

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District Office 13051 North Telecom Parkway #101 Temple Terrace, Florida 33637-0926 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

December 8, 2021

Southwest Florida Water Management District c/o Jennette Seachrist, Resource Management Director 2379 Broad Street Brooksville, FL 34604 jennette.seachrist@watermatters.org

File No. 09-0412330-001-EG, Manatee County

Dear Mrs. Seachrist:

On November 10, 2021, we received your notice of intent to use a General Permit (GP), pursuant to Rule 62-330.485, Florida Administrative Code (F.A.C.) to perform the following activities:

Construct approximately 398 linear feet of riprap at the entrance to Three Sisters Springs within a manmade canal contiguous with Kings Bay, a Class III Outstanding Florida waterbody. The project is located at 301 SE Kings Bay Drive, Crystal River 34429, Section 28, Township 18 South, Range 17 East, Citrus County.

Your intent to use a general permit has been reviewed by Department staff for three types of authorizations: (1) regulatory authorization, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal authorization. The authority for review and the outcomes of the reviews are listed below. Please read each section carefully.

Your project did not qualify for the federal review portion of this verification request. Specifically, the activity is not covered by the State Programmatic General Permit. **Additional authorization must be obtained prior to commencement of the proposed activity**. This letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity. Please refer to the specific section(s) dealing with that portion of the review below for advice on how to proceed.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

1. Regulatory Review - Approved

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the General Permit under Rule 62-330.485, F.A.C. Any activities performed under a general permit are subject to general conditions required in Rule 62-330.405, F.A.C. (attached), and the specific conditions of Rule 62-330.485, F.A.C. (attached). Any deviations from these conditions may subject the permittee to enforcement action and possible penalties.

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Please be advised that the construction phase of the GP must be completed within five years from the date the notice to use the GP was received by the Department. If you wish to continue this GP beyond the expiration date, you must notify the Department at least 30 days before its expiration.

Authority for review- Part IV of Chapter 373, F.S., Title 62, F.A.C. and in accordance with the operating agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C.

2. Proprietary Review – Not required

The activity does not require further authorization under Chapter 253 of the Florida Statutes, or Chapters 18-20 or 18-21 of the Florida Administrative Code.

3. Federal Review – SPGP Not Approved

Your proposed activity as outlined on your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **shall be required** from the Corps. You must apply separately to the Corps using the Application for Department of the Army Permit (ENG 4345) or alternative as allowed by Corps regulations. More information on Corps permitting may be found online in the Jacksonville District Regulatory Division Sourcebook: (https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/).

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Additional Information

Please retain this general permit. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

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- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for

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extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,

Carla S. Burrmann, M.S., C.W.E.

Environmental Manager

Permitting & Waste Cleanup Programs

Southwest District

Enclosures:

Chapter 62-330.485, F.A.C.

General Conditions for All General Permits, Ch. 62-330.405, F.A.C.

Standard Manatee Conditions for In-Water Work

Attachments:

Project drawings, 14 pages

cc:

Jennifer Brunty, Stantec Consulting Service Inc., Jennifer.Brunty@stantec.com

 $Ken\ Frink,\ City\ of\ Crystal\ River,\ \underline{kfrink@crystalriverfl.com}$

ERP Permitting, FDEP, SW_ERP@floridadep.gov

Nikki Ross, FDEP, Nikki.A.Ross@floridadep.gov

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U.S. Army Corps of Engineers, tampareg@usace.army.mil

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Shorathuray Buie	
<i></i>	December 8, 2021
Clerk	Date

62-330.485 General Permit to the Department and Water Management Districts for Environmental Restoration or Enhancement.

- (1) A general permit is granted to the Department and Districts for the construction, alteration, operation, maintenance, removal and abandonment of projects to implement Department or District environmental restoration or enhancement projects.
- (2) The environmental restoration or enhancement project must comply with any one of the following procedures:
- (a) The project is part of a Surface Water Improvement and Management Plan developed pursuant to section 373.453, F.S.; or
- (b) The project is approved by the District Governing Board or the Secretary of the Department after conducting at least one public meeting; or
- (c) The project is wholly or partially funded through the Land Acquisition Trust Fund pursuant to Article X, Section 28 of the Florida Constitution, or through any successor trust fund.
- (3) When the activity is to be conducted by the Department, the Department shall provide the notice and any processing fee required by rule 62-330.071, F.A.C., to the appropriate District.
- (4) When the activity is to be conducted by a District, the District shall provide the notice and any required fee to the appropriate Department office.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.118(1), 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.418, 373.426, 403.814(1) FS. History—New 10-3-95, Amended 10-1-07, Formerly 62-341.485, Amended 10-1-13, 6-1-18.

62-330.405 General Conditions for All General Permits

The following general permit conditions are binding upon the permittee and are enforceable under chapter 373, F.S. These conditions do not apply to the general permit for stormwater management systems under section 403.814(12), F.S.

(1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may

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subject the permittee to enforcement action and revocation of the permit under chapter 373, F.S.

- (2) The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the "take" of listed species).
- (3) The general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- (4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- (5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- (6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with chapter 120, F.S., and section 373.429, F.S.
- (7) The general permit is not transferable to a new third party. To be used by a different permittee, a new notice to use a general permit must be submitted in accordance with rule 62-330.402, F.A.C. Activities constructed in accordance with the terms and conditions of a general permit are automatically authorized to be operated and maintained by the permittee and subsequent owners in accordance with subsection 62-330.340(1), F.A.C. Any person holding the general permit, persons working under the general permit, and owners of land while work is conducted under the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.
- (8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the general permit.
- (9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in the general permit.
- (10) A permittee's right to conduct a specific activity under the general permit is authorized for a duration of five years.
- (11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007)*, available at https://www.flrules.org/Gateway/reference.asp?No=Ref-04227, and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008)*, available at http://publicfiles.dep.state.fl.us/DEAR/Stormwater_Training_Docs/erosion-inspectors-manual.pdf.
- (12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize

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rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:

- (a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;
 - (b) The maximum width of the construction access area shall be limited to 15 feet;
- (c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and
- (d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.
- (13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.
- (14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
 - (15) Except where specifically authorized in the general permit, activities must not:
- (a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or
- (b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.
- (16) If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.
- (17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.
- (18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
- (a) All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- (b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
- (c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.
- (d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.

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- (e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- (19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- (20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History—New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-13, 6-1-18.

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STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at lmperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

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All project vessels

SPEED / NO WAKE

When a manatee is within 50 feet of work all in-water activities must

SHUT DOWN

1-888-404-FWCC(3922) Wildlife Alert: Report any collision with or injury to a manatee:

cell *FWC or #FWC

CONSTRUCTION PLANS FOR

THREE SISTERS SPRINGS CANAL SHORELINE STABILIZATION PROJECT #W431

SECTION 28, TOWNSHIP 18 SOUTH, RANGE 17 EAST, CITRUS COUNTY, FLORIDA

CLIENT:

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

2379 BROAD STREET BROOKSVILLE, FLORIDA (352) 796-7211

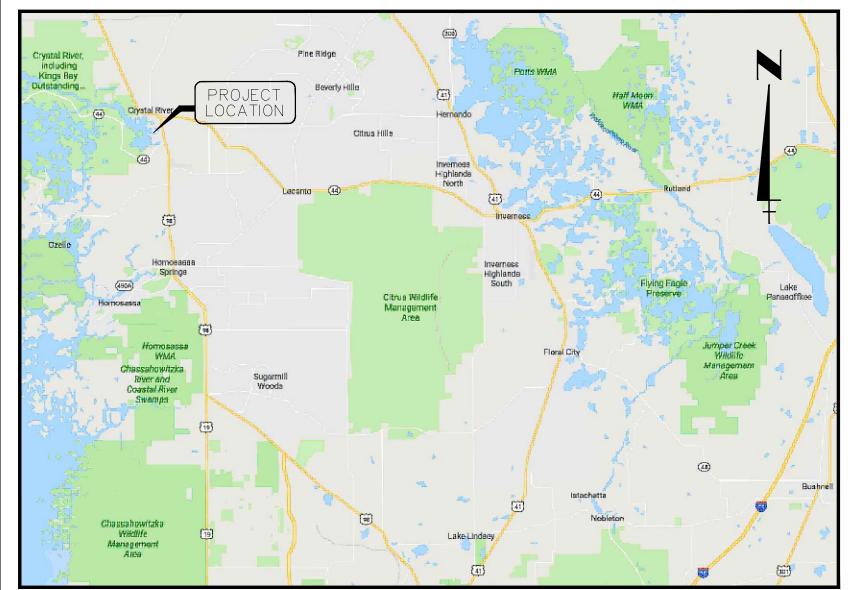
NOTES

GENERAL SITE CONSTRUCTION NOTES:

