PROJECT MANUAL

FOR THE

## 2022 Shoreline Phase II Project

FOR

QUARRY COMMUNITY DEVELOPMENT DISTRICT

October 26, 2021



2216 Altamont Avenue Ft. Myers, Florida 33901 Ph. 239.332.5499 Fx. 239.332.2955

**BID SPECS 10/26/2021** 

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## The Quarry CDD 2022 Shoreline Phase II

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#### REQUEST FOR PROPOSALS

# THE QUARRY COMMUNITY DEVELOPMENT DISTRICT INVITATION FOR BIDS FOR STORMWATER LAKES SHORELINE REPAIR PROJECT AND NOTICE OF PUBLIC MEETING TO OPEN PROPOSALS

Notice is hereby given that the Quarry Community Development District ("District") will receive proposals for its Stormwater Lakes Shoreline Repairs Project (the "Project").

The contract will require contractors to provide construction services for the Project, as more particularly described in the Project Manual and in accordance with the plans and specifications. The construction services will be performed under a unit-price contract and in accordance with all applicable local, State, and Federal laws, regulations, and executive orders.

The Project Manual will be available beginning **November 1st, 2021 at 8:00 a.m.**, at the following website: <a href="www.quarrycdd.org/documents">www.quarrycdd.org/documents</a>. The Project Manual will include, but not be limited to, the Request for Proposals, proposal and contract documents, and construction plans and specifications.

There will be a non-mandatory **pre-proposal conference** at 8975 Kayak Drive, Naples, FL 34120 on **November 15, 2021 at 9:00 a.m.** 

Proposals will be evaluated in accordance with the criteria included in the Project Manual. The District reserves the right to reject any and all proposals, make modifications to the work, award the contract in whole or in part with or without cause, provide for the delivery of the project in phases, and waive minor or technical irregularities in any Proposal, as it deems appropriate, if it determines in its discretion that it is in the District's best interests to do so.

Proposers must possess a minimum of three years of professional experience working in shoreline restoration areas in the State of Florida, and have specific experience with littoral planting and lake bank restoration.

Each proposal shall be accompanied by a proposal guarantee in the form of a bid bond or certified cashier's check in an amount not less than five percent (5%) of the total bid to be retained in the event the successful proposer fails to execute a contract with the District and file the requisite Performance and Payment Bonds and insurance within the time period specified in the Project Manual.

Any person who wishes to protest this notice or the Project Manual, or any component thereof, shall file with the District a written notice of protest within seventy-two (72) hours after the publication date of the notice, for protests related to the notice, or, for protests related to the Project Manual, within seventy-two (72) hours after the Project Manual is made available, and shall file a formal written protest with the District within seven (7) calendar days after the date of timely filing the initial notice of protest. Filing will be perfected and deemed to have occurred upon receipt by the District Manager, Inframark, 210 North University Drive, Suite 702, Coral Springs, Florida 33071. Failure to timely file a notice of protest or failure to timely file a formal written protest shall constitute a waiver of any right to object to or protest the contents of the District's Project Manual. The formal written protest shall state with particularity the facts and law upon which the protest is based.

Firms desiring to provide services for the Project must submit one (1) original, nine (9) copies and one (1) digital copy of the required proposal no later than **12:00 p.m. on December 3, 2021**, at the offices of the District Engineer, CPH, Inc., 2216 Altamont Avenue, Fort Myers, Florida 33901, C/O Albert

Lopez. The District Engineer will conduct a special public meeting at 12:05 p.m. on December 3, 2021 at its office to open the proposals. No official action will be taken at the meeting. The meeting is open to the public and will be conducted in accordance with the provisions of Florida law including but not limited to Chapter 190 of the Florida Statutes. A copy of the agenda for the meeting may be obtained from the District Manager, at the District's Manager's office, or (239) 785-0675. The meeting may be continued in progress without additional notice to a time, date, and location stated on the record. Pursuant to provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the District Office at least forty-eight (48) hours before the meeting by contacting the District Engineer at (239) 332-5499. If you are hearing or speech impaired, please contact the Florida Relay Service at 1 (800) 955-8770, who can aid you in contacting the District Office.

Because this is a project for repair of an existing public facility, the District is not required to comply with Section 255.20, Florida Statutes and any variance from such section or other applicable law shall not be grounds for a protest.

Proposals shall be in the form provided in the Project Manual and submitted in a sealed envelope pursuant to the Instructions to Proposers. As noted below, proposals will be opened publicly at that date, time, and location; those received after the time and date stipulated above will be returned un-opened to the proposer. Any proposal not completed as specified or missing the required proposal documents as provided in the Project Manual may be disqualified.

All questions regarding the Project Manual or the Project shall be directed in writing only to the District Engineer, CPH, Inc., 2216 Altamont Avenue, Fort Myers, Florida 33901, C/O Albert Lopez, alopez@cphcorp.com. No phone inquiries please.

Justin Faircloth District Manager

#### **INSTRUCTIONS TO BIDDER**

#### PART 1 GENERAL

#### 1.01 Bidding Documents

- A. Bidding Documents include the Invitation for Bids, Instructions to Bidders, Bid Form, other sample bidding and contract forms, and the proposed Contract Documents, including any Addenda issued prior to receipt of bids.
- B. Bidding Documents may be obtained in compliance with the Invitation for Bids. No partial sets of the Bidding Documents will be issued. Complete sets of Bidding Documents shall be used in preparing bids. Neither the Owner nor the Engineer will assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

#### 1.02 Bidder Questions

Any Bidder who is in doubt as to the true meaning of any part of the Bidding Documents, or finds a discrepancy or omission therein, may submit to the Engineer a written request for an interpretation or correction. The person submitting the request shall be responsible for its delivery to the Engineer at least nine (9) days prior to the bid opening date. Any interpretation, correction or change of the Bidding Documents will be made by Addendum. Interpretations, corrections or changes made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes.

#### 1.03 Addenda

Addenda will be mailed or otherwise delivered to all plan holders who received a complete set of Bidding Documents from the Engineer. All Addenda issued during the time of bidding shall form a part of the Contract Documents, shall be covered in the Bid, and shall become a part of the Contract. Receipt of each Addendum shall be acknowledged in the Bid Form; failure to do so may subject the Bidder to disqualification. It shall be the Bidder's responsibility to ensure that they have received all Addenda prior to bid. The Owner or Engineer shall not be responsible for non-receipt or untimely receipt of Addenda due to acts of the delivering agency or any other source.

#### 1.04 Examination of Documents and Inspection of Site

Before submitting a Bid, Bidders shall carefully examine the Bidding Documents and inspect the project site to fully inform themselves of all existing conditions and limitations. Each Bidder, by submitting his Bid, represents that he has so examined the Bidding Documents and inspected the site, that he understands the provisions of the Bidding Documents and that he has familiarized himself with the local conditions under which the work is to be performed. Bidders will not be given extra payment or contract time for conditions, which could have been determined by such examinations.

#### 1.05 Bidder's Interest in More Than One Bid

No person, firm, or corporation shall be allowed to make, file, or have an interest in more than one Bid for the same work, unless Alternates are called for. A person, firm, or corporation who has submitted a sub-bid to a Bidder or who has quoted prices on materials to a Bidder is not hereby disqualified from submitting a sub-bid or quoting prices to other Bidders, or from bidding as a prime contractor.

#### 1.06 Certificates and Licenses

Bidders must be properly licensed to perform the Contract Work. Proper licensing shall be as defined by Florida Statutes.

## 1.07 Public Entity Crimes - Denial or Revocation of Right to Transact Business With a Public Entity

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; 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 (FS) 287.017 for CATEGORY TWO (\$35,000) for a period of 36 months following the date of being placed on the convicted vendor list.

#### 1.08 Florida Trench Safety Act

Bidders must comply with the Florida Trench Safety Act (FS 553.60-553.64), by completing and submitting with the sealed bid the Trench Safety Statement Form, a copy of which is included as part of these Contract Documents.

#### 1.09 Rejection of Bidders Under Litigation

The Owner reserves the right to reject the Bid of any Bidder who is behind, as determined by the Owner or Engineer, on the completion schedule for any existing contracts; who has failed to properly progress work on any construction contract with any governmental agency within the past five (5) years; who is currently under litigation with the Owner; who is in litigation with any governmental agency within the past five (5) years; who is involved in any dispute resolution procedure with any governmental agency within the past five (5) years; who has previously defaulted on a contract with any governmental agency within the past five (5) years; or who has previously failed to satisfy all requirements related to life safety including, but not limited to, the maintenance of traffic provisions on existing or previous agreements with any governmental agency within the past five (5) years.

#### 1.10 Debarred or Suspended Bidders

The Bidder certifies, by submission of its Proposal (Bid), that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in contracting with any federal department or agency. The Owner reserves the right to reject any bid from a debarred or suspended Bidder or from a Bidder whose principals are debarred or suspended.

#### 1.11 Form of Bid

- A. Each Bid shall be submitted on the Bid Form included as one of the Bidding Documents. The Bidder is not permitted to make changes in the Bid Form provided. The Bidder shall fill in spaces on the Bid Form by typewriter, computer, or manually in ink. When a Bidder submits a Bid and fills in information, which is then changed, each change must be initialed by the person signing the Bid.
- B. The Bidder must fill in all unit prices, total prices, and total amounts. Each Unit Price will be deemed to include an amount considered by Contractor to be adequate to cover all costs, including manpower, labor, equipment, materials, supplemental and administrative costs, and profit.
- C. Where so indicated by the makeup of the Bid Form, amounts shall be expressed in both words and figures, and in case of discrepancy between the two, the amount in words shall govern.
- D. The Bid Form shall be completely filled out including the Bidder information; acknowledgement of receipt of all Addenda; the Bid Amount including Unit Prices and Total Prices for all Items including all alternate items; the completed Bidder Submittal checklist; and the bid properly signed and dated by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the State of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached certifying agent's authority to bind Bidder. A bid submitted by a partnership shall be signed in the name of the firm by one or more of the partners.
- E. No conditional Bids will be accepted. Alternate Bids will not be considered unless called for. Oral proposals or modifications will not be considered. The Owner reserves the right to reject a bid that is unbalanced.
- F. All submitted bid packages including alternate bid items become the property of the Owner.

#### 1.12 Bid Security

A. Provide a bid security in the form of a certified check or bid bond. Bid security shall be payable without condition to the Owner, as a guaranty that the Bidder, if awarded the Contract, will promptly execute the Agreement in accordance with the Bidding Documents, and will furnish all bonds and insurance as required. If

Bid Bond is provided it shall be provided using the form included in section 00420 and shall be provided by a surety company authorized to do business in the State of Florida. The amount of the Bid Security shall be as follows:

- 1. Construction Projects where the Maximum Bid Price is \$60,000 or greater: Bid Security shall be in an amount equal to at least 5% of the Maximum Bid Price (Base Bid Plus Alternates).
- 2. Construction Projects where the Maximum Bid Price is less than \$60,000: Bid Security shall be in an amount equal to at least 10% of the Maximum Bid Price (Base Bid Plus Alternates).
- B. If for any reason the Bidder withdraws his Bid after Bid Opening or fails to execute an Agreement or to provide the specified bonds, insurance, and insurance certification, such Bidder shall be in default. The defaulting Bidder and his surety shall pay to the Owner all costs incurred by the Owner for procuring the performance of the work required by the Bidding Documents which exceed the amount of his Bid, including engineering and legal costs, not to exceed the amount of the bid security.
- C. The Bid Security of all except the three (3) apparent most qualified Bidders will be returned within 21 days after the canvass of Bids.

#### 1.13 Submission of Bids

- A. Submit two duplicate originals of the Bid, Bid Security, and all other documents required to be submitted with the Bid. Enclose in a single sealed opaque envelope, addressed to the party receiving the Bids. Label on the outside of the envelope the Project name, project number (if applicable), and the Bidder's name and address. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "Bid Enclosed" on the face thereof.
- B. Bids shall be delivered to the designated location prior to the time and date for receipt of Bids indicated in the Invitation for Bids or any extension thereof made by Addendum. Bids received after the time and date for receipt of Bids will be returned unopened to the person or firm submitting the Bid.
- C. The Bidder shall assume full responsibility for timely delivery of his Bid to the designated location.

#### 1.14 Modification and Withdrawal of Bids

- A. Bids may not be modified after submittal; however, they may be withdrawn at any time prior to the Bid Opening time and date.
- B. Withdrawal requests shall be made in writing and must be received by the Owner before the time and date stated or as addended for the Bid Opening. Properly withdrawn Bids will be returned unopened to the person or firm submitting the Bid.

- C. A Bidder who withdraws his Bid may submit a new Bid in the same manner as specified under "Submission of Bids".
- D. If a Contract is not awarded within 90 calendar days after opening of Bids, a Bidder may file a written request with the Owner for the return of his Bid.

#### 1.15 Basis of Award

- A. The Owner reserves the right to accept or reject any or all bids in whole or in part with or without cause, to waive technicalities, or to accept the bid(s) which, in its judgment, best serves the interest of the Owner.
- B. Except in cases where the Owner exercises the right to reject all Bids, the Contract will be awarded by the Owner, as soon as practicable after Opening of Bids, to the responsive, most qualified bidder.
- C. The most qualified Bid will be determined by comparison of the "Total Base Bid" stipulated on the Bid Form, plus any combination of Additive or Deductive Alternate Bid Items of the Owner's choosing. If the stated "Total Base Bid" conflicts with the sum of the Total Prices on the Bid Schedule, then the sum of the Total Prices prevails. The Total Price for each item is the stated unit price times the quantity.

#### 1.16 Responsiveness Requirements

- A. All Bidders are required to be responsive. Failure to meet any of the responsiveness requirements set forth herein may result in the Bidder being judged non-responsive.
- B. To be judged responsive, the Bidder shall execute, and return the following forms and required information with the Bid:

Section	Form / Information
00410	Proposal (Bid Form) Including Acknowledgment of All Issued
	Addenda
	Acknowledge of Receipt of Addendum (Form Issued by the City with
	each issued Addendum
	Bid Security in Accordance with the Instructions to Bidder
	Bidder Completed W-9 Form
	Bidder Officer Signatory Authorization Information
00430	Trench Safety Form
00432	Non Collusion Affidavit
00434	Conflict of Interest Affidavit
00436	Florida Statutes on Public Entity Crimes Affidavit
00438	Compliance With the Public Records Law Affidavit
00440	Bidder Information and Affidavit
00450	Certification Of Non-Segregated Facilities Form
00452	Disputes Disclosure Form
00454	Drug Free Workplace Form

Section	Form / Information
00456	Unauthorized (Illegal) Alien Workers Affidavit
00458	E-Verify Compliance Form
00460	Americans With Disabilities Act Affidavit
00464	Schedule Of Proposed Subcontractors
00525	Criminal Background Check Requirements and Affidavit
00622	City of Sanford Insurance Requirements and Affidavit
	Copies of Licenses Issued by the State of Florida Dept. of Business
	and Professional Regulation Construction Industry Licensing Board

C. If the Invitation to Bids requires attendance at a mandatory Pre-Bid meeting, then Bids submitted from Bidders who do not attend the mandatory Pre-Bid meeting will be judged non-responsive; unless providentially hindered as to such required attendance due to provable circumstances beyond the control of the Bidder whereupon mandatory attendance may be waived at the sole discretion of the Owner

#### 1.17 Responsibility Requirements

- A. All Bidders are required to be responsible. Failure to meet any of the responsibility requirements set forth herein may result in the Bidder being judged non-responsible. Bids from non-responsible bidders may be accepted or rejected at the discretion of the Owner.
- B. To be judged responsible, the Bidder shall meet the following standards:
  - 1. The Bidder shall be properly licensed and shall have a satisfactory record of integrity, judgment, and performance as a corporation (including its shareholders and officers), partnership, or as a sole proprietorship, including in particular, any prior performance upon contracts from the State and the Owner.
  - 2. The Bidder shall have at least three (3) years of experience as a prime contractor.
  - 3. The Bidder shall have performed as a prime contractor on at least three (3) projects of similar type and size as the proposed contract work.
  - 4. The Bidder shall be able to comply with the required completion schedule for the project.
  - 5. The Bidder shall have adequate financial resources to perform the work, and shall have an adequate financial management system and audit procedure which provides efficient and effective accountability and control of all property, funds, and assets. The Bidder shall be able to demonstrate this in accordance with the requirements described herein.
  - 6. The Bidder shall conform with the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.

#### 1.18 Bidder Evaluation Submittal Requirements

- A. Within 7 calendar days after being notified of being the most qualified, responsive Bidder, the Bidder shall submit the following information to the Owner or Engineer for evaluation to determine compliance with the responsibility requirements. The following information may also be required to be submitted by the second and third most qualified bidders within 7 calendar days, if notified by the Owner or Engineer.
  - 1. Resumes of key personnel, especially those personnel proposed for work on this Project.
  - 2. Provide a list of equipment and quantities currently owned or under lease to the Bidder and available for the work.
  - 3. List of personnel, by name and title, contemplated to perform the work.
  - 4. Provide financial information in accordance with the following:
    - a. For projects where the total base bid is \$600,000.00 or less, provide a current Compilation Statement of the Bidder, prepared by a Certified Public Accountant (CPA).
    - b. For projects where the total base bid is \$600,000.01 up to \$10,000,000.00, provide a current Percentage of Completion Review of the Bidder, prepared by a CPA.
    - c. For projects where the total base bid is \$10,000,000.01 or higher, provide a current audited financial statement of the Bidder, prepared by a CPA, including a certification that the financial status of the company has not materially changed since the audit.
    - d. The financial information shall reflect the most current fiscal year, and in no case no more than 16 months old.
  - 5. Provide a list of equipment and quantities currently owned or under lease to the Bidder and available for the work.
  - 6. As required by the Owner, submit fully executed copies of the following forms:
    - a) Financial Information Form Section 00462
    - b) Insurance Certification Section 00620
- B. The Owner reserves the right to waive submittal of any or all of the above informational requirements of the Bidder.

#### 1.19 Award of Contract

If the contract is to be awarded, the Owner or its agent will deliver to the most qualified bidder a Notice of Award and Agreement form within ninety (90) days after the day of the bid opening. The successful bidder shall sign and return the Agreement and required bonds and insurance within fourteen (14) days of receipt of the Notice of Award.

#### 1.20 Bonds and Insurance

A. Upon award of the contract, the Bidder, simultaneously with the execution of the Agreement, shall furnish certificates of insurance, insurance certification, performance bond, and payment bond. The forms of the bonds and insurance

- certification, including bonding amounts and duration and insurance coverage required are included in the Bidding Documents.
- B. The successful Bidder shall, before commencing the work, record said Payment and Performance Bond in the public records of the County where the improvement is located in accordance with FS 255.05.

#### 1.21 Waiver

Each Bidder agrees to waive any claims it has or may have against the Owner, Engineer, and their respective officers, employees, agents, designees, successors, legal representatives or assigns, arising out of or in connection with the administration, evaluation, recommendation, rejection or award of any bid.

PART 2 PRODUCTS - Not Used PART 3 EXECUTION - Not Used

#### **BID EVALUATION CRITERIA**

1. Personnel. (10 Points)

(E.g., financial and technical resources; capabilities and experience of key personnel, including the project manager and field supervisor; present ability to manage this project; evaluation of existing work load; proposed staffing levels, etc. *No preference will be given based on a respondent's geographic proximity to the Project.*)

2. Proposer's Experience.

(20 Points)

(E.g., past record and experience of the respondent in similar projects; volume of work previously performed by the firm; past performance for other Community Development Districts in other contracts; compliance with applicable public policy; character, integrity, reputation of respondent, etc.)

3. Understanding of Scope of Work.

(20 Points)

Extent to which the proposal demonstrates an understanding of the District's needs for the services requested.

4. Price. (25 Points)

Points available for price will be allocated as follows:

<u>15 Points</u> will be awarded to the Proposer submitting the lowest total bid, (i.e., the summation of the unit price extensions using quantity estimates provided, the allowances shown, plus the proposal contractor's fee) for completing the work. All other proposals will receive a percentage of this amount based upon the difference between the Proposer's bid and the low bid.

10 Points are allocated for the reasonableness of unit prices and balance of bid.

5. Schedule. (25 Points)

Points available for schedule will be allocated as follows:

<u>15 Points</u> will be awarded to the Proposer submitting the proposal with the most expedited construction schedule (i.e. the fewest number of days) for completing the work. All other proposals will receive a percentage of this amount based upon the difference between the Proposer's timeline and the most expedited construction schedule.

<u>10 Points</u> will be allocated based on the Proposer's ability to credibly complete the project within the Proposer's schedule without a premium cost for accelerated work and demonstrate on-time performance. These points will also take into account the demonstration of Proposer's

understanding (through presentation in the proposal of a milestone schedule) of how to meet the required substantial and final completion dates and the delivery approach outlined in the Project Manual.

## PROPOSAL (BID FORM)

#### **PART 1 GENERAL**

1.01 Description

The Quarry CDD 2022 Shoreline Phase II

NAME OF BIDDER:

The fo			r the <u>2022 Sho</u> lled the Owner			nade to <u>The Quarry CDD</u> )	
(2) Own	er		n in the Invitation fo				
1.02	The U	ndersi	gned:				
	A.	Ackno	owledges recei	pt of:			
		1.	Project Manu	ıal and Drawin	gs identified w	ithin the Project Manual.	
		2.	Addenda:	Number Number Number Number Number Number		Dated Dated Dated Dated Dated Dated	
	B.		itting his Bid, h			ments and understands that in misunderstanding regarding the	
	C.	Agree	es:				
		1.	To hold this B	Bid open for 90	) calendar day	s after the bid opening date.	
		2.	To accept the provisions of the Instructions to Bidders regarding disposition of Bid Security.				
		3.	basis of this	Bid, and to f	urnish a Perfo	h the Owner, if awarded on the rmance Bond and a Labor and th the Instructions to Bidders.	

00410-1

PROPOSAL (BID FORM)

	4.	To accomplisi	h the Work in	accordance with	the Contract	Documents.
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- 5. To begin Work after the issuance of a Notice to Proceed, unless otherwise provided, and substantially complete the Work within \_\_\_\_\_ calendar days of the date of the Notice to Proceed.
- 6. To accept the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

#### 1.03 Bid Schedule

The Bidder hereby agrees to perform all Work as required by the Contract Documents for the following Unit Prices. All Work required to be performed by the Contract Documents is to be included within the following Pay Items, inclusive of furnishing all manpower, equipment, materials and performance of all operations relative to construction of the Project. Work for which there is not a Pay Item will be considered incidental to the Contract and no additional compensation will be allowed.

## **Quarry CDD 2022 Shoreline Phase II**

## **Schedule of Unit Prices**

Item 1	Import Fill to m 21,642 CY	neet 4:1 slope @\$	per CY	\$
Item 2	6" to 8" Rip Ra 4,800 TONS	ap @\$	per TON	\$
Item 3	New Sod on Ir Area (St. Augu 1,807 SY		per SY	\$
Item 4	New Sod on Ir Area (Seashor 2,610 SY		per SY	\$
Item 5	Geotextile 17,100 SY	@\$	per SY	\$
Item 6	Biodegradable Blanket 18,800 SY	Erosion  © \$	per SY	\$
Item 7	Littoral Plantin 14,421	g-1 gal. @ \$	EA	\$
Item 8	Littoral Plantin (Mid-section) 37,303	g-2" Liners @ \$	_EA	\$
Item 9	Littoral Plantin (Low-section) 37,303	g-2" Liners @ \$	_EA	\$
Item 10	Irrigation Line 7,931 LF	Relocation/New @ \$	per LF	\$
Item 11	Irrigation Head	d Relocation/New @ \$	_EA	\$
Item 12	14" x 14" Yard 50	Drain Relocation/N @ \$		\$
Item 13	4" ADS Double 500 LF	e Wall Drainage Pip @ \$	pe per LF	\$

The Quarry CDD 2022 Shoreline Phase II NAME OF BIDDER:

Item 14	6" ADS Double 250 LF	e Wall Drainage Pip @ \$		\$
Item 15		e Wall Drainage Pip @ \$		\$
Item 16		ole Wall Drainage P @ \$		\$
Item 17	Concrete Flum 8 SY	ne @\$	per SY	\$
Item 18	Curbing 100 LF	@\$	per LF	\$
Item 19	3.5' Average H	ock Retaining Wall leight @ \$	per SF	\$
Item 20	As-Built 17,728 LF	@\$	per LF	\$

## 1.04 Miscellaneous Requirements and Affirmations

- A. Proposals (Bids) must be on the Bid Form.
- B. The Bidder acknowledges the receipt, execution, and return of the following forms and required information with the Bid (the Bidder is to fill out the far right column in the below Table):

Section	Form / Information	Submitted by Bidder with Bid (Y/N)
00410	Proposal (Bid Form) Including	
	Acknowledgment of All Issued Addenda	
	Bid Security in Accordance with the	
	Instructions to Bidder	
00430	Trench Safety Form	
00432	Non Collusion Affidavit	
00434	Conflict of Interest Affidavit	
00436	Florida Statutes on Public Entity Crimes	
	Affidavit	
00438	Compliance With the Public Records Law	
	Affidavit	
00440	Bidder Information and Affidavit	
	Completed W-9 Form	
	Bidder Officer Signatory Authorization	
	Information	
00450	Certification Of Non-Segregated Facilities	
	Form	
00452	Disputes Disclosure Form	
00454	Drug Free Workplace Form	
00455	Certification Regarding Non-Scrutinized Companies	
00456	Unauthorized (Illegal) Alien Workers	
	Affidavit	
00458	E-Verify Compliance Form	
00460	Americans With Disabilities Act Affidavit	
00464	Schedule Of Proposed Subcontractors	
	Copies of Licenses Issued by the State of	
	Florida Dept. of Business and Professional	
	Regulation Construction Industry Licensing	
	Board	

1.05	RESPECTFULLY SUBMIT	<code>FTED</code> , signed and sealed this $\_$	day of
	2	<u>:</u>	
Name	e of Bidder		
By (S	ignature)	Date	
Printe	ed Name and Title		
Busin	ess Address		
City	State	Zip Code	(CORPORATE SEAL)
Telep	hone No.	Facsimile No.	
E-Ma	il Address		
ATTE	ST:		
By (S	ignature)	Date	
Printe	ed Name and Title		

#### **BID BOND FORM**

KI	NOW ALL MEN BY THESE PRESENT, that we, the undersigned, (1)
	, as Principal, and (2)
	, as Surety, are hereby and firmly bound unto (3)
	, as Owner, in the penal sum of (4)
	Dollars (\$) for the payment of which,
ad	ell and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, dministrators, successors, and assigns.
Ih	ne condition of the above obligation is such that whereas the Principal has submitted to (3) a certain Bid for (5)
	, attached hereto and hereby made
a p	part hereof.
	Bidder

#### NOW, THEREFORE,

- A. If said Bidder shall be in rejected, or in the alternate,
- B. If said Bid shall be accepted and the Principal shall execute and deliver the Agreement (properly completed in accordance with the Bidding Documents), and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby give waive notice of any such extension.

**IN WITNESS WHEREOF**, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers.

Signed and sealed this day of	
ATTEST:	Principal
By (Principal Officer)	By (Signature of Officer)
Typed Name and Title	Typed Name and Title
(CORPORATE SEAL)	Address
	City, State, Zip
	Surety
Ву	By: Attorney-in-Fact
Typed Name and Title	Typed Name and Title
(SEAL)	Address
	City, State, Zip
	Telephone No. Facsimile No.

#### TRENCH SAFETY FORM

Bidder acknowledges that included in the various items of the proposal contained on the Bid Form are costs for complying with the Florida Trench Safety Act (FS 553.60-553.64). The Bidder further identifies the cost of compliance with the applicable trench safety standards for the project as follows (Bidder to attach additional sheets as necessary to identify all costs):

	Trench Safety Measure (Description)	Units of Measure (LF, SF, SY)	Unit Quantity	Unit Cost	Extended Cost
Α					
В					
С					
D					
Е					
F					
TO	TAL				\$

The total cost shown herein is already included in the various items on the Bid Form and is not additional to the pricing shown on the Bid Form.

