Prepared for



INDIAN RIVER COUNTY SOLID WASTE DISPOSAL DISTRICT 1325 74th Avenue SW Vero Beach, Florida 32968

BID DOCUMENTS

PHASE 1 – CELL 3 SITE PREPARATION CLASS I LANDFILL – SEGMENT 3 EXPANSION

Indian River County Landfill Facility Vero Beach, Florida

BID NO. 2023040

Prepared by

Geosyntec^D consultants

engineers | scientists | innovators

1200 Riverplace Boulevard Suite 710 Jacksonville, Florida 32207

Project No.: FL9363-02

March 2023

INDIAN RIVER COUNTY SOLID WASTE DISPOSAL DISTRICT

PHASE 1 – CELL 3 SITE PREPARATION CLASS 1 LANDFILL – SEGMENT 3 EXPANSION

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DIVISION 0: BIDDING AND CONTRACT REQUIREMENTS

SECTION 00020

ADVERTISEMENT FOR BIDS

INDIAN RIVER COUNTY

The Indian River County (IRC) Board of County Commissioners is accepting sealed bids until <u>2:00 P.M on Friday, May 5, 2023.</u> Each bid shall be submitted in a sealed envelope and shall bear the name and address of the bidder and "Phase I – Cell 3 Site Preparation Class 1 Landfill – Segment 3 Expansion", Bid Number 2023040 on the outside. Bids should be addressed to Purchasing Division, Room B1-301, 1800 27th Street, Vero Beach, Florida 32960. All bids will be opened publicly and read aloud at 2:00 P.M. All bids received after 2:00 P.M., on the day specified above, will not be accepted or considered.

Project Description:

Site preparation, including clearing, grubbing, and stripping of Cells 3 (including 50 ft into future Cell 4) footprint areas; supply, placement, and compaction of fill material to the Cells 3 grades shown on the Construction Drawings, construction of perimeter access roads and perimeter drainage ditches around Cells 3 and future Cell 4.

Note: Future cell 4 subgrade preparation will be an option to perform if approved by the owner.

All material and equipment furnished and all work performed shall be in strict accordance with the plans, specifications, and contract documents; which may be obtained at: <u>www.demandstar.com</u> or at <u>www.ircgov.com/departments/budget/purchasing</u> under "Current Solicitations". All communications as to this bid shall be directed to <u>IRC Purchasing Division at purchasing@ircgov.com</u>.

All bids shall be submitted in **Duplicate** on the Bid Proposal forms provided within the specifications. Bid Security must be in the sum of not less than <u>Five Percent (5%)</u> of the total amount of the bid, made payable to Indian River County Board of County Commissioners. In the event the Contract is awarded to the Bidder, Bidder will enter in a Contract with the County and furnish the required 100% Public Construction Bond and certificates of insurance within the timeframe set by the County. If Bidder fails to do so, the Bid Security shall be retained by the County as liquidated damages and not as penalty.

County reserves the right to delay awarding of the Contract for ninety (90) days after the bid opening, to waive informalities in any bid, or reject any or all bids in whole or in part with or without cause/or to accept the bid that, in its judgment, will serve the best interest of Indian River County, Florida.

A MANDATORY Pre-Bid Conference will be held on Wednesday, April 12, 2023 at 11:30 a.m. at the Indian River County Solid Waste Disposal District office, 1325 74th Ave SW, Vero Beach, FL 32968. ATTENDANCE AT THIS CONFERENCE BY ALL BIDDERS IS **REQUIRED.** No bidder arriving after the meeting has begun will be allowed to sign in.

INDIAN RIVER COUNTY PURCHASING MANAGER

For Publication in the Indian River Press Journal: **Friday, March 31, 2023**

Please furnish tear sheet and Affidavit of Publication to:

INDIAN RIVER COUNTY PURCHASING DIVISION 1800 27th Street Vero Beach, Florida 32960

SECTION 00100

INSTRUCTIONS TO BIDDERS

(Based Upon EJCDC No. C-700(Rev. 1), 2013 Ed.)

1.01 DEFINED TERMS

Terms used in these Instructions to Bidders which are defined in the Standard General Conditions of the Construction Contract (No. C-700(Rev. 1), 2013 ed.) have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a bid directly to Owner, as distinct from a sub-bidder, who submits a bid to a Bidder. The term "Successful Bidder" means the lowest, qualified, responsible, and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award. The term "Bidding Documents" includes the Advertisement or Invitation to Bid, Instructions to Bidders, The Bid Form, Disclosure of Relationships Statement, General Information Regarding Bidder, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

1.02 COPIES OF BIDDING DOCUMENTS

- A. Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement or Invitation to Bid may be obtained from the Issuing Office.
- B. Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- C. Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the work and do not confer a license or grant for any other use of the Bidding Documents.

1.03 QUALIFICATIONS OF BIDDERS

To demonstrate qualifications to perform the work, each Bidder must be prepared to submit, within 5 days of Owner's request, written evidence, such as financial data, previous experience, present commitments, and other such data as may be necessary to prove to the satisfaction of the Owner that the Bidder is qualified by experience to do the work and is prepared to complete the work within the stated time period.

Bidder must be registered with and use, at their sole expense, the Department of Homeland Security's E-Verify system (www.e-verify.gov) to confirm the employment eligibility of all newly hired employees, as required by Section 448.095, F.S.. Owner, contractor, and subcontractors may not enter into a contract unless each party to the contract registers with and uses the E-Verify system. Contractor is responsible for obtaining proof of E-Verify registration for all subcontractors. This requirement applies to any provider of services or goods.

00100-1

1.04 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- A. It is the responsibility of each Bidder, before submitting a bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost progress, performance, or furnishing of the work, (c) consider federal, state, and local laws and regulations that may affect costs, progress, performance, or furnishing of the work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors, or discrepancies in the Contract Documents.
- B. Reference is made to the Supplementary Conditions for identification of:
 - 1. Those reports of explorations and tests of subsurface conditions at the site which have been utilized by Engineer in preparation of the Contract Documents. Bidder may rely upon the accuracy of the technical data contained in such reports, but not upon non-technical data, interpretations, or opinions contained therein or for the completeness thereof the purposes of bidding or construction.

To obtain access to the site, the following shall be contacted: Purchasing Division, <u>purchasing@ircgov.com</u> or (772) 226-1416. The site is located in Vero Beach, Indian River County as shown on the plans.

- 2. Those drawings of physical conditions in relation to existing surface and subsurface conditions (except underground facilities) which are at or contiguous to the site have been utilized by Engineer in preparation of the Contract Documents. Bidder may rely upon the accuracy of the technical data contained in such drawings, but not upon the completeness thereof for the purposes of bidding or construction. Copies of such reports and drawings will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the technical data contained therein upon which Bidder is entitled to rely as provided in Paragraphs 1.04.B1 and 1.04.B2 are incorporated therein by reference. Such technical data has been identified and established in the Supplementary Conditions.
- C. Information and data reflected in the Contract Documents with respect to underground facilities at or contiguous to the site is based upon information and data furnished to Owner and Engineer by owners of such underground facilities or others, and Owner does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.
- D. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, underground facilities and other physical conditions, and possible changes in the Contract Documents due to differing conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions.

- E. Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies, and obtain any additional information and data which pertain to the physical conditions (surface, subsurface and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance, or furnishing of the work and which Bidder deems necessary to determine its Bid for performing and furnishing the work in accordance with the time, price and other terms and conditions of the Contract Documents.
- F. On request in advance, Owner will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes, clean up, and restore the site to its former condition upon completion of such explorations.
- G. The lands upon which the work is to be performed, right-of-way and easements for access thereto and other lands designed for use by the Contractor in performing the work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by and paid for by the Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by the Owner unless otherwise provided in the Contract Documents.
- H. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this the Instruction to Bidder, that without exception the Bid is premised upon performing and furnishing the work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the work.

1.05 INTERPRETATIONS AND ADDENDA

- A. <u>CONE OF SILENCE.</u> Potential bidders and their agents shall not communicate in any way with the Board of County Commissioners, County Administrator or any County or Solid Waste Disposal District staff other than Purchasing personnel in reference or relation to this solicitation. This restriction shall be effective from the time of bid advertisement until the Board of County Commissioners meets to authorize award. Such communication may result in disqualification.
- B. All questions about the meaning or intent of the Bidding Documents are to be submitted to PURCHASING (<u>purchasing@ircgov.com</u>) in writing. Interpretations or clarifications considered necessary by ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties through the Issuing Office as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

C. Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by OWNER or ENGINEER.

1.06 BID SECURITY

- Each Bid must be accompanied by Bid Security made payable to OWNER in the Α. amount of five percent of the Bidder's maximum base bid price and in the form of a certified check; cashier's check; or an AIA Document A310 Bid Bond issued by a surety meeting the requirements of Paragraph 5.01 of the General Conditions. The Bid Bond shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. The Surety must be authorized to issue surety bonds in Florida. The Bidder shall require the attorney-in-fact who executes any Bond, to affix to each a current certified copy of their Power of Attorney, reflecting such person's authority as Power of Attorney in the State of Florida. Further, at the time of execution of the Contract, the Successful Bidder shall for all Bonds, provide a copy of the Surety's current valid Certificate of Authority issued by the United States Department of the Treasury under 31 United States Code sections 9304-9308. The Surety shall also meet the requirements of paragraphs 5.01 and 5.02 of the General Conditions.
 - B. The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, OWNER may annul the Notice of Award and the Bid security of that Bidder will be retained by the owner. The Bid Security of other Bidders whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of seven days after the Effective Date of the Agreement or 91 days after the Bid opening, whereupon Bid Security furnished by such Bidders will be returned.

Bid Security of other Bidders whom OWNER believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

1.07 CONTRACT TIME

The number of days within which, or dates by which, the work is to be substantially completed and also complete and ready for final payment (the Contract Time) are set forth in the Agreement (Section 00530).

1.08 LIQUIDATED DAMAGES

Provisions for liquidated damages are set forth in the Agreement (Section 00530).

1.09 SUBSTITUTE OR "OR EQUAL" ITEMS

00100-4

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement. The procedure for submission of any such application by Contractor and consideration by Engineer is set forth in Paragraph 6.05 of the General Conditions (Section 00700), may be supplemented in the General Requirements (Section 00800), and Substitutions and Product Options (Section 01630).

1.10 PREPARATION OF BIDS

- A. The Bid form is included with the Bidding Documents. Only the bid form provided by OWNER is acceptable (Bidders are not to recreate the bid form). *Bids not submitted on the bid form(s) shall be rejected, as will bids submitted on rewritten or recreated bid forms.*
- B. All blanks on the Bid form shall be completed by printing in ink or by typewriter and the Bid signed. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.
- C. A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
- D. A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.
- E. A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown below the signature.
- F. A Bid by an individual shall show the Bidder's name and official address.
- G. A Bid by a joint venture shall be executed by each joint venturor in the manner indicated on the Bid form. The official address of the joint venture must be shown below the signature.
- H. All names shall be typed or printed in ink below the signatures.
- I. The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid form.

00100-5

- J. The address and telephone number for communications regarding the Bid shall be shown.
- K. The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number or county registration number for the state or county of the Project, if any, shall also be shown on the Bid form.
- L. All supporting information requested in the Bid Form must be furnished. Do not leave any questions or requests unanswered.
- M. CONTRACTOR shall furnish all labor, materials, equipment and incidentals necessary to perform additional work not covered on the Contract Drawings. The **FORCE ACCOUNT** is intended as a contingency for unforeseen work. Lump sum amount for **FORCE ACCOUNT** work is included in the bid schedule. The value of force account work will be determined in accordance with Article 12 of the General Conditions.
- N. Unit Price Bid: Bidders shall submit a Bid on a unit price basis for each item of Work listed in the bid schedule. The total of all estimated prices will be determined as the sum of the products of the estimated quantity of each item and the unit price Bid for the item. The final quantities and Contract Price will be determined in accordance with paragraph 11.03 of the General Conditions.

Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in paragraph 11.02 of the General Conditions. The Bidder's attention is called to the fact that any estimate of quantities of work to be done and materials to be furnished under the Specifications as shown on the Bid Schedule, or elsewhere, is approximate only and not guaranteed. The OWNER does not assume any responsibility that the final quantities shall remain in strict accordance with the estimated quantities, nor shall the Bidder plead misunderstanding or deception because of such estimate of quantities or of the character, location of the work, or other conditions pertaining thereto.

1.11 SUBMISSION OF BIDS

A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project Title and Bid Number (and, if applicable, the designated portion of the Project for which the Bid is submitted), Bid Number, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If mail or other delivery system sends a Bid, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to Indian River County, Purchasing Division, 1800 27th Street, Vero Beach, Florida, 32960. The Bid form is to be completed and submitted with the Bid Security and the following forms:

- A. Sworn Statement under Section 105.08, Indian River County Code, on Disclosure of Relationships.
- B. Sworn Statement under the Florida Trench Safety Act.
- C. Qualifications Questionnaire.
- D. List of Subcontractors.
- E. Certification Regarding Prohibition Against Contracting with Scrutinized Companies

1.12 MODIFICATION AND WITHDRAWAL OF BIDS

- A. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.
- B. If, within 24 hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the work to be provided under the Work.

1.13 OPENING OF BIDS

Bids will be opened at the time and place indicated in the advertisement or invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

1.14 BIDS TO REMAIN SUBJECT OF ACCEPTANCE

All bids will remain subject to acceptance for ninety days after the day of the Bid opening, but the Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of that period.

1.15 AWARD OF CONTRACT

OWNER reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. OWNER further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to be non-responsible. OWNER may also reject the Bid of any Bidder if OWNER believes that it would not be in the best interest of the Project to make an award to that Bidder. OWNER also reserves the right to waive all technicalities and

informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder. The County will not reimburse any Bidder for bid preparation costs. Owner reserves the right to cancel the award of any Contract at any time before the execution of such Contract by all parties without any liability to the Owner. For and in consideration of the Owner considering Bids submitted, the Bidder, by submitting its Bid, expressly waives any claim to damages, of any kind whatsoever, in the event the Owner exercises its right to cancel the award in accordance herewith.

- A. In evaluating Bids, OWNER will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award. In evaluating Bids, Owner will consider the qualifications of the Bidder, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- B. Owner may consider the qualifications and experience of subcontractors, suppliers, and other persons and organizations proposed for those portions of the work as to which the identity of subcontractors, suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. Owner may consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the work when such data is required to be submitted prior to the Notice to Award.
- C. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and establish the responsibility, qualifications, and financial ability of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.
- D. If the Contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the Owner.
- E. More than one Bid for the same Work from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing that one Bidder has any interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all proposals in which such Bidders are believed to be interested. Any or all proposals will be rejected if there is reason to believe that collusion exists among the Bidders, and no participants in such collusion will be considered in future proposals for the same work.
- F. OWNER has no local ordinance or preferences, as set forth in FS 255.0991 (2) in place, therefore no preference prohibited by that section will be considered in the acceptance, review or award of this bid.
- G. Any actual or prospective bidder or proposer who is aggrieved in connection with the bidding and/or selection process may protest to the OWNER's Purchasing Manager. The protest shall be submitted in writing to the Purchasing Manager

within seven (7) calendar days after the bidder or proposer knows or should have known of the facts giving rise to the protest. CONTRACTOR certifies that it and its related entities as defined by Florida law are not on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725 of the Florida Statutes, and are not engaged in a boycott of Israel. In addition, if this agreement is for goods or services of one million dollars or more, CONTRACTOR certifies that it and its related entities as defined above by Florida law are not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473 of the Florida Statutes and are not engaged in business operations in Cuba or Syria. OWNER may terminate this Contract if CONTRACTOR is found to have submitted a false certification as provided under section 287.135(5), Florida Statutes, been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria, as defined by section 287.135, Florida Statutes.

- H. OWNER may terminate this Contract if CONTRACTOR, including all wholly owned subsidiaries, majority-owned subsidiaries, and parent companies, that exist for the purpose of making profit, is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel as set forth in section 215.4725, Florida Statutes.
- I. Accordingly, firms responding to this solicitation shall return with their response an executed copy of the attached "Certification Regarding Prohibition Against Contracting with Scrutinized Companies." Failure to return this executed form with submitted bid/proposal/statement of qualifications will result in the response being deemed non-responsive and eliminated from consideration.
- J. When OWNER gives a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement with the other Contract Documents which are identified in the Agreement as attached thereto. Within fifteen (15) days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to OWNER. OWNER shall return one fully signed counterpart to Successful Bidder.

Should Bidder to whom the Contract has been awarded refuse or fail to complete the requirements of Paragraph J above, the additional time in calendar days, required to correctly complete the documents will be deducted, in equal amount, from the Contract time. Or, the OWNER may elect to revoke the Award and the OWNER shall hold the Bid Bond for consequential damages incurred, and the Contract may be awarded as the OWNER desires.

1.16 PUBLIC CONSTRUCTION BOND

Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth OWNER's requirements as to Public Construction Bond and insurance. When the Successful Bidder delivers the executed Agreement to OWNER, it must be accompanied by the required insurance certificate(s) and Bond, unless the Bond has been waived due to the total contract being less than \$100,000.

1.17 PUBLIC DISCLOSURE STATEMENT

Any entity entering into a contract with Indian River County as Owner shall disclose any relationship that may exist between the contracting entity or its affiliate and an Indian River County Commissioner or Indian River County employee. The relationship with either must be disclosed as follows: Father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, half brother, half sister, grandparent, or grandchild. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity.

1.18 FLORIDA PRODUCED LUMBER

The selected Bidder as Contractor agrees to comply with the provisions of Section 255.20, Florida Statutes, as such statute may be amended from time to time, wherein Indian River County as Owner must specify lumber, timber and other forest products produced and manufactured in Florida whenever such products are available and their price, fitness and quality are equal.

1.19 TRENCH SAFETY

Florida Statutes Section 553.60 through 553.64, known as the "Trench Safety Act" requires all contractors engaged by Indian River County, Florida to comply with Occupational Safety and Health Administration's excavation safety standard, found in 29 C.F.R. s. 1926.650 Subpart P. All prospective subcontractors are required to sign a Trench Safety Act Compliance Statement and provide compliance cost information where indicated. The costs for complying with the Trench Safety Act must be incorporated into the Bid.

1.20 PUBLIC ENTITY CRIME STATEMENT

Pursuant to Florida Statutes Section 287.133(2)(a), all Bidders are hereby notified that a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity (defined as the State of Florida, any of its departments or agencies, or any political subdivision); may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes Section 287.017 for CATEGORY TWO [currently \$35,000] for a period of 36 months from the date of being placed on the convicted vendor list. A "public entity

crime" means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

1.21 PERMITS, IMPACT, AND INSPECTION FEES.

In accordance with Florida Statutes Section 218.80, the "Public Bid Disclosure Act", Indian River County as OWNER is obligated to disclose all license, permit, impact, or inspection fees that are payable to Indian River County in connection with the construction of the Work by the accepted bidder. ALL PERMIT, IMPACT, OR INSPECTION FEES PAYABLE TO INDIAN RIVER COUNTY IN CONNECTION WITH THE WORK ON THIS COUNTY PROJECT WILL BE PAID BY INDIAN RIVER COUNTY, WITH THE EXCEPTION OF RE-INSPECTION FEES AS SET FORTH IN THE CONTRACT. The bidder will not include ANY PERMIT, IMPACT, OR INSPECTION FEES payable to Indian River County in the bid.

* END OF SECTION *

SECTION 00300 - Bid Package Contents

THIS PACKAGE CONTAINS:

SECTION TITLE	SECTION NUMBER
Bid Form	00310
Bid Bond	00430
Sworn Statement on Disclosure of Relationships	00452
Sworn Statement Under the Florida Trench Safety Act	00454
Qualifications Questionnaire	00456
List of Subcontractors	00458
Certification Regarding Prohibition Against Contracting with Scrutinized Companies	00460

SUBMIT ONE (1) ORIGINAL AND ONE (1) COPY OF THIS COMPLETE PACKAGE WITH YOUR BID

* * END OF SECTION * *

SECTION 00310 - Bid Form

PROJECT IDENTIFICATION:

Project Name:	<u>INDIAN RIVER COUNTY BID NO. 2023040</u> PHASE 1 – CELL 3 SITE PREPARATION
	CLASS 1 LANDFILL – SEGMENT 3
	EXPANSION
Number of Astronomics	1225 744 A

Project Address: 1325 74th Avenue SW, Vero Beach, Florida 32968 Project Description: CONTRACTOR shall complete all work as specified or

indicated in the Contract Documents. The work is generally described as follows which shall include, but is not necessarily limited to the following:

1. Surveying for earthwork staking for Cell 3 as shown on construction drawing - 4A and for establishment of control points for all perimeter drainage ditches and perimeter access roads. All surveying shall be done in accordance with the Technical Specifications. The Owner will provide surveying for as-built record drawings and for measurement and payment purposes. Contractor shall provide its own surveying necessary to execute the Work described in the Contract Documents.

2. Clearing, grubbing, and stripping of the designated Cell 3(including 50 ft into future Cell 4) as shown on the Construction drawings(4A), perimeter access road areas, and drainage ditches.

3. Installation of all sediment and erosion control measures, as described in the Technical Specifications and Construction Drawings.

4. Use of appropriate dust control measures during earthwork operations.

5. Furnish materials for general fill, structural fill, and stabilized base material that meets the requirements of the Technical Specifications. Stockpiling in designated areas and maintenance of stockpiles shall be the responsibility of the Contractor.

6. All earthwork related to the construction of Cell 3, perimeter drainage ditch and perimeter access road as shown on the Construction Drawings and meeting the requirements of the Technical Specifications.

7. Future Cell 4 subgrade preparation will be an option to perform at Owner's discretion. However, Bidders can quote for estimated quantities in the BID form Optional BID section for future Cell 4 site preparation.

THIS BID IS SUBMITTED TO:

INDIAN RIVER COUNTY 1800 27th Street VERO BEACH, FLORIDA 32960

- **1.01** The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- **2.01** Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of OWNER.
- **3.01** In submitting this Bid, Bidder represents, as set forth in the Agreement, that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

Addendum Date	Addendum Number

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions, and (2) reports and drawings of a Hazardous Environmental Condition, if any, which have been identified in the Supplementary Conditions as provided in paragraph 4.06 of the General Conditions.

E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.

F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.

G. Bidder is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Bidding Documents.

H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.

I. Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by ENGINEER is acceptable to Bidder.

J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

4.01 Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or

rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

[The remainder of page intentionally left blank]

BID FORM - BID NO. <u>2023040</u> SOLID WASTE DISPOSAL DISTRICT INDIAN RIVER COUNTY LANDFILL PHASE I - CELL 3 SITE PREPARATION

Item No.		Work Description/Item	Units	Estimated Quantity (Note X)	Material/Labor Unit Cost	Total Cost
Cell 3 Site	e Prepara	tion				
General S	Site Prepa	ration				
1	Mobiliza	ation and Demobilization (See Note I)	LS	1		
2	Surveyin	g (See Note II)	LS	1		
3	Site Prep	paration (See Note III)	acre	14		
4	Erosion a	and Sediment Controls	LS	1		
Phase I C	Cell 3 Prep	paration				
	Earthwo	ork (General Fill) (See Note IV)				
5	А	Grading for Cell 3 (Fill) & Perimeter Berm (Fill) & backfilling north-south perimeter ditch between Cell 2(existing) & Cell 3	СҮ	204,500		
	В	Perimeter Ditch (Fill)	CY	6,800		
Roads						
	Perimete	r Access Road				
6	А	8" Stabilizer Material	CY	1100		
	В	Geotextile Separator (See Note V)	SY	4840		
Vegetatio	n/Perman	ient Stabilization			•	
7	Sodding	bottom and sideslopes of the perimeter ditch	acre	4.6		
Option	al BID					
Cell 4 Sit	te Prepara	ation (See Note VI)				
General S	Site Prepa	ration				
8	Site Prep	paration (See Note VII)	acre	15		
9	Addition	al Surveying (See Note VIII)	LS	1		
Phase I C	Cell 4 Prep	paration	•	• 	-	•
10	Earthwo	ork (General Fill)				
10	Grading	for Cell 4 (Fill) & Perimeter Berm (Fill) (See Note IX)	CY	175,400		
		Contingency (15% of 1 thru 10)				
			T	otal Cos	t =	

BID FORM - BID NO.<u>2023040</u> SOLID WASTE DISPOSAL DISTRICT INDIAN RIVER COUNTY LANDFILL PHASE I - CELL 3 SITE PREPARATION

Notes:

- I Mobilization/Demobilization shall include and cover the furnishing of all materials, labor, tools, and equipment necessary for the Contractor to mobilize the necessary operations to the project site, and shall also cover demobilizing all material, labor, tools, personal and equipment from the project site. This item shall be in accordance with 'Section 01025: Measurement and Payment 1.03A'
- II The survey activities (Item 2) shall include initial and all surveying necessary throughout the duration of the project.
- III The Site Preparation activities (Item 3) shall include clearing, grubbing, stripping, and surface grading and shall be in accordance with Section 02110 of the Specifications
- IV Earthwork involves grading for Cell 3 extending 50 ft into future Cell 4 from south to north; filling for perimeter berms to tie in to Cell 2 subgrade elevations along the north, south and east boundaries ; cutting as required, in accordance with the existing topography, for the perimeter ditch. Quantities are based on in-plane volume.
- V The geotextile separator shall be a multi-filament woven geotextile and shall be in accordance with the technical specifications
- VI. Future Cell 4 subgrade preparation will be an option to perform at the discretion of owner. Mark Optional Bid items as NA if not applicable.
- VII The Site Preparation activities (Item 8) for Cell 4 shall include clearing, grubbing, stripping, and surface grading and shall be in accordance with Section 02110 of the Specifications
- VIII Additional Survey (item 9) shall include initial and all surveying necessary for Cell 4 site preparation.
- IX Earthwork involves grading for Cell 4 from south to north; Quantities are based on in-plane volume. filling for perimeter berms all along the north, south and east boundaries; cutting as required, in accordance with the existing topography.
- X Quantities presented herein are estimated quantities and should be verified by Contractor. If quantities are found to be significantly different, Contractor shall notify Construction Manager. Quantities not provided shall be estimated and verified by Contractor. Payment shall be made on surveyed and calculated quantities in accordance with the Technical Specifications.

5.01 Bidder shall complete the Work in accordance with the Contract Documents for the price(s) contained in the Bid Schedule:

- A. The Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- B. The Owner reserves the right to omit or add to the construction of any portion or portions of the work heretofore enumerated or shown on the plans. Furthermore, the Owner reserves the right to omit in its entirety any one or more items of the Contract without forfeiture of Contract or claims for loss of anticipated profits or any claims by the Contractor on account of such omissions.
- C. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided. The quantities actually required to complete the contract and work may be less or more than so estimated, and, if so, no action for damages or for loss of profits shall accrue to the Contractor by reason thereof.
- D. Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions.

6.01 Bidder agrees that the Work will be substantially completed and ready for final payment in accordance with paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified, which shall be stated in the Agreement.

- 7.01 The following documents are attached to and made a condition of this Bid:
 - A. Itemized Bid Schedule;
 - B. Required Bid security in the form of _____;
 - C. Sworn Statement under Section 105.08, Indian River Code, on Disclosure of Relationships;
 - D. Sworn Statement Under the Florida Trench Safety Act;
 - E. Qualifications Questionnaire;
 - F. List of Subcontractors;
 - G. Certification Regarding Prohibition Against Contracting with Scrutinized Companies

8.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

SUBMITTED on _____, 20___.

State Contractor License No		
If Bidder is:		
<u>An Individual</u> Name (typed or printed):		
By:		(SEAL)
Doing business as: Business address:		
Phone No.: FAX No.: Email:		
<u>A Partnership</u> Partnership Name:		(SEAL)
By:)	
Name (typed or printed):		
Business address:		
Phone No.: FAX No.: Email:		—
A Corporation Corporation Name:	_	(SEAL)
State of Incorporation: Type (General Business, Professional, Service, Limited Liability):		
By:		
Name (typed or printed):		
	(CORP	ORATE SEAL)
Attest		
Business address:		
Phone No.: FAX No.: Email:		
Date of Qualification to do business is		

By:(Signature of joint venture	partner attach evidence of authority to sig	n)
		,
Title:		
Business address:		
	FAX No.:	
Joint Venture Name:		(SEA
By: (Signature attach evider		
(Signature attach evidei	nce of authority to sign)	
Title: Business address:		
	FAX No.:	

(Each joint venturor must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

* * END OF SECTION * *

SECTION 00430 – Bid Bond

AIA DOCUMENT A310 BID BOND

The Contractor shall use the document form entitled "AIA Document A310 Bid Bond."

END OF SECTION

SECTION 00452 – Sworn Statement on Disclosure of Relationships

SWORN STATEMENT UNDER SECTION 105.08, INDIAN RIVER COUNTY CODE, ON DISCLOSURE OF RELATIONSHIPS

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement MUST be submitted with Bid, Proposal or Contract No. 2023040

for INDIAN RIVER COUNTY PHASE 1 – CELL 3 SITE PREPARATION CLASS 1 LANDFILL – SEGMENT 3

EXPANSION

2. This sworn statement is submitted by: _____

(Name of entity submitting Statement)

whose business address is:

3. My name is _____

(Please print name of individual signing)

and my relationship to the entity named above is ______

4. I understand that an "affiliate" as defined in Section 105.08, Indian River County Code, means:

The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the entity.

5. I understand that the relationship with a County Commissioner or County employee that must be disclosed as follows:

Father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, daughter-in-law, son-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, or grandchild.

6. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies.]

Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, have any

relationships as defined in section 105.08, Indian River County Code, with any County Commissioner or County employee.

_The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents, who are active in management of the entity have the following relationships with a County Commissioner or County employee:

Name of Affiliate or entity	Name of County Commissioner or employee	Relationship	
		(Signature)	
		(Date)	
STATE OF			

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of \Box physical presence or \Box online notarization, this _____ day _____ of 20____, by _____ (name of person making statement).

> (Signature of Notary Public - State of Florida) (Print, Type, or Stamp Commissioned Name of Notary Public)

 \Box who is personally known to me or \Box who has produced _____as identification.

SECTION 00454 – Sworn Statement Under the Florida Trench Safety Act

THIS FORM MUST BE SIGNED BY THE BIDDER WHO WILL BE RESPONSIBLE FOR THE EXCAVATION WORK ("BIDDER"), OR ITS AUTHORIZED REPRESENTATIVE, IN THE PRESENCE OF A NOTARY PUBLIC AUTHORIZED TO ADMINISTER OATHS.

- 1. This Sworn Statement is submitted with Bid _____ for <u>INDIAN RIVER COUNTY</u> <u>PHASE 1 – CELL 3 SITE PREPARATION CLASS 1 LANDFILL – SEGMENT 3</u> <u>EXPANSION</u>
- 2. This Sworn Statement is submitted by ______

		rn Statement)		
				, hereinafter
"BIDDER".	The	BIDDER's	address	is _

BIDDER's Federal Employer Identification Number (FEIN) is ______.

3. My name is ______ and my relationship to the BIDDER (Print Name of Individual Signing)

is

(Position or Title) I certify, through my signature at the end of this Sworn Statement, that I am an authorized representative of the BIDDER.

- 4. The Trench Safety Standards that will be in effect during the construction of this Project are contained within the <u>Trench Safety Act, Section 553.60 et.seq. Florida Statutes</u> and refer to the applicable Florida Statue(s) and/or OSHA Regulation(s) and include the "effective date" in the citation(s). Reference to and compliance with the applicable Florida Statute(s) and OSHA Regulation(s) is the complete and sole responsibility of the BIDDER. Such reference will not be checked by OWNER or ENGINEER and they shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.
- 5. The BIDDER assures the OWNER that it will comply with the applicable Trench Safety Standards.
- 6. The BIDDER has allocated and included in its bid the total amount of \$______, based on the linear feet of trench to be excavated over five (5) feet deep, for compliance with the applicable Trench Safety Standards, and intends to comply with said standards by instituting the following specific method(s) of compliance on this Project:

The determination of the appropriate method(s) of compliance is the complete and sole responsibility of the BIDDER. Such methods will not be checked by the OWNER or ENGINEER for accuracy, completeness, or any other purpose. The OWNER and ENGINEER shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

7. The BIDDER has allocated and included in its bid the total amount of \$______ based on the square feet of shoring to be used for compliance with shoring safety requirements and intends to comply with said shoring requirements by instituting the following specific method(s) of compliance on this Project: ______ The determination of the appropriate method(s) of compliance is the complete and sole responsibility of the BIDDER. Such methods will not be checked by the OWNER or ENGINEER for accuracy, completeness or any other purpose. The OWNER and ENGINEER shall have no responsibility to review or check the BIDDER's compliance with the Trench Safety Standards.

8. The BIDDER, in submitting this bid, represents that it has obtained and considered all available geotechnical information, has utilized said geotechnical information and that, based on such information and the BIDDER's own information, the BIDDER has sufficient knowledge of the Project's surface and subsurface site conditions and characteristics to assure BIDDER's compliance with the applicable Trench Safety Standards in designing the trench safety system(s) for the Project.

BIDDER:			
By:			

Position or Title:	
Date:	

STATE OF ______

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of \Box physical presence or \Box online notarization, this _____ day _____ of 20____, by _____ (name of person making statement).

(Signature of Notary Public - State of Florida) (Print, Type, or Stamp Commissioned Name of Notary Public)

□ who is personally known to me or □ who has produced ______ as identification.

* * END OF SECTION * *

SECTION 00456 – QUALIFICATIONS QUESTIONNAIRE

NOTICE: THE OWNER RETAINS THE DISCRETION TO REJECT THE BIDS OF NON-**RESPONSIBLE BIDDERS.**

Documentation Submitted with Bid No: 2023040

Project Name: INDIAN RIVER COUNTY PHASE 1 – CELL 3 SITE PREPARATION CLASS 1 LANDFILL – SEGMENT 3 EXPANSION

- 1. Bidder's Name / Address:
- 2. Bidder's Telephone & FAX Numbers: _____
- 3. Licensing and Corporate Status:
 - a.
 - Is Contractor License current? ______ Bidder's Contractor License No: ______ b. [Attach a copy of Contractor's License to the bid]
 - Attach documentation from the State of Florida Division of Corporations that C. indicates the business entity's status is active and that lists the names and titles of all officers.
- Number of years the firm has performed business as a Contractor in construction work of 4. the type involved in this contract:
- 5. What is the last project OF THIS NATURE that the firm has completed?
- 6. Has the firm ever failed to complete work awarded to you?

[If your answer is "yes", then attach a separate page to this guestionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which the firm failed to complete the work.]

7. Has the firm ever been assessed liquidated damages?

> [If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which liquidated damages have been assessed.]

8. Has the firm ever been charged by OSHA for violating any OSHA regulations?

[If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which OSHA violations were alleged.]

9. Has the firm implemented a drug-free workplace program in compliance with Florida Statute 287.087? _____

(In the case of a tie, preference will be given to businesses with drug-free workplace programs)

10. Has the firm ever been charged with noncompliance of any public policy or rules?

[If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project.]

- 11. Attach to this questionnaire, a notarized financial statement and other information that documents the firm's financial strength and history.
- 12. Has the firm ever defaulted on any of its projects?

[If your answer is "yes", then attach a separate page to this questionnaire that explains the circumstances and list the project name, Owner, and the Owner's telephone number for each project in which a default occurred.]

- 13. Attach a separate page to this questionnaire that summarizes the firm's current workload and that demonstrates its ability to meet the project schedule.
- 14. Name of person who inspected the site of the proposed work for the firm:

Name:	Date of Inspections:

15. Name of on-site Project Foreman: _____

Number of years of experience with similar projects as a Project Foreman:

16. Name of Project Manager: _____

Number of years of experience with similar projects as a Project Manager: _____

- 17. State your total bonding capacity:
- 18. State your bonding capacity per job: _____
- 19. Please provide name, address, telephone number, and contact person of your bonding company:

[The remainder of this page was left blank intentionally]

19. Complete the following table for SIMILAR projects:

Name of Project	Date Completed	Owner	Contact Person: Name/ Email Address/Phone	Original Contract Amount	Final Contract Amount

SECTION 00458 – List of Subcontractors

The Bidder **MUST** list below the name and address of each Subcontractor who will perform work under this Contract in excess of one-half percent of the total bid price, and shall also list the portion of the work which will be done by such Subcontractor. After the opening of Bids, additions, changes or substitutions will not be allowed unless approved by Indian River County after a request for such a change has been submitted in writing by the Contractor, which shall include reasons for such request. Subcontractors must be properly licensed and hold a valid Certificate of Competency.

Documentation Submitted with Bid No.2023040 for INDIAN RIVER COUNTY PHASE 1 – CELL 3 SITE PREPARATION CLASS 1 LANDFILL – SEGMENT 3 EXPANSION

	Work to be Performed	Subcontractor's Name/Address	Portion of Work (%)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			

Note: Attach additional sheets if required.

* * END OF SECTION * *

SECTION 00460 – CERTIFICATION REGARDING PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES

I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majorityowned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit have been placed on the Scrutinized Companies that Boycott Israel List created pursuant to s. 215.4725 of the Florida Statutes, or are engaged in a boycott of Israel.

In addition, if this solicitation is for a contract for goods or services of one million dollars or more, I hereby certify that neither the undersigned entity, nor any of its wholly owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of such entities or business associations, that exists for the purpose of making profit are on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473 of the Florida Statutes, or are engaged in business operations in Cuba or Syria as defined in said statute.

I understand and agree that the County may immediately terminate any contract resulting from this solicitation upon written notice if the undersigned entity (or any of those related entities of respondent as defined above by Florida law) are found to have submitted a false certification or any of the following occur with respect to the company or a related entity: (i) it has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel, or (ii) for any contract for goods or services of one million dollars or more, it has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or it is found to have been engaged in business operations in Cuba or Syria.

Name of Respondent:_____

By:_____ (Authorized Signature)

Title:_____

Date:_____

SECTION 00431

SCHEDULE OF SUBCONTRACTORS

The following are the subcontractors to be used if the undersigned is awarded the contract for this project.

NAME & ADDRESS

TYPE OF WORK

 Total dollar amount that will be

 awarded to Sub-contractors:

NOTE: The above Schedule of Subcontractors will become a part of the contract to be awarded and must be submitted in writing to the OWNER for approval prior to that subcontractor performing the work.

END OF SECTION

SECTION 00530 EJCDC STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR ON THE BASIS OF A STIPULATED PRICE

THIS AGREEMENT ("Agreement" or "Contract") dated the ______day of ______in the year 20___ by and between Indian River County Solid Waste Disposal District, a dependent special district of Indian River County, which is apolitical subdivision in the State of Florida (hereinafter called OWNER) and ______ (Hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 WORK

CONTRACTOR as an independent contractor and not as an employee shall furnish and complete all of the necessary labor, material, and equipment to perform the work as specified or indicated in the Contract Documents. The work is generally described as follows:

Site preparation for Cell 3(including 50 ft into future Cell 4) subgrade prior to construction of the liner system, perimeter access roads areas and perimeter ditch around Cell 3 & future Cell 4.

General requirements of the work to be performed at the Indian River County Landfill, Phase 1 Cell 3 site preparation shall include the items listed below.

- 1. Surveying for earthwork staking for Cell 3 as shown on the construction drawing 4A and for establishment of control points for all perimeter drainage ditches and perimeter access roads. All surveying shall be done in accordance with the Technical Specifications. The Owner will provide surveying for as-built record drawings and for measurement and payment purposes. Contractor shall provide its own surveying necessary to execute the Work described in the Contract Documents.
- 2. Clearing, grubbing, and stripping of the designated Cell 3(including 50 ft into future Cell 4) as shown on the Construction drawings(4A), perimeter access road areas, and drainage ditches.
- 3. Installation of all sediment and erosion control measures, as described in the Technical Specifications and Construction Drawings.
- 4. Use of appropriate dust control measures during earthwork operations.
- 5. Furnish materials for general fill, structural fill, and stabilized base material that meets the requirements of the Technical Specifications. Stockpiling in designated areas and maintenance of stockpiles shall be the responsibility of the Contractor.
- 6. All earthwork related to the construction of Cell 3, perimeter drainage ditch and perimeter access road as shown on the Construction Drawings and meeting the requirements of the Technical Specifications.

7. Future Cell 4 subgrade preparation will be an option to perform at Owner's discretion. However, Bidders can quote for estimated quantities in the BID form Optional BID section, for future Cell 4 site preparation.

ARTICLE 2 ENGINEER

The project has been designed by Geosyntec Consultants, Inc., hereinafter called ENGINEER, and who is to act as OWNER'S representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the work in accordance with the Contract Documents.

ARTICLE 3 CONTRACT TIME

- 3.1 The CONTRACTOR shall be substantially completed with the following timeframe
 - (a) Within <u>30</u> calendar days from effective date of Notice to Proceed, Contractor shall complete the following tasks:
 - 1. Obtain all necessary permits.
 - 2. Receive approved shop drawings for all materials and equipment to be utilized in the job.
 - 3. Perform all photographic recording and documentation of conditions prior to construction.
 - 4. Locate all existing utilities in the area of work.
 - 5. Submit and secure approval of shop drawings.
 - 6. Mobilize all labor, equipment, and materials.
 - 7. Deliver and store all equipment and materials to the job site.
 - 8. Notify all utilities and other affected parties prior to initiating construction.
 - (b) From <u>30</u> calendar days to <u>90</u> calendar days from the effective date of Notice to Proceed, the CONTRACTOR shall complete the following tasks:
 - 1. Substantially complete the Work described in these Contract Documents.
 - 2. Correct all deficiencies noted by Engineer.

Completion of all tasks outlined above (i.e., Subparagraphs a) and b) constitutes Substantial Completion.

- (c) From <u>90</u> calendar days to 120 calendar days from the effective date of Notice to Proceed, the CONTRACTOR shall complete the following tasks:
 - 1. Clean up project area.
 - 2. Remove all equipment and material from project site.
 - 3. Perform contract closeout procedures.
- 3.2 Completion of all tasks outlined above (i.e., Subparagraphs a, b, and c) constitute Final Completion.

3.3 Liquidated Damages.

OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the work is not completed within the times specified in Paragraphs 3.1 and 3.2 above, plus any extensions thereof allowed in accordance with Article 11 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER four-hundred and fifty dollars (\$450.00) for each day that expires after the time specified in Paragraph 3.1 for Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER four-hundred and fifty dollars (\$450.00) for each day that expires after the time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER four-hundred by OWNER, CONTRACTOR shall pay OWNER four-hundred and fifty dollars (\$450.00) for each day that expires after the time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER four-hundred and fifty dollars (\$450.00) for each day that expires after the time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER four-hundred and fifty dollars (\$450.00) for each day that expires after the time specified in Paragraph 3.2 for completion and readiness for final payment.

- 3.3.1 The CONTRACTOR and OWNER agree that OWNER is authorized to deduct all or any portion of the above-stated liquidated damages due to the Owner from payments due to the Contractor; or, in the alternative, all or any portion of the above-stated liquidated damages may be collected from the Contractor or its Surety or Sureties. These provisions for liquidated damages shall not prevent the OWNER, in case of the CONTRACTOR's default, from terminating the Contractor's right to proceed as provided in this AGREEMENT.
- 3.3.2 In addition to the above-stated liquidated damages, the CONTRACTOR shall be responsible for reimbursing OWNER to third party consultants in administering the Project beyond the Substantial Completion date specified in this Agreement, or beyond an approved extension of time granted to CONTRACTOR, whichever date is later.

ARTICLE 4 CONTRACT PRICE

4.1 OWNER shall pay CONTRACTOR for completion of the work in accordance with the Contract Documents in current funds in the amount of <u>\$</u>_____

ARTICLE 5 PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions and the Contract Documents.

- 5.1 The OWNER shall make progress payments to the CONTRACTOR on the basis of the approved partial payment request as recommended by ENGINEER in accordance with the provisions of the Local Government Prompt Payment Act, Florida Statutes section 218.70 et. seq. The OWNER shall retain five percent (5%) of the payment amounts due to the CONTRACTOR until final completion and acceptance of all work to be performed by CONTRACTOR under the Contract Documents.
- 5.2 Pay Requests. Each request for a progress payment shall be submitted on the application for payment form supplied by OWNER and the application for payment shall contain the CONTRACTOR's certification. All progress payments will be on the basis of progress of the work measured by the schedule of values established, or in the case of unit price work based on

the number of units completed.

- 5.3 Paragraphs 5.1 and 5.2 do not apply to construction services work purchased by the County as OWNER which are paid for, in whole or in part, with federal funds and are subject to federal grantor laws and regulations or requirements that are contrary to any provision of the Local Government Prompt Payment Act. In such event, payment and retainage provisions shall be governed by the applicable grant requirements and guidelines.
- 5.4 ACCEPTANCE AND FINAL PAYMENT: Upon receipt of written notice that the work is ready for final inspection and acceptance, the ENGINEER will promptly make such inspection and when the ENGINEER finds the work acceptable under the terms of the Contract and the Contract fully performed, the ENGINEER will promptly issue a final completion certificate stating that the work provided for in this Contract has been completed, and acceptance by the OWNER under the terms and the conditions thereof is recommended and the entire balance found to be due the CONTRACTOR, will be paid to the CONTRACTOR by the OWNER following County Commission approval of the final Contract payment.
- 5.5 <u>Acceptance of Final Payment as Release</u>. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER from all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with the work under this Contract and for every act and neglect of the OWNER and others relating to or arising out of the work. Any payment, however, final, or otherwise, shall not release the CONTRACTOR or its sureties from any obligations under the Contract Documents or the Payment and Performance Bonds.
- ARTICLE 6 INTEREST Not Applicable.

ARTICLE 7 CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- 7.1 CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, work, site, locality, and all local conditions and laws and regulations that in any manner may affect cost, progress, performance or furnishing of the work.
- 7.2 CONTRACTOR has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in the Supplementary Conditions as provided in Paragraph 5.03 of the General Conditions, and accepts the determination set forth in Paragraph SC 4.02 of the Supplementary Conditions of the extent of the technical data contained in such reports and drawings upon which CONTRACTOR is entitled to rely.
- 7.3 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies (in addition to or to supplement those referred to in Paragraph 7.2 above) which pertain

to the subsurface or physical conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the work as CONTRACTOR considers necessary for the performance of furnishing of the work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Paragraph 5.03 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.