- 1. THE PURPOSE OF THIS PROJECT IS BANK STABILIZATION AND ECOLOGICAL ENHANCEMENT. THE CONTRACTORS WORKING ON THIS SITE SHALL TAKE GREAT CARE IN AVOIDING UNNECESSARY IMPACTS TO WETLANDS, VEGETATION, AND ANIMALS.
- 2. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED.
- 3. THE CONTRACTOR SHALL OBTAIN AND/OR VERIFY EXISTENCE OF ALL REQUIRED PERMITS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMITS NOT FURNISHED BY THE DISTRICT INCLUDING BUT NOT LIMITED TO NPDES AND TREE REMOVAL.
- 4. PRIOR TO THE START OF CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "SUNSHINE STATE ONE CALL (1-800-432-4770)", CITY/COUNTY PUBLIC WORKS DEPARTMENT AND ANY OTHER UTILITIES (ELECTRIC, PHONE, GAS, CABLE, ETC.). IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE.
- 5. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PLANS AND TECHNICAL SPECIFICATIONS UNLESS OTHERWISE NOTED, SPECIFIC REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S ROADWAY AND TRAFFIC DESIGN STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ARE INCORPORATED INTO THE CONTRACT DOCUMENTS BY REFERENCE. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION UNLESS OTHERWISE NOTED.
- 6. IF HUMAN REMAINS OR ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR MUST STOP WORK IMMEDIATELY AND PROMPTLY NOTIFY THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (DISTRICT) REPRESENTATIVE, FLORIDA DEPARTMENT OF STATE DIVISION OF HISTORICAL RESOURCES, AND PROJECT ENGINEER.
- 7. THE CONTRACTOR SHALL NOT ENTER UPON, OR ALTER THE WETLAND PRESERVE AREAS THAT MAY BE ONSITE OR DIRECTLY ADJACENT TO THE PROJECT AREA. ALL WORK PERFORMED IN THE VICINITY OF OPEN WATER, WETLANDS, AND WETLAND HABITAT RESTORATIONS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINE RESULTING FROM VIOLATION OF PERMIT CONDITIONS.
- BLEVATIONS SHOWN HEREON ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM 1988 BASED ON DISTRICT BENCHMARKS #780043 A (A 3/4" ALUMINUM ROD WITH 3" ALUMINUM DISC STAMPED "SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SURVEY CONTROL STATION, LB 6773 2011, NAVD 1988 780043 A" ENCASED IN CONCRETE AT LATITUDE 28 53 17.18N, LONGITUDE 82 35 22.12W) WITH A PUBLISHED ELEVATION OF 2.41' AND #780043 B (A 3/4" ALUMINUM ROD WITH 3" ALUMINUM DISC STAMPED "SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SURVEY CONTROL STATION, LB 6773 2011, NAVD 1988 780043 B" ENCASED IN CONCRETE AT LATITUDE 28 53 16.93N, LONGITUDE 82 35 22.10W) WITH A PUBLISHED ELEVATION OF 2.57'.
- 9. IF BENCHMARKS 780043A AND/OR 780043B ARE DISTURBED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING A FLORIDA REGISTERED PROFESSIONAL SURVEYOR, AT CONTRACTOR'S EXPENSE, TO REPLACE THE MONUMENTS IN THE SAME FASHION AS THEY WERE ORIGINALLY SET ALUMINUM ROD DRIVEN TO REFUSAL WITH DISTRICT LOGO CAP STAMPED WITH THE SAME NUMBER AS THE MARKER DESTROYED AND ADDITIONAL STAMPING OF 'RESET' WITH RESET DATE, ROD AND LOGO CAP WILL BE INCASED IN CONCRETE.

THE ELEVATION OF THE RESET MARKS WILL BE BASED ON A CLOSED LEVEL LOOP FROM A MINIMUM TWO NGS/SWFWMD BENCHMARKS. THESE EFFORTS WILL RESULT IN A DATA SHEET SUBMITTED TO THE DISTRICT FOR EACH RESET MARK. (A BLANK BM FORM FOR CONSULTANTS IS INCLUDED AS AN ATTACHMENT TO SECTION 01050 OF THE PROJECT TECHNICAL SPECIFICATIONS). METHODOLOGIES AND PROCEDURES WILL BE CONSISTENT WITH THOSE OUTLINED IN THE ATTACHMENT DOCUMENT REFERENCED ABOVE. THE REQUIRED ACCURACY WILL MATCH THAT AS LISTED ON THE DATA SHEET FOR THE DESTROYED MARK.

- 10. ANY CLEARING, GRUBBING AND EXCAVATED MATERIAL WILL BE REMOVED FROM SITE AND DISPOSED OF PROPERLY AT A LICENSED FACILITY OR AS DIRECTED BY THE DISTRICT REPRESENTATIVE.
- 11. ALL CONSTRUCTION DEBRIS WILL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE AND VERIFY ALL CUT AND FILL QUANTITIES FOR THE PROJECT. A BULKING/COMPACTION FACTOR SHOULD BE TAKEN INTO ACCOUNT WHEN FIGURING
- 13. IMMEDIATELY BEFORE REQUESTING FINAL INSPECTIONS, THE CONTRACTOR SHALL CHECK ALL LINES AND DRESS TO THE PROPER GRADES/CONTOURS. ALL AREAS ARE TO BE STABILIZED AND MAINTAINED UNTIL ACCEPTANCE. WHEN UPLAND AND WETLAND PLANTING AREAS ARE INDICATED ON DRAWINGS OR SPECIFIED, THE CONTRACTOR SHALL MAKE ALLOWANCES WHEN ROUGH GRADING FOR THE FINISHED GRADES IN THESE AREAS.
- 14. POST GRADING SOIL CONDITIONS SHALL BE APPROPRIATE FOR PLANTING IN ACCORDANCE WITH TECHNICAL
- 15. ANY DISTURBED AREAS ABOVE MEAN HIGH WATER, NOT HARDSCAPED OR LANDSCAPED, WILL BE SEEDED/MULCHED, HYDROSEEDED, SODDED OR PLANTED WITH MATERIALS AS SPECIFIED.
- 16. EXISTING BOARDWALKS TO BE PROTECTED OUTSIDE LIMITS OF SILT FENCE EXCEPT AS NOTED ON PLANS FOR TEMPORARY CONSTRUCTION ACCESS.
- 17. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE NPDES STORMWATER PERMITTING FOR CONSTRUCTION ACTIVITIES FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR THE APPLICABLE PERMITTING APPLICATION AND
- 18. 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 USACE, DISTRICT, AND FDEP PERMITTING CONDITIONS.
- 19. UPON COMPLETION OF CONSTRUCTION, BARE EARTH CONDITIONS ARE TO BE GRASSED TO REDUCE THE
- 20. PROPOSED LIMESTONE RIP—RAP LIMITS TO BE STAKED PRIOR TO INSTALLATION. LIMESTONE RIP—RAP LIMIT STAKED ALIGNMENT WILL BE FIELD REVIEWED BY DISTRICT REPRESENTATIVE AND/OR PROJECT ECOLOGIST/ENGINEER. STAKED LIMESTONE RIP—RAP LIMIT ALIGNMENT MAY BE REVISED AND FIELD STAKED BY OR UNDER THE SUPERVISION OF DISTRICT REPRESENTATIVE AND/OR PROJECT ECOLOGIST/ENGINEER WHERE IMPACTS TO ECOLOGICAL RESOURCES (E.G., TREES, ROOTS, OR DESIRABLE VEGETATION) MAY BE
- 21. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION RELATED TO PLANTING PLANS AND DETAILS.



LOCATION MAP



CONSTRUCTION ENTRANCE MAP

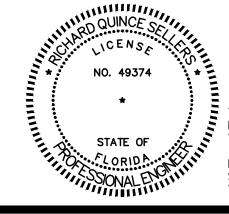
SCALE 1"=300"

INDEX TO SHEETS

SHEET NO.	DE	SCRIPTION				
1	COVE	R SHEET				
2	EXISTI	ING CONDITIONS AERIAL PHOTOGRAPH				
3	EXISTI	ING CONDITIONS SITE PLAN KEY SHEET				
4	EXISTI	ING CONDITIONS SITE PLAN				
5	SITE PLAN KEY SHEET					
6	SITE	PLAN				
7-11	CROS	S SECTIONS				
12	TYPIC	AL DETAILS				
13	BEST	MANAGEMENT PRACTICES PLANS				
14	BEST	MANAGEMENT PRACTICES DETAILS				
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	12/07/21	REVISED FOR CONSTRUCTION PLANS COVER SHEET PER FDEP COMMENTS	RQS/89561			
A	8/12/21	REV. NOTES PER SWFWMD COMMENTS	R.C.			
NO.	DATE	DESCRIPTION	BY			
		STATUS: REVISIONS				



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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY RICHARD QUINCE SELLERS, PE ON THE DATE ADJACENT TO THE SEAL.