Bidder, by signature below, assures that the contractor performing trench excavating will comply

with the applicable Trench Safety Star	ndards.	· ·
Submitted, signed and sealed this	day of	,
Bidder		
Signature		
Printed Name and Title		
ATTEST:		
Signature	Date	(SEAL)

#### NON COLLUSION AFFIDAVIT

The undersigned, by signing this document hereby certifies that the company named below hereby is or does:

- 1. States that the entity named below and the individual signing this document has submitted the attached bid or proposal:
- 2. He is fully informed respecting the preparation and contents of the attached proposal and of all pertinent circumstances respecting such proposal;
- 3. Said bid or proposal is genuine and is not a collusive or sham bid or proposal;
- 4. Neither the said bidder or proposer nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, proposer, firm or person to submit a collusive or sham bid or proposal in connection with the Contract for which the attached bid or proposal has been submitted or to refrain from bidding or proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communications or conference with any other bidder, proposer, firm or person to fix the price or prices in the attached bid or proposal or of any other bidder of proposer, or to fix any overhead, profit or cost element of the bid or proposal price or the bid or proposal price of any other bidder or proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed Contract.
- 5. The price or prices quoted in the attached bid or proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or proposer or any of its agents, representatives, owners, employees, or parties in interest, including the individual signing this document.

Bidder	
Signature of Authorized Representative (Affiant)	Date
Printed or Typed Name and Title of Authorized Representative	e (Affiant)

STATE OF FLORIDA COUNTY OF	
notarization, this day of	before me by means of physical presence or online , by
aswhose r	for
that he/she is authorized to execute this docu	ment and thereby bind the Corporation / LLC.
(In the last three blanks fill in the name of the Officer acknowledge)	owledging this document, title of Officer / Manager, and name of the Corporation or LLC)
Signature of Notary Public - State of Florida	Print, Type, or Stamp Commissioned Name of Notary Public
Personally Known	OR Produced Identification
Type of Identification Produced:	

#### CONFLICT OF INTEREST AFFIDAVIT

Project Name:	The Quarry CDD 2022 Shoreline Phase II
Bid No.:	

The Affiant identified below deposes and states that:

- 1. The below named Bidder is submitting a Bid to the Owner for the project named above.
- 2. The Affiant has made diligent inquiry and provides the information contained in this Affidavit based upon his own knowledge.
- 3. The Affiant states that only one submittal for the above project is being submitted and that the below named Bidder has no financial interest in other entities submitting proposals for the same project.
- 4. Neither the Affiant nor the below named Bidder has directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive pricing in connection with the Bidder's submittal for the above project. This statement restricts the discussion of pricing data until the completion of negotiations and execution of the Agreement for this project
- 5. Neither the Bidder nor its affiliates, nor any one associated with them, is presently suspended or otherwise ineligible from participating in contract lettings by any local, state, or federal agency.
- 6. Neither the Bidder, nor its affiliates, nor any one associated with them have any potential conflict of interest due to any other clients, contracts, or property interests for this project.
- 7. I certify that no member of the Bidder's ownership, management, or staff has a vested interest in any aspect of the Owner.
- 8. I certify that no member of the Bidder's ownership or management is presently applying for an employee position with the Owner or actively seeking an elected position with the Owner (where the Owner is a governmental agency).
- 9. In the event that a conflict of interest is identified in the provision of services, I, on behalf of the below named Bidder, will immediately notify the Owner in writing.

Bidder		
Signature of Authorized Representative	e (Affiant)	Date
Printed or Typed Name and Title of Au	uthorized Representative	(Affiant)
STATE OF FLORIDA COUNTY OF		
The foregoing instrument was acknowledged be notarization, this day of as	·	ysical presence or online _ , by
as, whose na that he/she is authorized to execute this docum	ame is subscribed to this instru	ument, who personally swore or affirmed
(In the last three blanks fill in the name of the Officer acknow	vledging this document, title of Officer /	Manager, and name of the Corporation or LLC)
Signature of Notary Public - State of Florida	Print, Type, or Stamp 0	Commissioned Name of Notary Public
Personally Known	OR Produced Identification _	
Type of Identification Produced:		

#### FLORIDA STATUTES ON PUBLIC ENTITY CRIMES AFFIDAVIT

Project Name:	The Quarry CDD 2022 Shoreline Phase II
Bid No.:	

The Affiant identified below attests to the following:

- 1. I understand that a "public entity crime" as defined in Section 287.133(1)(g), Florida Statutes, 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 or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
- 2. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crimes, with or without an adjudication of guilt, in any Federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.
- 3. I understand that an "affiliate" as defined in Section 287.133(1)(a), Florida Statutes, means: A predecessor or successor of a person convicted of a public entity crime: or an entity under the control of any natural person who is active in the management of the entity and how has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one (1) person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an affiliate.
- 4. I understand that a "person" as defined in Section 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

5.	relation to the entity submitting this sworn statement. (Note: indicate what statements apply)	
	Neither the entity submitting this sworn statement, nor any convicted of a public entity crime subsequent to July 1, 1989.	vho are active in
	The entity submitting this sworn statement, or one or mor directors, executives, partners, shareholders, employees, members of active in management of the entity, or an affiliate of the entity, has been and convicted of a public entity crime subsequent to July 1, 1989.	r agent who are
	The entity submitting this sworn statement, or one or more directors, executives, partners, shareholders, employees, members or active in management of the entity, or an affiliate of the entity, has be and convicted of a public entity crime subsequent to July 1, 1989. Ho been a subsequent proceeding before an Administrative Law Jury of the Division of Administrative Hearings and the Final Order entered by the Law Jury determined that it was not in the public interest to place the this sworn statement on the convicted vendor list. (You must attach a order.)	agents who are een charged with wever, there has e State of Florida, ne Administrative entity submitting
this fo unders the thr	rstand that the submission of this form to the Owner and is for the Owner is valid through December 31, of the calendar year in which it stand that i am required to inform the Owner prior to entering in to a conceshold amount provided in section 287.017, Florida Statues, for cate in the information contained in this form.	is filed. I also tract in excess of
Bidder		FEIN No.
Signat	ure of Authorized Representative (Affiant)	Date
Printed	d or Typed Name and Title of Authorized Representative (Affiant)	
	OF FLORIDA Y OF	
The fore notariza	egoing instrument was acknowledged before me by means of physical presence or _ tion, this day of , , by _ as for for, whose name is subscribed to this instrument, who persona	online
	as tot whose name is subscribed to this instrument, who personal	Illy swore or affirmed
that he/s	she is authorized to execute this document and thereby bind the Corporation / LLC.	, 511010 01 411111104
(1- 1- 1	t three blanks fill in the name of the Officer advantadains this decrease title of Officer / Manager and name of the	- O

The Quarry CDD 2022 Shoreline Phase II

Signature of Notary Public - State of Florida	Print, Type, or Stamp Commissioned Name of Notary Public
Personally Known	OR Produced Identification
Type of Identification Produced:	

#### COMPLIANCE WITH THE PUBLIC RECORDS LAW AFFIDAVIT

Upon award recommendation or 30 days after opening, it is understood that all submittals to governmental entities shall become "public records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes, and Section 24(a), Article 1 of the Constitution of the State of Florida, and other controlling law (collectively the "Public Records Laws"). If the Owner rejects all replies submitted in response to a competitive solicitation and provides notice of its intent to reissue the solicitation, the replies remain exempt from disclosure until the Owner provides a notice of intent to award or withdraws the reissued solicitation. If no award is made, responses are not exempt for longer than 12 months after the initial notice rejecting all responses.

Proposers/Bidders must invoke the exemptions to disclosure provided by law as applicable to the response to the solicitation, must identify the data or other materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary. The submission of a proposal authorizes release of the Proposer's/Bidder's credit data to the Owner.

If a Proposer/Bidder submits information exempt from public disclosure, the Proposer/Bidder must specifically and in detail identify with specificity which pages/paragraphs of their bid/proposal package are exempt from the Public Records Laws, identifying the specific exemption under the Public Records Laws that applies to each. The protected information must be submitted to the Owner in a separate envelope marked accordingly.

By submitting a response to this solicitation, the Proposer/Bidder agrees to defend, indemnify and hold the City harmless in the event the Owner litigates the public records status of the Proposer's/Bidder's documents. This provision obligates the Proposer/Bidder to pay the full legal costs of the Owner including, but not limited to, attorneys fees, court costs, and any and all other charges, regardless of what level of trial or appeal.

Bidder	
Signature of Authorized Representative (Affiant)	Date
Printed or Typed Name and Title of Authorized Representative (Affiant)	

COUNTY OF	
	before me by means of physical presence or online
that he/she is authorized to execute this docu	ment and thereby bind the Corporation / LLC.  Description of the Corporation of the Corporation of LLC.
Signature of Notary Public - State of Florida	Print, Type, or Stamp Commissioned Name of Notary Public
Personally Known	OR Produced Identification
Type of Identification Produced:	

### **BIDDER INFORMATION AND AFFIDAVIT**

DA	TE SUBMITTED:	, 2021			
1.	Proposer(	(Company Name)	/_/ A Individual /_/ A Partnership /_/ A Limited Liability Com /_/ A Corporation /_/ A Subsidiary Corporat		
2.	Proposer's Parent C	company Name (if applicable) _		-	
3.	Proposer's Parent C	Company Address (if applicable	e)		
	Street Address			_	
	P.O. Box (if any)			-	
	City	State	Zip Code	-	
	Telephone		Fax No	_	
	1 <sup>st</sup> Contact Name		Title		
	2 <sup>nd</sup> Contact Name _		Title	-	
4.	Proposer Company	Address (if different)			
	Street Address	_		_	
	P.O. Box (if any)			_	
	City	State	Zip Code	_	
	Telephone		Fax No	_	
	1 <sup>st</sup> Contact Name		Title		
	2 <sup>nd</sup> Contact Name _		Title	_	
5.	List the location of Proposer's office that would perform Quarry Community Development Diswork.				
	Street Address			_	
	P.O. Box (if any)			_	
	City	State	Zip Code	_	

	Tele	phone	Fax No
	1 <sup>st</sup> C	Contact Name	Title
	2 <sup>nd</sup> (	Contact Name	Title
6.	Is th	e Proposer incorporated in the Stat	e of Florida? Yes (_) No (_)
	6.1	If yes, provide the following:	
		Is the Company in good stand Corporations? Yes (_) No (_)	ing with the Florida Department of State, Division of
		If no, please explain	
		Date Incorporated	Charter No.
		—	Charter No
	6.2	If no, provide the following:	
		The state in which the Proposer co	ompany is incorporated
		Is the company in good standing v	vith the state? Yes (_) No (_)
		If no, please explain	
		Date incorporated	Charter No
7.		ne Proposer company a registered No (_)	or licensed contractor with the State of Florida? Yes
	7.1	If yes, provide the following:	
		Type of registration (i.e. certified g	eneral contractor, certified electrical contractor, etc.)
		License No	Expiration Date
		Qualifying Individual	Title
		List company(ies) currently qualified	ed under this license

	7.2	Is the Proposer company a registered or licensed Contractor with Collier County? Yes No (_)
	7.3	Has the Proposer company performed work for a community development district previously? Yes (_) No (_)
		If yes, describe:
	_	
8.	Nam	ne of Proposer's Bonding Company
	Add	ress
	App	roved Bonding Capacities: Aggregate Limit \$ Single Project Limit \$ Total Current Contracts Bonded \$
9.	Nar	me of Proposer's Bonding Agency
	Add	ress
	Con	tact Name Telephone
10.		the Proper's total annual dollar value of work completed for each of the last three (3) s starting with the latest year and ending with the most current year (18)
	<u>(</u> 19)	, (20)
11.	Gen Auto Wor	at are the Proposers' company's current insurance limits?  I eral Liability \$  I proposers' company's current insurance limits?  I proposers' company's current insurance limits?
12.		the Proposer company been cited by OSHA for any job site or company office/ shop ty violations in the past two years? Yes (_) No (_)
	If ye	s, please describe each violation fine, and resolution
	Wha	at is the Proposer's current worker compensation rating?
		the Proposer experienced any worker injuries resulting in a worker losing more than (10) working days as a result of the injury in the past two (2) years? Yes ( ) No ( )

	state(s)? Yes (_) No (_)									
ľ	t so, state the na	me(s) of the co	mpany(ies)							
7	The state(s) whe	re barred or sus	spended							
-	- State the period(s	s) of dobarmont	or cuenoncion							
_	-	s) or deparment	. or suspension _							
١	What is the const			ed superintendent a						
	INDIVIDUAL'S NAME	PRESENT POSITION OR OFFICE		YEARS OF CONSTRUCTION EXPERIENCE	YEARS WITH FIRM	IN WH				
			e any work award	ed to you? Yes (_)	No (_)					
  -										
-	Has any officer o	or partner of yo	our organization e	ever been an office	r, partner,	or owne				
- -				ever been an office ete a construction o						
- - H s	come other organ	nization that ha	s failed to compl		contract?	Yes (_)				

years.
Has organization or any of its affiliates ever been either disqualified or der prequalification status by a governmental entity? Yes (_) No (_)
If so, discuss the circumstances surrounding such denial or disqualification as well as date thereof.
Within the past five (5) years, has organization failed to complete a project within scheduled contract time? Yes (_) No (_)
If so, discuss the circumstances surrounding such failure to complete a project on time well as the date thereof.
List all projects currently under contract, with a remaining contract amount of \$100,000.00 (excluding retainage) and with an expected remaining contract duratio excess of 120 days (to substantial completion).
Identify all subcontractors Contractor intends on utilizing for the project and describe portion and percentage of work to be performed by each subcontractor.

[Remainder of Page Left Intentionally Blank]

The undersigned hereby authorize(s) and request(s) any person, firm or corporation to furnish any pertinent information requested by the Quarry Community Development District or their authorized agents, deemed necessary to verify the statements made in this application or attachments hereto, or necessary to determine whether the Quarry Community Development District should qualify the Proposer for providing a Proposal for its construction projects, including such matters as the Proposer's ability, standing integrity, quality of performance, efficiency and general reputation.

-	By:	
	(T <u>y</u>	ype Name and Title of Person Signing)
This day of	, 2021.	
		(Corporate Seal)
Sworn to before me this	day of	, 2021.
(Seal)	Notary Public/ Exp	iration Date

## **CORPORATE OFFICERS**

Company Name		Date		
Provide the following information for Officers of	the Proposer and parent company	y, if any.		
NAME OF PROPOSER	POSITION OR TITLE	CORPORATE RESPONSIBILITIES	INDIVIDUAL'S RESIDENCE CITY, STATE	
FOR PARENT COMPANY (if applicable)				

## **SUPERVISORY PERSONNEL**

mpany Name	Date			
at is the experience of the key ma ach resumes of key personnel here)	personnel of the Proposer company for	Date		
INDIVIDUAL'S NAME	PRESENT TITLE	DESCRIPTION OF DIRECT JOB RESPONSIBILITIES	YEARS OF EXPERIENCE IN PRESENT POSITION	TOTAL YEARS OF RELATED EXPERIENCE

# COMPANY OWNED MAJOR EQUIPMENT (Attach additional sheets if necessary)

	(, titaon additional onloce il nococcai ),	
Company Name		Date

			No. LOCATED IN			
QUANTITY	DESCRIPTION	CAPACITY	FLORIDA	OTHER		

# STATUS OF CONTRACTS ON HAND (Attach additional sheets if necessary)

Company Name	Date
--------------	------

Furnish requested information about all of Proposer's active contracts, whether as prime or subcontracts; whether in progress or awarded but not yet started; and regardless of with whom contracted. All amounts to be shown to nearest \$1,000. Contractor may consolidate and list as a single item all contracts which individually do not exceed 3% of total active contracts and in total do not exceed 20% of the active total contracts.

					COMPLETED AMOUNT THIS DATE	COMPLETION DATE		
OWNER, LOCATION AND DESCRIPTION OF PROJECT	CURRENT CONTRACT AMOUNT AS PRIME	CURRENT CONTRACT AMOUNT AS SUBCONTRACTOR	CURRENT AMOUNT SUBJECT TO OTHERS	AS PRIME CONTRACTOR	AS SUBCONTRACTOR	ORIGINAL CONTRACT DATE	APPROVED REVISED DATE	CURRENT ESTIMATE DATE
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
	\$	\$	\$	\$	\$			
		Subtotal Uncor	npleted Work	\$	\$			
		Total Unco	mpleted Work o	n Hand \$				

## PROJECTS PROPOSER COMPLETED IN THE LAST THREE YEARS

Company Name				Date			
List all projects completed in the last two years for which the contract value individually exceeded 3% of the Proposer's annual total work co							
the year the project was started.	. Include in the	list proje	cts that were started	d earlier than two	o years but were complete	ed within the last two years.	
	FINAL CONTRACT	PRIME OR	CLASSIFICATION OF WORK	YEAR STARTED/	OWNER NAME/	NAME & PHONE NUMBER OF OWNE	

PROJECT NAME/ LOCATION	FINAL CONTRACT AMOUNT	PRIME OR SUB <sup>1</sup>	CLASSIFICATION OF WORK PERFORMED	YEAR STARTED/ COMPLETED	OWNER NAME/ LOCATION <sup>2</sup>	NAME & PHONE NUMBER OF OWNER'S REPRESENTATIVE ON THIS PROJECT <sup>3</sup>
TROJECT NAME/ ECOATION	AWOONT		I LIN ONWED	OOMI LETED	LOGATION	REFRESENTATIVE ON THIS PROSECT

<sup>&</sup>lt;sup>1</sup> 'Prime or Sub' should indicate whether Proposer performed the work as a prime contractor or as a subcontractor.

<sup>&</sup>lt;sup>2</sup> 'Owner Name/ Location' should indicate the Owner of the project if the Proposer performed the work as a prime contractor or the general contractor if the Proposer performed the work as a subcontractor.

<sup>&</sup>lt;sup>3</sup> Name & Phone Number of Owner's Representative on this Project' should list a reference from the business entity listed in the previous column familiar with Proposer's contract performance.

## **AFFIDAVIT FOR INDIVIDUAL**

STATE OF	_ )
COUNTY OF	) SS _ )
date; and that he/ she understands that in statements on this application constitute fr	, being duly sworn, deposes and the preceding questions are correct and true as of this intentional inclusion of false, deceptive or fraudulent raud; and, that the District considers such action on
the part of the Proposer to constitute good of	cause for rejecting Proposer's proposal.
	(Proposer must also sign here)
Sworn to before this day of	, 2021.
Notary Public / Expiration Date:	_
(SEAL)	

## **AFFIDAVIT FOR PARTNERSHIP**

STATE OF		)	66
COUNTY OF		)	SS
	, is a memb	er of the	firm of,
being duly sworn, deposes and are correct and true as of the di inclusion of false, deceptive or	says that the sta ate of this affidav fraudulent stater	itements a vit; and, th ments on	and answers to the preceding questions hat he/ she understands that intentiona this application constitutes fraud; and Proposer to constitute good cause for
	(Si	ignature c	of a General Partner is Required)
Sworn to before me this	day of	, 2	2021.
Notary Public / Expiration Date	<u>;</u>		
(SEAL)			

## **AFFIDAVIT FOR CORPORATION**

STATE OF	- )	00	
COUNTY OF	_ )	SS	
(4:410)			
(title) of the			
(a corporation described herein) being duly answers to the preceding questions are cor he/ she understands that intentional inclusion	rect and true	as of the date of	of this affidavit; and, that
application constitutes fraud; and, that the Proposer to constitute good cause for reject			tion on the part of the
	(Officer mu	st also sign here	)
			CORPORATE SEAL
Sworn to before me this day of		2021.	
Sworn to before me this day of  Notary Public / Expiration Date:		2021.	
		2021.	

#### CERTIFICATION OF NON-SEGREGATED FACILITIES FORM

The Bidder certifies that no segregated facilities are maintained and will not be maintained during the execution of this contract at any of its establishments.

The Bidder further certifies that none of its employees are permitted to perform their services at any location under the Bidder's control during the life of this contract where segregated facilities are maintained.

The Bidder certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained.

As used in this certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color or national origin, because of habit, local custom, or otherwise.

The Bidder agrees that (except where it has obtained identical certification from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontract exceeding \$10,000 and that it will retain such certifications in its files.

Name of Bidder	
Signature of Authorized Representative	Date
Printed or Typed Name and Title of Authorized Representative	

## **DISPUTES DISCLOSURE FORM**

Answer the following questions by answering "YES" or "NO". If you answer "YES", please explain in the space provided, please add a page(s) if additional space is needed.

1.	Has your firm, or any of its officers, received a reprimand of any suspended by the Department of Professional Regulation or any other reor professional association within the last five (5) years?	egulatory agency
2.	Has your firm, or any member of your firm, been declared in defau removed from a contract or job related to the services your firm provid course of business within the last five (5) years? (Y/N)	es in the regular
3.	Has your firm had filed against it or filed any requests for equitable adjuctains or litigation in the past five (5) years that is related to the seprovides in the regular course of business? (Y/N) Not explanation must state the nature of the request for equitable adjustment or litigation, a brief description of the case, the outcome or status monetary amounts or extended contract time involved.	ervices your firm te: If yes, the nt, contract claim
missta	eby certify that all statements made are true and agree and unde atement or misrepresentation or falsification of facts shall be cause for for the consideration of the project identified.	
Firm		
Signat	ture of Authorized Representative Date	
Printed	d or Typed Name and Title of Authorized Representative	

#### DRUG FREE WORKPLACE FORM

The undersigned, in accordance with Florida Statute 287.087 hereby certifies that the company named below does:

- 1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and Employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3. Give each employee engaged in providing the commodities or contractual services that are proposed a copy of the statement specified in item 1.
- 4. In the statement specified in item 1, notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

Bidder / Contractor		
Signature of Authorized Representative	Date	
Printed or Typed Name and Title of Authorized Penrosentative		
	Date	

#### CERTIFICATION REGARDING NON-SCRUTINIZED COMPANIES

A company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with an agency or local governmental entity for goods or services of any amount if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, or is engaged in a boycott of Israel.

Section 287.135, Florida Statutes, prohibits local governments from contracting with companies, for goods or services of One Million and 00/100 Dollars (\$1,000,000.00) or more that are 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 s. 215.473; or is engaged in business operations in Cuba or Syria.

As the person authorized to sign on behalf of the Bidder, I hereby certify that the company identified below in the section entitled "Bidder/Contractor Name" is not listed on the Scrutinized Companies that Boycott Israel List, is not engaged in any boycott of Israel, is not listed on the Scrutinized Companies with Activities in Sudan List, is not listed on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, and is not engaged in business operations in Cuba or Syria. I understand that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject the successful Bidder to termination of the awarded Agreement, civil penalties, attorney's fees, and/or costs.

By the signature(s) below, I/we, the undersigned, as authorized signatory to commit the firm, certify that the information as provided in this certification, is truthful and correct at the time of submission.

Name of Bidder / Contractor Name			FEIN
Mailing Address			
Phone No.	Fax No.	E-Mail Address	
Signature of Author	ized Representative	Date	
Printed or Typed Na	ame and Title of Authorized Repre	esentative	

## **UNAUTHORIZED (ILLEGAL) ALIEN WORKERS AFFIDAVIT**

The Owner will not intentionally award publicly-funded contracts to any Contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in 8 U.S.C. Section 1324a(e) Section 274A(e) of the Immigration and Nationally Act (INA). The Owner shall consider the employment by the Contractor of unauthorized aliens, a violation of Section 274A(e) of the INA. Such violation by the Contractor of the employment provisions contained in Section 274A(e) of the INA shall be grounds for immediate termination of this Agreement by the Owner.

The Affiant identified below deposes and states that:

- The below identified Contractor does not and will not during the performance of any contract resulting from the solicitation identified below employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.
- 2. Upon request of the Owner, it will provide copies of Immigration Form I-9 for each person associated with the above named company who has been or is present at the designated jobsite associated with any work or project resulting from this solicitation.

Bidder / Contractor		
Signature of Authorized Representati	ive (Affiant)	Date
Printed or Typed Name and Title of A	Authorized Representative (	Affiant)
STATE OF FLORIDA COUNTY OF		
The foregoing instrument was acknowledged notarization, this day of as, whose	before me by means of phy	sical presence or online , by
as	for	
that he/she is authorized to execute this docu	name is subscribed to this instru- iment and thereby bind the Corpo	ment, who personally swore or affirmed pration / LLC.
(In the last three blanks fill in the name of the Officer ackn	owledging this document, title of Officer / N	Manager, and name of the Corporation or LLC)
Signature of Notary Public - State of Florida	Print, Type, or Stamp C	ommissioned Name of Notary Public
Personally Known	OR Produced Identification	
Type of Identification Produced:		
	END OF SECTION	

The Quarry CDD 2022 Shoreline Phase II

#### **E-VERIFY COMPLIANCE AFFIDAVIT**

Project Name:	The Quarry CDD 2022 Shoreline Phase II
Bid No.:	

The Affiant identified below attests to the following:

- 1. That the Contractor is currently in compliance with and throughout the term of the above identified project and will remain in compliance with Executive Order 11-02, issued by the Office of the Governor, State of Florida, requiring the use of the Department of Homeland Security's Status Verification ("E-Verify") System to ensure that all employees of the Contract and the Contractor's subcontractors performing work under the above-listed Contract are legally permitted to work in the United States.
- 2. Each Contractor that performs work under the Project referenced above shall provide the Owner a copy of the "Edit Company Profile" screen indicating enrollment in the E-Verify Program.
- 3. The Contractor will register and participate in the work status verification for all newly hired employees of the contractor and for all subcontractors performing work on the above-listed Contract.
- 4. The Contractor agrees to maintain records of its compliance with the verification requirements as outlined in this Affidavit and, upon request of the any Authority having jurisdiction over the Project, including, but not limited to, the State of Florida, agrees to provide a copy of each such verification to that Authority.
- 5. That all persons assigned by the Contractor or its subcontractors to perform work under the above identified project will meet the employment eligibility requirements as established by the Federal Government and the government of the State of Florida.
- 6. That the Contractor understands and agrees that its failure to comply with the verification requirements as set forth herein or its failure to ensure that all employees and subcontracts performing work under the above identified project are legally authorized to work in the United States and the State of Florida constitute a breach of contract for which the Owner may immediately terminate the Contract without notice and without penalty. Contractor further understands and agrees that in the event of such termination, the Contractor shall be liable to the Owner for any costs incurred by the Owner as a result of the Contractor's breach.
- 7. That for the purposes of this Affidavit, the following definitions apply:
  - "Employee" Any person who is hired to perform work in the State of Florida.

"Status Verification System" – the procedures developed under the Illegal Immigration Reform and Immigration Responsibility Act of 1996, operated by the Department of Homeland Security and known as the "E-Verify Program", or any successor electronic verification system that may replace the E-Verify Program.

Contractor		
Signature of Authorized Representative	(Affiant)	Date
Printed or Typed Name and Title of Auth	norized Represen	tative (Affiant)
STATE OF FLORIDA COUNTY OF		
The foregoing instrument was acknowledged before notarization, this day of as		. bv
as, whose nam	for	is instrument, who personally swore or affirmed
that he/she is authorized to execute this document	nt and thereby bind th	ne Corporation / LLC.
(In the last three blanks fill in the name of the Officer acknowled		
Signature of Notary Public - State of Florida	Print, Type, or S	Stamp Commissioned Name of Notary Public
Personally Known OF	R Produced Identifica	ition
Type of Identification Produced:		

#### **AMERICANS WITH DISABILITIES ACT AFFIDAVIT**

By executing this Certification, the undersigned Contractor certifies that the information herein contained is true and correct and that none of the information supplied was for the purpose of defrauding the Owner.