- 7.4 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing underground facilities at or contiguous to the site and assumes responsibility for the accurate location of said underground facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said underground facilities are or will be required by CONTRACTOR in order to perform and furnish the work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Paragraph 5.05 of the General Conditions.
- 7.5 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 7.6 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.
- 7.7 Contractor is registered with and will use the Department of Homeland Security's E-Verify system (www.e-verify.gov) to confirm the employment eligibility of all newly hired employees for the duration of this agreement, as required by Section 448.095, F.S. Contractor is also responsible for obtaining proof of E-Verify registration for all subcontractors.

ARTICLE 8 CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the work consist of the following:

- 8.1 This Agreement (Section 00530).
- 8.2 Public Construction Bond (Sections 00610).
- 8.3 Notice of Award and Notice to Proceed (examples in Section 00800).
- 8.4 General Conditions (Section 00700).
- 8.5 Supplementary Conditions (Section 00800).
- 8.6 Specifications bearing the title <u>"Phase 1 Cell 3 Site Preparation Class 1 Landfill Segment 3 Expansion</u>" as listed in the table of contents hereof.
- 8.7 Drawings, inclusive with each sheet bearing the following general title <u>"Phase 1 Cell 3 Site</u> <u>Preparation Class 1 Landfill - Segment 3 Expansion.</u>
- 8.8 Addenda numbers to _____, inclusive.
- 8.9 CONTRACTOR'S Bid (Section 00300).

- 8.10 Specifications bearing the title "<u>IRCDUS Water and Wastewater Utility Standards</u>, July, 2007", or the latest version thereof.
- 8.11 The following, which may be delivered or issued after the effective date of the Agreement and are not attached hereto: All written amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to Paragraphs 3.04 of the General Conditions.

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraphs 11.01 of the General Conditions.

ARTICLE 9 MISCELLANEOUS

- 9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.
- 9.2 It is agreed that the CONTRACTOR shall not assign, transfer, convey, or otherwise dispose of the contract or its right, title, or interest in or to the same or any part thereof, or allow legal action to be brought in its name for the benefit of others, without previous consent of the OWNER and concurred to by the sureties. Any attempted assignment shall be void and may, at the option of the OWNER be deemed an event of default hereunder. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of the OWNER who may be a party hereto.
- 9.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.
- 9.4 The CONTRACTOR shall be properly licensed to practice its trade or trades which are involved in the completion of this Agreement and the work thereunder.
- 9.5 This Agreement shall be governed by the laws of the State of Florida. Venue for any lawsuit brought by either party against the other party or otherwise arising out of this agreement shall be in Indian River County, Florida, or, in the event of federal jurisdiction, in the United States District Court for the Southern District of Florida.
- 9.6 CONTRACTOR agrees to indemnify and hold harmless the OWNER, together with its agents, engineers, employees, elected officers and representatives, from liabilities, damages, losses, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of the CONTRACTOR and persons employed or utilized by the CONTRACTOR in the performance of the work under this Agreement. This indemnification and hold harmless provision shall survive the termination or expiration of this Agreement. The indemnification is limited to \$5 million per occurrence.
- 9.7 <u>Pledge of Credit</u>. The CONTRACTOR shall not pledge the OWNER'S credit or make it a guarantor of payment or surety for any Agreement, debt, obligation, judgment, lien or any

form of indebtedness. The CONTRACTOR further warrants and represents that it has no obligation of indebtedness that would impair its ability to fulfill the terms of this Agreement.

9.8. <u>Counterparts</u>. This Agreement may be executed in one or more counterparts, but all such counterparts, when duly executed, shall constitute one and the same Agreement.

9.9. <u>Public Records</u>. Indian River County is a public agency subject to Chapter 119, Florida Statutes. The Contractor shall comply with Florida's Public Records Law. Specifically, the Contractor shall:

(1) Keep and maintain public records required by the County to perform the service.

(2) Upon request from the County's Custodian of Public Records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119 or as otherwise provided by law.

(3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the County.

(4) Upon completion of the contract, transfer, at no cost, to the County all public records in possession of the Contractor or keep and maintain public records required by the County to perform the service. If the Contractor transfers all public records to the County upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the Custodian of Public Records, in a format that is compatible with the information technology systems of the County.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

(772) 226-1424 <u>publicrecords@ircgov.com</u> Indian River County Office of the County Attorney 1801 27th Street Vero Beach, FL 32960

(5) Failure of the Contractor to comply with these requirements shall be a material breach of this Agreement.

IN WITNESS WHEREOF, OWNER AND CONTRACTOR have signed this Agreement the day and year first written above.

OWNER

INDIAN RIVER COUNTY	
By:	By:
By: Joseph H. Earman, Chairman	By:(Contractor)
By:	(CORPORATE SEAL)
By: John A. Titkanich, Jr., County Administrator	A 44
	Attest
APPROVED AS TO FORM AND LEGAL SUFFICIENCY:	
By:	
By: Dylan Reingold, County Attorney	Address for giving notices:
Jeffrey R. Smith, Clerk of Court and Comptroller	
	License No(Where applicable)
Attest: Deputy Clerk	(Where applicable)
(SEAL)	Agent for service of process:
Designated Representative:	
Himanshu Mehta, Managing Director	Designated Representative:
Solid Waste Disposal District	Name:
	Title:
	Address:
	Phone:
	(If CONTRACTOR is a corporation or a

partnership, attach evidence of authority to sign.)

END OF SECTION

SECTION 00610

INSTRUCTION FOR PUBLIC CONSTRUCTION BOND

The front or cover page to the required public construction payment and performance bond shall contain the information required by Fla. Stat. 255.05(1)(a) and be substantially in the format shown on the first page following this instruction.

The Public Construction Bond shall be in the form suggested by Fla. Stat. 255.05(3) as shown on the second page following this instruction.

A Power of Attorney from a surety insurer authorized to do business in Florida, authorizing the signature of the Attorney in Fact who executes the Public Construction Bond shall accompany that Bond.

Public Work F.S. Chapter 255.05 (1)(a) Cover Page

THIS BOND IS GIVEN TO COMPLY WITH SECTION 255.05 OR SECTION 713.23 FLORIDA STATUTES, AND ANY ACTION INSTITUTED BY A CLAIMANT UNDER THIS BOND FOR PAYMENT MUST BE IN ACCORDANCE WITH THE NOTICE AND TIME LIMITATION PROVISIONS IN SECTION 255.05(2) OR SECTION 713.23 FLORIDA STATUTES.

BOND NO:	
CONTRACTOR NAME:	
CONTRACTOR ADDRESS:	
CONTRACTOR PHONE NO:	
SURETY COMPANY NAME:	
SURETY PRINCIPAL	
BUSINESS ADDRESS:	
SURETY PHONE NO:	
OWNER NAME:	
OWNER ADDRESS:	
OWNER PHONE NO:	
OBLIGEE NAME:	
(If contracting entity is different from the owner, the contracting public entity)	
OBLIGEE ADDRESS:	
OBLIGEE PHONE NO:	
BOND AMOUNT:	
CONTRACT NO:	
(If applicable) DESCRIPTION OF WORK:	
DESCRIPTION OF WORK.	
PROJECT LOCATION:	
incjier location.	
LEGAL DESCRIPTION: (If applicable)	

FRONT PAGE

All other bond page(s) are deemed subsequent to this page regardless of any page number(s) that may be printed thereon.

PUBLIC CONSTRUCTION BOND

Bond No.

(enter bond number)

BY THIS BOND, We ______as Principal and ______, a corporation, as Surety, are bound to <u>Indian River County</u>, herein called Owner, in the sum of \$______, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

- Performs the contract dated ______, ____, between Principal and Owner for construction of <u>Phase I – Cell 3 Site Preparation Class 1 Landfill – Segment 3 Expansion</u> the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract: and
- 2. Promptly makes payments to all claimants, as defined in Section <u>255.05(1)</u>, Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
- 3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and
- 4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise, it remains in full force.
- 5. Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section <u>255.05(2)</u>, Florida Statutes.
- 6. Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety's obligation under this bond.

DATED ON _____, _____

(Name of Principal)

Ву ___

(As Attorney in Fact)

(Name of Surety)

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



American Council of Engineering Companies







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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
 - 1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 - 2. Agreement—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 - 3. Application for Payment—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 - 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 - 5. Bidder—An individual or entity that submits a Bid to Owner.
 - 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 - 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 - 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 - 9. Change Proposal—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 - 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer

has declined to address. A demand for money or services by a third party is not a Claim.

- 11. Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
- 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
- 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
- 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
- 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
- 17. *Cost of the Work*—See Paragraph 13.01 for definition.
- 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
- 20. Engineer—The individual or entity named as such in the Agreement.
- 21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- 22. Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
- 23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

- 24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
- 25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
- 26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
- 27. Notice to Proceed—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
- 28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
- 29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
- 31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
- 32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
- 33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 34. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
- 35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

- 37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
- 38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- 40. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
- 42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
- 43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
- 44. Technical Data—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
- 45. Underground Facilities—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

- 48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.
- 1.02 Terminology
 - A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
 - B. Intent of Certain Terms or Adjectives:
 - 1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
 - C. Day:
 - 1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.
 - D. Defective:
 - 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
 - E. Furnish, Install, Perform, Provide:
 - 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a wellknown technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

- 2.01 Delivery of Bonds and Evidence of Insurance
 - A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
 - B. *Evidence of Contractor's Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
 - C. *Evidence of Owner's Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.
- 2.02 *Copies of Documents*
 - A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
 - B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.
- 2.03 Before Starting Construction
 - A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 Initial Acceptance of Schedules

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 Electronic Transmittals

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- 3.02 *Reference Standards*
 - A. Standards Specifications, Codes, Laws and Regulations
 - Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 Reporting and Resolving Discrepancies

- A. *Reporting Discrepancies*:
 - 1. Contractor's Verification of Figures and Field Measurements: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

- 2. Contractor's Review of Contract Documents: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.
- B. *Resolving Discrepancies*:
 - 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

- 4.01 Commencement of Contract Times; Notice to Proceed
 - A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.
- 4.02 *Starting the Work*
 - A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.
- 4.03 *Reference Points*
 - A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. abnormal weather conditions;
 - acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 - 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.
- 5.02 Use of Site and Other Areas
 - A. Limitation on Use of Site and Other Areas:
 - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - If a damage or injury claim is made by the owner or occupant of any such land or area 2. because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part

by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning*: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading of Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.
- 5.03 Subsurface and Physical Conditions
 - A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
 - B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 Differing Subsurface or Physical Conditions

- A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
 - 1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Drawings or Specifications; or
 - 3. differs materially from that shown or indicated in the Contract Documents; or
 - 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. Possible Price and Times Adjustments:
 - Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 Underground Facilities

- A. *Contractor's Responsibilities*: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. Engineer's Review: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. Owner's Statement to Contractor Regarding Underground Facility: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments*:
 - Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 Hazardous Environmental Conditions at Site

- A. *Reports and Drawings*: The Supplementary Conditions identify:
 - 1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 - 2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 Insurance—General Provisions

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is

maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.
- 6.03 *Contractor's Insurance*
 - A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

- 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
 - 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 - 2. claims for damages insured by reasonably available personal injury liability coverage.
 - 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
 - 1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 - 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 - 3. Broad form property damage coverage.
 - 4. Severability of interest.
 - 5. Underground, explosion, and collapse coverage.
 - 6. Personal injury coverage.
 - Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 - 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. Automobile liability: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. Umbrella or excess liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result

of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

- G. Additional insureds: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 Owner's Liability Insurance

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 - 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

- 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
- 6. extend to cover damage or loss to insured property while in transit.
- 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
- 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
- 10. not include a co-insurance clause.
- 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
- 12. include performance/hot testing and start-up.
- 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. Notice of Cancellation or Change: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. Partial Occupancy or Use by Owner: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 Waiver of Rights

- All policies purchased in accordance with Paragraph 6.05, expressly including the builder's Α. risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 Receipt and Application of Property Insurance Proceeds

A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the

policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 Supervision and Superintendence

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.
- 7.02 Labor; Working Hours
 - A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
 - B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.
- 7.03 Services, Materials, and Equipment
 - A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
 - B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and

guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 Substitutes

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and

- 2) available engineering, sales, maintenance, repair, and replacement services.
- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. Reimbursement of Engineer's Cost: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 Concerning Subcontractors, Suppliers, and Others

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.

- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.

- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 Patent Fees and Royalties

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 Permits

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 Safety Representative

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.
- 7.14 Hazard Communication Programs
 - A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or

exchanged between or among employers at the Site in accordance with Laws or Regulations.

- 7.15 *Emergencies*
 - A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.
- 7.16 Shop Drawings, Samples, and Other Submittals
 - A. Shop Drawing and Sample Submittal Requirements:
 - 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
 - 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
 - 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
 - B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.
 - 1. Shop Drawings:
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to

provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

- 2. Samples:
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
- 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals*: Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. Engineer's Review:
 - 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 - 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 - 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 - 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 - 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 - 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 - 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

- 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.
- E. Resubmittal Procedures:
 - 1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
 - 2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
 - 3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.
- 7.17 Contractor's General Warranty and Guarantee
 - A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
 - B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
 - C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by Engineer;
 - 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. use or occupancy of the Work or any part thereof by Owner;
 - 5. any review and approval of a Shop Drawing or Sample submittal;
 - 6. the issuance of a notice of acceptability by Engineer;
 - 7. any inspection, test, or approval by others; or
 - 8. any correction of defective Work by Owner.

D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

- 8.01 Other Work
 - A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
 - B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
 - C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
 - D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

- If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's Α. employees, any other contractor working for Owner, or any utility owner for whom the Owner is responsible causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

- 9.01 *Communications to Contractor*
 - A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.
- 9.02 Replacement of Engineer
 - A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.
- 9.03 Furnish Data
 - A. Owner shall promptly furnish the data required of Owner under the Contract Documents.
- 9.04 Pay When Due
 - A. Owner shall make payments to Contractor when they are due as provided in the Agreement.
- 9.05 Lands and Easements; Reports, Tests, and Drawings
 - A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 Insurance
 - A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 Change Orders
 - A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

- 9.08 Inspections, Tests, and Approvals
 - A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
 - A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 Undisclosed Hazardous Environmental Condition
 - A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 Evidence of Financial Arrangements
 - A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).
- 9.12 Safety Programs
 - A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
 - B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

- 10.01 Owner's Representative
 - A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.
- 10.02 Visits to Site
 - A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
 - B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during

or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Project Representative

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 Rejecting Defective Work

- A. Engineer has the authority to reject Work in accordance with Article 14.
- 10.05 Shop Drawings, Change Orders and Payments
 - A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
 - B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
 - C. Engineer's authority as to Change Orders is set forth in Article 11.
 - D. Engineer's authority as to Applications for Payment is set forth in Article 15.
- 10.06 Determinations for Unit Price Work
 - A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.
- 10.07 Decisions on Requirements of Contract Documents and Acceptability of Work
 - A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 Limitations on Engineer's Authority and Responsibilities

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.
- 10.09 Compliance with Safety Program
 - A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

- 11.01 Amending and Supplementing Contract Documents
 - A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. Change Orders:
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. Work Change Directives: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 Owner-Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 Unauthorized Changes in the Work

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.
- 11.04 Change of Contract Price
 - A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
 - B. An adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and 11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 Change Proposals

A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

- 1. *Procedures*: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal.
- 2. Engineer's Action: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
- 3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 - 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.
- 11.08 Notification to Surety
 - A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12 – CLAIMS

- 12.01 Claims
 - A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
 - B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
 - C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
 - D. Mediation:
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

- 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

- 13.01 *Cost of the Work*
 - A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 - 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
 - B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work. Payroll costs of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable

thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes

other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded*: The term Cost of the Work shall not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*: When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. Cash Allowances: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

- 14.01 Access to Work
 - A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.
- 14.02 Tests, Inspections, and Approvals
 - A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
 - B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
 - C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
 - D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects*: Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 Uncovering Work

A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.
- 14.07 Owner May Correct Defective Work
 - A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
 - B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
 - C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

- 15.01 *Progress Payments*
 - A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
 - B. Applications for Payments:
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 - 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
 - C. *Review of Applications*:
 - 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
 - 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
- b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
- c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
- 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. Payment Becomes Due:
 - 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. Reductions in Payment by Owner:
 - 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - I. there are other items entitling Owner to a set off against the amount recommended.
 - 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 Final Payment

- A. Application for Payment:
 - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of

inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. Engineer's Review of Application and Acceptance:
 - If, on the basis of Engineer's observation of the Work during construction and final 1. inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due*: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation,

including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

- 15.07 Waiver of Claims
 - A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
 - B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 Correction Period

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

- 16.01 Owner May Suspend Work
 - A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses,

and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.
- 16.03 Owner May Terminate For Convenience
 - A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
 - B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

- 18.01 *Giving Notice*
 - A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.
- 18.03 Cumulative Remedies
 - A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 No Waiver

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.
- 18.06 Survival of Obligations
 - A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.
- 18.08 Headings
 - A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SECTION 00800

SUPPLEMENTARY CONDITIONS

INDIAN RIVER COUNTY DEPARTMENT OF UTILITY SERVICES BOARD OF COMMISSIONERS 1801 27th Street, Vero Beach, Florida 32960



GENERAL CONDITIONS

 $"P:\PROJ1\FL\ACTIVEPROJECTS\FL9363(IRC_Phase1Segment3Cell 3 Site Preparation)\Reporting\Bid Docs_Draft_SB\DIVISION_0_SB\00800 Supplementary Conditions_11.doc"$

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SUPPLEMENTARY CONDITIONS

AMENDMENTS TO GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC Document No. C-700(Rev. 1), 2013 edition) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

SC 1.01.A.43. Delete paragraph 1.01.A.38. of the General Conditions in its entirety and replace with the following:

38. Specifications - Sections included under Division 1 through Division 2 of the Project Manual.

ARTICLE 2 - PRELIMINARY MATTERS

SC 2.01.B.

Delete paragraph 2.01.B of the General Conditions in its entirety and replace with the following:

B. Before any Work at the site is started, Contractor shall deliver to Owner, with copies to Engineer, certificates of insurance, which Contractor is required to purchase and maintain in accordance with the requirements of the Contract Documents.

SC 2.03.A.1 Add the following immediately at the end of subparagraph 2.03.A.1: using the Critical Path Method (CPM).

SC 2.03.A.4 Add new subparagraph 4 after the existing text of 2.03 of the General Conditions:

4. If this Project is an addition to an existing working plant, then the Contractor shall coordinate with the Owner on tie-ins. The Owner shall have final say on plant shut down times and duration to make tie-ins.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, REQUIREMENT, REUSE

SC 3.01.C

Add a new paragraph immediately after Paragraph 3.01.C of the General Conditions which is to read as follows:

D. Each and every provision of law and clause required by law to be inserted in these Contract Documents shall be deemed to be inserted herein, and they shall be read and enforced as though it were included herein.

SC3.03A.3

Delete existing 3.03A.3 of the General Conditions in its entirety and replace it with the following:

Contractor shall not be liable to Owner or Engineer for failure to report any such conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or, in the exercise of ordinary care,

reasonably should have recognized such conflict, error, ambiguity, or discrepancy and failed to report it in writing to the Owner and the Engineer.

SC 3.03B

Delete existing 3.03B of the General Conditions in its entirety and replace it with the following

B. *Resolving Discrepancies.* Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall be read together as a whole not in isolation so as to give meaning to each provision; however, to the extent there is a conflict or inconsistency between or among provisions, the strictest or most stringent standard shall apply.

ARTICLE 4 - COMMENCEMENT AND PROGRESS OF THE WORK

SC 4.01.A

Delete paragraph 4.01.A of the General Conditions in its entirety, and replace with the following:

The Contract Times will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 60 days after the Effective Date of the Agreement

SC 4.03.A.

Add the following new paragraph immediately after paragraph 4.03.A. of the General Conditions to read as follows:

B. Engineer may check the lines, elevations, reference marks, batter boards, etc., set by Contractor, and Contractor shall correct any errors disclosed by such check. Such a check shall not be considered as approval of Contractor's work and shall not relieve Contractor of the responsibility for accurate construction of the entire Work. Contractor shall furnish personnel to assist Engineer in checking lines and grades.

SC 4.04.A.1

Add the following sentence immediately after the existing text in paragraph 4.04.A.1 of the General Conditions:

Additionally, any and all changes to the Project's critical path must be reflected in each Project schedule.

SC4.04.A.3

Add the following paragraph immediately after paragraph GC 4.04.A.2 of the General Conditions:

Contractor shall give Owner full information in advance as to its plans for performing each part of the Work. If at any time during the progress of Work, Contractor's actual progress is inadequate to meets the requirements of the Contract, Owner may, but is not obligated to, so notify Contractor. In such event, Contractor acknowledges and agrees that Contractor shall implement some or all of the following remedial actions at the sole cost and expense of Contractor: (a) Increase manpower in such quantities and crafts as necessary to eliminate the backlog of Work; (b) Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction equipment, or any combination of the foregoing to eliminate the backlog of Work; or (c) Reschedule the Work in conformance with the specification requirements. Neither such notice by Owner nor Owner's failure to issue such notice shall relieve Contractor of its obligation to achieve the quality of Work and rate of progress required by the Contract. Failure of Contractor to implement some or all of the remedial actions may be grounds for determination by Owner that Contractor is not prosecuting its Work with such diligence as will assure completion within times specified. Upon such determination, Owner may terminate Contractor's right to

proceed with the performance of the Contract, or any separable part thereof, in accordance with the applicable provisions of this Contract.

4.05.A and C Delete paragraphs 4.05.A and 4.05.C of the General Conditions in their entirety and replace with the following:

A. Where Contractor is delayed or prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if (1) a Claim is made therefore as provided in paragraph 12.02.A and (2) Contractor provides evidence that the delay impacted the critical path of the Project. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 8, fires, floods, abnormal weather conditions, or acts of God. The Contractor must request the extension of time in writing and must provide the following information within the time periods stated hereafter. Failure to submit such information and in compliance with the time requirements hereinafter stated, shall constitute a waiver by the Contractor and a denial of the claim for extension of time:

- 1. Nature of the delay or change in the Work;
- 2. Dates of commencement and cessation of the delay or change in the Work;
- 3. Activities on the current progress schedule affected by the delay or change in the Work;
- 4. Identification and demonstration that the delay or change in Work affects the critical path;
- 5. Identification of the source of delay or change in the Work;
- 6. Anticipated extent of the delay or change in the Work; and
- 7. Recommended action to minimize the delay.

C. Contractor hereby affirms that the extension of time granted herein is the Contractor's sole and exclusive remedy. Apart from extension of time, no payment or claim for damages shall be made to the Contractor as compensation for damages for any delays or hindrances from any cause whatsoever in the progress of the Work whether such delay is avoidable or unavoidable.

ARTICLE 5 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC 5.01.A

Delete existing paragraph 5.01.A of the General Conditions in its entirety and replace it with the following:

A. Owner shall furnish the site.

SC 5.01.B

Delete existing paragraph 5.01B of the General Conditions in its entirety.

SC 5.02.A.2

Delete the words: "arbitration or" in line 12 of paragraph 5.02.A.2 of the General Conditions.

SC 5.03.A

Delete 5.03.A.1 of the General Conditions in its entirety and replace it with the following:

A. *Reports and Drawings:* The Contract Documents may identify those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents. Engineer has relied upon the data obtained from subsurface investigations made at the site in the form of test borings. Such data is in the form of boring logs, which are available upon request. The locations of the test borings are indicated on the Drawings. Such logs and samples are not part of the Contract Documents.

SC 5.03.A.2.

Add the following new sentences immediately at the end of existing paragraph 5.03.A.2 of the General Conditions which is to read as follows:

In the preparation of Drawings and Specifications, the Engineer has relied upon the reports and tests of subsurface physical conditions at the site. The foregoing information and data shown or indicated in the Contract Documents is based on information and data furnished to Owner or the Engineer by others. The Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data, and the Contractor shall have full responsibility for requesting, reviewing, and checking all such information and data.

Sc 5.04.A

Delete 5.04.A of the General Conditions in its entirety and replace it with the following:

A. *Notice by Contractor*. The Contractor shall promptly, and before such conditions are disturbed, and in no event later than 10 days after first observance of the conditions, notify the Owner and Engineer in writing of:(1) subsurface or latent physical conditions at the site differing materially from those indicated in this Contract, or (2) unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in this Contract. The Owner will promptly investigate the conditions, and if it finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work under this Contract, a Change Order shall be issued accordingly based on the Schedule of Values and executed by the Owner and the Contractor. Contractor's failure to provide notice upon discovery of the differing site condition shall waive any entitlement to such an adjustment in the Contract Price or Contract Time. Further, no Claim of the Contractor under this paragraph 5.04A shall be allowed unless the Contractor has given the notice as required in this paragraph 5.04A.

SC 5.04.D.1 Delete subparagraph 5.04.D.1 of the General Conditions in its entirety.

SC 5.06.I Delete paragraph 5.06.I of the General Conditions in its entirety.

SC 5.07 Add the following new paragraph immediately after Paragraph 5.06.K of the General Conditions.

SC 5.07 Archaeological or Resources at Site

SC5.07.A If Archaeological or Historical Resources are revealed, uncovered or discovered at site, Contractor shall cease work immediately and solicit the services of an Archaeologist Registered with the Registry of Professional Archaeologists. Based on Archaeologist's determination, Contractor shall then submit a Change Order in order to avoid resources or mitigate as required to proceed with project.

ARTICLE 6 - BONDS AND INSURANCE

SC 6.01.A Replace the words "performance and payment bonds" with the words "Public Construction Bond."; then add the following sentence immediately after the existing text in paragraph 6.01A of the General Conditions:

Pursuant to Florida Statutes section 255.05(1)(a) (2007), any claimant (as such term is defined in Florida Statutes section 713.01) may apply to Indian River County as Owner for copies of the Agreement and the recorded payment and performance bonds and shall thereupon be furnished with certified copies of such documents.

SC-6.02.D Delete existing paragraph 6.02.D of the General Conditions in its entirety.

SC-6.02 Delete existing paragraph 6.02.E, 6.02.F 6.02.H of the General Conditions in its entirety.

SC 6.03 Delete existing paragraph 6.03.I, 6.03.J of the General Conditions in its entirety and replace with the following:

I. The Contractor shall not commence Work under the Agreement until it has obtained all insurance required under the Agreement and the Indian River County Risk Manager has approved such insurance. The Contractor shall procure and maintain, for the duration of the Agreement, the minimum insurance coverage as set forth herein. The cost of such insurance shall be included in the Contract Price

J. The insurance required by paragraph 5.04A of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

- 1. Workers' Compensation: To meet statutory limits in compliance with the Workers Compensation Law of Florida. This policy must include employers' liability with a limit \$500,000 for each accident, \$500,000 disease policy limit and \$100,000 disease each employee. Such policy shall include a waiver of subrogation as against Owner on account of injury sustained by an employee(s) of the Contractor.
- 2. Commercial General Liability: A per occurrence form policy, including Premise Operations, Independent Contractors, Products and Completed Operations including X, C, U (Explosion, Collapse, Underground) Broad Form Property Damage, Broad Form Property Damage Endorsement, with a combined single limit of not less than \$3,000,000 general aggregate to include products/completed operations, fire damage /legal liability, and medical payments. Limits can be layered with an Excess Liability Policy (Umbrella).
- Business Auto Liability: Coverage shall include Owned vehicles and Hired/Non-Owned vehicles, for a combined single limit (bodily injury and property damage) of not less than \$500,000/combined single limit (Bodily Injury/Property Damage); personal injury protection - statutory limits; \$500,000/hired/non-owned auto liability. Limits can be layered with Excess Liability Policy (Umbrella).
- 4. Contractor's Builders' Risk "All Risk" Insurance: All risk coverage with limits equal to one hundred percent (100%) of the completed value of the Work. There shall be a waiver of occupancy endorsement to enable the Owner to occupy the facility under construction during such activity. The policy must be endorsed to provide machinery/equipment endorsement during transit and installation, and Owner direct purchase materials, if any. The maximum deductible under this coverage is \$10,000 per claim, except Windstorm coverage which will have a maximum deductible equal to 2 percent of the completed value of the work.
- 5. Flood Insurance Contractor shall maintain coverage when the buildings or structures are located within an identified special flood hazard area. Such flood insurance shall protect the interests of the

Contractor and the County and shall be afforded for the lesser of the total insurable value of such buildings or structures, or, the maximum amount of flood insurance coverage available under the National Flood Insurance Program.

K. Insurance Requirements – Ten (10) days prior to the commencement of any Work under the Contract, a certificate of insurance shall be provided to the Indian River County Risk Manager for review and approval. The certificate shall provide that: (a) Indian River County (as Owner) and Masteller & Moler, Inc. (as Engineer) be named as an additional insured on the commercial general liability, auto liability, and Contractor's Builders' Risk "All Risk" insurance policies; (b) the Contractor's insurance coverage shall be primary; and (c) Indian River County (as Owner) and Masteller & Moler, Inc. will be given thirty (30) days' notice prior to cancellation or modification of any required insurance and such notice shall be in writing by registered mail, return receipt requested and addressed to the Indian River County Risk Manager. It shall be the responsibility of the Contractor to ensure that all subcontractors comply with all insurance requirements of this Contract.

L. All coverage shall be maintained without interruption from date of commencement of Work until date of final payment.

M. All insurers must be authorized to do business in Florida and have a Best Key Rating of A- VII.

N. The insurance companies selected shall send written verification to the Indian River County Risk Manager that they will provide 30 days prior written notice to the Indian River County Risk Manager of its intent to cancel or modify any required policies of insurance.

SC 6.04 Delete existing paragraph 6.04 of the General Conditions in its entirety.

SC 6.05 Delete existing paragraph 6.05 of the General Conditions in its entirety.

SC 6.06 Delete existing paragraph 6.06 of the General Conditions in its entirety and replace with the following.

A. All insurance policies provided by the Contractor shall contain provisions to the effect that the insurer waives all rights of subrogation against any of the insured, additional insured, (and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them) Owner and the Engineer.

SC 6.07 Delete existing paragraph 6.07 of the General Conditions in its entirety.

ARTICLE 7 - CONTRACTOR'S RESPONSIBILITIES

SC 7.01.B

Delete paragraph 7.01.B of the General Conditions in its entirety, and replace with the following:

7.01.B The Contractor shall employ a competent superintendent and necessary assistants who shall be assigned to, and in attendance at, the Project site during performance of the Work. The superintendent shall be reasonably satisfactory to the Owner. So long as the superintendent remains employed by the Contractor or any related entity, the superintendent shall not be replaced without the Owner's prior written consent, except under extraordinary circumstances. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

SC 7.02B Add the following new paragraphs immediately after paragraph 7.02.B of the General Conditions which are to read as follows:

C. Regular working hours are defined as 8 hours per day, Monday through Friday, excluding holidays, between the hours of 7:00 AM and 7:00 PM. Requests to work other than regular working hours shall be submitted to Engineer not less than 48 hours prior to any proposed weekend work or scheduled extended work weeks. Occasional unscheduled overtime on weekdays may be permitted provided two hours notice is given to Engineer.

D. Contractor shall reimburse the Owner for additional engineering and/or inspection costs incurred as a result of overtime work in excess of the regular working hours stipulated in Article SC-7.02C. At Owner's option, overtime costs may either be deducted from the Contractor's monthly payment request or deducted from the retainage prior to release of final payment. Overtime costs for the Owner's personnel shall be based on the individual's current overtime wage rate. Overtime costs for personnel employed by the Engineer or Owner's independent testing laboratory shall be calculated in accordance with the terms of their respective contracts with the Owner.

SC 7.05.<u>B</u> Delete the third sentence of paragraph 7.05B of the General Conditions in its entirety and replace with the following:

However, if Contractor claims entitlement to additional time or money as a result of the Field Order, such entitlement is conditioned upon obtaining a Change Order authorized and executed by Owner after timely making a Claim as provided in the Contract Documents.

SC 7.06.C Delete Paragraph 7.06.C of the General Conditions in its entirety

Delete Paragraph 7.06.C of the General Conditions in its entirety and replace with the following:

C. Contractor shall not employ any Subcontractor, Supplier or other person or organization, (including those who are to furnish the principal items of materials or equipment), whether initially or as a substitute, against whom Owner may have reasonable objection. Acceptance of any Subcontractor, Supplier or other person or organization by Owner shall not constitute a waiver of any right of Owner to reject defective Work. Contractor shall not be required to employ any Subcontractor, Supplier or other person or organization against whom Contractor has reasonable objection.

SC 7.06.D Delete Paragraph 7.06.D of the General Conditions in its entirety

SC-7.06.E Delete Paragraph 7.06.E of the General Conditions in its entirety

SC 7.06.F Delete Paragraph 7.06.F of the General Conditions in its entirety

SC 7.06.G Delete Paragraph 7.06.G of the General Conditions in its entirety

SC 7.08 Delete Paragraph 7.08 of the General Conditions in its entirety and replace with the following:

ALL PERMIT, IMPACT, OR INSPECTION FEES APPLICABLE AT THE TIME OF OPENING OF BIDS THAT ARE PAYABLE TO INDIAN RIVER COUNTY IN CONNECTION WITH THE WORK ON THIS COUNTY PROJECT WILL BE PAID BY INDIAN RIVER COUNTY. Contractor acknowledges that the foregoing items are governed by the provisions of Florida Statutes section 218.80, Public Bid Disclosure Act. Further, Contractor shall pay the applicable business tax and obtain a business tax receipt from the Indian River County Tax Collector. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all applicable construction permits. Owner shall reimburse Contractor for the cost of such permits on the basis of actual cost. Owner shall assist Contractor, when necessary, in obtaining such permits and

licenses. As set forth in the Contract Documents, re-inspection fees are payable solely by Contractor. Owner shall pay all charges of utility owners for connections for providing permanent services to the Work. Owner has made application for and received the Indian River County (IRC) Right-of-way and Florida Department of Transportation (FDOT) Rights-of-way Permits. Said permits will be included in Section 00901. Any permits issued after issuance of bid documents and prior to bid opening will be provided as an Addendum.

The selected Contractor will need to obtain FDEP NPDES Permit for this project if the manner in which the project is constructed exceeds applicable thresholds. In the event an FDEP NPDES permit is not required for this project, the Contractor will still be responsible for installation of silt fences, turbidity barriers and other erosion control devices as necessary to minimize erosion due to construction activities. It will be the Contractor's responsibility to develop and maintain an erosion control plan at all times. The selected Contractor shall obtain an Indian River County dewatering permit, if such permit is required.

Contractor acknowledges that the foregoing items are governed by the provisions of Florida Statutes section 218.80 (2006), Public Bid Disclosure Act.

SC 7.17.A: Delete Paragraph 7.17.A. of the General Conditions in its entirety and replace with the following:

A. Contractor warrants and guarantees to Owner <u>for one (1) year from the date of Final Completion</u> that all Work will be in accordance with the Contract Documents and will not be defective; provided, however, that manufacturer equipment warranties may be of a longer duration.

SC 7.18.A

Delete paragraph 7.18.A of the General Conditions in its entirety.

SC 7.19.E

Delete paragraph 7.19.E of the General Conditions in its entirety and replace with the following:

E. Contractor shall not be responsible for the adequacy of the performance criteria or design criteria required by or contained in the Contract Documents.

ARTICLE 8 – OTHER WORK AT THE SITE

No Changes

ARTICLE 9 OWNER'S RESPONSIBILITIES

SC 9.02

Delete paragraph 9.02 of the General Conditions in its entirety and replace with the following:

If Owner terminates the employment of Engineer, Owner may appoint another engineer whose status under the Contract Documents shall be that of the former Engineer.

SC 9.04

Delete paragraph 9.04 of the General Conditions in its entirety and replace with the following:

Payments under this contract are governed by the Local Government Prompt Payment Act, Florida Statutes section 218.70 et. seq.,

SC 9.06

Delete paragraph 9.06 of the General Conditions in its entirety.

SC 9.11

Delete paragraph 9.11 of the General Conditions in its entirety.

ARTICLE 10 - ENGINEER'S STATUS DURING CONSTRUCTION

SC 10.02

Delete the first sentence of paragraph 10.02.A of the General Conditions in its entirety and replace with the following:

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified Engineer the progress that has been made and the quality of the various aspects of Contractor's executed Work.

SC 10.03.A

Add the following new paragraph immediately after paragraph 10.03. A of the General Conditions which is to read as follows:

B. Engineer will furnish a part-time Project Representative. Contractor is responsible to give 24-hour notice on all required inspections so that the Project Representative may be present.

SC 10.07

Delete paragraph 10.07.A of the General Conditions in its entirety and replace with the following:

Except for: Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work there under. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. (a) Claims for differing subsurface or physical conditions governed by paragraph 5.04; and (b) claims for time extensions governed by paragraph 4.05, all matters in question and other matters between Owner and Contractor arising prior to the date final payment is due, relating to the acceptability of the Work and the interpretation of the requirements of the contract documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 15 days after occurrence of the event giving rise to such Claim or within 15 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later; provided, however, the Owner shall make all final determination of such matters.

ARTICLE 11 - AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

SC 11.07.A.3 Delete subparagraph 11.07.A.3 of the General Conditions in its entirety

SC 11.04.C Delete "15 percent" in line 2 of paragraph 11.04.C.2.a of the General Conditions and replace with "10 percent".

SC11.04.C Delete "15 percent" in line 3 of paragraph 11.04.C.2.c of the General Conditions and replace with "10 percent".

SC 12.03.C Delete paragraph 12.03.C of the General Conditions in its entirety.

SC 12.03.D Delete paragraph 12.03.D of the General Conditions in its entirety and replace with the following:

In no event shall Owner, Engineer, or the Related Entities of either of them be liable to Contractor, any Subcontractor, any Supplier, any other person or organization, or any surety for or employee or agent of any of them, for any claim, cost, loss, or damages of any nature whatsoever arising out of or resulting from delays.

ARTICLE 12 - CLAIMS

SC 12.01.A

Add the following sentence at the end of 12.01.A of the General Conditions:

All Claims shall initially be referred to the Engineer for decision.

SC 12.01.B

Delete paragraph 12.01.B of the General Conditions in its entirety and replace with the following:

Except for: (a) Claims for differing subsurface or physical conditions governed by paragraph 5.04; and (b) claims for time extensions governed by paragraph 4.05, Claims by either party shall be initiated within 15 days after occurrence of the event giving rise to such Claim or within 15 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later, by written notice of the amount or extent of the Claim, dispute, or other matter with supporting data to the Engineer and the other party by written notice stating the general nature of each Claim, dispute, or other matter delivered by the claimant to Engineer and the other party to the Contract. A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 11.04.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 11.05.B. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract.

ARTICLE 13 COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

SC 13.02.B

Delete paragraph 13.02.B of the General Conditions in its entirety and replace with the following:

It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER.

Delete paragraphs 13.02.B through D of the General Conditions in their entirety.

ARTICLE 14 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

SC 14.04. A

Delete the phrase "(such costs to be approved by Engineer as to reasonableness)" in lines 6 and 7 of paragraph 14.04. A of the General Conditions.

ARTICLE 15 - PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC 15.08.C

Add the following sentence at the beginning of paragraph 15.08.C of the General Conditions:

The Owner and Contractor agree that a warranty inspection shall be scheduled no later than eleven (11) months after final payment under this Contract so that the Owner and the Contractor may inspect and otherwise examine the Work prior to the expiration of the Performance Bond

SC 15.08.E

Delete paragraph 15.08.E of the General Conditions in its entirety and replace with the following:

Contractor's obligations under this paragraph 15.08.E are in addition to any other obligation or warranty. The provisions of this paragraph 15.08 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or any way to limit the Contractor's continued liability for defective Work, including latent defects.

SC 15.01B.1

Delete the first sentence of paragraph 15.01.B.1 of the General Conditions in its entirety and replace with the following:

On or before the tenth (10th) day of each month, the Contractor shall submit completed partial progress payment requests to the Engineer, as set forth herein. Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application for Payment and accompanied by such supporting documentation as is required by the Contract Documents. Such supporting documents shall include but not be limited to, the required Contractor's certification; retainage as set forth in the Agreement; and a monthly dated CPM schedule for the Project. The Contractor shall make the following certification (Affidavit) on each Application for Payment: "I hereby certify that the labor and materials listed on this Application for Payment have been used in the construction of this Work and payment received from the last request for payment has been used to make payments to all subcontractors, laborers, material, men and suppliers except as listed below: "All payments by Indian River County as Owner shall be made in accordance with the Local Government Prompt Payment Act. Florida Statutes section 218.70 et. seq.

SC 15.01.B.3

Add a new paragraph immediately after paragraph 15.01.B.1 of the General Conditions, which is to read as follows:

4. Contractor shall furnish satisfactory proof to Owner and Engineer that payment received from Owner for materials and equipment not incorporated into the Work and suitably stored, has in fact been paid to the respective supplier(s) within ten (10) days of Contractor's receipt of payment from Owner. Failure to provide such evidence of payment shall result in the withdrawal of previous approval(s) and removal of the cost of related materials and equipment from the next submitted Application for Payment, and shall be deemed a default under the Contract.

SC 15.01.D.1

Delete paragraph 15.01.D.1 of the General Conditions in its entirety and replace with the following:

All payments by Indian River County as Owner shall be made in accordance with the Local Government Prompt Payment Act. Florida Statutes section 218.70 et. seq.

SC 15.01.E.2

Delete paragraph 15.01.E.2 of the General Conditions in its entirety and replace with the following:

If Owner refuses to make payment of the full amount recommended by Engineer, Owner shall provide notice to Contractor in accordance with the provisions of the Local Government Prompt Payment Act. Florida Statutes section 218.70 et. seq. and pay Contractor any amount remaining after deduction of the amount so withheld in accordance with the provisions of the Local Government Prompt Payment Act. Florida Statutes section 218.70 et. seq. Owner shall pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, in accordance with the provisions of the Local Government Prompt Payment Act. Florida Statutes section 218.70 et. seq. Owner shall pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, in accordance with the provisions of the Local Government Prompt Payment Act. Florida Statutes section 218.70 et. seq.

SC 15.02.A

Add the following sentences to the end of the existing paragraph 15.02.A of the General Conditions as follows:

No materials or supplies for the Work shall be purchased by Contractor or Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. Contractor warrants that Contractor has good title to all materials and supplies used by Contractor in the Work, free from all liens, claims or encumbrances.

SC 15.03.C

Delete paragraph 15.03.C of the General Conditions in its entirety and replace with the following:

If Engineer considers the Work substantially complete, Engineer will prepare and deliver to Owner a tentative certificate of Substantial Completion that shall fix the date of Substantial Completion. In accordance with the provisions of Florida Statutes section 208.735(7)(a)(2005), upon receipt of the tentative certificate of Substantial Completion from Engineer, the Owner, the Engineer, and the Contractor shall conduct a walkthrough inspection of the Project to document a list of any items required to render the Work on the Project complete, satisfactory, and acceptable under this Agreement (herein the "Statutory List"). The Statutory List shall be reduced to writing and circulated among the Owner, the Engineer, and the Contractor by the Owner or the Engineer within 30 calendar days after substantial completion. The Owner and Contractor acknowledge and agree that: 1) the failure to include any corrective work, or pending items that are not yet completed, on the Statutory List does not alter the responsibility of the Contractor to complete all of the Work under this Agreement: 2) upon completion of all items on the Statutory List, the Contractor may submit a pay request for all remaining retainage except as otherwise set forth in this Agreement; and 3) any and all items that require correction under this Agreement and that are identified after the preparation of the Statutory List remain the obligation of the Contractor to complete to the Owner's satisfaction under this Agreement. After receipt of the Statutory List by the Contractor, the Contractor acknowledges and agrees that it will diligently proceed to complete all items on the Statutory List and schedule a final walk-through in anticipation of final completion on the Project.

SC 15.03.D

Delete paragraph 15.03.D of the General Conditions in its entirety and replace with the following:

At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, HVAC, utilities, insurance, and warranties and guarantees.

SC 15.06.A.3

Delete paragraph 15.06.A.3 of the General Conditions in its entirety.

SC 15.06. B.1

Delete paragraph 15.06.B.1 of the General Conditions in its entirety and replace with the following:

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation, all as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will indicate, within twenty days after receipt of the final Application for Payment, in writing Engineer's recommendation of payment and present the Application to Owner for payment. Thereupon Engineer will give written notice to Owner and Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

SC 15.06. C.1 Delete paragraph GC-15.06.B.1 in its entirety and replace with the following:

Payment shall be made by Owner to Contractor according to the Local Government Prompt Payment Act, Florida Statutes section 218. et.seq.

SC 15.07

Delete paragraph 15.07 of the General Conditions in its entirety.

ARTICLE 16 - SUSPENSION OF WORK AND TERMINATION

SC 16.02.A.1

Delete subparagraph 16.02.A.1 of the General Conditions in its entirety, and replace with the following:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents;

SC 16.02.A.2

Delete subparagraph 16.02.A.2 of the General Conditions in its entirety, and replace with the following:

2. Contractor's violation of any material provisions of the Contract Documents.

SC 16.02.A.5 and 6:

Add the following new sub paragraphs at the end of paragraph GC 16.02.A

- 5. Failure of Contractor to make proper payments to Subcontractors for labor, services, materials or equipment in connection with the Work;
- 6. If Contractor abandons the Work, or assigns Contract or any part thereof, without the previous written consent of Owner, otherwise than in accordance with the Contract Documents.

SC 16.02.H

Add the following new paragraph immediately following paragraph 16.02.H of the General Conditions:

H. If, after termination of the Contract by the Owner for cause as set forth in paragraph 16.02, it is determined that the Contractor had not failed to fulfill its contractual obligations, the termination under paragraph 16.02 shall be deemed to have been for the convenience of the Owner. In such event, adjustment of the contract price shall be made as provided in paragraph 16.03.

ARTICLE 17 - FINAL RESOLUTION OF DISPUTES

SC 17.01. A

Delete the paragraph 17.01.A of the General Conditions in its entirety and replace with the following:

A. Prior to the filing of any suit or other legal proceedings, the parties shall endeavor to resolve claim disputes or other matters in question by mediation. Mediation shall be initiated by any party by serving a written request for same on the other party. The parties shall, by mutual agreement, select a circuit court mediator as certified by the Supreme Court of Florida within 15 days of the date of the request for mediation. If the parties cannot agree on the selection of a circuit court mediator as certified by the Supreme Court of Florida, then the Owner shall select the mediator, who shall be a circuit court mediator as certified by the Supreme Court of Florida. The mediator's fee shall be paid in equal shares by Owner and Contractor.