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PROJECT NUMBER 177311300

PROJECT ECOLOGIST

CHECKED BY

JENNIFER BRUNTY

JULY 2021

RESERVED FOR STATUS AND DATE STAMPS

PROJECT MANAGER

DATE

MICHAEL A.G. BURTON

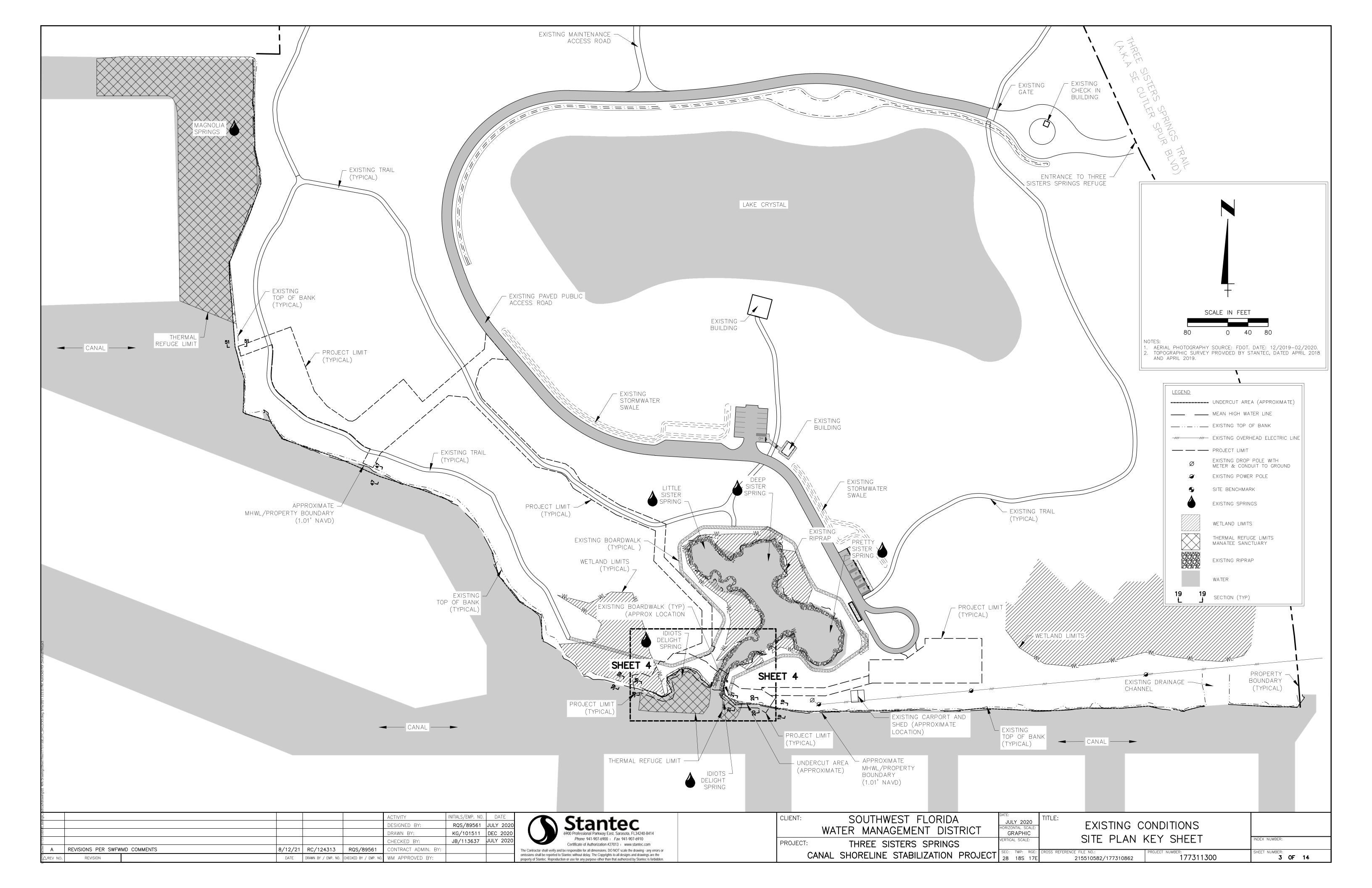
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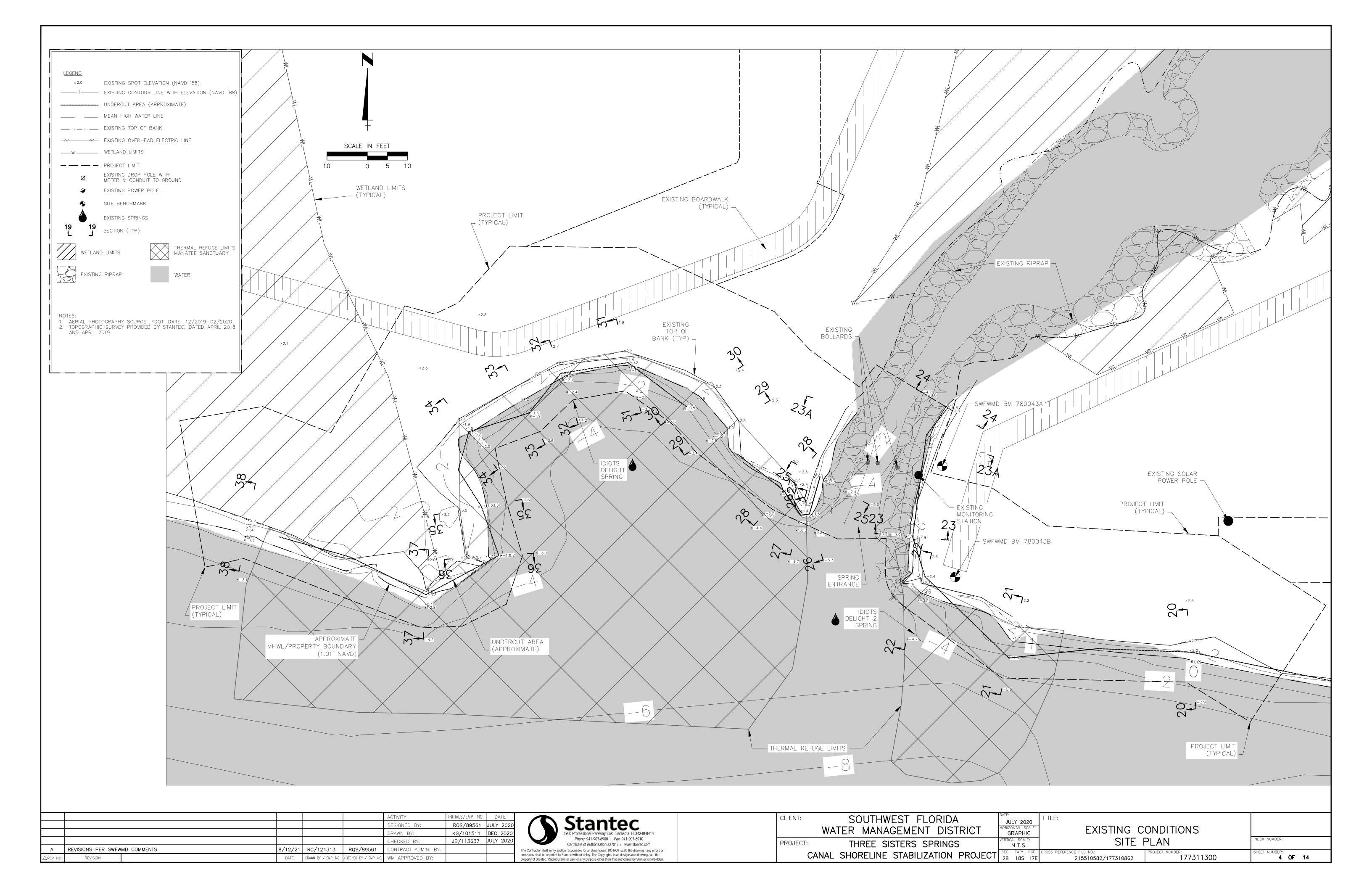
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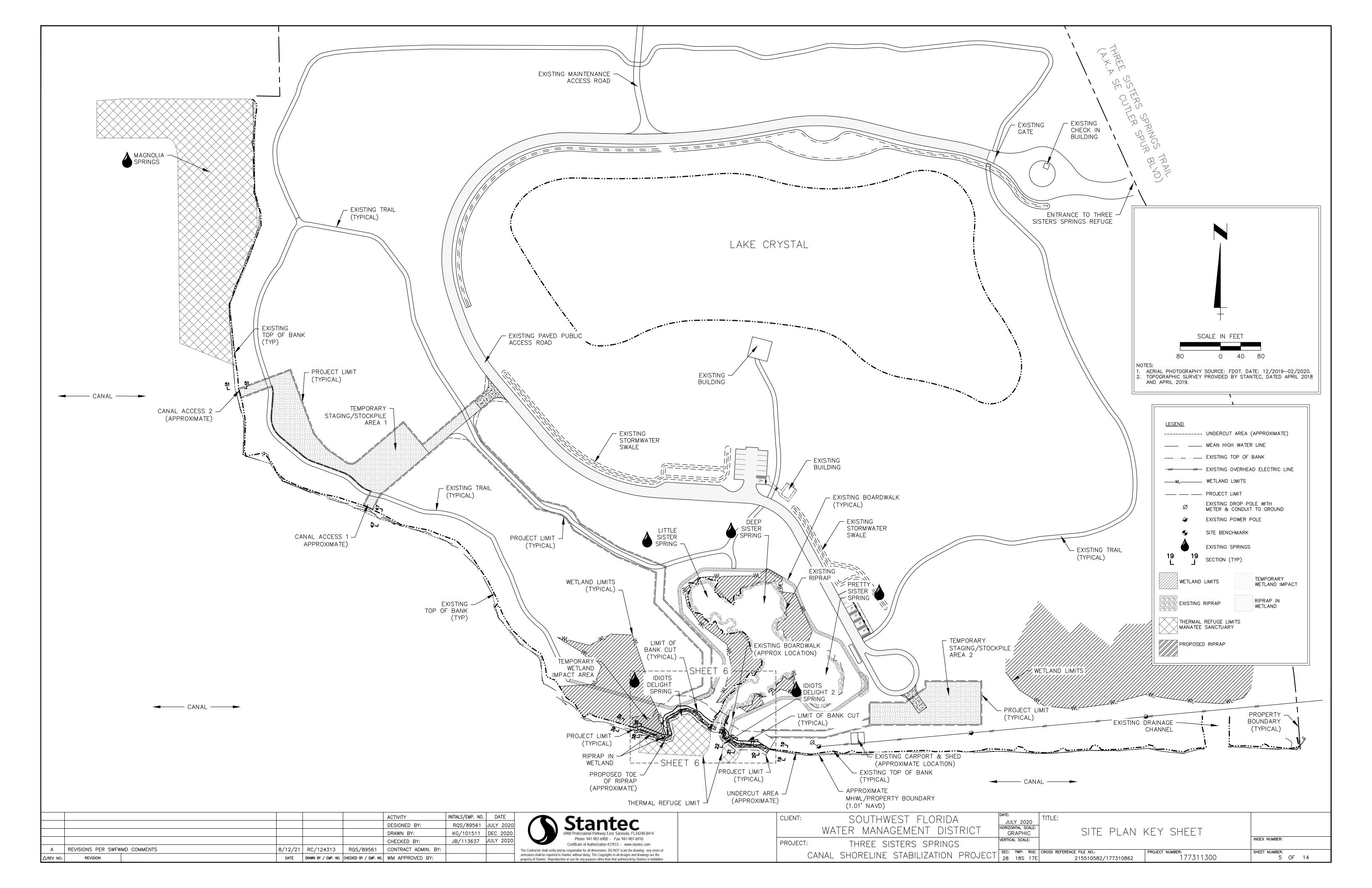
PROJECT ENGINEER

