. CONSECUTIVE SPLICE LOCATIONS SHALL BE STAGGERED BY VERTICALLY 3 FEET.
5. STEEL Sheet pile splices shall be continuously butt welded prior to welding of steel sheet pile splice PLATES.
6. Steel sheet pile splice plates shall be welded to the same face of the steel sheet pile throughout the wall length. splice plates are required at all flange and all web locations. center splice plates about the center of the web or flange as applicable.

(4) BUTT WELD DETAIL

Construction is to comply with the requirements of the governing building code and all other APPLICABLE FEDERAL, STATE, LOCAL CODES, STANDARDS, REGULATIONS AND LAW. THE GOVERNING BUILDING CODE
FOR THIS PROJECT IS THE FLORIDA BUILDING CODE 2017, SIXTH EDITION INCLUDING ALL CURRENT AMENDMENTS,
2. THE CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS With FiELD CONDitions, Dimensions and PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS (+/-) USE ONLY PRINTED DIMENSIONS,
ELECTRONIC DRAWINGS SHOULD NOT BE ASSUMED TO BE DRAWN TO SCALE REPORT ANY DISCREPANCIES IN WRIT ELECTRONIC DRAWINGS SHOULD NOT BE ASSUMED TO BE DRAWN TO SCALE. REPORT ANY DISCREPANCIES IN WRITING
TO THE ENGINEER PRIOR TO PROCEEDING WITH WORK. DO NOT CHANGE SIZE OR LOCATION OF STRUCTURAL MEMBER WITHOUT WRITTEN INSTRUCTION FROM THE ENGINEER.
3. the structure and its components are designed to be structurally sound when completed. prior to COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR STABILITY AND TEMPORARY BRACING OR SUPPORT.
4. DETAILS LABELED "TYP." APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY EACH LOCAFION. ATSTION REGARING THE APPLICABILITY of typical details shall be resolved by the leon county representative.

## CONCRETE

Concrete shall be in accordance with section 346 of the fdot standard specifications. concrete SHALL INCLUDE A PERMEABILITY REDUCING ADMIXTURE SUCH AS SIKA WATERTIGHT CONCRETE POWDER OR
APPROVED EQUAL USE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS,
${ }_{\text {IV }}^{\text {CONCRETE CLASS }}$
MIN. 28 D
5,500 PSI
MAXI
0.41
2. concrete cover dimensions shown in the plans do not include placement and fabrication tolerances UNLESS SHOWN AS "MINIMUM COVER". SEE FDOT STANDARD SPECIFICATIONS SECTION 415 FOR ALLOWABLE TOLERANCES. ALL DIMENSIONS PERTAINNG TO THE LOCATION OF REINFORCING STEEL ARE TO THE CENTERLINE OF
THE BAR EXCEPT WHERE CLEAR DIMENSION IS NOTED TO FACE OF CONCRETE.
3. VIbrate concrete to prevent honeycombs and voids. do not use admixtures containing chloride salts in the concrete.
4. all reinforcing steel shall comply with fdot standard specifications section 931.