SC 17.01.C.

Add paragraph 17.01.C of the General Conditions in its entirety and replace with the following

C. Contractor shall carry on the Work and maintain the progress schedule during the dispute resolution proceedings, unless otherwise agreed by Contractor and Owner in writing.

ARTICLE 18 - MISCELLANEOUS

SC 18.01.A Delete paragraph 18.01A of the General Conditions in its entirety and replace with the following

Notices: Any notice, request, demand, consent, approval, or other communication required or permitted by this Agreement shall be given or made in writing and shall be served, as elected by the party giving such notice, by any of the following methods: (a) Hand delivery to the other party; (b) Delivery by commercial overnight courier service; or (c) Mailed by registered or certified mail (postage prepaid), return receipt requested at the addresses of the parties shown in the Agreement. Notices shall be effective when received at the address as specified above. Facsimile transmission is acceptable notice effective when received, provided, however, that facsimile transmissions received (i.e., printed) after 5:00 p.m. or on weekends or holidays, will be deemed received on the next day that is not a weekend day or a holiday. The original of the notice must additionally be mailed. Either party may change its address, for the purposes of this paragraph, by written notice to the other party given in accordance with the provisions of this paragraph.

SC 18.09 through and including 18.16

Add the following new paragraphs after paragraph 18.08 of the General Conditions:

<u>18.09 Utilities</u>: The Contractor shall, at its expense, arrange for, develop and maintain all utilities in Work areas to meet the requirements of the Contract. Such utilities shall be furnished by Contractor at no additional cost to the Owner, and shall include but not be limited to the following: public telephone service for the Contractor's use; construction power as required at each point of construction; and water as required throughout the construction. Prior to final acceptance of the Work the Contractor shall, at its expense, satisfactorily remove and dispose of all temporary utilities developed to meet the requirements of the Contract.

<u>18.10 Drainage</u>: The contractor shall so conduct its operations and maintain the Work in such condition that adequate drainage will be in effect at all times. Existing functioning storm sewers, gutters, ditches, and other run-off shall not be obstructed.

<u>18.11 Fire Hydrants</u>: Fire hydrants on or adjacent to the highway shall be kept accessible to fire apparatus at all times and no material or obstruction shall be placed within fifteen feet (15') of any such hydrant.

<u>18.12 Protection of Structures</u>: Heavy equipment shall not be operated close enough to pipe headwalls or other structure to cause their displacement.

<u>18.13 Fencing</u>: On all Work which includes fencing and where the Engineer determines it to be necessary for maintaining the security of livestock or adjacent property, or for protection of pedestrians who are likely to gain access to the Work from adjacent property, the Contractor shall erect an appropriate temporary security fence as a first order of business. Temporary fencing shall be installed at temporary construction easement areas on all commercial and residential properties appropriate to secure the Work area and protect persons and domestic animals. At all times the Contractor shall conduct the Work under secure temporary fencing. Permanent fencing shall be addressed as required by the Plans and Specifications.

<u>18.14 Record Drawings</u>: The Contractor shall keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These items shall be available to the Engineer and shall be delivered to the Engineer for the Owner. Record Drawings shall be submitted with each pay request. Final acceptance of the Work will be withheld until the approval of such documents is made by the Owner.

<u>18.15 Progress Videotapes / Photographs</u>: Contractor shall deliver to the Owner prior to commencing the Project a preconstruction videotaping (DVD-type color video) of the Project with descriptive radio narrative clarifying orientation and objects viewed. Contractor shall provide monthly photographs taken on cutoff date for each scheduled Application for Payment and each major process component indicated construction status and progress from invitation of work at each component through substantial completion of each component. The cost of the video and photographs shall be included in the bid submitted by the Contractor.

<u>18.16 Commercial Activities</u>: Contractor shall not establish any commercial activity or issue concessions or permits of any kind to third parties for establishing commercial activities on land owned or controlled by Owner. Contractor shall not allow its employees to engage in any commercial activities on the Project site.

END OF SECTION

SECTION 00850

DRAWINGS INDEX

PHASE 1 – CELL 3 SITE PREPARATION

- 1 COVER SHEET
- 2 EXISTING SITE CONDITIONS
- 3 SITE DEVELOPMENT PLAN
- 4 EARTHWORK GRADING PLAN
- 4A EARTHWORK CELL 3 GRADING PLAN
- 5 CONSTRUCTION CONTROL POINTS DATA
- 6 PHASE I PERIMETER SWALE PROFILE
- 7 CROSS SECTIONS AND DETAILS
- 8 EROSION AND SEDIMENT CONTROL DETAILS

END OF SECTION

SECTION 00901

APPROVED PERMITS

Phase 1 – Cell 3 Site Preparation

NO. Permit & Description

- Indian River County Landfill Facility Class I Construction and Operation Permit, Modified Permit No. 0128769-033-MM issued on November 11, 2022 from previous Permit No. 0128769-022-SC and 0128769-023-SO is Complete, by Florida Department of Environmental Protection Central District Office.
- Indian River County Landfill (IRCL) Environmental Resource Permit Extension File No. EM 31-0163429-010 for previously issued Permit No. ERP 31-0163429-009-EM, was Modified and Permit Extension Issued to Indian River County Solid Waste Disposal District, Permitting Authority: Florida Department of Environmental Protection Central District Office, August 8, 2015.

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FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

November 30, 2022

NOTICE OF PERMIT MODIFICATION

By-Email hmehta@ircgov.com

In the Matter of an Application for Permit by: Indian River County Solid Waste Disposal District 1325 74th Avenue Vero Beach, FL 32968

Indian River County WACS # 19134 Indian River County Landfill

Attention: Mr. Himanshu Mehta, P.E.

DEP File No: 0128769-033-SO-MM

Pursuant to Sections 403.061(14) and 403.707, Florida Statutes, the Department hereby issues modification number 0128769-033-SO-MM. The following conditions of Permit Nos. 0128769-022-SC and 0128769-023-SO are modified as follows:

SPECIFIC CONDITIONS	FROM	то	TYPE OF MODIFICATION
Title Page	Existing	Amended	Addition of Permit Modification No. 0128769-033-SO-MM
Section 1.C.	Existing	Amended	Updated Facility Description to include addition of the leachate evaporator and three additional improvements.
2.B.2.	Existing	Amended	Reference revised to reflect reordering of documents in Appendix 2.
2.B.6.	Existing	Amended	Reference revised to reflect reordering of documents in Appendix 2.
2.C.2.	Existing	Amended	Updated to include information in the Operation and Training Plan, Revision No. 6, dated August 2022.
2.C.12.e.	New	New	Addition to include requirements established in the Approval of Alternate Procedures Order – SWAP 22-1

Mr. Himansu Mehta, P.E. November 30, 2022 Page 2

2.E.1.	Existing	Amended	Reference revised to reflect reordering documents in Appendix 2.
Appendix 2	Existing	Amended	Revised the order of documents to be listed chronologically. Revised Sections I to IV, II to III, III to II and IV to I.
Appendix 2	Existing	Amended	Addition of Documents V.1, V.2, V.3., V.4., and V.5
Appendix 3 II.1.	Existing	Amended	Revised number of ground water monitoring wells
Appendix 3 II.5.	Existing	Amended	Reference revised to reflect reordering of documents in Appendix 2.
Appendix 3	Existing	Amended	Updated Table 1 to include proposed MWs
Appendix 3	Existing	Amended	Added Figure 1b - Proposed Groundwater MW Locations

Attached are Permit Nos. 0128769-022-SC and 0128769-023-SO as modified by this Order. The attached permit replaces all previous permits and permit modifications for this facility.

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:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; 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 are or 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;

Mr. Himansu Mehta, P.E. November 30, 2022 Page 3

- (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 14 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 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. 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 <u>Sections 120.569</u> 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.

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 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.

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.

Mr. Himansu Mehta, P.E. November 30, 2022 Page 4

EXECUTION AND CLERKING Executed in Tallahassee, Florida. STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kimberly A. Walker

Digitally signed by Kimberly A. Waker Date: 2022.11.30 09:58:35-05:00

Kimberly A. Walker, Program Administrator Permitting and Compliance Assistance Program

Attachment(s): Permit Modification No. 0128769-033-SO-MM

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:

Ron T. Jones, Indian River County, <u>rjones@ircgov.com</u> Himanshu Mehta, Indian River County, <u>hmehta@ircgov.com</u> Kwasi Badu-Tweneboah, Ph.D., P.E., Geosyntec Consultants, KBaduTweneboah@Geosyntec.com

Richard Tedder, P.E., Senior Consultant, Geosyntec Consultants, <u>RTedder@Geosyntec.com</u> El Kromhout, P.G, FDEP PCAP Solid Waste Section, <u>Elizabeth Kromhout@FloridaDEP.gov</u> Alan Willett, P.G, FDEP PCAP Solid Waste Section, <u>Alan.Willett@FloridaDEP.gov</u> Southeast District Solid Waste <u>SED.SolidWaste@dep.state.fl.us</u>

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.

Tamela Starling

11/30/2022 Date



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

Permit Issued to:

Indian River County Solid Waste Disposal District 1325 74th Avenue SW Vero Beach, Florida Phone Number: 772.770.5112

> WACS Facility ID No.: 19134 Indian River County Landfill 1325 74th Avenue SW Vero Beach, Florida 32968

> Contact Person: Mr. Himanshu Mehta, P.E. Managing Director 1325 74th Avenue, Southwest Vero Beach, FL 32968 772.770.5112

Solid Waste Construction/Operation Permit – Landfill Permit Nos.: 0128769-022-SC; 0128769-023-SO Permit Modification Nos.: 0128769-024-SO-MM; 0128769-026-SC-IM; 0128769-027-SO-MM; 0128769-028-SO-MM; 0128769-029-SO-IM; <u>0128769-033-SO-MM</u> Replace Permit Nos.: SC31-0128769-019 and SO31-0128769-020

> Permit Issued: January 5, 2016 Permit Renewal Application Due Date: November 5, 2035 Permit Expires: January 5, 2036

Permitting Authority Florida Department of Environmental Protection Solid Waste Program & Permitting 2600 Blair Stone Road, MS #4565 Tallahassee, Florida 32399-2400

SECTION 1 - SUMMARY INFORMATION

A. Authorization

The permittee is hereby authorized to construct/operate the facility described below in accordance with the specific and general conditions of this permit and any documents attached to this permit or specifically referenced in this permit and made a part of this permit.

This solid waste construction/operation permit is issued under the provisions of Chapter 403, Florida Statutes, (F.S.), and Chapters 62-4 and 62-701, Florida Administrative Code, (F.A.C.).

This permit does not relieve the permittee from complying with any other appropriate local zoning or land use ordinances or with any other laws, rules or ordinances. Receipt of any permits from the Department does not relieve the applicant from obtaining other federal, state, and local permits and/or modifications required by law, including those from other Sections within the Department or of the Water Management District.

Permit 0128769-022-SC authorizes construction of Class I disposal cells within Segment 3 in accordance with the approved design as provided in the documents listed in Appendix 2. The Permittee must notify the Department prior to beginning construction of new cells and a certification of completion of construction and proof of financial assurance shall be submitted and approved prior to operation of newly constructed cells. Groundwater monitoring wells shall be abandoned and installed as described in Table 1 of the Water Quality Monitoring Plan (Appendix 3).

Permit 0128769-023-SO authorizes continued operation of the Class I landfill, which includes filling the Segment 1 vertical expansion, Infill Area, Segment 2, and constructed portions of Segment 3. All areas being filled have been or will be lined in accordance with Chapter 62-701, F.A.C. The operation permit will be modified as needed to address closure of cells as they reach design elevation.

Permit 0128769-023-SO also authorizes the operation of a recovered materials transfer facility, a household hazardous waste transfer facility, a yard trash processing facility, an asbestos disposal area and a waste tire site.

B. Facility Location

The facility is located south of Oslo Road, west of Range Line Road (74th Avenue) and east of Interstate 95, Indian River County, Florida. The latitude and longitude are 27°34'48.4" North and 80°28'49.1" West.

C. Facility Description

The Indian River County Landfill property covers about 276 acres and includes the Class I disposal area described below and a 19-acre C&D Debris Disposal Facility in the southeast corner of the property. The C&D Debris Disposal Facility is permitted under a separate permit. The facility also includes a recovered materials transfer facility, a household hazardous waste transfer facility, a yard trash processing operation, and a waste tire site authorized by this permit.

Segment 1 is a 20-acre unlined landfill cell that was operated between 1978 and 1990 and was closed with an 8-12 inch compacted clay cap in 1991. A permit was issued in 2005, and modified in 2006, to allow for the placement of C&D debris on top of the Segment 1 north, west and south side slopes. The C&D debris was capped with a two-foot layer of soil and vegetation as final closure of Segment 1 in 2005.

Segment 2 was constructed in 1988 and comprises an area of approximately 38 acres to the east of Segment 1. Segment 2 was constructed with a 60-mil thick high-density polyethylene (HDPE) geomembrane liner. The final design height of Segment 2 is 180 feet NGVD. Leachate from the western half of Segment 2 is collected at a pump (lift) station at the northwest corner of Segment 2. Leachate from the eastern half of Segment 2 is collected into Manhole 9 at the northeast corner of Segment 2 and conveyed to the pump station. Leachate is then pumped to the Indian River County West Regional Wastewater Treatment Plant (WRWTP) for disposal. The north and south side slopes of Segment 2 have received final closure cover; consisting of a 40-mil thick linear low-density polyethylene (LLDPE) geomembrane, a geonet drainage layer and 2 feet of soil and vegetation; up to elevation 105 feet NGVD. Segment 2 was closed, and construction completion was certified in 2020.

The Infill Area was constructed in 1999. The bottom of the Infill Area has a single composite liner comprised of a 60-mil thick HDPE geomembrane over two feet of compacted clay covering a five-acre area between Segment 1 and Segment 2, and a 60-mil thick textured HDPE geomembrane covering approximately 7.5 acres of the east slope of Segment 1. Leachate from the Infill Area drains to the collection pipe along the western side of Segment 2.

The Segment 1 vertical expansion was constructed in 2009 and comprises an area of approximately 4.6 acres on top of the closed Segment 1 cell. The Segment 1 vertical expansion was constructed with a composite liner consisting of a 60-mil thick HDPE geomembrane and a geosynthetic clay liner. The final design height of the Segment 1 vertical expansion is185 feet NGVD. Leachate from the Segment 1 vertical expansion drains through a geocomposite drainage layer into the Infill Area. Segment 1 vertical expansion was closed, and construction completion was certified in 2020.

Segment 3 is located to the east and southeast of Segment 2 and is being constructed in phases as needed. The total footprint area of Segment 3 is 76 acres and will consist of 8 cells. Segment 3, Cell 1, directly east of and on top of the east slope of Segment 2, was constructed in 2013. Segment 3, Cell 2 was constructed in 2020. Segment 3, Cells 3 through 8 will be constructed using a double liner system with a leachate collection system and a leak detection system. Leachate from Segment 3 is collected and pumped to the Indian River County WRWTP.

Leachate will be pumped from the Class I landfill directly to the on-site 500,000-gallon leachate storage tank and conveyed into the leachate evaporator for treatment. All leachate generated from the Class I landfill will be treated in the on-site leachate evaporator. Byproduct residuals from the leachate evaporator will be disposed of in the lined Class I Landfill. If needed for emergencies the leachate will be transmitted to IRC West Regional WWTP for disposal. Additional details are in the approved Operation Plan (August 2022) referenced in APPENDIX 2, Section V, Number 3.

The following improvements will be made at the facility: an improved driveway entrance over the Sub-Lateral C-5 canal to the existing yard trash processing area north of the Landfill, another inbound weigh scale and bypass lane, just north of the existing inbound weigh scale for

commercial hauler use, and the installation of a new high pressure skid system with hydrogen sulfide (H2S) removal and a chiller to a location just east of the existing flare with a new smaller flare. Additional details are in the Minor Modification Permit Application, Landfill Leachate Evaporator (received August 11, 2022) referenced in APPENDIX 2, Section V, Number 2.

D. Appendices Made Part of This Permit

APPENDIX 1 - General Conditions

APPENDIX 2 - List of Approved Documents Incorporated into the Permit

APPENDIX 3 - Water Quality Monitoring Plan

SECTION 2 - SPECIFIC CONDITIONS

A. Administrative Requirements

- <u>Documents Part of This Permit</u>. The permit application as revised in final form replaced or amended in response to the Department's Request(s) for Additional Information are contained in the Department's files and are made a part of this permit. Those documents that make up the complete permit application are listed in APPENDIX 2.
- <u>Permit Modification</u>. Any change to construction, operation, monitoring, or closure requirements of this permit may require a modification to this permit, in accordance with the provisions of Rule 62-701.320(4), F.A.C.
- Permit Renewal. In order to ensure uninterrupted operation of this facility, a timely and sufficient permit renewal application must be submitted to the Department in accordance with Rule 62-701.320(10), F.A.C. A permit application submitted at least 61 days prior to the expiration of this permit is considered timely and sufficient.
- 4. <u>Transfer of Permit or Name Change</u>. In accordance with Rule 62-701.320(11), F.A.C., and Rule 62-4.120, F.A.C., the Department must be notified by submitting Form 62-701.900(8) within 30 days: (a) of any sale or conveyance of the facility; (b) if a new or different person takes ownership or control of the facility; or (c) if the facility name or permittee's legal name is changed.
- <u>Air Permit Requirements</u>. This facility is authorized to operate under a Title V permit. The Air Program Facility ID is 0610015. For information regarding the Title V permit, contact the Division of Air Resource Management, Office of Permitting and Compliance, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400, (850) 717-9000.
- <u>Submittals Required Every Five Years</u>. No later than January 5, 2021, January 5, 2026, and January 5, 2031, the Permittee shall submit a report to the Department that contains the following:

- An updated closure plan to reflect changes in closure design, long-term care requirements, and financial assurance requirements.
- A revised closure cost estimate, made by recalculating the total cost of closure or long-term care, in current dollars.
- c. A demonstration that the leachate collection system has been water pressure cleaned or inspected by video recording.
- d. An updated operation plan, if operational procedures have changed.
- 7. <u>Permit Fee Payments</u>. The total permit fee required is \$80,000 for a 20-year construction permit and a 20-year operation permit. The applicant has elected to pay this fee in installments in accordance with Rule 62-701.315(13), F.A.C., and submitted \$20,000 with the September 28, 2015 permit application. No later than January 5, 2021, January 5, 2026, and January 5, 2031, the Permittee shall submit the remaining installment payments of \$20,000 each to the Department. This fee is due the State regardless of whether the Permittee closes the facility, surrenders the permit, has the permit revoked, or transfers the permit before it expires. If the Permittee elects to transfer the permit, it must either pay the entirety of the fee due before submitting the application for transfer, or it must include with the transfer application a signed agreement from the proposed transferee to accept responsibility for the remainder of the permit fee due.

B. Construction Requirements

- <u>Construction authorized</u>. This permit authorizes construction of disposal cells within Segment 3. Intermediate Permit Modification No. 0128769-026-SC-IM authorizes construction of a gravity leachate collection system and leachate detection system that conveys leachate to a pump station that will be located outside of the anchor berm for Cells 2, 3, and 4 of Segment 3. This pump station will serve cells 1, 2, 3, and 4 of Segment 3. The Cell 1 sump pump flows will be rerouted to the new pump station. The Permittee must notify the Department prior to beginning construction of new disposal cells.
- Specific Construction Details for The Gravity Leachate Collection System: The construction of the gravity leachate collection system and leachate detection system described in Specific Condition 2.B.1. will include a total of six bootless liner penetrations. Each bootless liner penetration includes a manufactured plate with a 12-inch high-density polyethylene containment pipe secured to a concrete pad. Appendix C, Sheets 18A, and 20A of the 2018 Intermediate Modification Application (APPENDIX 2, Section III- III., Number 1.) contain specific construction details and specifications for the leachate collection system and bootless liner penetrations.
- 3. <u>General Construction Requirements.</u> All construction shall be done in accordance with the approved design, drawings, CQA plan, and specifications. The Department shall be notified before any changes, other than minor deviations, to the approved design are implemented in order to determine whether a permit modification is required.
- 4. <u>Certification of Construction Completion</u>. Upon completion of construction of one or more cells, the engineer of record shall certify to the Department in accordance with Rule 62-701.320(9)(b), F.A.C., that the permitted construction is complete and was done in substantial conformance with the approved construction plans except where minor

deviations were necessary. All deviations shall be described in detail and the reasons therefore enumerated. The following documents shall be submitted along with the Certification:

- a. The final report and record drawings showing that the liner system has been installed in substantial conformance with the plans and specifications for the liner system. The record drawings must include the results of the surveys of the liner, base grade and collection pipe slopes.
- b. Results of testing of geosynthetic and soil components of the liner system.
- 5. <u>Construction Quality Assurance</u>. The Construction Quality Assurance (CQA) Plan submitted with the March 17, 2010 permit application and subsequent revisions shall be followed for preparing the subgrade and installing and testing the liner system and related components. The CQA engineer or the engineer's designee shall be on-site at all times during construction of the liner system to monitor the construction activities including preparation of the subbase, placement of the liner components and leachate collection system, and placement of the drainage and protective layer over the primary liner.
- 6. <u>Construction Quality Assurance for the Gravity Leachate Collection System and Leachate Detection System</u>: The specific testing procedures and related CQA procedures for construction of the gravity leachate collection system and leachate detection system are specified in Section 3, Permit Application Part G, of the 2018 Intermediate Modification Application (APPENDIX 2, Section III. II., Number 1.) A primary liner electrical leak location survey in accordance with ASTM D7007-09 will be performed after liner installation, leachate collection system piping installation, and protective sand layer placement are complete. Any leaks found during the survey will be repaired immediately. After installation of the double walled leachate collection pipe, the interstitial space between the 12-inch secondary containment pipe and the 10-inch leachate collection pipe will be pressure tested for any leaks. After pressure testing, the test chamber opening of the secondary containment pipe will be filled with bentonite grout and welded shut.
- 7. <u>Approval of Certification</u>. The permittee shall not begin using newly constructed Segment 3 cells until one of the following has occurred: (1) the Department has stated in writing that it has no objection to the certification of construction completion; or (2) at least 30 days have passed since the certification was submitted and the Department has not responded in writing to the certification.

C. Operation Requirements

- <u>General Operating Requirements</u>. The Permittee shall operate the landfill in accordance with the approved Operation Plan. The Department shall be notified before any changes, other than minor deviations, to the approved Operation Plan are implemented in order to determine whether a permit modification is required.
- 2. <u>Operation Plan</u>. A copy of the approved Operation Plan, including the operating record as defined in Rule 62-701.500(3), F.A.C., shall be kept at the facility and shall be accessible to landfill operators. Sections 11.2, 17.3, 17.6, and 17.9 of the approved Operation Plan from November 2015 were revised in March 2018 as part of the minor modification to reflect new procedures associated with the modified leachate collection/conveyance

system for Segment 3 Cells 2, 3, and 4 and the associated new leachate pump station that will be constructed at the same time as Segment 3 Cell 2. The operation plan was updated with Addendum 2 dated July 2021. The approved Operation Plan (APPENDIX 2, Section V, Number 5) dated August 2022, known as Revision No. 6, includes all previously approved revisions in Addendum 1 and Addendum 2. The approved Operation Plan (November 2015) is referenced in APPENDIX 2, Section III., Number 1, and the approved Addendum (March 2018) is referenced in APPENDIX 2, Section II. Number 3.

- Authorized Waste Types. The facility is authorized to manage only the following waste types:
 - a. Waste types defined in Rule 62-701.200, F.A.C .:
 - 1) Class I waste
 - 2) Class III waste
 - 3) Construction and demolition debris
 - 4) Yard trash
 - 5) White goods
 - 6) Waste tires
 - 7) Household hazardous waste
 - 8) Recovered materials
 - b. Other Wastes Specifically Authorized: None.
- 4. <u>Unauthorized Waste Types</u>. The facility is not authorized to accept, process or dispose any waste types not listed in C.3 above. Any unauthorized waste inadvertently received by the facility shall be managed in accordance with the approved Operation Plan.
- 5. Waste Management and Handling.
 - a. Solid waste shall be formed into cells to construct horizontal lifts. The working face of the cell, and side grades above land surface, shall be at a slope no greater than three feet horizontal to one-foot vertical rise or as authorized by this permit in accordance with the approved operation plan.
 - b. No solid waste shall be disposed of outside of the permitted footprint of the solid waste disposal units.
 - c. The sequence of waste filling shall be as specified in the approved operation plan.
- 6. Landfill Elevation. The permitted height of the Class I landfill is currently as follows:
 - a. Segments 1 vertical expansion & Segment 2: 180' NGVD
 - b. Segment 3: 210' NGVD
- <u>Initial Waste Placement</u>. The first layer of waste placed above the liner and leachate collection system shall be a minimum of four feet in compacted thickness and consist of selected wastes containing no large rigid objects that may damage the liner or leachate collection system.
- <u>Cover Requirements</u>. All solid waste disposed of in the Class I landfill shall be covered as required by Rule 62-701.500(7), F.A.C.
 - a. Initial cover shall be applied and maintained at the end of each working day in the Class I landfill in accordance with Rule 62-701.500(7)(e)&(f), F.A.C., so as to protect the public health and welfare. Approved initial cover materials include those listed

in Rule 62-701.500(7)(e), F.A.C., provided they meet the criteria of Rule 62-701.200(53), F.A.C.

- b. Alternate initial cover material (AICM) not identified herein shall be approved by the Department prior to use at the facility. For those areas where solid waste will be deposited on the working face within 18 hours, initial cover may consist of a temporary cover or tarpaulin. Approved AICM includes:
 - Processed yard trash may be used as initial cover in a 50/50 mixture with soil and applied in 6 inch compacted layers.
 - 2) Rusmar AC-667SE soil equivalent foam, in accordance with the Operations Plan.
- c. Intermediate cover shall be applied and maintained in accordance with F.A.C. 62-701.500(7)(g). An intermediate cover of one (1) foot of compacted earth or other approved intermediate cover material, in addition to the six (6) inch layer of initial cover, shall be applied within seven (7) days of cell completion at all landfills if final cover or an additional lift is not to be applied within 180 days of cell completion. Approved intermediate cover materials include those listed in Rule 62-701.500(7)(g), F.A.C., provided they meet the criteria of Rule 62-701.200(55), F.A.C. Processed yard trash may be used as intermediate cover in a 50/50 mixture with soil.
- d. Materials that have been used for intermediate cover may be removed and reused only if the materials are substantially free of waste.
- 9. <u>Erosion Control</u>. Erosion control measures shall be employed to correct any erosion which exposes waste or causes malfunction of the storm water management system. Such measures shall be implemented within three days of occurrence. If the erosion cannot be corrected within seven days of occurrence, the landfill operator shall notify the Department and propose a correction schedule.
- <u>Contingency Plan and Notification of Emergencies</u>. The Permittee shall notify the Department in accordance with the approved Contingency Plan. Notification shall be made to the DEP's Southeast District Office at 3301 Gun Club Road, MSC 7210-1, West Palm Beach, Florida, 33406, at phone number 561-681-6600 or by Email to: <u>Southeast District@dep.state.fl.us</u>.
- Housekeeping. The facility shall be operated to control dust, vectors, litter and objectionable odors. If objectionable odors are confirmed beyond the landfill property boundary, the owner or operator shall comply with the gas management requirement in Section 2, Part E.
- 12. Leachate Management.
 - a. The permittee shall operate the leachate management system (including the collection, removal and transmission systems), and maintain the system as designed, so that leachate is not discharged from the system except as provided for in the Operation Plan.
 - b. Routine inspections and maintenance of the leachate management system shall be conducted in accordance with the schedule established in the Operation Plan.
 - c. The leachate collection pipes shall be cleaned or video inspected at least once every five years.
 - d. The permittee, on a daily basis, shall record quantities of leachate generated in gal/day and precipitation at the facility, and shall compare these measurements.

- e. Leachate collection, treatment and disposal shall comply with requirements established in the Approval of Alternate Procedures Order – SWAP 22-1 (APPENDIX 2, Section V., Number 1) and the current Operation Plan (APPENDIX 2, Section V., Number 5).
- 13. <u>Spotters and Operators</u>. This facility shall have the minimum number of spotters present when waste is accepted as specified in the Operation Plan, to be located as specified in the Operation Plan. A trained operator shall be on duty at the facility at all times the facility is operating. Approved training courses can be found at the following web site: <u>http://www.treeo.ufl.edu/sw</u>.
- 14. Record Keeping Requirements.
 - a. Waste Quantity Records. Waste records shall be compiled monthly, and copies shall be provided to the Department no less than annually by February 1, in accordance with Rule 62-701.500(4)(a), F.A.C. This information shall be reported to the Department through the DEP Business Portal located at: <u>http://www.fldepportal.com/go</u>.
 - b. Estimate of Remaining Life. The permittee shall submit the annual estimate of the remaining life and capacity by September 1st. The report is required by Rule 62-701.500(13)(c), F.A.C. and must be submitted to the Southeast District Office and to:

Florida Department of Environmental Protection Solid Waste Program & Permitting, MS 4565 2600 Blair Stone Road Tallahassee, Florida, 32399-2400

- 15. <u>Hazardous Waste</u>. If any regulated hazardous wastes are discovered to be deposited at the facility, the facility operator shall promptly notify the Department, the person responsible for shipping the wastes to the facility, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator shall assure the cleanup, transportation, and disposal of the wastes are discovered they shall be management facility. In the event that hazardous wastes are discovered they shall be managed in accordance with the procedures provided in facility Operation Plan.
- Storm Water. Leachate shall not be discharged into the storm water management system. Storm water or other surface water which comes into contact with or mixes with the solid waste or leachate shall be considered leachate and is subject to the requirements of Rule 62-701.500(8), F.A.C.

D. Water Quality Monitoring Requirements

 <u>Zone of Discharge</u>. The zone of discharge for the Class I facility shall be a threedimensional volume defined in the horizontal plane as extending 100 feet from the Class I active disposal area footprint or to the property boundary, whichever is less. The Zone of Discharge shall be defined in the vertical plane as extending from the top of the ground to the base of the surficial aquifer. The permittee shall ensure that Class G-II water quality standards will not be exceeded at the boundary of the zone of discharge, per Rule 62-520.420, F.A.C., and that ground water minimum criteria will not be exceeded outside the boundary of the zone of discharge, per Rule 62-701.320(17), F.A.C. Water Quality Monitoring Plan The Water Quality Monitoring Plan for this permit is included in APPENDIX 3.

E. Gas Management System Requirements

- <u>Construction Requirements</u>. All construction shall be done in accordance with the approved gas management system design, drawings, and specifications. The Department shall be notified before any changes, other than minor deviations, to the approved design are implemented in order to determine whether a permit modification is required.
 - a. Locations of gas monitoring probes are specified in Figure 1 of Appendix 3.
 - b. Locations of gas extraction or venting wells are specified in Drawing 27 and Drawing 37, Appendix A of the 2020 permit application (APPENDIX 2, Section <u>LIV</u>.).
- <u>Certification of Construction Completion</u>. After construction is completed the engineer of record shall certify to the Department in accordance with Rule 62-701.320(9)(b), F.A.C., that the permitted construction is complete and was performed in substantial conformance with the approved construction plans except where minor deviations were necessary. All deviations shall be described and the reasons therefore enumerated.
- Operational Requirements. Gas controls shall be operated and maintained so that they function as designed.
- 4. <u>Monitoring Requirements</u>. Monitoring for methane gas at the property boundary and within structures on the property shall be performed quarterly to determine the effectiveness of the gas migration controls. The gas monitoring results shall be reported as a percent of the lower explosive limit (LEL), calibrated to methane. The report shall be submitted to the Department under separate cover no later than 15 days after the end of the period in which the monitoring occurred.
- 5. Gas Remediation Plan. The facility landfill gas management system shall be operated to prevent the concentration of combustible gases from exceeding 25% of the lower explosive limit in structures, excluding gas control or recovery components, and from exceeding the lower explosive limit at or beyond the property boundary. If either of these limits is exceeded then a gas remediation plan shall be designed and implemented in accordance with Rule 62-701.530(3)(a), F.A.C.
- 6. <u>Odor Remediation Plan</u>. The facility shall be operated to control objectionable odors. If objectionable odors are confirmed beyond the property boundary then upon notification by the Department the permittee shall develop and implement an odor remediation plan in accordance with the requirements of Rule 62-701.530(3)(b), F.A.C.
- Actions Not Requiring Solid Waste Permit Modifications. Modifications to the solid waste permit shall not be required for the following changes to the approved landfill gas management system.
 - a. In areas of the landfill without a final cover, provided the Permittee notifies the Department prior to implementing any of these modifications.
 - 1. Raising, replacing or re-drilling existing gas extraction wells.

- 2. Decommissioning or abandoning existing gas extraction wells.
- Installation of temporary gas extraction wells and piping that are not part of the permitted gas collection system design.
- Adding additional gas extraction wells to an existing gas header or lateral of the permitted gas collection system in order to control odor or comply with air Title V requirements for gas control.
- b. The Permittee may re-drill existing gas wells and install additional gas extraction wells in areas of the landfill with final cover if a construction plan for the work is submitted to and approved by the Department prior to construction. This construction plan shall provide reasonable assurance that:
 - 1. The integrity of the final cover will be maintained;
 - Any solid waste uncovered during the installation of the extraction wells will be properly managed; and,
 - 3. Odors and stormwater will be controlled.

F. Financial Assurance and Cost Estimates

1. <u>Financial Assurance Mechanism</u>. The permittee may not receive waste for disposal or storage in any disposal unit for which financial assurance has not been approved. Proof that the financial mechanisms are established and funded in accordance with Rule 62-701.630, F.A.C. shall be submitted to the Department at least sixty (60) days prior to the planned acceptance of solid waste in any disposal unit. When established, the permittee shall maintain, in good standing, the financial assurance mechanisms. Supporting documentation and evidence of increases associated with cost estimate increases shall be submitted within the time frames specified in Rule 62-701.630, F.A.C. All submittals in response to this specific condition shall be sent to:

Florida Department of Environmental Protection Financial Assurance Subsection 2600 Blair Stone Road MS 4548 Tallahassee, Florida 32399-2400

2. Cost Estimates.

- a. The permittee shall submit closure cost estimates, including annual adjustments for inflation, in accordance with the requirements of Rule 62-701.630(3) and (4), F.A.C., and 40 CFR Part 264.142(a) using Form 62-701.900(28).
- b. An owner or operator using an escrow account shall submit the annual inflation adjusted estimate(s) between July 1 and September 1. An owner or operator using a letter of credit, guarantee bond, performance bond, financial test, corporate guarantee, trust fund or insurance shall submit the inflation adjusted cost estimate(s) between January 1 and March 1.
- c. All submittals in response to this specific condition shall be sent to the District Office and a copy to the address identified in Specific Condition F.1. or to the following email address: <u>Solid.Waste.Financial.Coordinator@dep.state.fl.us</u>.

G. Closure Requirements

- <u>Closure Permit Requirements</u>. Prior to initiating closure of a solid waste disposal unit, or part of a solid waste disposal unit, the Permittee shall receive authorization from the Department in one of the following ways.
 - If the landfill is operating under a Department permit that includes a Closure Plan with sufficient detail to provide reasonable assurance of compliance with the closing requirements of Rule 62-701.600, F.A.C., then the Permittee shall notify the Department at least 30 days prior to initiating the closure activities and receive written approval from the Department prior to beginning the work.
 - 2. If the landfill is operating under a Department permit that requires substantive changes to the closing activities in the permitted Closure Plan, then the Permittee shall request a modification of the permit to include sufficient design detail to ensure compliance with the closing requirements of Rule 62-701.600, F.A.C., and shall initiate closing only after the permit has been modified.
 - The Permittee shall submit an application to the Department for a closure permit on Form 62-701.900(1) and shall initiate closure activities only after the permit is issued. The application shall include a Closure Plan made up of the following:
 - 1) A closure design plan;
 - 2) A closure operation plan;
 - 3) A plan for long-term care; and,
 - A demonstration that proof of financial assurance for long-term care will be provided.
- <u>Closure Design</u>. All closure construction shall be done in accordance with the approved closure design plan. The Department shall be notified before any changes, other than minor deviations, to the approved closure design are implemented in order to determine whether a permit modification is required.
- <u>Closure Operation Plan</u>. All closure shall be done in accordance with the approved closure operation plan.
- 4. <u>Certification of Closure Construction Completion</u>. After closure construction has been completed, the engineer of record shall certify to the Department on Form 62-701.900(2) that the closure is complete and that it was done in accordance with the plans submitted to the Department except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated.

Permit originally executed in Leon County, Florida by Tim Bahr, Program Administrator, Permitting and Compliance Assistance Program, State of Florida Department of Environmental Protection on January 5, 2016. PERMITTEE NAME: Mr. Himanshu Mehta, Managing Director FACILITY NAME: Indian River County Landfill PERMIT NO5.: 0128769-022-SC 0128769-023-SO WACS Facility ID: 19134

APPENDIX 1

GENERAL CONDITIONS

- The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 12. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;

- 4. the person responsible for performing the analyses;
- the analytical techniques or methods used;
- 6. the results of such analyses.
- 13. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

APPENDIX 2

APPROVED DOCUMENTS INCORPORATED INTO THE PERMIT

IV. I. The following documents were used and incorporated by reference for the 2016 Indian River County Landfill Permit Renewal:

- 1. Response to First Request for Additional Information, dated November 9, 2015.
- 20-Year Renewal Permit Application to Construct and Operate a Class I Landfill, dated September 28, 2015. This application includes revisions to the design of the leachate collection and transmission system.
- 3. Response to Fourth Request for Additional Information, dated September 8, 2010
- 4. Response to Third Request for Additional Information, dated August 13, 2010.
- 5. Response to Second Request for Additional Information, dated July 15, 2010.
- 6. Response to First Request for Additional Information, dated May 13, 2010.
- Renewal Permit Application to Construct and Operate Class I Landfill, dated March 17, 2010. This application, along with revisions provided in the responses to RAIs, contains design details for the construction of Segment 3 disposal cells.

These documents can be accessed using the following link: https://fldeploc.dep.state.fl.us/WWW_WACS/REPORTS/SW_Facility_Docs.asp?wacsid=19134

- III.II. The following documents are referenced for the March 2018 Intermediate Modification and Minor Modification for Permit Numbers 0128769-026-SC-IM and 0128769-027-SO-MM Indian River County Landfill Permit Renewal:
 - "Application for an Intermediate Permit Modification for a Class I Landfill Permit Nos. 0128769-022-SC & 0128769-023-SO", prepared by CDM Smith, dated January 26, 2018, signed and sealed by Amy Hightower, P.E., received January 29, 2018. <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid =8.271794.1]&[profile=Permitting_Authorization]
 </u>
 - "Application for an Intermediate Permit Modification for a Class I Landfill Permit Nos. 0128769-022-SC & 0128769-023-SO, Response to First Request for Additional Information", prepared by CDM Smith, dated February 23, 2018, signed and sealed by Amy Hightower, P.E., received February 23, 2018. <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntitv&[guid =8.273471.1]&[profile=Permitting_Authorization]</u>
 - Addendum to the Operation and Training Plan Prepared by Geosyntec Consultants dated November 2015", dated January 2018, submitted as part of the "Application for an Intermediate Permit Modification for a Class I Landfill Permit Nos. 0128769-022-SC & 0128769-023-SO", prepared by CDM Smith, dated March 8, 2018, signed and sealed by Amy Hightower, P.E., received March 12, 2018. <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid</u> =8.274539.1]&[profile=Permitting_Authorization]

- H.III The following document is referenced for the March 6, 2020 Minor Modification Request for Permit Number 0128769-028-SO-MM Indian River County Landfill Permit Renewal: <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8 .309892.1]&[profile=Permitting_Authorization]</u>
- <u>LIV</u>. The following document is referenced for the October 29, 2020 Indian River County Intermediate Modification Request for Permit Number 0128769-029-SO-IM: <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.318098.1]&[profile=Permitting_Authorization]</u>
- <u>V</u>. The following documents are referenced for the August 5, 2022, Minor Modification Request for Permit Number 0128769-033-SO-MM Indian River County Landfill Permit Renewal:
 - Indian River County Solid Waste Disposal District Approval of Alternate Procedures Case No.: SWAP 22-1: OCG No.: 22-2226, issued July 22, 2022: https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid =8.346599.1]&[profile=Permitting Authorization]
 - Minor Modification Permit Application, Landfill Leachate Evaporator, prepared by Geosyntec, dated August 5, 2022, signed and sealed by Kwasi Badu-Tweneboah, P.E., received August 11, 2022: https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntitv&[guid =8.346660.1]&[profile=Permitting Authorization]
 - First Request for Additional Information (RAI), dated August 31, 2022: <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.346825.1]&[profile=Permitting_Authorization]</u>
 - <u>Response to the First Request for Information, revised September 28, 2022:</u> <u>https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntitv&[guid=8.347943.1]&[profile=Permitting_Authorization]</u>
 - Indian River County Landfill Facility Class I Landfill Operation and Training Plan, Revision No. 6, dated August 2022: https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid =8.347941.1]&[profile=Permitting_Authorization]

APPENDIX 3 WATER QUALITY MONITORING PLAN

INDIAN RIVER COUNTY LANDFILL-CLASS I PERMIT NOs: 0128769-022-SC & 0128769-023-SO WACS_FACILITY ID: 00019134

I. GENERAL

- The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapter 62-160, F.A.C. Approved methods as published by the Department or as published in Standard Methods, ASTM, or EPA Methods shall be used. [62-701.510(2)(b), F.A.C.]
- The organization collecting samples at this site must use the Field and Laboratory Standard Operating Procedures (DEP-SOP-001/01) referenced in Chapter 62-160, F.A.C. Department of Health Environmental Laboratory Certification Program (DOH ELCP). This Certification must be for the test method and analyte(s) that are reported. [62-160.210(1), 62-160.300(1), 62-701.510(2)(b), FAC., and DEP SOP FS1008]

NOTE: DEP-SOP-001/01 can be accessed at: http://www.dep.state.fl.us/water/sas/sop/sops.htm

- 3. The permittee must ensure that the analytical laboratory conducting the analyses uses analytical methods capable of achieving detection limits at or below the Groundwater Cleanup Target Levels (GCTLs) or the Freshwater Surface Water Cleanup Target Levels (SWCTLs) in Table I, Chapter 62-777, F.A.C. except those listed in Table C of the "FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits dated 10/12/2004". GCTLs and SWCTLs that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated. [DEP SOP FM 1000]
- 3. If, at any time, analyses detect parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., in the detection wells or at the edge of the Zone of Discharge, the Permittee may confirm the data by resampling the affected wells within thirty (30) days of receipt of the sampling data. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. [62-701.510(6)(a), F.A.C.]
- 4. If the resampling event detects parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., the Permittee shall notify the Department in writing within 14 days of receipt of the sampling data. Confirmed data must be submitted to the Department within 60 days from completion of lab analyses, unless a different due date is approved. Use "CONF" (for confirmation data) in the report type column. [62-701.510 (8)(a), F.A.C.]

 Upon notification by the Department, the permittee shall initiate evaluation monitoring in accordance with Rule 62-701.510(6)(a), F.A.C.

II. GROUND WATER QUALITY MONITORING

- The <u>90 94</u> ground water monitoring wells/piezometers included in this monitoring plan and designated for water quality testing and water level measurements are listed in Table 1 and shown on Figure 1 of this Appendix. [62-701.510(3)(d)2 & 3, F.A.C.].
- Any initial sample collected from a new ground water monitoring well, unless the new monitoring well is installed to replace an existing well within the monitoring network, shall be analyzed for the following Initial Ground Water Monitoring Parameters. [62-701.510(5)(b), F.A.C.]

Field Parameters	Laboratory Parameters		
1. Static water level in wells before purging	1. Ammonia - N, Total		
2. Dissolved oxygen	2. Chlorides		
3. pH	3. Iron		
Specific conductivity	4. Nitrate		
5. Temperature	5. Sodium		
6. Turbidity	Total dissolved solids (TDS)		
7. Colors and sheens (by observation)	 Those parameters listed in 40 CFR Part 2 Appendix II.* 		

* Mercury is not listed because it is included in Appendix II.

* Appendix I is not listed because it is a subset of Appendix II.

 All active monitoring wells shall be routinely sampled and analyzed in semi-annually in January and July for the following groundwater monitoring parameters. [62-701.510(5)(c) & (7)(a), F.A.C.].

	Field Parameters	Laboratory Parameters		
1.	Static water level in wells before purging	1. Ammonia - N, Total		
2.	Dissolved oxygen	2. Chlorides		
3.	pH	3. Iron		
4.	Specific conductivity	4. Mercury		
5.	Temperature	5. Nitrate		
6.	Turbidity	6. Sodium		
7. C	Colors and sheens (by observation)	7. Total dissolved solids (TDS)		
		 Those parameters listed in 40 CFR Part 25 Appendix I 		

- 4. All intermediate wells except MW-13I and MW-43I shall be sampled annually.
- 5. Three piezometers, PZ-1, PZ-2, and PZ-3 will be installed adjacent to the liner penetrations for Segment 3, Cells 2, 3 and 4 (one piezometer per cell) and sampled for field parameters, which are listed in Section II, Item 3 above. The initial monitoring of each piezometer will be performed prior to placement of waste in each cell. Water quality monitoring of each piezometer will be performed concurrently with the routine semi-annual monitoring events for

the Class I landfill. Each piezometer shall be constructed with two-inch diameter PVC casing and well screen. The well screen will be 10 feet in length with a 0.010-inch slot size. Each piezometer will be surveyed in accordance with 62-701.510(3)(d)(1), F.A.C., and well completion reports for each piezometer will be provided pursuant to 62-701.510(3)(d)1, F.A.C. The proposed approximate locations of the piezometers are shown in Figure 1 below and on Drawing Nos. 8, 9, and 9A_ in Appendix C of the Intermediate Permit Modification Application submitted on January 29, 2018 (APPENDIX 2, Section <u>LIV.</u>, Item 1.)

- All water quality analyses will be performed on unfiltered samples unless filtered samples are approved by the Department.
- 7. Unless otherwise approved by the Department, wells with high turbidity must be remediated or reinstalled to reduce the turbidity value to less than 20 NTU prior to sample collection. Should any ground water sample exhibit dissolved oxygen concentrations greater than 20% of oxygen saturation at the field measured temperature, the sampled well must be repurged then resampled as soon as an acceptable dissolved oxygen value has been attained unless it can be demonstrated that in situ ground water contains higher levels of dissolved oxygen. All water quality analyses will be performed on unfiltered samples unless approved by the Department.