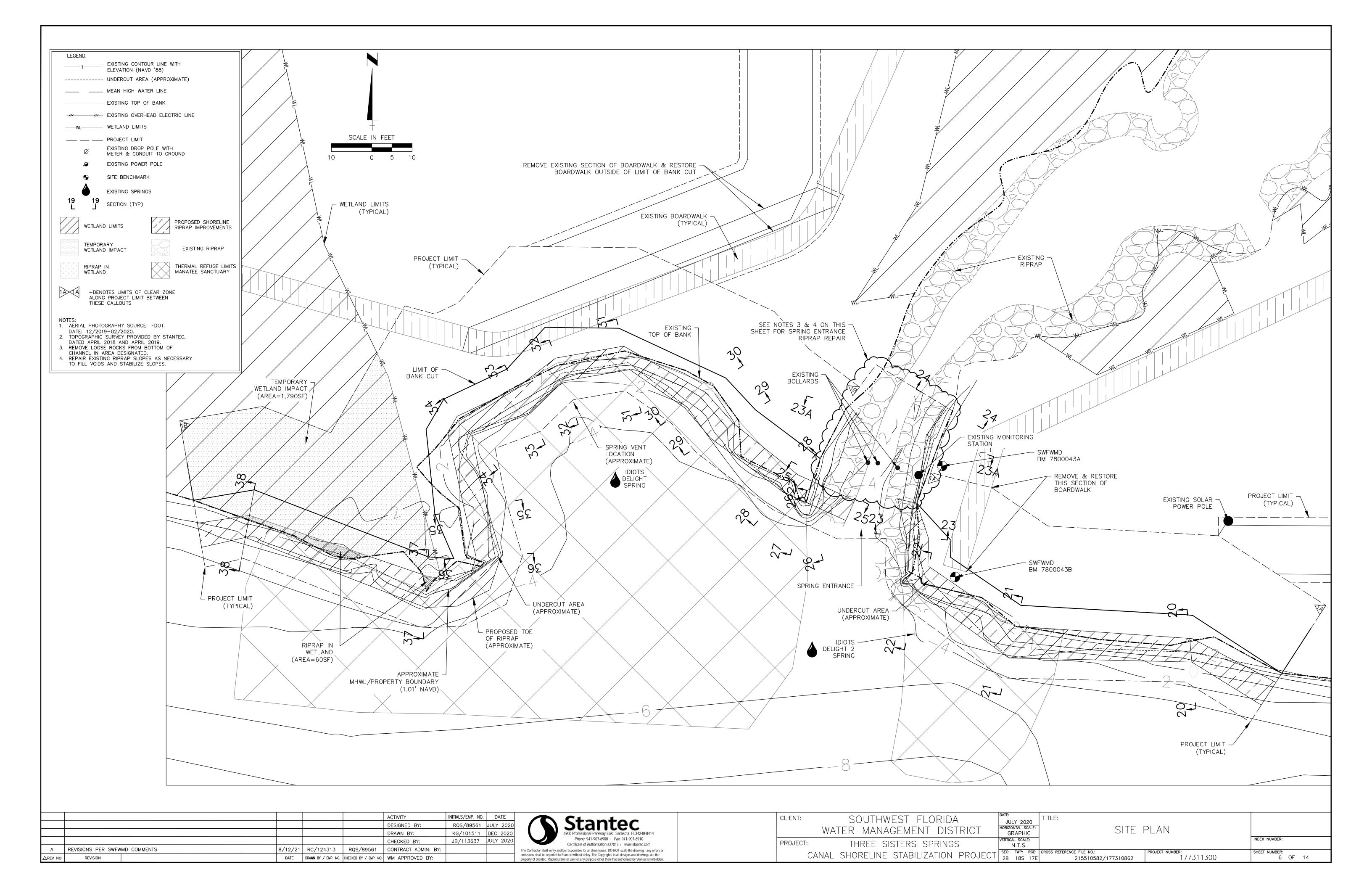
R. QUINCE SELLERS, P.E

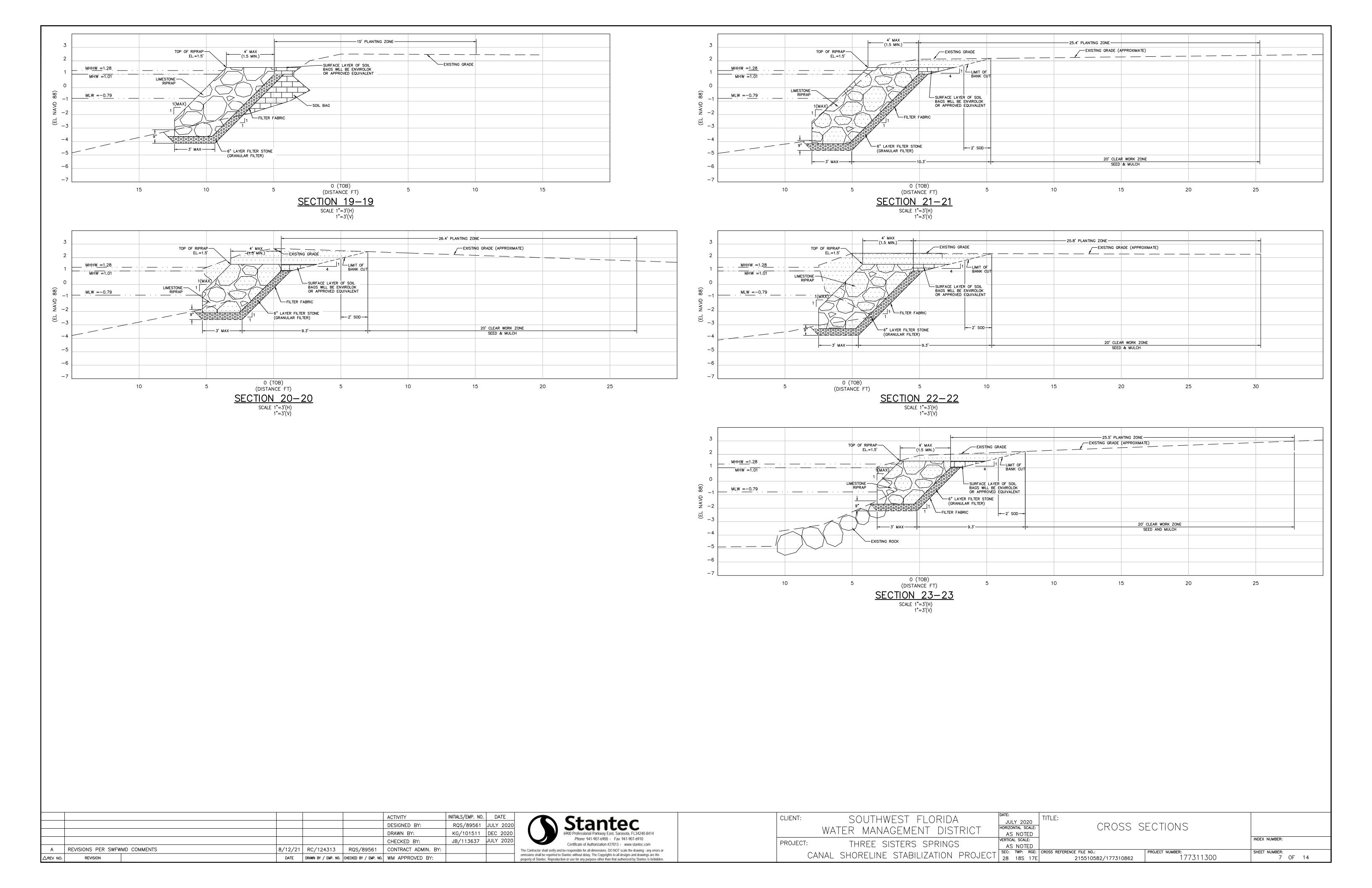


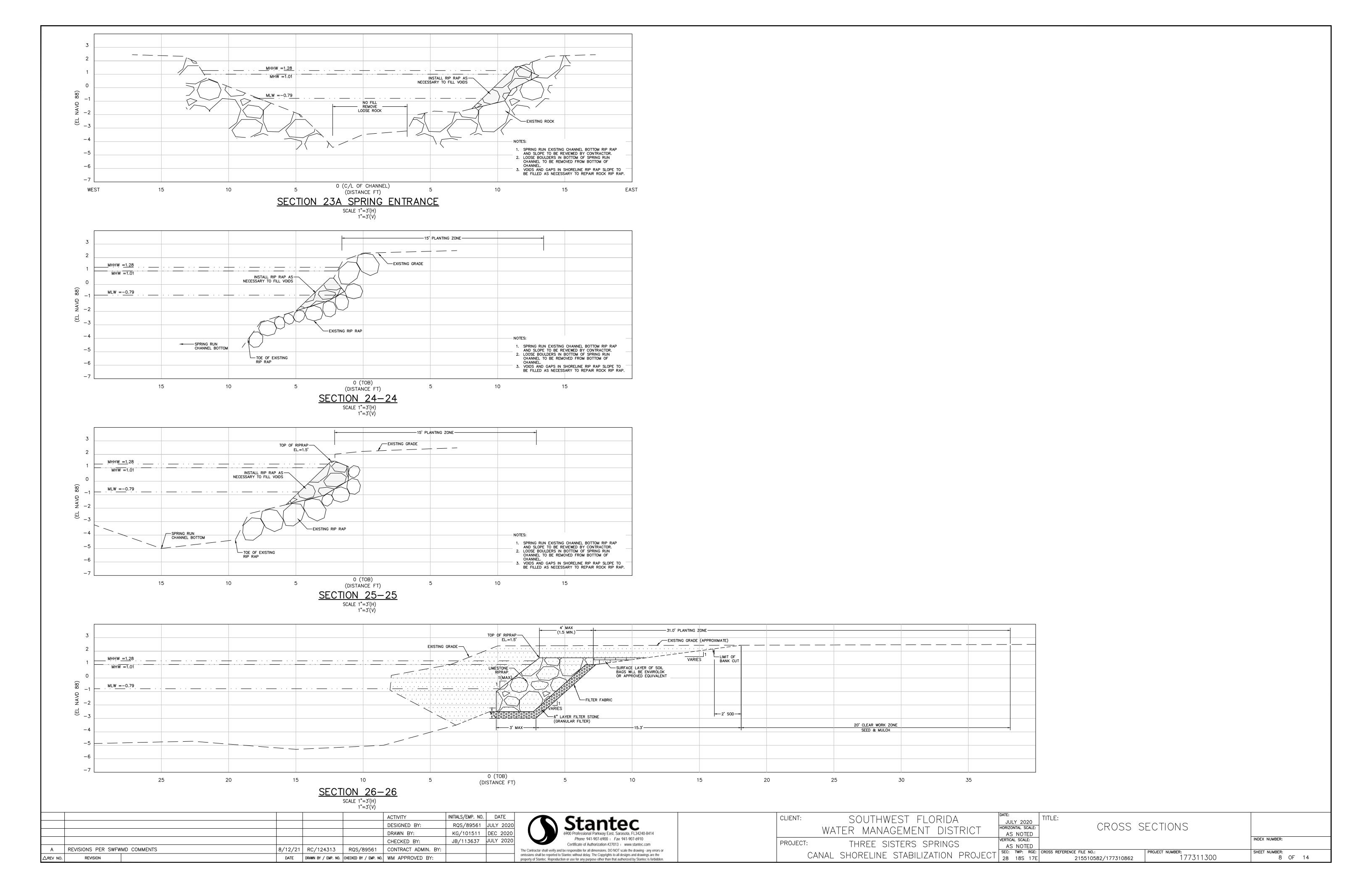


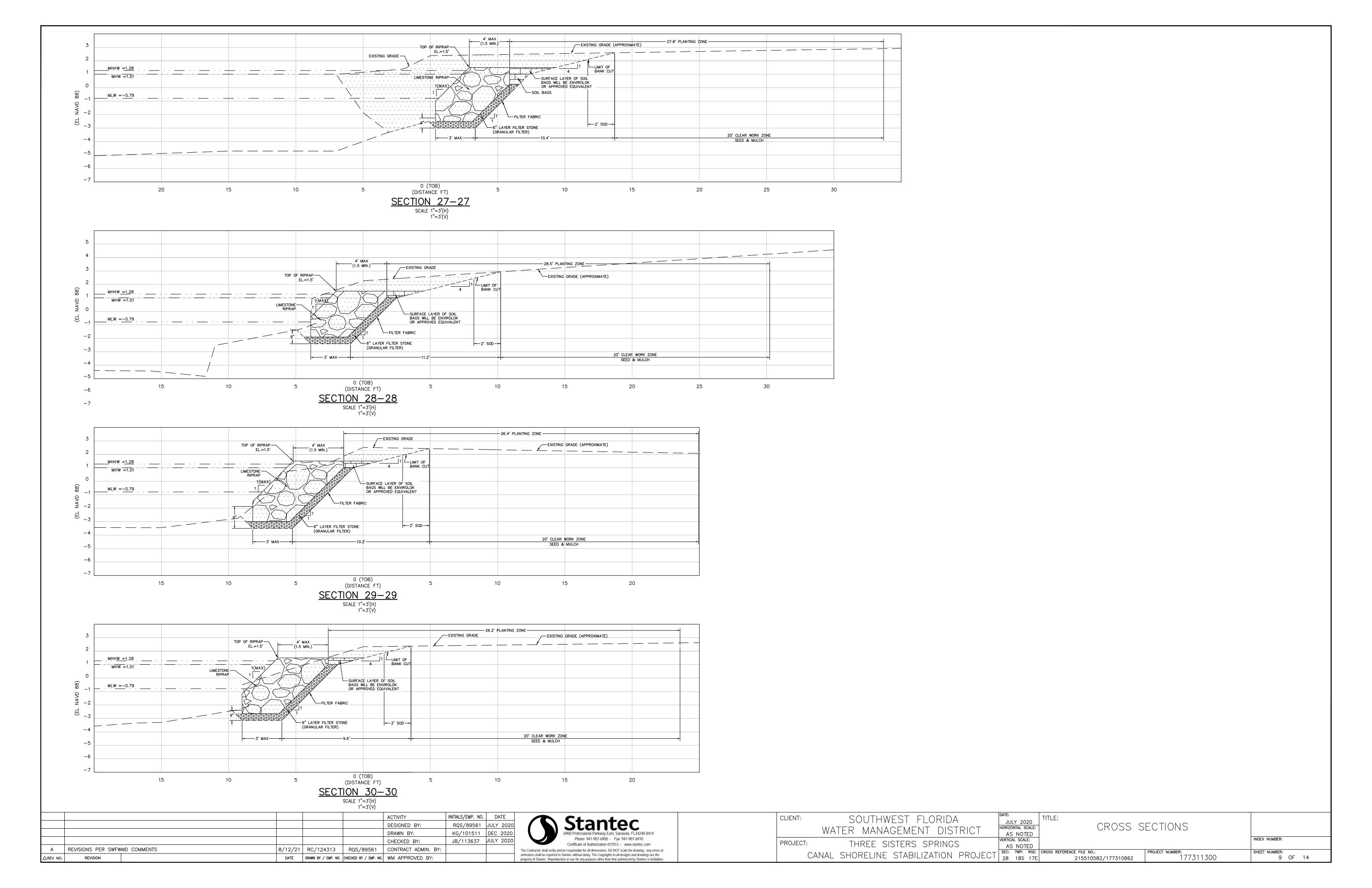


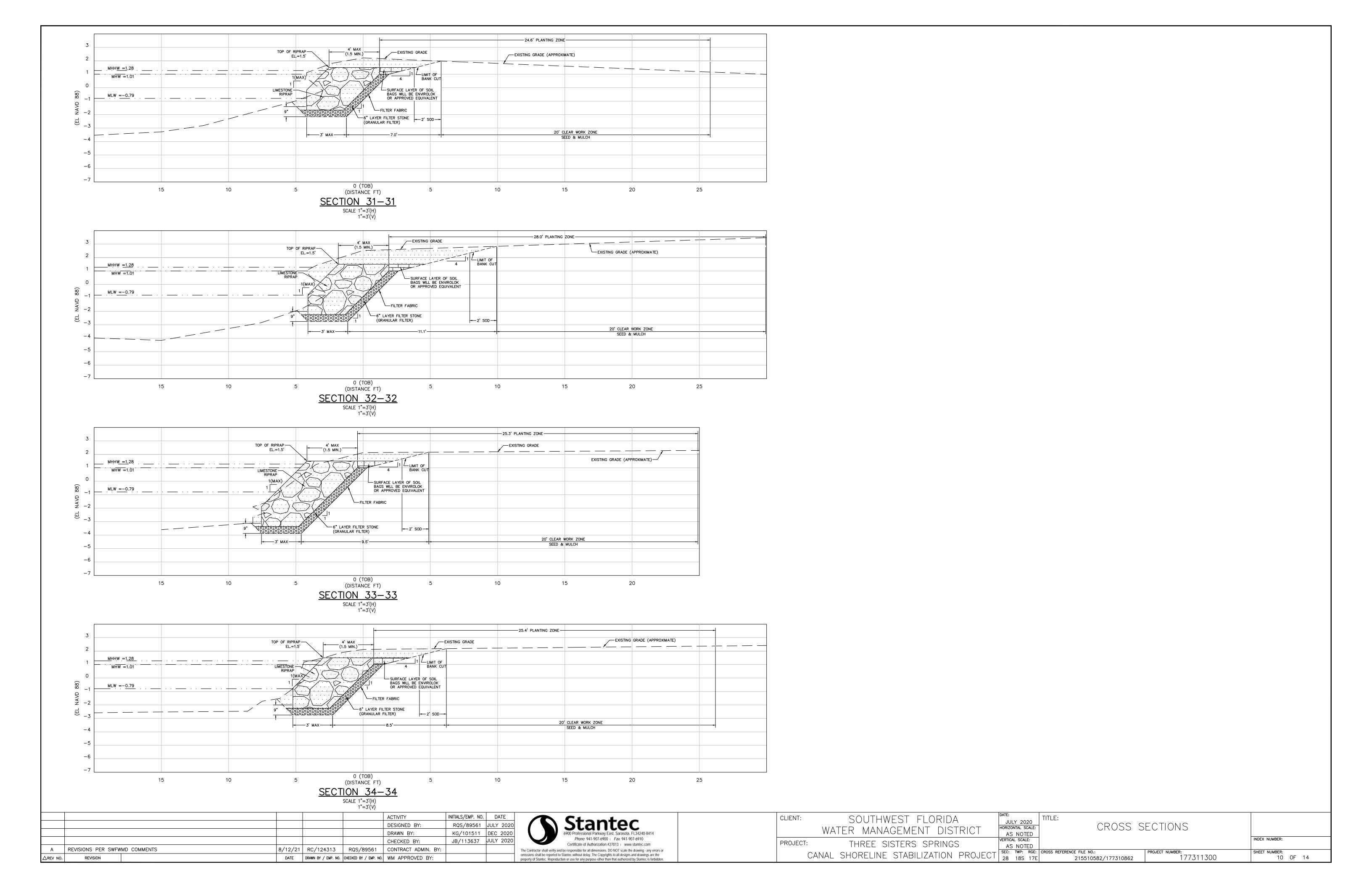


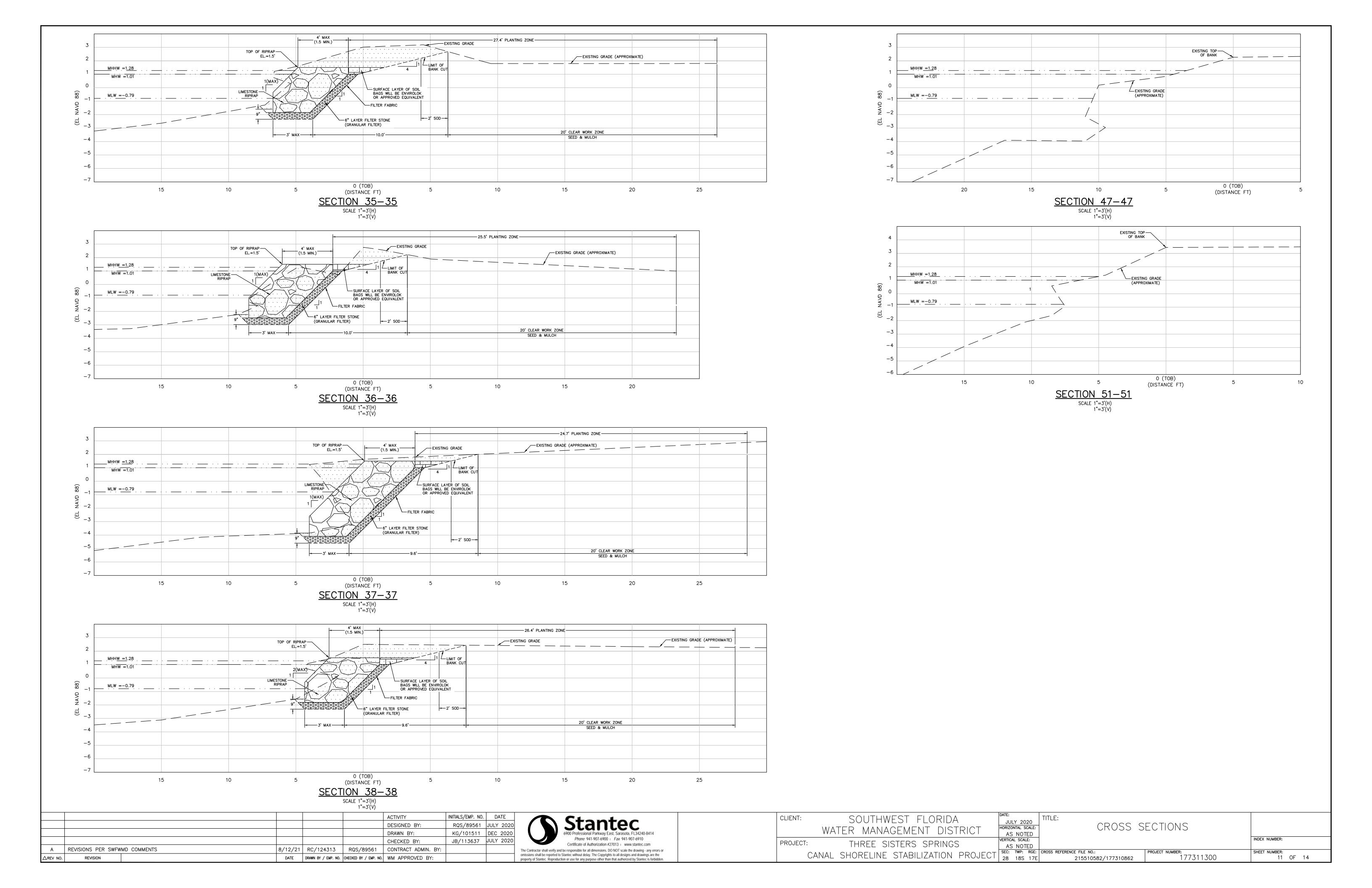












MANATEE PROTECTION

PART I - GENERAL

1.01 SUMMARY

THE SCOPE OF THIS SECTION IS TO INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF MANATEES AND MANATEE SPEED ZONES, AND THE NEED TO AVOID COLLISIONS WITH AND INJURY TO MANATEES. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER—RELATED ACTIVITIES FOR THE PRESENCE OF MANATEE(S).

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. SECTION 01530 TEMPORARY BARRIERS AND CONTROLS
- SECTION 02435 TURBIDITY CONTROL AND MONITORING

1.03 REFERENCES

- A. MARINE MAMMAL PROTECTION ACT OF 1972
- B. ENDANGERED SPECIES ACT OF 1973
- C. FLORIDA MANATEE SANCTUARY ACT OF 1978

PART II — PRODUCTS (NOT USED)

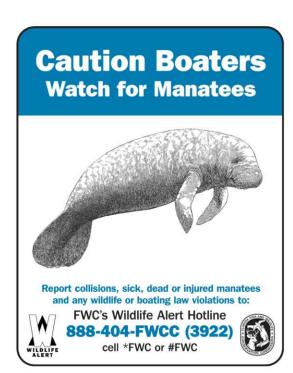
PART III - EXECUTION

1.01 MANATEE PROTECTION

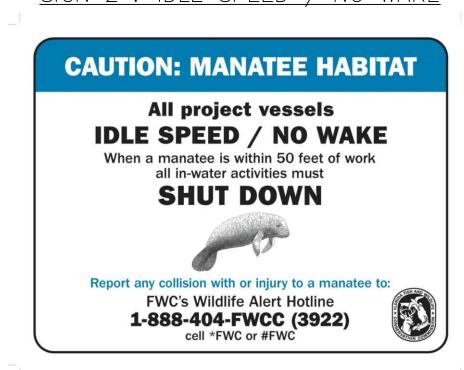
- A. THE CONTRACTOR SHALL ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING MANATEES, WHICH ARE PROTECTED UNDER THE MARINE MAMMAL PROTECTION ACT OF 1972, THE ENDANGERED SPECIES ACT OF 1973, AND THE FLORIDA MANATEE SANCTUARY ACT OF 1978. THE CONTRACTOR MAY BE HELD RESPONSIBLE FOR ANY MANATEE HARMED, HARASSED, OR KILLED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- B. SILTATION BARRIERS SHALL BE INSTALLED AND SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE MONITORED REGULARLY TO AVOID MANATEE ENTANGLEMENT OR ENTRAPMENT. BARRIERS SHALL NOT IMPEDE MANATEE MOVEMENT OR BLOCK MANATEE ENTRY TO OR EXIT FROM ESSENTIAL HABITAT.