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to comply with the rules, regulations and relevant orders issued pursuant to the Americans with Disabilities Act (ADA), 42 USC s. 12101 et seq. It is understood that in no event shall the Owner be held liable for the actions or omissions of the Contractor or any other party or parties to the Agreement for failure to comply with the ADA. The Contractor agrees to hold harmless and indemnify the Owner, its agents, officers or employees from any and all claims, demands, debts, liabilities or causes of action of every kind or character, whether in law or equity, resulting from the Contractor's acts or omissions in connection with the ADA.

Contractor		
Signature of Authorized Representation	ve (Affiant)	Date
Printed or Typed Name and Title of A	uthorized Representative (Affiant)	
STATE OF FLORIDA COUNTY OF		
The foregoing instrument was acknowledged notarization, this day of	before me by means of physical presence o , , by for name is subscribed to this instrument, who person	r online
, whose r that he/she is authorized to execute this docu	name is subscribed to this instrument, who persoment and thereby bind the Corporation / LLC.	nally swore or affirmed
(In the last three blanks fill in the name of the Officer acknowledge)	owledging this document, title of Officer / Manager, and name o	f the Corporation or LLC)
Signature of Notary Public - State of Florida	Print, Type, or Stamp Commissioned Na	nme of Notary Public
Personally Known	OR Produced Identification	
Type of Identification Produced:		

The Quarry CDD 2022 Shoreline Phase II

#### FINANCIAL INFORMATION FORM

If requested by the Owner, the following information is to be provided by the Bidder as part of the Owner's evaluation of the Bidder after Bids have been received by the Owner:

#### 1. Bank References:

Name of Bank	Bank Address	Contact Name and Title	Contact Phone No.

- 2. Attach a financial statement including Bidder's latest balance sheet and income statement showing the following items:
  - A. Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials, real estate, stocks and bonds, equipment, furniture and fixtures, inventory and prepaid expenses).
  - B. Net Fixed Assets
  - C. Other Assets
  - D. Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, accrued salaries, real estate encumbrances and accrued payroll taxes)
  - E. Other Liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus, and retained earnings)

- F. State the name of the firm preparing the financial statement and date thereof:
- G. This financial statement must be for the identical organization named on page one. If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent, subsidiary). Please note, that the Owner reserves the right to reject financial statement(s) submitted by other than the organization named on page one.
- 3. State the names and addresses of all businesses and/or individuals who own an interest of more than five percent (5%) of the Bidder's business and indicate the percentage owned of each such business and/or individual:

Name	Address	Percentage Owned
Bidder		
Signature of Authorized Representative Date		
Printed or Typed Name and Title	e of Authorized Representative	

# NOTICE OF AWARD FORM

Project Name and	d Bid No.:	The Quarry CDD 2022 Shoreline Phase II
above described V	VORK in resp	ne BID submitted by you, dated for the conse to the Invitation for Bids and Bidding Documents.  ur BID has been accepted for BID items in the amount of \$
required CONTRA within fourteen (14 Agreement and to receipt of this Notion OWNER's acceptate	ACTOR's Per calendar da furnish said ice, said OW ance of your	ructions to Bidder to execute the Agreement and furnish the rformance Bond, Payment Bond, and certificates of insurance ays from the date of this Notice to you. If you fail to execute said Bonds and insurance within fourteen (14) calendar days from NER will be entitled to consider all your rights arising out of the BID as abandoned and as a forfeiture of your BID BOND. The hother rights as may be granted by law.
You are required to	o return an a	cknowledged copy of this NOTICE OF AWARD to the OWNER.
Dated this	day of	,,
OWNER:		
	(Name of	f OWNER)
	By (Signa	ature)
	(Printed I	Name and Title)
		ACCEPTANCE OF NOTICE
Receipt and accep		above NOTICE OF AWARD is hereby acknowledged byhis,
	By	
		lame and Title

The Quarry CDD 2022 Shoreline Phase II

To:

#### AGREEMENT FORM

## PART 1 GENERAL

Owr	S AGREEMENT, made this day of, hereinafter called the, whose principal and local address
is	, hereinafter called
the (	Contractor.
The	Owner and Contractor Agree as follows:
A.	Contract Documents
	The Contract Documents include the Agreement, Addenda (which pertain to the Contract Documents), Contractor's Bid, Notice to Proceed, the Bonds, the General Conditions, the Supplementary Conditions, the Specifications listed in the Index to the Project Manual, any technical specifications as incorporated by the Project Manual; the Drawings as listed in the Project Manual, all Writter Amendments, Change Orders, Work Change Directives, Field Orders, and Engineer's written interpretations and clarifications issued on or after the Effective Date of this Agreement. These form the Contract and all are as fully a part of the Contract as if attached to this Agreement or repeated herein.
B.	Scope of Work
	The Contractor shall perform all Work required by the Contract Documents for the construction of the
_	Occupant Time
C.	Contract Time
	The Contractor shall begin Work after the issuance of a written Notice to Proceed from Owner and shall substantially complete the Work within the Contract Time identified in Paragraphs 1.02.C.5 of the Bid Form, which is calendar days. The Work shall be finally complete, ready for Final Payment in accordance with the General Conditions, within45 calendar days from the actual date of substantial completion.
D.	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 no

substantially complete within the time specified in Paragraph C above, plus any extensions thereof allowed in accordance with the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal arbitration proceeding the actual loss suffered by OWNER if the Work is not substantially complete 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 \$ for each calenda
day that expires after the time specified in Paragraph C for substantia
completion until the Work is substantially complete. It is agreed that if this Work
is not Finally completed in accordance with the Contract Documents, the
CONTRACTOR shall pay the OWNER as liquidated damages for delay, and no
as penalty, one-fourth (1/4) of the rate set forth above.

#### E. Contract Price

**Unit Price Contract** 

The Owner will pay the Contractor in o	current funds for the performance of the
Work, subject to additions and deduction	ons by Change Order and subject to the
Measurement and Payment Provision	ns, and subject to actual constructed
quantities; the Total Contract Price of	•
Dollars (\$).	Payments will be made to the Contractor
on the basis of the Schedule of Unit Pr shall be as fully a part of the Contract as	rices included as a part of his Bid, which is if attached or repeated herein.
• •	•

## F. Payment Procedures

- 1. Application for Payment: CONTRACTOR shall submit Applications for Payment in accordance with Article 14.02 of Section 00700 General Conditions, Section 00800 Supplementary Conditions 14.02.A.1 and 14.02.A.2, and Section 00625 Application for Payment.
- 2. Final Payment: Upon Final Inspection and Final Completion and acceptance of the Work in accordance with Articles 14.06 and 14.07 of Section 00700 General Conditions, OWNER shall pay the remainder of the contract price as provided in the General Conditions.

## G. Retainage

Retainage for this Project is 5%.

## H. Engineer

The Project has been designed by CPH, Inc., referred to in the documents as the Engineer, whose authority during the progress of construction is defined in the General Conditions and Supplementary Conditions.

IN WITNESS WHEREOF,	the parties	hereto	have	executed	this	Agreement	the	day	and	year
first above written.						-				

mst above written.		
CONTRACTOR:		

Name of Firm	
By (Signature)	(SEAL)
Printed Name and Title	
ATTEST:	
By (Signature)	
Printed Name and Title	
OWNER:	
Name of Owner	
By (Signature)	(SEAL)
Printed Name and Title	
ATTEST:	
By (Signature)	
Printed Name and Title	

## **NOTICE TO PROCEED FORM**

То:	
Notice to Proceed D	ate:
Project Name:	The Quarry CDD 2022 Shoreline Phase II
Bid No.:	
above Notice to Pro	ed to commence Work in accordance with the Agreement dated This Notice authorizes the Contractor to commence construction on the ceed Date and, in accordance with the Agreement, all Work shall be
Therefore, the Date o Agreement, all Work s	e within calendar days of the date of this Notice to Proceed. f Substantial Completion is Per the shall be finally substantially complete within calendar days of the mpletion. Therefore, the Date of Final completion is
ISSUED BY: (N	(Name of Owner)
	By (Signature)
	(Printed Name and Title)
	ACCEPTANCE OF NOTICE
	ce of the above Notice To Proceed is hereby acknowledged by this day of
	Ву
	Printed Name and Title

The Quarry CDD 2022 Shoreline Phase II

## **PERFORMANCE BOND**

(100% of Contract Price)

Project Name:	The Quarry CDD 2022 Shoreline Phase II				
	Contract No	o.:			
	Contractor		Surety		
Name:					
Address:					
Phone No.:					
		Owner			
	Name:			_	
	Address:			_	
	Phone No.:			_	
KNOW ALL ME	N BY THESE PRESI				
and firmly boun, lawful truly to be mad of their heirs, e	nd unto the Owner in to money of the United e, the Contractor and executors, administrat	the full and just s States of Amer SURETY bind t	sum of \$ica, to the payment of themselves, their rep	, as SURETY, are held of which sum, well and resentatives, and each and severely, firmly by	
these presents.					
The Project is I	ocated at:				
General descrip	otion of the Work:				
WHEREAS, the	Contractor has by wri	tten Agreement on the Owner for Cor		, 20 _, for the project entitled _, with conditions and	
	e further described in the reof for the purpose of		d Agreement, which A	greement is by reference	
NOW, THEREF	ORE, the condition of	this obligation is	such that if Principal:		
Promptly and fa	aithfully performs its di	uties. all the cove	enants, terms, conditi	ons. and agreements	

The Quarry CDD 2022 Shoreline Phase II

of said Contract including, but not limited to the insurance provisions, guaranty period and the warranty provisions, in the time and manner prescribed in the Contract, and

Pays Owner all, losses, damages, delay damages (liquidated or actual), expenses, costs and attorneys' fees, including costs and attorney's fees on appeal that Owner sustains resulting directly or indirectly from any breach or default by Principal under the Contract, then this bond is void; otherwise it shall remain in full force and effect.

- 1. Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the SURETY shall promptly remedy the default or shall promptly:
  - A. Complete the Contract in accordance with its terms and conditions; or
  - B. Expeditiously obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by SURETY of the lowest responsible qualified bidder, award a contract; or, if the Owner elects, upon determination by the Owner and the SURETY jointly of the lowest responsible bidder, to have the SURETY arrange for a contract between such bidder and Owner, and for the SURETY to make available as Work progresses sufficient funds to pay the cost of completion less the balance of the Contract price (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph). The term "balance of the Contract price," as used in this Bond, shall mean the total amount payable by Owner to Contractor under the Contract and any approved change orders thereto, less the amount properly paid by Owner to Contractor. The SURETY shall pay Owner all remaining losses, delay and disruption damages, expenses, costs, and statutory attorney's fees, including appellate proceedings, that Owner sustains because of a default by Contractor under the Contract.
- 2. Any changes in or under the Contract Documents (which include the Plans, Drawings, and Specifications) and compliance or noncompliance with any formalities connected with the Contract or the changes therein shall not affect SURETY's obligations under this Bond and SURETY hereby waives notice of any such changes.
- 3. The SURETY's monetary obligations to the Owner shall not be reduced by legal fees and costs incurred by the SURETY arising out of Contractor's default.
- 4. The SURETY, for value received, hereby stipulates and agrees that its obligations hereunder shall be direct and immediate and not conditional or contingent upon Owner's pursuit of its remedies against Principal, shall remain in full force and effect notwithstanding (i) amendments or modifications to the Contract entered into by Owner and Principal without the SURETY's knowledge or consent (ii) waivers of compliance with terms of the Contract granted by Owner to Principal without the SURETY's knowledge or consent, or (iii) the discharge of Principal from its obligations under the Contract as a result of any proceeding initiated under the Bankruptcy Code of 1978, as the same may be amended, or any similar state or federal law, or any limitation of the liability of Principal or its estate as a result of any such proceeding.

- 5. The Surety shall indemnify and hold the Owner harmless from any and all claims and damages, arising from the Contractor's default under the Contract including, but not limited to, contractual damages, expenses, costs, injury, negligent default, or intentional default, patent infringement and actual damages in accordance with the Contract.
- 6. In the event that the SURETY fails to fulfill its obligations under this Performance Bond, then the SURETY shall indemnify and hold the Owner harmless from any and all loss, damage, cost and expense, including reasonable attorneys' fees and costs for all trial and appellate proceedings, resulting from the SURETY's failure to fulfill its obligations hereunder. This paragraph shall survive the termination or cancellation of this Performance Bond.
- 7. The Contractor shall save the Owner harmless from any and all damages, expenses and costs which may arise by virtue of any defects in said work or materials within a period of two (2) years from the date of Final Completion of the Project.
- 8. This Performance Bond is intended to comply with the requirements of Section 255.05, Florida Statutes, as amended, and additionally, to provide contract rights more expansive than as required by statute.

IN WITNESS WHEREOF, this ins	trument is executed this day of			
, 20 ATTEST:	PRINCIPAL/CONTRACTOR			
	PRINCIPAL / CONTRACTOR			
By: Secretary	By: CONTRACTOR Signatory Authority			
Typed Name of Secretary	Typed Name and Title			
(CORPORATE SEAL)	Address			
(Witness to CONTRACTOR)	City, State, Zip			
Typed Name	Telephone No. Facsimile No.			
(Witness to CONTRACTOR)				
Typed Name				

Name of Project

ATTEST:	SURETY
(SURETY) Secretary	SURETY
Typed or Printed Name	Ву:
Typed of Fillited Name	Typed or Printed Name
	Typed or Printed Name
	Title
Witness as to SURETY	
Typed or Printed Name	Address
Witness as to SURETY	City, State, Zip
Typed or Printed Name	Telephone No. Facsimile No.

**NOTE**: Date of this Performance Bond must not be prior to date of the Agreement. If CONTRACTOR is a joint venture, all ventures shall execute this Performance Bond. If CONTRACTOR is a Partnership, all partners shall execute this Performance Bond.

**IMPORTANT**: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Florida, unless otherwise specifically approved in writing by Owner.

All bonds shall be originals and issued or countersigned by a local producing agent who is authorized to operate in the State of Florida. Attorneys-in-fact who sign Bid Bonds or Performance/Payment Bonds must file with such bond a certified copy of their Power of Attorney to sign such Bond. **Agents of surety companies must list their name, address, and telephone number on all Bonds.** 

# **PAYMENT BOND**

(100% of Contract Price)

Proje	ect Name:			
	Contract N	o.:		-
(	Contractor		Surety	
Name:			_	
Address: _			_	
Phone No.:				
		Owner		
	Name:			<u></u>
	Address:			<u></u>
	Phone No.:			
KNOW ALL MEI	N BY THESE PRES	ENTS that		
and firmly bound , lawful r truly to be made	d unto the Owner in money of the United e, the Contractor and	the full and just I States of Ame d SURETY bind	sum of \$ rica, to the payment themselves, their re	ty, as SURETY, are held tof which sum, well and epresentatives, and each y and severely, firmly by
The Project is lo	cated at:			
General descrip	tion of the Work:			
				, 20 , for the project entitled , with conditions and
	further described in the for the purpose of			Agreement is by reference

Name of Project

**NOW, THEREFORE,** the condition of this obligation is such that if Principal shall promptly make payments to all claimants as defined in Section 255.05(1), 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 Agreement, then this obligation shall be void; otherwise, it shall remain in full force and effect subject, however, to the following conditions:

- 1. This Payment Bond is furnished for the purpose of complying with the requirements of Section 255.05, Florida Statutes, as same may be amended.
- 2. Any action instituted by a claimant under this Bond for payment must be in accordance with the notice and time limitation provisions in Sections 255.05(2) and 255.05(10), Florida Statutes.
- 3. This Payment Bond is conditioned that Contractor shall promptly make payments to all persons defined in Section 713.01, Florida Statutes, whose claims derive from the prosecution of the Work provided for in the Contract.
- 4. Pursuant to Section 255.05, Florida Statutes, a claimant, except a laborer, who is not in privity with the Contractor shall, before commencing or not later than forty-five (45) days after commencing to furnish labor, services, or materials for the prosecution of the Work, serve the contractor with a written notice that he or she intends to look to the Bond for protection. A claimant who is not in privity with the Contractor and who has not received payment for furnishing his or her labor, services, or materials shall serve a written notice of nonpayment on the Contractor and on the SURETY. The notice of nonpayment shall be under oath and served during the progress of the Work or thereafter but may not be served earlier than forty-five (45) days after the first furnishing of labor, services, or materials by the claimant or later than ninety (90) days after the final furnishing of the labor, services, or materials by the claimant or, with respect to rental equipment, later than ninety (90) days after the date that the rental equipment was last on the job site available for use.
- 5. The time periods for service of a notice of nonpayment or for bringing an action against a Contractor or a Surety shall be measured from the last day of furnishing labor, services, or materials by the claimant and may not be measured by other standards, such as the issuance of a certificate of occupancy or the issuance of a certificate of substantial completion.
- 6. An action, except an action for recovery of retainage, must be instituted against the Contractor or the SURETY on the payment bond within one (1) year after the performance of the labor or completion of delivery of the materials or supplies. An action for recovery of retainage must be instituted against the Contractor or the SURETY within one (1) year after the performance of the labor or completion of delivery of the materials or supplies.
- 7. The claimant shall have a cause of action against the Contractor and SURETY for the amount due him or her, including unpaid finance charges due under the claimant's contract. Such action may not involve the Owner in any expense.

Name of Project PAYMENT BOND (100% of Contract Price)

- 8. Any changes in or under the Contract or Contract Documents and compliance or non-compliance with any formalities connected with the Contract or the changes therein shall not affect SURETY's obligations under this Payment Bond and SURETY hereby waives notice of any such changes. Further, Principal and SURETY acknowledge that the sum of this Payment Bond shall increase or decrease in accordance with the Change Orders (unilateral or directive change orders and bilateral change orders) or other modifications to the Contract or Contract Documents. This Payment Bond shall not cover any components or materials directly purchased and paid for by the Owner.
- 9. The Performance Bond and this Payment Bond and the covered amounts of each are separate and distinct from each other. This Payment Bond shall be construed as a statutory Payment Bond under Section 255.05, Florida Statutes, and not as a common law bond.

IN WITNESS WHEREOF, this instrument is executed this day of			
, 20  ATTEST:	PRINCIPAL/CONTRACTOR		
	PRINCIPAL / CONTRACTOR		
By: Secretary	By: CONTRACTOR Signatory Authority		
Typed Name of Secretary	Typed Name and Title		
(CORPORATE SEAL)	Address		
(Witness to CONTRACTOR)	City, State, Zip		
Typed Name	Telephone No. Facsimile No.		
(Witness to CONTRACTOR)			
Typed Name	<u>—</u>		

ATTEST:	SURETY
(SURETY) Secretary	SURETY
Typed or Printed Name	Ву:
	Typed or Printed Name
	Title
Witness as to SURETY	
Typed or Printed Name	Address
Witness as to SURETY	City, State, Zip
Typed or Printed Name	Telephone No. Facsimile No.

**NOTE**: Date of this Payment Bond must not be prior to date of the Agreement. If CONTRACTOR is a joint venture, all ventures shall execute this Payment Bond. If CONTRACTOR is a Partnership, all partners shall execute this Payment Bond.

**IMPORTANT**: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Florida, unless otherwise specifically approved in writing by Owner.

All bonds shall be originals and issued or countersigned by a local producing agent who is authorized to operate in the State of Florida. Attorneys-in-fact who sign Bid Bonds or Performance/Payment Bonds must file with such bond a certified copy of their Power of Attorney to sign such Bond. **Agents of surety companies must list their name, address, and telephone number on all Bonds.** 

# **CONSENT OF SURETY TO FINAL PAYMENT**

WE,	, having heretofore executed Performance
and Payment Bonds No.	, having heretofore executed Performance for the Project known as* hereby agree that after referred to as OWNER may make full payment of the percentage, to the CONTRACTOR, that full payment to the CONTRACTOR is appropriate and
, in the amount of \$	<u>*</u> hereby agree that
, herein	after referred to as OWNER may make full payment of the
final estimate, including the retained	percentage, to the CONTRACTOR,
The Surety concurs	that full payment to the CONTRACTOR is appropriate and
the Surety expressly releases the OV	VNER from all liability to Surety resulting from full payment
to CONTRACTOR. It is fully unders	tood that the granting of the right to the OWNER to make
	CONTRACTOR and/or his assigns, shall in no way relieve
this surety company of its obligations	s under its bond, as set forth in the specifications, contract
and bond pertaining to the above pro	ject.
* = Dollar Value of Issued Performance and Payme	ent Bonds
IN WITNESS WHEREOF, the	has
	d on its behalf by its
and its duly a	authorized attorney in fact, and its corporate seal to be
hereunto affixed, all on this	day of
	· <del></del>
Surety	Attorney-in-Fact
(Power of Attorney must be a	ttached if executed by Attorney in Fact)
STATE OF FLORIDA	
COUNTY OF	
The foregoing instrument was acknowledged	before me by means of physical presence or online
notarization, this day of	,, by
aswhose i	for, by name is subscribed to this instrument, who personally swore or affirmed
that he/she is authorized to execute this docu	ment and thereby bind the Corporation / LLC.
(In the last three blanks fill in the name of the Officer acknowledge)	owledging this document, title of Officer / Manager, and name of the Corporation or LLC)
Signature of Notary Public - State of Florida	Print, Type, or Stamp Commissioned Name of Notary Public
Personally Known	OR Produced Identification
Type of Identification Produced:	
. 170 0. 140/14/10440011 1044004.	<del></del>

**END OF SECTION** 

#### INSURANCE REQUIREMENTS

Project Name:	
Owner:	
Owner Address / Phone No.:	
Engineer:	CPH, Inc.
Engineer Address / Phone No.:	500 West Fulton St., Sanford, FL 32771 Ph. 407-322-6841

The following insurance requirements are required to be met, in addition to requirements defined in Sections 00700 (General Conditions) and 00800 (Supplementary Conditions). Any conflict between the requirements contained in this section and any other section, it is hereby noted that the requirements of this section as amended shall prevail.

- 1. The successful Bidder will be required to provide, to the Owner and the Engineer, prior to commencing any work, a Certificate of Insurance which verifies coverage in compliance with the requirements outlined in Sections 00700 (General Conditions) and 00800 (Supplementary Conditions) and as indicated herein. Any Work initiated without completion of this requirement shall be unauthorized and the Owner and Engineer will not be responsible.
- 2. The required insurance policies shall be endorsed to provide primary and noncontributory coverage to the Owner and all of the Additional Insureds in relation to any and all other liability insurance and shall not contain co-insurance provisions.
- 3. All policies are to provide a Waiver of Subrogation endorsement in favor of the Owner and all of the Additional Insureds.
- 4. All policies, except for professional liability policies and workers compensation policies are to be endorsed to include the Owner and the Engineer as Additional Insured. The Owner and Engineer shall be Certificate Holders.
- 5. Builder's Risk ("All Risk") insurance is required for all projects that include above grade construction, installation of structures, pipeline installation, and for all projects where the Contractor proposes to be paid for stored material.
- 6. In the event that the insurance coverage expires prior to the completion of the project, a renewal certificate shall be issued 30 days prior to said expiration date.
- 7. All limits are per occurrence and must include Bodily Injury and Property Damage.
- 8. All policies must be written on occurrence form, not on claims made form.
- 9. Self insured retentions shall not be allowed on any liability coverage.

- 10. In the notification of cancellation: The Owner and the Engineer shall be endorsed onto the policy as a cancellation notice recipient. Should any of the policies be cancelled before the expiration date thereof, notice shall be delivered to the Owner in accordance with the policy provisions.
- 11. All insurers must have an A.M. Best rating of at least A-VII.
- 12. It is the responsibility of the Contractor to responsible to ensure that all Subcontractors retained by the Prime Contractor shall provide coverage as defined herein before and after and are the responsibility of said Prime Contractor in all respects.
- 13. All certificates of insurance, notices, etc. must be provided to the above addresses.

#### **END OF SECTION**

# **APPLICATION FOR PAYMENT**

Projec	t Name:	The Quarry CDD 2022 S	Shoreline Phase II	
Bid No	).:			
Contra	ctor:			
Payme	ent Request No.:			
Period	Ending Date:			
		STATEMENT C	F WORK	
1.	Original Contract	Price		
2.	Net Change Orde			
3.	Current Contract			
4.		and Stored to Date		
5.	Amount Retained			
6.		s Retainage (Line 4 Minu	s Line 5)	
7.	Previous Paymer		,	
8.	Amount Due This	Payment (Line 6 Minus L	ine 7)	
9.	Balance to Finish	, Less Retainage (Line 3	Minus Line 4)	
progress Agreen obligati Payme inclusiv listed i security the Co Materia all info Applica accords	ss payments rece nent referred to a ons of the Contrac nt under said Agre- re; and, (2) all Wor n or covered by to y interests and encentractor to pay in falmen and Equipm rmation provided ation for Payment ance with the terms	ived from the Owner of bove have been applied ctor incurred in connection ement, being Applications rk, materials and equipment his Application for Paymoumbrances; (3) all previoull (less retainage) all ament Suppliers; and (4) all on the Subcontractor and are true and correct; ar	on account of Wall by the Contract of with Work cover for Payment number of the contract of the country of the	erjury that (1) all previous fork performed under the tor to discharge in full all red by prior Application for abered 1 through
CONT	RACTOR:		_ (S	EAL)
Ву	(Signature of Auth	orized Representative)	Da	ate
Printed	Name and Title		-	

The Quarry CDD 2022 Shoreline Phase II

STATE OF FLORIDA COUNTY OF		
The foregoing instrument was acknowl notarization, this day of as	edged before me by means of physical presen,, by	ce or online
that he/she is authorized to execute thi	whose name is subscribed to this instrument, who p is document and thereby bind the Corporation / LLC	ersonally swore or affirmed
	cer acknowledging this document, title of Officer / Manager, and na	
Signature of Notary Public - State of FI	orida Print, Type, or Stamp Commissione	d Name of Notary Public
	OR Produced Identification	•
SUBCONTRACTOR AND SUP	PLIER LISTING	
The following is a list of Subco Materials, Supplies, or Equipm dollar amount of the work applie	ontractors and Suppliers who have performent during time period represented by the ed for (add to the table as necessary to pro	is Application and the wide a complete list).
NAME	ADDRESS	AMOUNT
PAYMENT OF THE AMOUNT	REQUESTED ABOVE IS RECOMMENDE	D FOR APPROVAL:
By	 	<u> </u>
By	 Date	<del></del>
•		

The Quarry CDD 2022 Shoreline Phase II

#### **REQUIRED ATTACHMENTS**

#### Monthly Application For Payment:

- 1. Updated Project Schedule
- Waivers and Releases Of Lien Upon Progress Payment or Consent of Surety for Progress Payment

# <u>Final Application For Payment (Submitted With or Prior to the Final Application for Payment):</u>

- 1. Consent of Surety to Final Payment
- 2. Completed Material and Workmanship Bond
- 3. Certificate of Final Completion
- 4. Manufacturer operation and maintenance instructions
- 5. Manufacturers' guarantees, warranties, bonds, and letters of coverage extending beyond the time limitations of the Contractor's guarantee
- 6. All required Record Drawings
- 7. All required directional bore logs
- 8. Stormwater NPDES Notice of Termination (If Required)

**END OF SECTION** 

# **CERTIFICATE OF SUBSTANTIAL COMPLETION**

Project Name:	The Quarry CDD 2022 Shoreline Phase II			
Bid No.:				
Owner:				
Contractor:				
Agreement Date:				
	antial Completion applies to all work under the Contract Documents or rts thereof if construction is phased by contract:			
ISSUED TO:				
Co	ntractor:			
Contractor, Engineer, a	ertificate applies has been inspected by authorized representatives of nd Owner and that Work is hereby declared to be substantially with the Contract Documents on:			
	Date of Substantial Completion			
and the failure to include and warrant all the Work	leted or corrected is attached hereto. This list may not be all-inclusive, an item in it does not alter the responsibility of Contractor to complete in accordance with the Contact Documents. All items on the list shall d by Contractor within days of the above date of Substantial			

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligations to complete the Work in accordance with the Contract Documents.