III. SURFACE WATER MONITORING

- The surface water monitoring site (SW-2) included in this monitoring plan is listed on Table 1 and shown on Figure 1. [62-701.510(4)(c), F.A.C.]
- Semi-annual samples from SW-2 shall be collected in January and July. Samples will be collected only if water is being discharged. The samples shall be analyzed for the following Surface Water Monitoring Parameters. [62-701.510(5)(d) & (7)(b), F.A.C.]:

Field Parameters	Laboratory Parameters
1. Surface Water Elevation	1. Unionized ammonia as N
2. Specific Conductivity	Total hardness as CaCO3
3. pH	Biochemical oxygen demand (BOD₅)
Dissolved oxygen	4. Iron
5. Turbidity	5. Mercury
6. Temperature	6. Nitrate
7. Colors and sheens (by observation)	Total Dissolved Solids (TDS)
	 Total Organic Carbon (TOC)
	9. Fecal Coliform
	10. Total Phosphorus as P
	11. Chlorophyll A
	12. Total nitrogen
	Chemical Oxygen Demand (COD)
	Total Suspended Solids (TSS)
	 Those parameters listed in 40 CFR Part 258 Appendix I

Surface V	Water	Sampling	Parameters
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3. Please confer with your consultant and analytical laboratory prior to sampling to ensure the analytical method is capable of achieving detection limits at or below the Freshwater Surface Water Criteria in Table I of Chapter 62-777, F.A.C. except those listed in Table C of the "FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits dated 10/12/2004". Freshwater Surface Water Criteria that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated.

IV. MONITORING WELL REQUIREMENTS

- If a monitoring well or piezometer becomes damaged or inoperable, the Permittee shall notify the Department within two (2) days of discovery with a written report within ten (10) days of notice. The written report shall describe what problem has occurred and the remedial measures that have been taken to prevent a recurrence. The Department can require the replacement of inoperable monitoring wells or piezometers. [62-520.600 (6)(1), F.A.C.]
- 2. New or replacement monitoring well design or placement must be approved by the Department. The design and construction of these wells must be based on site-specific borings with appropriate supporting data such as grain size distribution analyses, in-situ hydraulic conductivity testing, and depth to water. Wells shall be installed using standard, accepted practices for well construction. [62-701.510(3), F.A.C. and 62-550.600(3) and (6), F.A.C.]
- 3. All wells and piezometers shall be clearly and permanently labeled and the well site maintained so that the well is visible at all times. Unless otherwise authorized in a Department permit, new monitoring wells, and existing monitoring wells at the time of permit renewal, shall have protective bollards or other devices installed around them if they are located in areas of high traffic flow to prevent damage from passing vehicles. [62-701.510(3)(d)5, F.A.C.]
- The Department shall be notified in writing before any monitoring wells are abandoned or plugged. Wells shall be abandoned using standard, accepted practices for well abandonment. [62-701.510(3)(d)6, F.A.C.]

V. REPORTING REQUIREMENTS

A. FIELD ACTIVITIES

 The Department must be notified in writing, hard copy or e-mail, at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s) so that the Department may collect split samples. [62-701.510(8)(a), F.A.C.]

B. MONITORING WELL COMPLETION REPORT

- One (1) electronic copy (Adobe pdf format) of the Monitoring Well Completion Report, Form 62-701.900(30), F.A.C., must be submitted to the Department within thirty (30) days after installation of any new or replacement monitoring well(s). In addition, as-built well construction diagrams and soil boring logs that cover the entire depth of the monitoring well(s) must be submitted to the Department. [62-520.600(6)(j), F.A.C.]
- 3. The top of casing elevation of each well, to the nearest 0.01 feet, and the latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and certified by a Florida Licensed Surveyor and Mapper and provided on the form. [62-701.510(3)(d)1 & 62-520.600(6)(i), F.A.C.]

C. SURVEYING

- 4. One (1) electronic copy (Adobe pdf format) of a drawing must be submitted within sixty (60) days following monitoring well installation showing the location of all monitoring sites (active, abandoned, and Evaluation Monitoring), piezometers, water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988) to the nearest 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. [62-701.510(1)(c)&(3)(d)1, and 62-520.600(6)(i), F.A.C.].
- 5. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells need to be surveyed as long as all other monitoring wells in the monitoring plan have been surveyed and certified by a Florida Licensed Surveyor and Mapper and there is no reason to believe that the elevations have changed. The location and elevation determinations and the certification must be provided with the Monitoring Well Completion Report upon completion of each new well. [62-701.510(3)(d)1, F.A.C.].

D. DEPTH MEASUREMENTS

6. A total depth measurement must be made on each well at time of the Technical Report or every five years. This measurement is to be reported as total apparent depth below ground surface and should be compared to the original total depth of the well.

E. INITIAL AND SEMI-ANNUAL SAMPLING AND SUBMITTING ELECTRONIC DATA

- Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses and shall follow the Department's electronic reporting requirements using the ADaPT software. [Rule 62-701.510(8)(a), F.A.C.]
- 8. Required water quality monitoring reports and analytical results shall be submitted electronically. Water quality monitoring reports shall be submitted in an Adobe pdf format. The water quality data Electronic Data Deliverable (EDD) shall be provided to the Department in a comma separated text file electronic format consistent with requirements for importing the data into the Department's databases as summarized at:

http://www.dep.state.fl.us/waste/categories/shw/pages/ADaPT.htm.

- 9. Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall include the following:
 - a) Cover letter;
 - b) Summary of exceedances and recommendations;
 - c) Ground water contour maps;
 - d) Chain of custody forms;

- e) Water levels, water table elevation;
- f) Water Quality Monitoring Certification using Form Rule 62-701.900(31);
- g) Appropriate information using the Groundwater Sampling Log, Form FD 9000-24 (DEP-SOP-001/01); and,
- h) Laboratory and Field EDDs and error logs, as applicable.
- 10. All submittals in response to this specific condition shall be sent both to:

Florida Department of Environmental Protection	Florida Department of Environmental Protection
Southeast District Office	Solid Waste Program & Permitting
3301 Gun Club Road, MSC 7210-1	2600 Blair Stone Road, MS 4565
West Palm Beach, FL 33406-3007	Tallahassee, Florida 32399-2400
Email to: Southeast.District@dep.state.fl.us	Email to: ADaPT EDDs.and.Reports@dep.state.fl.us

F. WATER ELEVATIONS

11. Water levels in all monitoring wells, whether sampled or not, all piezometers and all surface water sites must be measured to the nearest 0.01 foot and reported semi-annually. Surface water elevations at sampling locations must be measured on the same day as ground water levels in the wells and piezometers and reported semiannually. All water level measurements must be made within a one-day period. These measurements should be reported in a table that includes well or surface water point name, date water level measured, measuring point elevation referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), depth to water and calculated water level elevation referenced to the same nationally recognized datum. The ground water elevations shall be reported in the ADaPT data for the upload into WACS. [62-701.510(8)(a)8, F.A.C.]

G. GROUND WATER CONTOUR MAPS

12. Ground water elevation contour maps for each monitored aquifer zone must be submitted semiannually to the Department, with contours at no greater than one foot intervals unless site specific conditions dictate otherwise. Ground water elevation contour map(s) should include monitoring well and piezometer locations, ground water elevation at each monitoring well or piezometer location referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), a bar scale, north arrow, ground water contour interval, date of measurement and ground water flow direction. The map(s) must incorporate adjacent and on-site surface water elevations where appropriate. These maps shall be signed and sealed pursuant to Florida Statutes (F.S.) Chapters 471 and 492 which require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., be signed and sealed by the professional(s) who prepared or approved them. This certification must be made by a licensed professional who is able to demonstrate competence in this subject area. [62-701.510(8)(a)9, F.A.C.]

H. TECHNICAL REPORT

13. A technical report, signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department approximately every two and one-half years during the active life of the facility, and every five years during the long-term care period. The report shall summarize and interpret the water quality monitoring results and water level measurements collected since the last Technical Report. The report shall contain, at a minimum, the following [62-701.510(8)(b), F.A.C.]:

- Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;
- b) Trend analyses of any monitoring parameters consistently detected;
- c) Comparisons among shallow, middle, and deep zone wells;
- Comparisons between background water quality and the water quality in detection and compliance wells;
- e) Correlations between related parameters such as total dissolved solids and specific conductance;
- f) Discussion of erratic and/or poorly correlated data;
- g) An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and
- An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.
- One (1) electronic copy (Adobe pdf format) of the Technical Report shall be submitted to the Department on the following schedule: [62-701.510(8)(b), F.A.C.]

Report	Sampling Periods Covered	Number of Semi-annual Sampling Events in Report	Date Technical Report Due	
#1	January 2016 to June 2018	5	07/31/2018	
#2 July 2018 to December 2020		5	1/31/2021	
#3	January 2021 to June 2023	5	7/31/2023	
#4	July 2023 to December 2025	5	1/31/2026	
#5	January 2026 to June 2028	5	7/31/2028	
#6 July 2028 to December 2030		5	1/31/2031	
#7 January 2031 to June 2033		5	7/31/2033	
#8 July 2033 to December 2035		5	1/05/2036 (permit expire date)	

 Water quality monitoring data included in the Technical Report that has not been previously submitted to the Department shall be submitted in electronic format as described in Specific Conditions V.E., Paragraphs 8 and 9 of this Appendix. [62-160.240, and 62-701.510(8)(a), F.A.C.]

Table 1 – Class I Water Quality Sampling Testsite Info	formation
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Testsite Name	Testsite WACS No.	Designation	Sample Type	Comment
MW-1S	11904	DE	SEMGW	
MW-11	11903	DE	ANNGW	
MW-2S	11690	DE	SEMGW	
MW-2I	11693	DE	ANNGW	
MW-3S	11907	DE	SEMGW	
MW-3I	11803	DE	ANNGW	
MW-7S	12012	DE	SEMGW	
MW-7I	12013	DE	ANNGW	
MW-11S	12016	DE	SEMGW	
MW-111	12017	DE	ANNGW	
MW-12S	11909	DE	SEMGW	
MW 12I	11701	DE	ANNGW	
MW-13S	11922	DE	SEMGW	
MW-13I	27450	DE	SEMGW	
MW-14S	11804	DE	SEMGW	
MW-14I	11924	DE	ANNGW	
W-15SX	19122	BG	SEMGW	
MW-15I	11695	BG	ANNGW	
MW-15D	11921	BG	SEMGW	Deep well to be monitored semi-annually
MW 24S	22388	DE	SEMGW	To be installed after construction of Segment 3 Cell 4
MW-24I	11911	DE	ANNGW	To be installed after construction of Segment 3 Cell 4
MW 25S	22389	DE	SEMGW	To be installed after construction of Segment 3 Cell 3
MW-25I	27451	DE	ANNGW	To be installed after construction of Segment 3 Cell 3
MW-26S	22940	DE	SEMGW	To be installed after construction of Segment 3 Cell 8
MW-26I	22941	DE	ANNGW	To be installed after construction of Segment 3 Cell 8
MW-27S	22942	DE	SEMGW	To be installed after construction of Segment 3 Cell 7
MW-27I	22943	DE	ANNGW	To be installed after construction of Segment 3 Cell 7
MW-28S	22944	DE	SEMGW	To be installed after construction of Segment 3 Cell 6
MW-28I	22945	DE	ANNGW	To be installed after construction of Segment 3 Cell 6
MW-295	22946	DE	SEMGW	To be installed after construction of Segment 3 Cell 5
MW-29I	22947	DE	ANNGW	To be installed after construction of Segment 3 Cell 5
MW-30S	22948	DE	SEMGW	To be installed after construction of Segment 3 Cell 5
MW-30I	22949	DE	ANNGW	To be installed after construction of Segment 3 Cell 5
MW-31S	TBA	DE	SEMGW	To be installed after construction of Segment 3 Cell 4
MW-311	TBA	DE	ANNGW	To be installed after construction of Segment 3 Cell 4
MW-32S	TBA	DE	SEMGW	To be installed after construction of Segment 3 Cell 4
MW-32I	TBA	DE	ANNGW	To be installed after construction of Segment 3 Cell 4
MW-33S	TBA	DE	SEMGW	To be installed after construction of Segment 3 Cell 4
MW-33I	TBA	DE	ANNGW	To be installed after construction of Segment 3 Cell 4
MW-34S	TBA	DE	SEMGW	To be installed after construction of Segment 3 Cell 8
MW-34I	TBA	DE	ANNGW	To be installed after construction of Segment 3 Cell 8
MW-35S	TBA	DE	SEMGW	To be installed after construction of Segment 3 Cell 5
MW-35I	TBA	DE	ANNGW	To be installed after construction of Segment 3 Cell 5
MW-36S	27452	DE	SEMGW	
MW-36I	27453	DE	ANNGW	
MW-37S	27454	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 7
MW-37I	27455	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 7
		~~	A LANGER	Monitoring to be suspended until construction of Cell 2
MW-38S	27456	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 7
				Monitoring to be suspended until construction of Cell 2
MW-38I	27457	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 7
				To be installed after construction of Segment 3 Cell 3
MW-39S	TBA	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 6
				To be installed after construction of Segment 3 Cell 3
MW-39I	TBA	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 6

PERMIT NOs.: 0128769-022-SC 0128769-023-SO WACS Facility ID: 19134

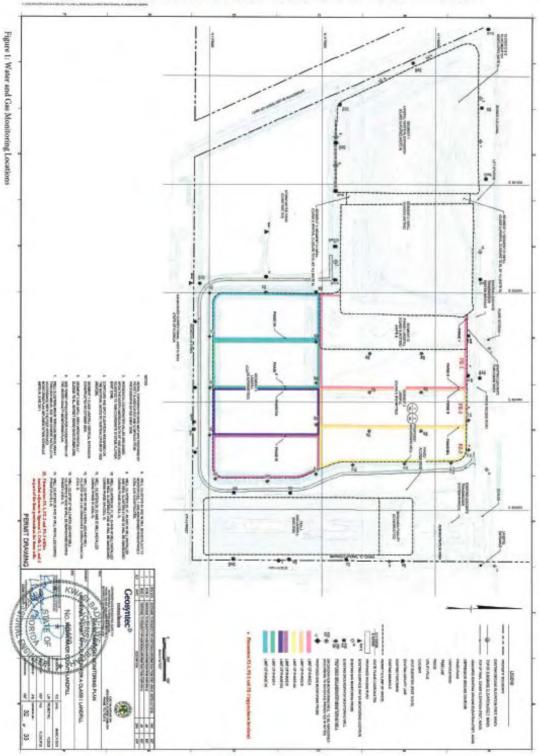
Testsite Name	Testsite WACS No.	Designation	Sample Type	Comment
MW-40S	TBA	DE	SEMGW	To be installed after construction of Segment 3 Cell 4
MW-40I	TBA	DE	ANNGW	To be installed after construction of Segment 3 Cell 4
				Monitoring to be suspended until construction of Cell 2
MW-41S	27458	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 3
	- 1 K.			Monitoring to be suspended until construction of Cell 2
MW-41-I	27459	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 3
			11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Monitoring to be suspended until construction of Cell 2
MW-42S	27460	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 3
				Monitoring to be suspended until construction of Cell 2
MW42I	27461	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 3
MW-43S	27462	DE	SEMGW	Monitoring to be suspended until construction of Cell 2
MW-43I	27463	DE	SEMGW	Monitoring to be suspended until construction of Cell 2
MW-44S	27464	DE	SEMGW	
MW-44I	27465	DE	ANNGW	the second second second beautiful and the second
				To be installed within 90 days of issuance of this permit
MW-45S	TBA	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 2
and and	1		A Sameran	To be installed within 90 days of issuance of this permit
MW45I	TBA	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 2
the second second	1			To be installed within 90 days of issuance of this permit
MW-46S	TBA	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 2
Sec. March	200	in the second	1.20000	To be installed within 90 days of issuance of this permit
MW-46I	TBA	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 2
	1.000	3.57	and states	To be installed after construction of Segment 3 Cell 3
MW-47S	TBA	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 4
	25.0		1.325.57	To be installed after construction of Segment 3 Cell 3
MW-47I	TBA	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 4
and a	200		augusta i	To be installed after construction of Segment 3 Cell 3
MW-48S	TBA	DE	SEMGW	To be abandoned before construction of Segment 3 Cell 4
	100	1.2.	12212200	To be installed after construction of Segment 3 Cell 3
MW48I	TBA	DE	ANNGW	To be abandoned before construction of Segment 3 Cell 4
MW-49	31240	DE		Proposed MW for Storage Tank
MW-50	31241	DE		Proposed MW for Storage Tank
MW-51	31242	DE		Proposed MW for Storage Tank
MW-52	31243	DE		Proposed MW for Storage Tank
	V			ATER LEVELS ONLY
MW-1D	11902	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-2D	11905	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-3D	11906	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-7D	29896	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-8D	11918	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-9D	29898	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-10D	11916	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-11D	29899	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-12D	11908	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-14D	11923	PZ	ANNGW	Piezometer for deep zone water level measurements
MW-20D	29900	PZ	ANNGW	Piezometer for deep zone water level measurements
		C&1	D WELLS FOR WA	ATER LEVELS ONLY
MW-17S	18942	DE	SEMGW	Water Level Monitoring
MW-17I	18943	DE	SEMGW	Water Level Monitoring
MW-18S	18944	DE	SEMGW	Water Level Monitoring
MW-18I	18945	DE	SEMGW	Water Level Monitoring
MW-19S	18946	DE	SEMGW	Water Level Monitoring
And in case of the second s	18947	DE	SEMGW	Water Level Monitoring
MW-19I				Water Level Monitoring
	18948	DE	SEMGW	water Dever Monitoring
MW-20S	18948	DE	SEMGW	Water Level Monitoring
MW-19I MW-20S MW-20I MW-21S	the second se			

PERMITTEE NAME: Mr. Himanshu Mehta, Managing Director FACILITY NAME: Indian River County Landfill

PERMIT NOs.: 0128769-022-SC 0128769-023-SO WACS Facility ID: 19134

Testsite Name	Testsite WACS No.	Designation	Sample Type	Comment
These	C&D wells will:	no longer be sam	pled for the Class I I	Permit, but only for the C&D Permit (WACS Permit #84744)
		SUF	FACE WATER SA	MPLING LOCATION
SW-2	11931	DE	SEMSW	Pond, if discharging

PZ-1	30740	DE	SEMGW	PZ-1 was installed on February 12, 2020, adjacent to the liner penetration for Segment 3, Cell 2 prior to the placement of waste. Water quality monitoring will be conducted for Field Parameters.
PZ-2	TBA	DE	SEMGW	To be installed adjacent to the liner penetration for Segment 3, Cell 3 prior to the placement of waste. Water quality monitoring will be conducted for Field Parameters.
PZ-3	TBA	DE	SEMGW	To be installed adjacent to the liner penetration for Segment 3, Cell 4 prior to the placement of waste. Water quality monitoring will be conducted for Field Parameters.





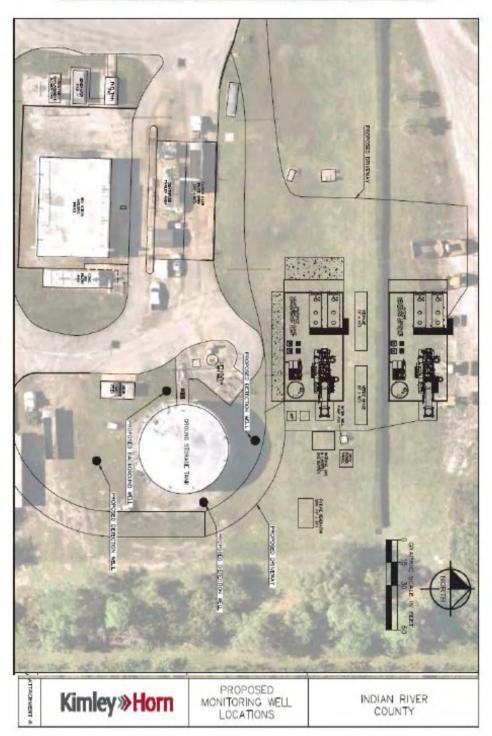


Figure 1b - Proposed Groundwater Monitoring Well Locations



Florida Department of

Environmental Protection Southeast district office 3301 gun club road, MSC 7210-1 West Palm Beach, fl 33406 561-681-6600 RICK SCOTT GOVERNOR

CARLOS LOPEZ-CANTERA LT. GOVERNOR

JONATHAN P. STEVERSON SECRETARY

August 27, 2015

Indian River County Solid Waste Disposal District Himanshu H. Mehta, P.E., Managing Director 1325 74th Ave SW Vero Beach, Florida 32968 E-mail: <u>hmehta@ircgov.com</u>

RE: File Name: Indian River County Landfill (IRCL) – Permit Extension File No.: EM 31-0163429-010

Dear Mr. Mehta:

Your request to modify this permit has been received and reviewed by Department staff. The modification is to extend the above referenced permit expiration date of July 30, 2015, an additional 10 years to July 27, 2025.

The IRCL facility is located in Southern Indian River County, east of Interstate 95, south of Oslo Road, and west of Rangeline Road in Vero Beach, Florida. The facility is located in Section 25 of Township 33 South, Range 38 East, Indian River County, Florida (latitude 27° 34' 29.77" and longitude 80° 29' 9.91").

Since the proposed modification is not expected to result in any adverse environmental impact or water quality degradation, the permit is hereby modified as requested. By copy of this letter, we are notifying all necessary parties of the modification.

This letter of approval **changes the expiration date to July 27, 2025**. This letter must be attached to the original permit. This permit extension does not:

- 1. Otherwise change any other terms or conditions of the permit EM 31-0163429-009.
- Affect the water quality certification determination under Section 401, Public Law 92-500, 33 U.S.C. Section 1341 made as part of the permit.
- 3. Affect the coastal zone consistency concurrence determination made under Florida's Coastal Zone Management Program in Section 307 of the Coastal Zone Management Act and 15 CFR 930, Subpart D originally contained in the permit.

4. Affect the expiration date of any state, federal, or local permit, license, or authorization related to this permit, specifically including any federal permit under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899.

This Permit is hereby final unless a sufficient petition for an administrative hearing is timely filed under Sections 120.569 and 120.57 of the Florida Statutes (F.S.) as provided below. The procedures for petitioning for a hearing are set forth below.

Mediation is not available.

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. The petition must contain the information set forth below and 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.

Because the administrative hearing process is designed to re-determine final agency action on the application, the filing of a petition for an administrative hearing may result in a modification of the permit or even a denial of the application. If a sufficient petition for an administrative hearing or request for an extension of time to file a petition is timely filed, this permit automatically becomes only proposed agency action on the application, subject to the result of the administrative review process. Accordingly, the applicant is advised not to commence construction or other activities under this permit until the deadlines noted below for filing a petition for an administrative hearing, or request for an extension of time has expired.

Under Rule 62-110.106(4), Florida Administrative Code (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 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, before the applicable deadline. 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. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

In the event that a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention 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.

In accordance with Rule 62-110.106(3) F.A.C., petitions for an administrative hearing by the applicant 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) of the Florida Statutes must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first.

Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing 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 of the Florida Statutes.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; 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; $\cdot \cdot$ and an explanation of how the petitioner's substantial interests are or 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; and

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action;

(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.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Under Sections 120.569(2)(c) and (d), F.S., a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition this order will not be effective until further order of the Department.

This permit constitutes an order of the Department. The applicant has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, 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 of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department. The applicant, or any party within the meaning of Section 373.114(1)(a), F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1), 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 the final order is filed on the Department within 20 days from the date when the final order the Department of the Department within 20 days from the date when the final order the Department within 20 days from the date when the final order the Department within 20 days from the date when the final order is filed with the Clerk of the Department within 20 days from the date when the final order is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Date

Jason Andreotta Permitting Program Administrator Southeast District

Copies furnished to recipients:

John Kwasi Badu-Tweneboah, P.E.- <u>kbadutweneboah@geosyntec.com</u> John Juillianna, SJRWMD, <u>jjullianna@sjrwmd.com</u>

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

blorne g Date 5 Clerk

OCULUS: ERP/Permitting Auth./ERP_163429/Permit Final/ERP Modifications-EM/010



Florida Department of Environmental Protection Permit

Permit Issued to: **Indian River County Solid Waste Disposal District** Attention: Himanshu H. Mehta, P.E., Managing Director <u>(hmehta@ircgov.com)</u> 1325 74th Avenue SW Vero Beach, Florida 32968

Environmental Resource Permit – Major Modification of an Individual Permit Permit No.: ERP31-0163429-009-EM

> Permit Issued: July 30, 2010 Permit Expires: July 30, 2015

Permitting Authority Florida Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone No. 407-893-7874 Fax No. 850-412-0467



Florida Department of Environmental Protection

Central District 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

NOTICE OF PERMIT

Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

In the Matter of an Application for Permit by: Indian River County Solid Waste Disposal District 1325 74th Avenue SW Vero Beach, Florida 32968

Attention: Himanshu H. Mehta, P.E. Managing Director

> Indian River County - ERP Indian River County Landfill Segment 3 Expansion Major Modification of ERP31-0163429-001-EI File No. 31-0163429-009

Dear Mr. Mehta:

Enclosed is Permit Number ERP31-0163429-009-EM to modify an existing permitted landfill. The facility is located at 1325 74th Avenue SW in Sections 25 and 26, of Township 33 South, Range 38 East, in Vero Beach, Indian River County. This permit is issued pursuant to Sections 373.118, 373.413, 373.416, and 373.426, *Florida Statutes* (F.S.) and Rules 40C-4, 40C-40, 40C-41, 40C-42, 62-312, and 62-343, *Florida Administrative Code* (F.A.C.).

Pursuant to Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing this application.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 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 of Appeal must be filed within 30 days from the date this notice is filed with the Clerk of the Department.

Mediation under section 120.573 of the Florida Statutes is not available for this proceeding.

If there are any questions, please contact Debra Laisure, P.E., of the Submerged Lands and Environmental Resource Program by telephone (407-893-7874), fax (850-412-0467), or email (Debra.Laisure@dep.state.fl.us).

RIGHTS OF AFFECTED PARTIES

This Permit is hereby granted. This action is final and effective on the date filed with the Clerk of the Department unless a sufficient petition for an administrative hearing is timely filed under sections 120.569 and 120.57 of the Florida Statutes as provided below. If a sufficient petition for an administrative hearing is timely filed, this action automatically becomes only proposed agency action on the application, subject to the result of the administrative review process. Therefore, on the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because an administrative hearing may result in the reversal or substantial modification of this action, the applicant is advised not to commence construction or other activities until the deadlines noted below for filing a petition for an administrative hearing or request for an extension of time have expired.

Mediation is not available.

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 of the Florida Statutes. The petition must contain the information set forth below and 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.

Under rule 62-110.106(4) of the Florida Administrative Code, 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 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, before the applicable deadline. 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. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

If a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Any intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

In accordance with rule 62-110.106(3) FAC, petitions for an administrative hearing by the applicant 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) of the Florida Statutes must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition for an administrative hearing 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 of the Florida Statutes.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; 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 are or 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; and
- (f) A statement of the specific rules or statutes that the petitioner contends requires reversal or modification of the agency's proposed action;
- (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.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301, Florida Administrative Code.

Under sections 120.569(2)(c) and (d) of the Florida Statutes, a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This permit constitutes an order of the Department. Subject to the provisions of paragraph 120.68(7)(a) of the Florida Statutes, which may require a remand for an administrative hearing, the applicant has the right to seek judicial review of the order under section 120.68 of the Florida Statutes, by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, 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 of appeal must be filed within 30 days from the date when the order is filed with the Clerk of the Department.

Executed in Orlando, Florida.

DH/dl/df

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

David Herbster Submerged Lands and Environmental Resources Program

Date: July 30, 2010

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

Dave M. Lesta Clerk

<u>July 30, 2010</u> Date

Enclosure: Permit No. ERP31-0163429-009-EM Engineering Drawings DEP Form 62-343.900(3), Construction Commencement DEP Form 62-343.900(5), Certification of Construction Completion DEP Form 62-343.900(6), Environmental Resource Permit Inspection Certification DEP Form 62-343.900(7), Request for Transfer of Environmental Resource Permit Construction Phase to Operation Phase

Copies furnished to: Kwasi Badu-Tweneboah, P.E. (<u>kbadutweneboah@geosyntec.com</u>) John Juillianna, SJRWMD (<u>jjullianna@sjrwind.com</u>)

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of

business on July 30, 2010 to the listed persons by _____

Rev. 4/91



Florida Department of Environmental Protection

Central District 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

PROJECT INFORMATION:

Permit Number: ERP31-0163429-009-EM Expiration Date: July 30, 2015 County: Indian River Latitude: 27° 34' 29.77" Longitude: 80° 29' 9.91" Sections 25 and 26/Township 33 South/Range 38 East Project: Indian River County Landfill Segment 3 Expansion

PERMITTEE:

Indian River County Solid Waste Disposal District 1325 74th Avenue SW Vero Beach, Florida 32968

Attention: Himanshu H. Mehta, P.E. Managing Director

> Indian River County – ERP Major Modification of ERP31-0163429-001-EI <u>File No. 31-0297841-001</u>

Dear Mr. Mehta:

This permit is issued under the provisions of Part IV of Chapter 373, *Florida Statutes* (F.S.) and Chapters 62.4, 62-302, 62-330, 62-343, 62-101.040, 40C-4, 40C-40, 40C-41 and 40C-42, *Florida Administrative Code* (F.A.C.). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

<u>Modify and Operate</u>: an existing, permitted landfill. The project consists of a lateral expansion of the Segment 3 landfill footprint by converting the previously permitted Cell 2 of the construction and demolition debris disposal area into a lined Class I landfill. Swales and downdrains will convey stormwater runoff from the cell into perimeter drainage ditches and ultimately into the existing wet detention pond, which has excess capacity. The pond discharges into the C-5 canal through a control structure and has the following characteristics: a bottom elevation of 4.2 feet, top of bank elevation of 25 feet, a control elevation set at 20 feet, and an overflow elevation set at 23.1 feet. All elevations are referenced to NGVD 1929.

The 14 accompanying engineering drawings will be attached to, and become a part of, this permit.

Permittee: IRCo Solid Waste Disposal District Attention: Himanshu H. Mehta, P.E.

GENERAL CONDITIONS:

- 1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.
- 2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by Department staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
- 3. Activities approved by this permit shall be conducted in a manner which does not cause violations of state water quality standards.
- 4. Prior to and during construction, the permittee shall implement and maintain all erosion and sediment control measures (best management practices) required to retain sediment on-site and to prevent violations of state water quality standards. All practices must be in accordance with the guidelines and specifications in chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management (Florida Department of Environmental Regulation 1988), unless a project specific erosion and sediment control plan is approved as part of the permit, in which case the practices must be in accordance with the plan. If site specific conditions require additional measures during any phase of construction or operation to prevent erosion or control sediment, beyond those specified in the erosion and sediment control plan, the permittee shall implement additional best management practices as necessary, in accordance with the specifications in chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management (Florida Department of Environmental Regulation 1988). The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.
- 5. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased.
- 6. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Department an "Environmental Resource Permit Construction Commencement" notice (Form No. 62-343.900(3), F.A.C., copy enclosed) indicating the actual start date and the expected completion date.
- 7. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the Department on an annual basis utilizing an "Annual Status Report Form" (Form No. 62-343.900(4), F.A.C.). The form can be downloaded from <u>http://www.dep.state.fl.us/water/wetlands/erp/forms.htm</u>. Reports shall be submitted during June of each year.
- 8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.
- 9. For those systems which will be operated or maintained by an entity which will require an easement or deed restriction in order to provide that entity with the authority necessary to operate or maintain the system, such easement or deed restriction, together with any other final operation or maintenance documents as are required by subsections 7.1.1 through 7.1.4 of the Applicant's Handbook: Management

Permittee: IRCo Solid Waste Disposal District Attention: Himanshu H. Mehta, P.E.

GENERAL CONDITIONS:

and Storage of Surface Waters (Applicant's Handbook), must be submitted to the Department for approval. Documents meeting the requirements set forth in these subsections of the Applicant's Handbook will be approved. Deed restrictions, easements and other operation and maintenance documents which require recordation either with the Secretary of State or the Clerk of the Circuit Court must be so recorded prior to lot or unit sales within the project served by the system, or upon completion of construction of the system, whichever occurs first. For those systems which are proposed to be maintained by county or municipal entities, final operation and maintenance documents must be received by the Department when maintenance and operation of the system is accepted by the local governmental entity. Failure to submit the appropriate final documents referenced in this paragraph will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system.

- 10. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions in paragraphs (8 and 9) above, the Department determines the system to be in compliance with the permitted plans, and the entity approved by the Department in accordance with subsections 7.1.1 through 7.1.4 of the Applicant's Handbook accepts responsibility for operation and maintenance of the system. The permit may not be transferred to such an approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the Department, the permittee shall request transfer of the permit to the responsible approved operation and maintenance entity, if different from the permittee. Until the permit is transferred pursuant to section 7.1 of the Applicant's Handbook, and Section 62-343.110(1)(d), F.A.C., the permittee shall be liable for compliance with the terms of the permit.
- 11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This 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 permit and chapter 40C-4 or chapter 40C-40, F.A.C.
- 12. The permittee shall notify the Department in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of section 62-343.130, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.
- 13. Should any other regulatory agency require changes to the permitted system, the permittee shall provide written notification to the Department of the changes prior to implementation so that a determination can be made whether a permit modification is required.
- 14. The permittee is hereby advised that section 253.77, F.S., states that a person may not commence any excavation, construction, or other activity involving the use of sovereign 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 lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.
- 15. Within 30 days after completion of construction of the permitted system, or independent portion of the system, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing "Environmental Resource Permit As-Built Certification by a Registered Professional" (Form No. 62-343.900(5), F.A.C.) supplied with this permit. When the completed system differs substantially from the permitted plans, any

GENERAL CONDITIONS:

substantial deviations shall be noted and explained and two copies of as-built drawings submitted to the Department. Submittal of the completed form shall serve to notify the Department that the system is ready for inspection. The statement of completion and certification shall be based on on-site observation of construction (conducted by the registered professional engineer, or other appropriate individual as authorized by law, or under his or her direct supervision) or review of as-built drawings for the purpose of determining if the work was completed in compliance with approved plans and specifications. As-built drawings shall be the permitted drawings revised to reflect any changes made during construction. Both the original and any revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor. The following information, at a minimum, shall be verified on the as-built drawings:

- a. Dimensions and elevations of all discharge structures including all weirs, slots, gates, pumps, pipes, and oil and grease skimmers;
- b. Locations, dimensions, and elevations of all filter, exfiltration, or underdrain systems including cleanouts, pipes, connections to control structures, and points of discharge to the receiving waters;
- c. Dimensions, elevations, contours, or cross-sections of all treatment storage areas 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, when appropriate;
- d. Dimensions, elevations, contours, final grades, or cross-sections of the system to determine flow directions and conveyance of runoff to the treatment system;
- e. Dimensions, elevations, contours, final grades, or cross-sections of all conveyance systems utilized to convey off-site runoff around the system;
- f. Existing water elevation(s) and the date determined; and
- g. Elevation and location of benchmark(s) for the survey.
- 16. The permittee shall hold and save the Department harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.
- 17. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
- 18. Upon reasonable notice to the permittee, Department authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit
- 19. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the Department.
- 20. The permittee shall immediately notify the Department in writing of any previously submitted information that is later discovered to be inaccurate.

SPECIFIC CONDITIONS:

PERMIT ALTERATIONS

1. Permittee must obtain a permit from the Department prior to beginning construction of subsequent phases or any other work associated with this project not specifically authorized by this permit.

WATER QUALITY

2. Turbidity must be controlled to prevent violations of water quality pursuant to Rule 62-302-530(69), Florida Administrative Code. Turbidity shall not exceed 29 Nephelometric Turbidity Units above natural background conditions. Turbidity barriers shall be correctly installed at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the proposed work. It is understood that "receiving waterbody" shall not be construed to mean the permittee's settling pond, dredge lake, or other parts of the permittee's closed water system. Turbidity barriers shall remain in place at all locations until construction is completed, soils are stabilized, and vegetation has been established.

Upon final completion of the project and upon reasonable assurance that the project is no longer a potential turbidity source, the permittee will be responsible for the removal of the barriers.

INSPECTION REPORTS

- 3. Inspection reports for retention, underdrain, wet detention, swales, and wetland stormwater management systems shall be submitted to the Department two years after completion of construction and every two years thereafter on the enclosed form [DEP Form 62-343.900(6)].
- 4. Copies of all turbidity monitoring reports shall be provided to the Department on a monthly basis. Reports shall be submitted to the letterhead address.

CONSTRUCTION DETAILS

- 5. Before any offsite discharge from the stormwater management system occurs, the retention and detention storage must be excavated to rough grade prior to building construction or placement of impervious surface within the area served by those systems.
- 6. Adequate measures must be taken to prevent siltation of these treatment systems and control structures during construction or siltation must be removed prior to final grading and stabilization.

EROSION CONTROL MEASURES

- 7. The following measures shall be taken to minimize erosion:
 - A. Swales and dry ponds: sodding of all side slopes; seeding and mulching of flat-lying bottom areas;
 - B. Berms and other disturbed flat-lying areas: seed and mulch.

SPECIFIC CONDITIONS:

Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven (7) days after the construction activity in that portion of the site has temporarily or permanently ceased.

8. All wetland areas or water bodies, which are outside of the specific limits of construction authorized by this permit must be protected from erosion, siltation, scouring or excess turbidity and dewatering.

MAINTENANCE ACTIVITIES

- 9. The following maintenance activities shall be performed as needed on
 - A. All permitted systems:
 - 1) Removal of trash and debris;
 - 2) Inspection of inlets and outlets;
 - 3) Removal of sediments when the storage volume or conveyance capacity of the stormwater management system is below design levels; and
 - 4) Stabilization and restoration of eroded areas.
 - B. Retention, swale, and underdrain systems:
 - 1) Mowing and removal of grass clippings;
 - 2) Aeration, tilling, or replacement of topsoil; and
 - 3) Re-establishment of vegetation on disturbed surfaces.
 - C. Wet detention systems:
 - 1) Replanting of natural vegetation within the littoral zone; and
 - 2) Control of nuisance and exotic vegetation.
- 10. If the system is not functioning as designed and permitted, operational maintenance must be performed immediately to restore the system. If operational maintenance measures are insufficient to enable the system to meet the design and performance standards of this chapter, the permittee must either replace the system or construct an alternative design. A permit modification must be obtained from the Department prior to constructing such an alternate design pursuant to section 40C-4.331, F.A.C.

DEWATERING

11. If dewatering is to occur during any phase of construction or thereafter and discharge is to on-site or off-site surface waters of the State, either directly or via a stormwater management system, a generic permit in accordance with Rule 62-621.300, F.A.C., will be required prior to any dewatering.

SPECIFIC CONDITIONS:

- 12. If dewatering is to occur during any phase of construction or thereafter and the surface water pump(s), wells or facilities are capable of withdrawing 1 million gallons of water per day (MGD) or more, a consumptive use permit in accordance with Rule 40C-2.041, F.A.C., may be required from the St. Johns River Water Management District (SJRWMD) prior to beginning any dewatering.
- 13. A plan for routing of discharge water must be submitted to the DEP Central district Office for approval prior to commencement of dewatering.

EARTH WORK

- 14. If during the progress of this project prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures are encountered at any time within the project site area, work should cease in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at 850/245-6333, or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources.
- 15. In the event that any unmarked human remains are encountered anywhere on the subject property, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes. The permittee, or other designee, should contact the authority cited in this Section. Thereafter, project activities should not resume without verbal and/or written authorization from the designated official.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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David Herbster Submerged Lands and Environmental Resources Program Date of Issue: July 30, 2010

DIVISION 1: GENERAL REQUIREMENTS

SECTION 01010 SUMMARY OF WORK

SUMMARY OF WORK

PART 1 - GENERAL

1.01 SCOPE

- A. The project consists of the soil's construction (excavation, general fill, compacted soil layer, aggregate/stabilizer material placement, geosynthetics installation (geotextile separator for the perimeter access road) for the Indian River County Landfill Cell 3 subgrade preparation.
- B. CONTRACTOR shall cooperate with OWNER and other contractors so that the OWNER's work or work by other contractors can be carried out smoothly without interfering or delaying the Work.
- C. This project will include several work tasks, as outlined below:

Item 1 - Mobilization and Demobilization:

This item shall include charges related to transit of equipment, project startup and project closeout. CONTRACTOR shall also include in this item a job site trailer, generator for trailer power, and fuel for the generator for the OWNER REPRESENTATIVE use for the duration of the project.

Item 2 - Surveying

This item is to be utilized to perform surveying for earthwork staking and for establishment of control points for all drainage ditches, pipes and culverts and shall include: construction stakeout survey, intermediate surveying as required by CONTRACTOR's personnel to further construction, surveying required for perimeter ditch, perimeter access road, earthwork for the Cell 3 grades (as per Construction Drawing 4A - Cell 3 grading plan) and thickness verification. Surveying shall also include surveys for conformance checks, "red-line" drawings and sketches to determine measurement of quantities. CONTRACTOR shall provide the OWNER with the as-built drawings of the completed work.

Item 3 – Site Preparation (Clearing, Grubbing and Stripping)

This item is to be utilized to perform clearing, grubbing and stripping of the designated Cell 3 as shown in the Construction Drawings, perimeter access road and ditch areas.

Item 4 – Erosion and Sediment Control

This item is to be utilized to implement the erosion and sediment control measures for preparation of the site for Cell 3 (as per Construction Drawing 4A - Cell 3 grading plan). This item includes furnishing of all labor, materials, tools, transportation, and equipment necessary for construction and maintenance of the erosion and sediment control measures. This item shall be in accordance to Technical Specifications Section 02290 and as shown on the Construction Drawings.

Item 5 – General Fill (Cut and Fill)

This item is to be utilized when soils suitable for earthwork are imported to and excavated from Cell 3. The soil excavated shall be used as fill and the remaining portion of the fill shall be furnished by the CONTRACTOR. As a part of this item, CONTRACTOR shall be responsible for all the earthwork related to Cell 3 (as per Construction Drawing 4A - Cell 3 grading plan), perimeter drainage ditch and perimeter access road including material placement, moisture conditioning, compaction, and grading. Fill lift thickness shall not exceed 10 in. (loose). The earthwork shall be in accordance with Technical Specifications Section 02200 and the Construction Drawings.

Item 6 – Perimeter Access Road (24 ft width)

CONTRACTOR shall construct the 24-ft. wide perimeter access road around Cell 3. Road should be same as Cell 3/Cell 4 (as per Construction Drawing 4A - Cell 3 grading plan). This shall include the installation of: a compacted soil base (or subgrade) and an 8-in. thick stabilizer material (crushed limerock/ shell material or crushed coquina) roadway base (materials and installation) and use of a geotextile separator.

Item 7 – Vegetation/Permanent Stabilization

This item is to be utilized for sodding the perimeter drainage ditches and any other areas as directed by the ENGINEER. This item includes all labor, tools, equipment, supervision, and materials necessary to pre-qualify, procure, deliver, stockpile, and install sodding meeting the requirements of Section 02930 of the Technical Specifications.



Miscellaneous Items

- 1. Use of appropriate dust control measures during earthwork operations.
- If Cell 4 optional Bid section is taken into consideration and subgrade preparation work is allotted to bidders as per OWNER's discretion, then Item 8, Item 9 & Item 10 for Cell 4 on the Bid Form will correspond to same summary of work as per Item 2, Item 3, Item 5 respectively described above but the location of work will be Cell 4.

PART 2 - PRODUCTS

Not applicable.

PART 3 - EXECUTION

Not applicable.

[END OF SECTION]

MEASUREMENT AND PAYMENT



MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. This Section describes the methods for Measurement and Payment for the Work of this Contract.
- B. Measurement and Payment of Work will be made, and payment for Work will be taken to be included in, and covered by, the Contract unit prices and lump sum payment methods for the various bid items listed in Contractor's Bid Form.
- C. Contractor shall provide necessary equipment, workers, construction quality control testing, and survey (for its own use) personnel as required. Owner will provide surveying for as-built record drawings and for measurement and payment purposes. Owner will also provide construction quality control/assurance testing by a third-party firm.

1.02 ENGINEER'S ESTIMATE OF QUANTITIES

A. Bid items and estimated quantities are identified in Contractor's Bid Form of the Contract Documents. The estimated quantities for unit price pay items are approximate only and are included solely for the purpose of comparison of Bids. Owner does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground, or the actual quantities of material encountered or required will correspond with the estimated quantities.

1.03 BID ITEMS

- A. Bid Item Number 1: Mobilization/Demobilization
 - 1. Measurement for payment will not be made for this item.
 - 2. Payment of the lump sum listed in the Bid Form for this Bid Item will be prorated as follows for work covered by each payment request submitted by the Contractor: 20% for the first invoice and 5% per month thereafter with 20% held and payable with Contractor's final payment in accordance with the Contract Documents.
 - 3. The lump sum price shall include and cover the furnishing of all materials, labor, tools, and equipment necessary for Contractor to mobilize the necessary operations to the project site, including: the initial movement of personnel and

equipment to the project site; application, fee payment, and acquisition for all necessary permits; the establishment of Contractor's shops, plants, storage areas, field office, temporary water, electrical, telephone, sanitary and other temporary facilities; and other expenses required for the Work included in this Contract.

- 4. The lump sum price shall include, but not be limited to:
 - a. preparation of Site-Specific Health and Safety Plan if required by the Contract Documents;
 - b. preparing and maintaining all project safety and other records required by this Contract;
 - c. obtaining any permits required by County in order to perform the Work included in this Contract;
 - d. the cost of Contractor's insurance requirements for the duration of the Work; and
 - e. the cost of furnishing and maintaining performance and payment bonds as required in the Contract Documents for the duration of the Work.
- 5. The lump sum price shall include and cover demobilizing all materials, labor, tools, and personnel and equipment from the project site; dismantling of Contractor's shops, plants, storage areas, field office, temporary water, electrical, telephone, sanitary, and all other activities required for the project closeout.
- 6. Mobilization/Demobilization may not be more than 10% of the total bid price.
- B. Bid Item Number 2: Surveying
 - 1. Measurement for payment will not be made for this item.
 - 2. Payment of the lump sum price listed in the Bid Form for this Bid Item will be prorated based on the actual work accomplished by the Surveyor for work covered by each payment request submitted by Contractor. Contractor shall submit proof of survey work performed through survey work products.
 - 3. The lump sum price shall include and cover the furnishing of all labor, materials, tools, supervision, transportation, and equipment necessary to perform surveying work as specified in Section 02100 necessary for Contractor to perform Work included in this Contract. Surveying for as-built record drawings and for measurement and payment purposes will be provided by the Owner.