- C. ALL VESSELS ASSOCIATED WITH THE PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE IMMEDIATE AREA AND WHILE IN WATER WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN FOUR FEET CLEARANCE FROM THE BOTTOM. ALL VESSELS SHALL FOLLOW ROUTES OF DEEP WATER WHENEVER POSSIBLE.
- D. IF A MANATEE IS SIGHTED WITHIN 100 YARDS OF THE PROJECT AREA, ALL APPROPRIATE PRECAUTIONS SHALL BE IMPLEMENTED BY THE CONTRACTOR TO ENSURE PROTECTION OF THE MANATEE. ALL IN-WATER OPERATIONS, INCLUDING VESSELS, MUST BE SHUTDOWN IF A MANATEE(S) COMES WITHIN 50 FEET OF THE OPERATION. ACTIVITIES WILL NOT RESUME UNTIL THE MANATEE(S) HAS MOVED BEYOND THE 50-FOOT RADIUS OF THE PROJECT OPERATION, OR UNTIL 30 MINUTES ELAPSES IF THE MANATEE(S) HAS NOT REAPPEARED WITHIN 50 FEET OF THE OPERATION. ANIMALS MUST NOT BE HERDED AWAY OR HARASSED INTO LEAVING.
- E. ANY COLLISION WITH AND/OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE DISTRICT'S REPRESENTATIVE AND TO THE "FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) MANATEE HOTLINE" AT 1-888-404-FWCC (1-888-404-3922). COLLISION AND/OR INJURY SHOULD ALSO BE REPORTED TO THE U.S. FISH AND WILDLIFE SERVICE IN JACKSONVILLE (1-904-731-3336) FOR NORTH FLORIDA OR VERO BEACH (1-772-562-3909) IN SOUTH FLORIDA.