| helical pile data table |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| InStallation criteria |  |  |  |  |  |  |  | DESIGN CRITERIA |  |  |  |
| Station | $\begin{gathered} \text { PILE } \\ \text { NO. } \end{gathered}$ | $\left.\begin{gathered} \text { SHAFT } \\ \text { TYPE } \end{gathered} \right\rvert\,$ | BRACKET | $\begin{gathered} \text { MIIIMUM } \\ \text { TIP } \\ \text { ELEVATION } \\ \text { (ft.) } \end{gathered}$ | $\begin{gathered} \text { ULTIMATE } \\ \text { BEARING } \\ \text { RESISTANCE } \\ \text { (tons) } \end{gathered}$ |  |  | FACTORED DESIGN LOAD (tons) | FS | $\begin{gathered} K_{t} \\ \left(\frac{1}{\pi}\right) \end{gathered}$ | $\begin{gathered} \text { MAXIMUM } \\ \text { INSTALLATION } \\ \text { TORQUE } \\ (I b * f t) \end{gathered}$ |
| 2+12.00 | 1-4 | HP350 | HP350NCB8 | 124.0 | 50 | 13,413 | 35.0 | 23 | 2.0 | 7.0 | 17,500 |
| 2+23.00 | 1-4 | HP350 | HP350NCB8 | 124.0 | 50 | 13,413 | 35.0 | 23 | 2.0 | 7.0 | 17,500 |
| 2+08.47 | 1-2 | HP350 | HP350NCB8 | 143.00 | 12 | 3,457 | 16.0 | 6 | 2.0 | 7.0 | 17,500 |
| 2+26.53 | 1-2 | HP350 | HP350NCB8 | 143.00 | 12 | 3,457 | 16.0 | 6 | 2.0 | 7.0 | 17,500 |

PILE INSTALIATION NOTES
HELICAL PILES TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
THE REQUIRED ULTIMATE TORQUE-CORRELATED CAPACITY SHALL BE VERIFIED AT EACH PILE LOCATION, MONITORING AND RECORDING THE FINAL INSTALLATION TORQUE AND APPLYING DEFAULT TORQUE CORRELATIONS PER ICC-EC AC358.
THE HELICAL PILES LICTINS CROWD SHALL BE APPLIED TO ADVANCE THE HELICAL PILE SECTIONS AT A RATE OF APPROXIMATELY EQHAN TO THE PITCH OF THE HELIX PLATE PER REVOLUTION. THE RATE OF ROTATION AND MAGNITUDE OF DOWNWARD PRESSURE SHALL BE ADJUSTED FOR DIFFERENT SOIL CONDITIONS AND DEPTHS. EXTENSIONS SHALL BE PROVIDED TO OBTAIN THE REQUIRED minimum overall length and minimum torsional resistance shown.
If the torsional resistance during installation reaches the helical pile's allowable torque rating prior to SATISFACTION OF THE MINIMUM TIP ELEVATION, TERMINATE THE INSTALLATION AT THE DEPTH OBTAINED.
THE CONTRACTOR SHALL PROVIDE LEON COUNTY COPIES OF THE INDIVIDUAL HELICAL PILE INSTALLATION
THE CONTRACTOR SHALL PROVIDE LEON COUNTY COPIES OF THE INDIVIDUAL HELICAL PILE INSTALLATION RECORDS WITHIN 24 HOURS AFTER EACH INSTALLATION IS COMPLETED. FORMAL COPIES SHALL BE SUBMITTED WITHIN 30 DAYS FOLLOWING THE COMPLETION OF THE HELICAL PILE INSTALLATION. RECORDS Shall contain at a minimum, the following:

LOCATION OF HELICAL PILE AND PILE IDENTIFICATION NUMBER.
termination depth, pile head depths, and length of installed pile
INSTALLED INCLINATION OF PILE
FINAL TORSIONAL RESISTANCE
CALCULATED GEOTECHNICAL CAPACITY BASED ON FINAL TORSIONAL RESISTANCE
COMMENTS PERTAINING TO INTERRUPTIONS, OBSTRUCTIONS OR OTHER RELEVANT INFORMATION
6. A SIngle pile load test shall be conducted in accordance with astm d1143 quick TEST method and the following A SINGLE
CRITERIA