- C. Bid Item Number 3: Site Preparation (clearing, grubbing, stripping)
 - 1. Measurement for payment will be made on a per acre basis.
 - 2. Payment of the unit price listed in the Bid Form for this Bid Item will be based on the as-built area of actual work accomplished as listed in the Bid Form.
 - 3. The per acre bid price shall include all labor, tools, equipment, supervision, materials, and testing necessary to perform clearing, grubbing, and stripping, as specified in Section 02110 of these Specifications and at the locations shown on the Construction Drawings.
 - 4. No payment will be made until after the designated locations have been cleared, grubbed, or stripped and accepted pursuant to the Specifications and Construction Drawings. No payment will be made for stored materials.
- D. Bid Item Number 4: Erosion and Sediment Control
 - 1. Measurement for payment will not be made for this item.
 - 2. Payment of the lump sum price listed in the Bid Form for this Bid Item will be prorated based on the contract schedule as agreed to between Owner and Contractor.
 - 3. The lump sum price shall include and cover the furnishing of all labor, materials, tools, supervision, transportation, and equipment necessary to construct and maintain the erosion and sediment control features as described in the Section 02290 and as shown on the Construction Drawings. Work includes, but is not limited to:
 - a. temporary stormwater diversion dikes;
 - b. rock check dams;
 - c. lined sediment traps;
 - d. temporary stormwater piping;
 - e. stabilized construction entrance;
 - f. removal and disposal of accumulated sediment;
 - g. temporary seeding and mulching of stockpiles and disturbed areas;
 - h. soil amendments, fertilizer, disc harrowing, and other seedbed preparation;
 - i. permanent seeding, and mulching, and maintenance until acceptable permanent vegetation is established;
 - j. erosion control matting; and



- k. sodding in lieu of seeding.
- 4. The lump sum price also includes materials supply and delivery to the site, proper protection, and storage until placement.
- 5. No payment will be made for stored materials.
- E. Bid Item Number 5: General Fill (Supply and Install)
 - 1. Measurement for payment will be made on an in-place, compacted cubic yard basis.
 - 2. Payment of the unit price listed in the Bid Form for this Bid Item will be based on the as-built, placed and compacted volume of actual work accomplished as listed in the Bid Form and shall be measured based on pre- and postconstruction surveys. Interim payments may be made on the basis of truck counts or other method as proposed by the Contractor and agreed by the Owner; no more than 90% of the bid price will be paid based on truck counts.
 - 3. The per cubic yard bid price shall include all labor, tools, equipment, supervision, and materials necessary to transport (from off-site borrow sources), place, moisture condition, and compact General Fill from approved off-site borrow sources or as provided by the Contractor. The installed General Fill shall meet the requirements of Section 02200 of the Specifications and to the lines and grades shown on the Construction Drawings.
 - 4. No payment will be made until after the General Fill is installed pursuant to the Specifications at the locations required in the Construction Drawings. No payment will be made for stored materials.
- F. Bid Item Number 6: Perimeter Access Road
 - 1. Measurement for payment will be made on a cubic yard/square yard basis.
 - 2. Payment of the unit price listed in the Bid Form for this Bid Item will be based on the as-built area of actual work accomplished as listed in the Bid Schedule.
 - 3. The per cubic yard/square yard bid price shall include and cover the furnishing of all labor, materials, tools, supervision, transportation, and equipment necessary to construct Perimeter Access Roads as described in Section 02230

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of the Specifications and as shown on the Drawings. Work includes, but is not limited to:

- i. placement of the multifilament woven geotextile;
- ii. placement and compaction of the structural fill; and
- iii. placement and compaction of a minimum 8 inches of stabilizer material.
- 4. Stabilizer material may be crushed limerock, shell material, or crushed coquina. Contractor shall submit samples of stabilizer material intended for use for the Perimeter Access Road to the Engineer for review no less than 30 calendar days prior to use. Final selection of the stabilizer material will be made by the Owner.
- 5. The unit price also includes materials supply and delivery to the site, proper protection, and storage until placement.
- 6. Payment will be made after the Perimeter Access Road is completed and accepted pursuant to the Specifications and Construction Drawings. No payment will be made for stored materials.
- G. Bid Item Number 7: Vegetation/ Permanent Stabilization
 - 1. Measurement for payment will be made on a per acre basis for this item.
 - 2. Payment of the unit price listed in the Bid Form for this Bid Item will be based on the as-built area of actual work accomplished as listed in the Bid Form.
 - 3. The per acre bid price shall include all labor, tools, equipment, supervision, and materials necessary to pre-qualify, procure, deliver, stockpile, and install sodding meeting the requirements of Section 02930 of the Technical Specifications.
 - 4. The per acre bid price shall also include all labor, tools, equipment, supervision, and materials necessary to supply and apply/place the Hydro-seeding/Vegetative Stabilization, including additional over-seeding and other work necessary to establish permanent vegetation, at the locations shown on the Construction Drawings and as described in the Specifications.
 - 5. No payment will be made until after the Vegetation/Permanent Stabilization is installed pursuant to the Specifications at the locations required in the Construction Drawings. No payment will be made for stored materials.

Optional Items in Bid form for Future Cell 4

- H. Bid Item Number 8: Site Preparation (clearing, grubbing, stripping)
 - 1. Measurement for payment will be made on a per acre basis.
 - 2. Payment of the unit price listed in the Bid Form for this Bid Item will be based on the as-built area of actual work accomplished as listed in the Bid Form.
 - 3. The per acre bid price shall include all labor, tools, equipment, supervision, materials, and testing necessary to perform clearing, grubbing, and stripping, as specified in Section 02110 of these Specifications and at the locations shown on the Construction Drawings.
 - 4. No payment will be made until after the designated locations have been cleared, grubbed, or stripped and accepted pursuant to the Specifications and Construction Drawings. No payment will be made for stored materials
- I. Bid Item Number 9: Additional Surveying
 - 1. Measurement for payment will not be made for this item.
 - 2. Payment of the lump sum price listed in the Bid Form for this Bid Item will be prorated based on the actual work accomplished by the Surveyor for work covered by each payment request submitted by Contractor. Contractor shall submit proof of survey work performed through survey work products.
 - 3. The lump sum price shall include and cover the furnishing of all labor, materials, tools, supervision, transportation, and equipment necessary to perform surveying work as specified in Section 02100 necessary for Contractor to perform Work included in this Contract. Surveying for as-built record drawings and for measurement and payment purposes will be provided by the Owner.
- J. Bid Item Number 10: General Fill (Supply and Install)
 - 1. Measurement for payment will be made on an in-place, compacted cubic yard basis.
 - 2. Payment of the unit price listed in the Bid Form for this Bid Item will be based on the as-built, placed, and compacted volume of actual work accomplished as listed in the Bid Form and shall be measured based on pre- and postconstruction surveys. Interim payments may be made on the basis of truck

counts or other method as proposed by the Contractor and agreed by the Owner; no more than 90% of the bid price will be paid based on truck counts.

- 3. The per cubic yard bid price shall include all labor, tools, equipment, supervision, and materials necessary to transport (from off-site borrow sources), place, moisture condition, and compact General Fill from approved off-site borrow sources or as provided by the Contractor. The installed General Fill shall meet the requirements of Section 02200 of the Specifications and to the lines and grades shown on the Construction Drawings. The unit price includes all CQC testing required by Sections 01410 and 02200 of the Specifications.
- 4. No payment will be made until after the General Fill is installed pursuant to the Specifications at the locations required in the Construction Drawings. No payment will be made for stored materials.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 CONTRACT PRICE FORM

A. See Contract Attachment A for Bid Form.

3.02 APPLICATION FOR PAYMENT

A. Contractor shall use the Application for Payment Form provided in this Specification Section.

3.03 SUPPORT DOCUMENTATION FOR APPLICATIONS FOR PAYMENT

- A. Contractor is responsible to obtain and submit all documentation, including all measurement and quantity computations, required for verification of pay applications. Engineer shall verify measurements and quantities for payment.
- B. Should Engineer determine that insufficient data has been submitted to accurately verify a pay application, Engineer shall notify Contractor of deficiencies. Contractor shall address identified deficiencies prior to further review of the pay application.



C. In the event that survey data provided by Contractor is not sufficient to determine actual pay quantity, and the status of Work prevents additional data from being obtained, Engineer shall attempt to reasonably estimate the pay quantity based upon available information. Engineer's estimate shall be final.

[END OF SECTION]

APPLICATIONS FOR PAYMENT

APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

Submit Applications for Payment to Engineer in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.

1.02 RELATED REQUIREMENTS

- A. In other parts of the Construction Documents:
 - 1. Agreement between Owner and Contractor
 - 2. General Conditions of the Contract
 - 3. Article 15 Payments to Contractor; Set-Offs; Completion; Correction Period
- B. Specified in Other Sections:
 - 1. Section 01000: Summary of Work
 - 2. Section 01700: Contract Closeout

1.03 FORMAT AND DATA REQUIRED

- A. Submit itemized applications typed in a format approved by Engineer. All applications for payment must be numbered, dated, and signed by the Contractor.
- B. Provide itemized data on payment application (format, schedules, line items and values accepted by Engineer).

1.04 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to the date of submittal of application
 - 2. Fill in summary of dollar values
 - 3. Execute certification with the signature of a responsible officer of the contract firm
 - 4. Have resident project representative review and sign application prior to submission to Engineer

1.05 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When the Owner or the Engineer requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:
 - 1. Project
 - 2. Application number and date
 - 3. Detailed list of enclosures
 - 4. For stored products:
 - a. Item number and identification
 - b. Description of specific material
- B. Submit one copy of data and cover letter for each copy of application.

1.06 PREPARATION OF APPLICATION FOR FINAL PAYMENT

- A. Application for payment is required for progress payments
- B. Only one application will be acceptable in any one month

1.07 SUBMITTAL PROCEDURE

- A. Submit Applications for Payment to Engineer at the time stipulated in the Agreement
- B. Number: Four copies of each progress Application
- C. When Engineer finds the Application properly completed and correct, he will transmit the applications for payment to the Owner

PART 2 -- PRODUCTS

Not applicable

PART 3 -- EXECUTION

Not applicable

[END OF SECTION]

SECTION 01035 CHANGE ORDER PROCEDURES



CHANGE ORDER PROCEDURES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Promptly implement Change Order Procedures
- B. Contractor shall comply with the following requirements:
 - 1. Provide full written data required to evaluate changes.
 - 2. Maintain detailed records of work done on a time-and-material/force account basis.
 - 3. Provide full documentation to Engineer on request.
- C. Designate in writing the member of Contractor's organization:
 - 1. Who is authorized to accept changes in the Work
 - 2. Who is responsible for informing others in the contractor's employ of the authorization of changes in the Work.
- D. Owner will designate in writing the person who is authorized to execute Change Orders.

1.02 RELATED REQUIREMENTS

- A. The amount of established unit prices.
- B. Conditions of the Contract:
 - 1. Methods of determining cost or credit to Owner resulting from changes in Work made on a time-and-materials basis.
 - 2. Contractor's claims for additional costs.
- C. Section 01052: Applications for payment.
- D. Section 01311: Construction schedules.
- E. Section 00300: Bid Form



F. Section 01720: Project Record Documents.

1.03 DEFINITIONS: "Change Order" See General Conditions

1.04 PRELIMINARY PROCEDURES

- A. Owner or Engineer may initiate changes by submitting a proposal Request to Contractor. Request will include the following:
 - 1. Detailed description of the Change, Products, and location of the change in the Project. Supplementary or revised Drawings and Specifications.
 - 2. The projected time span for making the change, and a specific statement as to whether overtime work is, or is not, authorized.
 - 3. A specific period of time during which the requested price will be considered valid.
 - 4. Such request is for information only, and is not an instruction to execute the changes, nor to stop work in progress.
- B. Contractor may initiate changes by submitting a written notice to Engineer, containing:
 - 1. Description of the proposed changes.
 - 2. Statement of the reason for making the changes.
 - 3. Statement of the effect on the Contract Sum and the Contract Time.
 - 4. Statement of the effect on the work of separate contractors.
 - 5. Documentation supporting any changes in Contract Sum or Contract Time, as appropriate.

1.05 CONSTRUCTION CHANGE AUTHORIZATION

- A. In lieu of Proposal Request, Engineer may issue a "Work Directive Change" for Contractor to proceed with a change for subsequent inclusion in a Change Order.
- B. Authorization will describe changes in the work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.
- C. Owner and Engineer will sign and date the Work Directive Change as authorization for the Contractor to proceed with the Changes



1.06 DOCUMENTATION OF PROPOSALS AND CLAIMS

- A. Support each quotation for a lump sum proposal, and for each unit price which has not previously been established, with sufficient substantiating data to allow Engineer to evaluate the quotation.
- B. On request, provide additional data to support time and cost computation including the following:
 - 1. Labor required.
 - 2. Equipment required.
 - 3. Products required:
 - a. Recommended source of purchase and unit cost.
 - b. Quantities required.
 - 4. Taxes, insurance bonds.
 - 5. Credit for work deleted from Contract, similarly documented.
 - 6. Overhead and profit.
 - 7. Justification for any change in Contract Time.
- C. Support each claim for additional costs, and for work done on a time-and-material / force account basis, with documentation as required for a lump sum proposal, plus the following additional information:
 - 1. Name of the Owner's authorization agent who ordered the work, and date of the order.
 - 2. Dates and time work performed, and by whom.
 - 3. Time record, summary of hours worked, and hourly rates paid.
 - 4. Receipts and invoices for:
 - a. Equipment used, listing dates and times of use.
 - b. Products used, listing quantities.
 - c. Subcontracts.
- D. Document requests for substitutions for Products as specified in Section 01600.

1.07 PREPARATION OF CHANGE ORDERS

- A. Engineer will prepare each Change Order.
- B. Form Change Order format provided in the Contract Documents

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- C. Change Order will describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of change.
- D. Change Order will provide an accounting of the adjustment in the Contract Sum and in the Contract Time.

1.08 LUMP SUM / FIXED PRICE CHANGE ORDER

- A. Content of Change Orders will be based on either:
 - 1. Engineer's Proposal Request and Contractor's responsible Proposal as mutually agreed upon between Owner and Contractor.
 - 2. Contractor's Proposal for a change, as recommended by Engineer.
- B. Owner and Engineer will sign and date the Change Order as authorization for the contractor to proceed with the changes.
- C. Contractor shall sign and date the Change Order to indicate agreement with the terms therein.

1.09 UNIT PRICE CHANGE ORDER

- A. Content of Change Orders will be based on, either:
 - 1. Engineer definition of the scope of the required changes.
 - 2. Contractor's Proposal for a change, as recommended by Engineer.
 - 3. Survey of completed work
- B. The amount of the unit prices shall be:
 - 1. Those stated in the Agreement.
 - 2. Those mutually agreed upon between Owner and Contractor.
- C. When quantities of each of the items affected by the Change Order can be determined prior to start of the work:
 - 1. Owner and Engineer will sign and date the Change Order as authorization for Contractor to proceed with the changes.
 - 2. Contractor shall sign and date the Change Order to indicate agreement with the terms therein

- D. When quantities of the items cannot be determined prior to start of the work:
 - 1. Engineer or Owner will issue a Change Order directing Contractor to proceed with the change on the basis of unit prices, and will cite the applicable unit prices.
 - 2. At completion of the change, Engineer will determine the cost of such work based on the unit prices and quantities used.
 - 3. Contractor shall submit documentation to establish the number of units of each item and any claims for a change in Contract Time.
 - 4. Engineer will sign and date a second Change Order to establish the change in Contract Sum and in Contract Time.
 - 5. Owner and Contractor will sign and date the second Change Order to indicate their agreement with the terms therein.

1.10 TIME AND MATERIAL / FORCE ACCOUNT CHANGE ORDER / CONSTRUCTION AUTHORIZATION

- A. Engineer and Owner will issue a Work Directive Change directing Contractor to Proceed with the changes on a time-and-material / force account basis
- B. At completion of the change, Contractor shall submit itemized accounting and supporting data as provided in the Article "Documentation of Proposals and Claims" of this section.
- C. Engineer will determine the allowable cost of such work, as provided in General Conditions and Supplementary Condition.
- D. Engineer will sign and date the Change Order to establish the change in Contract Sum and Contract Time
- E. Owner and Contractor will sign and date the Change Order to indicate their agreement therein.

1.11 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Contractor shall periodically revise Schedule of Values and Request for Payment forms to record each change as a separate item of Work, and to record the adjusted Contract Sum.
- B. Contractor shall periodically revise the Construction Schedule to reflect each change in Contract Time:



- 1. Revise sub-schedules to show changes for other items of work affected by the changes.
- C. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

PART 2 -- PRODUCTS

Not Applicable

PART 3 -- EXECUTION

Not Applicable

[END OF SECTION]

REGULATORY REQUIREMENTS AND NOTIFICATION

REGULATORY REQUIREMENTS AND NOTIFICATION

PART 1 - GENERAL

1.01 PERMITS REQUIRED

- A. Florida Department of Environmental Protection: The required general permit from the Florida Department of Environmental Protection (FDEP) for the project will be obtained by Indian River County Solid Waste Disposal District (SWDD) prior to commencement of construction.
- B. Indian River Farms Water Control District: If needed, a permit from the Drainage District to cross any canals will be obtained by the SWDD Department.
- C. Other Permits Required: The Contractor is responsible for obtaining any discharge permits that may be required by local drainage districts, and for Consumptive Use Permit from the SJRWMD for construction dewatering activities and for a "Generic Permit for the Discharge of Produced Groundwater from Any Non-Contaminated Site Activity" from the FDEP and a "General Permit for Stormwater Discharge from Construction Activities" (NOI) from the FDEP.
- D. Contractor is required to provide Stormwater Pollution Prevention Plan (SWPPP). inspections in accordance with the FDEP NOI permit conditions. This will include weekly reports, reports after certain rainfall events, and turbidity testing of all receiving waters. An inspector with appropriate qualifications shall provide the reports, testing, certification from the FDEP Inspection reports shall be kept on the job site, and copies shall be submitted monthly to the Engineer.

1.02 NOTIFICATION

- A. Indian River County: The Contractor is required to notify the Indian River County SWDD Department 48 hours prior to initiating construction (Ronnie T. Jones, Assistant Managing Director, Solid Waste Disposal District, 1325 74th Avenue SW, Vero Beach, FL 32968; Office: 772-226-3214; Fax: 772-770-5296).
- B. Utility Companies: Contractor shall notify the following known utility companies in the area 48 hours prior to initiating construction: SUNSHINE LOCATES (800) 432-4770
 Southern Bell Telephone, Bill Moore, (772) 468-5538
 Comcast, Craig Bowers, (772) 567-3444 Ext. 51
 FP&L, Paul Hess, (772) 337-7002
 City Gas Company, Glen "Bock" Kreinhagen, (561) 871-2552 ext.23
 Florida Gas & Transmission, Cecil Walker, (321) 288-8839

- C. The Contractor shall give the Engineer not less than seven (7) calendar days notice of the time and place (or places) where he will start the work.
- D. When the Contractor's excavating operations encounter prehistoric remains or artifacts of historical or archeological significance, the operations shall be temporarily discontinued in that area and the Engineer shall be notified. The Engineer will consult archaeological authorities and determine the disposition of the remains or artifacts. The Contractor agrees that he will make no claim for additional payment or for extension of time because of any delays in or alteration of his procedure due to removal of any such remains or artifacts.

PART 2 - PRODUCTS

Not applicable

PART 3 - EXECUTION

Not applicable

** END OF SECTION **

REFERENCE STANDARDS



REFERENCE STANDARDS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

Abbreviations and acronyms used in Contract Documents to identify reference standards.

1.02 QUALITY ASSURANCE

- A. Application: When a standard is specified by reference, comply with requirements and recommendations stated in that standard, except when requirements are modified by the Contract Documents or applicable codes establish stricter standards.
- B. Publication Date: The publication in effect on the date of issue of Contract Documents, except when a specific publication date is specified.

1.03 ABBREVIATIONS, NAMES, AND ADDRESSES OR ORGANIZATIONS

- A. Obtain copies of reference standards direct from publication source, when needed for proper performance of work, or when required for submittal by Contract Documents.
- B. The following, as appropriate to project, is a list of referenced standards and their mailing addresses for requesting copies of standards:
 - Aluminum Association AA 818 Connecticut Avenue, NW Washington, D.C. 20006 AABC Associated Air Balance Council 1000 Vermont Avenue, NW Washington, D.C. 20005 AASHTO American Association of State Highway and Transportation Officials 444 North Capitol Street, NW Washington, D.C. 20001 ACI American Concrete Institute Box 19150 **Redford Station** Detroit, MI 48219



ADC	Air Diffusion council 435 North Michigan Avenue Chicago, IL 60611
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AISC	American Institute of Steel Construction 1221 Avenue of the Americas New York, NY 10020
AISI	American Iron and Steel Institute 1000 16 th Street, NW Washington, D.C., 20036
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
ARI	Air Conditioning and Refrigeration Institute 1815 North Fort Myer Drive Arlington, VA 22209
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 345 East 47 th Street New York, NY 10017
ASME	American Society of Mechanical Engineers 345 East 47 th Street New York, NY 10017
ASPA	American Sod Producers' Association Association Building Ninth and Minnesota Hastings, NE 68901
ASSE	American Society of Sanitary Engineers 960 Illuminating Building Cleveland,OH 44113



ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWI	Architectural Woodwork Institute 2310 South Walter Reed Drive Arlington, VA 22206
AWPA	American Wood-Preservers Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society 2501 NW 7 th Street Miami, FL 33125
AWWA	American Water Works Association 6666 W. Quincy Avenue Denver, CO 80235
CDA	Copper Development Association 57 th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10017
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue Washington, D.C. 20036
CRSI	Concrete Reinforcing Steel Institute 180 North LaSalle Street, Suite 2110 Chicago, IL 60601
FDOT	Florida Department of Transportation Haydon Burns Building 605 Suwannee Street Tallahassee, FL 32301
FM	Factory Mutual System 1151 Boston-Providence Turnpike Norwood, MA 02062
FS	Federal Specifications General Services Administration Specifications and Information Distribution Section (WFSIS)



	Washington Navy Yard, Bldg. 197 Washington, D.C. 20407
GA	Gypsum Association 1603 Orrington Avenue Evanston, IL 60201
MFMA	Maple Flooring Manufacturers Association 2400 East Devon, Suite 205 Des Plaines, IL 60018
MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
MLSFA	Metal Lath / Steel Framing Association 221 North LaSalle Street Chicago, IL 60601
NAAMM	National Association of Architectural Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180
NEMA	National Electrical Manufacturers Association 2101 L Street, NW Washington, D.C. 20037
NFPA	National Fire Protection Association 470 Atlantic Avenue Boston, MA 02210
NFPA	National Forest Products Association 1619 Massachusetts Avenue, NW Washington, D.C. 20036
NOFMA	National Oak Flooring Manufacturers Association 804 Sterick Building Memphis, TN 38103
NSF	National Sanitation Foundation



NSF Building 3475 Plymouth Road Ann Arbor, MI 48106

- NSWMA National Solid Waste Management Association 1120 Connecticut Avenue, NW Washington, D.C. 20036 NTMA National Terrazzo and Mosaic Association
- NTMA National Terrazzo and Mosaic Association 3166 Des Plaines Avenue Des Plaines, IL 60018
- PCA Portland Cement Association 5420 Old Orchard Road Skokie, IL 20076
- PCI Prestressed Concrete Institute 20 North Wacker Drive Chicago, IL 60606
- PS Product Standard U.S. Department of Commerce Washington, D.C. 20203
- RCSHSB Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004 SDI Steel Deck Institute Box 3812

Box 3812 St. Louis, MO 63122

- SDI Steel Door Institute 712 Lakewood Center North Cleveland, OH 44107
- SIGMA Sealed Insulating Glass Manufacturers Association 111 East Wacker Drive Chicago, IL 60601
- SJI Steel Joint Institute 1703 Parham Road, Suite 204 Richmond, VA 23229
- SMACNA Sheet Metal and Air Conditioning Contractors National Association



8224 Old Courthouse Road Vienna, VA 22180

- TCA Technical Aid Series Construction Specifications Institute 1150 Seventeenth Street, NW Washington, D.C. 20036
 TCA Tile Council of America, Inc. Box 326 Princeton, NJ 08540
- UL Underwriters Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

ENVIRONMENTAL PROTECTION PROCEDURES

Phase I – Cell 3 Site Preparation



SECTION 01110

ENVIRONMENTAL PROTECTION PROCEDURES

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials and equipment and perform all work required for the prevention of environmental pollution in conformance with applicable laws and regulations, during and as the result of construction operations under this Contract. For the purpose of this Section, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic and/or recreational purposes.
- B. The control of environmental pollution requires consideration of air, water and land, and involves management of noise and solid waste, as well as other pollutants.
- C. Schedule and conduct all work in a manner that will minimize the erosion of soils in the area of the work. Provide erosion control measures such as diversion channels, sedimentation or filtration systems, berms, staked hay bales, seeding, mulching or other special surface treatments as are required to prevent silting and muddying of streams, rivers, impoundments, lakes, etc. All erosion control measures shall be in place in an area prior to any construction activity in that area.
- D. This Section is intended to ensure that construction is achieved with a minimum of disturbance to the existing ecological balance between a water resource and its surroundings. These are general guidelines. It is the Contractor's responsibility to determine the specific construction techniques to meet these guidelines.
- E. All phases of sedimentation and erosion control shall comply with and be subject to the approval of the Florida Department of Environmental Protection. Contractor shall prepare sedimentation and erosion control drawings meeting the requirements for approval by that agency. Upon approval, furnish two copies of the approved Drawing to the Engineer.

1.02 APPLICABLE REGULATIONS

FL9363\01110 Environmental Protection Procedures_07_C3 01110-1

A. Comply with all applicable Federal, State, and local laws and regulations concerning environmental pollution control and abatement.

1.03 NOTIFICATIONS

A. The Engineer will notify the Contractor in writing of any non-compliance with the foregoing provisions or of any environmentally objectionable acts and corrective action to be taken. State or local agencies responsible for verification of certain aspects of the environmental protection requirements shall notify the Contractor in writing, through the Engineer, of any non-compliance with State or Local requirements. After receipt of such notice from the Engineer or from the regulatory agency through the Engineer, immediately take corrective action. Such notice, when delivered to the Contractor or his authorized representative at the site of the work, shall be deemed sufficient for the purpose. If the Contractor fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it is later determined that the Contractor was in compliance.

1.04 IMPLEMENTATION

- A. Prior to commencement of the work, meet with the Engineer to develop mutual understandings relative to compliance with these provisions and administration of the environmental pollution control program.
- B. Remove temporary environmental control features, when approved by the Engineer and incorporate permanent control features into the project at the earliest practicable time.

PART 2 PRODUCTS (not used)

PART 3 - EXECUTION

3.01 EROSION CONTROL

A. Provide positive means of erosion control such as shallow ditches around

construction to carry off surface water. Erosion control measures, such as siltation basins, hay check dams, mulching, jute netting and other equivalent techniques, shall be used as appropriate. Offsite surface water shall be diverted around the site, to a downstream channel ahead of siltation barriers. Flow of surface water into excavated areas shall be prevented. Ditches around construction area shall also be used to carry away water resulting from dewatering of excavated areas. At the completion of the work, ditches shall be backfilled, and the ground surface restored to original condition.

3.02 PROTECTION OF STREAMS AND SURFACE WATERS

- A. Take all precautions to prevent, or reduce to a minimum, any damage to any stream or surface water from pollution by debris, sediment or other material, or from the manipulation of equipment and/or materials in or near such streams. Water that has been used for washing or processing, that contains oils or sediments that will reduce the quality of the water in the stream, shall not be directly returned to the stream. Divert such waters through a settling basin or filter before being directed into streams or surface waters.
- B. Do not discharge water from dewatering operations directly into any live or intermittent stream, channel, wetlands, surface water or any storm sewer. Water from dewatering operations shall be treated by filtration, settling basins, or other approved method to reduce the amount of sediment contained in the water to allowable levels.
- C. Take all preventative measures to avoid spillage of petroleum products and other pollutants. In the event of any spillage, prompt remedial action shall be taken in accordance with a contingency action plan approved by the Florida Department of Environmental Protection. Submit two copies of approved contingency plans to the Engineer.
- D. Water being flushed from structures or pipelines after disinfection, with a Cl2 residue of 2 mg/1 or greater shall be treated with a dichlorination solution, in a method approved by the Engineer, prior to discharge.

3.03 PROTECTION OF LAND RESOURCES

- A. Restore land resources within the project boundaries and outside the limits of permanent work to a condition, after completion of construction that will appear to be natural and not detract from the appearance of the project.
- B. Outside of areas requiring earthwork for the construction of the new facilities, do not deface, injure, or destroy trees or shrubs, nor remove or cut them without

prior approval. No ropes, cables, or guys shall be fastened to or attached to an existing nearby trees for anchorage unless specifically authorized by the Engineer. Where such special emergency use is permitted, first wrap the trunk with a sufficient thickness of burlap or rags over which softwood cleats shall be tied before any rope, cable, or wire is placed. The Contractor shall in any event be responsible for any damage resulting from such use.

- C. Before beginning operations near them, protect trees that may possibly be defaced, bruised, injured, or otherwise damaged by the construction equipment, dumping or other operations, by placing boards, planks, or poles around them. Monuments and markers shall be protected similarly.
- D. Any trees or other landscape features scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to their original condition. The Engineer will decide the method of restoration to be used and whether damaged trees shall be treated and healed or removed and disposed of.
 - 1. All scars made on trees by equipment, construction operations, or by the removal of limbs larger than 1-inch in diameter shall be coated as soon as possible with an approved tree wound dressing. All trimming or pruning shall be performed in an approved manner by experienced workmen with saws or pruning shears. Tree trimming with axes will not be permitted.
 - 2. Climbing ropes shall be used where necessary for safety. Trees that are to remain, both within or outside established clearing limits, that are subsequently damaged by the Contractor and are beyond saving in the opinion of the Engineer, shall be immediately removed and replaced.
- E. The Contractor's storage and other construction buildings required temporarily for the performance of the work, shall be located at previously cleared portions of the job site or areas which are proposed to be cleared and shall not be within wetlands, stormwater detention areas or floodplains. The preservation of the landscape shall be an imperative consideration in the selection of all sites and in the construction of buildings. Drawings showing storage facilities shall be submitted by the Contractor for approval of the Engineer.
- F. If the Contractor proposes to construct temporary roads or embankments and excavations for plant and/or work areas, he shall submit the following for approval at least ten days prior to scheduled start of such temporary work.
 - 1. A layout of all temporary roads, excavations, embankments and drainage to be constructed within the work area.

- 2. Details of temporary road construction.
- 3. Drawings and cross sections of proposed embankments and their foundations, including a description of proposed materials.
- 4. A landscaping drawing showing the proposed restoration of the area. Indicate the proposed removal of any trees and shrubs outside the limits of existing clearing area. Indicate locations of guard posts or barriers required to control vehicular traffic and protect trees and shrubs to be maintained undamaged. The Drawing shall provide for the obliteration of construction scars as such and shall provide for a natural appearing final condition of the area. Modification of the Contractor's approved drawings shall be made only with the written approval of the Engineer. No unauthorized road construction, excavation or embankment construction including disposal areas will be permitted.
- G. Remove all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess of waste materials, or any other vestiges of construction as directed by the Engineer. It is anticipated that excavation, filling and plowing of roadways will be required to restore the area to near natural conditions which will permit the growth of vegetation thereon. The disturbed areas shall be prepared and sodded as described in Section 02485, or as approved by the Engineer.
- H. All debris and excess material will be disposed of outside wetland or floodplain areas in an environmentally sound manner.

3.04 PROTECTION OF AIR QUALITY

- A. Burning The use of burning at the project site for the disposal of refuse and debris will not be permitted.
- B. Dust Control Maintain all excavations, embankment, stockpiles, access roads, plant sites, waste areas, borrow areas and all other work areas within or without the project boundaries free from dust which could cause the standards for air pollution to be exceeded and which would cause a hazard or nuisance to others.
- C. An approved method of stabilization consisting of sprinkling or other similar methods will be permitted to control dust. The use of petroleum products is prohibited. The use of chlorides may be permitted with approval from the Engineer.

Phase I – Cell 3 Site Preparation

D. Sprinkling, to be approved, must be repeated at such intervals as to keep all parts of the disturbed area at least damp at all times, and the Contractor shall have sufficient competent equipment on the job to accomplish this. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs, as determined by the Engineer.

3.05 NOISE CONTROL

A. Make every effort to minimize noises caused by the construction operations. Equipment shall be equipped with silencers or mufflers designed to operate with the least possible noise in compliance with Federal and State regulations.

3.06 MAINTENANCE OF POLLUTION CONTROL FACILITIES DURING CONSTRUCTION

A. Maintain all facilities constructed for pollution control as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created.

SECTION 01200 PROJECT MEETINGS



PROJECT MEETINGS

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall cooperate and coordinate with the Resident Project Representative to schedule and administer pre-construction meeting, periodic progress meetings and specially called meetings throughout progress of the work.
 - 1. Prepare agenda for meetings.
 - 2. Make physical arrangements for meetings.
 - 3. Preside at meetings.
 - 4. Record the minutes; include significant proceedings and decisions.
 - 5. Reproduce and distribute copies of minutes within 15 working days after each meeting.
 - a. To participants in the meeting.
 - b. To Owner, Engineer, and other parties affected by decisions made at the meeting.
- B. Representatives of Contractors, Owner, Subcontractors, and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. Attend meetings to ascertain that work is expedited consistent with Contract Documents and construction schedules.

1.02 RELATED REQUIREMENTS

- A. Instructions to Bidders are included in Division 0.
- B. Construction Schedules are included in Section 01311.
- C. Contract Closeout is included in Section 01700.

1.03 PRE-CONSTRUCTION MEETING

- A. Schedule a preconstruction meeting no later than 15 days after date of Notice to Proceed.
- B. Location: A central site, convenient for all parties, designated by the Owner.



- C. Attendance
 - 1. Owner's Representative.
 - 2. Engineer and his/her professional consultants.
 - 3. Resident Project Representative.
 - 4. Contractor's Superintendent.
 - 5. Major Subcontractors.
 - 6. Major suppliers.
 - 7. Utilities
 - 8. Others as appropriate.
- D. Suggested Agenda
 - 1. Distribution and discussion of:
 - a. List of major Subcontractors and suppliers.
 - b. Projected Construction Schedules.
 - 2. Critical work sequencing.
 - 3. Major equipment deliveries and priorities.
 - 4. Project Coordination.
 - a. Designation of responsible personnel.
 - b. Contractor, Owner, Engineer, and Resident Project Representative responsibilities.
 - 5. Procedures and processing of:
 - a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change Orders.
 - e. Applications for Payment.
 - 6. Adequacy of distribution of Contract Documents.
 - 7. Procedures for maintaining Record Documents.
 - 8. Use of premises:
 - a. Office, work and storage areas.
 - b. Owner's requirements.
 - 9. Construction facilities, controls, and construction aids.
 - 10. Temporary utilities.
 - 11. Housekeeping procedures.

1.04 PROGRESS MEETINGS

- A. Schedule regular periodic meetings. The progress meetings will be held every 7 days with the first meeting 30 days after the pre-construction meeting or 30 days after the date of Notice to Proceed or one week following mobilization to the site by Contractor.
- B. Hold called meetings as required by progress of the work.
- C. Location of the meetings: Project field office of Contractor or Resident Project Representative.



- D. Attendance
 - 1. Contractor
 - 2. Owner's representatives
 - 3. Engineer and his/her professional consultants as needed.
 - 4. Subcontractors as appropriate to the agenda.
 - 5. Suppliers as appropriate to the agenda.
 - 6. Others as appropriate.
- E. Suggested Agenda
 - 1. Review, approval of minutes of previous meeting.
 - 2. Review of work progress since previous meeting.
 - 3. Field observations, problems and conflicts.
 - 4. Problems which impede Construction Schedule.
 - 5. Review of off-site fabrication, delivery schedules.
 - 6. Corrective measures and procedures to regain projected schedule.
 - 7. Revisions to Construction Schedule.
 - 8. Progress, schedule, during succeeding work period.
 - 9. Coordination of schedules.
 - 10. Review submittal schedules; expedite as required.
 - 11. Maintenance of quality standards.
 - 12. Pending changes and substitutions.
 - 13. Review proposed changes for:
 - 14. Effect on Construction Schedule and on completion date.
 - 15. Effect on other contracts of the project.
 - 16. Other business.
 - 17. Construction schedule.
 - 18. Critical/long lead items.
- F. Attend progress meetings and is to study previous meeting minutes and current agenda items, in order to be prepared to discuss pertinent topics such as deliveries of materials and equipment, progress of the work, etc.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

PRE-CONSTRUCTION CONFERENCE



PRE-CONSTRUCTION CONFERENCE

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Engineer shall schedule and administer the preconstruction conference and shall perform the following duties:
 - 1. Prepare agenda for meeting.
 - 2. Give notice of meeting three days in advance of meeting date.
 - 3. Make physical arrangements for meeting.
 - 4. Preside at meeting.
 - 5. Record the minutes, which shall include all significant proceedings and decisions.
 - 6. Reproduce and distribute copies of minutes within fifteen (15) working days after meeting. Minutes shall be distributed to all participants in the meeting and to all parties affected by decisions made at the meeting.

1.02 RELATED REQUIREMENTS

- A. Section 01000: Summary of Work.
- B. Section 01311: Construction Schedule.
- C. Section 01720: Project Record Documents.

1.03 PRECONSTRUCTION CONFERENCE

- A. Engineer will schedule meeting with Contractor, Owner and other affected parties.
- B. Location of the preconstruction meeting: The project site or a nearby office to be selected by Owner/Engineer.
- C. Attendance:
 - 1. Owner/Owner's representative.
 - 2. Engineer/Engineer's representative and his professional consultant.
 - 3. Contractor/Contractor's superintendent.
 - 4. Local utilities representatives.
 - 5. Local government agencies representative.



- D. Agenda:
 - 1. Record of Attendance.
 - 2. Project Summary Description.
 - 3. Local Utilities to be affected.
 - a. Water lines
 - b. Sewer lines
 - c. Gas lines
 - d. Telephone lines
 - e. Cable TV lines
 - f. Electric lines
 - g. Highways
 - h. Railroads
 - 4. Contractor Responsibilities:
 - a. Start date
 - b. Completion date
 - c. Liquidated damages
 - d. Contract amount
 - e. Work schedule
 - f. Space utilization
 - g. Rights-of-Way occupancy
 - h. Progress Payment Application
 - i. As-Builts (Records/Drawings)
 - j. Photographs
 - k. Shop drawings
 - 1. Subcontractors
 - m. Project coordination
 - n. Guarantee, Warranties, Maintenance Manuals
 - 5. Owner Responsibilities:
 - a. Property and right-of-way purchase
 - b. Monthly meetings
 - c. Special meetings
 - d. Partial and final payment
 - e. Change Orders
 - f. Periodic site visits
 - g. Public announcements and public relations
 - h. Project acceptance
 - 6. Engineer Responsibilities:



- a. Technical representative of Owner
- b. Interpreter of contract documents
- c. Periodic inspections of job progress
- d. Reviews partial and final payment applications
- e. Prepares Change Orders
- f. Checks and approves shop drawings
- g. Reviews record drawings
- h. Performs final inspection and issues certificate of completion
- 7. Resident Inspector Responsibilities:
 - a. Engineer's and Owner's representative on site
 - b. Review materials and work and reports any deficiencies to Engineer
 - c. Reviews applications for payment
 - d. Works with Contractor on public notification of work items
 - e. Attends progress meetings
 - f. Observes testing work
 - g. Maintains daily diary of work tasks
 - h. Furnishes reports to Engineer as deemed advisable

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

CONSTRUCTION SCHEDULES

CONSTRUCTION SCHEDULES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Promptly after award of the Contract, Contractor shall prepare and submit to the Engineer estimated construction progress for the Work, with subschedules of related activities which are essential to its progress.
- B. Coordinate the work and scheduling with and around other contractors and individual trades performing work on the Project.
- C. Submit revised progress schedules with each application for payment.
- D. Progress Schedule shall become part of Contract Documents after approval by Engineer.

1.02 RELATED REQUIREMENTS

- A. In other parts of the Contract Documents:
 - 1. General Conditions:
 - a. Articles 2 and 6 Schedules, Reports, and Records
 - b. Sections 6.1 and 6.2 Supervision by Contractor
 - c. Article 15 Supervision of Work, Termination, and Delay
- B. Specified in other sections.
 - 1. Section 01000: Summary of Work
 - 2. Section 01201: Preconstruction Conference

1.03 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart as follows:
 - 1. Provide separate horizontal bar for each trade or operation
 - 2. Horizontal time scale: Identify the first workday of each week.
 - 3. Scale and spacing: To allow space for notations and future revisions.
 - 4. Minimum sheet size: 11" x 17"
- B. Format of listings: The chronological order of the start of each item of work



C. Identification of listings: By major specification section numbers.

1.04 CONTENT OF SCHEDULES

- A. Construction Progress Schedule shall:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning and completion of each major element of construction, specifically list:
 - a. Subcontractor work
 - b. Utility construction
 - c. Restoration
 - 3. Show projected percentage of completion for each item, as of the first day of each month.

1.05 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission
- B. Show changes occurring since previous submission of Schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipated delays, and the impact on the schedule.
 - 2. Corrective action recommended, and its effect.
 - 3. The effect of changes on schedules of other prime contractors.

1.06 SUBMISSIONS

- A. Submit initial schedules within ten (10) days after award of Contract; Engineer will review schedules for information only.
- B. Submit revised progress schedules with each application for payment.
- C. Submit the number of opaque reproductions which the Contractor requires, plus two (2) additional copies; one for Owner and one for Engineer.

1.06 DISTRIBUTION



1.07

- A. Distribute copies of approved schedules to:
 - 1. Job site file
 - 2. Subcontractors
 - 3. Other concerned parties
- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projections shown in the schedule.

PART 2 -- PRODUCTS

Not Applicable

PART 3 -- EXECUTION

Not Applicable

SECTION 01370 SCHEDULE OF VALUE



SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Submit a Schedule of Values allocated to the various portions of the work, within twenty- one (21) days after the effective date of the Agreement.
- B. Upon request of the Owner or Engineer, support the values with data which will substantiate their correctness.
- C. The accepted Schedule of Values shall be used only as the basis for the Contractor's Applications for Payment.

1.02 RELATED REQUIREMENTS

- A. Standard General Conditions of the Construction Contract
- B. Application for Payment is included in Section 01052.

1.03 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Type schedule on an 8¹/₂-inch by 11-inch or 8¹/₂-inch by 14-inch white paper furnished by the Owner; Contractor's standard forms and automated printout will be considered for approval by the Engineer upon Contractor's request. Identify schedule with:
 - 1. Title of Project and location.
 - 2. Engineer and Project number.
 - 3. Name and Address of Contractor.
 - 4. Contract designation.
 - 5. Date of submission.
- B. Schedule shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Identify each line item with the number and title of the respective Section.
- D. For each major line-item list sub values of major products or operations under the item.

- E. For the various portions of the work:
 - 1. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
 - 2. For items on which progress payments will be requested for stored materials, break down the value into:
 - a. The cost of the materials delivered and unloaded, with taxes paid. Paid invoices are required for materials upon request by the Engineer.
 - b. The total installed value.
- F. The sum of all values listed in the schedule shall equal the total Contract Sum.

1.04 SUB-SCHEDULE OF UNIT MATERIAL VALUES

- A. Submit a sub-schedule of unit costs and quantities for:
 1. Products on which progress payments will be requested for stored products.
- B. The form of submittal shall parallel that of the Schedule of Values, with each item identified the same as the line item in the Schedule of Values.
- C. The unit quantity for bulk materials shall include an allowance for normal waste.
- D. The unit values for the materials shall be broken down into:
 - 1. Cost of the material, delivered and unloaded at the site, with taxes paid.
 - 2. Copies of invoices for component material shall be included with the payment request in which the material first appears.
 - 3. Paid invoices shall be provided with the second payment request in which the material appears, or no payment shall be allowed and/or may be deleted from the request.
- E. The installed unit value multiplied by the quantity listed shall equal the cost of that item in the Schedule of Values.

PART 2 - PRODUCTS

(NOT USED)

PART 3 - EXECUTION

(NOT USED)

SECTION 01381 AUDIO-VISUAL DOCUMENTATION

AUDIO-VISUAL DOCUMENTATION

PART 1 --GENERAL

1.01 DESCRIPTION OF WORK

Prior to commencing the Work, the Contractor shall have a continuous color audiovideo CD recording taken along the entire length of the Project to serve as a record of preconstruction conditions. The preconstruction swale elevations shall be recorded at 100' intervals.

1.02 APPROVAL

No construction shall begin prior to review and acceptance of the tapes covering the construction area by the Engineer. The Engineer shall have the authority to reject all or any portion of a videotape not conforming to specifications and order that it be redone at no additional charge. The Contractor shall reschedule unacceptable coverage within five (5) days after being notified. The Engineer shall designate those areas, if any, to be omitted from or added to the audio-video coverage. Tape recordings shall not be made more than thirty (30) days prior to beginning of construction in any area. All tapes and written records shall become property of Owner. The tapes shall be delivered to the Owner as soon as possible after recording.

1.03 QUALITY ASSURANCE

The Contractor shall engage the services of a professional electrographer. The color audio-video tapes shall be prepared by a responsible commercial firm known to be skilled and regularly engaged in the business of preconstruction color audio-video tape documentation.

PART 2 - PRODUCTS

2.01 GENERAL

All equipment, accessories, materials, and labor to perform this service shall be furnished by the Contractor.

2.02 QUALITY

The total audio-video system shall reproduce bright, sharp, clear pictures with accurate colors and shall have minimal distortion, tearing, rolls, or other imperfections. The audio portion of the recording shall reproduce the commentary of

the camera operator with proper volume and clarity and be free from distortion and interruptions.