- F. TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES, INCLUDING CONSTRUCTION/DREDGING ACTIVITIES. AWARENESS SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FWC MUST BE USED. SAMPLES OF MANATEE SIGNAGE ARE INCLUDED AT THE END OF THIS SPECIFICATION. ALL SIGNS SHALL BE REMOVED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. ONE (1) SIGN MEASURING AT LEAST THREE (3) FEET BY FOUR (4) FEET WHICH READS "CAUTION BOATERS: WATCH FOR MANATEES" SHALL BE POSTED IN A LOCATION WHERE IT IS PROMINENTLY VISIBLE TO WATER RELATED CONSTRUCTION CREWS. A SECOND SIGN SHALL BE POSTED IF VESSELS ARE ASSOCIATED WITH THE CONSTRUCTION, AND SHALL BE PLACED IN A LOCATION THAT IS PROMINENTLY VISIBLE TO THE VESSEL OPERATOR. THE SECOND SIGN SHALL BE AT LEAST 8½ INCHES BY 11 INCHES AND READ:

"CAUTION: MANATEE HABITAT. IDLE SPEED IS REQUIRED IF OPERATING A VESSEL IN THE CONSTRUCTION AREA. ALL EQUIPMENT MUST BE SHUTDOWN IF A MANATEE COMES WITHIN 50 FEET OF THE OPERATION. A COLLISION WITH AND/OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) AT 1-888-404-FWCC (1-888-404-3922) AND THE U.S. FISH AND WILDLIFE SERVICE AT (1-904-731-3336) FOR NORTH FLORIDA OR (1-772-562-3909) FOR SOUTH FLORIDA."

SIGN 1 : CAUTION MANATEE AREA



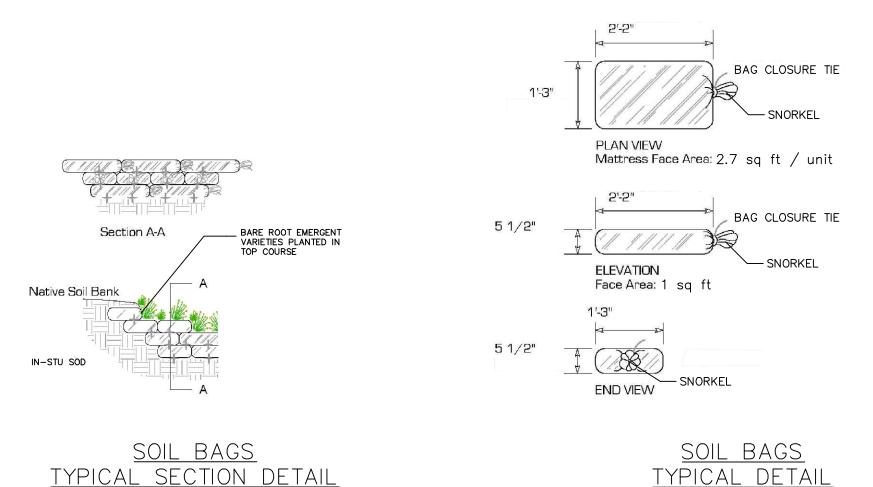
SIGN 2 : IDLE SPEED / NO WAKE



MANATEE PROTECTION PLAN

						ACTIVITY	INITIALS/EMP. NO.	DATE	
						DESIGNED BY:	RQS/89561	JULY 2020	
						DRAWN BY:	KG/101511	DEC 2020	
						CHECKED BY:	JB/113637	JULY 2020	
Α	REVISIONS PER SWFWMD COMMENTS		8/12/21	RC/124313	RQS/89561	CONTRACT ADMIN. BY:			
REV NO.	REVISION		DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:			