Executed by E	Engineer on	Date
Ву:	Engineer:  (Signature)	CPH, Inc.
Executed by 0	(Printed Name	e and Title)  Date
Ву:	Owner:(Signature)	
	(Printed Name	e and Title)
Contractor accepts this Certificate of Substa	antial Completi	on on Date
Ву:	Contractor:(Signature)	
	(Printed Name	e and Title)

## **END OF SECTION**

# **CERTIFICATE OF FINAL COMPLETION**

Project Name:	The Quarry CDI	2022 Shoreline Phase II
Bid No.:		
Owner:		
Contractor:		
Agreement Date:		
		es to all work under the Contract Documents or the tion is phased by contract:
ISSUED TO:		
Cor	ntractor:	
	d Owner and tha	has been inspected by authorized representatives of it Work is hereby declared to be finally complete in on:
		Date of Final Completion
	-	of Work except any and all latent defects, warranty Completion obligations of the Contractor under the
Executed b	y Engineer on	Date
	Engineer:	CPH, Inc.
	Ву:	(Signature)
		(Printed Name and Title)

The Quarry CDD 2022 Shoreline Phase II

**CERTIFICATE OF FINAL COMPLETION** 

Contractor accepts this Certificate of Final	Completion on
·	Date
Contractor:	
Den	
Ву:	(Signature)
	(Printed Name and Title)
Accepted by Owner on	Data
	Date
Owner:	
Ву:	
,	(Signature)
	(Printed Name and Title)

# **END OF SECTION**

## CONTRACTOR'S WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT

The undersigned Lienor, in consi	deration of the sum of \$	
, hereby waives and rele	eases its lien and right to claim a lien	for labor, services or
materials furnished through	to the <u>The</u>	Quarry Community
	ect known as the The Quarry CDD 202	
The labor, services or materials f	urnished relate to improvements to the fo	llowing property:
The Qua	arry. 8975 Kayak Dr, Naples, FL 34120	
This waiver and release does no after the date specified.	ot cover any retention or labor, services,	or materials furnished
DATED on	, 20	-
Lienor:		<del>-</del>
Address:		-
		_
Ву:		<u>-</u>
Signature		
Printed Name and Title		-
STATE OF FLORIDA		
COUNTY OF		
The foregoing instrument was acknowled notarization, this day of	dged before me by means of physical presen, by, by forsose name is subscribed to this instrument, who p	ce or online
aswh	tor nose name is subscribed to this instrument, who n	ersonally swore or affirmed
that he/she is authorized to execute this	document and thereby bind the Corporation / LLC	
(In the last three blanks fill in the name of the Office	er acknowledging this document, title of Officer / Manager, and na	nme of the Corporation or LLC)
Signature of Notary Public - State of Flo	rida Print, Type, or Stamp Commissione	d Name of Notary Public
Personally Known	OR Produced Identification	
Type of Identification Produced:		
	END OF SECTION	

The Quarry CDD 2022 Shoreline Phase II

CONTRACTOR'S WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT

# SUBCONTRACTOR'S / SUPPLIER'S WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT

The undersign	ed Lienor, in consideration of the sum of \$
, hereb	by waives and releases its lien and right to claim a lien for labor, services or
materials furni	by waives and releases its lien and right to claim a lien for labor, services or shed through to to (the Contractor) for the Project known as the <u>The Quarry CDD 2022</u>
Charolina Dha	(the Contractor) for the Project known as the <u>The Quarry CDD 2022</u>
services or ma	<u>se II whose Owner is the The Quarry Community Development District.</u> The labor, terials furnished relate to improvements to the following property:
00111000 01 1110	terials farmisfied relate to improvements to the following property.
	The Quarry. 8975 Kayak Dr, Naples, FL 34120
This waiver ar after the date s	nd release does not cover any retention or labor, services, or materials furnished specified.
DATED on	, 20
Lienor:	
Address:	
Ву:	
Signatu	ure
_	
Printed	Name and Title
Timed	Traine and The
STATE OF FLOR	
COUNTY OF	
The foregoing inst	trument was acknowledged before me by means of physical presence or online
as	day of,, by for, whose name is subscribed to this instrument, who personally swore or affirmed
that he/she is auth	, whose name is subscribed to this instrument, who personally swore or affirmed norized to execute this document and thereby bind the Corporation / LLC.
	s fill in the name of the Officer acknowledging this document, title of Officer / Manager, and name of the Corporation or LLC).
in the last three blank	, in the name of the officer dotatomodying this decemben, the of officer / manager, and name of the corporation of ELO).
Signature of Nota	ry Public - State of Florida Print, Type, or Stamp Commissioned Name of Notary Public
Personally Known	OR Produced Identification
Type of Identificat	ion Produced:

**END OF SECTION** 

The Quarry CDD 2022 Shoreline Phase II

SUBCONTRACTOR'S / SUPPLIER'S WAIVER AND RELEASE OF LIEN UPON PROGRESS PAYMENT

## CONTRACTOR'S WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT

, hereby waives and releases its lien and right to cla	im a lien for
, riereby waives and releases its lien and right to the	ann a non ioi
labor, services or materials furnished through to Quarry Community Development District for the Project known as the TheQu	uarry CDD
2022 Shoreline Phase II. The labor, services or materials furnished relate to impr	
the following property:	
8975 Kayak Dr, Naples, FL 34120	
DATED on, 20	
Lienor:	
Address:	
By:	
Signature	
Printed Name and Title	
STATE OF FLORIDA	
COUNTY OF	
The foregoing instrument was acknowledged before me by means of physical presence or or notarization, this day of , , , by as for	
asfor	
asfor, whose name is subscribed to this instrument, who personally sw that he/she is authorized to execute this document and thereby bind the Corporation / LLC.	vore or affirmed
(In the last three blanks fill in the name of the Officer acknowledging this document, title of Officer / Manager, and name of the Corp	oration or LLC)
Signature of Notary Public - State of Florida Print, Type, or Stamp Commissioned Name of N	•
Personally Known OR Produced Identification	
Type of Identification Produced:	

**END OF SECTION** 

The Quarry CDD 2022 Shoreline Phase II

CONTRACTOR'S WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT

# SUBCONTRACTOR'S / SUPPLIER'S WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT

		tion of Final Payment ir			
		waives and releases	its lien and	right to claim	a lien for
	or materials furnished				
(the Contractor	) for the Project knowr	n as the <u>The Quarry C</u> [	<u>DD 2022 Sho</u>	oreline Phase	II_ whose
		Development District.	The labor,	services or	materials
furnished relate	to improvements to the	ne following property:			
	8975 K	Kayak Dr, Naples, FL 3	34120		
DATED on _			20	_	
Lienor:				_	
Address:				_	
-				_	
By:				_	
Signatu	re				
				_	
Printed	Name and Title				
STATE OF FLORI	DA				
The foregoing instruction, this	ument was acknowledged b	poefore me by means of for ame is subscribed to this in	physical preser	nce or online	
as		for			
that ha/sha is auth	, whose n	ame is subscribed to this in ment and thereby bind the C	strument, who p	personally swore	or affirmed
		·			
(In the last three blanks	fill in the name of the Officer ackno	wledging this document, title of Offic	cer / Manager, and n	ame of the Corporatio	n or LLC)
Signature of Notar	y Public - State of Florida	Print, Type, or Stam	np Commissione	ed Name of Notar	y Public
Personally Known		OR Produced Identification			<u>—</u>
Type of Identification	on Produced:				

**END OF SECTION** 

The Quarry CDD 2022 Shoreline Phase II

SUBCONTRACTOR'S / SUPPLIER'S WAIVER AND RELEASE OF LIEN UPON FINAL PAYMENT

#### SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the "Standard General Conditions of the Construction Contract", prepared by Engineers Joint Contract Documents Committee (EJCDC), Copyright © 2002. All provisions of the General Conditions, which are not so amended or supplemented in these Supplementary Conditions remain in full force and effect.

#### SC-1.01.A.9 Defined Terms

Delete the definition "Change Order" in its entirety and replace it with the following:

9. Change Order - A document recommended by Engineer 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, issued on or after the Effective Date of the Agreement, and which represents a full accord and satisfaction of all costs of whatever nature, direct or indirect, arising from or related to the addition, deletion, or revision, including, without limitation, its impact on unchanged base contract work.

#### SC-1.01.A.37 Defined Terms

Delete the definition "Resident Project Representative" in its entirety and replace it with the following:

37. Resident Project Representative - The authorized representative of the Owner or Engineer who is assigned to the site or any part thereof.

#### SC-1.02.G Terminology

Add the following terminology clarification to Paragraph 1.02 of the General Conditions:

G. The word "Plans" when used in the Contract Documents shall have the same meaning and be used interchangeably with the word "Drawings".

## SC-1.02.H Terminology

Add the following terminology clarification to Paragraph 1.02 of the General Conditions:

H. The words "Subcontractor" and "Supplier" are sometimes used interchangeably in the Contract Documents and when used shall mean either Subcontractor or Supplier as defined herein or both Subcontractor and Supplier as defined herein.

#### SC-2.02.A Copies of Documents

In the first sentence of Paragraph 2.02.A of the General Conditions, delete the word "ten" (10) and add the word "five" (5) copies.

#### SC-2.03.A Commencement of Contract Times: Notice to Proceed

Delete Paragraph 2.03.A of the General Conditions in its entirety and replace it with the following:

A. At the Owner's discretion, a Notice to Proceed may be given at any time within thirty days after the effective date of the Agreement. The Contract Time will commence at the time specified in such notice provided that the Notice to Proceed may not specify a time of commencement later than sixty days after the effective date of the Agreement.

## SC-2.07.A.1 Initial Acceptance of Schedules

Add the following to the end of Paragraph 2.07.A.1 of the General Conditions:

Under no circumstances whatsoever shall Contractor be entitled to compensation based upon a right to finish early prior to the Contract Time.

## SC-3.01.D Contract Documents, Intent

Add the following to Paragraph 3.01 of the General Conditions:

D. The various contract documents shall be given precedence, in case of conflict, error or discrepancy, as follows: Change Order, Agreement, approved Schedule of Values, addenda, Supplementary Proiect Conditions. General Conditions. the Manual. Specifications, Contract Drawings, and Contractor's Bid. An addendum issued prior to bid, may modify any of the contract documents in existence at that time. The addendum takes precedence over the previous issue of the contract document being modified. In case of conflict between the Contract Documents, the Contract Document first listed shall have priority over any Contract Document later in the list.

## SC-3.03.A.1 Before Starting Construction

Add the following sentence to the end of Paragraph 3.03.A.1 of the General Conditions:

By commencing work, the Contractor shall be deemed to have accepted the condition of the site as being in suitable, satisfactory and acceptable condition to perform its work on the Project.

#### SC-3.06.B Electronic Data

Change the acceptance period for detecting and correcting data in paragraph 3.06.B of the General Conditions from 60 days to 30 days.

#### SC-3.06.D Electronic Data

Add the following to Paragraph 3.06 of the General Conditions:

D. Transfer of electronic data to a third party by the receiving party is prohibited.

## SC-4.02.A-B Subsurface and Physical Conditions

Relating to Paragraphs 4.02.A.1, 4.02.A.2, 4.02.B, 4.02.B.1, 4.02.B.2, and 4.02.B.3 of the General Conditions:

Section 00320, "Site Investigation Data", of the Project Manual identifies the reports and drawings referred to in Paragraphs 4.02.A.1, 4.02.A.2, 4.02.B, 4.02.B.1, 4.02.B.2, and 4.02.B.3 of the General Conditions. If Section 00320 does not identify specific reports or drawings, then the Engineer may have relied only on local county USDA/SCS soils surveys or other information that is not site specific. Contractor reliance on soil surveys is subject to the same limitations as defined in SC-4.02.B.4.

## SC-4.02.B.4 Subsurface and Physical Conditions

Add the following to Paragraph 4.02.B of the General Conditions:

4. The Contractor acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered, including all exploratory work done on behalf of the Owner on the site or any contiguous site, as well as from information presented by the Drawings and Specifications made a part of this Contract, or any other information made available to him prior to receipt of Bids. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work. The Owner assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Owner.

## SC-4.03.A.4 Differing Subsurface or Physical Conditions

Delete Paragraph 4.03.A.4 of the General Conditions in its entirety and replace it with the following:

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, within seven (7) days 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 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so. Written notice is a precondition to Contractor's rights under Paragraph 4.03.C.

#### SC-4.05.B Reference Points

Add the following to Paragraph 4.05 of the General Conditions:

B. The Owner and Engineer reserve the right to periodically check certain layout and grades of the work of the Contractor; however, they are not obligated to do so. The Contractor shall not rely on any such measurements made by the Owner or Engineer. The Contractor is solely responsible to layout and construct to the required grades all work in accordance with the Contract Documents, and any layout and grade work not in conformance with these Documents shall be classified as "Defective Work".

## **SC-4.06.J** Hazardous Environmental Conditions at Site

Add the following to Paragraph 4.06 of the General Conditions:

J. The Contractor shall be responsible for the legal disposal of any asbestos, PCB's, petroleum, hazardous waste or radioactive material brought to the site by the Contractor, Sub-Contractors, Suppliers, or anyone else for whom the Contractor is responsible.

#### SC-5.03.A Certificates of Insurance

The additional insured are as identified in Section 00620, "Insurance Certification".

## SC-5.04.C.1-3 Contractor's Liability Insurance

Add the following to Paragraph 5.04 of the General Conditions:

C. The insurance limits indicated below and otherwise referenced are minimum limits acceptable to the Owner. Such policies shall be endorsed

to provide primary and non-contributory coverage to the all of the additional insureds in relation to any and all other liability insurance. All policies are to be provide a Waiver of Subrogation endorsement in favor of all of the additional insureds. The limits of liability for the Contractor provided insurance shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

- 1. Workers' Compensation
  - a. State: Statutory
  - b. Applicable Federal: Statutory
  - c. Employer's Liability Coverage B: \$250,000 each accident for bodily injury by accident; \$250,000 each employee for bodily injury by disease; \$500,000 policy limit for bodily injury by disease.
- 2. Commercial General Liability (ISO Form CG 00 01)
  - Bodily Injury (including completed operations and products liability:
    - 1) \$2,000,000 Each Occurrence
    - 2) \$2,000,000 Annual Aggregate
  - b. Property Damage:
    - 1) \$2,000,000 Each Occurrence
    - 2) \$2,000,000 Annual Aggregate, or
    - 3) a combined single limit of \$2,000,000
  - c. Property Damage liability insurance will provide Explosion, Collapse and Underground coverage where applicable.
  - d. Personal Injury, with employment exclusion deleted: \$2,000,000 Annual Aggregate
- 3. Comprehensive Automobile Liability:
  - a. Bodily Injury:
    - 1) \$2,000,000 Each Person
    - 2) \$2,000,000 Each Occurrence
  - b. Property Damage:
    - 1) \$2,000,000 Each Occurrence, or
    - 2) a combined single limit of \$2,000,000.
- **SC-5.05.A** Owner's Liability Insurance

Delete paragraph 5.05.A of the General Conditions in its entirety.

#### SC-5.06.A Property Insurance

Delete paragraph 5.06.A of the General Conditions and replace it with the following (subparagraphs A.1 through A.7 shall remain):

A. Unless otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain property insurance upon the

Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by law). This insurance shall include the interests of Owner, Contractor and Subcontractors in the Work, shall insure against perils of fire and extended coverage, shall include 'all risk' insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including fees and charges of engineers, architects, attorneys and other professionals). If not covered under the 'all risk' insurance or otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment. The policies of insurance required to be purchased and maintained by Contractor in accordance with Paragraphs 5.6 and 5.7 shall contain a provision that the coverage afforded will not be canceled or materially changed until at least thirty days' prior written notice has been given to the Owner. The Contractor shall maintain such policies of insurance continuously from the date specified in the Notice to Proceed until the Initiation of Operation. This insurance shall:

## SC-5.06.B Property Insurance

Delete Paragraph 5.06.B of the General Conditions in its entirety and replace it with the following:

B. Contractor shall purchase and maintain such boiler and machinery insurance or additional property insurance as required which will include the interests of Owner, Contractor, subcontractors, Engineer, and Engineer's consultants in the Work, all of whom shall be listed as insured or additional insured parties.

## SC-5.06.C Property Insurance

Delete Paragraph 5.06.C of the General Conditions in its entirety and replace it with the following:

C. The form of policy for the property insurance provided by the Contractor shall be completed value. If the Owner is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall bear all reasonable costs properly attributable thereto.

#### SC-5.06.E Property Insurance

Delete Paragraph 5.06.E of the General Conditions in its entirety.

## SC-6.02.B Labor; Working Hours

Add the following new sentence to the end of Paragraph 6.02.B of the General Conditions:

Regular Working Hours are defined as 7:00 a.m. to 4:00 p.m., Monday through Friday. Work requiring inspection by the Owner or Utility is to be scheduled for 9:00 a.m. to 4:00 p.m., Monday through Thursday and 9:00 a.m. to 12:00 noon on Fridays upon a minimum of forty-eight (48) hours advance notice for inspections.

## SC-6.02.C Labor; Working Hours

Add the following to Paragraph 6.02 of the General Conditions:

C. Requests to work during other than normal working hours must be submitted to the Engineer at least 48 hours in advance of the period proposed for such overtime work and shall set forth the proposed schedule for overtime work to give Engineer ample time to arrange for his personnel to be at the site of the work.

## SC-6.03.A.1 Services, Materials and Equipment

Add the following to Paragraph 6.03.A of the General Conditions:

1. All water for testing, flushing, and construction shall be furnished by the Contractor. It may be available by connecting to the Owner's (or Utility's) water system at a point approved by the Owner and Utility. The Owner (or Utility) shall charge the Contractor for water used in performing the above functions in accordance with the Owner's (or Utility's) established rate schedule. There shall be installed in each and every connection to the Owner's (or Utility's) potable water supply a reduced pressure zone backflow preventer meeting the requirements of AWWA C511. Contractor shall be required to meter all water used.

## SC-6.03.D Services, Materials and Equipment

Add the following to Paragraph 6.03 of the General Conditions:

D. Provisions of the Contract Documents relating to all materials and equipment and how they are to be applied, installed, connected, erected, used, cleaned, and conditioned does not assign the Engineer, or any of the Engineer's consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or Performance of Work or any duty or responsibility contrary to the provisions of Paragraph 9.09.

#### SC-6.04.A.3 Progress Schedule

Add the following to Paragraph 6.04.A of the General Conditions:

3. The Contractor is required to promptly take appropriate action to recover schedule whenever A) the Engineer anticipates significant slippage beyond the Contract Time, and orders schedule recovery in writing; or B) any Contractor progress schedule activity is shown as slipping, due to acts or omissions within the control of the Contractor, by 15 (fifteen) or more days beyond the Contract Time. Under no circumstances whatsoever is Contractor entitled to inefficiencies arising from or related to overtime, second shift, or premium work. Contractor is solely responsible for costs incurred to recover schedule delays resulting from Contractor's acts or omissions.

## SC-6.05.A.2.d.5) Substitutes and "Or Equals"

Add the following to Paragraph 6.05.A.2.d of the General Conditions:

5) The application will also contain an itemized estimate of all delays or schedule impacts that will result directly or indirectly from reviews, acceptance and provision of such substitute. In reviewing such substitutes, the Engineer shall consult with Owner and attach items of particular importance to operation, maintenance, repair and part stocking and placement considerations including standardization with similar materials or equipment, existing or planned, within Owner's existing system or facilities.

## SC-6.05.B Substitutes and "Or Equals"

Add the following to the end of Paragraph 6.05.B of the General Conditions:

Contractor's application for use of substitute materials, equipment, or specific means, methods, technique, or procedure of construction, including reasonable time for Engineer and his Consultant to review the substitution and redesign, if required, shall not be considered as an acceptable basis for Contractor not meeting the substantial completion date, nor as a basis for a time extension of the Contract Time.

## **SC-6.06.B** Concerning Subcontractors, Suppliers and Others

Relating to Paragraph 6.06.B of the General Conditions, the Contractor shall note the following:

Subcontractors, Suppliers, or other persons or organizations (including those who are to furnish the principal items of materials and equipment for the project) are to be identified for evaluation after bid opening, submitted in accordance with the Instructions To Bidder.

## SC-6.07.B Patent Fees and Royalties

Add the following to the end Paragraph 6.07.B of the General Conditions:

The Contractor shall defend all such claims in connection with any alleged infringement of such rights.

#### SC-6.08.B Permits

Add the following to Paragraph 6.08 of the General Conditions:

B. Owner shall obtain and pay for construction permits for the project as identified in the Bidding Documents. All such Owner furnished permits and approvals are either contained in the Bidding Documents or are available for inspection upon request. A copy will be furnished to the successful Bidder after the effective date of the Agreement upon his request, and Contractor will follow all conditions and provisions of these permits, applications, regulations and approvals as a part of this project work as much as if they were wholly repeated herein. It is the Contractor's responsibility to apply to the local jurisdiction for any other required permits.

## **SC-6.11.A.4** Limitation on Use of Site and Other Areas

Add the following to Paragraph 6.11.A of the General Conditions:

4. Where the Contractor hauls Materials or Equipment to the Project over roads and bridges on the state park road system, state highway system, county road system, or city street system and such use causes damage, he shall immediately, at his expense, repair such road or bridge to as good a condition as before the hauling began.

### SC-6.12.A Record Documents

Delete the last sentence of Paragraph 6.12.A of the General Conditions, and replace it with:

Upon completion of the Work, Contractor shall provide all such Samples to Owner, and copies of all such record documents and Shop Drawings shall be delivered to Engineer for Owner to the extent not previously provided.

## SC-6.13.D Safety and Protection

Delete Paragraph 6.13.D of the General Conditions in its entirety and replace it with the following:

D. The Contractor's duties and responsibilities for safety and protection of the Work shall continue until such time as all the Work is completed and the certificate of final completion has been executed by the Owner, Engineer, and Contractor.

## SC-6.13.E Safety and Protection

Add the following to Paragraph 6.13 of the General Conditions:

The Contractor shall implement traffic control in accordance with Maintenance of Traffic Control notes and details on the plans, in the technical specifications, and in accordance with FDOT and MUTCD requirements. The Contractor shall maintain traffic within the limits of the project for the duration of the construction period, including any temporary suspensions of work. It shall include the construction and maintenance of any necessary detour facilities; the providing of necessary facilities for access to residences and businesses along the project; the furnishing, installation and maintenance of traffic control and safety devices during construction; daily inspections of the traffic control devices (including nighttime inspections); replacement of all equipment and devices found not to be conforming with approved standards during the inspection; the control of dust, and any other special requirements for safe and expeditious movement of traffic as may be called for on the plans. The term "Maintenance of Traffic" shall include all such facilities, devices, and their operation as are required for the safety and convenience of the public as well as for minimizing public nuisance. This work shall also consist of the removal of existing pavement markings necessary in order to implement traffic control, temporary signs, and the removal or relocation of existing signs in order to implement traffic control. This work shall include any adjustments necessary to the traffic control devices under emergency conditions.

## SC-6.17.D.2 Shop Drawings and Samples

Add the following after the first sentence Paragraph 6.17.D.2 of the General Conditions:

Engineer's approval shall also not extend to verification of actual field conditions.

## SC-6.19.A Contractor's General Warranty and Guarantee

Delete Paragraph 6.19.A of the General Conditions in its entirety and replace it with the following:

A. The Contractor warrants and guarantees to the Owner and the Engineer that all work, labor, materials, equipment and services furnished and performed will be done in a good and workmanlike manner and will be of the highest quality, free from defects and in accordance with the Contract Documents. Each application for payment submitted by the Contractor to the Owner shall be deemed to constitute a confirmation, restatement, and reaffirmation by the Contractor of the foregoing warranty and guarantee, with respect to all work, labor materials, equipment and

services performed and furnished for the Project through the date of such application. All defective work, whether or not in place, may be rejected, corrected, or accepted as provided in Paragraph 13. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

## **SC-6.19.D** Contractor's General Warranty and Guarantee

Add the following to Paragraph 6.19 of the General Conditions

D. Contractor warrants and guarantees all computer controlled components incorporated into the Work accurately process date and time data (including but not limited to, calculating, comparing, and sequencing) and leap year calculations. This includes the proper exchange of date and time data with other such components.

## SC-6.21.B Delegation of Professional Design Services

Delete paragraph 6.21.B of the General Conditions in its entirety and replace it with the following:

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. As a minimum, the design shall comply with all federal, state, and local laws, regulations, ordinances, and codes. 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, Shop Drawings 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.

## SC-6.21.C Delegation of Professional Design Services

Delete paragraph 6.21.C of the General Conditions in its entirety and replace it with the following:

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.

## SC-9.01.A Owner's Representative

Add the following to Paragraph 9.01.A of the General Conditions:

If they choose to do so, the Owner or the Engineer may provide a Resident Project Representative who will function as the Resident Project Representative during the construction period thereby giving the Owner additional representation during the construction phase in addition to the periodic visits and certain other designated limited services to be provided by the Engineer during construction.

## SC-9.03.A Project Representative

Delete paragraph 9.03.A of the General Conditions in its entirety and replace it with the following:

- A. If a Resident Project Representative is furnished by either the Owner or Engineer to assist Engineer in observing the performance of the Work, then the following Duties, Responsibilities, and Limitations of the authority of the Resident Project Representative and assistants are as shown herein:
  - 1. The Resident Project Representative (RPR), assistants and other field staff will assist Engineer in observing performance of the work of Contractor. The RPR and assistants may be employees of the Engineer or they may be employees of the Owner, depending on assignment based on availability, timing and scheduling.
  - 2. The RPR, his assistants or other field staff, are not planned nor budgeted to be present full time at all work sites at all times while Contractor is working. Therefore there will be Contractor work that will not be observed. However, through more extensive periodic visits and onsite observations of the work in progress than provided through the Administration of Construction Work and by field check of materials and equipment by the RPR and assistants, Engineer shall endeavor to provide further protection for Owner against defects and deficiencies in the work of Contractor; but, the furnishing of such services will not make Engineer responsible for or give Engineer control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for Contractor's failure to perform the Work in accordance with the Contract Documents.
  - 3. The duties and responsibilities of the RPR are limited to those of Engineer in Engineer's agreement with the Owner and in the construction Contract Documents, and are further limited and described as follows:
    - a. RPR is Engineer's representative at the site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's

dealings in matters pertaining to the onsite work shall in general be with Engineer and Contractor keeping Owner advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner with the knowledge of and under the direction of Engineer.

- b. SCHEDULES: Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
- c. CONFERENCES AND MEETINGS: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project related meetings, and prepare and circulate copies of minutes thereof.

#### d. LIAISON:

- 1) Serve as Engineer's liaison with Contractor, working principally though Contractor's superintendent and assist in understanding the intent of the Contract Documents; and assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-site operations.
- 2) Assists in obtaining from Owner additional details or information, when required for proper execution of the Work.
- e. SHOP DRAWINGS AND SAMPLES:
- 1) Record date of receipt of Shop Drawings and samples.
- 2) Receive samples that are furnished at the site by Contractor, and notify Engineer of availability of samples for examination.
- 3) Advise Engineer and Contractor of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by Engineer.
- f. REVIEW OF WORK, REJECTION OF DEFECTIVE WORK, INSPECTIONS AND TESTS:
- 1) Conduct on-site observations of the Work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
- 2) Report to Engineer whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of Work that RPR believes should be corrected or rejected or should be uncovered for

- observation, or requires special testing, inspection or approval.
- 3) Verify that tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; and observe, record and report to Engineer appropriate details relative to the test procedures and startups.
- 4) Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to Engineer.
- g. INTERPRETATION OF CONTRACT DOCUMENTS: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by the Engineer.

#### h. RECORDS:

- 1) Maintain at the job site or other suitable location orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.
- 2) Prepare or obtain a diary or log book or marked up plans or sketches, photographs or videos, recording Contractor hours on the job site, weather conditions, data relative to questions of Change Orders or changed field conditions, changes in the Construction from the Contract Documents, list of job site visitors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures; and maintain records and send appropriate copies to Engineer.
- 3) Record names, addresses, and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.