2.03 CAMERA

The color video camera used in the recording system shall have a horizontal resolution of 300 lines at center, a luminance signal-to-noise ratio of 45dB, and a minimum illumination requirement of 25 foot candles.

2.04 TAPES

Audio-video tapes shall be new. Reprocessed tapes will not be acceptable. The tapes shall be one-half inch, high energy, extended still frame capable videocassette, shall be interchangeable with the color videocassette player, and shall be compatible for playback with the player-receiver.

PART 3 -- EXECUTION

3.01 VIDEOTAPING PROCEDURES

- A. Each tape shall begin with the current date, project name, and municipality, and be followed by the general location; i.e., name of street, house address, viewing side, and direction of progress. The audio track shall consist of an original live recording. The recording shall contain the narrative commentary.
- B. All video recordings must, by electronic means, display continuously and simultaneously generate, with the actual taping, transparent digital information to include the date and time of recording, and station numbers, if shown on the Drawings. The date information shall contain the month, day, and year. The time information shall contain the hour, minute, and second. Additional information shall be displayed periodically. Such information shall include, but not be limited to, project name, contract number, name of street, house address, direction of travel, and the viewing side. The transparent information shall appear on the screen.
- C. All taping shall be done during times of good visibility. No taping shall be done during precipitation, mist, or fog. The recording shall be done only when sufficient sunlight is present to properly illuminate the subjects of recording and to produce bright, sharp video recordings of those subjects.
- D. The rate of speed in the general direction of travel of the vehicle used during taping shall not exceed 44 feet per minute. Panning, zoom-in, and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.



- E. Tape coverage shall include all surface features located within the zone of influence of construction supported by appropriate audio coverage. Such coverage shall include, but not be limited to, existing driveways, sidewalks, curbs, pavements, ditches, mailboxes, landscaping, culverts, fences, signs, and headwalls within the area covered.
- F. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall not be more than twelve (12) feet. In some instances, audio-video tape coverage may be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the Engineer.

TESTING LABORATORY SERVICES

TESTING LABORATORY SERVICES

PART 1 -- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Owner may employ and pay for the services of an independent testing laboratory to perform certain specified testing in addition to what is called for in the Contract Documents. Contractor shall pay for all additional testing.
 - 1. Contractor shall cooperate with the laboratory to facilitate the execution of its required services.
 - 2. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the work of the Contract.
- B. Contractor will employ and pay for the services of an independent testing laboratory to perform certain specified testing. All testing described in the Contract Documents shall be paid for by the Contractor.

1.02 RELATED REQUIREMENTS

- A. General Conditions of the Contract: Inspections and testing required by laws, ordinances, rules, regulations, orders or approvals of public authorities.
- B. Respective sections of specifications: Certification of Products.

1.03 QUALIFICATION OF LABORATORY

- A. Meet "Recommended Requirements for Independent Laboratory Qualification," published by American Council of Independent Laboratories.
- B. Meet basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction."
- C. Authorized to operate in the State in which the Project is located.
- D. Submit copy of report of inspection of facilities made by Materials Reference Laboratory of National Bureau of Standards during the most recent tour of Inspection, with memorandum of remedies of any deficiencies reported by the inspection.



- E. Testing Equipment:
 - 1. Calibrated at reasonable intervals by devices of accuracy traceable to either:
 - a. National Bureau of Standards
 - b. Accepted values of national physical constants.

1.04 LABORATORY DUTIES

- A. Cooperate with Engineer and Contractor; provide qualified personnel after due notice.
- B. Perform specified inspections, sampling, and testing of materials and methods of construction:
 - 1. Comply with specified standards
 - 2. Ascertain compliance of materials with requirements of Contract Documents.
- C. Promptly notify Engineer and Contractor of observed irregularities or deficiencies of work or products.
- D. Promptly submit written report of each test and inspection; one copy each to Engineer, Owner, and Contractor, and one copy to Record Documents File. Each report shall include:
 - 1. Date issued
 - 2. Project title and number
 - 3. Testing laboratory name, address, and telephone number
 - 4. Name and signature of laboratory inspector
 - 5. Date and time of sampling or inspection
 - 6. Record of temperature and weather conditions
 - 7. Date of test
 - 8. Identification of product and specification section
 - 9. Location of sample or test in the Project
 - 10. Type of inspection or test
 - 11. Results of tests and compliance with Contract Documents
 - 12. Interpretation of test results, when requested by Engineer
- E. Perform additional tests as required by Engineer or the Owner

1.05 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

- A. Laboratory in not authorized to:
 - 1. Release, revoke, alter, or enlarge on requirements of Contract Documents
 - 2. Approve or accept any portion of the work
 - 3. Perform any duties of the Contractor

1.06 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel and provide access to work and to manufacturer's facilities.
- B. Secure and deliver to the laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other material mixes which require control by the testing laboratory.
- D. Furnish copies of product test reports as required.
- E. Furnish incidental labor and facilities:
 - 1. To provide access to work to be tested
 - 2. To obtain and handle samples at the project site or at the source of the product to be tested
 - 3. To facilitate inspections and tests
 - 4. For storage and curing of test samples
- F. Notify laboratory, in advance of operations to allow for laboratory assignments of personnel and scheduling of tests.

PART 2 -- PRODUCTS

Not applicable

PART 3 -- EXECUTION

Not applicable

SUBSTITUTIONS AND PRODUCT OPTIONS

SUBSTITUTIONS AND PRODUCT OPTIONS

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Furnish and install products specified, under options and conditions for substitutions stated in this Section.
- B. Whenever a product, material or item of equipment is specified or described by using the name of a proprietary product or the name of a particular manufacturer or vendor, followed by the phase "or equal," the specific item mentioned shall be the basis upon which bids are to be prepared, and shall be understood as establishing the type, function, dimension, appearance and quality desired. Other manufacturer's or vendor's products not named will be considered as substitutions, provided the required information is submitted in the manner set forth in this section and provided the substitution will not require substantial revision to the Contract Documents.

1.02 RELATED WORK

- A. Bid Form is included in Division 0.
- B. Change Order Procedures are included in Section 01035.

1.03 SUBMITTAL OF LIST OF PROPOSED SUBSTITUTIONS

A. Bidders shall submit their list of proposed substitutions and the proposed monetary changes associated therewith to the Owner on the standard form provided together with their bids.

1.04 CONTRACTOR'S OPTIONS

- A. For Products specified only by reference standard, select product meeting that standard, by any manufacturer.
- B. For Products specified by naming several products or manufacturers, select any one of products and manufacturers named which complies with Specifications.
- C. For products specified by naming one or more products or manufacturers and stating "or equal," submit a request as for substitutions, for any product or manufacturer which is not specifically named.



D. For products specified by naming only one product and manufacturer, there is no option, and no substitution will be allowed.

1.05 SUBSTITUTIONS

- A. In order for substitutions to be considered, the Contractor shall submit, within 30 days of issuance of Notice of Award, complete data as set forth herein to permit complete analysis of all proposed substitutions noted on his substitutions list. No substitution shall be considered unless the Contractor provides the required data in accordance with the requirements of this Section within the 30 day period.
- B. Submit separate request for each substitution. Support each request with:
 - 1. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature; identify:
 - 1) Product description.
 - 2) Reference standards.
 - 3) Performance and test data.
 - 4) Operation and maintenance data.
 - c. Samples, as applicable.
 - d. Name and address of similar projects on which product has been used, and date of each installation.
 - 2. Itemized comparison of the proposed substitution with product specified; List significant variations. Substitution shall not change design intent and shall perform equal to that specified.
 - 3. Data relating to impact on construction schedule occasioned by the proposed substitution.
 - 4. Any effect of substitution on separate contracts.
 - 5. List of changes required in other work or products.
 - 6. Accurate cost data comparing proposed substitution with product specified.
 - a. Amount of any net change to Contract Sum.
 - 7. Designation of required license fees or royalties.
 - 8. Designation of availability of maintenance services, sources of replacement materials.
- C. Substitutions will not be considered for acceptance when:
 - 1. They are indicated or implied on shop drawings or product data submittals without a formal request from Contractor.
 - 2. They are requested directly by a Subcontractor or supplier.
 - 3. Acceptance will require substantial revision of Contract Documents.
- D. Requests for substitutions submitted after Notice of Award will not be considered unless evidence is submitted to the Engineer that all of the following circumstances



exist:

- 1. The specified product is unavailable for reasons beyond the control of the Contractor. Such reasons shall consist of strikes, bankruptcy, discontinuance of manufacturer, or acts of God.
- 2. The Contractor placed, or attempted to place, orders for the specified products within 10 days after Notice of Award.
- 3. Request for substitution is made in writing to the Engineer within 10 days of the date on which the Contractor ascertains that he cannot obtain the item specified.
- 4. Complete data as set forth herein to permit complete analysis of the proposed substitution is submitted with the request.
- E. The Engineer's decision regarding evaluation of substitutions shall be considered final and binding. Requests for time extensions and additional costs based on submission of, acceptance of, or rejection of substitutions will not be allowed. All approved substitutions will be incorporated into the Agreement by Change Order.

1.06 CONTRACTOR'S REPRESENTATION

- A. In making formal request for substitution, Contractor represents that:
 - 1. He has investigated proposed product and has determined that it is equal to or superior in all respects to that specified.
 - 2. He will provide same warranties or bonds for substitution as for product specified.
 - 3. He will coordinate installation of accepted substitution into the Work, and will make such changes as may be required for the Work to be complete in all respects.
 - 4. He waives claims for additional costs caused by substitution which may subsequently become apparent.
 - 5. Cost data is complete and includes related costs under his Contract, but not: a. Costs under separate contracts.
 - b. Engineer's costs for redesign or revision of Contract Documents.

1.07 ENGINEER DUTIES

- A. Review Contractor's requests for substitutions with reasonable promptness.
- B. Notify Contractor, in writing, of decision to accept or reject requested substitution.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

[END OF SECTION]

CONTRACT CLOSEOUT



CONTRACT CLOSEOUT

PART 1 -- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Comply with requirements stated in General and Special Conditions of the Contract and in Specifications for administrative procedures in closing out the work.
- B. Related requirements in other parts of the Contract Documents:
 - 1. Fiscal provisions, legal submittals, and additional administrative requirements; General Conditions of the Documents:
 - a. Paragraph 6.19 Record Documents
 - b. Paragraph 14.11 Final Inspection
 - c. Paragraph 14.8 Substantial Completion
 - d. Paragraph 14.12 Application for Final Payment
 - e. Paragraph 14.13 Final Payment and Acceptance
 - f. Paragraph 13.1 Guarantee of Work
- C. Related requirements specified in other sections:
 - 1. Section 01710: Cleaning
 - 2. Section 01720: Project Record Documents
 - 3. Section 01740: Warranties and Bonds

1.02 SUBSTANTIAL COMPLETION

- A. When Contractor considers his work is substantially complete, he shall submit to Engineer:
 - 1. A written notice that the work or designated portion thereof, is substantially complete.
 - 2. A list of items to be completed or corrected.
- B. Within a reasonable time after receipt of such notice, Engineer will make an inspection to determine the status of completion.
- C. Should Engineer determine that the work is not substantially complete:1. Engineer will promptly notify the Contractor, in writing, giving the reasons.



- 2. Contractor shall remedy the deficiencies in the work, and shall send a second written notice of substantial completion to Engineer
- 3. Engineer will re-inspect the work
- D. When Engineer concurs that the work is substantially complete, he will:
 - 1. Prepare a Certificate of Substantial Completion, accompanied by a list of items to be completed or corrected
 - 2. Submit the Certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them in the certificate.

1.03 FINAL INSPECTION

- A. When Contractor considers the work is complete, he shall submit written certification that:
 - 1. Contract Documents have been reviewed
 - 2. Work has been inspected for compliance with Contract Documents
 - 3. Work has been completed in accordance with Contract Documents
 - 4. Equipment and systems have been tested in the presence of the Owner's representative and are operational
 - 5. Work is completed and ready for final inspection
- B. Engineer will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- C. Should Engineer consider that the work is incomplete or defective:
 - 1. Engineer will promptly notify the Contractor, in writing, listing the incomplete or defective work.
 - 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Engineer that the work is complete.
 - 3. Engineer will re-inspect the work
- D. When Engineer finds that the work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.04 RE-INSPECTION FEES

Should the Engineer perform re-inspection due to failure of the work to comply with the claims of status of completion made by the Contractor, Contractor will compensate Engineer/Owner for such additional services.

1.05 ADDITIONAL SERVICES

Should Engineer be required to provide representation at the site for the administration of the Contract for Construction, more than thirty days after the specified Date of Substantial Completion of the work, Contractor will compensate Engineer for such additional services.

1.06 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER

- A. Evidence of compliance with requirements of governing authorities: Certificate of Occupancy
- B. Project Record Documents: To requirements of Section 01720
- C. Warranties and Bonds: To requirements of Section 01740; also, see Item H below
- D. Evidence of Payment and Release of Liens: To requirements of General and Supplementary Conditions
- E. Certificate of Insurance for Products and Completed Operations
- F. One (1) Year Maintenance Bond
- G. Certificate of Operation from equipment manufacturers

1.07 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to Engineer
- B. Statement shall reflect all adjustments to the Contract Sum:
 - 1. The original Contract Sum
 - 2. Additions and deductions resulting from:
 - a. Previous change orders
 - b. Allowances
 - c. Unit prices
 - d. Deductions for uncorrected work
 - e. Deductions for liquidated damages
 - f. Deductions for re-inspection payments
 - g. Other adjustments



- 3. Total Contract sum, as adjusted
- 4. Previous payments
- 5. Sum remaining due
- C. Engineer will prepare a final change order, reflecting approved adjustments to the Contract sum which were not previously made by change order.

1.08 FINAL APPLICATION FOR PAYMENT

A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 -- PRODUCTS

Not applicable

PART 3 -- EXECUTION

Not applicable

[END OF SECTION]

PROJECT RECORD DOCUMENTS



PROJECT RECORD DOCUMENTS

PART 1 -- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Contractor shall maintain at the site for the Owner one record copy of the following:
 - 1. Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change orders and other modifications to the Contract
 - 5. Engineer field orders or written instructions
 - 6. Approved shop drawings, product data, and samples
 - 7. Field test records
- B. Related requirements in the other parts of the Contract Documents:

General Conditions of the Contract; Section 2 – Schedules, Reports and Records

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Contractor shall store documents and samples in the field office apart from documents used for construction.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide locked cabinet or secure storage space for storage of samples.
- B. File documents and samples in accordance with Specifications Table of Contents.
- C. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by Engineer.

1.03 MARKING DEVICES

A. Provide felt tip marking pens for recording information in the color red.



1.04 RECORDING (SEE ALSO SPECIAL CONDITIONS)

- A. Label each document "PROJECT RECORD" in neat large, printed letters.
- B. Record information concurrently with construction progress. DO NOT conceal or backfill any work until required information is recorded.
- C. Drawings: Legibly mark to record actual construction:
 - 1. Depths of various elements of construction in relation to N.G.V.D. 1929.
 - 2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
 - 4. Field changes of dimension and detail
 - 5. Changes made by field order or by change order.
 - 6. Details not on original contract drawings.
 - D. Specifications and Addenda: Legibly mark each section to record:
 - 1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.
 - 2. Changes made by field order or by change order.

1.05 SUBMITTAL

- A. At Contract close-out, deliver Record Documents to Engineer for the Owner
- B. Accompany submittal with transmittal letter in duplicate, containing:
 - 1. Date
 - 2. Project title and number
 - 3. Contractor's name and address
 - 4. Title and number of each Record Document
 - 5. Signature of Contractor or his authorized representative

1.06 AS-BUILT SURVEYS

- A. GENERAL INFORMATION TO BE SHOWN ON AS-BUILT AND SURVEY DRAWINGS
 - 1. Existing right-of-way limits and/or easements within the limits of construction.
 - 2. Survey baseline stationing every 100', control points set every 500', and at angle change of direction.

- 3. Show cross section elevations at grade every 100' for gravity sewer line construction and 500' for water line and force main construction. Elevations that reflect any significant change in grade between the previously stated footage shall be shown on plans.
- 4. Existing parcels, tracts, and lot corner locations shown with front footage dimensions per plat when platted. If construction project is along back of lots, then show back lot dimensions.
- 5. Existing roadway edge of pavement or edge of dirt road.
- 6. Existing utilities as located in field (water, sewer, telephone, electric, cable TV, etc.) (NOTE: Sunshine One to be contacted by surveying firm prior to survey locate; with the intent of county excavation.)
- 7. Existing utilities as associated with number 5 above (example: valves, meters, manholes, etc.)
- 8. Existing curbs, driveway widths and types.
- 9. Existing drainage pipe crossings and driveway culverts (type, sizes and invert elevations.)
- 10. Existing swales and/or ditches and elevations every 100' at top and bottom if within area of construction.
- 11. Existing fences.
- 12. Existing trees and/or shrubbery.
- 13. All other non-movable items such as mailboxes, flag poles, etc.
- 14. All street names.

B. CONTROL INFORMATION FOR AS-BUILT UTILITY SURVEY WORK

- 1. All as-built drawings (24"x36") shall state in 1" lettering "AS-BUILT" located in the bottom right hand side of the drawing original and/or copies, along with the as-built date.
- 2. All as-built surveys shall meet the minimum requirements of the Chapter 61G17, Florida Administrative Code Pursuant to Section 472 of the Florida Statutes. All surveys shall be based on a minimum horizontal control Third Order, "Class 2."

- 3. All state plane coordinates shall be based on the Florida State Plane Horizontal data (East Zone); or Florida High Precision Geodetic Network (superstation) and NAD 83/1990 final adjustment.
- 4. All engineering or surveying as-built drawings shall be tied to a minimum of one (1) permanent reference monument (P.R.M.) that shall be tied to a minimum of one (1) section corner or one-quarter (1/4) section corner whichever is closest to the project. State plane coordinates shall be physically shown on the drawing next to the P.R.M. used.
- 5. All elevations shown shall be based on 1929 NGVD.
- 6. All incoming as-built drawings (24"x36") shall be received on a CD, as an electronic copy, AutoCADD 2000 format, with a tie to a minimum of two (2) state plane coordinates. (NOTE: Prior to submitting the electronic copy, one (1) copy of each as-built shall be submitted for review and approval. After all approvals, a (24"x36") Mylar reproducible along with five (5) signed and sealed copies of each as-built shall be submitted.)
- 7. All utility as-built construction plans that are located within a distance of one (1) mile from any Indian River County Global Positioning System (G.P.S.) control project monuments shall be tied into the project from one (1) on-site Permanent Reference Monument (P.R.M.) subdivision Corner, or site plan project corner.
- 8. All as-built surveys shall include a minimum of two (2) existing or established benchmarks for vertical control every 1,400 feet and shown on all surveys.
- 9. All Utility As-built construction located within one mile of the Indian River County Global Positioning System (G.P.S.) control project shall be tied from that nearest G.P.S. point and into the closest construction site Permanent Reference Monument (P.R.M.), if available. This does not eliminate Item No. 7 above.
- 10. All as-builts shall clearly depict as-built utility lines that were constructed along with their respective easement (if required). As-builts will not be accepted unless the verbiage "Proposed" and/or "To Be constructed" have been revised to read "AS-Built". As-built Construction drawings with, to be constructed terminology, will not be accepted.
- 11. All as-builts shall be certified by the contractor's surveyor.



- 12. All utility as-built construction located within the rights-of-way, easements and alike shall be tied to the respective rights-of way, easements, etc., every 1,000 feet and change of direction.
- 13. All fire hydrants, valves, Tee's, crosses, A.R.V.'s and pipeline changes in direction (fittings), shall be located with state plane coordinates and shall be identified on the as-builts.
- 14. All as-builts shall be complete and approved before commencement of field test.

PART 2 -- PRODUCTS

Not applicable

PART 3 -- EXECUTION

Not applicable

[END OF SECTION]

WARRANTIES AND BONDS



WARRANTIES AND BONDS

PART 1 -- GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Compile specified warranties and bonds.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittal when so specified.
- D. Review submittals to verify compliance with Contract Documents
- E. Submit to Engineer for review and transmittal to Owner

1.02 RELATED REQUIREMENTS

- A. In other parts of the Contract Documents:
 - 1. Instructional to Bidders: Bid or Proposal Bonds
 - 2. General Conditions of Contract:
 - a. Performance Bond and Labor and Material Payment Bond
 - b. General Warranty of Construction.
- B. Specified in other sections:
 - 1. Section 01700: Contract Closeout
 - 2. Each respective section of Specifications shall have Warranties and Bonds required for specific products.
 - 3. Provisions of Warranties and Bonds, Duration: The respective section of specification which specifies the product.

1.03 SUBMITTAL REQUIREMENTS

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers and subcontractors.
- B. Number of original signed copies requires: Two each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item

- 2. Firm, with name of principal, address, and telephone number.
- 3. Scope.
- 4. Date of beginning of warranty, bond or service and maintenance contract.
- 5. Duration of warranty, bond or service maintenance contract.
- 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure
 - b. Instances which might affect the validity of warranty bonds.
- 7. Contractor, name of responsible principal, address and telephone number.

1.04 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8-1/2" X 11" punched sheets for 3-ring binder
 - a. Fold larger sheets to fit into binders
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS." List:
 - a. Title of project
 - b. Name of Contractor
- C. Binders: Commercial quality, three-ring, with durable and cleanable plastic cover.

1.05 TIME OF SUBMITTALS

- A. Make submittals within ten days after Date of Substantial Completion, prior to final request for payment.
- B. For items of work, where acceptance is delayed materially beyond the Date of Substantial Completion, provide updated submittal within ten days after acceptance, listing the date of acceptance as the start of the warranty period.

1.06 SUBMITTALS REQUIRED

A. Submit warranties, bonds, and service and maintenance contracts as specified in the respective sections of Specifications, as appropriate.

PART 2 -- PRODUCTS

Not applicable

PART 3 -- EXECUTIVE

Not applicable

[END OF SECTION]

DIVISION 2: SITEWORK

SURVEYING

SURVEYING

PART 1 - GENERAL

1.01 SCOPE

- A. This Section includes the requirements for surveying. Requirements include, but shall not be limited to:
 - 1. establishing permanent and temporary survey benchmarks and control points;
 - 2. establishing a horizontal and vertical project control system based on existing benchmarks;
 - 3. setting limits and boundaries of construction activities;
 - 4. performing support surveys and surveys for conformance checks, "red-line" drawings, and sketches, and to determine measurement of quantities for periodic progress payments and final payment; and
 - 5. preparing and furnishing "red-line" drawings and sketches.
- B. As-built record surveys and surveys for measurement and payment purposes will be provided by the Owner.

1.02 RELATED SECTIONS AND PLANS

- A. Section 01025 Measurement and Payment
- B. Section 02110 Site Preparation (Clearing, Stripping, & Grubbing)
- C. Section 02200 Earthwork
- E. Section 02240 Riprap
- F. Section 02290 Erosion and Sediment Control
- G. Section 02720 Geotextiles
- I. Section 02930 Vegetation

1.03 REFERENCES

A. National Geodetic Survey Standards.

1.04 SUBMITTALS

- A. Interim surveys performed shall be submitted to the Construction Manager with each payment request to substantiate the quantities claimed.
- B. Contractor will be required to submit survey notes during construction upon request by the Owner Representative or Engineer.

1.05 PROJECT RECORD DOCUMENTS

- A. Contractor shall maintain on-site, a complete and accurate survey log documenting the survey work performed.
- B. Contractor shall maintain on-site, a plan clearly showing all site reference points, survey control points, and benchmarks.
- C. Contractor shall maintain on-site an accurate and current set of marked-up drawings indicating the as-built conditions.
- D. As-built surveys, stamped and signed, by a State of Florida Licensed/Registered Land Surveyor or Professional Engineer shall be submitted immediately following the completion of any applicable construction activity. Complete as-built surveys shall be submitted upon substantial completion of each phase of construction and are a prerequisite for contract closeout. This work item will be performed by the Owner.

PART 2 - PRODUCTS

2.01 MATERIALS AND SURVEY EQUIPMENT

- A. Provide materials and survey equipment as required to properly perform the surveys, including, but not limited to, instruments, tapes, rods, measures, mounts, and tripods, stakes and hubs, nails, ribbons, other reference markers, and all else as required.
- B. The survey instruments used for this work shall be precise and accurate to meet the needs of the work described. All survey instruments should be capable of reading to a precision of 0.001 ft and with a setting accuracy of \pm 0.8 seconds.

PART 3 - EXECUTION

3.01 GENERAL

- A. Maintain accurate and complete notes of surveys:
 - 1. Handwritten survey notes and information shall be written with lead pencil(s) and entered in "write in rain" notebooks. A copy of the numbered, dated, and signed field book pages shall be provided to the Owner Representative or Engineer upon request for use in checking the work.
 - 2. Electronic field survey information shall be collected and backup equipment shall be available in the event of equipment malfunction.
 - a. Electronic format for printed output of data collector field survey notes shall be compatible with the approved field book notation format.
 - b. Electronic format for printed output of data collector field work shall be compatible with the Contractor's and Owner Representative or Engineer's computer equipment and software for verifying and checking the work. A copy of the data disk shall be submitted to the Owner Representative or Engineer upon request.
- B. During construction, survey notes shall be retained by the Contractor and shall be submitted to the Owner Representative or Engineer for review upon request. Contractor shall maintain records of testing and compliance for each successive soil layer.
- C. Conformance check surveys for elevation and for horizontal coordinates shall be to the nearest 0.01 ft and for angles shall be to the nearest 20 seconds.
- D. Measurement and payment surveys for elevation and for horizontal distances shall be to the nearest 0.1 ft \pm 0.05 ft.
- E. Perform construction layout surveys in advance of scheduled construction activities. At completion of a survey, provide a copy of the field notes, drawings, or sketches to the Owner Representative or Engineer for review. The Contractor shall allow the Owner's Representative or the Engineer three calendar days for review. The Contractor is responsible for rework and/or construction delays caused by survey or staking errors.

- F. Set slope stakes in accordance with accepted surveying practices.
- G. Set grade stakes required for construction activities as the work progresses. Set fine grade stakes on all items for which the Construction Drawings specify a definite grade line.
- H. Upon completion of the work, the Contractor shall provide the Owner Representative or Engineer with all original surveying field notes, layouts, computations, and electronic files in standard bound survey notebooks. Electronic file information shall be compatible with the Owner Representative or Engineer's computer equipment and software as requested.
- I. Protect survey control points and replace disturbed survey control points at no additional cost to the Owner.

3.02 SPECIFIC FIELD REQUIREMENTS

- A. Establish temporary control points, as necessary, to support construction activities.
- B. Survey Documentation:
 - 1. Record the following information in survey notebooks for each control point established and for all other surveying:
 - a. control point designation;
 - b. northing and easting in State Plane North American Datum (NAD83);
 - c. elevation in National Geodetic Vertical Datum (NGVD29);
 - d. date of establishment;
 - e. description and sketch of the control point location; and
 - f. a minimum of three reference features that can be seen from the control point.
 - 2. Document survey work in the field notebooks using the format and procedures described below:
 - a. title and consecutive number on the front cover;
 - b. consecutively numbered pages;

- c. table of contents, indicated by survey task, on the first numbered page;
- d. legend indicating symbols used in survey notes;
- e. names of survey team for each task;
- f. notes on weather and equipment;
- g. date and time on each page to indicate when work was recorded;
- h. notes in a uniform character such that they can be interpreted and used by anyone with survey knowledge; and
- i. description and/or sketches of the survey control used.
- C. Preliminary Surveys:
 - 1. Earthwork Staking: Stakes for cut and fill limits shall establish the exterior limits of excavations and berms. The maximum staking interval shall be 50 feet. Stakes shall be prominently noted with description of point, vertical distance to design elevation, and offset distance as applicable.
 - 2. Structures: Stake structure centerlines so that the orientation, position, limits, and foundation elevation(s) are positively identified. Mark stakes to reflect the design elevation and offset distance as applicable.
 - 3. Ditches and Channels: Stake ditches and channels such that the layout remains undisturbed during construction.
 - 4. Pipes and Culverts: Stake pipes and culverts on 50-ft maximum stationing. Place offset stakes beyond excavation limits and material stockpiles. Continuously check invert elevation during placement.
- D. Final Surveys:
 - 1. Final topography shall be staked at nominal 50-foot intervals. Additionally, the following points shall be staked and noted as applicable.
 - a. Grade breaks.
 - b. Mid-point of slopes less than 50 ft.
 - c. Points of horizontal curvature and tangency.

- d. Points of stationing equation.
- 2. Pipes and culverts: Survey alignment and elevations of the top of all pipes at each change in grade and every 50 feet between changes in grades.

3.03 SURVEYS FOR MEASUREMENT AND PAYMENT

- A. Perform surveys to evaluate quantities of work performed and percent of completed work in accordance with Section 01025.
- B. Calculate and certify quantities and submit survey results, calculations, and certification to the Owner Representative or Engineer for review and evaluation.

3.04 SURVEYS FOR CONFORMANCE CHECKS AND AS-BUILT DOCUMENTS

- A. Survey the following surfaces to verify the lines and grades achieved during construction:
 - 1. for berms, ditches, roads, and other earthwork specified in Section 02200:
 - a. original grade surface;
 - b. compacted surface of cut slopes; and
 - c. finished grade surface.
 - 2. for culverts and other erosion and sediment control structures specified in Sections 02290 and 02721:
 - a. original grade surface;
 - b. pipe inverts; and
 - c. finished grade surface including riprap protection at inverts; and
 - 3. for the subgrade specified in Section 02200:
 - a. prepared subgrade surface.
- B. Perform earthwork conformance checks and as-built surveying immediately upon completion of a given installation to verify compliance with the Construction Drawings, facilitate progress, and avoid delaying commencement of the next

installation. Provide the following minimum spacing and locations for survey points:

- 1. surfaces with gradients less than 10 percent, survey on a square grid spaced not wider than 50 ft;
- 2. on slopes greater than 10 percent, a square grid spaced not wider than 50 ft shall be used, but in all cases, a line at the crest, midpoint, and toe of the slope shall be taken;
- 3. a line of survey points spaced not more than 50 ft apart shall be taken along any slope break (this will include the inside edge and outside edge of any bench on a slope); and
- 4. a line of survey points spaced not more than 50 ft apart and at each end shall be taken at the top of any pipes, culverts, discharge structures, or other appurtenances.

[END OF SECTION]

SITE PREPARATION

(CLEARING, GRUBBING, AND/OR STRIPPING)

SITE PREPARATION (CLEARING, GRUBBING, AND/OR STRIPPING)

PART 1 – GENERAL

1.01 SCOPE

A. This section describes the requirements for clearing, grubbing, and/or stripping activities.

1.02 RELATED SECTIONS AND PLANS

- A. Section 02100 Surveying
- B. Section 02200 Earthwork
- C. Section 02230 Road Construction
- D. Section 02290 Erosion and Sediment Control
- E. Section 02930 Vegetation

1.03 DEFINITIONS

- A. Clearing consists of the removal of trees, bushes, vegetation, and other surface debris that are 18 inches above the ground surface.
- B. Grubbing consists of the removal of stumps, roots, and vegetation to a depth of 3 feet below the existing ground surface or subgrade elevation, whichever is lower.
- C. Stripping consists of the removal of minimum 6 inches topsoil layer including roots and organic matter, grass, and other material unsuitable for use as subgrade or compacted fill.

1.04 SUBMITTALS

A. Provide list of equipment, description of construction methods, and other required information to perform clearing, grubbing, and stripping with the Contractor's Earthwork Work Plan specified in Section 02200.

1.05 COMPLIANCE WITH REGULATIONS

A. It is the sole responsibility of the Contractor to be completely familiar with and to follow all local, state, and federal regulations pertaining to the work required in this Section.

1.06 EXISTING CONDITIONS

A. The Contractor shall comply with applicable regulations in locating and providing clearance for all underground and above ground utilities, if applicable, prior to beginning construction activities. The Contractor shall immediately notify the Owner's Representative and the Engineer if utility lines or structures not shown on the Construction Drawings are encountered. Repair of damage and all restitution for liabilities resulting from damage to existing facilities due to activities by the Contractor shall be at the Contractor's expense.

PART 2 – PRODUCTS

Not used.

2.02 EQUIPMENT

A. Furnish equipment to perform the clearing, grubbing, and stripping specified in this Section.

PART 3 – EXECUTION

3.01 FAMILIARIZATION

- A. Prior to implementing any of the work described in this section, the Contractor shall become thoroughly familiar with the site, the site conditions, and all portions of the work described in this section.
- B. Contractor shall note that the elevation of groundwater is at or near the existing ground surface for areas covered under this Contract. Some areas may also be inundated with water at the start of construction. Contractor is responsible for any dewatering required to execute the required work.
- C. Inspection:

- 1. Prior to implementing any of the work in this section, the Contractor shall carefully inspect and verify that related work required by other sections is complete to the point where the work described in this section may properly commence without adverse impact.
- 2. If the Contractor has any concerns regarding the related work required by other Sections, he shall notify the Owner's Representative in writing prior to the commencement of operations. Failure to notify the Owner's Representative will be construed as Contractor acceptance of the related work of all other sections.

3.02 EROSION AND SEDIMENT CONTROL

- A. Prior to implementing any work described in this section, the Contractor shall install all erosion and sediment controls in the relevant area(s) of construction.
- B. Contractor is solely responsible for selecting, implementing, and maintaining proper and fully adequate erosion and sediment controls at all times during construction.

3.03 CLEARING AND GRUBBING

- A. Perform clearing and grubbing in excavation, compacted fill, trenching, road construction, fencing, stockpiling areas; and other areas as shown on the Construction Drawings unless otherwise directed by the Owner's Representative or the Engineer.
- B. Perform clearing and grubbing as separate activities.
- C. In those areas where only clearing is required, perform clearing in a manner that minimizes disturbance to the existing ground surface.
- D. Chip cleared materials of a woody nature to a size that is suitable for use as mulch. Keep cleared material to be chipped as free of soil and other inorganic matter as possible. Cleared material smaller than 3 inches in maximum dimension need not be chipped.
- E. Stockpile cleared and grubbed materials separately in the stockpile areas shown on the Construction Drawings or as directed by the Owner's Representative. Stockpiling of cleared and grubbed materials shall be in accordance with Section 02200.
- F. After completion of grubbing, fill and compact depressions outside the grading limits. Material type and degree of compaction shall meet the requirements specified

for compacted fill in Section 02200. Match fill elevation to the surrounding grade and grade to drain.

3.04 STRIPPING

- A. Perform stripping in excavation, compacted fill, trenching, road construction, stockpiling areas, and other areas as shown on the Construction Drawings. Transport stripped material to the stockpile areas shown on the Construction Drawings or as directed by the Owner's Representative. Stockpiling of stripped material shall be in accordance with Section 02200.
- B. If soil or weather conditions are unsuitable for stripping, due to precipitation or high wind as determined by the Owner's Representative, cease stripping activities until permission to resume stripping activities is obtained from the Owner's Representative.

3.05 SURVEYING AND CONSTRUCTION TOLERANCES

- A. The Contractor shall retain a Surveyor who shall be responsible for providing survey control for the work. The areas to be cleared, grubbed, and/or stripped shall be surveyed prior to performing the work for the purpose of measurement and payment.
- B. Survey the limits of clearing in accordance with Section 02100.

3.06 PROTECTION OF WORK

- A. The Contractor shall protect all prior work, including all materials and related work of other Sections.
- B. In the event of damage, the Contractor shall immediately make all necessary repairs and replacements necessary, as directed and approved by the Owner's Representative, at no additional cost to the Owner.

[END OF SECTION]

SECTION 02200 EARTHWORK

EARTHWORK

PART 1 - GENERAL

1.01 SCOPE

A. This section includes the requirements for site preparation, excavation, surface water control, excavation dewatering, stockpiling, subgrade preparation, general fill, and earthwork materials.

1.02 RELATED SECTIONS AND PLANS

- A. Section 01025 Measurement and Payment
- B. Section 01410 Testing and Testing Laboratory Services
- C. Section 02100 Surveying
- D. Section 02230 Road Construction
- E. Section 02290 Erosion and Sediment Control
- F. Section 02720 Geotextiles
- G. Section 02930 Vegetation

1.03 REFERENCES

- A. Latest version of American Society for Testing and Materials (ASTM) Standards:
 - 1. ASTM D 422. Standard Test Method for Particle Size Analysis of Soils.
 - ASTM D 698. Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kNm/m3)).
 - 3. ASTM D 2487. Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
 - 4. ASTM D 2937. Standard Test Method for Density of Soil in Place by the Drive-Cylinder Method.

5. ASTM D 6938. Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

1.04 SUBMITTALS

- A. For each source of general and structural fill material, submit the following to the Engineer for review within 30 calendar days from Notice to Proceed:
 - 1. the source of the material;
 - 2. certification and test results from the supplier that the general and structural fill material meets the requirements of this Section; certification shall also include that tests were performed in accordance with ASTM D 422, ASTM D 698, and ASTM D 2487; and
 - 3. 50-pound representative sample of the general and structural fill material from each source for visual examination, and testing, if necessary.
- B. Within 15 calendar days from Notice to Proceed, the Contractor shall submit to the Engineer for review an Earthwork Work Plan. The Earthwork Work Plan shall include, at a minimum:
 - 1. list of equipment proposed for the construction activities including earthwork and other scope of work specified or described in the contract documents;
 - 2. construction methods for each construction activity;
 - 3. dewatering methods and techniques;
 - 4. coordination of survey requirements for the earthwork;
 - 5. proposed locations of temporary soil stockpile areas;
 - 6. coordination of earthwork activities with surface water management and erosion and sediment control measures;
 - 7. schedule for earthwork activities; and
 - 8. dust control measures.

1.05 CONSTRUCTION QUALITY ASSURANCE

A. The earthwork will be monitored and tested by an Independent Testing Laboratory as specified in Section 01410.

- B. The Independent Testing Laboratory will perform soil conformance testing on general and structural fill to verify compliance with this Section. The Contractor shall provide all equipment and labor to assist the Independent Testing Laboratory in obtaining conformance samples from excavations and stockpiles.
- C. The Independent Testing Laboratory will perform soil performance testing on the subgrade surface and general and structural fill lifts to evaluate compliance with this Section. The Independent Testing Laboratory will indicate any portion of the earthwork that does not meet the requirements of this Section and will delineate the extent of the nonconforming area.
- D. The Contractor shall correct all deficiencies and non-conformances identified by the Independent Testing Laboratory at no additional cost to the Owner.
- E. The Contractor shall be aware of the Independent Testing Laboratory's activities required by Section 01410 and this Section and shall account for these activities in the construction schedule.

1.06 EXISTING CONDITIONS

- A. Existing site surface and subsurface conditions, based on available site data, are indicated on the Construction Drawings.
- B. Contractor shall verify existing conditions as indicated in Section 02100.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Obtain material for general and structural fill from the off-site borrow sources approved by the Engineer.
- B. General and structural fill material shall be free of debris, foreign objects, large rock fragments, organics, and other deleterious materials. General and structural fill material shall classify as GW, GC, GM, SW, SP, SM, or SC according to the Unified Soil Classification System (per ASTM D 2487).
- C. No materials larger than 6 inches in particle size shall be allowed in general and structural fill material unless approved by the Engineer.
- D. Soil testing will be performed by the Owner and Engineer, through the Independent Testing Laboratory. Contractor shall perform its own quality control.

2.02 EQUIPMENT

- A. Furnish compaction equipment to achieve the required minimum soil dry density within the range of acceptable moisture contents.
- B. Furnish hand compaction equipment, such as a walk-behind compactor, hand tampers, or vibratory plate compactor, for compaction in areas inaccessible to large compaction equipment.
- C. Furnish water trucks, pressure distributors, or other equipment designed to apply water uniformly and in controlled quantities to variable surface widths for required in-place moisture adjustment, to prevent drying of soil surfaces, and for dust control.
- D. Furnish equipment such as excavators, scrapers, compactors, loaders, dozers, earth hauling equipment and all other equipment, as required for earthwork construction.

PART 3 - EXECUTION

3.01 GENERAL

- A. All general and structural fill material to be compacted shall be at a moisture content that will readily facilitate effective compaction.
- B. General and structural fill material placed wet that exhibit pumping shall not be accepted regardless of the in-place density or percent compaction. Wet materials shall not be placed and compacted. Wet materials, if used, shall be allowed to dry in place, if feasible, or removed and replaced with suitable materials as directed by the Independent Testing Laboratory or Engineer.

3.02 SITE PREPARATION

- A. Install construction fence and barricades around open trenches and excavated areas.
- B. Install erosion and sediment controls in relevant areas of construction as indicated on the Construction Drawings and as required by Section 02290. Maintain the erosion and sediment controls for the duration of the Contract or until the disturbed areas are vegetated in accordance with Section 02930. Accumulated sediment behind silt fences, in drainage ditches or in structures shall be removed in accordance with Section 02290, or as directed by the Engineer.
- C. Prior to any earthwork activity, perform clearing, grubbing, and/or stripping as indicated on the Construction Drawings and in accordance with Section 02110.

3.03 SURFACE WATER CONTROL

- A. Installation of surface water and erosion controls shall be in accordance with approved Surface Water Management and Erosion Control Plan as specified in Section 02290.
- B. Install surface water and erosion controls in and around work areas to control runoff and erosion and to prevent surface water run-on into excavations. Perimeter controls may include shallow ditches, berms, or localized regrading.

3.04 EXCAVATION

A. Excavate designated areas to the subgrade elevations or excavation limits indicated on the Construction Drawings. Stockpile excavated material in areas designated by the Engineer or Owner's Representative for use in subsequent construction.

3.05 EXCAVATION DEWATERING

- The Contractor shall provide adequate equipment for the removal of storm or A. subsurface waters which may accumulate in the excavation. If subsurface water is encountered, the Contractor shall utilize suitable equipment to adequately dewater the excavation so that it will be dry for work and pipe laying. A wellpoint system or other Engineer-approved dewatering method shall be utilized if necessary to maintain the excavation in a dry condition for preparation of the trench bottom and for pipe laying. Wellpoint holes shall be plugged with concrete grout. Dewatering by trench pumping will not be permitted if migration of fine-grained natural material from bottom, side walls, or bedding material In the event that satisfactory dewatering cannot be accomplished will occur. due to subsurface conditions or where dewatering could damage existing structures, the Contractor shall obtain the Engineer's approval of wet trench construction procedure before commencing construction. Dewatering shall cease in a manner to allow the subsurface water to slowly return to normal levels.
- B. Anticipate seepage of groundwater, and accumulation of surface water runoff in excavations. Manage groundwater and surface water in excavations in accordance with this Section.
- C. Prevent surface water run-on from adjacent areas from entering the excavation.

D. Disposal:

Water pumped from the trench or other excavation shall be disposed of in storm sewers having adequate capacity, canals, or suitable disposal pits. Contractor is responsible for acquiring all permits required to discharge the water and shall protect waterways from turbidity during the dewatering operation. In areas where adequate disposal sites are not available, partially backfilled trenches may be used for water disposal only when the Contractor's plan for trench disposal is approved in writing by the Engineer. The Contractor's plan shall include temporary culverts, barricades, and other protective measures to prevent damage to property or injury to any person or persons. No flooding of streets, roadways, driveways, or private property will be permitted. Engines driving dewatering pumps shall be equipped with residential type mufflers.

3.06 STOCKPILING

- A. Separate stockpiles by material type.
- B. Stockpile excavated soils at the areas indicated on the Construction Drawings or as designated by the Owner's Representative or the Engineer.
- C. Construct stockpiles no steeper than 3H:1V (horizontal:vertical), grade to drain, seal by tracking perpendicular to the slope contours with a dozer, and dress daily during periods when fill is taken from the stockpile.
- D. Silt fence or berms shall be constructed at the base of stockpiles that will not be immediately used.
- E. Restore all areas used for stockpiling when stockpiles are removed as directed by the Owner's Representative or the Engineer.

3.07 SUBGRADE PREPARATION

- A. Subgrade material shall consist of soil relatively free of debris, foreign objects, organics and other deleterious materials.
- B. Compact all subgrade within the limits of construction to a minimum 95 percent of the Standard Proctor (ASTM D 698) maximum dry density at a moisture content approved by the Engineer.
- D. Subgrade for general and structural fill shall be scarified to a depth of 2 inches using equipment identified in this Section.
- E. Unsuitable soils shall be removed and replaced with general and structural fill to a minimum depth of 2 feet below the proposed subgrade elevation. Suitable soil exhibiting pumping or developing ruts more than two inches in depth will be removed to a minimum depth of 1 foot or dried in place, if feasible. Compact the general and structural fill to a minimum 95 percent of standard Proctor (ASTM D 698) maximum dry density at a moisture content approved by the Engineer.
- F. In excavations or other areas where water accumulates, implement measures to remove the water in accordance with this section. Maintain the subgrade surface free of standing water and in firm condition to meet proof rolling requirements of this section. Maintain dewatered areas until overlying construction is complete.
- G. Manage surface water as described in Section 02290.

3.08 GENERAL AND STRUCTURAL FILL

- A. Use general and structural fill material that meets the material requirements of this Section. Place the general and structural fill material to the limits and grades shown on the Construction Drawings.
- B. Place general and structural fill material on surfaces that are free of debris, vegetation, or other deleterious material.
- C. Place general and structural fill material in loose lifts with a thickness of 12 inches \pm 1 inch. In areas where compaction is to be performed using hand operated equipment, place the fill material in loose lifts with a loose thickness of 6 inches \pm 1 inch.

- D. Prior to placing a succeeding lift of material over a previously compacted lift, thoroughly scarify the previous lift to a depth of 2 inches by discing, raking, or tracking with a dozer. Moisture condition the preceding lift if not within the acceptable moisture range.
- E. The trafficking of scarified surfaces by trucks or other equipment, except compaction equipment, is not permitted.
- F. Except as specified in this section, compact general and structural fill in each lift to at least 95 percent of its standard Proctor maximum dry density (ASTM D 698). Compact general and structural fill at moisture content as required to attain the specified density or as approved by the Engineer.
- G. Do not place fill during periods of precipitation. Placement may occur during periods of misting or drizzle, but only as authorized by the Engineer.
- H. Rework compacted general and structural fill that does not meet the required compaction.
- I. Dust shall be controlled by the application of water to the general and structural fill surfaces.