TYPICAL SOIL BAG SPECIFICATION: Calculated Unit Fill: $1.25~cu~ft~[.0354~m^3~]/$ unit Face Area: $1~sq~ft~[.093~m^2~]$ Mattress Face Area: $2.7~sq~ft~[.25~m^2~]/$ unit

SOIL BAG SYSTEM FILL MATERIALS

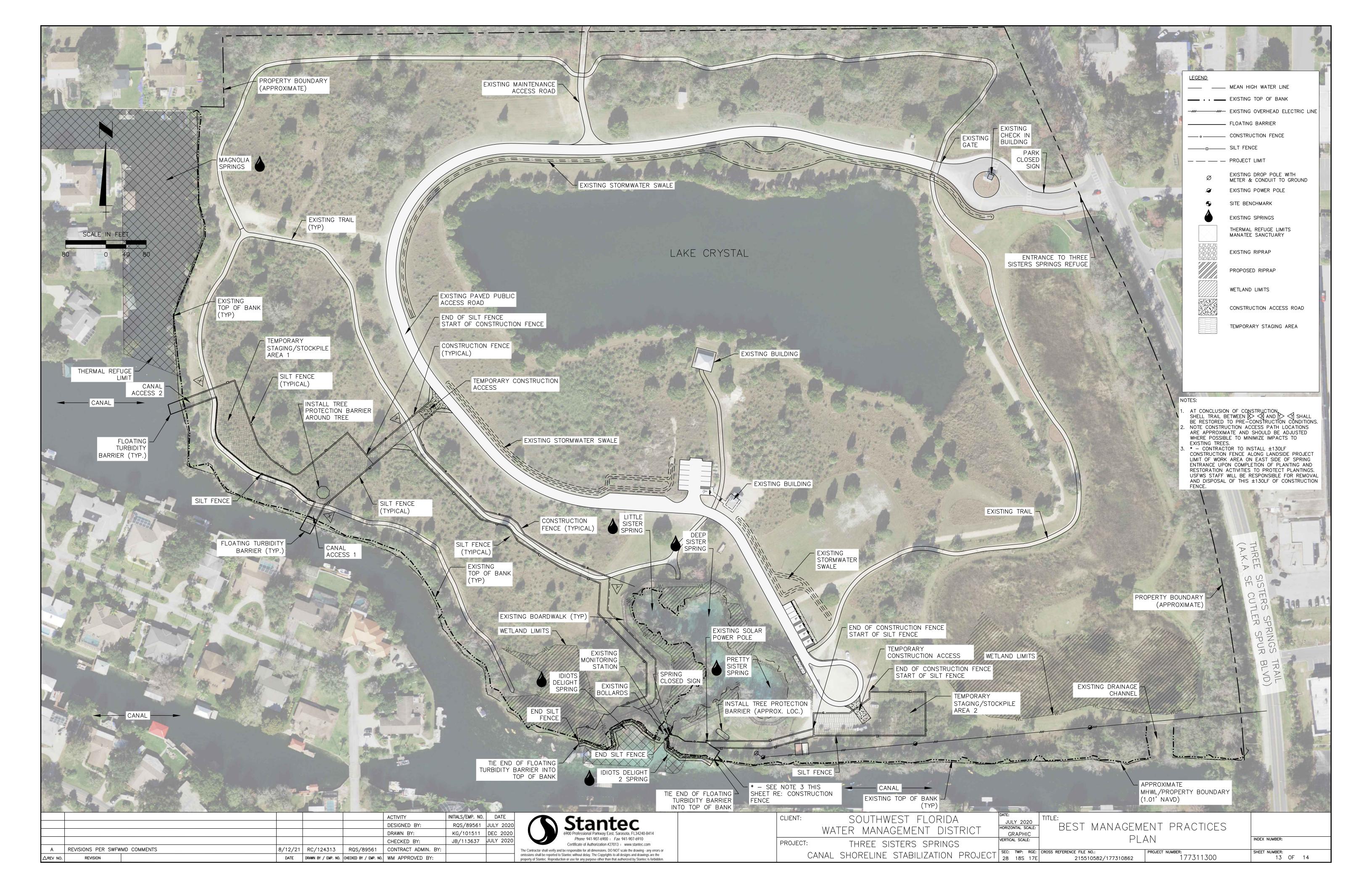
A. GRANULAR FILL (TO BE USED IN BAGS PLACED BELOW 0.5' ELEV.)

- 1. FOR BAG INSTALLATIONS AT APPROXIMATELY 6" BELOW MEAN HIGH WATER ELEVATION OR LOWER, BAGS WILL BE FILLED WITH CLEAN GRANULAR MATERIAL; MAXIMUM PARTICLE SIZE 0.80" TO MINIMUM PARTICLE SIZE 0.08".
- 2. EXCAVATED MATERIAL MAY BE USED IF IT MEETS REQUIREMENTS IN A.1. ABOVE AND APPROVED BY DISTRICT REPRESENTATIVE
- 3. BAGS SHALL BE BURLAP BAGS OR APPROVED ALTERNATE.

B. GROWING MEDIUM FILL (TO BE USED IN BAGS PLACED AT OR ABOVE 0.5' ELEV.)

- 1. FOR BAG INSTALLATIONS ABOVE 6" BELOW MEAN HIGH WATER ELEVATION, BAGS WILL BE FILLED WITH GROWING MEDIUM.
- 2. GROWING MEDIUM WILL CONSIST OF FREELY DRAINING NATIVE SOILS AND GRANULAR MATERIALS CLEANED OF ALL DEBRIS, ROOTS, BRANCHES, STONES IN EXCESS OF 2" DIAMETER AND OTHER DELETERIOUS MATERIALS.
- 3. GROWING MEDIUM PROPERTIES SHALL INCLUDE (BY VOLUME):
 APPROXIMATE ORGANIC CONTENT 10%-15%
 GRANULAR CONTENT: SMALLER THAN 2", LARGER THAN 0.08" 60%-70%
 GRANULAR CONTENT: LARGER THAN 0.002", SMALLER THAN 0.08" 10%-15%
 CLAY AND SILTS 0% -5%
- 4. ORGANIC ADDITIVE MATERIALS SHALL BE A LOCALLY AVAILABLE COMMERCIAL COMPOST PRODUCT.
- 5. MIX ALL ORGANIC MATERIALS EVENLY THROUGH THE MATERIAL.
- 6. BAGS SHALL BE ENVIROLOK BAGS OR APPROVED ALTERNATE.
- 7. THE "SNORKEL" OF EACH BAG SHALL BE FOLDED AND PLACED UNDER EACH BAG.
- 8. BAG CLOSURE TIE SHALL BE BIODEGRADABLE FOR TOP LAYER OF SOIL BAGS.

CLIE	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	JULY 2020 HORIZONTAL SCALE: GRAPHIC	TITLE: TYPICAL	DETAILS	
PRO	DJECT: THREE SISTERS SPRINGS	VERTICAL SCALE:			INDEX NUMBER:
	CANAL SHORELINE STABILIZATION PROJECT	SEC: TWP: RGE: 28 18S 17E	CROSS REFERENCE FILE NO.: 215510582/177310862	PROJECT NUMBER: 177311300	SHEET NUMBER: 12 OF 14



- 1. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE CONDITIONS OF THE REGULATORY AGENCY PERMITS AND HAVE COPIES OF THE PERMITS ON SITE. THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR OBTAINING AND/OR MODIFYING ALL
- APPLICABLE NPDES PERMITTING AND FOR COMPLYING WITH ALL DISTRICT, FDEP AND USACOE 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 SWEPT AS REQUIRED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL TO OR FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARPAULIN.
- 4. THE CONTRACTOR SHALL CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT AND SHALL USE WATER, STRAW MULCH, OR OTHER SUITABLE MATERIAL AS REQUIRED.
- 5. AT A MINIMUM, SILT FENCES, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA.
- 6. THE CONTRACTOR SHALL ERECT SILT FENCE, STAKED HAY BALES, STAKED TURBIDITY BARRIERS, AND FLOATING TURBIDITY BARRIERS PRIOR TO COMMENCEMENT OF EXCAVATION/GRADING ACTIVITY. FLOATING TURBIDITY BARRIERS MAY BE DEPLOYED IN SECTIONS AROUND ACTIVE CONSTRUCTION AND BE MOVED AS APPROPIATE AS CONSTRUCTION AND RESTORATION IS COMPLETED.
- 7. REQUIRED EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED AND MAINTAINED AS REQUIRED THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.
- 8. ALL EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR IN COMPLIANCE WITH DISTRICT AND NPDES PERMIT REQUIREMENTS THROUGHOUT 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
- 9. 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.

TURBIDITY BARRIERS FOR FLOWING

TYPES OR ANY COMBINATION OF

HOWEVER PAYMENT WILL BE UNDER

TURBIDITY BARRIER AND/OR STAKED

STAKED TURBIDITY BARRIERS TO BE

THE PAY ITEM(S) ESTABLISHED

TURBIDITY BARRIER. POSTS IN

INSTALLED IN VERTICAL POSITION

UNLESS OTHERWISE DIRECTED BY

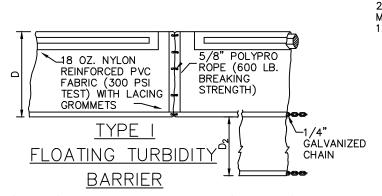
THE ENGINEER.

