

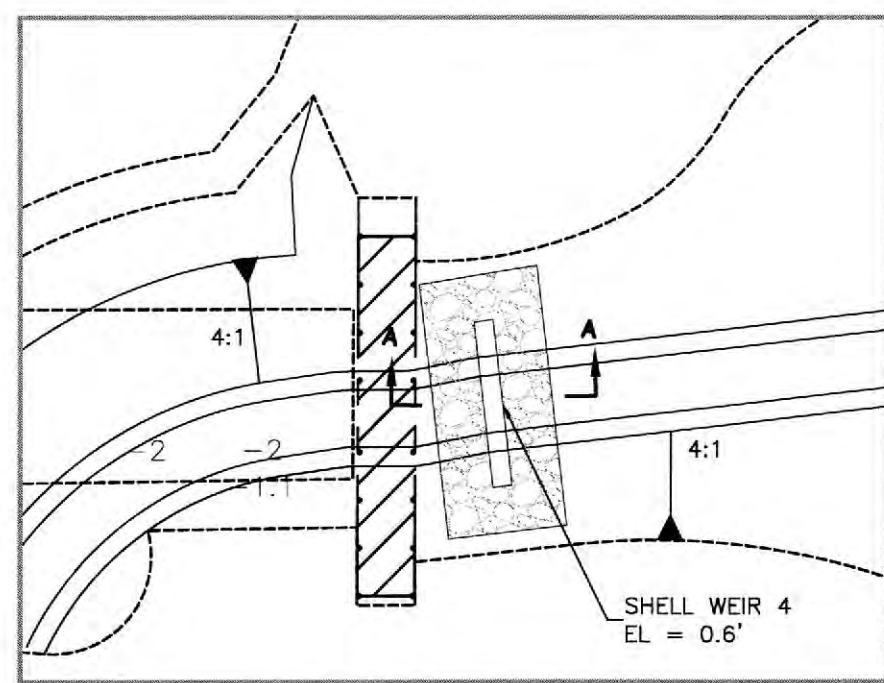


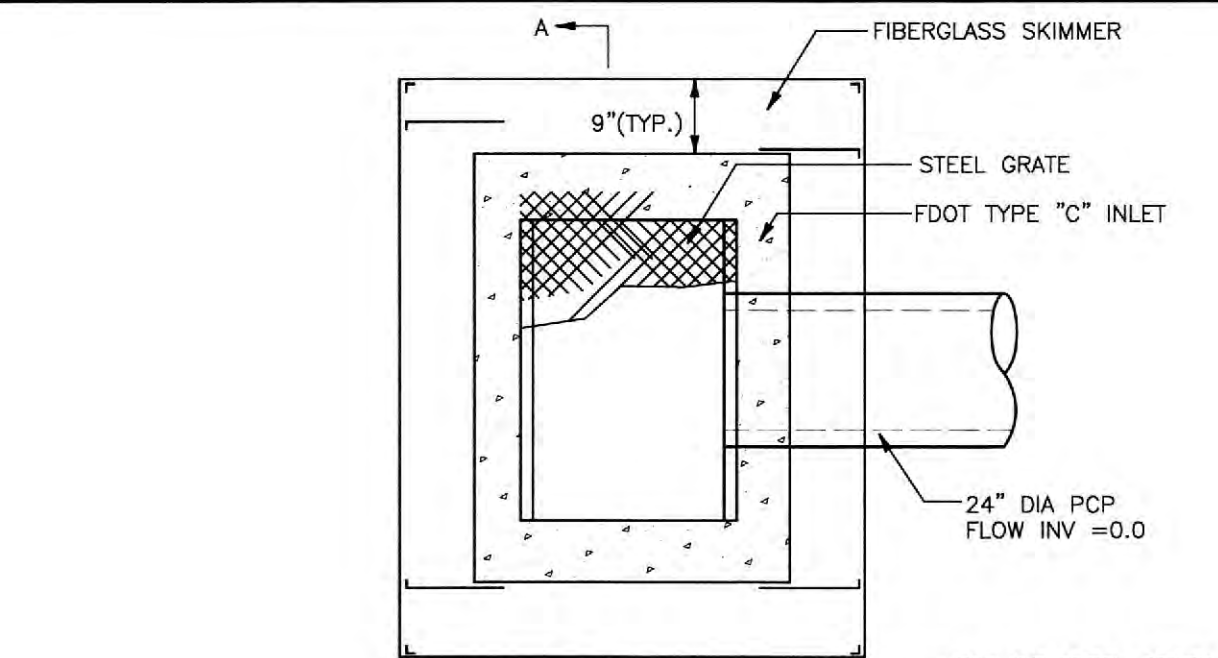
					ACTIVITY	INITIALS/EMP. NO.	DATE	<div>Stantec 6900 Professional Parkway East, Sarasota, FL 34240-8414 Phone 941-907-6900 • Fax 941-907-6910 Certificate of Authorization #27013 • www.stantec.com <small>The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyright to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.</small></div>
					DESIGNED BY:	RQS/89561	03/2016	
					DRAWN BY:	AS/102871	03/2016	
					CHECKED BY:			
1	REVISE PER RA# 1, PAGE NUMBERS	SEP/16	AS/102871	RQS/89561	CONTRACT ADMIN. BY:			
Δ REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:			

CLIENT:	MANATEE BOARD OF COUNTY COMISSIONERS	DATE: MARCH 2016	TITLE:	PLANTING SECTIONS
PROJECT:	ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION	HORIZONTAL SCALE:	CROSS REFERENCE FILE NO.:	PROJECT NUMBER: 215510519
		VERTICAL SCALE:	SHEET NUMBER: 27	OF 32
		SEC. TWP. RGE: 2 26 34S 16E		



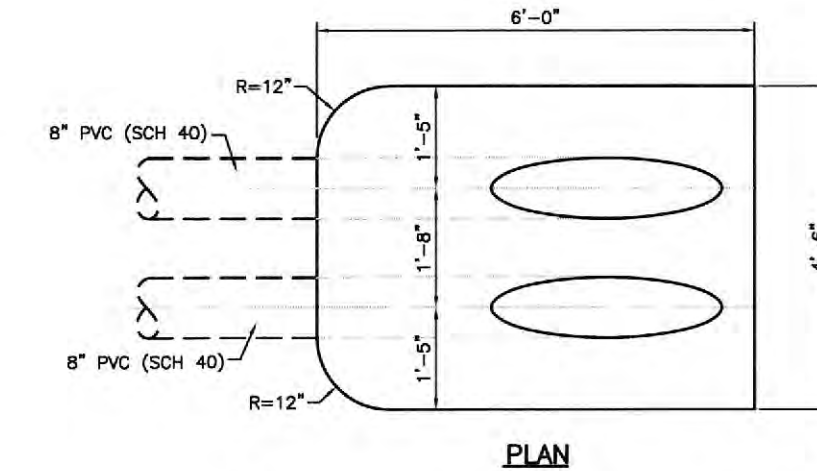


8. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE SKIMMER ASSEMBLY, FOR APPROVAL, PRIOR TO CONSTRUCTION.

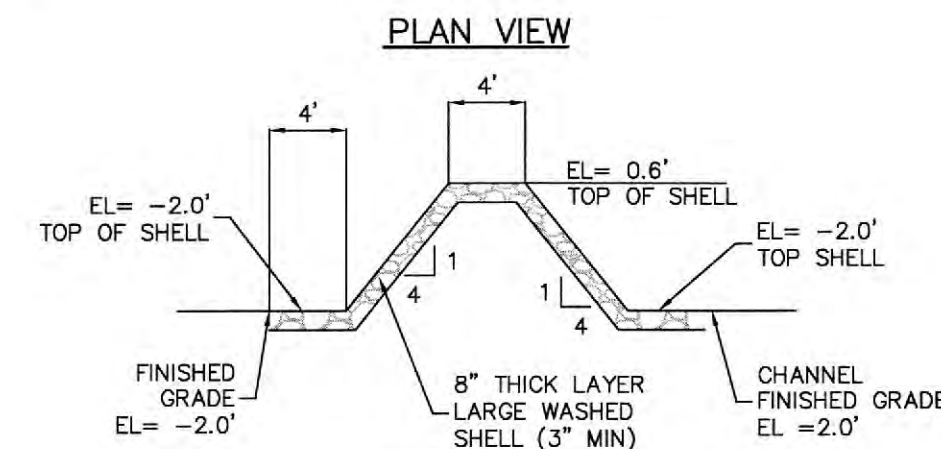


NOTE:
* MINIMUM SEPARATION BETWEEN PIPES
(WHERE APPLICABLE)

N.T.