#### i. REPORTS:

- 1) Furnish Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
- 2) Consult with Engineer in advance of scheduled major tests, inspections or start of important phases of the Work.

- 3) Draft proposed Change Orders, obtaining backup material from Contractor and recommend to Engineer Change Orders, and Field Orders.
- 4) Report immediately to Engineer and Owner upon the occurrence of any accident.
- j. PAYMENT REQUESTS: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requests to the schedule of values, work completed, and materials and equipment delivered at the site but not incorporated in the Work.
- k. CERTIFICATES, MAINTENANCE AND OPERATION MANUALS: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to Engineer for review and forwarding to Owner prior to final payment for the Work.

#### I. COMPLETION:

- 1) Before Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
- 2) Conduct final inspection in the company of Engineer, Owner and Contractor and prepare a final list of items to be completed or corrected.
- 3) Observe that all items on final list have been completed or corrected and make recommendations to Engineer concerning acceptance.
- 4. Limitations of Authority
  - a. Resident Project Representative
  - 1) Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by Engineer.
  - 2) Shall not exceed limitations of Engineer's authority as set forth in the Agreement or the Contract Documents.
  - 3) Shall not undertake any of the responsibilities of Contractor, subcontractors or Contractor's superintendent.
  - 4) Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
  - 5) Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.

- 6) Shall not accept Shop Drawings or sample submittals from anyone other than Contractor.
- 7) Shall not authorize Owner to occupy the Project in whole or in part.
- 8) Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by Engineer.

## SC-9.09.F-G Limitations on Engineer's Authority and Responsibilities

Add the following to Paragraph 9.09

- F. Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment of the Engineer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to the Engineer any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09.
- G. Engineer's recommendation for any payment, including final payment, shall not mean that Engineer is responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident hereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of Work, or for any failure of Contractor to perform or furnish work in accordance with the Contract Documents.

#### SC-10.03.A.4 Execution of Change Orders

Add the following to Paragraph 10.03.A of the General Conditions:

4. Change Orders shall constitute a full accord and satisfaction of all costs of whatever nature, direct or indirect, arising from or related to the change, including, without limitation, impact on unchanged base contract work.

## SC-10.05.B Claims and Disputes

In Paragraph 10.05.B of the General Conditions, change the time frame in which the opposing party must submit its response to the Engineer regarding the claimant's request from 30 days to 14 days, unless the Engineer allows additional time.

#### SC-10.05.F Claims

Add the following to the end of Paragraph 10.05.F of the General Conditions:

"including, without limitation, written notice requirements."

#### **SC-10.05.G** Claims

Add the following to Paragraph 10.05 of the General Conditions:

G. No action, either at law or at equity, shall be brought in connection with any such claim, dispute or other matter later than thirty days after the date on which Engineer has rendered such written decision in respect thereof. Failure to bring an action within said thirty days' period shall result in Engineer's decision being final and binding upon Owner and Contractor. In no event may any such action be brought after the time at which instituting such proceedings would be otherwise barred by the applicable statute of limitations.

#### SC-11.01.A.4 Cost of the Work

Delete "attorneys" from the list of special consultants in Paragraph 11.01.A.4 of the General Conditions

#### SC-11.03.D Unit Price Work

Delete Paragraph 11.03.D, including subparagraphs 11.03.D.1, 11.03.D.2, and 11.03.D.3 of the General Conditions in their entirety and replace them with the following:

- D. The Owner reserves the right to alter the Drawings, modify incidental work as may be necessary, and increase or decrease quantities of work to be performed to accord with such changes, including deduction or cancellation of any one or more of the Pay Items. Changes in the work shall not be considered as a waiver of any conditions of the Contract nor invalidate any provisions thereof. When changes result in changes in quantities of Work to be performed, the Contractor will accept payment according to Contract Unit Prices that appear in the original Contract. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:
  - 1. If the total cost of a particular item of Unit Price Work amounts to 10% or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 25% from the estimated quantity of such item indicated in the Proposal or Agreement; and

- 2. If there is no corresponding adjustment with respect to any other item of Work; and
- 3. If Contractor believes that it has incurred additional expense as a result thereof; or
- 4. If Owner believes that the quantity variation entitles it to an adjustment in the unit price, either Owner or Contractor may make a claim for an adjustment in the Contract Price in accordance with Article 12 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

## SC-12.02.C-E Change of Contract Times

Add the following to Paragraph 12.02 of the General Conditions:

- C. The Contractor agrees that said work shall be prosecuted regularly, diligently and without interruption at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner that the time for the completion of the work described herein is a reasonable time for the completion of the same. If the Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree as a part consideration for the awarding of this contract to pay to the Owner the amount specified elsewhere in these documents, not as a penalty, but as liquidated damages for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the work.
- D. It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for performance of any act whatsoever; and where under the contract an additional time allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner.
- E. The submission of the Bid shall be an indication that the Contractor has considered normal local weather conditions (daily and monthly variations) for the previous ten years from the date of the Bid as compiled by a national, state, or regional weather station which is within 25 miles of the project location. Contractor should consider and include the impact of normal local weather conditions on construction scheduling and sequencing when preparing the Bid. No claim shall be allowed based upon the schedule impact of normal local weather conditions.

#### SC-12.03.B Delays

Add the following to the end of Paragraph 12.03.B of the General Conditions:

Contractor's entitlement to an equitable adjustment of its Contract Price hereunder shall be for its direct, jobsite costs only. In no event shall it be entitled to recovery of indirect, offsite, or home office costs allegedly arising from or related to delays under this Paragraph 12.03.B.

## SC-12.03.C Delays

Add the following to the end of Paragraph 12.03.C of the General Conditions:

In no event shall Contractor be entitled to an adjustment in Contract Price for delays described in this Paragraph 12.03.C.

## SC-12.03.F Delays

Add the following to Paragraph 12.03 of the General Conditions:

F. Neither Engineer or Owner are liable to Contractor or its surety, or any of Contractor's Subcontractors or Suppliers for damages caused by delays within the control of or reasonably anticipatable by Contractor or delays beyond control of Owner or Contractor such as fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner.

## SC-13.03.B Tests and Inspections

Delete Paragraph 13.03.B, including subparagraphs 13.03.B.1, 13.03.B.2, and 13.03.B.3 of the General Conditions in their entirety and replace them with the following:

B. The Contractor shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except when otherwise specified by the Contract Documents.

## SC-13.03.G Tests and Inspections

Add the following to Paragraph 13.03 of the General Conditions:

G. Neither observations by the Engineer nor inspections, tests, or approvals by others shall relieve the Contractor from the Contractor's obligations to perform the Work in accordance with the Contract Documents.

## SC-13.04.C Uncovering Work

Delete the first parenthetical grouping in paragraph 13.04.C of the General Conditions that states, "(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)" and replace the deleted text with the following:

"(including but not limited to all fees and charges of engineers, architects and other non-legal professionals)"

#### **SC-13.06.A** Correction or Removal of Defective Work

Delete the first parenthetical grouping in paragraph 13.06.A of the General Conditions that states, "(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)" and replace the deleted text with the following:

"(including but not limited to all fees and charges of engineers, architects and other non-legal professionals)"

## SC-13.08.A Acceptance of Defective Work

Delete the second parenthetical grouping in paragraph 13.08.A of the General Conditions that states, "(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)" and replace the deleted text with the following:

"(including but not limited to all fees and charges of engineers, architects and other non-legal professionals)"

## SC-13.09.C Owner May Correct Defective Work

Delete the first parenthetical grouping in paragraph 13.09.C of the General Conditions that states, "(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)" and replace the deleted text with the following:

"(including but not limited to all fees and charges of engineers, architects and other non-legal professionals)"

## **SC-14.02.A.2** Application for Payments

Delete Paragraph 14.02.A.2 of the General Conditions in its entirety and replace it with the following:

2. Each Application for Payment shall include an affidavit of Contractor, in the form of the "Partial Release of Lien", stating that the Contractor releases a part of its lien, and quit claims all liens, lien rights, claims or demands of every kind to the Owner on the part released. The amount released shall be for the amount of Work completed through previous applications for payment.

## SC-14.02.B.5.e-j Review of Applications

Add the following paragraphs to Paragraph 14.02.B.5 of the General Conditions:

- e. The Work for which payment is requested cannot be verified,
- f. Claims or Liens have been filed or there is reasonable evidence indicating the probable filing thereof,
- g. Of unsatisfactory prosecution of the Work, including failure to clean up as required by the Contract Documents;
- h. Of persistent failure to cooperate with other contractors on the Project and persistent failure to carry out the Work in accordance with the Contract Documents:
- i. Of liquidated damages payable by the Contractor; or
- j. Of any other violation of, or failure to comply with, the provisions of the Contract Documents.

## SC-14.02.C.1 Payment Becomes Due

Delete Paragraph 14.02.C.1 of the General Conditions in its entirety and replace it with the following:

1. Upon receipt of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor. Owner will endeavor to make payment to Contractor within 30 days upon receipt of the Application for Payment from Engineer.

## SC-14.09.B Waiver of Claims

Add the following to Paragraph 14.09 of the General Conditions:

B. The Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the Engineer, nor the issuance of a certificate of Substantial Completion, nor any payment

by the Owner to the Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by the Owner, nor any act of acceptance by the Owner nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by the Engineer pursuant to Paragraph 14.07.B, nor any correction of defective work by the Owner will constitute an acceptance of Work not in accordance with the Contract Documents or a release of the Contractor's obligation to perform the Work in accordance with the Contract Documents.

## **SC-15.02.A.5-8** Owner May Terminate for Cause

Add the following to Paragraph 15.02.A of the General Conditions:

- 5. If the Contractor commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if the Contractor takes any equivalent or similar action by filing a petition or otherwise under any federal or state law in effect at such time relating to bankruptcy or insolvency;
- 6. If a petition is filed against the Contractor under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against the Contractor under any other federal or state law in effect at the time relating to bankruptcy or insolvency
- 7. If the Contractor makes a general assignment for the benefit of creditors;
- 8. If a trustee, receiver, custodian or agent of the Contractor is appointed under applicable law or under contract, whose appointment or authority to take charge of property of the Contractor is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of the Contractor's creditors.

## SC-15.02.C Owner May Terminate for Cause

Delete the parenthetical grouping in paragraph 15.02.C of the General Conditions that states, "(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)" and replace the deleted text with the following:

"(including but not limited to all fees and charges of engineers, architects and other non-legal professionals)"

## **SC-15.02.G** Owner May Terminate for Cause

Add the following to Paragraph 15.02 of the General Conditions:

G. If after notice of termination as provided for in this Paragraph 15.02, it is determined by a court of competent jurisdiction for any reason that Contractor was not in default or that its default was excusable or that Owner was not entitled to exercise its default remedies, the termination shall be deemed to be a termination for convenience pursuant to Paragraph 15.03 and Contractor's remedies shall be the same as and shall be limited to those afforded by Paragraph 15.03.

# **SC-15.03.A** Owner May Terminate for Convenience

Delete Paragraph 15.03.A of the General Conditions in its entirety, including subparagraphs 15.03.A.1, 15.03.A.2, 15.03.A.3, and 15.03.A.4, and replace it with the following:

- A. The Owner may terminate this Contract in whole or in part for its convenience, without cause, provided that the Contractor is given not less than seven (7) calendar days written notice and an opportunity for consultation with the Owner prior to termination.
  - When the Contract is terminated for the Owner's 1. convenience, the Contract Price shall be reduced in the proportion to which the canceled or incomplete Work relates to all the Work to be done by Contractor upon the Project. In such event, Contractor shall and hereby does release and discharge the Owner and Engineer from any and all claims arising out of, or as a result of such cessation or cancellation and termination; provided, however, that in any and all such events, Contractor shall be entitled to receive payment from the Owner based on applicable unit prices for contract work already done and performed in accordance with the Contract Documents and not yet paid for, with reimbursement for any actual and provable loss incurred by respect to materials, equipment Contractor with subcontractors (e.g. reasonable cancellation charges, if any, payable to subcontractors and suppliers and demobilization costs.)

# SC-15.05.A-C Owner May Stop Work

Add the following new paragraphs 15.05.A-C to Article 15 of the General Conditions:

15.05 Owner May Stop Work

A. The Owner may, but is not obligated to, stop work if any one or more of the following occur:

- 1. Contractor fails to perform the Work in compliance with the required Maintenance of Traffic provisions.
- 2. Contractor does not provide the required competent resident superintendent at all times during the progress of the Work.
- 3. Contractor fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents.
- 4. Contractor fails to obtain, maintain, or renew insurance in conformance with the Contract Documents, or if any insurance company Contractor has obtained insurance with has declared bankruptcy or is declared bankrupt.
- 5. Contractor fails to prosecute the Work without endangering persons or property.
- B. If one or more of the events identified in paragraph 15.05.A occur, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated. Any stop of Work order issued by Owner does not give control or responsibility over supervision of the Work, construction means, methods, techniques, sequences or procedures or for safety precautions or programs to Owner or Engineer. During the stoppage of the Work, the Contractor is fully responsible for maintaining all safety and protection requirements in accordance with the General and Supplementary Conditions. If Owner does not stop Work, whether at its discretion or because it is unaware of an occurrence that could cause it to issue a stop Work order, continuation of the Work without stoppage does not make the Owner or Engineer responsible for the safety and protection of the Work.
- C. Contractor shall bear all direct costs (including but not limited to fees and charges of engineers, architects and other non-legal professionals, any additional expenses incurred by Owner due to delay of others performing Work under a separate contract) of any stoppage of Work order issued by Owner in accordance with paragraphs 15.05.A and 15.05.B. Contractor shall further bear the responsibility for maintaining the Progress Schedule and shall not be entitled to any extension of Contract Time or increase in Contract Price.

# **SC-16.01.A-F** Methods and Procedures (Dispute Resolution)

Delete Paragraph 16.01 of the General Conditions in its entirety, including subparagraphs 16.01.A, 16.01.B, 16.01.C, 16.01.C.1, 16.01.C.2, and 16.01.C.3, and replace them with the following new Paragraphs:

- A. The chosen method for dispute resolution for this project is mediation. Mediation pursuant to this Paragraph shall be treated as compromise and settlement negotiations for purposes of the Florida Rules and Evidence.
- B. As provided above, the parties shall endeavor to settle the dispute by mediation. The proceeding will be conducted in accordance with the then current Center For Public Resources ("CPR") Model Procedure for Mediation of Business Disputes, with the following exceptions:
  - 1. If the parties have not agreed within ten (10) days of the request for mediation on the selection of a mediator willing to serve, the CPR, upon the request of either party, shall appoint a member of the CPR Panels of Neutrals as the mediator, and
  - 2. Efforts to reach a settlement will continue until the conclusion of the proceeding, which is deemed to occur when: (a) a written settlement is reached, or (b) the mediator concludes and informs the parties in writing that further efforts would not be useful, or (c) the parties agree in writing that an impasse has been reached. Neither party may withdraw before the conclusion of the proceeding.
- C. The parties regard the aforesaid obligation to mediate as essential provision of this Agreement and one that is legally binding on them. In case of a violation of such obligation by either party, the other may bring an action to seek enforcement of such obligation in any court of law having jurisdiction thereof.
- D. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the project is located, unless another location is mutually agreed upon.
- E. If the dispute has not been resolved by mediation as provided herein within one hundred twenty (120) days of the initiation of such mediation procedure, either party may initiate litigation upon ten (10) days' written notice to the other party.
- F. All applicable statutes of limitation and defenses based upon the passage of time shall be tolled while the procedures specified in this Section are pending. The parties will take such action, if any, required to effectuate such tolling.
- **SC-16.02** *Methods and Procedures (Dispute Resolution)*

Add the following new paragraph 16.02.A to Article 16 of the General Conditions:

16.02 Methods and Procedures (Dispute Resolution)

A. Litigation arising out of or related to this contract shall be governed by the laws of Florida and adjudicated in the courts of the County within which the project is located.

# SC-17.01.A.3 Giving Notice

Add the following to Paragraph 17.01.A of the General Conditions:

3. The parties' obligation to provide written notice under this Agreement may not be waived. Electronic or computerized mail is not an acceptable form of delivery of notices required by this Contract. The parties expressly and unequivocally waive any claim against the other based upon actual, verbal, or constructive notices. All written notice requirements are to be strictly construed and are a non-waivable condition precedent to pursuing any claims, rights, or remedies by under this Agreement.

# SC-17.07.A Mutual Waiver of Consequential Damages

Add the following new Paragraph 17.07.A to Article 17 of the General Conditions:

17.07 Mutual Waiver of Consequential Damages

A. Except to the extent of liquidated damages payable by Contractor under this Agreement and the express third party claim indemnification obligations of the parties hereunder, in no event shall either Owner or Contractor be liable to the other party under any legal theory whatsoever for consequential, incidental, punitive or exemplary damages of any nature whatsoever.

## SC-17.08.A Waiver of Jury Trial

Add the following new Paragraph 17.08.A to Article 17 of the General Conditions:

17.08 Waiver of Jury Trial

A. The parties hereby expressly agree that all disputes, claims, and counterclaims relating to this Agreement and the project shall be litigated, adjudicated, or otherwise resolved without a jury. The parties expressly, voluntarily, and unequivocally waive any right they may have to a jury trial in connection with all disputes, claims, and counterclaims relating to this Agreement and the project.

# CONSTRUCTION PHASE REQUEST FOR INFORMATION

RFI No.:		
Date Submitted:		
Name of Project:	The Quarry CDD 2022 Shoreline Phase II	
Owner:	The Quarry Community Development District	
Contractor:		
RFI From:		
Description of Requ	est:	
Response to Request:		
Response By:		
Date of Response:		
	END OF SECTION	

The Quarry CDD 2022 Shoreline Phase II

## **CHANGE ORDER FORM**

Change Order No.	
Project Name:	The Quarry CDD 2022 Shoreline Phase II
Bid No.:	
Owner:	The Quarry Community Development District
Contractor:	
Agreement Date:	
<u> </u>	

This Change Order is necessary to cover changes in the Work to be performed under the Agreement. The Agreement, General Conditions, Supplementary Conditions, and Technical Specifications contained in the Project Manual apply to and govern all Work under this Change Order.W

# THE FOLLOWING CHANGES ARE MADE TO THE CONTRACT DOCUMENTS:

1.	Original Contract Price	\$
2.	Current Contract Price (Adjusted by Previous Change Orders)	\$ ,
3.	Total Proposed Change in Contract Price	\$
4.	New Contract Price (Item 2 + Item 3)	\$
5.	Original Contract Time (Notice to Proceed to Substantial Completion)	Days
6.	Current Contract Time (Adjusted by Previous Change Orders)	Days
7.	Current Subst. Completion Date (Adjusted by Previous Change Orders)	
8.	Total Proposed Change in Contract Time	Days
9.	New Contract Time (Item 6 + Item 8)	Days
10.	New Contract Substantial Completion Date (Item 7 + Item 8)	
11.	Current Final Completion Date (Adjusted by Previous Change Orders)	
12.	Current Contract Time From Substantial Completion to Final Completion	Days
13.	Total Proposed Change in Contract Time Subst. to Final Completion	Days
14.	New Contract Time to Subst. Final Completion (Item 12 + Item 13)	 Days
15.	New Contract Final Completion Date (Item 10 + Item 14)	

# **CHANGES ORDERED**

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Description of Change:

Reason for Change:

Change in Contract Price: \$

Change in Contract Time: Days

# <u>ITEM 2</u>

Description of Change:

Reason for Change:

Change in Contract Price: \$

Change in Contract Time: Days

# ITEM 3

Description of Change:

Reason for Change:

Change in Contract Price: \$

Change in Contract Time: Days

ITEM 4	
Description of Change:	
Reason for Change:	
Change in Contract Price:	\$
Change in Contract Time:	Days
ITEM 5	
Description of Change:	
Reason for Change:	
Change in Contract Price:	\$
Change in Contract Time:	Days
ITEM 6	
Description of Change:	
Reason for Change:	

Change in Contract Price:

Change in Contract Time:

\$

Days

CHANGE ORDER SUMMARY			
No.	Description	Change in Contract Price	Change in Contract Time
TOT	AL	\$	Days

<u>WAIVER</u> This Change Order constitutes full and mutual accord and satisfaction for the adjustment of the Contract Price and Contract Time as a result of increases or decreases in cost and time of performance caused directly and indirectly from the change. Acceptance of this Waiver constitutes an agreement between OWNER and CONTRACTOR that the Change Order represents an equitable adjustment to the Agreement and that CONTRACTOR shall waive all rights to file a Contract Claim or claim of any nature on this Change Order. Execution of this Change Order shall constitute CONTRACTOR's complete acceptance and satisfaction that it is entitled to no more costs or time (direct, indirect, impact, etc.) pursuant to this Change Order.

# APPROVAL AND CHANGE ORDER AUTHORIZATION

# **ACKNOWLEDGMENTS**

The aforementioned change, and work affected thereby, is subject to all provisions of the original Agreement and specifically changed by this Change Order; and

It is expressly understood and agreed that the approval of the Change Order shall have no effect on the original Agreement other than matters expressly provided herein.

WITNESS to CONTRACTOR:	
	Contractor
	Printed Name and Title of Officer
Date	By (Signature)
	Date (Corporate Seal)
ATTEST:	Owner
(Signature)	Printed Name and Title
Date	By (Signature)
(Seal)	Date

#### **SUMMARY OF WORK**

#### **PART 1 GENERAL**

#### 1.01 Section Includes

Summary of work, other contracts, work sequence, operation of existing facilities, use of premises, Owner furnished products, coordination, cutting and patching

# 1.02 Summary of Work

- A. The Project consists of the maintenance and repair any deficiencies for all lake banks within the project limits. Locations of erosion deficiencies are identified on the 2022 Shoreline Phase II Construction Plans dated <u>October 26<sup>th</sup>, 2021</u> prepared by CPH, Inc.
- B. Furnish all materials, equipment, tools, and labor which is reasonably and properly inferable and necessary for the proper completion of the Work, whether specifically indicated in the Contract Documents or not.
- C. Reference Section 01410 Regulatory Requirements and Permits concerning permits secured by the Owner and permits to be secured by the Contractor. Other licenses or permits for construction facilities of a temporary nature that are necessary for the prosecution of the work shall be secured and paid for by the Contractor.
- D. Repair, replace, or otherwise settle with the Owner, if damage to property or existing facilities occurs, including damage to pavements, utilities, lawns, structures, etc.
- E. Construct the Project under a single Unit Price contract.

## 1.03 Work Under Other Contracts - N/A

# 1.04 Work Sequence

The Contractor's sequence of work shall be split in a minimum of two dry seasons.

- 2022 dry season work shall include all repair work specified on the plans for lakes: 30 @ golf course hole #18, 32, 34, 36, 38, 41, 42, 44, 46, 47, 50, 54 and 55. This scope shall be completed no later than June 30, 2022.
- 2023 dry season shall include all repair work specified on the plans for lakes: 30, 33, 34, 37, 40, 45, 48, 56, 57, 58, 59, 61, 62, 63, 63A, 63B, 64. This scope of work shall be completed no later than June 30<sup>th</sup>, 2023.

The contractor order of lakes may be of his choosing in order to complete the work in the allowed time frame under each dry season while accommodating other contractors on site. Lake repairs along golf course shoreline shall be prioritize in order to avoid unexpected golf club closing.

# 1.05 Operation of Existing Facilities

The Owner shall be able to operate existing facilities 24 hours per day, 7 days per week.

#### 1.06 Contractor Use of Premises

Confine operations at the site to areas permitted by applicable laws, ordinances, permits, and by the Contract Documents. Do not unreasonably encumber the site with materials or equipment. Do not load structures with weight that will endanger the structure. The Contractor shall assume full responsibility for protection and safekeeping of products stored on the job site.

#### 1.07 Owner Furnished Products – N/A

#### 1.08 Coordination

- A. The Contractor shall be fully responsible for the coordination of his work and the work of his employees, subcontractors, and suppliers and to assure compliance with schedules.
- B. The coordination requirements of this Section are in addition to the requirements of Section 00700, General Conditions, and 00800, Supplementary Conditions.
- C. It is the Contractor's responsibility to coordinate with all the utilities regarding locates, testing, or relocations.

# 1.09 Cutting and Patching

- A. The Contractor shall, at no additional expense to the Owner, perform cutting and patching necessary to the completion of the Project. Perform cutting and patching in a manner to prevent damage to the structure or previously completed work.
- B. Refinish surfaces as necessary to provide an even finish.

PART 2 PRODUCTS - Not Used

**PART 3 EXECUTION - Not Used** 

#### MEASUREMENT AND PAYMENT

# **PART 1 GENERAL**

# 1.01 Description

- A. Payment for all Work done in compliance with the Contract Documents, inclusive of furnishing all manpower, equipment, materials, and performance of all operations relative to construction of this project, will be made under Pay Items listed herein. Work for which there is not a Pay Item will be considered incidental to the Contract and no additional compensation will be allowed.
- B. The Owner reserves the right to alter the Drawings, modify incidental work as may be necessary, and increase or decrease quantities of work to be performed to accord with such changes, including deduction or cancellation of any one or more of the Pay Items. Changes in the work shall not be considered as a waiver of any conditions of the Contract nor invalidate any provisions thereof. When changes result in changes in quantities of Work to be performed, the Contractor will accept payment according to Contract Unit Prices that appear in the original Contract.
- C. Quantities necessary to complete the work as shown on the Drawings or as specified herein shall govern over those shown in the Proposal. The Contractor shall take no advantage of any apparent error or omission in the Drawings or Specifications, and the Engineer shall be permitted to make corrections and interpretations as may be deemed necessary for fulfillment of the intent of the Contract Documents.
- D. The Engineer will make measurements and determinations as necessary to classify the work within pay items and determine the quantities for pay purposes; such decisions will be final after 3 days if the Contractor does not submit a written notice as defined in the following paragraph.
- E. If the Contractor differs with the Engineer's classification of the Pay Items or determination of quantities of the Pay Items, he must notify the Engineer in writing within 3 days of the time that the Contractor is informed of the Engineer's decision. Otherwise the Owner will not consider any such difference as a claim for payment.
- F. Failure on the part of the Contractor to construct any item to plan or authorized dimensions within the specification tolerances shall result in: reconstruction to acceptable tolerances at no additional cost to the Owner; acceptance at no pay; or, acceptance at reduced final pay quantity or reduced unit price, all at the discretion of the Engineer.
- G. Work shall not be considered complete until all testing has been satisfactorily completed and the item of work has demonstrated compliance with plans and specifications.

- H. A preliminary monthly application for payment shall be submitted to the Owner/Engineer for review five (5) days prior to the submittal for approval of the Contractor's monthly payment request.
- I. Where FDOT pay item numbers are shown on the bid form, they generally follow FDOT pay item number formatting; however, they are only provided in order to use them for pay application purposes. FDOT pay item descriptions do not apply; utilize the descriptions on the bid form and within this section to determine the work associated with each pay item.

## PART 2 PAY ITEMS

## 2.01 Mobilization

#### A. Work Includes

Preparatory work and operations in mobilizing for beginning Work on the Project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, plus permits, fees, bonds (excluding the Material and Workmanship Bond), and insurance. Also included are temporary utilities/facilities, staging and storage areas, survey and layout, safety equipment and all other items not specifically identified under other bid items which are necessary for the construction, and compliance with administrative and regulatory requirements.

B. No separate payment cost. This cost for this item shall be spread among all other pay items.

## 2.02 Demobilization, Cleanup, Record Drawings, Project Closeout

# A. Work Includes

The movement of personnel, equipment, surplus materials from the project site, final site cleanup, cleanup and restoration of staging and storage areas, submittal of Final Record Drawings, providing required closeout documents such as the Material and Workmanship Bond, completion certificates, and manufacturer operation and maintenance instructions.