3.09 CONSTRUCTION QUALITY REQUIREMENTS

- A. The Independent Testing Laboratory shall be retained by the Owner and Engineer to perform soil conformance testing on general and structural fill materials to confirm compliance with this Section. Conformance testing to be performed and minimum testing frequencies shall be in accordance with this Section and Section 01410. Contractor shall provide equipment and labor to assist the Engineer or CQA Consultant in obtaining conformance samples from stockpiles and off-site borrow sources.
- B. Conformance samples and testing shall be performed for particle size analyses (ASTM D 422) and classification (ASTM D 2487) at the frequency of one (1) per 5,000 cubic yards for each borrow source material. Standard Proctor compaction (ASTM D 698) shall be performed at one (1) per 10,000 cubic yards for each borrow source material.
- C. The Engineer or CQA Consultant shall monitor earthwork activities in accordance with this Section.
- D. The Engineer or CQA Consultant shall perform performance testing on compacted general and structural fill lifts to confirm compliance with this Section.

The performance testing to be performed and minimum testing frequencies shall be as follows:

- 1. in-situ density and moisture content (ASTM D 6938) at 5 tests per acre per lift with a minimum of two nuclear moisture and density tests each day of active construction work;
- 2. drive cylinder testing (ASTM D 2937) for density and moisture content correlation with the nuclear gage testing at one (1) test per 25 nuclear tests.
- E. If tests indicate that any portion of the general and structural fill does not meet the requirements of this Section, the Independent Testing Laboratory shall delineate the extent of the nonconforming area. Rework the nonconforming area until it meets the requirements of this Section.

3.10 SURVEY CONTROL

A. Survey limits and elevations of excavations, top of subgrade, and top of berms in accordance with Section 02100.

3.11 TOLERANCES

- A. Perform the earthwork construction to within ± 0.3 feet of the grades indicated on the Construction Drawings except for roads for which earthwork construction shall be within -0.1 to +0.1 feet of the grades indicated.
- B. Positively draining slopes shall be maintained during all construction.

[END OF SECTION]

ROAD CONSTRUCTION

ROAD CONSTRUCTION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The Contractor shall furnish all labor, materials, tools, supervision, transportation, equipment, and incidentals necessary to perform all work associated with road construction, which includes the perimeter access road, as shown on the Construction Drawings to be surfaced with a suitable stabilizer material and geotextile layer. The work shall be carried out as specified herein and in accordance with the Construction Drawings.
- B. The Work shall include, but not be limited to: (i) furnishing suitable material for the subgrade of the perimeter access road; (ii) furnishing associated geotextiles; and (iii) hauling, placing, compacting, and grading of the road subgrade and stabilizer material (i.e., "road aggregate"). The completed road shall conform to the dimensions, lines, grades, and sections shown on the Construction Drawings or as directed by the Owner's Representative.

1.02 RELATED SECTIONS AND PLANS

- A. Section 01025 Measurement and Payment
- B. Section 01410 Testing and Testing Laboratory Services
- C. Section 02100 Surveying
- F. Section 02290 Erosion and Sediment Control
- G. Section 02720 Geotextiles
- I. Section 02930 Vegetation

1.03 REFERENCES

A. Latest version of the Florida Department of Transportation (FDOT) "Standard Specifications for Road and Bridge Construction" (FDOT Specifications).

1.04 SUBMITTALS

- A. The Contractor shall submit to the Engineer and Owner's Representative a description of equipment and methods proposed for grading and compacting subgrade and road aggregate, at least 5 days prior to the start of activities covered by this Section.
- B The Contractor shall submit to the Owner's Representative the following information at least 14 calendar days prior to the start of activities covered by this Section:
 - 1. Supplier/source of road aggregate material.
 - 2. Certification and test results from the supplier that the road aggregate material meets the material requirements of this Section.
 - 3. Upon request, a physical sample, of sufficient size for visual examination, and testing, if necessary. The sample shall be representative of project specific material to be supplied by the source.
- C. If the work of this Section is interrupted for reasons other than inclement weather, the Contractor shall notify the Owner's Representative and Engineer a minimum of 24 hours prior to the resumption of work.

1.05 QUALITY ASSURANCE REQUIREMENTS

- A. The Contractor shall ensure that the materials and methods used for road construction meet the requirements of the Construction Drawings and this Section. Any material or method that does not conform to these documents, or to alternatives approved in writing by Engineer will be rejected and shall be repaired or replaced by the Contractor.
- B. Construction of the roads shall be monitored by the Owner's Representative and CQA Consultant. If nonconformances or other deficiencies are found in the materials or completed work, the Contractor will be required to repair the deficiency or replace the deficient materials.

PART 2 - PRODUCTS

2.01 ROAD AGGREGATE

A. The Contractor shall furnish road aggregate material consisting of crushed carbonate stone, crushed coquina, or shell material, free of organic matter and other deleterious materials, which meets the material requirements specified in Section 911, Section 913 or Section 915 of the Florida DOT Specifications.

2.02 GEOTEXTILE

A. The geotextile separator shall meet the requirements specified in Section 02720.

2.03 EQUIPMENT

A. The Contractor shall furnish, operate, and maintain compaction equipment as is necessary to produce the required sections and grades.

PART 3 - EXECUTION

3.01 FAMILIARIZATION

- A. Prior to implementing any of the work in this Section, the Contractor shall become thoroughly familiar with the site, the site conditions, and all portions of the work falling within this and other related Sections.
- B. Inspection:
 - 1. The Contractor shall carefully inspect the installed work of all other Sections and verify that all work is complete to the point where the installation of the work specified in this Section may properly commence without adverse impact.
 - 2. If the Contractor has any concerns regarding the installed work of other Sections, the Owner's Representative shall be notified in writing prior to commencing work. Failure to notify the Owner's Representative or continuance of the work of this Section will be construed as the Contractor's acceptance of the related work of all other Sections.

3.02 SITE PREPARATION

A. The Contractor shall perform site clearing, grubbing, and stripping in accordance with the Construction Drawings and Section 02110 of these specifications prior to any earthwork activity.

3.03 GEOTEXTILE PLACEMENT

A. Install the geotextile separator over the prepared subgrade in accordance with Section 02720.

3.04 PLACEMENT OF ROAD AGGREGATE

- A. Road Aggregate shall be placed to the lines, grades and minimum thicknesses shown on the Construction Drawings and as specified in this Section.
- B. Place the road aggregate material on top of the geotextile separator by end dumping and carefully spread using a tracked bulldozer. Do not operate equipment directly on the geotextile.
- C. Aggregate for construction of roads shall meet the requirements of this Section.
- D. Place the road aggregate in accordance with the requirements of Section 230 of the Florida DOT Specifications.
- E. Compact the road aggregate in accordance with the requirements of Section 230-3.2 of the Florida DOT Specifications.

3.05 SURVEY CONTROL

- A. The Contractor shall perform all surveys necessary for construction layout and control.
- B. The Owner may supply surveying for quality assurance purposes and Record Drawings.

[END OF SECTION]

EROSION AND SEDIMENT CONTROL

EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.01 SCOPE

A. The Contractor shall furnish all labor, materials, tools, and incidentals required to install and maintain the temporary erosion and sediment control measures and structures including, but not limited to, silt fence, straw bales, check dams, and sediment traps, throughout the duration of the construction work. The Contractor shall also be responsible for removing the temporary erosion and sediment control measures and structures after the construction work is completed.

1.02 RELATED SECTIONS AND PLANS

- A. Section 02100 Surveying
- B. Section 02110 Clearing, Grubbing, and Stripping
- C. Section 02200 Earthwork
- D. Section 02245 Riprap
- F. Section 02930 Vegetation

1.03 REFERENCES

A. The Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual, First Edition, January 1999.

1.04 COMPLIANCE WITH REGULATIONS

A. It is the sole responsibility of the Contractor to be completely familiar and in compliance with all local, state, and federal regulations pertaining to the work required in this section.

1.05 CONSTRUCTION QUALITY ASSURANCE

- A. Erosion and sediment control activities shall be inspected and monitored by the Engineer as outlined in this Section.
- B. The Contractor shall be aware of the inspection and monitoring activities set forth in this Section and shall account for these activities in the construction schedule.

C. The Contractor shall assist the Engineer in every manner necessary for the proper performance of activities set forth in this Section.

1.06 SUBMITTALS

- A. Submit the following to the Engineer for review within 15 calendar days from Notice to Proceed:
 - 1. manufacturer's product data and recommended methods of installation for products used for erosion and sediment control measures; and
 - 2. certification from the supplier or Manufacturer that products meet the requirements of this Section.

PART 2 - PRODUCTS

2.01 SILT FENCE

- B. Furnish silt fence with either woven or nonwoven fabric. Silt fence shall:
 - 1. be woven fabric consisting of slit films of polypropylene treated with ultraviolet light stabilizers or nonwoven fabric consisting of long chain polymeric filaments or polyester yarns;
 - 2. be inert to hydrocarbons and chemicals commonly found in soils;
 - 3. be resistant to mildew, rot, insects, and rodent attack;
 - 4. have fence post of minimum $2" \times 2"$ lumber and with minimum length of 36 inches spaced at a maximum distance of 6 ft along the fabric; and
 - 5. have a minimum fabric width of 36 inches.

2.02 STABILIZATION

A. Materials for stabilization, including vegetation and crusting agent, shall be in accordance with Section 02930.

2.04 OTHER MATERIALS

- A. Riprap shall be in accordance with Section 02245.
- C. Materials for berms shall be as specified for compacted fill in Section 02200.

D. Construction entrances and check dams shall be in accordance with Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Silt fence shall be installed in accordance with the manufacturer's recommendations as needed or as directed by the Construction Manager, prior to any construction activities. Minimum fabric burial depth shall be 6 inches or as recommended by the manufacturer, whichever is greater.
- B. The exterior slopes of landfill berms and road shoulders shall be grassed immediately after final grading and shaping.
- C. The Contractor shall use straw bales to contain sediment and water from dewatering operations and promote infiltration. Accumulated sediment shall be removed and stockpiled for reuse in an area designated by the Construction Manager.

3.02 PROTECTION OF WORK

- A. The Contractor shall protect all prior work, including materials and related work of other sections.
- B. In the event of damage, the Contractor shall immediately make all repairs and replacements necessary, as directed and approved by the Construction Manager, at no additional cost to the Owner.

[END OF SECTION]

SECTION 02720 GEOTEXTILES

GEOTEXTILES

PART 1 - GENERAL

1.01 SCOPE

A. This section includes the requirements for geotextile products and installation.

1.02 RELATED SECTIONS AND PLANS

A. Section 02230 – Road Construction

1.03 REFERENCES

A. Latest version of American Society of Testing and Materials (ASTM) standards:

1.	ASTM D 4355.	Standard Test Method for Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon- Arc Type Apparatus).
2.	ASTM D 4491.	Standard Test Method for Water Permeability of Geotextiles by Permittivity.
3.	ASTM D 4533.	Standard Test Method for Trapezoidal Tearing Strength of Geotextiles.
4.	ASTM D 4632.	Standard Test Method for Grab Breaking Load and Elongation of Geotextiles (Grab Method).
5.	ASTM D 4751.	Standard Test Method for Determining Apparent Opening Size of a Geotextile.
6.	ASTM D 4873.	Standard Guide for Identification, Storage, and Handling of Geotextiles.
7.	ASTM D 5261.	Standard Test Method for Measuring Mass Per Unit Area of Geotextiles.
8.	ASTM D 5493.	Standard Test Method for Permittivity of Geotextiles Under Load.

- 9. ASTM D 6241. Standard Test Method for the Static Puncture Strength of Geotextiles and Geotextile Related Products Using a 50mm Probe.
- B. Federal Standard No. 751a Stitches, Seams, and Stitching.

1.04 SUBMITTALS

- A. Submit the following to the Engineer for review not less than 21 calendar days prior to use:
 - 1. geotextile Manufacturer and product name;
 - 2. certification of minimum average roll values and the corresponding test procedures for all geotextile properties listed in Tables 02720-1 and,
 - 3. projected geotextile delivery dates.
- B. Submit to the Engineer for review at least 14 calendar days prior to geotextile placement, manufacturing quality control certificates for each roll of geotextile as specified in this section.

1.05 CONSTRUCTION QUALITY ASSURANCE

- A. The installation of geotextiles will be monitored by the Engineer as specified in this Section.
- B. The Engineer may perform material conformance testing of the geotextiles.
- C. The Contractor shall correct all deficiencies and nonconformances identified by the Engineer at no additional cost to the Owner.

PART 2 - PRODUCTS

2.01 GEOTEXTILE

- A. Furnish geotextile products with minimum average roll values (95 percent lower confidence limit) meeting or exceeding the required property values in Tables 02720-1 (for geotextile separators).
- B. Furnish geotextiles that are stock products.

- C. Furnish geotextiles that are manufactured from first quality polymers, with no more than 20 percent reclaimed polymer used in production.
- D. Furnish polymeric threads for stitching that are ultra-violet (UV) light stabilized to at least the same requirements as the geotextile to be sewn. Furnish polyester or polypropylene threads that have a minimum size of 2,000 denier.

2.02 MANUFACTURING QUALITY CONTROL

- A. Sample and test the geotextile to demonstrate that the material conforms to the requirements of this section.
- B. Perform manufacturing quality control tests to demonstrate that the geotextile's properties conform to the values specified in Tables 02720-1. Perform as a minimum, the following manufacturing quality control tests at a minimum frequency of once per 50,000 square feet with minimum of 1 test per resin lot:

Test	Procedure
Mass per unit area	ASTM D 5261
Grab strength	ASTM D 4632
Tear strength	ASTM D 4533
Puncture strength	ASTM D 4833
Static Puncture strength	ASTM D 6241

- C. Submit quality control certificates signed by the geotextile manufacturer quality control manager. The certificates shall state that the geotextiles are continuously inspected and are needle-free. The quality control certificates shall also include: lot, batch, and roll number and identification; and results of manufacturing quality control tests including description of test methods used.
- D. Do not supply any geotextile roll that does not comply with the manufacturing quality control requirements.

F. If a geotextile sample fails to meet the quality control requirements of this section, sample and test rolls manufactured at the same time or in the same lot as the failing roll. Continue to sample and test the rolls until the extent of the failing rolls are bracketed by passing rolls. Do not supply failing rolls.

2.03 PACKAGING AND LABELING

- A. Supply geotextiles in rolls wrapped in relatively impermeable and opaque protective wrapping. Wrapping which becomes torn or damaged shall be repaired with similar materials.
- B. Mark or tag geotextile rolls in accordance with ASTM D 4873 with the following information:
 - 1. manufacturer's name;
 - 2. product identification;
 - 3. lot or batch number;
 - 4. roll number; and
 - 5. roll dimensions.
- C. Geotextile rolls not labeled in accordance with this section or on which labels are illegible upon delivery to the site shall be rejected and replaced at no expense to the Owner.

2.04 TRANSPORTATION

A. Deliver geotextiles to the site at least 14 calendar days prior to the planned deployment date to allow the Engineer adequate time to perform conformance testing on the geotextile samples if necessary.

2.05 HANDLING AND STORAGE

A. Protect geotextiles from sunlight, moisture, excessive heat or cold, puncture, mud, dirt, and dust or other damaging or deleterious conditions. Follow all geotextile manufacturer recommendations for handling and storage. Geotextile rolls shall be covered with additional tarp cover (in addition to the roll cover) to prevent damage to the rolls.

- B. Store geotextile rolls on palates or other elevated structures. Do not store geotextile rolls directly on the ground.
- C. Outdoor storage of geotextile rolls shall not exceed the manufacturer's recommendation or longer than 6 months, whichever is less.

PART 3 - EXECUTION

3.01 PLACEMENT

- A. Do not commence geotextile installation until the Engineer completes conformance evaluation of the geotextiles and performance evaluation of previous work, including evaluation of Contractor's survey results for previous work.
- B. Handle geotextiles so as to ensure they are not damaged in any way.
- C. Take necessary precautions to prevent damage to underlying layers including rutting during placement of the geotextiles.
- D. After unwrapping the geotextiles from its opaque cover, do not leave them exposed for a period in excess of 30 calendar days.
- E. If white colored geotextiles are used, take precautions against "snow blindness" of personnel.
- F. Examine the geotextile surface after installation to ensure that no potentially harmful foreign objects are present. Remove any such objects and replace any damaged geotextiles.

3.02 SEAMS AND OVERLAPS

- A. Continuously overlap a minimum of 6 inches and sew filter geotextiles (i.e., spot sewing is not allowed) using a "single prayer" seam. Sew seams using Stitch Type 401 as per Federal Standard No. 751a.
- B. Do not install horizontal seams on slopes that are steeper than 10 horizontal to 1 vertical. Seams shall be along, not across, the slopes.
- C. Overlap separator geotextiles a minimum of 12 inches and ensure that the overlap is maintained.

3.03 REPAIR

- A. Repair any holes or tears in the geotextiles using a patch made from the same geotextile material. Extend geotextile patches a minimum of 1 foot beyond the damaged area. Sew geotextile patches into place no closer than 1 inch from any panel edge. Should any tear exceed 50 percent of the width of the roll, remove and replace that roll.
- B. Remove any soil or other material that may have penetrated the torn geotextiles.

3.04 PLACEMENT OF SOIL MATERIALS

- A. Place soil materials on top of geotextiles in such a manner as to ensure that:
 - 1. the geotextiles and the underlying materials are not damaged; and
 - 2. slippage does not occur between the geotextile and the underlying layers during placement.
- B. Spread soil on top of the geotextile to cause the soil to cascade over the geotextile rather than be shoved across the geotextile.
- C. Place aggregate over geotextile separators as indicated on the Construction Drawings prior to trafficking.

Table 02720 - 1, on next page

TABLE 02720-1

REQUIRED PROPERTY VALUES FOR GEOTEXTILE SEPARATOR

PROPERTIES (6)	QUALIFIER	UNITS ⁽⁵⁾	SPECIFIED VALUES ⁽¹⁾	TEST METHOD
Product Requirements				
Туре			woven needle- punched	
Polymer composition	Minimum	%	95 polypropylene or polyester	
Mass per unit area	Minimum	oz/yd ²	10	ASTM D 5261
Mechanical Requirements				
Grab strength	Minimum	lb	225	ASTM D 4632 ⁽²⁾
Tear strength	Minimum	lb	90	ASTM D 4533 ⁽³⁾
Puncture strength	Minimum	lb	120	ASTM D 4833 ⁽⁴⁾
Static puncture strength	Minimum	psi	675	ASTM D 6241
Durability Requirements				
Ultraviolet Resistance	Minimum	%	70	ASTM D 4355

Notes:

- (1) All values represent minimum average roll values.
- (2) Minimum of values measured in machine and cross machine directions with 1 inch clamp on Constant Rate of Extension (CRE) machine.
- (3) Minimum value measured in machine and cross machine direction.
- (4) Tension testing machine with a 1.75-inch diameter ring clamp, the steel ball being replaced with 0.31-inch diameter solid steel cylinder with flat tip centered within the ring clamp.

(5)	mm =	millimeter	%	=	percent
	$oz/yd^2 =$	ounce per square yard	sec	=	second
	lb =	pound	psi	=	pound per square inch

(6) See Paragraph 2.02 for required MQC test frequencies.

[END OF SECTION]

VEGETATION

VEGETATION

PART 1- GENERAL

1.01 SCOPE

- A. This Section includes the requirements for sodding, seeding, liming, fertilizing, and maintaining vegetation until established and accepted.
 - 1. Areas to be sodded include: (i) bottom and side slopes of the perimeter ditch; and (ii) any disturbed areas with a slope of greater than 10%.
 - 2. Areas to be seeded include: (i) any disturbed areas with a slope of less than 10%; and (ii) any other areas as directed by the Engineer.

1.02 RELATED SECTIONS AND PLANS

- A. Section 01025 Measurement and Payment
- B. Section 02100 Surveying
- C. Section 02200 Earthwork
- D. Section 02290 Erosion and Sediment Control

1.03 REFERENCES

A. Latest version of the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction (FDOT Specifications).

1.04 SUBMITTALS

- A. Submit the following to the Engineer not less than 30 calendar days prior to use for review:
 - 1. proposed type and source of sod and seed; and
 - 2. manufacturer's product data for commercial fertilizer and lime and the recommended methods of application.
- B. Submit a plan for handling and storage of materials to prevent damage by moisture, heat, or exposure. Include all recommendations of manufacturers and suppliers.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Sod shall be live, thriving, and meet the requirements of Florida Department of Agriculture and Consumer Services.
- B. Seeds shall be live seed and meet the requirements of Florida Department of Agriculture and Consumer Services.
- C. The seeds should have been harvested from the previous year's crop.
- D. All seed bags shall have a label attached stating the date of harvest, LOT number, percent purity, percent germination, noxious weed certification, and date of test.
- E. Use fertilizer that is dry or liquid commercial grade fertilizer uniform in composition that meets the requirements of all State and Federal regulations and standards of the Association of Agricultural Chemists. Deliver fertilizer to the site in original, properly labeled, unopened, clean, containers each showing the manufacturer's guaranteed analysis conforming to applicable fertilizer regulations and standards. Use fertilizer that is 16-4-8 or as modified by the Engineer based on testing of the topsoil by the Contractor. Apply fertilizer to all sodded areas.
- F. Use lime that is agricultural ground limestone with a minimum total neutralizing power of 90 percent. The lime shall have a gradation of at least 40 percent passing the U.S. Standard Number 100 sieve, and at 95 percent passing the U.S. Standard Number 8 sieve.

PART 3 - EXECUTION

3.01 PLANTING AND APPLICATION OF FERTILIZER

- A. Do not commence vegetation until the Engineer reviews the results of soil analyses.
- B. Notify the Engineer 24 hours prior to laying sod, seeding, or fertilizing.
- C. The seed and fertilizer shall be placed by hydro seeding, or other method approved by the Engineer.
- D. The underlying soil layer should be graded to the lines and limits as indicated on the Construction Drawings. The soil layer surface shall be scarified and damp immediately prior to the seed or sod placement.

- E. Repair all gullies, washes, or disturbed areas that develop subsequent to final dressing of the prepared surface.
- F. Seeded areas shall be watered after germination as necessary until the vegetation is well established.
- G. Apply fertilizer and lime to all vegetated areas unless otherwise indicated by the Engineer.
- H. Apply fertilizer and lime at the specified rates. If not applied hydraulically, thoroughly rake the fertilizer and lime into the prepared surface to a minimum depth of 2 inches.
- I. Application rates:
 - 1. Application rates for seeding shall be according to manufacture/supplier recommendations or as directed by the Engineer.
 - 2. Application rates for fertilizer and lime in this section may be adjusted after the results of the site soil test results performed by the Contractor are available.
 - 3. Base contract price on application rates for fertilizer and lime specified in this section. Contract price will be adjusted for any variations either decreasing or increasing the application rates
- J. For areas to be covered with seed or sod:
 - 1. Apply fertilizer at a uniform rate of 1,200 pounds per acre or as otherwise directed by the Engineer.
 - 2. Apply agricultural lime at a rate of two tons per acre or as otherwise directed by the Engineer.

3.03 MAINTENANCE

- A. Maintain seeded and sodded areas immediately after placement until vegetation is well established and exhibits a vigorous growing condition.
- B. The Contractor shall supply and apply supplemental irrigation for the maintenance period following the placement of the seed or sod. All seeded and sodded areas should receive a minimum of 1¹/₂ in. of water per week either by precipitation or supplemental irrigation.

- C. Maintain the seeded and sodded areas in satisfactory condition. Maintenance of the seeded and sodded areas includes repairing eroded areas, revegetating, watering, and mowing (if applicable). A satisfactory condition of a seeded or sodded area is defined as a 10,000 square feet section of turf that has no bare spots larger than three square feet.
- D. The inspection will be performed by the Engineer, who will determine whether repair of sodded areas or revegetation is required. The Contractor shall make the repair or revegetation at the Contractor's expense.

3.04 ACCEPTANCE

E. The vegetated areas shall be accepted at the end of the warranty period if a satisfactory condition as defined in this Section exists or if accepted by the Engineer.

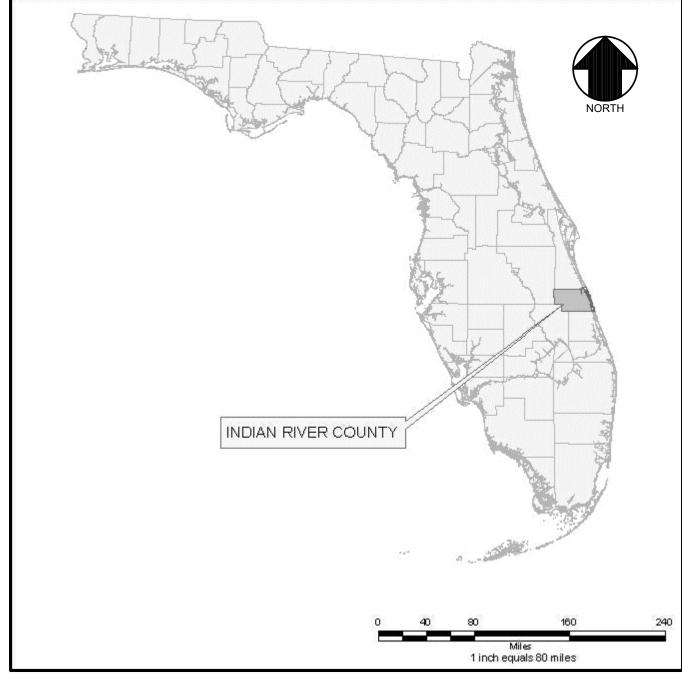
3.05 WARRANTY PERIOD

- A. Vegetated areas shall be subject to a warranty period of not less than 60 days from the issuance of the Engineer's final completion notice to the Contractor for the Contract over 100 percent of the areas seeded and sodded.
- B. At the end of the warranty period, the Engineer will perform an inspection upon written request by the Contractor. Vegetated areas not demonstrating satisfactory condition of vegetation as outlined above, shall be repaired, resodded, and maintained to meet all requirements as specified herein at the Contractor's expense. All unaccepted areas requiring repair, replacement of sod and/or reseeding shall be subject to a 60-day warranty period commencing at the completion of the reworking.
- C. After all necessary corrective work has been completed, the Engineer will certify in writing the final acceptance of the vegetated areas.

[END OF SECTION]

CONSTRUCTION DRAWINGS

INDIAN RIVER COUNTY, FLORIDA SOLID WASTE DISPOSAL DISTRICT PHASE I - CELL 3 SITE PREPARATION INDIAN RIVER COUNTY LANDFILL **CONSTRUCTION DRAWINGS MARCH 2023**



STATE MAP

DETAIL IDENTIFICATION LEGEND

-−2 Detail Number

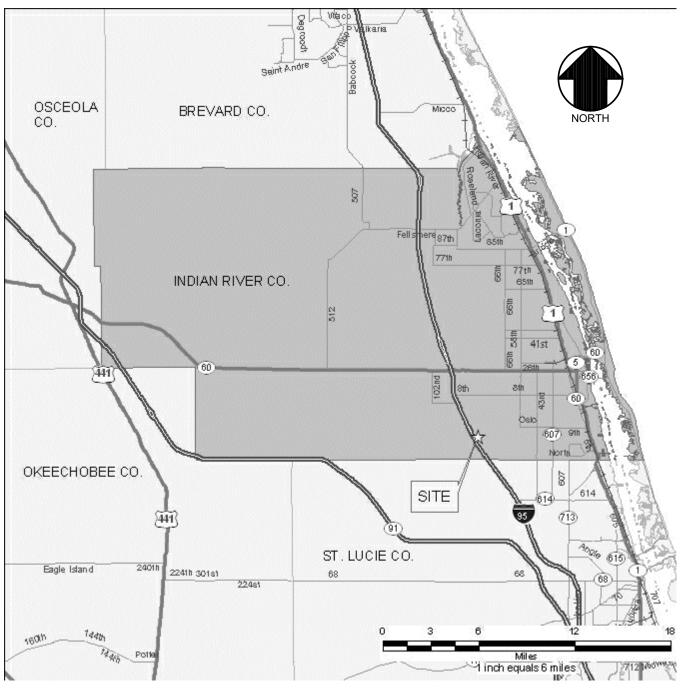
DETAIL TITLE OF DETAIL SCALE: 1" = 1 XREF: FILENAME

Example: Detail Number 2 Presented on Sheet No. 4 Note: Above System also applies to Section Identifications



INDIAN RIVER COUNTY LANDFILL

1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA (772) 770-5112



LOCATION MAP

LIST DRAWING LIST

REVISION

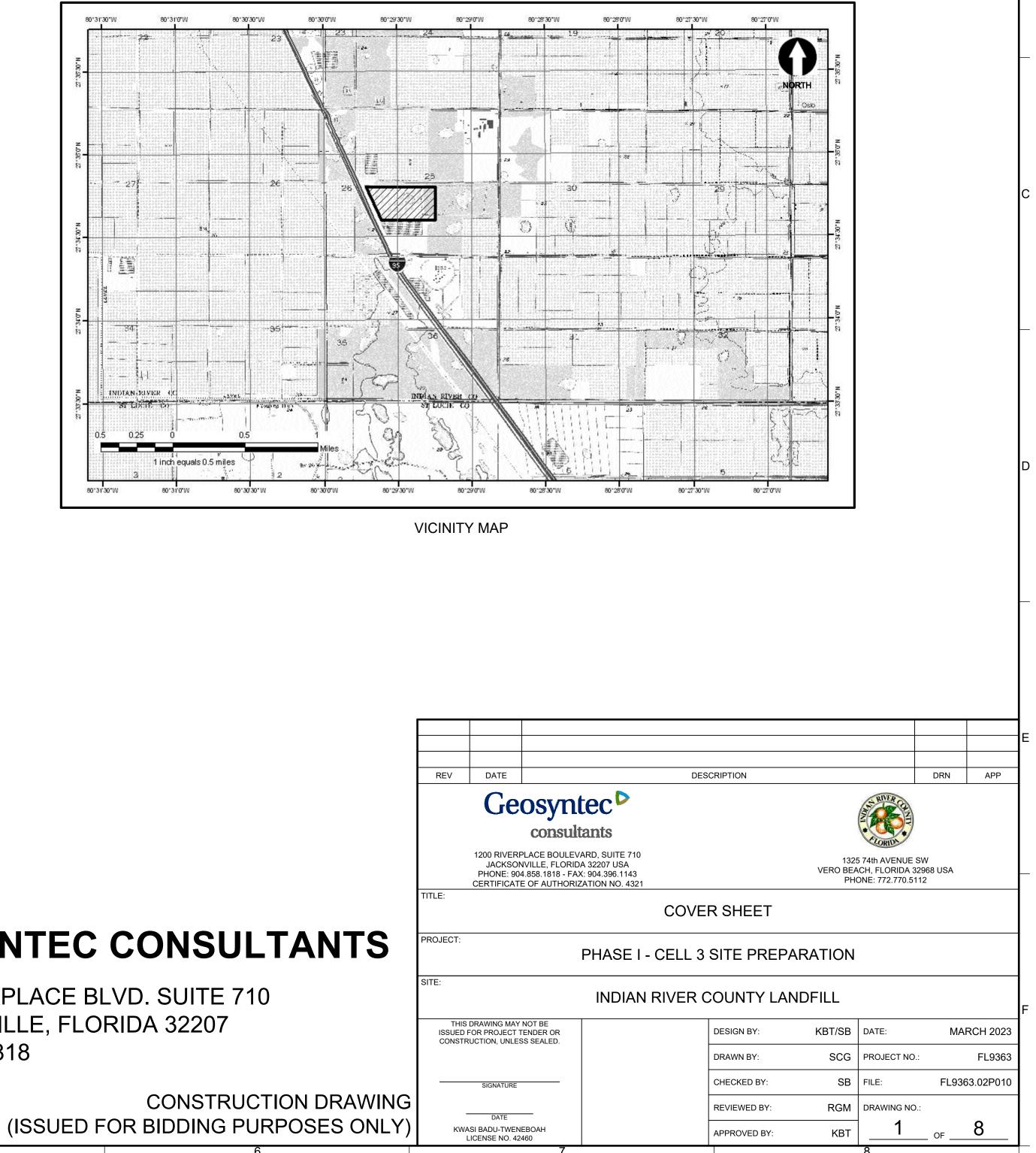
DRAWING TITLE

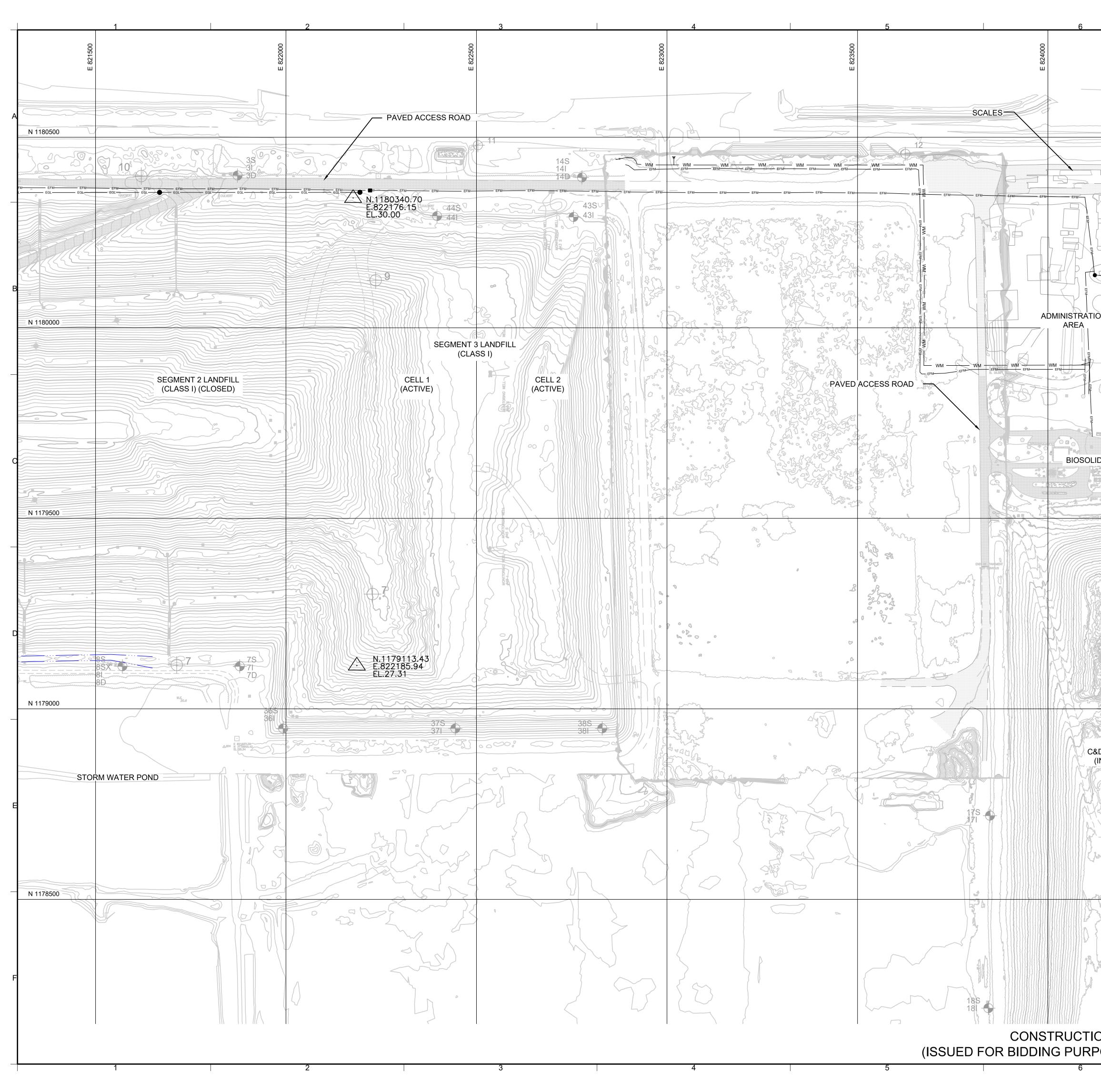
- COVER SHEET EXISTING SITE CONDITIONS SITE DEVELOPMENT PLAN
- EARTHWORK GRADING PLAN
- EARTHWORK CELL 3 GRADING PLAN CONSTRUCTION CONTROL POINTS DATA
- PHASE I PERIMETER DITCH PROFILE
- CROSS SECTIONS AND DETAILS
- EROSION AND SEDIMENT CONTROL DETAILS



GEOSYNTEC CONSULTANTS

1200 RIVERPLACE BLVD. SUITE 710 JACKSONVILLE, FLORIDA 32207 (904) 858-1818

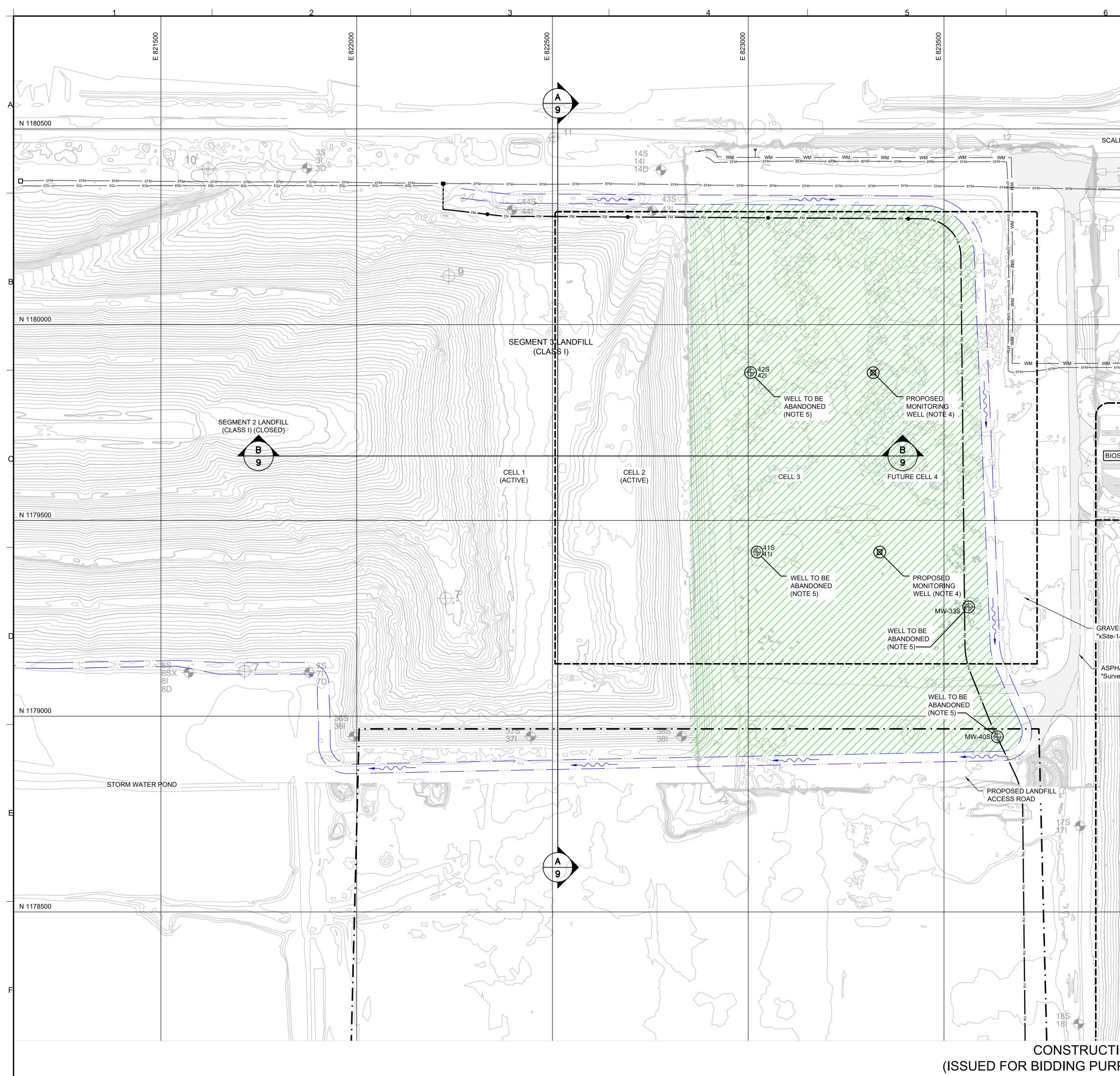




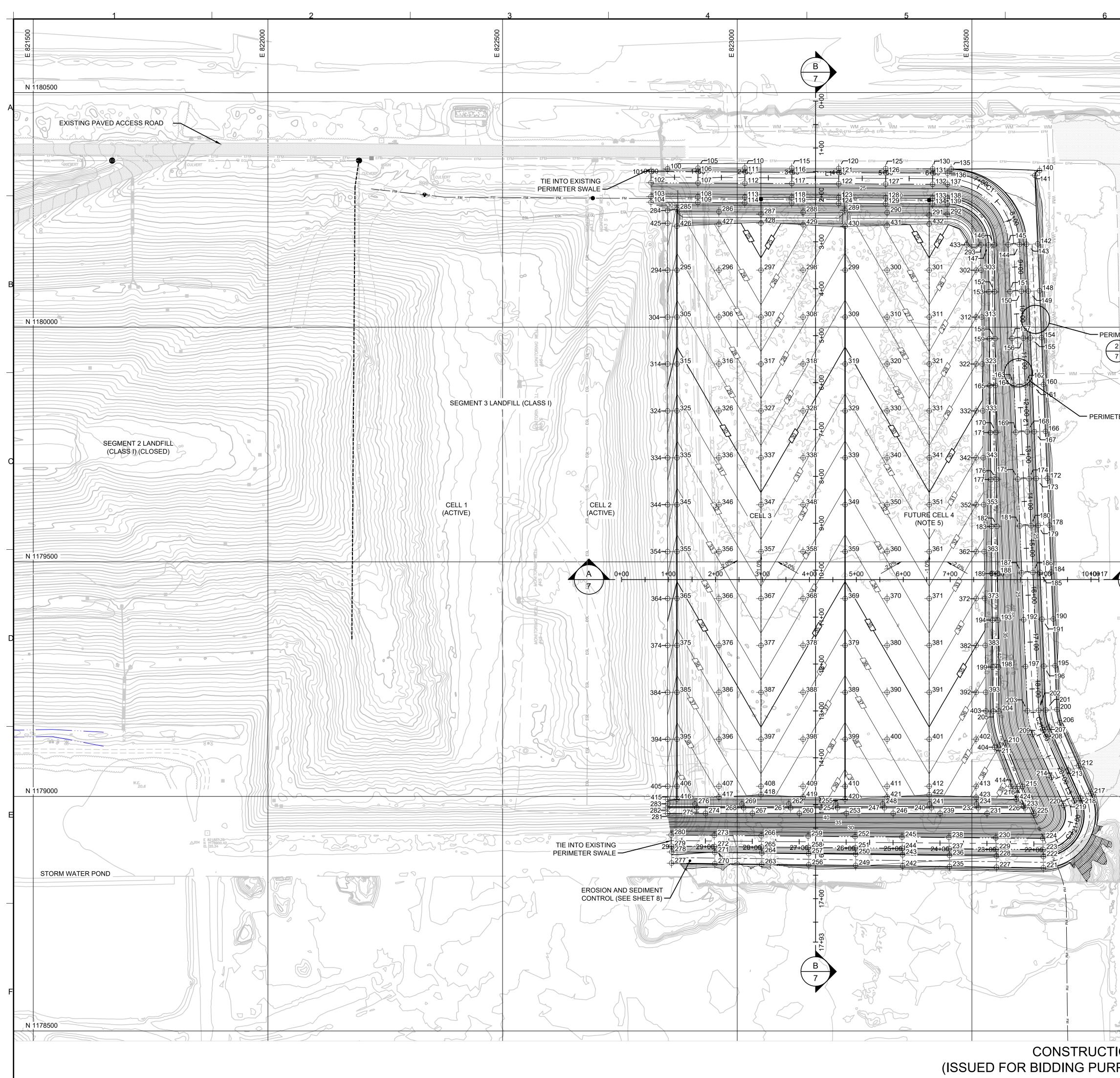
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LANDFILL	 TOPOGRAPHI SURVEY PREF EXISTING WAS INTERNATION BY AREA OF II HORIZONTAL (NAD83), ADJU CONTOURS A OF 1929 (NGV) 	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29).	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. LUES ARE BASED UPON THE NO DRDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120'24 SCALE IN FEET	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C ORTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL	/BER 2022. ERTIFIED DF 1983 . DATUM	APP
LANDFILL	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE Geos CO	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29).	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO DRDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120' 24 SCALE IN FEET DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C ORTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL	/BER 2022. ERTIFIED DF 1983 . DATUM	APP
LANDFILL	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE COOR 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.13	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIC (D29). Syntec Syntec Support	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO DRDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120'24 SCALE IN FEET DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN	APP
LANDFILL	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE COOR 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.13	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29). Syntec Syntec Support	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO ORDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120' 24 SCALE IN FEET DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. AL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN	APP
D LANDFILL JACTIVE)	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE CONTOURS A 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.13 CERTIFICATE OF AU	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29). Syntec Syntec Support	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO DRDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120'24 SCALE IN FEET DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. AL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN	APP
D LANDFILL JACTIVE)	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE COOR 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.13 CERTIFICATE OF AU TITLE: PROJECT:	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29).	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO ORDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120' 24 SCALE IN FEET DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5 DNS	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN	APP
D LANDFILL JACTIVE)	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE Coordinate Image: State of the state o	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29). STED SPOTEC SUITE BOULEVARD, SUITE 710 , FLORIDA 32207 USA 818 - FAX: 904.396.1143 UTHORIZATION NO. 4321 EXIS PHASE I	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO ORDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120' 24 SCALE IN FEET DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5 ONS ARATION	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN	APP
D LANDFILL JACTIVE)	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE COOR 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.13 CERTIFICATE OF AU TITLE: PROJECT:	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29). SUBJECTION	INTERNATIONAL & MASTELLER AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO ORDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120' 24 SCALE IN FEET DESCRIPTION DESCRIPTION	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5 ONS ARATION	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN	
D LANDFILL JACTIVE)	1. TOPOGRAPHI SURVEY PREF 2. EXISTING WAS INTERNATION BY AREA OF II 3. HORIZONTAL (NAD83), ADJU 4. CONTOURS A OF 1929 (NGV) REV DATE COOR 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.11 CERTIFICATE OF AU TITLE: PROJECT: SITE:	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29). SUBJECTION	INTERNATIONAL & MASTELLEF AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO DESCRIPTION 0 120' 24 SCALE IN FEET DESCRIPTION DESCRIPTION STING SITE CONDITION - CELL 3 SITE PREPA NRIVER COUNTY LAN DESIGN BY: DRAWN BY:	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5 ONS ARATION NDFILL KBT/SB DATE: SCG PROJECT NO	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN SW 32968 USA 32968 USA 3112 MARCH D.: F	H 2023 E9363
D LANDFILL JACTIVE)	 TOPOGRAPHI SURVEY PREF EXISTING WAS INTERNATION BY AREA OF II HORIZONTAL ((NAD83), ADJU CONTOURS A OF 1929 (NGV) REV DATE REV DATE Geos COR 1200 RIVERPLACE I JACKSONVILLE, PHONE: 904.858.11 CERTIFICATE OF AU TITLE: PROJECT: SITE: THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER CONSTRUCTION, UNLESS SEAL	PARED BY ALERT 5 STE ELEVATION WA IAL & MASTELLER, M NTEREST SOLUTION COORDINATES VAL JSTED TO 1999 COO ND SPOT ELEVATIO (D29). SUBJECTION	INTERNATIONAL & MASTELLEF AS OBTAINED FROM SURVEY P MOLER & TAYLOR INC., DATED NS, INC. UES ARE BASED UPON THE NO DRDINATE SYSTEM, FLORIDA E ON ARE BASED ON THE NATION 0 120' 24 SCALE IN FEET DESCRIPTION DESCRIPTION STING SITE CONDITION - CELL 3 SITE PREPA NRIVER COUNTY LAN	R, COMPLETED IN DECEM PREPARED BY ALERT 5 NOVEMBER 2021, AND C DRTH AMERICAN DATA C AST ZONE. IAL GEODETIC VERTICAL 0' 1325 74th AVENUE VERO BEACH, FLORIDA PHONE: 772.770.5 ONS ARATION NDFILL KBT/SB DATE:	ABER 2022. ERTIFIED DF 1983 DATUM DATUM DRN DRN DRN SW 32968 USA 3112 MARCH D.: F FL9363.0	H 2023 E9363