LOADING- $\quad$ INCREMENTS SHALL BE PERFORMED AT 5\% OF THE ANTICIPATED FAILURE LOAD OR MAXIMUM ANTICIPATED TEST LOAD WITH A MINIMUM HOLD TIMES OF 4 MIN. AT EACH INCREMENT. UPON COMPLETION OF THE MAXIMUM TEST LOAD HOLD INCREMENT, THE PILES SHALL BE UNLOADED IN 5 TO 10 EVEN INCREMENTS
WITH MINIMUM HOLD TIMES OF 4 MIN. AT EACH INCREMENT
helical pile notes:
MINIMUM MATERIAL REQUIREMENTS,
SHAFTS-FY $=65 \mathrm{KSI}, F U=75 \mathrm{KSI}$
COUPLERS-FY $=70 \mathrm{KSI}$ FU $=80 \mathrm{KSI}$
HELIX PLATES-ASTM A572 GR. 50
SHAFT COUPLING HARDWARE - (4)- $\varnothing$ 1" GRADE 5 BOLTS WITH NUTS
BRACKET WELDMENT - ASTM A36
EXTERNAL SLEEVE - FY $=50 \mathrm{KSI}, \mathrm{FU}=62 \mathrm{KSI}$
CAP PLATE - ASTM A572 GRADE 50
BRACKET HARDWARE - (2) - 1 " $\emptyset$ GRADE 5 BOLTS WITH NUTS
ALL WELDING TO BE IN ACCORDANCE WITH AWS D 1.1 LATEST ISSUE WITH ETO-XX MIN. ELECTRODE
helix plates have a nominal $3^{\prime \prime}$ Pitch with leading and trailing edges being no more than $1 / 4$ " out of parallel.
LEADS, EXTENSIONS, COUPLERS, HELIX PLATES AND BRACKETS SHALL BE HOT-DIP GALVANIZED (HDG) IN ACCORDANCE WITH ASTM A123.
SHAFT COUPLING AND BRACKET HARDWARE SHALL BE ZINC COATED IN ACCORDANCE WITH ASTM B633,


REGISTE, SLIGER ENGINEERING, INC. GINEEROF RECORD: JOHN F. SLIGER
P.E. LICEESE NUMBER 55550 CERTIEFICATE OF AUTHBRIIATITON: 9292

3370 CAPITAL CIRCLE NE, SUITE | TALLAHASIRELLEL NEE SL3 3208 |
| :--- | TALLAHASSEE, FL 32308

PHONE: 850 ) 894-4521-FAX: (850) 224-0505


ASSEMBLY DETAIL


BRACKET DETAIL

boardwalk helical pile
CONFIGURATION DETAIL


WEIR HELICAL PILE CONFIGURATION DETAIL
construction is to comply with the requirements of the governing building code and all other applicable federal STATE, LOCAL CODES, STANDARDS, REGULATIONS AND LAW. THE GOV
CODE GTH EDITION (2017) INCLUDING ALL CURRENT AMENDMENTS.
the structure is designed to be structurally sound when completed. prior to completion, the contractor is responsible for stability and temporary bracing or support.
design superimposed loads
DESIGN WIND LOADS
GOVERNING CODE
GOVERNING CODE
ULTIMATE DESIGN $\qquad$ ASCE 7-10
Nominal design wind speed $\qquad$ $\begin{aligned} & \\ & V \wedge A S D=82.9 \mathrm{MPH}\end{aligned}$
RISK CATEGORY ----
EXPOSURE - MWFRS
COMPONENTS AND CLA