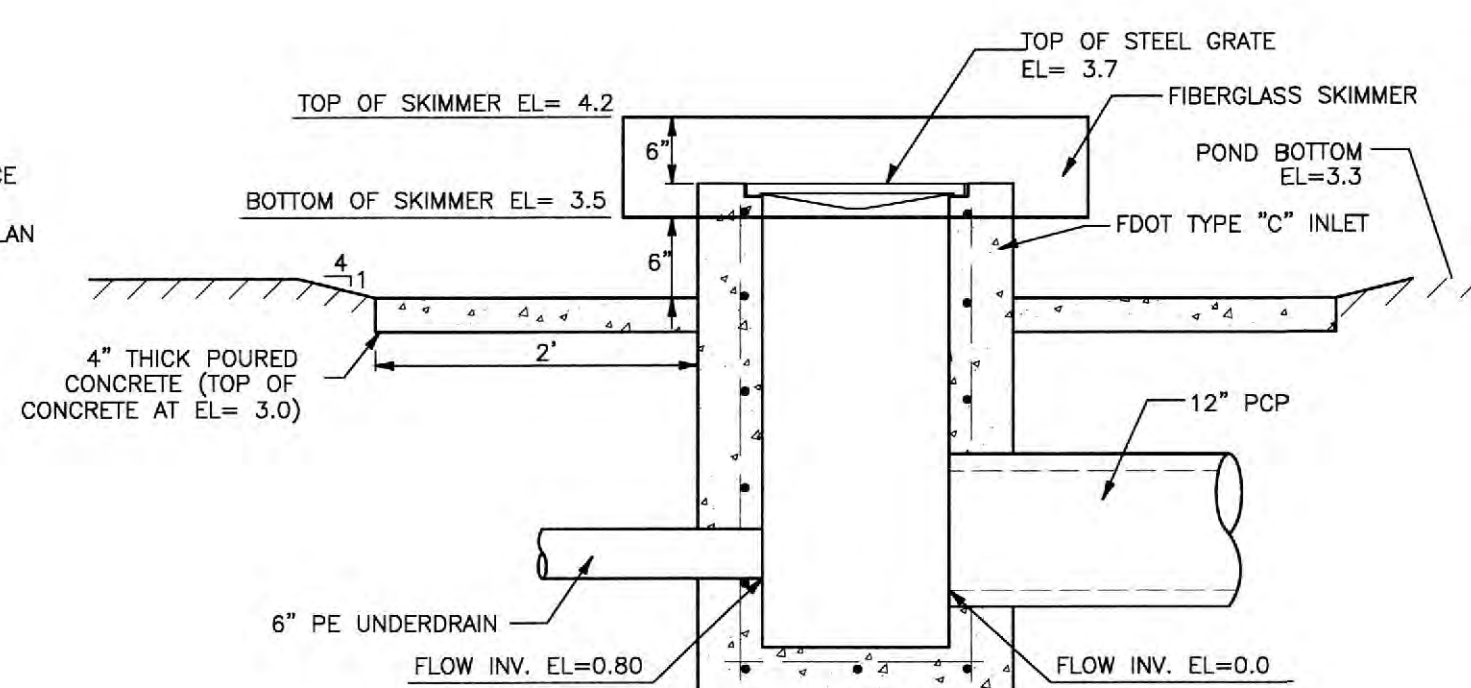


NOT TO SCALE



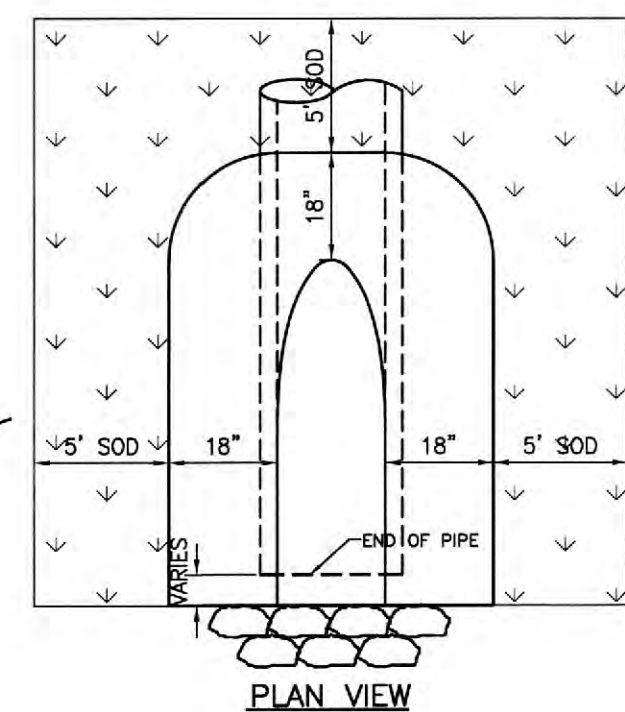
SECTION A-A

(W4) SHELL WEIR 4 TYPICAL DETAIL

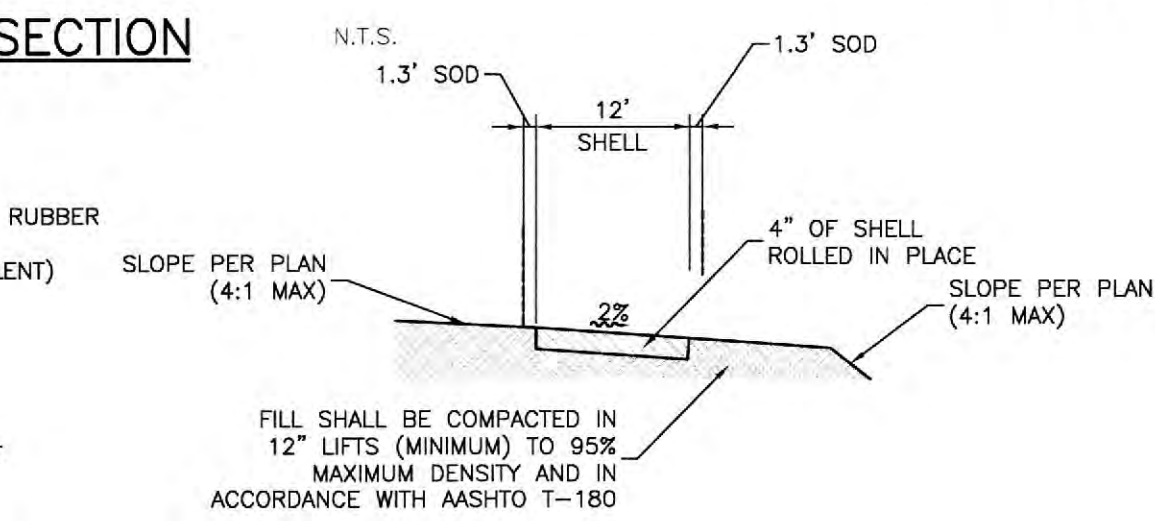


N.T.S

4. FILTER FABRIC SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 514, PLASTIC FILTER FABRIC, SPECIFICALLY SEC. 514-3.4 RIPRAP, INCLUDED IN UNIT COST OF MITERED END SECTION.



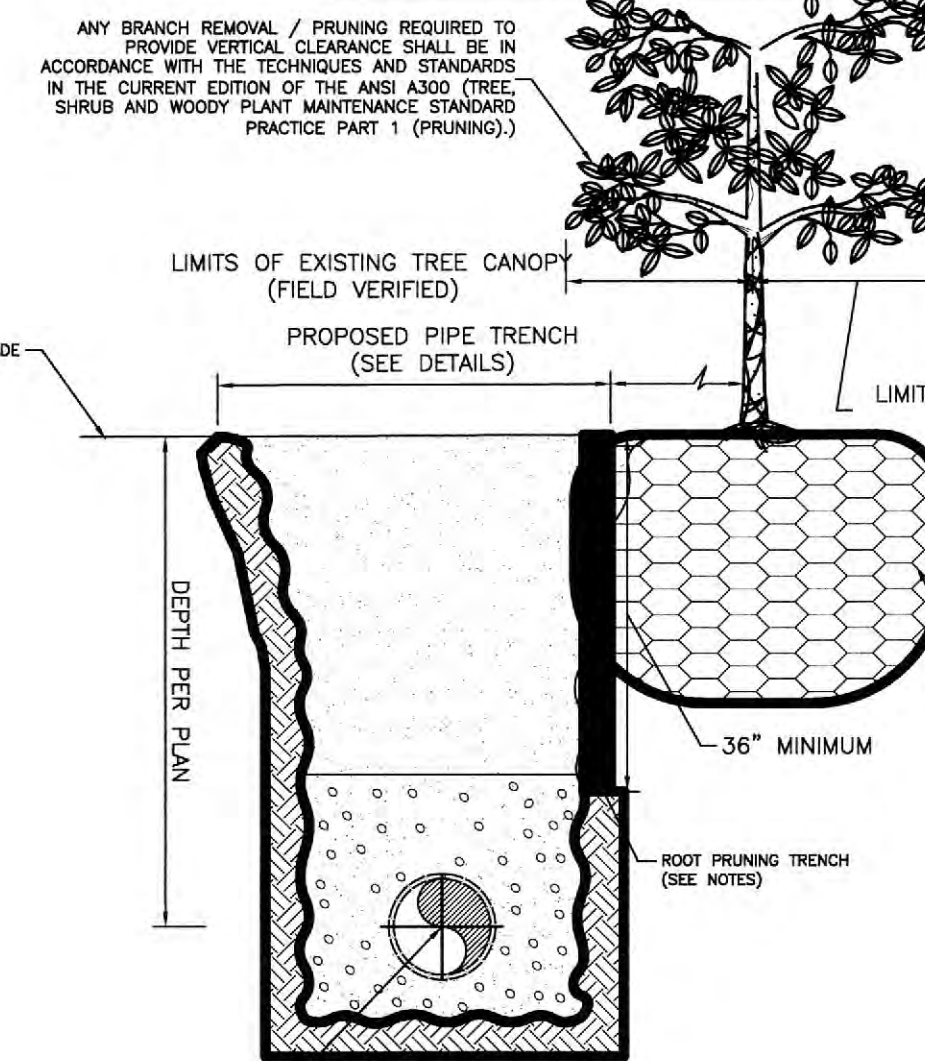
S-D022



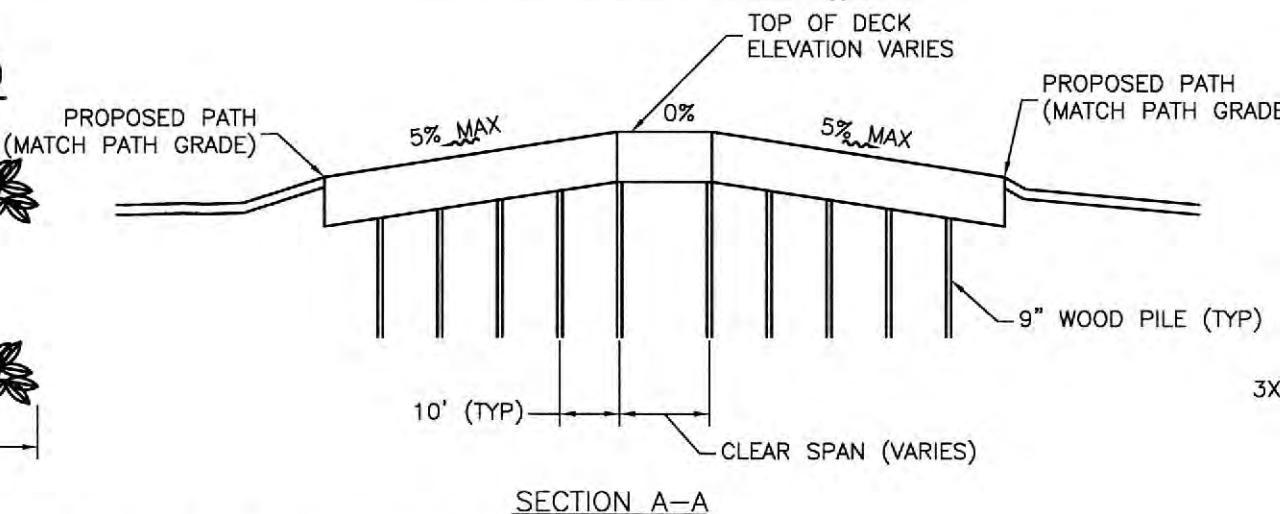
N.T.S.