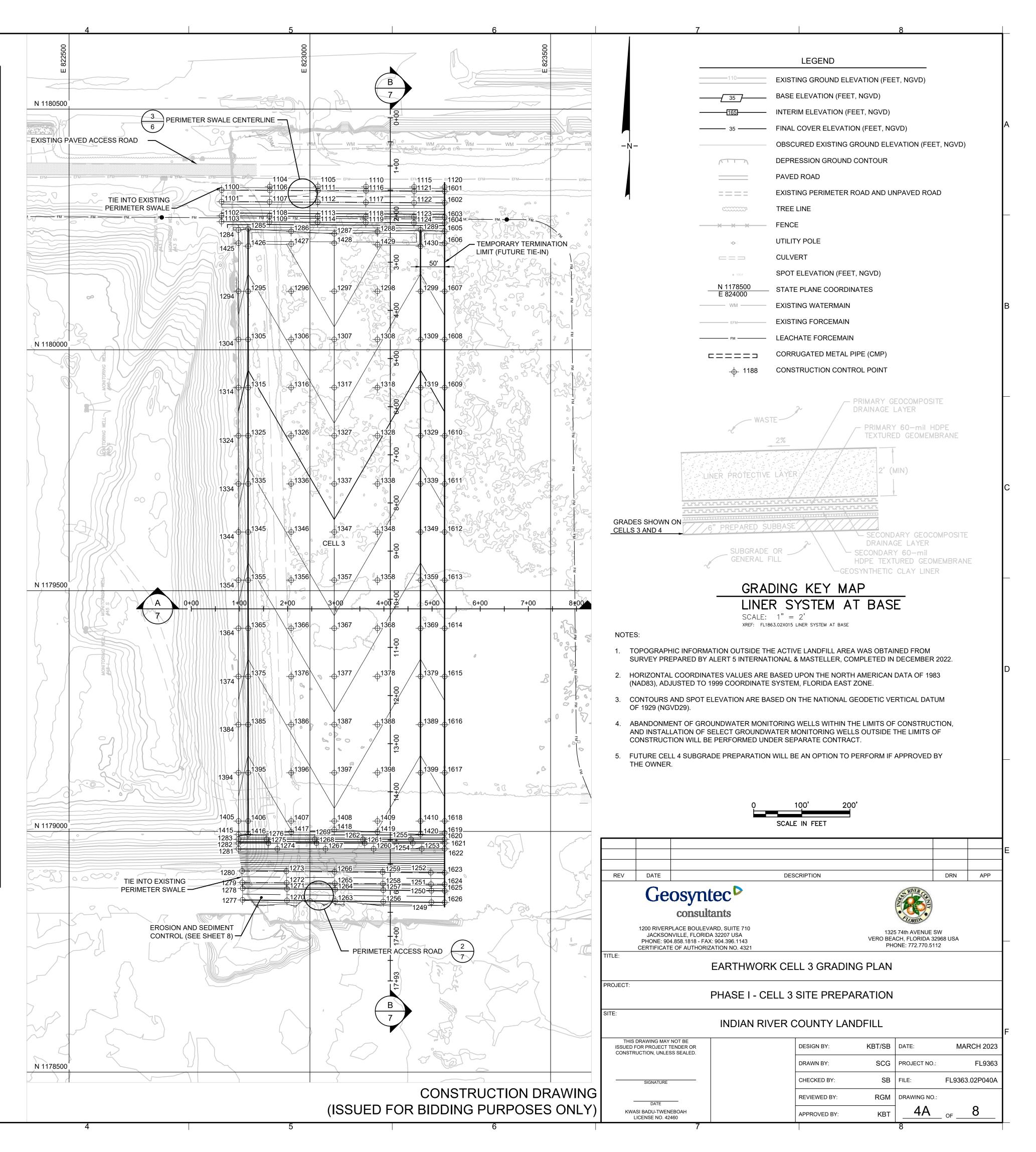
	7	8	
E 824000			
		LEGEND	
		EXISTING GROUND ELEVATION	A
S		(FEET, NGVD) OBSCURED EXISTING GROUND ELEVATION (FEET, NGVD)	-Ň-
		DEPRESSION GROUND CONTOUR	
		PAVED ROAD	4
EFM EFM		TREELINE	-
		FENCE	
	-o- 	UTILITY POLE CULVERT	
	m 106.6	SPOT ELEVATION (FEET, NGVD)	
	<u>N 1178500</u> E 824000	- STATE PLANE COORDINATES	В
	WM	EXISTING WATERMAIN EXISTING FORCEMAIN	
EF M		LEACHATE FORCE MAIN	
EFM		SWALE LIMITS OF CELL SITE PREPARATION	
	×_/_/_/	LIMITS OF CELL SITE PREPARATION	-
	⊠ ^{41S} 411	PROPOSED MONITORING WELL (NOTE 4)	
	+ 14 19S	EXISTING GAS MONITORING PROBE	
	191		
DLIDS FACILITY			С
			_
	NOTES:		
ROAD PER 3228000"		THE ACTIVE LANDFILL AREA WAS OBTAINED FROM ATIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.	Г
		INED FROM SURVEY PREPARED BY ALERT 5 & TAYLOR INC., DATED NOVEMBER 2021, AND CERTIFIED	
LT ROAD PER -143228000"	BY AREA OF INTEREST SOLUTIONS, INC.		
	(NAD83), ADJUSTED TO 1999 COORDINA		
	4. CONTOURS AND SPOT ELEVATION ARE I OF 1929 (NGVD29).	BASED ON THE NATIONAL GEODETIC VERTICAL DATUM	
CELL 1 C&D LANDFILL		NITORING WELLS WITHIN THE LIMITS OF CONSTRUCTION, DWATER MONITORING WELLS OUTSIDE THE LIMITS OF INDER SEPARATE CONTRACT	
(INACTIVE)			
) 120' 240' SCALE IN FEET	
A Caro			
			E
A HOLD	REV DATE	DESCRIPTION DRN	APP
,			
x85.9	1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA	1325 74th AVENUE SW	
	PHONE: 904.858.1818 - FAX: 904.396.1143 CERTIFICATE OF AUTHORIZATION NO. 4321 TITLE:	VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112	
		E DEVELOPMENT PLAN	
1111111111111111			
	PROJECT: PHASE I -	- CELL 3 SITE PREPARATION	I
	PHASE I -		
	SITE: INDIAN	RIVER COUNTY LANDFILL	F
p ^o	PHASE I -	RIVER COUNTY LANDFILL DESIGN BY: KBT/SB DATE: MA	ARCH 2023
	SITE: THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR	RIVER COUNTY LANDFILL DESIGN BY: KBT/SB DRAWN BY: SCG PROJECT NO.:	
p ^o	SITE: THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.	RIVER COUNTY LANDFILL DESIGN BY: KBT/SB DRAWN BY: SCG PROJECT NO.:	ARCH 2023 FL9363



I	7	8
824000		
E 83	110	
		EXISTING GROUND ELEVATION (FEET, NGVD) BASE ELEVATION (FEET, NGVD)
	<u>35</u>	INTERIM ELEVATION (FEET, NGVD)
	35	FINAL COVER ELEVATION (FEET, NGVD)
	-Ņ-	OBSCURED EXISTING GROUND ELEVATION (FEET, NGVD)
		DEPRESSION GROUND CONTOUR
EFM EFM F		PAVED ROAD
		EXISTING PERIMETER ROAD AND UNPAVED ROAD
		TREE LINE
	——————————————————————————————————————	FENCE
	-0-	UTILITY POLE
	n 105.6 N 1178500	SPOT ELEVATION (FEET, NGVD) - STATE PLANE COORDINATES
	E 824000	EXISTING WATERMAIN
	EGL	EXISTING GRAVITY LINE
	EFM	EXISTING FORCEMAIN
IMETER ACCESS ROAD	FM	LEACHATE FORCEMAIN
2	c====	CORRUGATED METAL PIPE (CMP)
7		CONSTRUCTION CONTROL POINT
VT E 8230 00 WM EFM W 177903 PM EFM EFM	-	
		PRIMARY GEOCOMPOSITE DRAINAGE LAYER
ETER SWALE CENTERLINE	WAS	/ PRIMARY 60-mil HDPE
$\begin{pmatrix} 3\\ 6 \end{pmatrix}$		2% TEXTURED GEOMEMBRANE
B OLO	LINER PROTECTIVE	E LAYER
	GRADES SHOWN ON CELLS 3 AND 46" PREPARED SI	UBBASE ////////////////////////////////////
	SUBGRADE	
	GENERAL	FILL HDPE TEXTURED GEOMEMBRANE -GEOSYNTHETIC CLAY LINER
A P Can	GRA	DING KEY MAP
		R SYSTEM AT BASE
		1" = 2' 863.02X015 LINER SYSTEM AT BASE
	NOTES:	
		HE ACTIVE LANDFILL AREA WAS OBTAINED FROM TIONAL & MASTELLER, COMPLETED IN DECEMBER 2022.
		BASED UPON THE NORTH AMERICAN DATA OF 1983
	(NAD83), ADJUSTED TO 1999 COORDINATE	E SYSTEM, FLORIDA EAST ZONE. ASED ON THE NATIONAL GEODETIC VERTICAL DATUM
	OF 1929 (NGVD29).	ASED ON THE NATIONAL GEODETIC VERTICAL DATUM
		ITORING WELLS WITHIN THE LIMITS OF CONSTRUCTION, WATER MONITORING WELLS OUTSIDE THE LIMITS OF
	CONSTRUCTION WILL BE PERFORMED UN	
	5. FUTURE CELL 4 SUBGRADE PREPARATION THE OWNER.	N WILL BE AN OPTION TO PERFORM IF APPROVED BY
		100' 200'
		SCALE IN FEET
		DESCRIPTION DRN APP
		* MORIDA *
	1200 RIVERPLACE BOULEVARD, SUITE 710 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.1143	1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA
	CERTIFICATE OF AUTHORIZATION NO. 4321 TITLE:	PHONE: 772.770.5112
	EARTHV	WORK GRADING PLAN
	PROJECT: PHASE I - CI	ELL 3 SITE PREPARATION
		VER COUNTY LANDFILL
	THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR	DESIGN BY: KBT/SB DATE: MARCH 2023
	ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.	DESIGN BY: KB1/SB DATE: MARCH 2023 DRAWN BY: SCG PROJECT NO.: FL9363
	SIGNATURE	CHECKED BY: SB FILE: FL9363.02P040
ION DRAWING	JUNATURE	REVIEWED BY: RGM DRAWING NO.:
RPOSES ONLY)	DATE KWASI BADU-TWENEBOAH LICENSE NO. 42460	
-	7	8

	SUR	/EY CONT	ROL DAT	A	SUR		ROL DAT	Γ A	SUR	VEY CONT	ROL DAT	ΓΑ
	POINT NUMBER	NORTHING	EASTING	ELEVATION	POINT NUMBER	NORTHING	EASTING	ELEVATION	POINT NUMBER	NORTHING	EASTING	ELEVAT
ľ	1100	1180331.84	822816.51	22.17	1285	1180251.22	822871.53	27.07	1386	1179221.55	822961.12	35.8
	1101	1180307.84	822816.37	22.17	1286	1180246.17	822961.12	25.57	1387	1179221.55	823050.70	34.26
	1102	1180278.37	822816.37	32.00	1287	1180241.12	823050.70	24.07	1388	1179221.55	823140.29	35.8
	1103	1180266.37	822816.37	32.00	1288	1180245.10	823140.29	25.58	1389	1179221.55	823229.87	37.3
	1104	1180339.00	822916.50	24.72	1289	1180249.08	823229.87	27.09	1394	1179121.55	822851.53	37.5
	1105	1180339.33	823016.50	24.99	1294	1180121.55	822851.53	27.52	1395	1179121.55	822871.53	38.3
	1106	1180331.29	822916.50	22.15	1295	1180121.55	822871.53	28.36	1396	1179121.55	822961.12	36.8
	1107	1180307.29	822916.37	22.15	1296	1180121.55	822961.12	26.81	1397	1179121.55	823050.70	35.2
	1108	1180277.80	822916.19	31.98	1297	1180121.55	823050.70	25.26	1398	1179121.55	823140.29	36.8
L	1109	1180265.80	822916.12	32.00	1298	1180121.55	823140.29	26.81	1399	1179121.55	823229.87	38.3
L	1110	1180338.87	823116.50	25.00	1299	1180121.55	823229.87	28.36	1405	1179021.55	822851.53	38.5
	1111	1180330.74	823016.50	22.13	1304	1180021.55	822851.53	28.52	1406	1179021.55	822871.53	39.3
	1112	1180306.74	823016.37	22.13	1305	1180021.55	822871.53	29.36	1407	1179021.55	822961.12	37.8
	1113	1180277.18	823016.19	31.98	1306	1180021.55	822961.12	27.81	1408	1179021.55	823050.70	36.2
	1114	1180265.18	823016.11	32.00	1307	1180021.55	823050.70	26.26	1409	1179021.55	823140.29	37.8
	1115	1180338.39	823216.50	25.00	1308	1180021.55	823140.29	27.81	1410	1179021.55	823229.87	39.3
	1116	1180330.19	823116.50	22.11	1309	1180021.55	823229.87	29.36	1415	1178993.37	822851.53	38.8
	1117	1180306.19	823116.37	22.11	1314	1179921.55	822851.53	29.52	1416	1178993.84	822871.53	39.6
	1118	1180276.56	823116.19	31.98	1315	1179921.55	822871.53	30.36	1417	1178998.64	822961.12	38.0
	1119	1180264.56	823116.11	32.00	1316	1179921.55	822961.12	28.81	1418	1179003.43	823050.70	36.4
	1120	1180338.08	823279.84	25.00	1317	1179921.55	823050.70	27.26	1419	1178998.64	823140.29	38.0
	1121	1180329.64	823216.50	22.09	1318	1179921.55	823140.29	28.81	1420	1178993.84	823229.87	39.6
	1122	1180305.64	823216.37	22.09	1319	1179921.55	823229.87	30.36	1425	1180221.55	822851.53	26.5
	1123	1180275.95	823216.18	31.98	1324	1179821.55	822851.53	30.52	1426	1180215.26	822871.53	27.4
	1124	1180263.95	823216.11	32.00	1325	1179821.55	822871.53	31.36	1427	1180219.48	822961.12	25.8
	1249	1178852.69	823252.37	25.97	1326	1179821.55	822961.12	29.81	1428	1180221.55	823050.70	24.2
	1250	1178876.69	823252.26	25.49	1327	1179821.55	823050.70	28.26	1429	1180218.34	823140.29	25.8
	1251	1178890.17	823251.58	21.23	1328	1179821.55	823140.29	29.81	1430	1180215.05	823229.87	27.3
	1252	1178914.16	823251.11	21.25	1329	1179821.55	823229.87	31.36	1601	1180329.29	823279.87	22.0
ſ	1253	1178963.76	823232.26	43.98	1334	1179721.55	822851.53	31.52	1602	1180305.29	823279.87	22.0
	1254	1178975.76	823213.56	44.08	1335	1179721.55	822871.53	32.36	1603	1180275.51	823279.87	32.0
ſ	1255	1178983.76	823210.11	43.00	1336	1179721.55	822961.12	30.81	1604	1180263.51	823279.87	32.0
F	1256	1178853.97	823152.38	25.81	1337	1179721.55	823050.70	29.26	1605	1180246.26	823279.87	26.2
	1257	1178877.97	823152.27	25.33	1338	1179721.55	823140.29	30.81	1606	1180221.55	823279.87	26.5
	1258	1178891.07	823151.59	21.14	1339	1179721.55	823229.87	32.36	1607	1180121.55	823279.87	27.5
	1259	1178915.07	823151.11	21.15	1344	1179621.55	822851.53	32.52	1608	1180021.55	823279.87	28.5
Γ	1260	1178963.76	823132.26	44.12	1345	1179621.55	822871.53	33.36	1609	1179921.55	823279.87	29.5
	1261	1178975.76	823113.56	44.23	1346	1179621.55	822961.12	31.81	1610	1179821.55	823279.87	30.5
	1262	1178983.76	823110.11	43.00	1347	1179621.55	823050.70	30.26	1611	1179721.55	823279.87	31.5
	1263	1178855.25	823052.39	25.66	1348	1179621.55	823140.29	31.81	1612	1179621.55	823279.87	32.5
	1264	1178879.25	823052.28	25.17	1349	1179621.55	823229.87	33.36	1613	1179521.55	823279.87	33.5
	1265	1178891.97	823051.59	21.05	1354	1179521.55	822851.53	33.52	1614	1179421.55	823279.87	34.5
	1266	1178915.97	823051.11	21.06	1355	1179521.55	822871.53	34.36	1615	1179321.55	823279.87	35.5
	1267	1178963.76	823032.26	44.27	1356	1179521.55	822961.12	32.81	1616	1179221.55	823279.87	36.5
	1268	1178975.75	823013.56	44.37	1357	1179521.55	823050.70	31.26	1617	1179121.55	823279.87	37.5
	1269	1178983.76	823010.11	43.00	1358	1179521.55	823140.29	32.81	1618	1179021.55	823279.87	38.5
ľ	1270	1178856.53	822952.40	25.50	1359	1179521.55	823229.87	34.36	1619	1178996.52	823279.87	38.7
F	1271	1178880.53	822952.29	25.02	1364	1179421.55	822851.53	34.52	1620	1178983.76	823279.87	43.0
	1272	1178892.87	822951.59	20.96	1365	1179421.55	822871.53	35.36	1621	1178975.76	823279.87	43.9
	1273	1178916.87	822951.12	20.96	1366	1179421.55	822961.12	33.81	1622	1178963.76	823279.87	43.9
	1274	1178963.75	822932.26	44.42	1367	1179421.55	823050.70	32.26	1623	1178913.90	823279.87	21.2
	1275	1178975.75	822913.56	44.52	1368	1179421.55	823140.29	33.81	1624	1178889.91	823279.87	21.2
F	1276	1178983.76	822910.11	43.00	1369	1179421.55	823229.87	35.36	1625	1178876.34	823279.87	25.5
	1277	1178857.71	822860.15	25.35	1374	1179321.55	822851.53	35.52	1626	1178852.34	823279.87	26.0
F	1278	1178881.71	822860.46	24.87	1375	1179321.55	822871.53	36.36				<u> </u>
┠	1279	1178893.70	822859.50	20.87	1376	1179321.55	822961.12	34.81				
┢	1280	1178917.70	822859.07	20.87	1377	1179321.55	823050.70	33.26				
${\sf F}$	1281	1178963.75	822851.53	44.53	1378	1179321.55	823140.29	34.81				
\mathbf{F}	1282	1178975.75	822851.53	44.61	1379	1179321.55	823229.87	36.36				
╞	1283	1178983.76	822851.53	43.00	1384	1179221.55	822851.53	36.52				
F	1284	1180248.88	822851.53	26.24	1385	1179221.55	822871.53	37.36				
					1000			01.00				

KSONVILLE-01\DATA\JAX-CADI\I\INDIAN RIVER CLASS I LANDFILL PHASE I - CELL 3 FL9363.02\DRAWINGS\SHEETS\FL9363.0

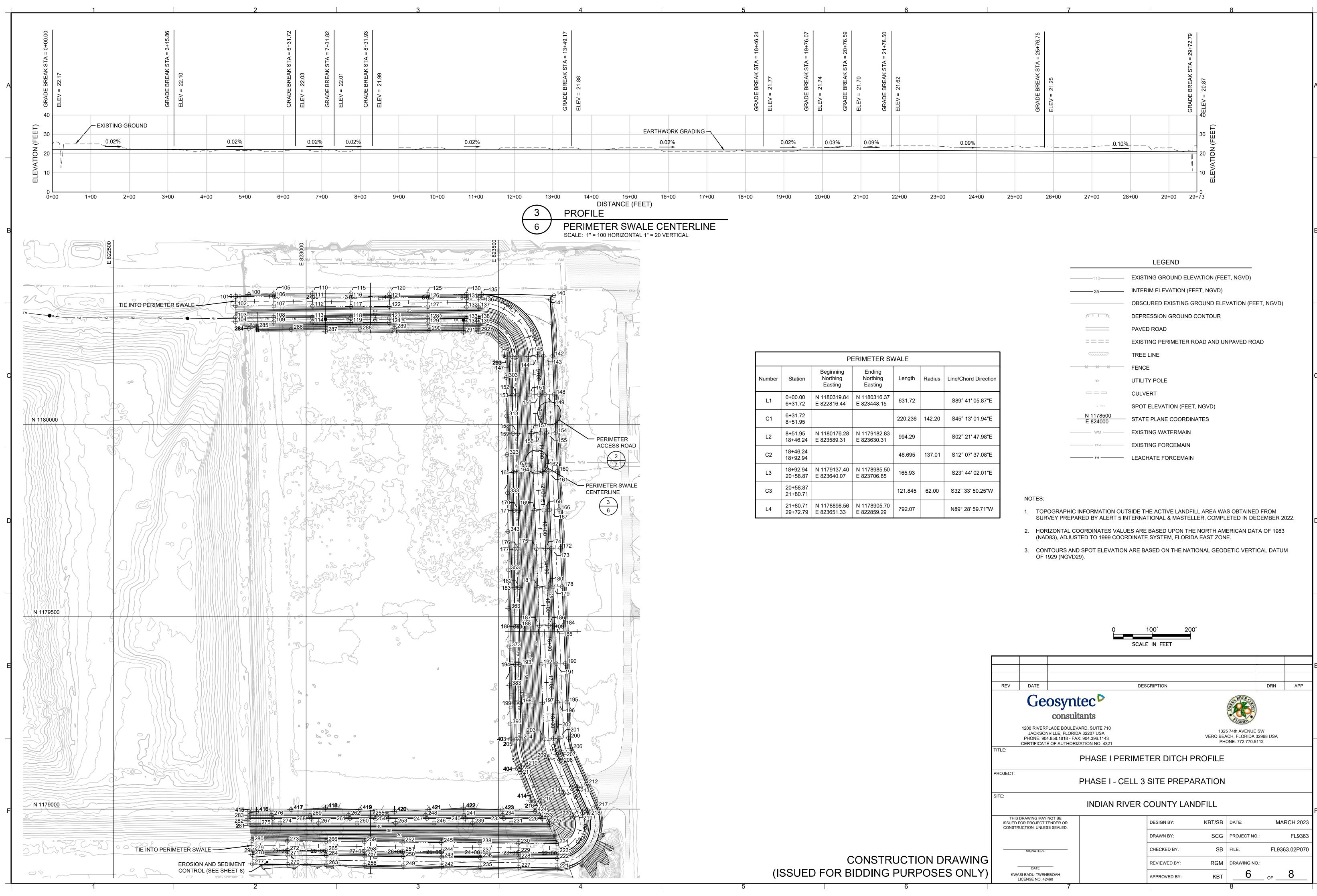


SUR\		ROL DA	ТА	SUR		ROL DAT	A	SUR		ROL DAT	Α	SUR		ROL DAT	A	SUR			TA
	NORTHING	EASTING	ELEVATION	POINT NUMBER	NORTHING	-	ELEVATION	POINT NUMBER	NORTHING	EASTING	ELEVATION	POINT NUMBER	NORTHING	EASTING	ELEVATION	POINT NUMBER	NORTHING		1
100	1180337.22	822851.53	24.02	169	1179776.14	823593.81	21.90	238	1178912.36	823451.10	21.44	307	1180021.55	823050.70	26.26	376	1179321.55	822961.12	34.81
101	1180331.84	822816.51	22.17	170	1179775.54	823551.44	36.02	239	1178963.76	823432.26	43.69	308	1180021.55	823140.29	27.81	377	1179321.55	823050.70	33.26
102	1180307.84	822816.37	22.17	171	1179775.41	823539.44	36.03	240	1178975.76	823413.56	43.79	309	1180021.55	823229.87	29.36	378	1179321.55	823140.29	34.81
103	1180278.37	822816.37	32.00	172	1179677.95	823660.91	26.88	241	1178983.76	823410.11	43.00	310	1180021.55	823319.46	27.81	379	1179321.55	823229.87	36.36
104	1180266.37	822816.37	32.00	173	1179677.27	823636.92	26.88	242	1178851.41	823352.36	26.13	311	1180021.55	823409.05	26.26	380	1179321.55	823319.46	34.81
105	1180338.92	822916.33	24.70	174	1179676.86	823621.93	21.88	243	1178875.41	823352.26	25.65	312	1180021.55	823509.05	27.99	381	1179321.55	823409.05	33.26
106	1180331.29	822916.50	22.15	175	1179676.22	823597.93	21.88	244	1178889.27	823351.58	21.32	313	1180021.55	823520.83	28.20	382	1179321.55	823509.05	34.99
107	1180307.29	822916.37	22.15	176	1179675.54	823552.48	37.03	245	1178913.26	823351.10	21.35	314	1179921.55	822851.53	29.52	383	1179321.55	823528.37	35.33
108	1180277.80	822916.19	31.98	177	1179675.42	823540.48	37.03	246	1178963.76	823332.26	43.83	315	1179921.55	822871.53	30.36	384	1179221.55	822851.53	36.52
109	1180265.80	822916.12	32.00	178	1179578.03	823665.04	26.86	247	1178975.76	823313.56	43.94	316	1179921.55	822961.12	28.81	385	1179221.55	822871.53	37.36
110	1180339.32	823016.33	24.99	179	1179577.36	823641.05	26.86	248	1178983.76	823310.11	43.00	317	1179921.55	823050.70	27.26	386	1179221.55	822961.12	35.81
111	1180330.74	823016.50	22.13	180	1179576.94	823626.05	21.86	249	1178852.69	823252.37	25.97	318	1179921.55	823140.29	28.81	387	1179221.55	823050.70	34.26
112	1180306.74	823016.37	22.13	181	1179576.31	823602.06	21.86	250	1178876.69	823252.26	25.49	319	1179921.55	823229.87	30.36	388	1179221.55	823140.29	35.81
113	1180277.18	823016.19	31.98	182	1179575.55	823553.52	38.04	251	1178890.17	823251.58	21.23	320	1179921.55	823319.46	28.81	389	1179221.55	823229.87	37.36
114	1180265.18	823016.11	32.00	183	1179575.42	823541.52	38.04	252	1178914.16	823251.11	21.25	321	1179921.55	823409.05	27.26	390	1179221.55	823319.46	35.81
115	1180338.87	823116.33	25.00	184	1179478.12	823669.16	26.83	253	1178963.76	823232.26	43.98	322	1179921.55	823509.05	28.99	391	1179221.55	823409.05	34.26
116	1180330.19	823116.50	22.11	185	1179477.44	823645.17	26.83	254	1178975.76	823213.56	44.08	323	1179921.55	823521.91	29.22	392	1179221.55	823509.05	35.99
117	1180306.19	823116.37	22.11	186	1179477.03	823630.17	21.83	255	1178983.76	823210.11	43.00	324	1179821.55		30.52	393	1179221.55		36.35
118	1180276.56		31.98	187	1179476.39		21.83	256	1178853.97	823152.38	25.81	325	1179821.55		31.36	394		822851.53	37.52
119	1180264.56	823116.11	32.00	188	1179475.55		39.04	257	1178877.97		25.33	326	1179821.55	822961.12	29.81	395		822871.53	38.36
120	1180338.39	823216.33	25.00	189	1179475.43	823542.56	39.04	258	1178891.07	823151.59	21.14	327	1179821.55	823050.70	28.26	396	1179121.55	822961.12	36.81
121	1180329.64		22.09	190	1179378.20	823673.29	26.81	259	1178915.07	823151.11	21.15	328	1179821.55		29.81	397	1179121.55		35.26
122	1180305.64	823216.37	22.09	191	1179377.53	823649.29	26.81	260	1178963.76	823132.26	44.12	329	1179821.55	823229.87	31.36	398	1179121.55	823140.29	36.81
123	1180275.95	823216.18	31.98	192	1179376.48	823610.30	21.81	261	1178975.76	823113.56	44.23	330	1179821.55	823319.46	29.81	399	1179121.55	823229.87	38.36
124	1180263.95	823216.11	32.00	193	1179375.56	823555.60	40.05	262	1178983.76	823110.11	43.00	331	1179821.55	823409.05	28.26	400	1179121.55	823319.46	36.81
125	1180337.90	823316.33	25.00	194	1179375.43	823543.60	40.05	263	1178855.25	823052.39	25.66	332	1179821.55	823509.05	29.99	401	1179121.55	823409.05	35.26
126	1180329.09	823316.50	22.06	195	1179278.29	823677.41	26.79	264	1178879.25	823052.28	25.17	333	1179821.55	823522.98	30.23	402	1179121.55	823509.05	36.99
127	1180305.09	823316.37	22.06	196	1179277.61	823653.42	26.79	265	1178891.97	823051.59	21.05	334	1179721.55	822851.53	31.52	403	1179181.82	823529.88	36.75
128	1180275.33	823316.18	31.98	197	1179276.56	823614.43	21.79	266	1178915.97	823051.11	21.06	335	1179721.55	822871.53	32.36	404	1179104.77	823548.34	37.84
129	1180263.33	823316.11	32.00	198	1179275.57	823556.64	41.06	267	1178963.76	823032.26	44.27	336	1179721.55	822961.12	30.81	405	1179021.55	822851.53	38.52
130	1180337.42	823416.33	25.00	199	1179275.44	823544.64	41.06	268	1178975.75	823013.56	44.37	337	1179721.55	823050.70	29.26	406	1179021.55	822871.53	39.36
131	1180328.54	823416.50	22.04	200	1179184.94	823681.26	26.77	269	1178983.76	823010.11	43.00	338	1179721.55	823140.29	30.81	407	1179021.55	822961.12	37.81
132	1180304.54	823416.36	22.04	201	1179183.95	823657.28	26.77	270	1178856.53	822952.40	25.50	339	1179721.55	823229.87	32.36	408	1179021.55	823050.70	36.26
133	1180274.71	823416.18	31.98	202	1179183.33	823642.30	21.77	271	1178880.53	822952.29	25.02	340	1179721.55	823319.46	30.81	409	1179021.55	823140.29	37.81
134	1180262.71	823416.11	32.00	203	1179182.34	823618.32	21.77	272	1178892.87	822951.59	20.96	341	1179721.55	823409.05	29.26	410	1179021.55	823229.87	39.36
135	1180337.06	823455.73	25.00	204	1179181.75	823557.62	42.00	273	1178916.87	822951.12	20.96	342	1179721.55	823509.05	30.99	411	1179021.55	823319.46	37.81
136	1180328.37	823448.21	22.03	205	1179181.73	823545.62	42.00	274	1178963.75	822932.26	44.42	343	1179721.55	823524.06	31.25	412	1179021.55	823409.05	36.26
137	1180304.37	823448.08	22.03	206	1179156.95	823687.18	26.76	275	1178975.75	822913.56	44.52	344	1179621.55	822851.53	32.52	413	1179021.55	823509.05	37.99
138	1180274.47	823447.90	32.00	207	1179147.69	823665.03	26.76	276	1178983.76	822910.11	43.00	345	1179621.55	822871.53	33.36	414	1179021.55	823583.02	39.27
139	1180262.47	823447.82	32.00	208	1179141.88	823651.20	21.76	277	1178857.71	822860.15	25.35	346	1179621.55	822961.12	31.81	415	1178993.37	822851.53	38.80
140	1180333.92	823644.09	25.00	209	1179132.55	823629.08	21.76	278	1178881.71	822860.46	24.87	347	1179621.55	823050.70	30.26	416	1178993.84	822871.53	39.64
141	1180323.51	823634.27	25.20	210	1179113.97	823571.02	42.00	279	1178893.70	822859.50	20.87	348	1179621.55	823140.29	31.81	417	1178998.64	822961.12	38.04
142	1180177.52	823640.29	26.99	211	1179109.42	823559.92	42.00	280	1178917.70	822859.07	20.87	349	1179621.55	823229.87	33.36	418	1179003.43	823050.70	36.44
143	1180176.85	823616.30	26.99	212	1179065.40	823727.43	26.73	281	1178963.75	822851.53	44.53	350	1179621.55	823319.46	31.81	419	1178998.64	823140.29	38.04
144	1180176.43	823601.30	21.99	213	1179056.14	823705.29	26.44	282	1178975.75	822851.53	44.61	351	1179621.55	823409.05	30.26	420	1178993.84	823229.87	39.64
145	1180175.80	823577.31	21.99	214	1179041.01	823669.34	21.73	283	1178983.76	822851.53	43.00	352	1179621.55	823509.05	31.99	421	1178998.64	823319.46	38.04
146	1180175.52	823547.28	32.00	215	1179021.10	823608.12	43.10	284	1180248.88	822851.53	26.24	353	1179621.55	823525.14	32.27	422	1179003.43	823409.05	36.44
147	1180175.39	823535.28	32.00	216	1179016.56	823597.01	43.09	285	1180251.22	822871.53	27.07	354	1179521.55	822851.53	33.52	423	1178998.08	823509.05	38.23
148	1180077.61	823644.42	26.97	217	1179006.03	823753.54	26.72	286	1180246.17	822961.12	25.57	355	1179521.55	822871.53	34.36	424	1178993.50	823594.71	39.76
149	1180076.93	823620.42	26.97	218	1178996.37	823731.57	26.24	287	1180241.12	823050.70	24.07	356	1179521.55	822961.12	32.81	425	1180221.55	822851.53	26.52
150	1180076.52	823605.43	21.97	219	1178990.33	823717.84	21.72	288	1180245.10	823140.29	25.58	357	1179521.55	823050.70	31.26	426	1180215.26	822871.53	27.43
151	1180075.88		21.97	220	1178980.67	823695.87	21.72	289	1180249.08	823229.87	27.09	358	1179521.55		32.81	427	1180219.48		25.83
152	1180075.52	823548.32	33.01	221	1178847.57	823652.34	26.60	290	1180244.03	823319.46	25.59	359	1179521.55	823229.87	34.36	428	1180221.55	823050.70	24.26
153	1180075.40	823536.32	33.01	222	1178871.57	823652.23	26.12	291	1180238.98	823409.05	24.09	360	1179521.55		32.81	429	1180218.34		25.85
154	1179977.69	823648.54	26.94	223	1178886.56	823651.57	21.60	292	1180240.70	823447.69	24.74	361	1179521.55	823409.05	31.26	430	1180215.05		27.36
155	1179977.02	823624.55	26.94	224	1178910.56		21.63	293	1180175.22	823519.17	26.63	362	1179521.55	823509.05	32.99	431	1180217.07	823319.46	25.86
156	1179976.60		21.94	225	1178963.77	823632.26	43.40	294	1180121.55	822851.53	27.52	363	1179521.55		33.29	432	1180219.76		24.28
157	1179975.97			226	1178975.77		43.50	295		822871.53	28.36	364		822851.53	34.52	433	1180175.62	823489.23	26.00
158	1179975.53		34.01	227	1178848.85		26.44	296	1180121.55		26.81	365	1179421.55		35.36				
159	1179975.40		34.01	228	1178872.85		25.96	297	1180121.55		25.26	366	1179421.55		33.81				
160		823652.67	26.92	229	1178887.46		21.51	298	1180121.55		26.81	367	1179421.55		32.26				
161	1179877.10		26.92	230	1178911.46		21.54	299	1180121.55		28.36	368	1179421.55		33.81				
162	1179876.69		21.92	231	1178963.77		43.54	300	1180121.55		26.81	369	1179421.55		35.36				
163	1179876.05			232	1178975.76		43.65	301	1180121.55		25.26	370	1179421.55		33.81				
164	1179875.53		35.02	233	1178978.76		43.00	302	1180121.55		26.99	371	1179421.55		32.26				
165	1179875.41		35.02	234	1178983.76		43.00	303		823519.75	27.18	372	1179421.55		33.99				
166	1179777.86		26.90	235	1178850.13		26.28	304	1180021.55		28.52	373	1179421.55		34.31				
167	1179777.19		26.90	236	1178874.13		25.80	305	1180021.55		29.36	374	1179321.55		35.52				
168	1179776.77	823617.80	21.90	237	1178888.36	823451.57	21.42	306	1180021.55	822961.12	27.81	375	1179321.55	822871.53	36.36				

CONSTRUCTION DRAWING (ISSUED FOR BIDDING PURPOSES ONLY

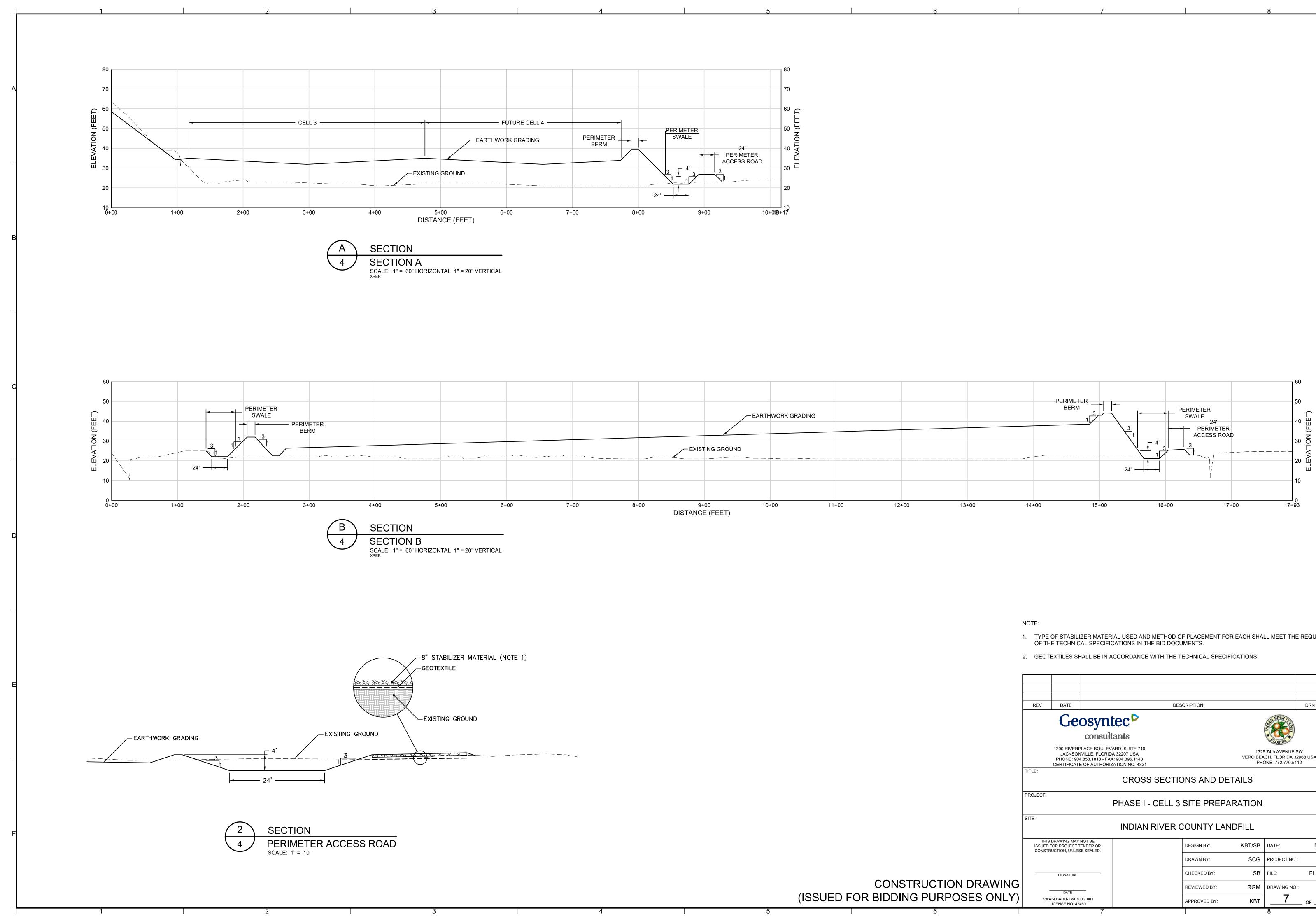
REV	DATE				DESCRIPTION			DRN	APP				
	Geo	OSYN consu		D		1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112							
	1200 RIVERP JACKSON PHONE: 904 CERTIFICATE	VILLE, FLOR .858.1818 - F.	IDA 32207 U AX: 904.396	JSA .1143									
TITLE:		C	ONST	RUCTIC	ON CONTROL PO	INTS DAT	ΓA						
					ELL 3 SITE PREP								
SITE: THIS ISSUED F	DRAWING MAY N	ENDER OR			ELL 3 SITE PREPA /ER COUNTY LAI		DATE:	M	ARCH 2023				
SITE: THIS ISSUED F		ENDER OR			/ER COUNTY LAI	NDFILL	1	MA					
SITE: THIS ISSUED F	FOR PROJECT TE	ENDER OR			/ER COUNTY LAI	NDFILL KBT/SB	DATE:		FL9363				
ISSUED F	FOR PROJECT TE RUCTION, UNLES	ENDER OR			/ER COUNTY LAI DESIGN BY: DRAWN BY:	NDFILL KBT/SB SCG	DATE: PROJECT NO.:		ARCH 2023 FL9363 363.02P050 8				

REV	DATE		DESCRIPTION			DRN	APP
	Geosy	ntec ultants					
	1200 RIVERPLACE BOU JACKSONVILLE, FLO PHONE: 904.858.1818 CERTIFICATE OF AUTH	ORIDA 32207 USA FAX: 904.396.1143		VERO BEA	5 74th AVENUE SW ACH, FLORIDA 3296 ONE: 772.770.5112	68 USA	
TITLE:		CONSTRUCTIO	N CONTROL PO	INTS DAT	ΓA		
PROJECT:		PHASE I - CE	LL 3 SITE PREP	ARATION			
SITE:		INDIAN RIV	ER COUNTY LA	NDFILL			
ISSUED	S DRAWING MAY NOT BE FOR PROJECT TENDER OR RUCTION, UNLESS SEALED.		DESIGN BY:	KBT/SB	DATE:	MAF	RCH 2023
22.101			DRAWN BY:	SCG	PROJECT NO.:		FL9363
	SIGNATURE		CHECKED BY:	SB	FILE:	FL936	3.02P050
			REVIEWED BY:	RGM	DRAWING NO.:		



	LEGEND
110	EXISTING GROUND ELEVATION (FEET, NGVD)
	INTERIM ELEVATION (FEET, NGVD)
	OBSCURED EXISTING GROUND ELEVATION (FEET, NGVD)
	DEPRESSION GROUND CONTOUR
	PAVED ROAD
====	EXISTING PERIMETER ROAD AND UNPAVED ROAD
c	TREE LINE
——————————————————————————————————————	FENCE
-0-	UTILITY POLE
	CULVERT
10 <i>6.6</i>	SPOT ELEVATION (FEET, NGVD)
N 1178500 E 824000	STATE PLANE COORDINATES
WM	EXISTING WATERMAIN
EFM	EXISTING FORCEMAIN
FM	LEACHATE FORCEMAIN

Radius	Line/Chord Direction		
	S89° 41' 05.87"E		
142.20	S45° 13' 01.94"E		
	S02° 21' 47.98"E		
137.01	S12° 07' 37.08"E		
	S23° 44' 02.01"E		
62.00	S32° 33' 50.25"W		
	N89° 28' 59.71"W		







REV	DATE		DESCRIPTION		DRN APP			
	Geosyr	ntec			RIVER			
	consu	CORIDA -						
	1200 RIVERPLACE BOULEVARD, SUITE 7 JACKSONVILLE, FLORIDA 32207 USA PHONE: 904.858.1818 - FAX: 904.396.114 CERTIFICATE OF AUTHORIZATION NO. 4		1325 74th AVENUE SW VERO BEACH, FLORIDA 32968 USA PHONE: 772.770.5112					
TITLE: CROSS SECTIONS AND DETAILS								
PROJECT: PHASE I - CELL 3 SITE PREPARATION								
SITE: INDIAN RIVER COUNTY LANDFILL								
ISSUED	DRAWING MAY NOT BE FOR PROJECT TENDER OR RUCTION, UNLESS SEALED.		DESIGN BY:	KBT/SB	DATE:	MARCH 202		
CONST	RUCTION, UNLESS SEALED.		DRAWN BY:	SCG	PROJECT NO.:	FL936		
	SIGNATURE		CHECKED BY:	SB	FILE:	FL9363.02P08		
			REVIEWED BY:	RGM	DRAWING NO.:			
	DATE					or 8		

- 1. TYPE OF STABILIZER MATERIAL USED AND METHOD OF PLACEMENT FOR EACH SHALL MEET THE REQUIREMENTS