B. No separate payment cost. This cost for this item shall be spread among all other pay items.

## 2.05 Erosion and Sediment Control

#### A. Work Includes

Preparation and implementation of stormwater pollution prevention control plan, including monitoring, inspecting, and reporting, providing erosion and sediment control measures, preparing and filing EPA NPDES NOI and NOT forms, and providing required contractor certifications. Also includes hay bales, filter bags,

and filter fabric as needed for supplemental inlet protection and to supplement silt fence, including replacement and maintenance needed during construction. In the event temporary staging and storage areas are used, any required erosion and sediment control measures are to be included in this item.

B. No separate payment cost. This cost for this item shall be spread among all other pay items

# 2.06 Sediment Barrier (Silt Fence)

#### A. Work Includes

Furnishing and installing silt fence including fence reinstallation, replacement, or other repairs and maintenance needed throughout construction, removal of silt fence at the completion of construction, restoration.

B. No separate payment cost. This cost for this item shall be spread among all other pay items.

# 2.07 Floating Turbidity Barrier

#### A. Work Includes

Furnishing and installing turbidity barrier including reinstallation, replacement, or other repairs and maintenance needed throughout construction, removal of turbidity barrier at the completion of construction.

B. Unit of measurement is linear feet.

# 2.08 Import Fill to Meet 4:1 Slope

#### A. Work Includes

Survey, layout, furnishing and installing suitable material as necessary for the construction. Work also includes grading, compaction, and testing of suitable fill material. Also includesfinish grading (to uniform smooth surface, positive drainage), filling depressions, dressing with suitable topsoil as required, compaction and testing.

- B. Unit of measurement is cubic yards, measured in place.
- C. Payment will be made at the contract unit price per cubic yard of regular excavation and embankment removed or placed.

#### 2.09 Install Geotextile Mat

#### A. Work Includes

Placing of geotextile mat on newly graded lake bank areas.

B. Unit of measurement is per square yard (SY), installed and accepted.

# 2.10 Biodegradable Erosion Blanket

A. Work Includes

Placing of erosion control blankets on newly graded lake bank areas.

B. Unit of measurement is per square yard (SY), installed and accepted.

## 2.11 Riprap

A. Work Includes

Subgrade preparation, furnishing and installing material, compacting.

B. Unit of measurement is Tons.

# 2.12 Littoral Plantings – 1 gal.

A. Work Includes

Soil preparation, bedding, furnishing and installing plants, mulch, staking (where required), watering, fertilizing, maintenance.

B. Unit of measurement is each. Payment will be made in accordance with the type of plantings as indicated on the Construction Plans.

# 2.13 Littoral Plantings – 2" liners.

A. Work Includes

Soil preparation, bedding, furnishing and installing plants, mulch, staking (where required), watering, fertilizing, maintenance.

B. Unit of measurement is each. Payment will be made in accordance with the type of plantings as indicated on the Construction Plans.

# 2.14 Irrigation Line Relocation / Repair

A. Work Includes

Relocation & repair of existing irrigation lines as needed within the project limits. Additional head installation or modification to secure proper planting growth.

B. Unit of measurement is lineal feet.

# 2.15 Irrigation Head Relocation / Repair

## A. Work Includes

Relocation & repair of existing irrigation heads as needed within the project limits.

B. Unit of measurement is each.

# 2.16 Sodding of Disturbed Areas

A. Work Includes

Placing Sod to aid stabilization of lake bank in areas indicated on the plans.

B. Unit of measurement is per square yard (SY), completed and accepted.

# 2.17 Yard Drain Relocation / Repair

A. Work Includes

Relocation / repair of existing yard drains and associated piping as needed within the project limits.

B. Unit of measurement is each.

# 2.18 Double Wall ADS Drainage Pipe - 4", 6", 8" and 10"

A. Work Includes

Installation of 4", 6", 8" and 10" drainage pipe.

B. Unit of measurement is lineal feet.

# 2.19 Concrete (Flume and Curb)

A. Work Includes

Installation of concrete flume and vertical curb.

B. Unit of measurement is square yards (SY).

# 2.20 Rock Wall

A. Work Includes

Installation of cut limestone cap rock boulders wall.

B. Unit of measurement is square feet.

# **PART 3 EXECUTION - Not Used**

#### ADMINISTRATIVE REQUIREMENTS

#### PART 1 GENERAL

#### 1.01 Section Includes

Meetings, construction progress documentation, submittals.

#### 1.02 Related Sections

A. Section 01770 - Contract Closeout

## 1.03 Preconstruction Meeting

The Owner will schedule a preconstruction meeting prior to beginning the Work to review shop drawing procedures, submittal requirements, and construction administration requirements (project coordination and communication). The Contractor shall bring to the preconstruction meeting the proposed construction schedule, which will be reviewed with the Owner during the meeting.

#### 1.04 Definitions

- A. Shop Drawings Shop drawings are original drawings, prepared by the Contractor, a subcontractor, supplier, or distributor, which illustrate some portion of the Work; showing fabrication, layout, setting, or erection details. Shop drawings shall be prepared by a qualified detailer and shall be identified by reference to sheet and detail numbers on the Contract Drawings
- B. Product Data Product data are manufacturer's standard schematic drawings and manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data. Catalog sheets, brochures, etc., shall be clearly marked to identify pertinent materials, products, or models.
- C. Samples Samples are physical examples to illustrate materials, equipment, or workmanship and to establish standards by which work is to be evaluated.

# 1.05 Submittal Requirements

- A. Prior to submission, thoroughly check shop drawings, product data, and samples for completeness and for compliance with the Contract Documents. Verify all field measurements, quantities, dimensions, specified performance criteria, fabrication, shipping, handling, storage, assembly, installation, and safety requirements.
- B. Coordinate the submittals with the requirements for other related work.

- C. Notify the Engineer, in writing at the time of submission, of deviations in submittals from the requirements of the Contract Documents. The Contractor's responsibility for deviations in submittals from the requirements of the Contract Documents is not relieved by the Engineer's review of submittals, unless the Engineer gives written acceptance of specific deviations.
- D. Submit electronic copies (PDF format) of each shop drawing and product data.
- E. Where a specific product manufacturer and model number is listed in individual specification sections and is proposed by the Contractor to be used, full submittal of product data is not required. In this case, submit in letter format the name of the product, manufacturer, model number, specification section, and name of project. Certify the identified product is proposed to be used in the project.
- F. Shop drawings, product data, and samples shall be accompanied by a letter of transmittal referring to the name of the project and to the specification page number and/or Drawing number for identification of each item. Submittals for each type of work shall be numbered consecutively, and the numbering system shall be retained throughout all revisions.
- G. Submittals shall bear the Contractor's stamp of approval certifying that they have been checked and indicate appropriate specification section and/or drawing location. Submittals without the Contractor's initialed or signed certification stamp and submittals which, in the Engineer's opinion, are incomplete, contain numerous errors or have not been properly checked, will be returned unchecked by the Engineer for resubmission.
- H. Begin no work which requires submittals until return of submittals with Engineer stamp and printed name or signature indicating the submittal has been approved.

## 1.06 Engineer Review of Submittals

- A. Engineer's review and approval of submittals will not extend to means, methods, techniques, sequences, procedures of construction or to safety precautions.
- B. The review and approval of a separate item will not indicate approval of the assembly in which the item functions. Engineer's review and approval of submittals shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents.
- C. The Engineer will review submittals with reasonable promptness. The Engineer's review of submittals shall not be construed as a complete check and shall not relieve the Contractor from responsibility for complete compliance with the Contract requirements.
- D. No corrections, changes, or deviations indicated on submittals reviewed by the Engineer shall be considered as a change order.

- E. Where review of submittals is required by the Owner or other agencies, the Engineer will forward the appropriate submittal(s) to these parties after Engineer review. Once review of all parties is complete, the submittal(s) will be returned to the Contractor reflecting the review of all parties
- F. If the submittal is not satisfactory, one copy of the submitted item will be retained by the Engineer and all other copies returned to the Contractor for appropriate action.
- G. In the event a third submittal is required, due to previous submittals of incomplete or incorrect data or not in compliance with the Contract Documents, the Contractor will be charged one-half of the cost incurred by the Engineer for the review of the third submittal. The Contractor shall bear the total cost incurred by the Engineer for all subsequent reviews. The Engineer costs charged to the Contractor will be at the cost plus rate generally charged by the Engineer and will be deducted by the Owner from payments due to the Contractor.
- H. Distribution of copies of acceptable submittals will be as mutually determined by the Contractor, Owner, and Engineer during or following the preconstruction conference.

# 1.07 Progress Meetings

- A. The frequency of progress meetings shall be determined during the preconstruction meeting. As a minimum, progress meetings shall be held once per month during construction.
- B. The Contractor and Owner shall attend the progress meetings.

**PART 2 PRODUCTS - Not Used** 

PART 3 EXECUTION - Not Used

#### PROJECT COMPLETION SCHEDULE

#### PART 1 GENERAL

#### 1.01 Section Includes

Project completion scheduling

#### 1.02 Submittals

- A. Prior to construction, prepare a schedule showing all major activities needed to complete project. Include major material and equipment order and delivery times. Submit to Owner no later than the date of the preconstruction conference.
- B. Schedule to utilize Critical Path Method formatted by establishing a precedence diagram which is time scaled. Include on schedule activity start dates, stop dates, and duration; critical path; float; delivery schedules. Include submittal dates and durations for components with extended lead times in schedule.
- C. Include on the schedule a minimum float of 1 day every 3 weeks during construction.
- D. Project substantial and final completion dates shown on schedule shall be same as or earlier than the contractual dates.

#### PART 2 PRODUCTS - Not Used

# **PART 3 EXECUTION**

## 3.01 Monitoring and Updating of Schedule

- A. Float shown on the schedule belongs to the project.
- B. Progress data shall be accumulated to update the schedule on a monthly basis, prior to submittal of the application for payment. Progress data shall include:
  - 1. Activities started
  - 2. Activities completed.
  - 3. Predicted activity starts
  - 4. Predicted activity completions
  - 5. Changes in original duration for specific activities
  - 6. Changes in activity sequences
  - 7. Percent complete on activities
- C. Update of schedule to include effect of the progress projected for the next two (2) reporting periods.

#### REGULATORY REQUIREMENTS AND PERMITS

#### PART 1 GENERAL

#### 1.01 Section Includes

Regulatory requirements, project permits

# 1.02 Requirements of Regulatory Agencies

- A. All piping installed within the right-of-way of any city, county, state, or federal highway or railroad shall be in accordance with a permit to construct issued by the controlling agency and obtained by the Owner. In no case shall an open trench be constructed within a railroad right-of-way unless otherwise indicated.
- B. Whenever the Drawings and Specifications conflict with the requirements of the permit, then the requirements of the permit shall govern and the cost of abiding by the provisions of the permit shall be considered incidental to the Contract.
- C. All electrical apparatus and wiring pertaining to a piece of equipment or an appliance furnished and installed under this Contract shall comply with the National Electrical Code and shall be listed by Underwriters Laboratories or bear the approval of a recognized Testing Laboratory approved by the Engineer.
- D. All construction projects 1 or more acres in size that discharge to offsite areas are required to abide by the provisions of the National Pollution Discharge Elimination System (NPDES) General Permit.

## 1.04 Project Permits

- A. The following permits have been obtained for the construction of the project, and are contained in the Appendix of the Project Manual:
  - 1. South Florida Water Management District Environmental Resource Permit No. 11-02234-P10, dated \_\_\_\_\_\_.
- B. The Contractor shall review and become familiar with all permits for the Project, complete with all conditions, attachments, exhibits and permit modifications. A copy of all permits for the Project shall be maintained by the Contractor at the project site, and shall be available for review upon request.

C. The Contractor shall be fully responsible to abide by all provisions of the permits. The Contractor is responsible for the selection, implementation and operation of all measures required by the permits, including the maintenance of said measures as necessary during construction. No additional compensation will be allowed for any work associated with permit requirements.

**PART 2 PRODUCTS - Not Used** 

**PART 3 EXECUTION - Not Used** 

#### STORMWATER POLLUTION PREVENTION / NPDES REQUIREMENTS

#### PART 1 GENERAL

#### 1.01 Section Includes

Stormwater Pollution Prevention Plan requirements and recommendations under the NPDES program for construction projects located in Florida.

## 1.02 Purpose

The purpose of this section is to outline minimum requirements for stormwater pollution prevention as required under the NPDES program. There may be more stringent local government or Owner requirements for Erosion and Sediment Control, which would be located in the Specifications or on the Drawings. The more stringent requirement governs.

## 1.03 Related Sections

- A. Section 01410 Regulatory Requirements and Permits
- B. Section 02370 Erosion and Sediment Control

#### 1.04 Abbreviations

- A. NPDES National Pollution Discharge Elimination System
- B. SWPPP Stormwater Pollution Prevention Plan
- C. NOI Notice of Intent
- D. NOT Notice of Termination

#### 1.05 Definitions

The term "NPDES Generic Permit" means the State of Florida Department of Environmental Protection (FDEP) Generic Permit For Stormwater Discharge from Large and Small Construction Activities. The NPDES Generic Permit is also known as the NPDES) Construction Generic Permit (CGP).

# 1.06 Construction Projects Requiring Compliance with NPDES Generic Permit

- A. All projects 1 or more acres in size that discharge to offsite areas.
- B. Smaller projects that are in the same construction corridor as larger construction projects where the larger project is 1 or more acre in size and is required to comply with the NPDES Generic Permit. In this case, even if the smaller project is less

than 1 acre in size, the smaller project must comply with the NPDES Generic Permit.

# 1.07 General Requirements

- A. Construction of this project is required to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Generic Permit for Stormwater Discharge from Small and Large Construction Activities.
- B. In order to meet NPDES requirements, the Contractor is responsible for preparing a Stormwater Pollution Prevention Plan (SWPPP), implementing, inspecting, maintaining, and reporting on all elements of the SWPPP, completing and submitting the required Notice of Intent (NOI) and Notice of Termination (NOT) forms as the Operator, and paying all associated fees. Copies of the NPDES Generic Permit, NOI, and NOT forms, and permit application fee information are available for download at dep.state.fl.us/water/stormwater/npdes/
- C. The SWPPP shall list all the contractors or subcontractors who will be conducting construction activities at the site, and identify the areas of the site in which they will be working. All contractors and subcontractors identified in the SWPPP must sign a copy of the certification statement contained at the end of this specification section before conducting any construction activities at the site. The certifications must have the name and title of the person signing the certification; the name, address, and telephone number of the contracting firm; and the signature date. These statements must be maintained in the SWPPP file on site.
- D. The SWPPP shall describe and ensure the implementation of best management practices which will be used to reduce the pollutants in stormwater discharge associated with construction activity and to assure compliance with the terms and conditions of the NPDES Generic Permit. The erosion and sediment control measures shown on these Drawings are the minimum required and are to be installed prior to construction. The Contractor is responsible for complying with all applicable rules, regulations and water quality standards and may need to install additional controls to meet these requirements.

# 1.08 SWPPP Implementation and Submittal Requirements

- A. The SWPPP shall be completed prior to submittal of the NOI and shall include the elements necessary to comply with the NPDES Generic Permit for construction activities administered by the FDEP and shall also include all local governing agency and Owner requirements. There may be more stringent local government or Owner requirements for Erosion and Sediment Control, which would be located in the Specifications or elsewhere on these Drawings.
- B. The Contractor must file the NOI with FDEP and the Owner at least two (2) business days prior to the start of construction. The Contractor shall also submit a copy of the NOI to the MS4 operator for all projects that discharge stormwater associated with construction activity to a municipal separate stormwater system

- (MS4). A copy of the NOI and a description of the project must be posted in a prominent place for public viewing at the construction site.
- C. The SWPPP must be implemented at the start of construction. A complete copy of the SWPPP, including copies of all inspection reports, plan revisions, etc., must be retained at the project site at all times during working hours and kept in the permanent project records for at least three years following submission of the NOT.
- D. Final Stabilization means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover (evenly distributed, without large bare areas) with a density of at least 70% for all unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures (such as geotextiles) have been employed. Once construction is completed and final stabilization has been achieved, the Contractor must file the NOT to FDEP, the Owner, and the MS4 operator within 14 days.

# 1.09 Inspections

- A. It is the responsibility of the Contractor to assure the adequacy of site pollutant discharge controls. Between the time the SWPPP is implemented and final site stabilization is achieved, all disturbed areas and pollutant controls must be inspected at least once every seven calendar days and within 24 hours following a rainfall of 0.5 inches or greater. The inspections are to be conducted by the Contractor's qualified designated representative.
- B. All inspections shall be documented in an inspection report that summarizes the scope of the inspection, the names and qualifications of personnel making the inspection; the date of the inspection; rainfall data; major observations relating to the implementation of the SWPPP, and actions taken in order to ensure compliance with NPDES requirements and the SWPPP. Such reports shall identify any incidents of non-compliance and actions taken to bring the project into compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the NPDES requirements and the SWPPP. Each inspection report shall be signed and certified by each qualified inspector.

# 1.10 Updating and Modifying the SWPPP

- A. Based on inspection results, any modifications necessary to increase effectiveness of the SWPPP to an acceptable level must be made within seven calendar days of the inspection.
- B. The SWPPP must be updated each time there are significant modifications to the pollutant prevention system or a change of contractors working on the project who disturbs site soil. For construction activities where the operator changes, the new operator shall file an NOI for coverage under this permit at least two (2) days before assuming control of the project and the previous operator shall file an NOT to

terminate permit coverage in accordance with the NPDES Generic Permit. Amendments to the plan shall be prepared, signed, dated, and kept as attachments to the original SWPPP.

# 1.11 Minimum SWPPP Provisions

- A. The following list contains the items that must be included in the SWPPP. The SWPPP must clearly identify the contractor(s) or subcontractor(s) that will implement each item.
  - Stormwater Team: Identify the personnel (by name or position) that are part of the stormwater team responsible for implementing the SWPPP, including the qualified inspector. List their individual responsibilities in developing or implementing the SWPPP.
  - Contractors /Subcontractors: List all the contractors or subcontractors who
    will be conducting construction activities at the site, and identify the areas
    of the site in which they will be working. All listed contractors and
    subcontractors must sign the certification contained at the end of this
    specification section.
  - 3. Site/Construction Activities Description:
    - a. Describe the nature of the construction activity.
    - b. Describe the intended sequence and time table of major activities that will disturb soils.
    - c. Include the scheduled starting and ending date for each major activity such as land clearing, grubbing, grading, cut and fill, dewatering operations, installation of erosion and sediment controls, installation of stormwater management systems, paving, final or temporary stabilization of exposed soil, and removal of construction equipment and vehicles.
    - d. Estimate the total area of the site and the total area that is expected to be disturbed by excavation, grading, or other construction activity.
    - e. Include existing data on soil types and the quality of any existing discharge from the site.
  - 4. For each proposed discharge point provide the following:
    - a. Latitude and Longitude
    - b. Drainage Area
    - c. Surface Waters or MS4
    - d. Estimate the amount of land that will be cleared during the construction activity for each drainage area.
  - 5. Include a site map showing all of the following:
    - a. Boundaries of the property.
    - b. Entrance/Exit Points
    - c. Locations where construction activities will occur.

- d. Locations where dewatering operation will occur.
- e. Drainage patterns and approximate slopes and elevations anticipated after major grading activities.
- f. Areas of soil disturbance.
- a. Areas which will not be disturbed.
- h. Location of major structural and nonstructural controls.
- i. Location of areas where stabilization practices are expected to occur.
- Location of surface waters and wetlands.
- k. Location where stormwater is proposed to be discharged during construction to a surface water or MS4.
- 6. List all non-stormwater discharges covered under the CGP and the pollution prevention procedures that will be implemented. The following types of non-stormwater discharges, if they are listed in the SWPPP and the SWPPP includes appropriate pollution prevention procedures as to not cause or contribute to a violation of water quality standards are to be considered to be covered (allowed) by the CGP:
  - a. Discharges from firefighting activities.
  - b. Fire hydrant flushings.
  - c. Waters without detergents used to spray off loose solids from vehicles.
  - d. Waters used to control dust.
  - e. Potable water sources such as waterline flushings.
  - f. Landscape irrigation water and drainage.
  - g. Routine external building washdown provided no detergents are used.
  - h. Pavement washwaters that do not contain detergents, leaks, spills of toxic or hazardous materials.
  - i. Air conditioning condensate.
  - j. Spring water.
  - k. Foundation or footing drain flows that are not contaminated with process material such as solvents.
  - I. Non-contaminated ground water associated with dewatering activities as described in Part 3.4 of the CGP.
- 7. The following non-stormwater discharges are prohibited by the CGP:
  - a. Wastewater from concrete washout.
  - b. Wastewater from washout or cleanout of stucco, paint, form release oils, curing compounds, and other construction materials.
  - c. Fuels, oils, or other pollutants from vehicle and equipment operation and maintenance.
  - d. Soaps, detergents, solvents, or other cleaners.
  - e. Hazardous substances or oil resulting from an on-site spill.
  - f. Solid materials, including building materials.

- g. Any other non-stormwater discharge not specifically allowed by the CGP as identified above.
- 8. Dewatering Controls (If Applicable): Include a description of the BMPs that will be used to ensure that discharges of noncontaminated ground water from dewatering operations do not cause or contribute to violations of state water quality standards.
- BMPs: Describe the BMPs that will be implemented for each major activity and the timing during the construction process that they will be implemented.
- 10. Permanent stormwater management controls: Describe the stormwater management controls or BMPs (e.g., stormwater detention or retention systems, vegetated swales, or velocity dissipation devices at discharge points) that will be installed during the construction process to control pollutants in stormwater discharges.
- 11. Inspections: Inspections must be at least once every seven calendar days and within 24- hours of the end of a storm event that is 0.50 inches or greater (even if it rains on the weekend or a holiday).
- 12. Maintenance: Describe the maintenance activities and schedules that will be followed to keep BMPs in good and effective operating condition.
- 13. Signed Certifications: Include all the signed contractors and subcontractors certifications in the SWPPP (Contained at the end of this specification is an example certification form).

## 1.12 Site Data

A. The following site data is provided to the Contractor for use in preparing the SWPPP and completing the NOI:

Total Site Area:	
Total Area Impacted by	
Construction:	
Existing Site Soils:	
<b>Drainage Area Contributing to Each</b>	
Discharge Point:	
Latitude and Longitude of Project	
Location:	
MS4 Operator Name:	
Receiving Waters:	

1.13 Minimum Erosion and Sediment Control Construction Requirements

- A. Stabilize all construction site exits with coarse aggregate or other approved materials, in accordance with details on the Drawings. Other minimum construction requirements that need to be implemented in order to comply with the NPDES Generic permit include installation of sediment barriers down slope from construction activities that disturb site soil; constructing rock surface temporary parking areas; installation of sediment barriers down slope prior to clearing and grubbing; installation of sediment barriers on the down slope side of utility construction and soil stockpiles; and the installation of sediment barriers on the down slope side of grading activities.
- B. Stabilization measures shall be initiated as soon as practicable, but in no case more than 7 days, in portions of the site where construction activities have temporarily or permanently ceased.
- C. The Owner has the authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, trenching, borrow and embankment operations. The Owner also has authority to direct Contractor to provide immediate permanent or temporary erosion and sediment control measures.
- D. The Contractor shall respond to erosion and sediment control maintenance requirements or implement additional measures to control erosion ordered by Owner or governing authorities within 48 hours or sooner if required at no additional cost to the Owner.
- E. The Contractor shall incorporate permanent erosion control features into project at earliest practical time to minimize need for temporary controls.
- F. For drainage basins with 10 or more disturbed acres at one time, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. The 3,600 cubic feet of storage area per acre drained does not apply to flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. For drainage basins with 10 or more disturbed acres at one time and where a temporary sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent controls is not attainable, a combination of smaller sediment basins and/or sediment traps and other BMPs should be used. At a minimum, silt fences, or equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area.
- G. Water trucks shall be used as needed during construction to reduce dust generated on the site. Dust control must be provided by the Contractor and shall be in compliance with applicable local and state dust control regulations.

# 1.14 Maintenance Requirements

- A. Maintain all erosion and sediment control measures throughout construction. Repair or replace all damaged sediment barriers. Remove accumulated sediment along all silt fences where the height of the sediment exceeds one-third of the height of the silt fence. Inspect all temporary and permanent grassing areas and re-grass where there are bare spots, washouts, or unhealthy growth.
- B. At the completion of construction, once final stabilization has been achieved, clean all accumulated sediment from all storm structures, pipelines, and stormwater ponds. Remove all temporary sediment controls upon receipt of authorization to remove has been received from the Owner or Engineer. Note that this may not occur for some time after construction activities have been completed, in order to ensure their removal has not occurred until final stabilization has been achieved to the satisfaction of the Owner and Engineer.

# 1.15 Stormwater Discharge Provisions

- A. Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil in accordance with local and state regulations.
- B. All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities shall be provided at the site throughout the construction phase for use by all construction personnel and shall be serviced by a commercial operator at least once a week.
- C. Discharges resulting from groundwater dewatering activities at construction sites are permitted provided the groundwater is free of sediments, is not contaminated, and dewatering occurs in accordance with state and local governing agency regulations.
- D. Chemicals, paints, solvents, fertilizers, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated, and disposed at an approved solid waste or chemical disposal facility.
- E. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility or activity shall be prevented. This does not relieve the operator of the reporting requirements of 40 CFR part 117 and 40 CFR part 302. The operator shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and remedial steps to be taken. The SWPPP must be modified within 14 calendar days of knowledge of the release to: provide a description of

the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

## **CONTRACTOR / SUBCONTRACTOR CERTIFICATION**

These statements must be maintained in the SWPPP file on site.

The SWPPP shall list all the contractors or subcontractors who will be conducting construction activities at the site, and identify the areas of the site in which they will be working.

All contractors and subcontractors identified in the SWPPP must sign a copy of the following certification statement before conducting any construction activities at the site. The certifications must have the name and title of the person signing the certification; the name, address, and telephone number of the contracting firm; and the signature date.

Name of Contractor / Subcontractor Conducting Construction at the site:

Business Name

Business Address

Business Telephone Number

CERTIFICATION:

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

Signature

Date

Printed Name

# CONTRACTOR CERTIFICATION

The SWPPP has been prepared by:	
Business Name	
Business Address	
Business Telephone Number	
The Contractor who has prepared the SWPPP sha	Il make the following certification:
"I certify under penalty of law that this document my direction or supervision in accordance with personnel properly gathered and evaluated to inquiry of the person or persons who manageresponsible for gathering the information, the inknowledge and belief, true, accurate, and compenalties for submitting false information, imprisonment for knowing violations."	a system designed to assure that qualified he information submitted. Based on my ge the system, or those persons directly nformation submitted is, to the best of my plete. I am aware that there are significant
Signature	Date
Printed Name	
PART 2 PRODUCTS - Not Used	
PART 3 EXECUTION - Not Used	

The Quarry CDD 2022 Shoreline Phase II

#### REFERENCES

#### **PART 1 GENERAL**

#### 1.01 Section Includes

Referenced standards and abbreviations

#### 1.02 Referenced Standards

- A. Any reference to published specifications or standards of any organization or association shall comply with the requirements of the specification or standard which is current on the date of Advertisement for Bids. In case of a conflict between the referenced specifications or standards, the one having the more stringent requirements shall govern.
- B. In case of conflict between the referenced specifications or standards and the Contract Documents, the Contract Documents shall govern.

#### 1.03 Abbreviations

The following are definitions of abbreviations used within the Project Manual:

AA	Aluminum Association
AASHTO	American Association of State Highway and Transportation
	Officials
ACI	American Concrete Institute
ANSI	American National Standard Institute
ASTM	American Society for Tosting and Materials

ASTM American Society for Testing and Materials
CRSI Concrete Reinforcing Steel Institute

FDEP Florida Department of Environmental Protection

FDOT Florida Department of Transportation

FS Florida Statutes

OSHA Occupational Safety and Health Administration

PS United States Products Standards UL Underwriter's Laboratories, Inc.