1999

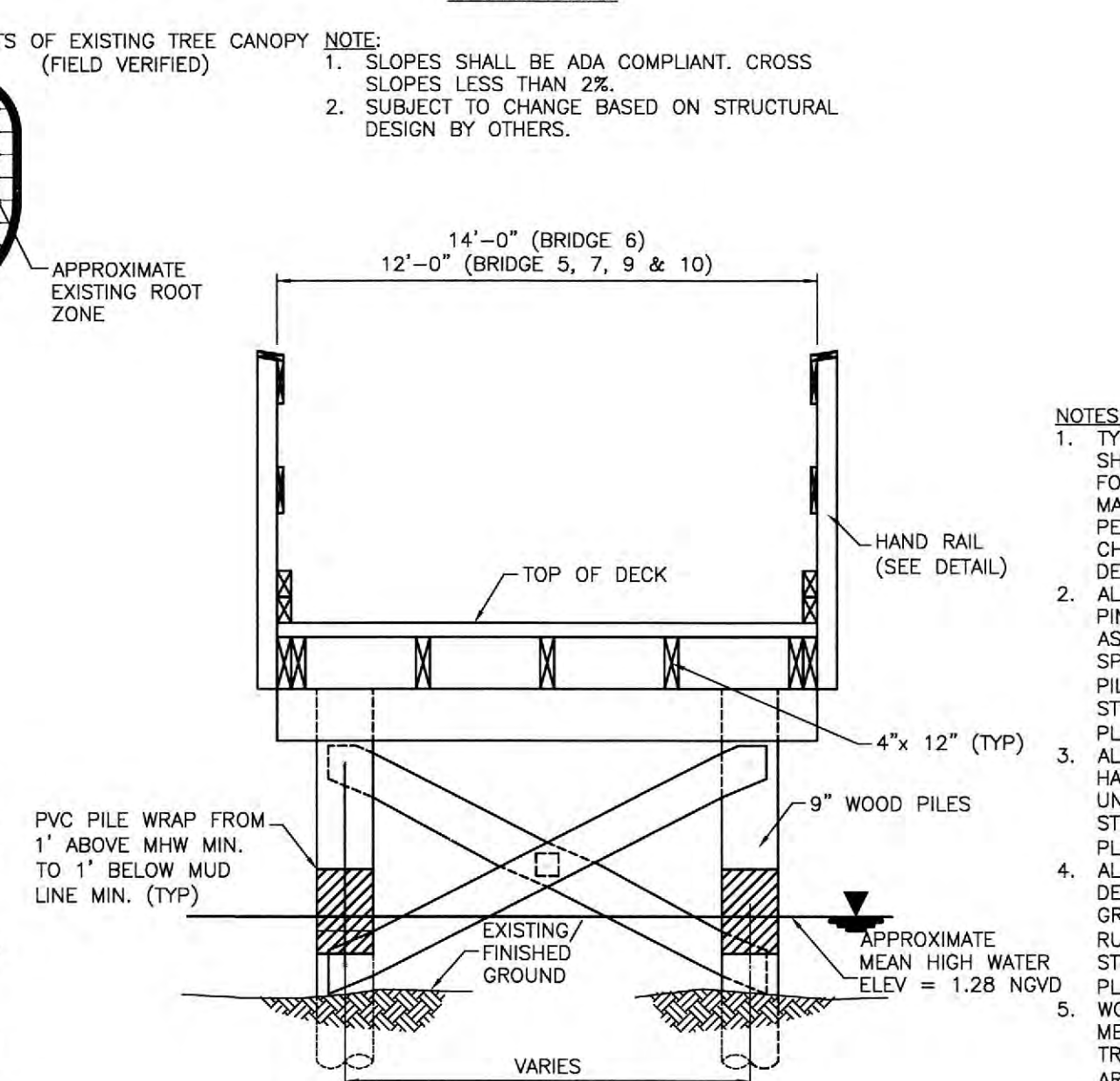
ANY BRANCH REMOVAL / PRUNING REQUIRED TO PROVIDE VERTICAL CLEARANCE SHALL BE IN ACCORDANCE WITH THE TECHNIQUES AND STANDARDS IN THE CURRENT EDITION OF THE ANSI A300 (TREE, SHRUB AND WOODY PLANT MAINTENANCE STANDARD PRACTICE PART 1 (PRUNING).)



1. WHERE PIPE TRENCH EXCAVATION WILL OCCUR INSIDE ROOT ZONE (AS SHOWN) A ROOT PRUNING TRENCH SHALL BE CREATED PRIOR TO EXCAVATION OF THE PIPE TRENCH. ROOT PRUNING TRENCH SHALL BE CONSTRUCTED IN A MANNER SUCH THAT EXISTING ROOTS WILL BE SEVERED AT AN ANGLE TO THE TRENCH FACE, NO FRAYED OR SPLIT ROOTS SHALL BE LEFT WITHOUT CORRECTION. PRIOR TO COMMENCEMENT OF ROOT - DISTURBING ACTIVITIES CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING PROPOSED METHODS AND MATERIALS TO BE USED TO THE ENGINEER FOR REVIEW AND APPROVAL. IN NO CASE SHALL EXCAVATION ENCLOSE MORE THAN 1/3 INTO THE EXISTING TREE CANOPY LIMITS. SHEETING (OR EQUIVALENT METHOD) MAY BE REQUIRED TO LIMIT ENCLOSEMENT INTO THE EXISTING TREE CANOPY.
2. NOTWITHSTANDING THE CONSTRUCTION OF THE ROOT PRUNING TRENCH, ANY ROOTS EXPOSED AND OR DAMAGED DURING CONSTRUCTION SHALL BE TREATED IN THE SAME MANNER AS DESCRIBED ABOVE.
3. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, CONTRACTOR TO FIELD MARK LOCATIONS OF ROOT PRUNING TRENCHES AND BRANCH PRUNING FOR REVIEW AND APPROVAL BY ENGINEER.
4. TREE ROOTS EXPOSED DURING CONSTRUCTION SHALL HAVE A SUITABLE BROAD SPECTRUM FUNGICIDE APPLIED SUCH AS "SUBDUO MAXX" (*Metenaxam*) OR APPROVED EQUAL. THIS FUNGICIDE SHALL BE APPLIED AT LABELED RATES AND ACCORDING TO LABELED DIRECTIONS PRIOR TO THE INTRODUCTION OF ANY BACKFILL.
5. ENGINEER TO REVIEW COMPLETED ROOT PRUNING TRENCH PRIOR TO BACKFILLING.
6. UPON COMPLETION OF ROOT PRUNING AND GRADING, PHC INJECTABLES FOR TREES TO BE SOIL INJECTED AT LABELED RATES AND ACCORDING TO LABELED DIRECTIONS WITHIN ENTIRE CANOPY AREA OF ANY TREE WHERE ROOT PRUNING HAS BEEN COMPLETED.

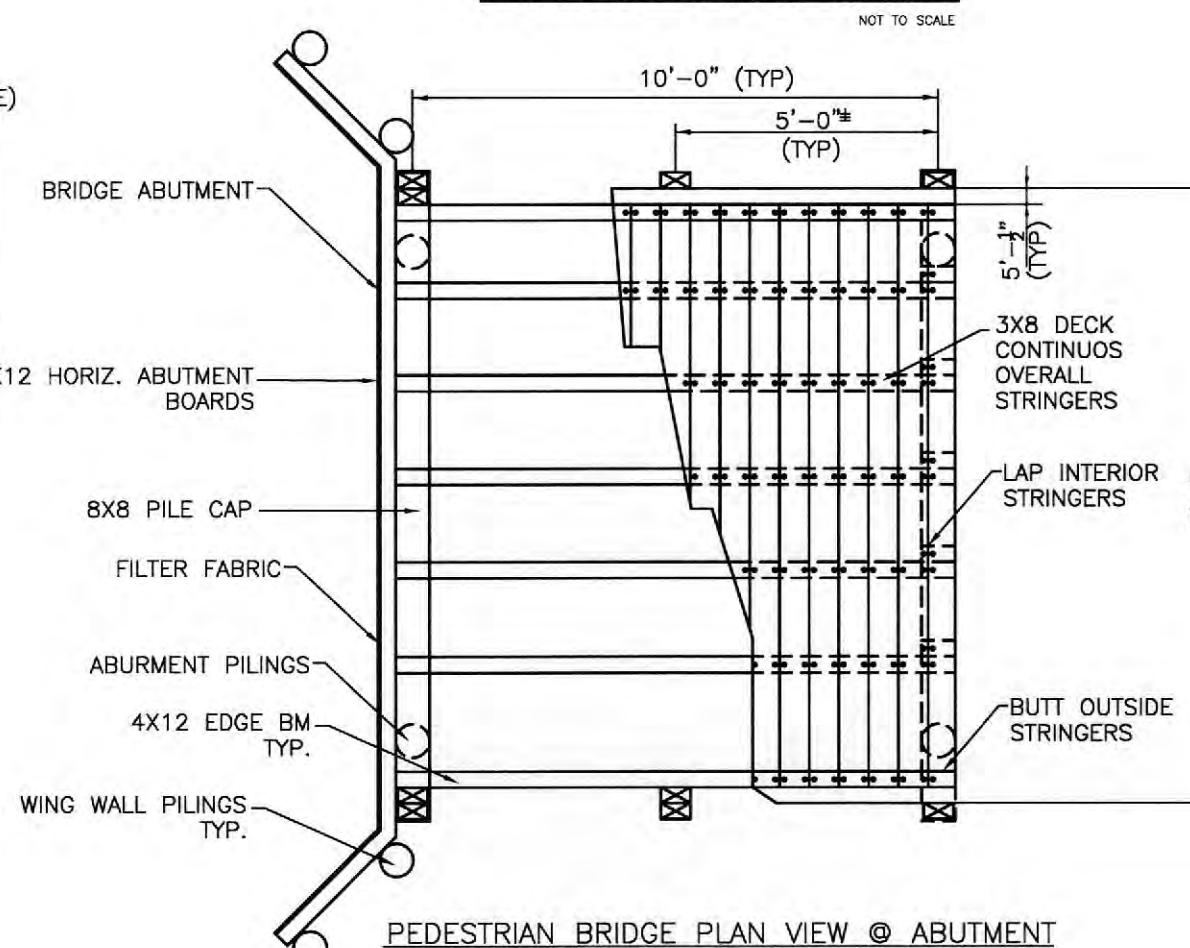


STRUCTURE D#1



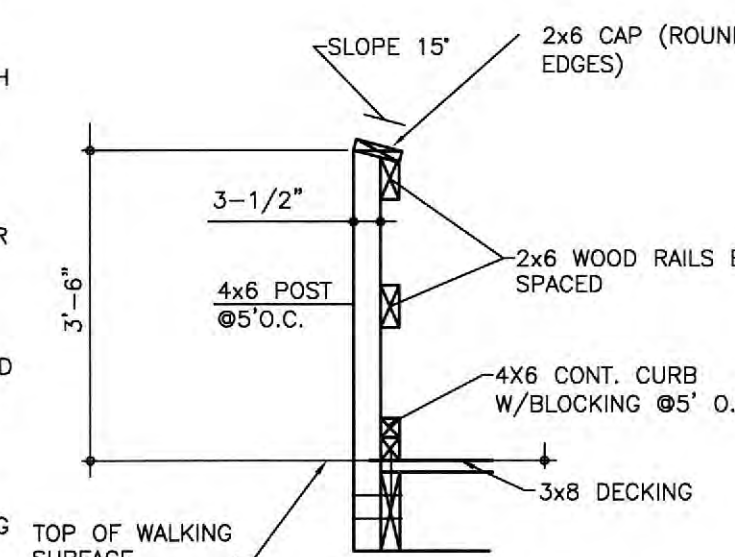
NOTE:
1. SUBJECT TO CHANGE BASED ON STRUCTURAL DESIGN BY OTHERS.