IN THE PLANS FOR FLOATING

TYPES THAT WILL SUIT SITE

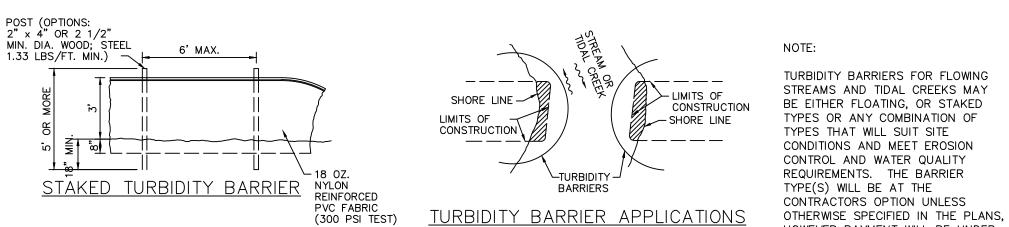
TYPE(S) WILL BE AT THE

- 10. EROSION AND SEDIMENT CONTROL DEVICES (SILT FENCE, TURBIDITY BARRIERS, ETC.) ARE DEPICTED IN APPROXIMATE LOCATIONS AND SHALL BE ADJUSTED AS NECESSARY WITH THE APPROVAL OF THE DISTRICT REPRESENTATIVE.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL EROSION AND SEDIMENT CONTROL DEVICES AT THE COMPLETION OF THE PROJECT.
- 12. ALL EXCAVATION, AND ACCESS TO AND FROM CONSTRUCTION AREAS SHALL BE WITHIN THE LIMITS OF THE PROJECT AREA.

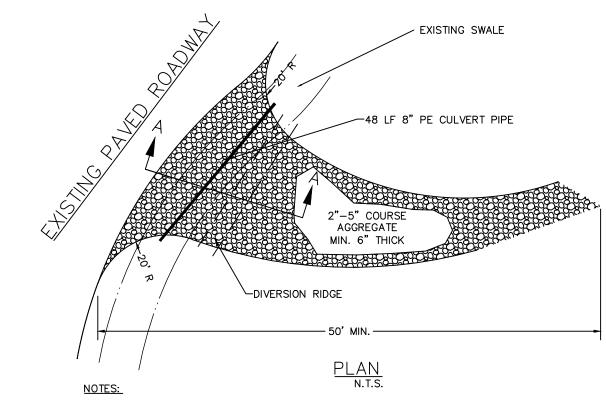


D1 = 5' STD. (SINGLE PANEL FOR DEPTH 5' OR LESS) D2 = 5' STD (ADDITIONAL PANEL FOR DEPTHS > 5') CURTAIN TO RÈACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN PLANS OR AS DETERMINED BY THE ENGINEER. NOTICE:

COMPONENTS OF TYPE I MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPE I SHALL BE AS APPROVED BY THE ENGINEER.

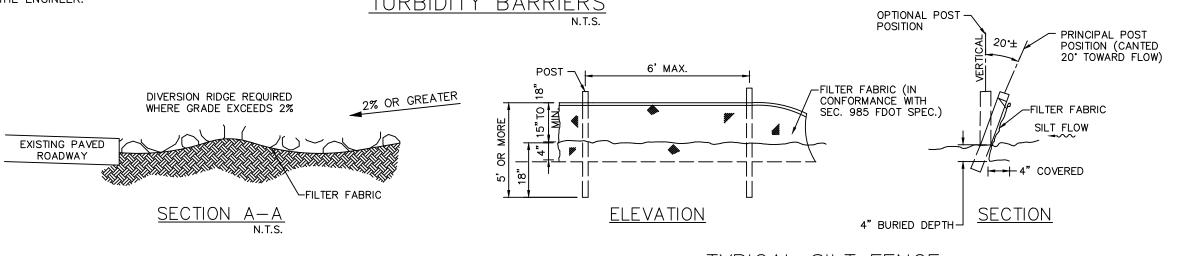


- 1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF
- WATER REGARDLESS OF WATER DEPTH. 2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
- 3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMODATE CONSTRUCTION OPERATIONS.
- 4. NAVIGATION MAY REQUIRE SEGMENTING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



- 1. CONTRACTOR SHALL REMOVE TEMPORARY CONSTRUCTION ACCESS (INCLUDING CROSSING CULVERT) AND RESTORE GRADES (INCLUDING ROADSIDE SWALE) TO PRE-CONSTRUCTION ELEVATIONS; SOD ALL BARE EARTH SURFACES; REPAIR ANY DAMAGE TO THE ASPHALT ENTRANCE DRIVE.
- 2. 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

TEMPORARY CONSTRUCTION

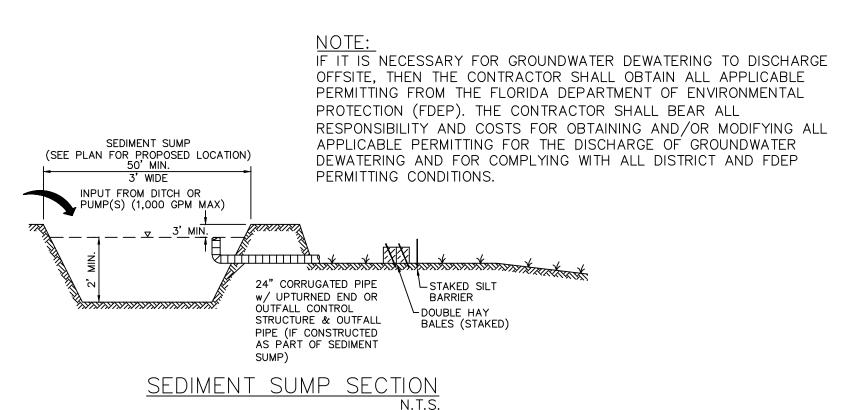


TYPICAL SILT FENCE

PROTECTIVE BARRIERS ARE USED DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES TO PROTECT TREES AND NATURAL AREAS TO BE RETAINED ON A SITE.

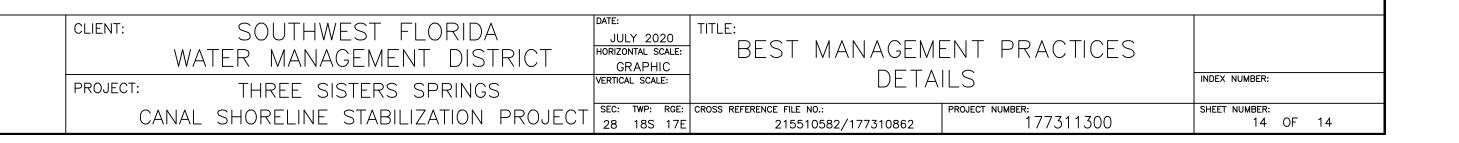
PROTECTIVE BARRIERS MUST BE ERECTED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR AS WELL AS ALONG NATURAL AREAS WHERE SUCH AREAS ARE ADJACENT TO PERMITTED LAND ALTERATION OR CONSTRUCTION ACTIVITIES. A PROTECTIVE BARRIER MUST REMAIN IN PLACE UNTIL THE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED OR UNTIL COMMENCEMENT OF GRADE FINISHING, SODDING, AND LANDSCAPING. NO GROUND DISTURBANCE SHALL OCCUR WITHIN THE BARRICADED AREA.

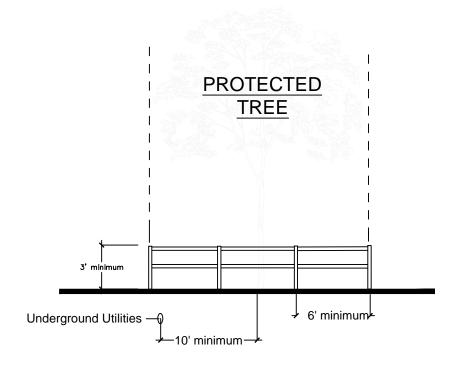
- 1. TREES TO RESTRICT ACCESS INTO THE AREA WITHIN THE ROOTZONE OF A TREE, A PHYSICAL STRUCTURE NOT LESS THAN 3 FEET IN HEIGHT, COMPRISED OF WOOD OR OTHER SUITABLE MATERIAL, IS PLACED AROUND THE TREE AT THE MINIMUMS SHOWN ABOVE, EXCEPT WHERE LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE ROOTZONE. VERTICAL MEMBERS SHALL BE MADE OF A MINIMUM OF 2X2 WOOD OR 5/8" STEEL REINFORCEMENT BAR, AT LEAST 3' IN HEIGHT AND INSTALLED TO A MINIMUM DEPTH OF 1' BELOW GRADE. SPACING BETWEEN VERTICAL MEMBERS SHALL BE NO GREATER THAN 6'. HORIZONTAL MEMBERS SHALL BE MADE OF A MINIMUM 1X2 WOOD OR OTHER FENCING MATERIAL, SUCH AS CHAIN LINK, AND BE A MINIMUM OF THREE FEET IN HEIGHT.
- 2. NATURAL AREAS TO RESTRICT ACCESS INTO AREAS WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE NOT AUTHORIZED, A PHYSICAL STRUCTURE NOT LESS THAN 3 FEET IN HEIGHT IS PLACED ALONG THE PERIMETER OF SUCH AREAS. UPRIGHT STAKES OF NO LESS THAN 2" X 2" LUMBER SPACED NO MORE THAN 25' APART AND CONNECTED BY EXTRA STRENGTH FILTER FABRIC AT 6' MAXIMUM SPACING WITHOUT WIRE SUPPORT FENCE. OTHER METHODS OF DEMARCATION WILL BE CONSIDERED DEPENDING UPON THE CHARACTERISTICS OF THE SITE.



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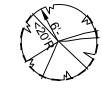








IF THE DRIP LINE IS LESS THAN SIX (6) FEET FROM THE TRUNK OF THE TREE. THE PROTECTION ZONE SHALL BE THAT AREA WITHIN A RADIUS OF SIX (6) FEET AROUND THE TREE



IF THE DRIP LINE IS MORE THAN SIX (6) FEET FROM THE TRUNK OF THE TREE, BUT LESS THAN TWENTY (20) FEET, THE PROTECTION ZONE SHALL BE THAT AREA WITHIN A RADIUS OF THE FULL DRIP LINE AROUND THE



IF THE DRIP LINE IS TWENTY (20) FEET OR MORE FROM THE TRUNK OF THE TREE, THE PROTECTION ZONE SHALL BE THAT AREA WITHIN A RADIUS OF TWENTY (20) FEET AROUND THE

TREE BARRICADE REQUIREMENTS