MEAN ROOF HEIGHT $\qquad$ $--K d=0.85$
TOPOGRAPHY FACTOR- $\qquad$
VERIFY all dimensions and site conditions prior to start of construction. notify the engineer of any DISCREPANCIES OR INCONSISTENCIES. NO CHANGES OF INFORMATION SHOWN ON THE DRAWINGS SHALL BE MADE WIT
SPECIFIC WRITTEN APPROVAL OF THE ENGINEER. DESIGN INFORMATION SHOWN ON THE DRAWINGS PROVIDE OVERALL SPECIFIC WRIITEN APPROVAL OF THE ENGINEER. DESIGN INFORMATION SHOWN ON THE DRAWINGS PROVIDE OVERALL detalls as required to fit existing conditions. The engineer shall be notified of any proposed modifications.
details labeled "TYp." apply To all situations that are the same or similar to those specifically referenced, YPICAL DETAILS SHAL解
CONTRACTORS WHO DISCOVER DISCREPANCIES, OMISSIIONS OR VARIATIONS IN THE CONTRACT DOCUMENTS SHALL IMMEDIATELY
NOTIFY THE ENGINEER. THE ENGINEER WILL RESOLVE THE CONDITION AND ISSUE A WRITTEN CLARIFICATION.
8. THE GENERAL CONTRACTOR SHALL COORDINATE ALL CONTRACT DOCUMENTS WITH FIELD CONDITIONS, DIMENSIONS AND PROJECT
SHOP DRAWINGS PRIOR TO CONSTRUCTION. DO NOT SCALE DRAWINGS MARKED WITH (+/-). USE ONLY PRINTED DIMENSIONS.
9. ELECTRONIC DRAWINGS SHOULD NOT BE ASSUMED TO BE DRAWN TO SCALE. REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER PRIOR TO PROCEEDIIG WITH WORK. DO NOT CHAN
INSTRUCTION FROM THE STRUCTURAL ENGINEER OF RECORD.
10. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK, AND THE PUBLIC FROM HARM. THE CONTRACTOR IS
SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND JOB SITE SAFETY INCLUDING ALL OSHA REQUIREMENTS.

1. the contractor shall submit for approval, 3 Sets of plans, calculations, and specifications signed and sealed by a licensed professional engineer in the state of florida, for any proposed changes to the contract documents. dimensional lumber:

ALL DIMENSIONAL LUMBER SHALL BE SAS AND GRADE STAMPED BY AN AGENCY CERTIFIED BY THE AMERICAN LUMBER STANDARD
COMMITTEF'S BOARD OF REVIEW AND MANUFACTURED IN ACCORDANCE WITH PS-2O. LATEST REVISION.
2. FRAming material shall be southern yellow pine, No. 1 or better, with a maximum moisture content of $19 \%$.
all material shall be southern pine, complying with the stress value tables located in the general notes.
4. Wanes are not acceptable in exposed material.
5. "PT" denotes pressure treated. all pt lumber shall be kiln dried after treatment (kdat).
6. all lumber shall be pressure treated in accordance with the american wood protection association standard tin FIELD CUTS, HOLES, AND DAMAGE SHALL BE TREATED WITH A BRUSH APPLIED COPPER NAPTHANATE OR
APPROVED PRESERV ATION SYSTEM AND APPLIED ACCORDING TO
contractor shall submit product treatment data sheets for approval by leon county prior to construction.
contractor shall abide by awpa use category standard u1. materials not properly treated for their specific use CONTRACTOR SHALL ABIDE BY AWPA USE CATEGORY STANDARD UE. MA
SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
. all fasteners shall be applied per table 2304.10.1, fbC 2017 UNLESS otherwise noted
all connectors shall be manufactured by simpson strong tie or approved equal unless otherwise noted.
2. ALL CONNECTORS AND FASTENERS THAT ARE NOT STAINLESS STEEL (SS) SHALL BE HOT DIPPED GALVANIZED FOR CORROSION PROTECTION
ZMAX ( 6185 )- MIN. 1.85 OZ. OF ZINC PER SQUARE FOOT OF SURFACE AREA PER ASTM A653. ZMAX (G185)- MIN. 1.85 OZ. OF ZINC PER SQUARE FOOT OF SURFACE AREA PER ASTM A653. HDG (14 GA. AND THICKER)- MIN. AVG. COATING WEIGHT OF 2.O OZ. PER SQUARE FOOT OF SURFACE AREA PER ASTM AI23. CONNECTORS
MAY REQUIRE SPECIAL FABRICATION FROM THE MANUFACTURER. NO ADDITIONAL CONTRACT TIME SER MAY REQUIRE SPECIAL FABRICATION FROM THE MANUFACTURER. NO ADDITIONAL CONTRACT TIME SHALL BE GRANTED TO OBTAIN THE
REQUIRED CONNECTORS. CONTRACTOR SHALL HAVE ALL CONNECTORS INSPECTED BY THE ENGINEER PRIOR TO CONCRETE EMBEDMENT OR COVERING CONNECTORS WITH SUBSEOUENT WORK.
3. CONTRACTOR SHALL USE FASTENERS THAT ARE COMPATIBLE WITH THE CORROSION PROTECTION OF THE CONNECTOR, AND SHALL USE
ALL FASTENERS REQUIRED TO OBTAIN MAXIMUM PUBLISHED CONNECTOR LOADS UNLESS OTHERWISE NOTED. ALL FASTENERS REQUIRED TO OBTAIN MAXIMUM PUBLISHED CONNECTOR LOADS UNLESS OTHERWISE NOTED.
4. contractor shall install all connectors in accordance with manufacturers specifications
5. threaded rod with nuts and washers of the same material type and diameter may be substituted for thru-bolts.