NT



PEDESTRIAN BRIDGE PLAN VIEW @ ABUTMENT

1. TYPICAL PEDESTRIAN BRIDGE DETAILS SHOWN ARE MINIMUM SPECIFICATIONS FOR LOCATION, CONSTRUCTION, MATERIALS AND PERMITTING AND ARE SUBJECT TO CHANGE BRIDGE PLAN STRUCTURAL DESIGN BY OTHERS.
2. ALL PILING SHALL BE SOUTHERN PINE TIMBER PILING COMPLYING WITH ASTM STANDARDS D25, STANDARD SPECIFICATIONS FOR ROAD TIMBER PILING AND/OR SPECIFIED BY STRUCTURAL ENGINEER ON BRIDGE PLANS (BY OTHERS).
3. ALL STEEL, BOLTS, NAILS AND OTHER HARDWARE SHALL BE SOUTHERN STEEL UNLESS OTHERWISE SPECIFIED BY STRUCTURAL ENGINEER ON BRIDGE PLANS (BY OTHERS).
4. ALL SOLID WOOD FRAMING AND WOOD DECK SHALL COMPLY WITH SOUTHERN PINE GRADED IN ACCORDANCE WITH SPIB RULES AND/OR AS SPECIFIED BY STRUCTURAL ENGINEER ON BRIDGE PLANS (BY OTHERS).
5. WOOD SUPER STRUCTURE AND PILING MEMBERS SHALL BE PRESSURE TREATED WITH CHROMATE COOPER ARSENATE (CCA) TYPE I C AS SPECIFIED BY STRUCTURAL ENGINEER ON BRIDGE PLANS (BY OTHERS).
6. ALL RAILING SYSTEMS (TOPS, EDGES, AND ENDS) SHALL BE FINISHED SUCH THAT THEY ARE SMOOTH AND FREE OF SPICULATORS AND SHARP PROJECTIONS.

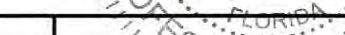


NOTE:
1. SUBJECT TO CHANGE BASED ON STRUCTURAL
DESIGN BY OTHERS.

WAF

						ACTIVITY	INITIALS/EMP. NO.	DATE
						DESIGNED BY:	RQS/89561	03/2016
						DRAWN BY:	AS/102871	03/2016
2	REMOVE TIMBER VEHICULAR BRIDGE (SH. 30) & RENUMBER; REVISE PER RA# 1		SEP/16	AS/102871	RQS/89561	CHECKED BY:		
1	ADD STRUCTURE P#5 DETAIL		6/15/16	AS/102871	RQS/89561	CONTRACT ADMIN. BY:		
ΔREV. NO.	REVISION		DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:		

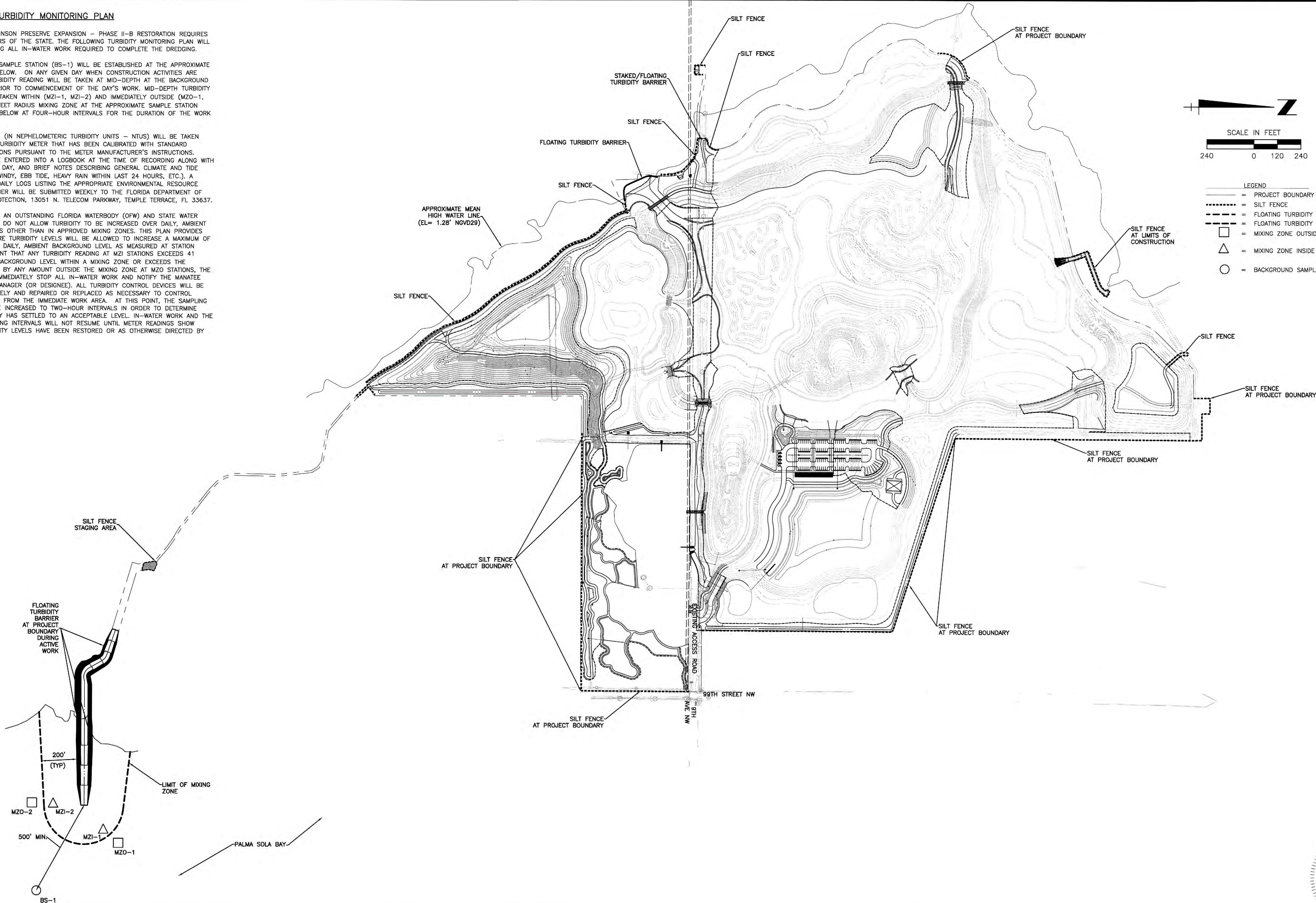


CLIENT:	MANATEE BOARD OF COUNTY COMMISSIONERS	DATE: MARCH 2016	TITLE:	CONSTRUCTION DETAILS	
PROJECT:	ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION	HORIZONTAL SCALE:	CROSS REFERENCE FILE NO.:	PROJECT NUMBER:	
		VERTICAL SCALE:			INDEX NUMBER:
		SEC. 23 & 26	TWP. 34S	RGE. 16E	
				215510519	
					SHEET NUMBER: 29 OF 32

CONSTRUCTION TURBIDITY MONITORING PLAN

CONSTRUCTION OF ROBINSON PRESERVE EXPANSION – PHASE II-B RESTORATION REQUIRES DREDGING WITHIN WATERS OF THE STATE. THE FOLLOWING TURBIDITY MONITORING PLAN WILL BE IMPLEMENTED DURING ALL IN-WATER WORK REQUIRED TO COMPLETE THE DREDGING.

- ONE BACKGROUND SAMPLE STATION (BS-1) WILL BE ESTABLISHED AT THE APPROXIMATE LOCATION SHOWN BELOW. ON ANY GIVEN DAY WHEN CONSTRUCTION ACTIVITIES ARE SCHEDULED, A TURBIDITY READING WILL BE TAKEN AT MID-DEPTH AT THE BACKGROUND SAMPLE STATION PRIOR TO COMMENCEMENT OF THE DAY'S WORK. MID-DEPTH TURBIDITY READINGS WILL BE TAKEN WITHIN (MZI-1, MZI-2) AND IMMEDIATELY OUTSIDE (MZO-1, MZO-2) THE 200 FEET RADIUS MIXING ZONE AT THE APPROXIMATE SAMPLE STATION LOCATIONS SHOWN BELOW AT FOUR-HOUR INTERVALS FOR THE DURATION OF THE WORK DAY.
- TURBIDITY READINGS (IN NEPHELOMETERIC TURBIDITY UNITS – NTUS) WILL BE TAKEN WITH A PORTABLE TURBIDITY METER THAT HAS BEEN CALIBRATED WITH STANDARD CALIBRATION SOLUTIONS PURSUANT TO THE METER MANUFACTURER'S INSTRUCTIONS. READINGS SHALL BE ENTERED INTO A LOGBOOK AT THE TIME OF RECORDING ALONG WITH THE DATE, TIME OF DAY, AND BRIEF NOTES DESCRIBING GENERAL CLIMATE AND TIDE CONDITIONS (E.G., WINDY, EBB TIDE, HEAVY RAIN WITHIN LAST 24 HOURS, ETC.). A SUMMARY OF THE DAILY LOGS LISTING THE APPROPRIATE ENVIRONMENTAL RESOURCE PERMIT (ERP) NUMBER WILL BE SUBMITTED WEEKLY TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 13051 N. TELECOM PARKWAY, TEMPLE TERRACE, FL 33637.
- PALMA SOLA BAY IS AN OUTSTANDING FLORIDA WATERBODY (OFW) AND STATE WATER QUALITY STANDARDS DO NOT ALLOW TURBIDITY TO BE INCREASED OVER DAILY, AMBIENT BACKGROUND LEVELS OTHER THAN IN APPROVED MIXING ZONES. THIS PLAN PROVIDES MIXING ZONES WHERE TURBIDITY LEVELS WILL BE ALLOWED TO INCREASE A MAXIMUM OF 41 NTUS OVER THE DAILY, AMBIENT BACKGROUND LEVEL AS MEASURED AT STATION BS-1. IN THE EVENT THAT ANY TURBIDITY READING AT MZI STATIONS EXCEEDS 41 NTUS ABOVE THE BACKGROUND LEVEL WITHIN A MIXING ZONE OR EXCEEDS THE BACKGROUND LEVEL BY ANY AMOUNT OUTSIDE THE MIXING ZONE, AT MZO STATIONS, THE CONTRACTOR WILL IMMEDIATELY STOP ALL IN-WATER WORK AND NOTIFY THE MANATEE COUNTY PROJECT MANAGER (OR DESIGNEE). ALL TURBIDITY CONTROL DEVICES WILL BE INSPECTED IMMEDIATELY AND REPAIRED OR REPLACED AS NECESSARY TO CONTROL TURBID DISCHARGES FROM THE IMMEDIATE WORK AREA. AT THIS POINT, THE SAMPLING FREQUENCY WILL BE INCREASED TO TWO-HOUR INTERVALS IN ORDER TO DETERMINE WHEN THE TURBIDITY HAS SETTLED TO AN ACCEPTABLE LEVEL. IN-WATER WORK AND THE FOUR-HOUR SAMPLING INTERVALS WILL NOT RESUME UNTIL METER READINGS SHOW ACCEPTABLE TURBIDITY LEVELS HAVE BEEN RESTORED OR AS OTHERWISE DIRECTED BY MANATEE COUNTY.