FDOT Specification FDOT Standard Specification for Road and Bridge

Construction, latest edition

FDOT Index FDOT Standard Plans for Road Construction, latest edition

#### PART 2 PRODUCTS - Not Used

#### PART 3 EXECUTION - Not Used

#### FDOT STANDARDS REFERENCE

### PART 1 GENERAL

#### 1.01 Section Includes

Instruction on the use and applicability of FDOT standards on the project

## 1.02 Requirements

- A. The Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, latest non-metric edition ("Standard Specifications"), and Standard Plans for Road Construction, latest non-metric edition ("Standard Plans") are referenced herein as source documents for applicable technical specifications and construction details to be used in the construction of this project. The term "latest edition" refers to the latest edition implemented by FDOT and includes all FDOT implemented supplements.
- B. Method of Measurement and Basis of Payment is to be in accordance with these Contract Documents rather than the Florida Department of Transportation Standard Specifications. Any item which is detailed in the Plans and for which material types, sizes and quality are also called out, the "Standard Plans" shall take preference over the plan detail unless otherwise directed by the Engineer.
- C. Where the FDOT Standard Specifications use the reference "Department", replace "Department" with "Owner", except for when such reference is to Department Standards and evaluation criteria.
- D. The Standard Plans are referenced herein as a source document for applicable construction items and details called for in the plans for which a specific plan detail is not provided. The Contractor shall construct the items called for in the plans in accordance with the "Standard Plans" unless otherwise defined or detailed in the plans or as directed by the Owner, Engineer or authorized representative.
- E. The Standard Plans are available for download from the FDOT website at:
  - fdot.gov/design/standardplans
- F. In case of conflict, the Project Manual takes precedence over FDOT specifications for a particular construction requirement.
- G. Copies of the latest implemented edition and implemented supplements of the Florida Department of Transportation Standard Specifications are available for download from the FDOT website at:

http://www.fdot.gov/programmanagement/Implemented/SpecBooks/

H. The Contractor shall inform the Owner and Engineer in writing of any specification that the Contractor feels is ambiguous or conflicting with other plan notes and details prior to the construction of the associated item. The Engineer will determine which information is to be used for construction. The Contractor is responsible for the removal and replacement of any item improperly constructed resulting from a misinterpretation of the specifications at no additional cost to the Owner.

## PART 2 PRODUCTS - Not Used

### PART 3 EXECUTION

### 3.01 General

The Contractor shall use Divisions Two (II) and Three (III) of the FDOT Specifications as they relate to methods of construction and material types and quality for the appropriate construction items contained within this project.

#### **QUALITY CONTROL**

### PART 1 GENERAL

#### 1.01 Section Includes

Quality control, quality assurance

## 1.02 Quality Control

- A. It is the Contractor's responsibility to perform all work in conformance with the Plans and Specifications.
- B. The Contractor will be responsible to provide a quality control program to determine the compaction procedures necessary to obtain the specified compaction.
- C. The Owner will employ and pay for a soils testing laboratory to perform testing services outlined in these Contract Documents.
- D. The Contractor is solely responsible for coordinating testing needed with the Owner.
- E. The Contractor shall cooperate with the Owner and make the work and samples available for testing at no additional cost.
- F. The Contractor is responsible for all testing costs where re-testing is needed due to failing tests.

## 1.03 Quality Assurance

- A. The Owner reserves the right to have additional tests made beyond those specified in the Contract Documents. The Contractor shall cooperate with the Owner and make the work and samples available for Owner testing at no additional cost in case the Owner chooses to have additional Owner furnished testing performed. It is the sole responsibility of the Contractor to see that its work meets all provisions of the Contract Documents.
- B. The Contractor shall cooperate with the soils laboratory personnel and provide access to the work to be tested. The Contractor shall notify the Engineer and Owner's testing laboratory sufficiently in advance of operations to allow scheduling of tests. The Contractor shall furnish casual labor and facilities to obtain and handle samples at the site and to store and cure test samples as required.

## 1.04 Testing of Materials

- A. Unless otherwise specified, all materials shall be sampled and tested in accordance with the latest published standard methods of ASTM in effect at the time bids are received.
- B. Test of materials shall be made by a representative of the Owner. Testing of equipment shall be the responsibility of the Contractor or an authorized manufacturer's representative. All test results shall be furnished to the Engineer in writing. The Contractor shall provide facilities required to collect and forward samples. The Contractor shall furnish the required samples without charge.
- C. The Contractor shall not make use of or incorporate in the work, the materials represented by the sample until tests have been made and the material found to be in accordance with the requirements of the Specifications.
- D. Materials to be tested and the applicable test procedure shall be as outlined in the individual sections of these Specifications.

## 1.05 Source and Quality of Materials and Equipment

- A. The source of materials to be used shall be in accordance with the Contract Documents and as approved by the Engineer before delivery. The approval of the source of any material shall continue as long as the material conforms to the Specifications.
- B. All material not conforming to the requirements of the Specifications shall be considered as defective and shall be removed from the work. If in place, faulty materials shall be removed by the Contractor at its expense and replaced with acceptable material unless permitted otherwise by the Owner. No defective materials that have been subsequently corrected shall be reused until approval has been given.
- C. Upon failure of the Contractor to comply immediately with any order of the Owner to remove and replace defective material, the Owner shall have authority to remove and replace defective materials, and to deduct the cost of removal and replacement from any monies due or to become due to the Contractor. Failure to reject any defective materials or work at the time of installation shall in no way prevent later rejection when such defects are discovered, nor obligate the Owner to final acceptance.

### 1.06 Additional Testing

In addition to soils laboratory and materials testing, the Contractor shall perform other testing called for in the Contract Documents including but not limited to piping, pressure, leakage, infiltration and exfiltration, as appropriate.

## PART 2 PRODUCTS - Not Used

# PART 3 EXECUTION - Not Used

#### TEMPORARY FACILITIES AND CONTROLS

### PART 1 GENERAL

## 1.01 Section Includes

Construction facilities, controls, temporary utilities, project identification signs, field office and storage sheds, storage of materials and equipment.

#### 1.02 Related Sections

Section 01550 - Temporary Traffic Control

#### 1.03 Submittals

- A. Prior to installation of construction facilities and temporary controls, submit the following items for review and approval:
- B. Project identification sign provide proposed text, layout, and sizing of all required signs

## 1.04 Construction Facilities and Temporary Controls

All construction facilities and temporary controls remain the property of the Contractor establishing them and shall be maintained in a safe and useful condition until removed from the construction site.

## 1.05 Removal of Temporary Construction

Remove the various temporary facilities, services, and controls and legally dispose of them as soon as the Owner deems permissible. Portions of the site and areas used for temporary facilities shall be restored to existing or better condition, including but not limited to fill replacement, regrading, compaction, and sodding.

## 1.06 Transportation and Handling

- A. Manufactured materials and products shall be delivered to the project site as needed for installation, undamaged, in original packages, containers, or bundles, as packaged by the manufacturer with manufacturer's name, brand, seals, and labels intact.
- B. Materials other than those designated within the Specifications or approved by the Owner shall not be delivered to the project site.

## 1.07 Storage and Protection

- A. The Contractor shall be responsible for protection and preservation of all materials until final acceptance of the Project. Any damage to work prior to acceptance shall be remedied by the Contractor at no additional cost to the Owner.
- B. Provide temporary weather-tight enclosures to protect work from damage by the elements, and protect finished surfaces to prevent any damage resulting from the work of any trade.

## 1.08 Security

- A. Contractor shall, at all times, be responsible for the security required in all project areas and shall provide all reasonable protection to prevent damage, injury or loss to employees on the Work and all other persons who may be affected thereby; all the work materials and equipment to be incorporated therein, whether in storage on or off the project site, under the care, custody or control of the Contractor or any subcontractors; and any other property under the care, custody or control of the Contractor or any subcontractors. Contractor shall be responsible for such security and safety until final acceptance of the Work.
- B. Full time watchmen will not be specifically required as a part of the Contract, but the Contractor shall provide inspection of work area daily and shall take whatever measures are necessary to protect the safety of the public, workmen, and materials, and provide for the security of the site, both day and night.

#### **PART 2 PRODUCTS**

## 2.05 Temporary Sanitary Facilities

Provide temporary toilet facilities as required. Maintain these during the entire period of construction under this Contract for the use of all construction personnel on the job. Enough chemical toilets shall be provided to conveniently serve the needs of all personnel. Chemical toilets and their maintenance shall meet the requirements of State and local health regulations and ordinances.

#### TEMPORARY TRAFFIC CONTROL

### PART 1 GENERAL

#### 1.01 Section Includes

Traffic and dust control

#### 1.02 Related Sections

Section 01520 - Temporary Facilities and Controls

### 1.03 Definitions

The term "Temporary Traffic Control" also known as "Maintenance of Traffic" as used herein, shall include all facilities, devices, traffic control personnel, and operations as are required for the safety and convenience of the public as well as for minimizing public nuisance.

#### 1.04 References

- A. Florida Department of Transportation Standard Plans for Road Construction
- B. Manual on Uniform Traffic Control Devices

### 1.05 Submittals

Provide traffic control plan. Include proposed signs, markings, barricades, detour routes, sequencing, and phasing for vehicular and pedestrian traffic routes during construction.

## 1.06 Qualifications

Provide at least one employee in the field (superintendent or foreman) who holds an IMSA (International Municipal Signal Association) Work Zone Traffic Control Safety Certification. This certified employee shall be on the job site when the traffic control measures are installed and when work is occurring within the zones.

## PART 2 PRODUCTS - Not Used

### PART 3 EXECUTION

## 3.01 Site Preparation

A. Contact property owners affected by construction. Coordinate temporary driveway closures and sequencing. Maintain access for all property owners during construction.

- B. Remove existing pavement markings and remove or relocate existing signs as necessary to implement traffic control.
- C. Install signs, markings, barricades in accordance with approved traffic control plan.
- D. Implement lane closures in accordance with the parameters shown on the drawings and in the approved traffic control plan.
- E. Perform work in a manner that will cause minimum interruptions to traffic.
- F. Place excavated material outside roadway clear zones, and away from pedestrian facilities.
- G. All trenches shall be backfilled each day prior to the completion of construction activities.
- H. Where special hazards exist, install traffic control through the use of lighted concrete barriers, barricades, or other such traffic control facilities as needed to ensure public safety.

#### 3.02 Maintenance

- A. Inspect traffic control devices on a daily basis to ensure placement of barricades and function of lights is maintained throughout construction.
- B. Wet unstabilized areas as necessary to control dust.
- C. Adjust traffic control devices as required under emergency conditions.

#### PRODUCT SELECTION AND SUBSTITUTION PROCEDURES

### PART 1 GENERAL

#### 1.01 Section Includes

Product selection and substitution procedures

#### 1.02 Product Selection

- A. Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, new at the time of installation.
- B. To the fullest extent possible, provide products of the same kind from a single source.
- C. Compatibility among product options is required. Where more than one choice is available as options during product selection, select an option which is compatible with other products and materials already selected.
- D. Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.
- E. Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- F. Where Contract Documents are at variance with specific manufacturer's details and installation procedures, contact Engineer for resolution prior to start of work.
- G. For products specified by naming a number of products and manufacturers and "or equal", select any of the products and manufacturers listed, or propose a substitution. If the Contractor wishes to propose a substitution, the Contractor must submit a request for product substitution for approval by the Engineer and Owner.
- H. For products specified naming only one product and manufacturer or a number of products and manufacturers without the "or equal" allowance, no substitutes are allowed.
- I. For products specified by reference standards only, the Contractor may provide any product complying with the specified standard.
- J. For products specified by performance and descriptive methods, without naming manufacturer's products, the Contractor may provide the products of any

manufacturer complying with the Contract Documents, subject to the review of product data and concurrence by the Engineer as specified herein.

### 1.03 Substitutions

- A. The intent of these Specifications is to provide the OWNER with a quality facility without discouraging competitive bidding. Substitutions may be submitted and will be evaluated as specified herein.
- B. If the Contractor wishes to provide a product other than one named in the Specifications, he shall submit sufficient information to the Engineer for evaluation and determination of acceptability of the product prior to Bid Opening.
- C. The Contractor is responsible for obtaining information required by the Engineer for the evaluation of products. The Engineer is responsible for determination of the equality of products, and his decision shall be final, except as otherwise provided by law and funding agency regulations.
- D. Substitution requests can be made after Bid Opening when:
  - 1. A specified product is no longer available
  - 2. The product cannot be delivered by the manufacturer in a timely manner
  - 3. The product is found to be incompatible with other specified products
  - 4. Proposed substitutions will yield a cost savings to the Owner
- E. The Contractor shall be responsible for the constructability and performance of any substitute materials requested by the Contractor and approved by the Engineer or by the Owner. The Contractor shall ensure that any approved substitute materials will perform to the intent of the specified materials, at no additional cost or time to the Owner, including the costs of installation, testing, repair, or correction of the utility system due to the performance or lack thereof of the substitute material.

PART 2 PRODUCTS - Not Used

**PART 3 EXECUTION - Not Used** 

#### CONTRACT CLOSEOUT

### PART 1 GENERAL

## 1.01 Section Includes

Substantial completion requirements, clean-up, final completion requirements, closeout submittals

## 1.02 Clean-Up Operations

- A. The entire Project site shall be thoroughly cleaned at the completion of the Work.
- B. Clean all installed pipelines, catch basins, sidewalks, paved areas, accumulated silt in ponds, plus all adjacent areas affected by construction, as directed by the Owner or jurisdictional agency. Equipment to clean these surfaces shall be subject to approval by the Owner.
- C. Restore to original condition or better all property not designated for alteration by the Contract Documents, including all areas used for staging and storage. Restoration includes but is not limited to fill replacement, regrading, compaction, and sodding. Conduct inspections of the completed restoration with the Owner, and conduct additional restoration as directed.

## 1.03 Substantial Completion Requirements

- A. Complete the following before requesting the inspection for certification of substantial completion.
  - 1. Submit As-Built Drawings.
  - 2. Complete required cleaning and testing of the completed construction in accordance with the specifications and the Owner's operating and maintenance personnel.
- B. Work is not substantially complete until the following has occurred:
  - 1. The Owner has received clearance to place the completed construction into service from the regulatory agencies.

### 1.04 Final Completion Requirements

- A. Complete the following before requesting the inspection for certification of final completion.
  - 1. All punchlist items identified during the substantial completion inspection.
  - 2. Deliver tools, spare parts, extra stocks of material and similar physical items to the Owner.

- 3. Discontinue use of construction tools and facilities.
- 4. Clean all marred surfaces including pressure washing, or other measures as needed as directed by the Owner.
- 5. Broom clean paved driveways and parking areas.
- 6. Hose clean sidewalks, loading areas, and others contiguous with principal structures.
- 7. Fully restore all property not designated for construction including all areas used for staging and storage.
- 8. Provide Final As-Built Drawings.

## 1.05 Closeout Submittals

- A. Upon completion of the project, or portions thereof, the Contractor shall transfer to the Owner all applicable items accumulated throughout construction. These include but are not limited to the following items:
  - Delivery of any salvaged or borrowed materials or equipment to the Owner
  - 2. Certificate of Substantial Completion
  - 3. Certificate of Final Completion
  - 4. Submittal of the Material and Workmanship Bond
  - 5. Submittal of manufacturers' guarantees, warranties, and bonds
  - 6. Contractor's Final Release of Lien
  - 7. Final Waivers of lien from all Subcontractors and Suppliers
  - 8. Consent of Surety to Final Payment

PART 2 PRODUCTS - Not Used

**PART 3 EXECUTION - Not Used** 

#### SITE DEMOLITION

## PART 1 GENERAL

## 1.01 Section Includes

- A. Removal of materials from project site.
- B. Demolition and removal of pavements, curbs and gutters, drainage structures, utilities, or landscaping.
- C. Filling voids in subgrade created as a result of removals or demolition.
- D. Disposal of demolished materials.

## 1.02 Related Sections

- A. Section 02230 Site Preparation
- B. Section 02310 Finish Grading
- C. Section 02315 Excavation and Fill

## 1.03 Regulatory Requirements

- A. Conform to applicable State and local codes for dust control and runoff control.
- B. Obtain required permits and licenses from appropriate authorities. Pay associated fees including disposal charges.
- C. Notify affected utility companies before starting work and comply with their requirements.
- D. Do not close or obstruct roadways, sidewalks, or fire hydrants without appropriate permits.
- E. Conform to applicable regulatory procedures when hazardous or contaminated materials are discovered.

## 1.04 Project Record Documents

Accurately record actual locations of capped utilities and subsurface obstructions that will remain after demolition.

## 1.05 Project Conditions

- A. Conditions existing at time of inspection for bidding purposes will be maintained by Owner as practicable.
- B. Unless otherwise indicated in Contract Documents or specified by the Owner, items of salvageable value to Contractor shall be removed from site and structures. Storage or sale of removed items on site will not be permitted and shall not interfere with other work specified in Contract Documents.
- C. Explosives shall not be brought to site or used to demolish structures.

#### PART 2 PRODUCTS - Not Used

### PART 3 EXECUTION

## 3.01 Preparation

- A. Provide, erect, and maintain erosion control devices, temporary barriers, and security devices at locations indicated on Construction Drawings.
- B. Protect existing landscaping materials, appurtenances, and structures which are not to be demolished. Repair damage caused by demolition operations at no cost to Owner.
- C. Mark location of utilities. Protect and maintain in safe and operable condition utilities that are to remain. Prevent interruption of existing utility service to occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities as acceptable to governing authorities and Owner.

## 3.03 Demolition Requirements

- A. Conduct demolition to minimize interference with adjacent structures or pavements.
- B. Cease operations immediately if adjacent structures appear to be in danger and notify the Owner. Do not resume operations until directed by the Owner.
- C. Conduct operations with minimum of interference to public or private access. Maintain ingress and egress at all times.
- D. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon, or limit access to their property.
- E. Sprinkle work with water to minimize dust. Provide hoses and water connections for this purpose.
- F. Comply with governing regulations pertaining to environmental protection.

G. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing prior to start of work.

## 3.05 Filling Voids

- A. Ensure that areas to be filled are free of standing water, frost, or unsuitable material, trash, and debris prior to fill placement.
- B. Place fill materials in accordance with Sections 02315 or 02320 as applicable unless subsequent excavation for new work is required.
- C. Grade surface to match adjacent grades and to provide flow of surface drainage after fill placement and compaction.

# 3.06 Disposal of Demolished Materials

- A. Remove from site debris, rubbish, and other materials resulting from demolition operations.
- B. No burning of any material, debris, or trash on-site or off-site will be allowed.
- C. Transport materials removed from demolished structures with appropriate vehicles and dispose off-site to areas that are approved for disposal by governing authorities and appropriate property owners.

## 3.07 Cleanup

- A. Clean the Project site to a condition satisfactory to the Engineer, free from demolished materials, rubbish or debris. Grade the site to meet adjacent contours and provide a positive flow for surface drainage.
- B. Restore items intended to remain that have been damaged by demolition work at no cost to, and to the satisfaction of the Owner.

#### SITE PREPARATION

### PART 1 GENERAL

#### 1.01 Section Includes

- A. Layout of work and protection of bench marks.
- B. Protection of structures, trees, or vegetation to remain.
- C. Clearing and grubbing.
- D. Stripping and storing topsoil.

## 1.02 Related Sections

A. Section 02370 - Erosion and Sedimentation Control

#### 1.03 Coordination

- A. Notify the following utility owners which may have utilities in the project area and coordinate with them to avoid service interruptions and/or safety hazards:
  - 1. Florida Power & Light
  - 2. Comcast
  - 3. CenturyLink
  - 4. Teco Peoples Gas
  - 5. Collier County
- B. Contact "Sunshine State, One-Call" by dialing "811", to determine if there are other utilities in the area, and their location. For additional information: www.callsunshine.com.

### PART 2 PRODUCTS - Not Used

### PART 3 EXECUTION

## 3.01 Bench Marks and Monuments

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 the Owner. All benchmarks, property corners, and other survey monuments that are lost, damaged, or destroyed shall be replaced by a Licensed Surveyor at the Contractor's expense.

## 3.02 Laying Out Work

- A. Base lines, property lines, and easement lines, are shown on the Drawings. Benchmarks utilized are also shown on the drawings.
- B. Stake out the construction, establish lines and levels, temporary bench marks, batter boards, centerlines and reference points for the work, and verify all dimensions relating to interconnection with existing features.
- C. Report any inconsistencies in the proposed grades, lines and levels, dimensions and locations to the Engineer before commencing work.
- D. Contain all construction activities within the right-of-way, easements, and property secured by the Owner, as shown on the drawings. Do not disturb surrounding properties or travel on surrounding properties without written consent from the property owner. Repair or reconstruct damaged areas on an immediate basis. All costs for repairs shall be the responsibility of the Contractor.

## 3.03 Burning

Burning is not allowed, unless notes on the drawings specifically allow it to occur. In the event burning is allowed, secure all necessary permits.

## 3.04 Protection of Trees and Shrubs

- A. Protect all trees and shrubs located outside the right-of-way, easements, and Owner secured property, particularly those trees and shrubs located adjacent to work areas.
- B. Within the right-of-way, easements, and Owner secured property, the intent is to allow trees and shrubs to remain in accordance with the following schedule:
  - 1. New roadway construction trees and shrubs to remain where located more than 15 feet from the back of curb, or outside the limits of excavation or fill areas, whichever is further.
  - 2. Utility pipeline construction trees and shrubs to remain outside a 15 foot wide path, centered on the pipeline.
- C. Protect branches, trunks, and roots of trees and shrubs that are to remain. Trees to remain in the construction area shall be boxed, fenced or otherwise protected before any work is started; remove boxing when directed by the Engineer. Do not permit heavy equipment or stockpiles within branch spread. Remove interfering branches without injury to trunks and cover scars with tree paint.

### 3.05 Relocation of Utilities

A. Active utilities which do not interfere with the work shall be supported and protected from damage. After obtaining the Engineer's approval, relocate or remove active utilities which will interfere with work as indicated. Pay for all

- damage to active utilities and for relocation or removal of all interfering utilities which are ascertainable from Drawings, surveys, site inspection or encountered during construction.
- B. Coordinate with each utility and pay all costs associated with the protection of existing facilities during construction. Also coordinate necessary relocations or other construction related matters with each utility.
- C. Inactive or abandoned utilities and appurtenant structures encountered shall be removed to avoid interference as directed by the Engineer. Exposed ends of abandoned lines shall be plugged or capped in a water-tight manner.

## 3.06 Clearing and Grubbing

- A. Areas to receive clearing and grubbing shall include all areas to be occupied by the proposed improvements, areas for fill and site grading, and borrow sites. Remove trees outside of these areas only as indicated on the Drawings or as approved in writing by the Engineer.
- B. Clearing shall consist of removing trees and brush and disposal of other materials that encroach upon or otherwise obstruct the work.
- C. Exercise extreme care during the clearing and grubbing operations. Do not damage existing structures, pipes or utilities.
- D. Grubbing shall consist of removing and disposing of stumps, roots larger than 2" in diameter, and matted roots. Remove to a depth of not less than 18" below the original surface level of the ground.
- E. All combustible debris and refuse from site preparation operations shall be removed to legal offsite disposal areas.

## 3.07 Topsoil Removal

- A. All areas to be occupied by proposed improvements, and borrow sites shall be stripped of all brush, weeds, grass, roots and other material.
- B. Remove all loamy, organic topsoil suitable for seeding and planting to whatever depth encountered and store separately from other excavated material. Stockpile in designated areas and provide for proper drainage. Cover storage piles as required to prevent windblown dust.
- C. All removed topsoil shall be stockpiled within the project work area. Topsoil can be incorporated into the project in all areas that are to be grassed.
- D. Dispose of unsuitable topsoil as specified under disposal of debris. Excess topsoil shall be removed from site unless specifically noted on Contract Drawings.

## 3.08 Disposal of Debris

- A. All combustible debris and refuse from site preparation operations shall be removed to legal offsite disposal areas.
- B. All non-combustible debris (not including acceptable fill material, fences, or other structures), resulting from site preparation operations shall become the property of the Contractor and shall be removed to legal offsite disposal areas.

#### **FINISH GRADING**

### **PART 1 GENERAL**

#### 1.01 Section Includes

Topsoil placement, grading of site

#### 1.02 Related Sections

- A. Section 02230 Site Preparation
- B. Section 02315 Excavation and Fill

## 1.03 References

- A. American Association of State Highway and Transportation Officials (AASHTO) latest edition:
  - 1. AASHTO T267 Determination of Organic Matter in Soils by Loss on Ignition

### **PART 2 PRODUCTS**

## 2.01 Topsoil

- A. Topsoil shall be fertile, friable, natural topsoil typical of the area, free from subsoil, stones, plants, roots or other extraneous material and shall not be used while muddy or frozen.
- B. Topsoil shall contain not less than 8% organic matter (AASHTO T267). The topsoil shall consist of either natural topsoils typical of the locality and free from coarse stone aggregate or surface soils stripped from the site and enriched with humus at a rate of 8% by volume. The soil mixture prepared by mixing surface soils and humus shall be free of oil, cinders, coarse stone, and woody root material.

### PART 3 EXECUTION

### 3.01 General

Provide all topsoil placement and finish grading and filling to achieve the lines and grades indicated on the Drawings. All earthwork shall be done in a manner that provides drainage.

## 3.02 Topsoil Placement

Place topsoil in all areas of new grading. The compacted subgrade to receive topsoil shall be scarified to a depth of 3 inches. Topsoil shall be spread evenly and compacted to a thickness of not less than 6 inches, to the proposed elevations and grades. Grade flush with walks, curbs, and paving.

## 3.03 Finish Grading

- A. All areas of the project including all previously grassed areas that have been disturbed, borrow sites, excavated and filled sections and adjacent transition areas shall be uniformly smooth-graded. Depressions from settlement shall be filled and compacted. Tops of embankments and breaks in grade shall be rounded. All surfaces shall be finished to provide adequate drainage. Finished surfaces shall be reasonably smooth, compacted, free from irregular surface changes and comparable to the smoothness obtained by blade-grader operations.
- B. Finished surfaces adjacent to paved or surfaced areas and within 10 feet of structures shall be within 1 inch of the proposed grade. All other areas shall be within 3 inches of the proposed grade.
- C. Newly graded areas shall be protected from traffic and erosion. All settlement or washing away that may occur from any cause prior to seeding or acceptance shall be repaired and grades re-established to the required elevations and slopes at no additional cost to the Owner.
- D. Unless otherwise indicated, dispose of all surplus material.

### **EXCAVATION AND FILL**

### **PART 1 GENERAL**

#### 1.01 Section Includes

- A. Excavation and fill for roads, ponds, general site work
- B. Sheeting, shoring and bracing
- C. Compaction

## 1.02 Related Sections

- A. Section 02230 Site Preparation
- B. Section 02240 Dewatering
- C. Section 02310 Finish Grading
- D. Section 02320 Trenching, Bedding, and Backfilling
- E. Section 02370 Erosion and Sedimentation Control

### 1.03 References

- A. American Association of State Highway and Transportation Officials (AASHTO) latest edition:
  - 1. AASHTO M145 Classification of Soils and Soil Aggregate Mixtures
  - 2. AASHTO T180 Moisture-Density Relations of Soils Using a 10-lb Rammer and 18-in Drop
- B. American Society for Testing and Materials (ASTM) latest edition:
  - ASTM D1557 Laboratory Compaction Characteristics of Soil Using Modified Effort
  - 2. ASTM D2487 Classification of Soils for Engineering Purposes
- C. Occupational Safety and Health Administration (OSHA) Regulations, including:
  - 1. Part 1926 Subpart P Excavations

### 1.04 Definitions

- A. Backfill = material placed in newly excavated areas to the topsoil, paving subgrade, or foundation level.
- B. Influence Area = the area within lines sloped downward at 45 degrees from the outer edges of paving, foundations, and utility lines. As a minimum, the influence area shall extend 5 feet beyond the edge of pavement (where there is no curb) or 5 feet beyond the back of curb.