## boardwalk piles:

1. helical pile beam brackets may require special fabrication. shop drawings signed and sealed BY A LICENSED ENGINEER IN THE STATE OF FLORIDA SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION R INSTALLATION. ALL COSTS FOR PILE BRACKETS SHALL BE PAID FOR BY THE CONTRACTOR. NO ADDITIONAL CONTRAC TIME SHALL BE GRANTED TO OBTAIN THE REQUIRED BRACKETS.


| wood framig SIE | Reounted values, in PSI |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F |  |  |  |  | E |
| SOUTHER Yelow Pine (SYP) |  |  |  |  |  |  |
| P.T. 8" round PLE | 1950 | 160 | 440 | 1250 |  | .500,000 |
| SCHEDULE OF REQUIRED STRESS VALUES <br> trus joist parallam plus psl wolmanized <br> (@100\% STRESS RATING) |  |  |  |  |  |  |
| wood fram g siz | ReOURED VALUES, IN PSI |  |  |  |  |  |
|  | fb | ft | fv | ${ }^{\mathrm{Fc},}$ | Fo | E |
| Servace level 2 |  |  |  |  |  |  |
| 54" $\times 11 \\|^{\prime \prime}$ | 1827 | 1397 | 197 | 338 | 1508 | 1,460,000 |



| REVIIIIONS |  | REVIISIONS |  |  | LEON COUNTY DEPARTMENT OF PUBLIC WORKS <br> 2280 MICCOSUKEE ROAD, TALLAHASSEE, FLORIDA 32308 PHONE (850) 606-1500 * FAX (850) 606-1501 HONE (850) 606-1500 * FAX (850) 606-150 | BOARDWALK | SHEET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | DESCRIPTION | DATE | DESCRIPTION |  |  | $P L A \mathbb{N}$ AND ELEVATION | No |
|  |  |  |  |  |  | PROJECT NAME: RVILLE TRACE POND CENTER PVIT STRUCTURE REPLACE MENT | 46 |




9"X18" RIBBON CURB WITH 1 \#4 BAR
CONTINUOUS
CONTINUOUS AND 3000 PSI
EXPANSION MIX. PROVIDE $1 / 2$
EXPANSION JOINT AT SHEET
PILE CAP. CONSTRUCT FLUSH
PILE CAP. CONSTRUCT FLU
WITH FINISH GRADE AT
BOARDAK
BOARDWALK AND TOP OF
BERM.
\#4 BAR
2 $^{2}$ MIN LAP
AT CORNERS
AT CORNERS
AND SPLICES


TYPICAL BOARDWALK SECTION
WITH HELICAL PILES
(N.T.S.)

(N T


LEON COUNTY DEPARTMENT OF PUBLIC WORKS

$\square$ EIAILS ( $50 F$ A) SENTIERUILLLE TRACE POND STRUCTURE REPLA CEMENT