Saved: 10/24/2016 5:20:45 PM QSELLERS | Path: 10/25/2016 9:44:32 AM AS42428 | V:\2155\as42428\215510519\m\05_01-silt\design\sheet files\PH IB- FRP2_BA-1\215510519-002-01-ET.dwg(02/03/2016)


REV NO.	REVISION	DATE	DRAWN BY / EXP NO.	CHECKED BY / EXP NO.	WM APPROVED BY:
3	REVISE PER RAI# 1, RENUMBER PAGES	SEP/16	AS/102871	RQS/89561	
2	REVISE PHASE IIB PROJECT BOUNDARY	6/28/16	AS/102871	RQS/89561	
1	REVISED SOUTH MOUND AND KAYAK LAUNCH	6/15/16	AS/102871	RQS/89561	

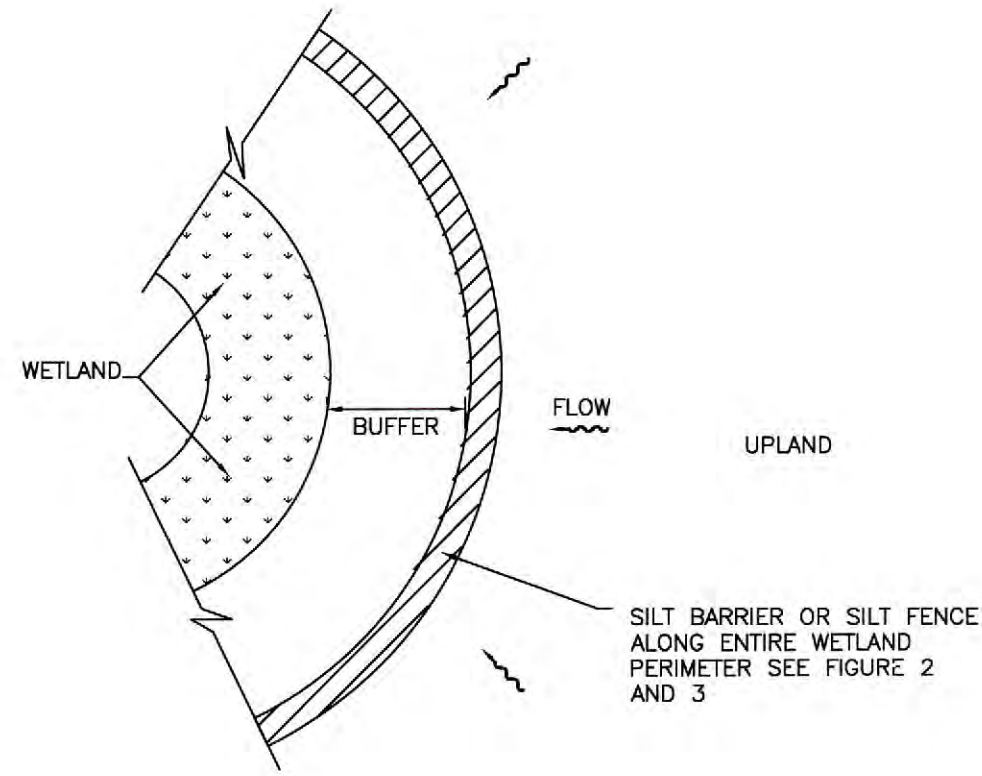
ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:	RQS/89561	03/2016
DRAWN BY:	AS/102871	03/2016
CHECKED BY:		
CONTRACT ADMIN. BY:		

**Stantec**
6000 Professional Parkway East, Sarasota, FL 34240-8414
Phone 941-907-6900 • Fax 941-907-6910
Certificate of Authorization #27015 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyright to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

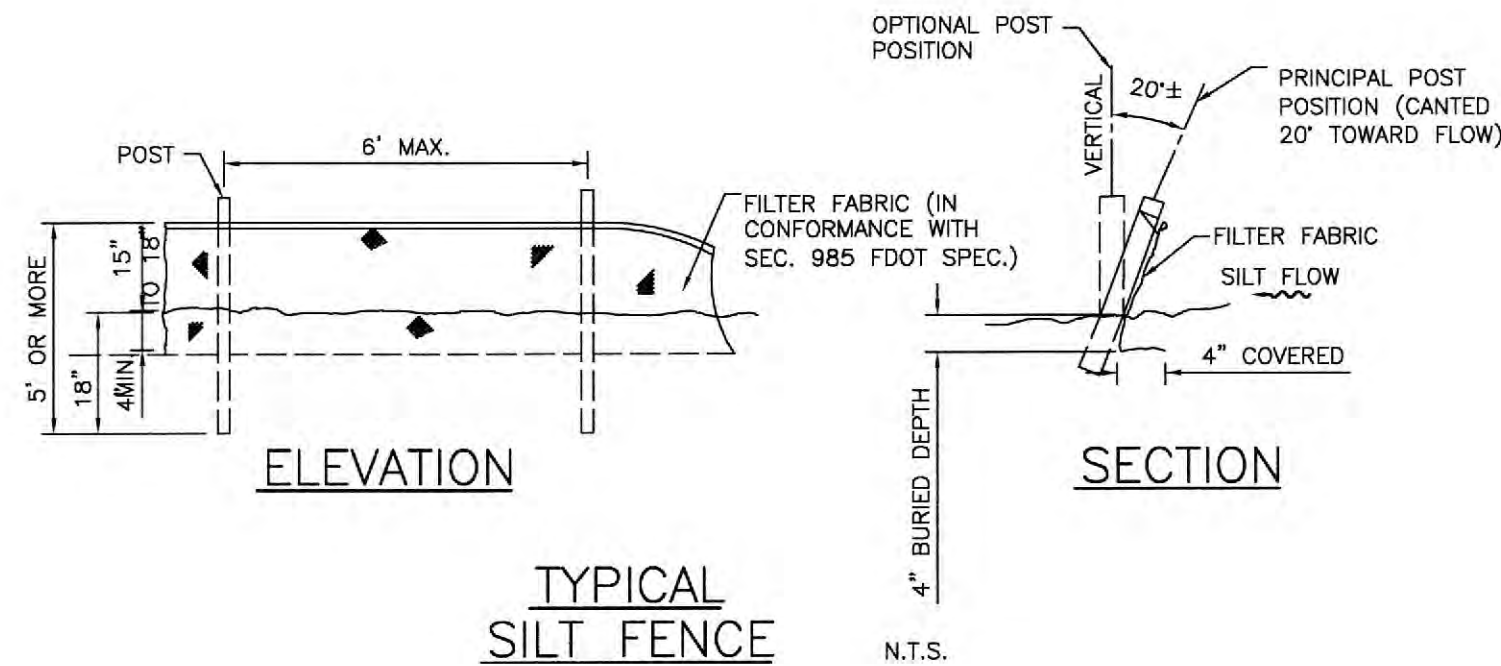
CLIENT:	MANATEE BOARD OF COUNTY COMMISSIONERS	DATE:	MARCH 2016	TITLE:	BEST MANAGEMENT PRACTICES PLAN
PROJECT:	ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION	HORIZONTAL SCALE:			
		VERTICAL SCALE:			
		SHEET: 23 OF 26	TWP: 34S	AGE: 16E	CROSS REFERENCE FILE NO.:
				PROJECT NUMBER:	215510519
				SHEET NUMBER:	31 OF 32





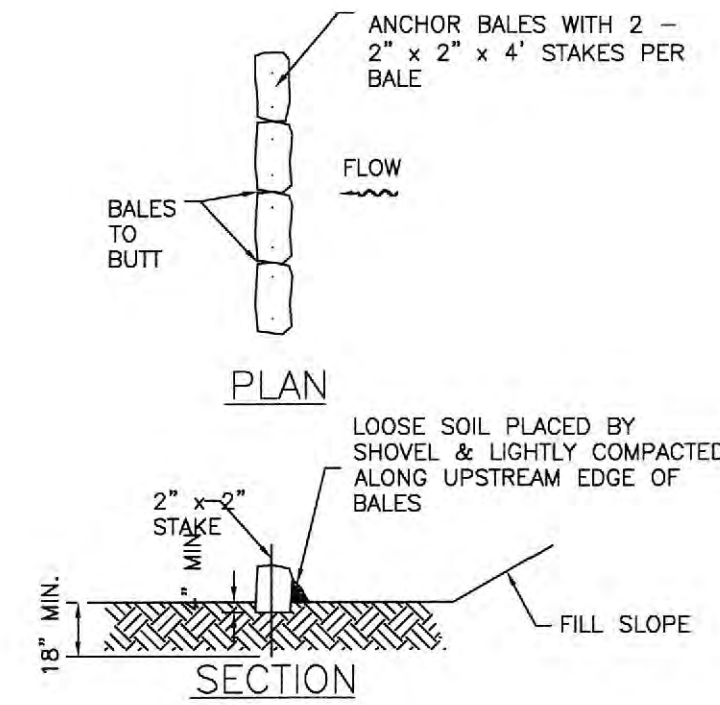
WETLAND BUFFER

FIGURE 1



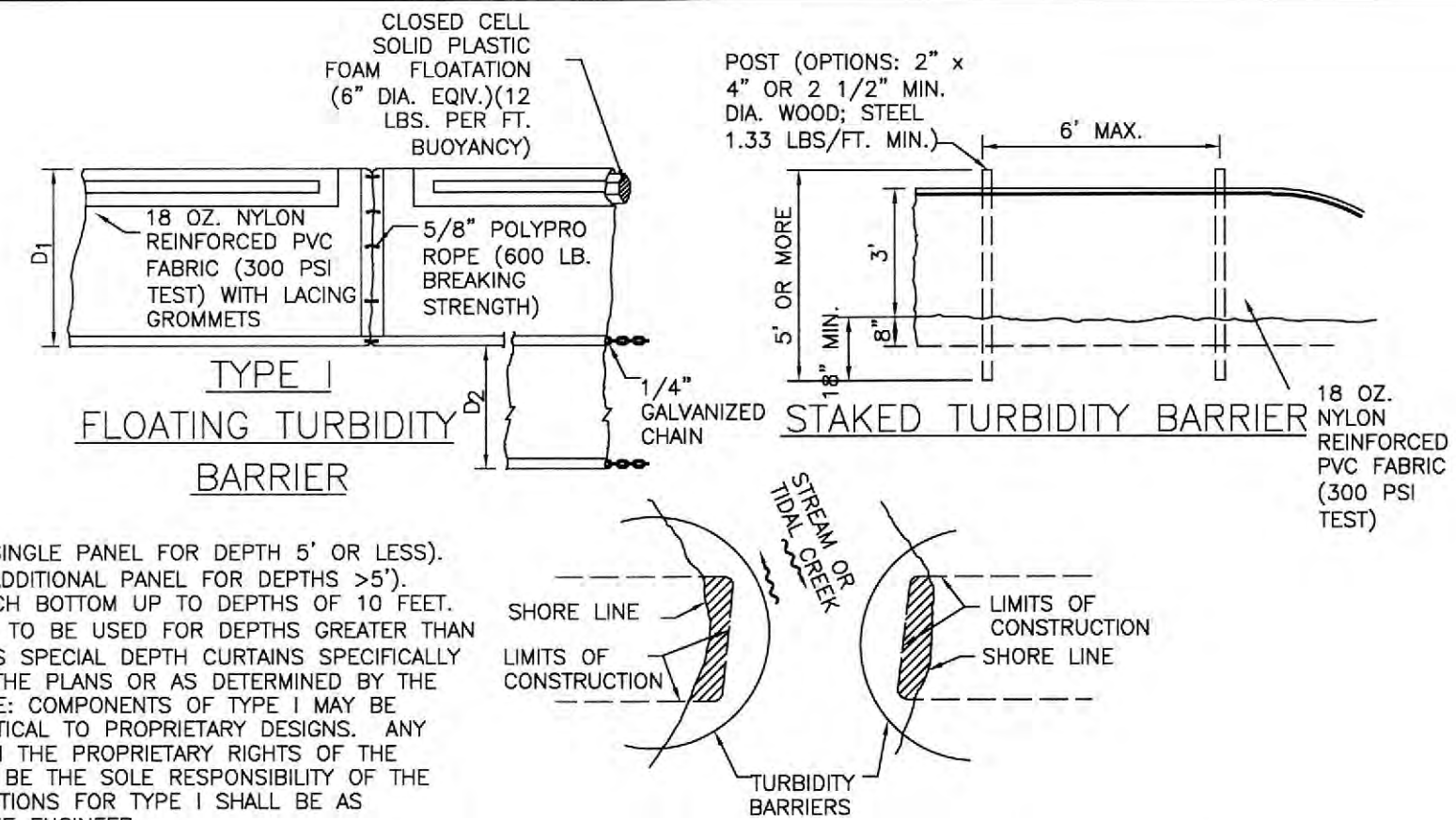
TYPICAL SILT FENCE

FIGURE 2



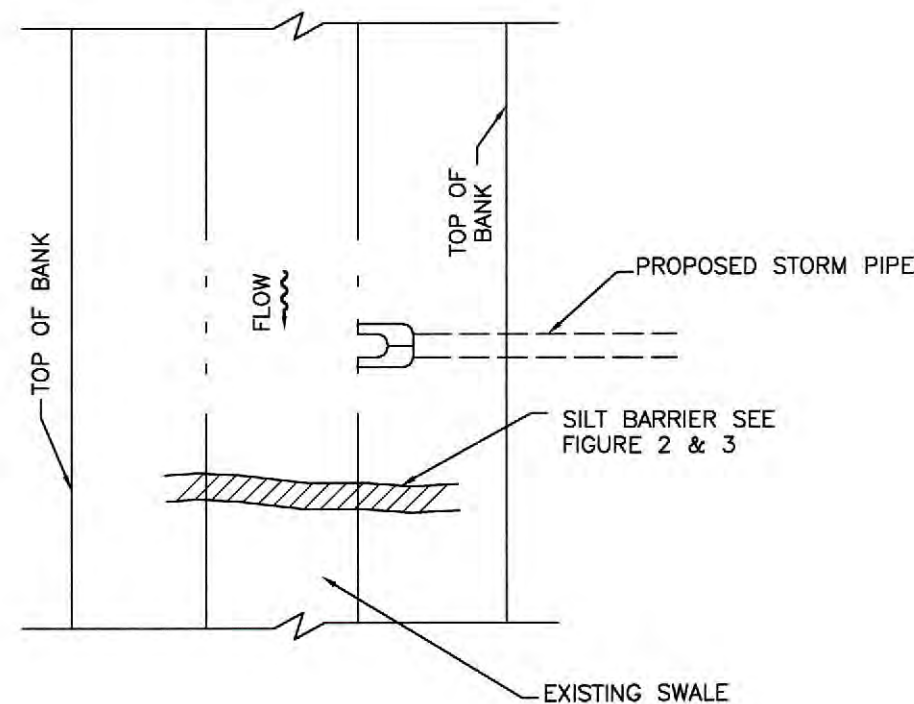
TYPICAL BALE SILT BARRIER

FIGURE 3



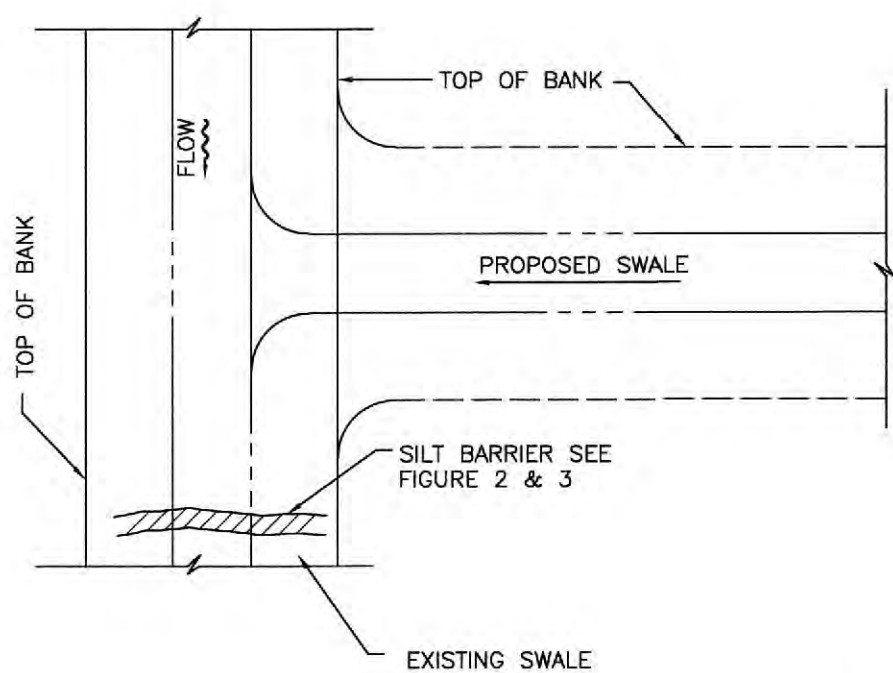
- NOTES:
1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
 2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
 3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
 4. NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.

- NOTE:
- TURBIDITY BARRIERS FOR FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATION OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. THE BARRIER TYPE(S) WILL BE AT THE CONTRACTORS OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS, HOWEVER PAYMENT WILL BE UNDER THE PAY ITEM(S) ESTABLISHED IN THE PLANS FOR FLOATING TURBIDITY BARRIER AND/OR STAKED TURBIDITY BARRIER. POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



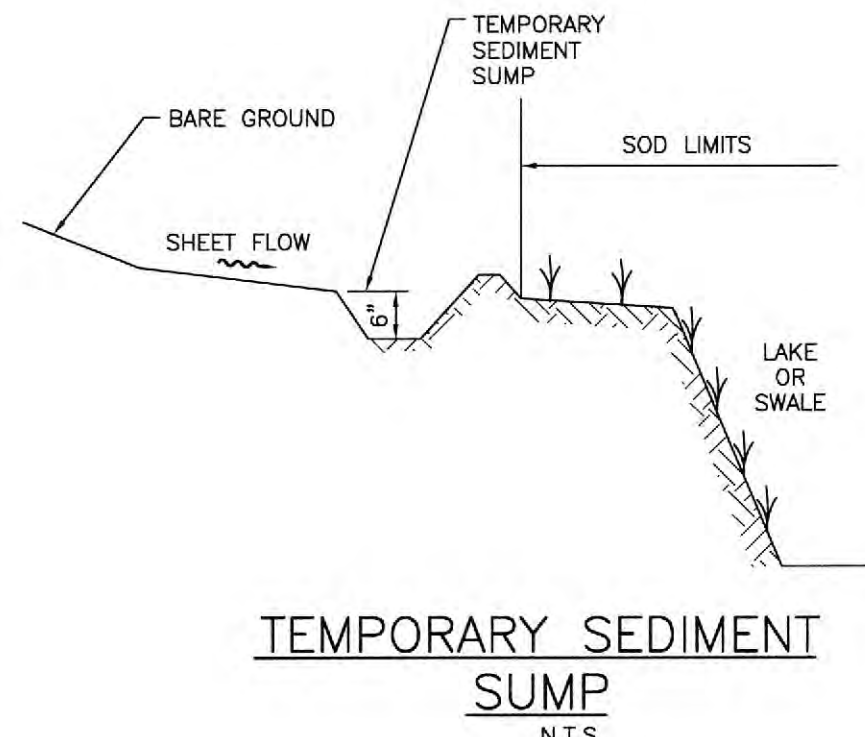
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE

FIGURE 5



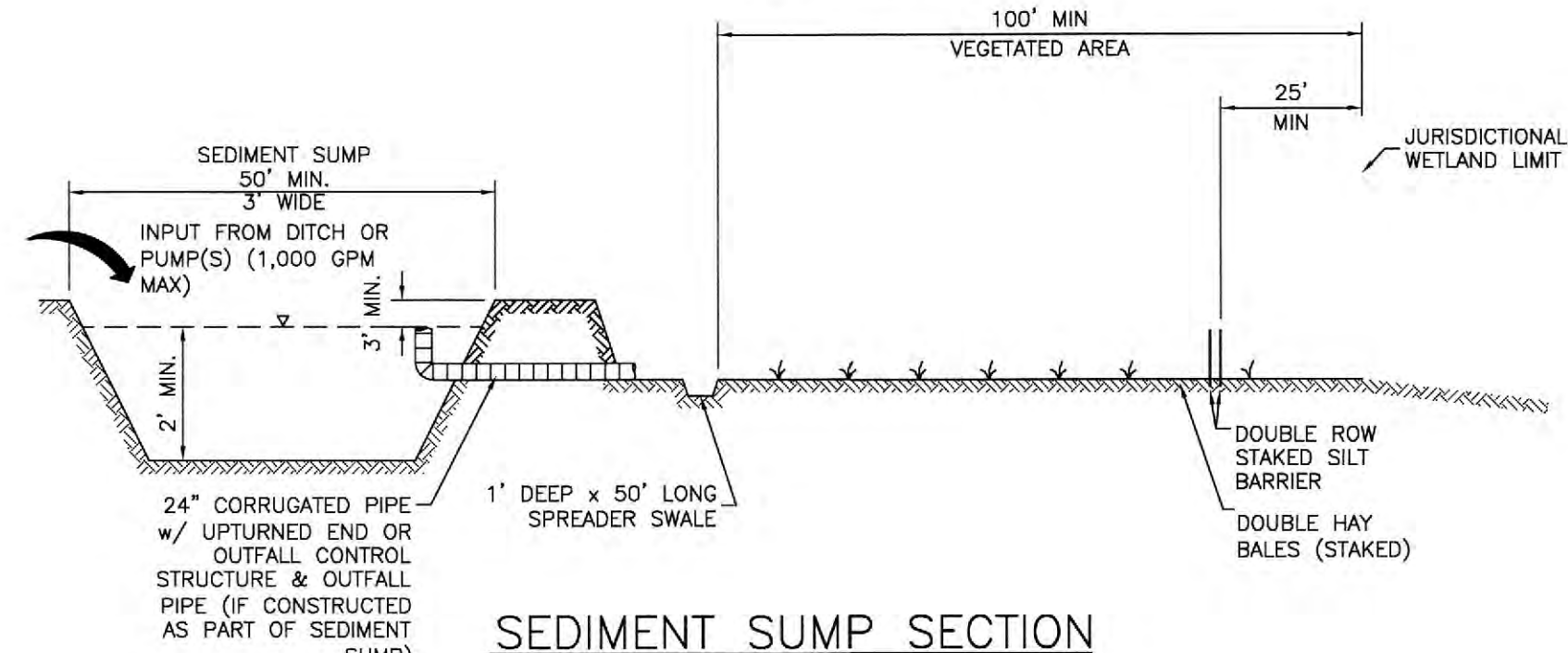
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE

FIGURE 6



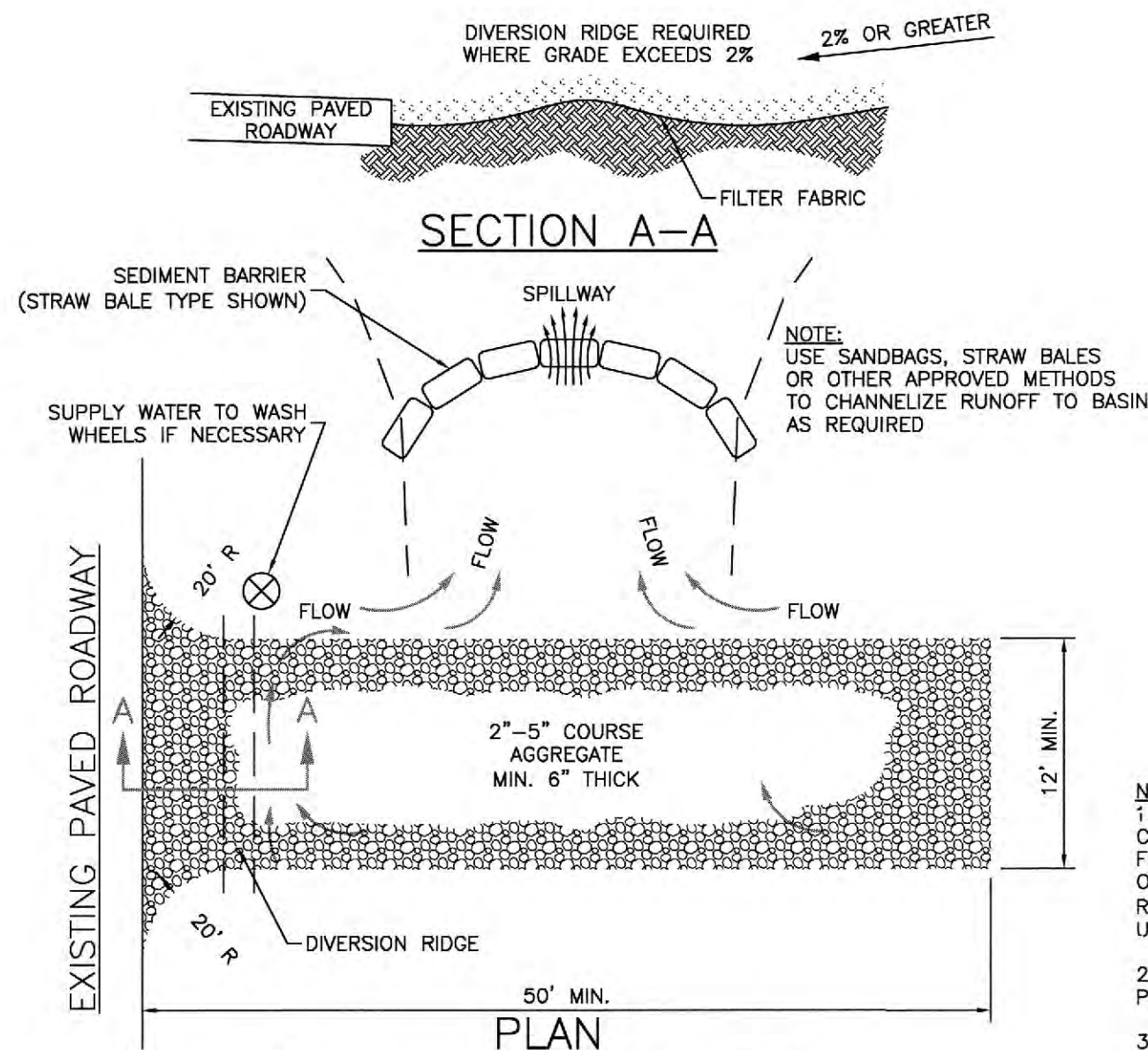
TEMPORARY SEDIMENT SUMP

FIGURE 7



SEDIMENT SUMP SECTION

FIGURE 8



TEMPORARY CONSTRUCTION ENTRANCE DETAIL

N.T.S.

- NOTE:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

NOTES:

1. THE CONTRACTOR SHALL ABIDE ALL APPLICABLE CONDITIONS OF THE REGULATORY AGENCY PERMITS AND HAVE COPIES OF THE PERMITS ON SITE. IF IT IS NECESSARY FOR GROUNDWATER DEWATERING TO DISCHARGE OFFSITE, THEN THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR OBTAINING AND/OR MODIFYING ALL APPLICABLE PERMITTING FOR THE DISCHARGE OF GROUNDWATER DEWATERING AND FOR COMPLYING WITH ALL SWFWMD AND FDEP PERMITTING CONDITIONS.
2. THE CONTRACTOR SHALL STAGE CONSTRUCTION IN PHASES WHENEVER POSSIBLE TO MINIMIZE SOIL LOSS AND CONTROL EROSION.
3. THE CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEEPED AS REQUIRED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SHALL BE COVERED WITH A TARPULIN.
4. ALL EXCAVATION, AND ACCESS TO AND FROM CONSTRUCTION AREAS SHALL BE WITHIN THE LIMITS OF THE PROJECT AREA.
5. THE CONTRACTOR SHALL CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT AND SHALL USE WATER, STRAW MULCH, OR OTHER SUITABLE MATERIAL AS REQUIRED.
6. AT A MINIMUM, SILT FENCES, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA.
7. ALL CONSTRUCTION DEWATERING (IF NECESSARY) SHALL BE CONTAINED ONSITE AND ALLOWED TO INFILTRATE THE SOIL UNLESS FDEP PERMITTING IS OBTAINED FOR OFFSITE DISCHARGE. ALL DEWATERING GROUNDWATER DISCHARGE SHALL BE ROUTED THROUGH A TEMPORARY SEDIMENT SUMP PRIOR TO DISCHARGE TO WETLANDS, OTHER SURFACE WATER, OR OFFSITE. THE GENERAL PROCESS OF THE DEWATERING SYSTEM, AS DEPICTED HEREIN, SHALL BE ADHERED TO DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL APPLICABLE APPROVALS FOR ANY MODIFICATIONS HE PROPOSES.
8. THE DEWATERING SYSTEM SHALL USE A PUMP AND PIPING THAT IS LESS THAN 6 INCHES IN DIAMETER AND OPERATE LESS THAN A TOTAL OF SIX MONTHS. ANY DEVIATION FROM THIS REQUIREMENT SHALL REQUIRE A WATER USE PERMIT. THE COST OF A WATER USE PERMIT AND ASSOCIATED MATERIALS SHALL BE BORNE BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL ERECT SILT FENCE, STAKED HAY BALES, STAKED TURBIDITY BARRIERS, AND FLOATING TURBIDITY BARRIERS PRIOR TO COMMENCEMENT OF EXCAVATION/GRADING ACTIVITY.
10. REQUIRED EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED AND MAINTAINED AS REQUIRED THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.
11. EROSION AND SEDIMENT CONTROL DEVICES (SILT FENCE, TURBIDITY BARRIERS, ETC.) ARE DEPICTED IN APPROXIMATE LOCATIONS AND SHALL BE ADJUSTED AS NECESSARY WITH THE DIRECTION OF THE PROJECT ECOLOGIST.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL EROSION, SEDIMENT AND TURBIDITY CONTROL DEVICES AT THE COMPLETION OF THE PROJECT.
13. ALL ACTIVE IN-WATER WORK SHALL BE ENCLOSED WITH FLOATING TURBIDITY BARRIERS.
14. TURBIDITY CONTROL DEVICES SHALL BE MAINTAINED AND SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION TO ENSURE THAT TURBIDITY LEVELS OUTSIDE THE ACTIVE IN WATER WORK AREA DO NOT EXCEED ALLOWABLE LEVELS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT TURBIDITY CONTROL DEVICES ARE INSPECTED DAILY AND MAINTAINED IN GOOD WORKING ORDER SO THAT THE TURBIDITY LEVELS OUTSIDE THE ACTIVE IN WATER WORK AREA DO NOT EXCEED ALLOWABLE LEVELS.
16. THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT TURBIDITY LEVELS WITHIN WATERS OF THE STATE SURROUNDING THE PROJECT AREA DO NOT EXCEED ALLOWABLE LEVELS. SUCH MEASURES INCLUDE BUT ARE NOT LIMITED TO, WORKING DURING SLACK TIDE, WORKING AT A TIME WHEN THE TIDAL RANGES ARE MINIMAL/LESS FREQUENT, AND WORKING WITHIN THE PROJECT AREA AT MINIMAL INTENSITY.
17. ALL PRACTICABLE AND NECESSARY EFFORTS SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, WETLANDS, AND OFFSITE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
18. ALL EROSION AND TURBIDITY CONTROL PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR IN COMPLIANCE WITH SWFWMD, MANATEE COUNTY, AND NPDES PERMIT REQUIREMENTS THROUGHT THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL DEVICES WEEKLY AND WITHIN 4 HOURS AFTER EACH RAINFALL EVENT OF 0.5 INCHES OR MORE. ALL MAINTENANCE SHALL BE PERFORMED WITHIN 24 HOURS OF INSPECTION.



CLIENT: MANATEE BOARD OF COUNTY COMISSIONERS
PROJECT: ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION

DATE: MARCH 2016
DESIGNED BY: RQS/89561
DRAWN BY: AS/102871
CHECKED BY:
CONTRACT ADMIN. BY:

TITLE: BEST MANAGEMENT PRACTICES DETAILS
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 215510519
SHEET NUMBER: 32 OF 32



CONSTRUCTION COMMENCEMENT NOTICE

Instructions: In accordance with Chapter 62-330.350(1)(d), F.A.C., complete and submit this form at least 48 hours prior to commencement of activity authorized by permit.

Permit No. _____ Application No. _____
Project _____
Name _____ Phase _____

Construction of the system authorized by the above referenced Environmental Resource
Permit and Application, is expected to commence on _____, 20____
and will have an estimated completion date of _____, 20____

PLEASE NOTE: If the actual construction commencement date is not known within 30 days of issuance of the permit, District staff should be so notified in writing. As soon as a construction commencement date is known, the permittee shall submit a completed construction commencement notice form.

_____ Permittee's or Authorized Agent's Signature	_____ Company	
_____ Print Name	_____ Title	_____ Date
_____ E-mail	_____ Phone Number	



AS-BUILT CERTIFICATION AND REQUEST FOR CONVERSION TO OPERATION PHASE

Instructions: Complete and submit this page within 30 days of completion of the permitted activities, as required by the permit conditions. **Any components of the permitted activities that are not in substantial conformance with the permit must be corrected or a modification of the permit will be required in accordance with Rule 62-330.315, Florida Administrative Code (F.A.C.).** The operation phase of the permit is effective when the construction certification for the entire permit/application is approved by the Agency. If the final operation and maintenance entity is not the permittee, the permittee shall operate the system, works or other activities temporarily until such time as the transfer to the operation entity is finalized (use Form 62-330.310(2)).

Permit No.:	Application No(s).	Permittee:
Project Name:		Phase (if applicable):

I HEREBY CERTIFY THAT (please choose accurately and check only one box):

- ☐ I hereby notify the Agency of the completion of construction of all the components of the system, works or other activities for the above referenced project and certify that it has been constructed in substantial conformance with the plans specifications and conditions permitted by the Agency. Any minor deviations will not prevent the system from functioning in compliance with the requirements of Chapter 62-330, F.A.C. Attached is documentary evidence of satisfaction of any outstanding permit conditions, other than long term monitoring and inspection requirements.
- ☐ At the time of final inspection, the works or activities were NOT completed in substantial conformance with the plans and specifications permitted by the Agency. (The registered professional shall describe the substantial deviation(s) in writing, and provide confirming depiction on the as-built drawings and information.)

If there were substantial deviations, plans must be submitted clearly labeled as “as-built” or “record” drawings reflecting the substantial deviations. If there are no substantial deviations, do not submit “as built” drawings.

For activities that require certification by a registered professional:

By:

Signature	Print Name	Fla. Lic. or Reg. No
! AFFIX SEAL !	Company Name	
	Company Address	Date

For activities that do not require certification by a registered professional:

By:

Signature	Print Name	
	Company Name	
	Company Address	Date



DRAWINGS AND INFORMATION CHECKLIST

Following is a list of information that is to be verified and/or submitted by the Registered Professional or Permittee:

1. All surveyed dimensions and elevations shall be certified by a registered Surveyor or Mapper under Chapter 472, F.S.
2. The registered professional's certification shall be based upon on-site observation of construction (scheduled and conducted by the registered professional of record or by a project representative under direct supervision) and review of as-built drawings, with field measurements and verification as needed, for the purpose of determining if the work was completed in accordance with original permitted construction plans, specifications and conditions.
3. If submitted, the as-built drawings are to be based on the permitted construction drawings revised to reflect any substantial deviations made during construction. Both the original design and constructed condition must be clearly shown. The plans need to be clearly labeled as "as-built" or "record" drawings that clearly highlight (such as through "red lines" or "clouds") any substantial deviations made during construction. As required by law, all surveyed dimensions and elevations required shall be verified and signed, dated and sealed by an appropriate registered professional. The following information, at a minimum, shall be verified on the as-built drawings, and supplemental documents if needed:
 - a. Discharge structures - Locations, dimensions and elevations of all, including weirs, orifices, gates, pumps, pipes, and oil and grease skimmers;
 - b. Detention/Retention Area(s) – Identification number, size in acres, side slopes (h:v), dimensions, elevations, contours or cross-sections of all, sufficient to determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems,
 - c. Side bank and underdrain filters, or exfiltration trenches - locations, dimensions and elevations of all, including clean-outs, pipes, connections to control structures and points of discharge to receiving waters;
 - d. System grading - dimensions, elevations, contours, final grades or cross-sections to determine contributing drainage areas, flow directions and conveyance of runoff to the system discharge point(s);
 - e. Conveyance - dimensions, elevations, contours, final grades or cross-sections of systems utilized to divert off-site runoff around or through the new system;
 - f. Benchmark(s) - location and description (minimum of one per major water control structure);
 - g. Datum- All elevations should be referenced to a vertical datum clearly identified on the plans, preferably the same datum used in the permit plans.
4. Wetland mitigation or restoration areas - Show the plan view of all areas, depicting a spatial distribution of plantings conducted by zone (if plantings are required by permit), with a list showing all species planted in each zone, numbers of each species, sizes, date(s) planted and identification of source of material; also provide the dimensions, elevations, contours and representative cross-sections depicting the construction.
5. Any additional information or outstanding submittals required by permit conditions or to document permit compliance, other than long-term monitoring or inspection requirements.

REQUEST FOR TRANSFER OF ENVIRONMENTAL RESOURCE PERMIT TO THE PERPETUAL OPERATION ENTITY

Instructions: Complete this form to transfer to the permit to the operation and maintenance entity. This form can be completed concurrently with, or within 30 days of approval of the As-Built Certification and Request for Conversion to Operation Phase (Form 62-330.310(1)). Please include all documentation required under Section 12.2.1(b) of Applicant's Handbook Volume 1. (see checklist below). **Failure to submit the appropriate final documents will result in the permittee remaining liable for operation and maintenance of the permitted activities.**

Permit No.:	Application No(s).	
Project Name:		Phase (if applicable):

- A. **REQUEST TO TRANSFER:** The permittee requests that the permit be transferred to the legal entity responsible for operation and maintenance (O&M).

By: _____

Signature of Permittee	Name and Title
Company	Company Address
Phone	City, State, Zip

- B. **AGREEMENT FOR SYSTEM OPERATION AND MAINTENANCE RESPONSIBILITY:** The below-named legal entity agrees to operate and maintain the works or activities in compliance with all permit conditions and provisions of Chapter 62-330, Florida Administrative Code (F.A.C.) and Applicant's Handbook Volumes I and II in perpetuity. Authorization for any proposed modification to the permitted activities shall be applied for and obtained prior to conducting such modification.

By: _____

Signature of Representative of O&M Entity	Name of Entity for O&M
Name and Title	Address
Email Address	City, State, Zip
Phone	Date

Enclosed are the following documents, as applicable:

- ☐ Copy of recorded transfer of title to the operating entity for the common areas on which the stormwater management system is located (unless dedicated by plat)
- ☐ Copy of all recorded plats
- ☐ Copy of recorded declaration of covenants and restrictions, amendments, and associated exhibits
- ☐ Copy of filed articles of incorporation and documentary evidence of active corporate status with the Department of State, Division of Corporations (for corporations)
- ☐ A completed, signed, and notarized affidavit attesting that the operating entity meets the requirements of Section 12.3 of Environmental Resource Permit Applicant's Handbook Volume I.(Note- this is optional, but aids in processing of this request)



REQUEST TO TRANSFER PERMIT

Instructions: Submit this form to the Agency within 30 days after any transfer of ownership or control of the real property where the permitted activity is located.

Note: Use of this form is not required when a valid permit is in the operation and maintenance phase. In such case, the owner must notify the Agency in writing within 30 days of a change in ownership or control of the entire real property, project, or activity covered by the permit. The notification may be letter, e-mail, or using this form, sent to the office that issued the permit. A processing fee is not required for this notice. The permit shall automatically transfer to the new owner or person in control, except in cases of abandonment, revocation, or modification of a permit as provided in Sections 373.426 and 373.429, F.S. (2012). If a permittee fails to provide written notice to the Agency within 30 days of the change in ownership or control, or if the change does not include the entire real property or activity covered by the permit, then the transfer must be requested using this form.

Permit No.: _____ Application No(s): _____ Date Issued: _____

Identification or Name of Surface Water Management System: _____

Phase of Surface Water Management System (if applicable): _____

PART 1: PROPOSED PERMIT HOLDER

The undersigned hereby notifies the Agency that I have acquired ownership or control of the land on which the permitted system is located through the sale or other legal transfer of the land. By signing below, I hereby certify that I have sufficient real property interest or control in the land in accordance with subsection 4.2.3 (d) of Applicant's Handbook Volume I; attached is a copy of my title, easement, or other demonstration of ownership or control in the land, including any revised plats, as recorded in the Public Records. I request that the permit be modified to reflect that I agree to be the new permittee. By so doing, I acknowledge that I have examined the permit terms, conditions, and drawings, and agree to accept all rights and obligations as permittee, including agreeing to be liable for compliance with all of the permit terms and conditions, and to be liable for any corrective actions required as a result of any violations of the permit after approval of this modification by the Permitting Agency. Also attached are copies of any recorded restrictive covenants, articles of incorporation, and certificate of incorporation that may have been changed as a result of my assuming ownership or control of the lands. As necessary, I agree to furnish the Agency with demonstration that I have the ability to provide for the operation and maintenance of the system for the duration of the permit in accordance with subsection 12.3 of Applicant's Handbook Volume I.

Name of Proposed Permit Holder: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____ Fax: _____ E-mail: _____



Signature of Proposed Permittee

Date

Title (if any)

PART 2: RESPONSIBLE REGISTERED PROFESSIONAL

Name of Registered Professional who will be responsible for system inspections and reporting as required by Chapter 62-330, F.A.C. (if applicable): _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____ Fax: _____ E-mail: _____

Enclosures:

- ☐ Copy of recorded transfer of title for surface water management system
- ☐ Copy of plat(s)
- ☐ Copy of recorded restrictive covenants, articles of incorporation, and certificate of incorporation
- ☐ Other _____