## 1.05 Quality Assurance

- A. Field density testing frequencies:
  - 1. One test for each 5,000 square feet or fraction thereof per lift of general backfilling, minimum 2 tests each layer.
  - 2. One test per each lift of backfill around and under structures.
  - 3. One test per lift per each change in type of fill.
  - 4. One test per 1000 square feet of pavement subgrade, minimum of 2 tests.
- B. Pond construction shall result in the finished pond having side slopes and dimensions that are in accordance with the construction drawings. It is the Contractor's sole responsibility to ensure that these requirements have been met. If the constructed side slopes are steeper than the required side slopes, or the pond volume is not within three (3) percent of the design volume, the Contactor may be required to make corrections to the pond at no additional cost to the Owner.
- C. Sheeting, shoring, and bracing used for the support of excavations over 20 feet deep shall be designed by a professional engineer licensed by the State of Florida.

## 1.06 Preconstruction Requirements

Precondition surveys and vibration monitoring are required for those areas where residential structures are within 100 feet of the proposed construction.

### **PART 2 PRODUCTS**

### 2.01 General

It is intended that previously excavated materials conforming to the following requirements be utilized wherever possible.

### 2.02 Materials

A. Acceptable materials (suitable material): AASHTO M145 classification A-1, A-3, A-2-4, A-2-6; ASTM D2487 classification GW, GP, GM, SM, SW, SP; unless otherwise disapproved within the Soil and Subsurface investigation reports. No more than 12% of acceptable materials shall pass the number 200 sieve.

- B. Unacceptable materials (unsuitable material): AASHTO M145 classification A-2-5, A-2-7, A-4, A-5, A-6, A-7, A-8; ASTM D2487 classification GC, SC, ML, MH, CL, CH, OL, OH, PT; unless otherwise approved within the Soil and Subsurface investigation reports.
- C. Flowable fill shall be "Excavatable" and shall meet the requirements of FDOT specification section 121, with a maximum 28-day compressive strength of 100 psi and a minimum 28-day compressive strength of 80 psi.

## 2.03 Sheeting, Shoring, and Bracing

- A. The structural strength and safety of all sheeting, shoring and bracing shall be the sole responsibility of the Contractor. Repair any damage resulting from failure to provide adequate supports.
- B. Provide timber work, shoring, bracing, sheeting, and sheet piling where necessary to retain banks of excavations, prevent cave-in of adjacent ground, prevent displacement of utilities and structures, and to protect public safety.
- C. Contractor is solely responsible for the design, installation, and operation of dewatering systems and their safety and conformity with local codes and regulations.

### PART 3 EXECUTION

## 3.01 General Construction Requirements

- A. Provide suitable temporary drainage channels for any water that may flow along or across the work as specified hereafter.
- B. Provide barriers, warning lights and other protective devices at all excavations.
- C. Sidewalks, roads, streets, and pavements shall not be blocked or obstructed by excavated materials, except as authorized by the Engineer, in which case adequate temporary provisions must be made for satisfactory temporary passage of pedestrians, and vehicles. Minimize inconvenience to public travel or to tenants occupying adjoining property.
- D. Where necessary to place excavated material adjacent to buildings, erect barriers to keep earth at least 4 feet from such buildings. Earth deposited on lawns shall be promptly and carefully removed to preserve the turf. All trees, shrubs, and landscaping shall be protected. Boring and jacking shall be used, if necessary, except where written permission is granted to remove trees and shrubs.
- E. If open excavations cross existing rigid surfacing, the surfacing shall be removed for a width one foot beyond the anticipated edge of the excavation. The pavement break shall be sawed to insure a straight joint. Surface replacement

shall match existing surfacing except as otherwise indicated on the Drawings. Where open excavation is allowed along or across public roadways, excavation, backfill, and surface replacement shall conform to the requirements of all permits applicable thereto. In no case shall surface replacement edges bear on less than 12" of undisturbed soil.

## 3.02 Preparation

- A. Identify required lines, levels, contours, and datum.
- B. Locate and identify existing utilities that are to remain and protect from damage.
- C. Notify utility companies to remove or relocate utilities that are in conflict with proposed improvements.
- D. Protect plant life, lawns, fences, existing structures, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- E. Protect benchmarks, property corners, and other survey monuments from damage or displacement. If marker needs to be removed it shall be referenced by licensed land surveyor and replaced, as necessary, by same.
- F. Prior to placing fill in low areas, such as previously existing ditches, ponds, or lakes, perform following procedures:
  - 1. Drain water out by gravity with ditch having flow line lower than lowest elevation in low area. If drainage cannot be performed by gravity ditch, use adequate pump to obtain the same results.
  - 2. After drainage of low area is complete, remove mulch, mud, debris, and other unsuitable material by using acceptable equipment and methods that will keep natural soils underlying low area dry and undisturbed.
  - 3. If proposed for fill, muck, mud, and other materials removed from low areas shall be dried on-site by spreading in thin layers for observation by Engineer. Material shall be inspected and, if found to be suitable for use as fill material, shall be incorporated into lowest elevation of site filling operation, but not under building or pavement subgrade or within 10'-0" of perimeter of building subgrade or paving subgrade. If, after observation by Engineer, material is found to be unsuitable, unsuitable material shall be removed from site.

## 3.03 Sheeting, Shoring, and Bracing

A. Furnish, install, and maintain, without additional compensation, sheeting, bracing, and shoring support required to keep excavations within the easement provided, to support the sides of the excavation, and to prevent any movement which may damage adjacent pavements or structures, damage or delay the work, or endanger life and health. Voids outside the supports shall be immediately filled and compacted.

- B. Sheeting, where required, shall be driven below the bottom of excavation so the lowest set of wales and struts are above the bottom of the excavation to allow necessary working room.
- C. The Engineer may direct in writing that supports in trenches be cut off at any specified elevation, in which case Contractor shall be paid for the supports left in place.
- D. Contractor may leave in place, to be embedded in the backfill of the excavation, any or all supports for the purpose of preventing injury to persons or property, whether public or private. However, no supports which are within 4' of the ground or pavement surface may be left in place without written permission of the Engineer. No extra payment will be made for supports left in place at the Contractor's option.
- E. All supports not left in place shall be removed in such manner as to avoid endangering the piping, structures, utilities or property, whether public or private. All voids left by the withdrawal of sheeting shall be immediately filled and compacted.
- F. The right of the Engineer to order supports left in place shall not be construed as creating an obligation on his part to issue such orders. Failure by the Engineer to exercise this right shall not relieve the Contractor from total liability for damages to persons or property resulting from the failure of the Contractor to leave in place sufficient supports to prevent any caving or moving of the ground adjacent to the excavation.

#### 3.04 Excavation

- A. Do not excavate for any structure until that structure is scheduled for construction. Excavate only to the depth and dimensions necessary for the construction. Slope sides of excavations in accordance with OSHA requirements and the recommendations contained within the project geotechnical report.
- B. The bottom of all excavations shall be undisturbed earth unless otherwise indicated, and shall be approved by the Engineer before any subsequent work is started. Over excavate a minimum of 2 feet where excavations occur within unsuitable soils, and replace over excavated material with suitable soils.
- C. Excavations carried below depths indicated on the Drawings without the previous approval of the Engineer shall be filled with 2500 psi concrete or flowable fill to the correct level at the expense of the Contractor.
- D. Maintain excavations in good order. If the bearing capacity of the foundation soils is reduced because the excavation is allowed to remain open prior to commencing work, the weathered soil shall be removed and replaced with 2500 psi concrete or flowable fill at the Owner's discretion at the expense of the Contractor.

- E. All suitable materials removed from excavation areas shall be used for the project. Excess excavated suitable material shall be stockpiled on site at a location of the Owner's choosing, and shall become the property of the Owner, unless otherwise indicated on the Drawings.
- F. Suitable onsite excavated materials containing silty or slightly clayey to clayey fine sands shall be sufficiently dried by surface spreading and discing if necessary, or by mixing with cleaner fine sands prior to placement in fill areas.
- G. Unsuitable materials within the influence area of construction shall be excavated, removed from the site, and disposed, unless otherwise indicated on the Drawings.
- H. Excavations shall be kept dry, compacted, and stable to a depth two feet below the bottom of the excavation.
- I. If portions of the bottom of excavations consist of material unstable to such a degree that, in the opinion of the Engineer, it cannot adequately support the construction, the bottom shall be over excavated and stabilized with approved coarse granular stabilization material. Depth of stabilization shall be as directed by the Engineer. The initial 50 tons of stabilization shall be incidental to the Contract. Compensation will be allowed only for such additional quantities as the Engineer shall direct in writing to be placed.

## 3.05 Filling

- A. All fill material shall be suitable soils or flowable fill. Fill placed within 1 foot of structures shall not contain rock or stone larger than 2 inch diameter. If a sufficient quantity of suitable material is not available from other excavations within the site, provide additional suitable material or flowable fill.
- B. Fill within the influence area of roadways, structures, foundations, or slabs, shall be placed in layers of 8 inch loose depth. In all other areas, place fill in layers of 12 inch loose depth.
- C. Take necessary precautions not to cause settlement or damage to adjacent slabs, walls, structures, or foundations. Place fill materials evenly adjacent to structures, without wedging against structures.
- D. Where filling is required on both sides of structures, fill and compact simultaneously on opposite sides in even layers.

## 3.06 Compaction

A. Unless otherwise indicated, the type of equipment and number of passes required to obtain the specified degree of compaction shall be determined at the site, subject to the approval of the Engineer.

- B. Provide mechanical compaction for cohesive material and vibratory compaction for granular materials, unless otherwise approved by the Engineer. Vibratory compaction is not allowed within 100 feet of existing structures. In these areas, compaction shall be accomplished by static means only. If compaction difficulties arise, the Engineer shall be consulted to review and possibly modify compaction procedures.
- C. Noncohesive soils shall be compacted with vibrating roller or equivalent; cohesive soils shall be compacted with sheeps-foot roller, pneumatic tamping, or approved equivalent, unless otherwise indicated.
- D. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

## 3.07 Testing and Cleanup

- A. Provide for testing and cleanup as soon as practicable, so these operations do not lag far behind pipe installation. Perform preliminary cleanup and grading operations immediately after backfilling.
- B. All surplus excavated material shall be disposed of by the Contractor.

## 3.08 Field Quality Control

- A. Minimum Density Requirement (ASTM D1557 or AASHTO T180):
  - 1. Fill placed under and within the influence area of roadways, structures, slabs, foundations = 98 percent
  - 2. Fill placed within pond and road embankment = 95 percent
  - 3. Fill placed within public road right-of-way and utility easements outside the road influence area = 95 percent
  - 4. Fill placed within landscape areas = 85 percent
  - 5. Fill placed within all other areas = 90 percent

Where fill is placed and differing density requirements are defined, the more stringent density requirement governs.

## TRENCHING, BEDDING, AND BACKFILLING

### PART 1 GENERAL

#### 1.01 Section Includes

- A. Trenching for piping and electrical work.
- B. Excavation for manholes, junction boxes, meter vaults, and appurtenances.
- C. Sheeting, shoring and bracing
- D. Bedding, backfilling, and compaction.

## 1.02 Related Sections

- A. Section 02230 Site Preparation
- B. Section 02240 Dewatering
- C. Section 02310 Finish Grading
- D. Section 02315 Excavation and Fill
- E. Section 02370 Erosion and Sedimentation Control

## 1.03 References

- A. American Association of State Highway and Transportation Officials (AASHTO) latest edition:
  - 1. AASHTO M145 Classification of Soils and Soil Aggregate Mixtures
  - 2. AASHTO T180 Moisture-Density Relations of Soils Using a 10-lb Rammer and 18-in Drop
- B. American Society for Testing and Materials (ASTM) latest edition:
  - ASTM D1557 Laboratory Compaction Characteristics of Soil Using Modified Effort
  - 2. ASTM D2487 Classification of Soils for Engineering Purposes
- C. Occupational Safety and Health Administration (OSHA) Regulations, including:
  - 1. Part 1926 Subpart P Excavations

### 1.04 Definitions

- A. Bedding = Area from bottom of trench to centerline of pipe
- B. Backfill = material above the top of pipe to the topsoil, paving sub-grade, or foundation level.
- C. Influence Area = the area within lines sloped downward at 45 degrees from the outer edges of paving, foundations, and utility lines. As a minimum, the influence area shall extend 5 feet beyond the edge of pavement (where there is no curb) or 5 feet beyond the back of curb.

## 1.05 Quality Assurance

- A. Field density testing frequencies:
  - One test for each 300 linear feet of pipeline or fraction thereof per lift of general backfilling in the pipeline trench. Where less than 300 linear feet of pipeline is installed, one test per lift of backfill is required, staggered along the pipeline at locations determined by the Engineer
  - 2. One test for each 100 square feet or fraction thereof of backfill around and under structures, with a minimum of two tests per lift.
  - 3. One test per lift per each change in type of fill.
- B. Sheeting, shoring, and bracing used for the support of excavations over 20 feet deep shall be designed by a professional engineer licensed by the State of Florida.

## 1.06 Preconstruction Requirements

Precondition surveys and vibration monitoring are required for those areas where residential structures are within 100 feet of the proposed construction.

## **PART 2 PRODUCTS**

### 2.01 General

It is intended that previously excavated materials conforming to the following requirements be utilized wherever possible.

## 2.02 Materials

- A. Acceptable materials (suitable material): AASHTO M145 classification A-1, A-3, A-2-4, A-2-6; ASTM D2487 classification GW, GP, GM, SM, SW, SP; unless otherwise disapproved within the Soil and Subsurface investigation reports. No more than 12 percent of acceptable materials shall pass the number 200 sieve.
- B. Unacceptable materials (unsuitable material): AASHTO M145 classification A-2-5, A-2-7, A-4, A-5, A-6, A-7, A-8; ASTM D2487 classification GC, SC, ML, MH,

- CL, CH, OL, OH, PT; unless otherwise approved within the Soil and Subsurface investigation reports.
- C. Flowable fill shall be "Excavatable" and shall meet the requirements of FDOT specification section 121, with a maximum 28-day compressive strength of 100 psi and a minimum 28-day compressive strength of 80 psi.

## 2.03 Sheeting, Shoring, and Bracing

- A. The structural strength and safety of all sheeting, shoring and bracing shall be the sole responsibility of the Contractor. Repair any damage resulting from failure to provide adequate supports.
- B. Provide timber-work, shoring, bracing, sheeting, and sheet piling where necessary to retain banks of excavations, prevent cave-in of adjacent ground, prevent displacement of utilities and structures, and to protect public safety.
- C. Contractor is solely responsible for the design, installation, and operation of dewatering systems and their safety and conformity with local codes and regulations.

#### PART 3 EXECUTION

## 3.01 General Construction Requirements

- A. Provide suitable temporary drainage channels for any water that may flow along or across the work as specified hereafter.
- B. Provide barriers, warning lights and other protective devices at all excavations.
- C. Sidewalks, roads, streets, and pavements shall not be blocked or obstructed by excavated materials, except as authorized by the Engineer, in which case adequate temporary provisions must be made for satisfactory temporary passage of pedestrians, and vehicles. Minimize inconvenience to public travel or to tenants occupying adjoining property.
- D. Where necessary to place excavated material adjacent to buildings, erect barriers to keep earth at least 4 feet from such buildings. Earth deposited on lawns shall be promptly and carefully removed to preserve the turf. All trees, shrubs, and landscaping shall be protected. Boring and jacking shall be used, if necessary, except where written permission is granted to remove trees and shrubs.
- E. If open excavations cross existing rigid surfacing, the surfacing shall be removed for a width one foot beyond the anticipated edge of the excavation. The pavement break shall be sawed to insure a straight joint. Surface replacement shall match existing surfacing except as otherwise indicated on the Drawings. Where open excavation is allowed along or across public roadways, excavation, backfill, and surface replacement shall conform to the requirements of all permits

applicable thereto. In no case shall surface replacement edges bear on less than 12 inches of undisturbed soil.

## 3.02 Preparation

- A. Identify required lines, levels, contours, and datum.
- B. Locate and identify existing utilities that are to remain and protect from damage.
- C. Notify utility companies to remove or relocate utilities that are in conflict with proposed improvements.
- D. Protect plant life, lawns, fences, existing structures, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- E. 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 the Owner. All benchmarks, property corners, and other survey monuments that are lost, damaged, or destroyed shall be replaced by a Licensed Surveyor at the Contractor's expense.

## 3.03 Sheeting, Shoring, and Bracing

- A. Furnish, install, and maintain, without additional compensation, sheeting, bracing, and shoring support required to keep excavations within the easement provided, to support the sides of the excavation, and to prevent any movement which may damage adjacent pavements or structures, damage or delay the work, or endanger life and health. Voids outside the supports shall be immediately filled and compacted.
- B. Sheeting, where required, shall be driven below the bottom of excavation so the lowest set of wales and struts are above the bottom of the excavation to allow necessary working room.
- C. The Engineer may direct in writing that supports in trenches be cut off at any specified elevation, in which case Contractor shall be paid for the supports left in place.
- D. Contractor may leave in place, to be embedded in the backfill of the excavation, any or all supports for the purpose of preventing injury to persons or property, whether public or private. However, no supports which are within 4 feet of the ground or pavement surface may be left in place without written permission of the Engineer. No extra payment will be made for supports left in place at the Contractor's option.
- E. All supports not left in place shall be removed in such manner as to avoid endangering the piping, structures, utilities or property, whether public or private.

- All voids left by the withdrawal of sheeting shall be immediately filled and compacted.
- F. The right of the Engineer to order supports left in place shall not be construed as creating an obligation on his part to issue such orders. Failure by the Engineer to exercise this right shall not relieve the Contractor from total liability for damages to persons or property resulting from the failure of the Contractor to leave in place sufficient supports to prevent any caving or moving of the ground adjacent to the excavation.

## 3.04 Trenching

- A. All excavations shall be made by open cut unless otherwise indicated. Sides of trenches shall be kept as nearly vertical as possible from the trench bottom to a level of one foot above the top of the pipe. Slope sides of trenches in accordance with OSHA requirements and the recommendations contained within the project geotechnical report.
- B. Excavation of trenches shall not advance more than 50 feet ahead of completed pipe installation except as approved by the Engineer.
- C. Excavate trenches to depth indicated or required for indicated flow lines and invert elevations. Over excavate trenches a minimum of 2 feet where excavations occur within unsuitable soils, and replace over excavated material with suitable soils.
- D. Where rock is encountered, carry excavation 6 inches below scheduled elevation and backfill with a 6 inch layer of crushed stone or gravel prior to installation of pipe.
- E. For pipes or conduit 5 inches or less, excavate to indicated depths. Hand excavate bottom cut to accurate elevations and support pipe or conduit on undisturbed soil.
- F. For pipes or conduit 6 inches or larger, and other work indicated to receive subbase, excavate to subbase depth indicated, or, if not otherwise indicated, to 6 inches below bottom of work to be supported.
- G. Except as otherwise indicated, excavate for pressure piping so top of piping is minimum 3 feet below finished grade.
- H. Unsuitable excavated materials shall be removed from the site and disposed, unless otherwise indicated on the Drawings.
- I. Grade bottoms of trenches as indicated, notching under pipe bells to provide solid bearing for entire body of pipe.
- J. Trench bottoms shall be kept dry, compacted, and stable to a depth two feet below the bottom of the trench.

- K. Dig trenches to the uniform width required for particular item to be installed, sufficiently wide to provide ample working room. Provide 9 -12 inch clearance on each side of pipe or conduit.
- L. If more than one pipe is to be installed in a trench, the pipes shall be spaced a minimum of one foot apart for pipes 4 inches and larger.
- M. If portions of the bottom of trenches consist of material unstable to such a degree that, in the opinion of the Engineer, it cannot adequately support the pipe or structure, the bottom shall be over excavated and stabilized with approved coarse granular stabilization material. Depth of stabilization shall be as directed by the Engineer. The initial 50 tons of stabilization shall be incidental to the Contract. Compensation will be allowed only for such additional quantities as the Engineer shall direct in writing to be placed.
- N. Do not backfill trenches until tests and inspections have been made.

## 3.05 Trench Backfilling

- A. Following placement of pipe and inspection of joints, install tamped bedding material. Place bedding fill materials in layers of 6 inch loose depth.
- B. All bedding and backfill material shall be suitable soils or flowable fill. Backfill material within 1 foot of pipe and appurtenances shall not contain rock or stone larger than 2 inch diameter. If a sufficient quantity of suitable material is not available from the trench or other excavations within the site, provide additional suitable material or flowable fill.
- C. After completion of bedding and preliminary approval of piping and testing, the pipe shall be covered to a point one foot above the top of the pipe for the full trench width, placed in layers of 8 inch loose depth.
- D. Place backfill over pipe. Where trench is within the influence area of roadways, structures, foundations, or slabs, place backfill in layers of 8 inch loose depth. In all other areas, place backfill in layers of 12 inch loose depth.
- E. Take necessary precautions not to cause settlement or damage to adjacent slabs, walls, structures, or foundations. Place backfill and fill materials evenly adjacent to structures, without wedging against structures or displacement of piping or conduit.

## 3.06 Minor Structural Excavation and Backfilling

A. Minor structures are defined as manholes, junction boxes, inlets, valve vaults, and meter vaults. Do not excavate for any structure until that structure is scheduled for construction. Excavate only to the depth and dimensions necessary for the construction.

- B. The bottom of all excavations shall be undisturbed earth unless otherwise indicated, and shall be approved by the Engineer before any subsequent work is started. Over excavate a minimum of 2 feet where excavations occur within unsuitable soils, and replace over excavated material with suitable soils.
- C. Excavations carried below depths indicated on the Drawings without the previous approval of the Engineer shall be filled with 2500 psi concrete or flowable fill at the Owner's discretion to the correct level at the expense of the Contractor.
- D. Maintain excavations in good order. If the bearing capacity of the foundation soils is reduced because the excavation is allowed to remain open prior to commencing work, the weathered soil shall be removed and replaced with 2500 psi concrete or flowable fill at the Owner's discretion at the expense of the Contractor.
- E. Do not backfill until new concrete has properly cured, coatings have been approved, and any required tests have been accepted.
- F. Fill within the influence area of roadways, structures, foundations, or slabs, shall be placed in layers of 8 inch loose depth. In all other areas, place fill in layers of 12 inch loose depth.
- G. Exercise care during backfilling operations to avoid any puncture, break or other damage to waterproofing systems, if any. Backfill adjacent to waterproofing in the presence of the Engineer.
- H. Where backfilling is required on both sides of structures, backfill and compact simultaneously on opposite sides in even layers. Other backfilling sequences shall be as specifically noted.

## 3.07 Compaction

- A. Unless otherwise indicated, the type of equipment and number of passes required to obtain the specified degree of compaction shall be determined at the site, subject to the approval of the Engineer.
- B. Provide mechanical compaction for cohesive material and vibratory compaction for granular materials, unless otherwise approved by the Engineer. Vibratory compaction is not allowed within 100 feet of existing structures. In these areas, compaction shall be accomplished by static means only. If compaction difficulties arise, the Engineer shall be consulted to review and possibly modify compaction procedures.
- C. Noncohesive soils shall be compacted with vibrating roller or equivalent; cohesive soils shall be compacted with sheeps-foot roller, pneumatic tamping, or approved equivalent, unless otherwise indicated.

D. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

# 3.08 Testing and Cleanup

- A. Provide for testing and cleanup as soon as practicable, so these operations do not lag far behind pipe installation. Perform preliminary cleanup and grading operations immediately after backfilling.
- B. All surplus excavated material shall be disposed of by the Contractor.

# 3.09 Field Quality Control

- A. Minimum Density Requirement (ASTM D1557 or AASHTO T180):
  - 1. Backfill placed under and within the influence area of roadways, structures, slabs, foundations = 98 percent
  - 2. Backfill placed within pond and road embankment = 95 percent
  - 3. Backfill placed within public road right-of-way and utility easements outside the road influence area = 95 percent
  - 4. Backfill placed within landscape areas = 85 percent
  - 5. Backfill placed within all other areas = 90 percent

Where backfill is placed and differing density requirements are defined, the more stringent density requirement governs.

#### STORM DRAINAGE PIPE SYSTEMS

### PART 1 GENERAL

#### 1.01 Section Includes

Storm sewer pipe, culverts, box culverts, underdrains, accessories

#### 1.02 Related Sections

A. Section 02320 - Trenching, Bedding, and Backfilling

# 1.03 References

- A. American Association of State Highway and Transportation Officials (AASHTO) latest edition:
  - 1. AASHTO M252 Corrugated Polyethylene Drainage Pipe
  - 2. AASHTO M294 Corrugated Polyethylene Pipe, 12 to 48-inch diameter
- B. American Society for Testing and Materials (ASTM) latest edition:
  - 1. ASTM D3212 Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
  - 2. ASTM D3350 Polyethylene Plastics Pipe and Fitting Material
  - 3. ASTM F477 Elastomeric Seals (Gaskets) for Joining Plastic Pipe
  - 4. ASTM F758 Smooth Wall PVC Plastic Underdrain Systems for Highway, Airport, and Similar Drainage
  - 5. ASTM F2306 12 to 60 in. [300 to 1500 mm] Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Gravity-Flow Storm Sewer and Subsurface Drainage Applications
- C. Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction and Standard Plans for Road Construction, latest implemented editions:
  - 1. Index No. 430-001 Geotextile Criteria
  - 2. Index No. 430-001 Miscellaneous Drainage Details
  - 3. Specification Section 948 Corrugated Polyethylene Pipe

### 1.04 Submittals

- A. Provide shop drawings and product data for all pipes and joints.
- B. Provide manufacturer's certificate of compliance or certified analysis in accordance with applicable standards for each shipment of materials.

# 1.05 Product Delivery, Storage and Handling

- A. Exercise care in transporting and handling pipe and fittings in order to avoid damage to pipe materials, coatings or joints.
- B. Lifting of materials shall be by hoist or on skids.
- C. Dropping pipe and fittings while unloading or handling is not permitted.
- D. Pipe shall be stored as recommended by the manufacturer.
- E. Damaged pipe shall be replaced at Contractor's expense.

# 2.02 High Density Corrugated Polyethylene Pipe and Joints

- A. Pipe 4 inch through 10 inch diameter shall comply with AASHTO M252, Type S.
- B. Virgin material for the production of pipe and fittings shall be high density polyethylene conforming to the minimum requirements of cell classification 424420C for 4-inch through 10-inch diameters.
- C. Bell joints for 4 inch through 10 inch diameter pipe shall be push-on sleeve.
- D. Pipe joints shall be watertight per ASTM D3212. Gaskets shall be installed by pipe manufacturer and shall comply with ASTM F477.
- E. Fittings shall comply with AASHTO M294.

### PART 3 EXECUTION

### 3.01 General Installation Requirements

- A. Perform work in accordance with plans and standard guidelines in a neat and accurate manner.
- B. All lengths of pipe shall be dimensioned accurately to measurements established at the site, and shall be worked into place without springing or forcing.
- C. Cut all pipe as necessary. The pipe interior and joints shall be thoroughly cleaned before being installed and kept clean during construction.
- D. Establish survey control. Line and grade of pipe shall be checked continuously on a joint by joint basis.
- E. Pipe shall be laid progressively up grade, with bell upstream, in a manner to form close, concentric joints with smooth bottom inverts.

# 3.04 High Density Corrugated Polyethylene Pipe

- A. Install in accordance with ASTM D2321.
- B. Backfill and compact evenly on each side to prevent displacement, meeting the requirements of ASTM D2321 and Section 02320.
- C. Minimum cover over the pipe (outside top to finish grade) shall be 30 inches.

# 3.08 Visual Inspection and Testing

- A. Prior to inspection and testing, clean all installed lines and structures.
- B. After backfill has been placed, the Engineer will visually inspect all storm lines to check joints, alignment and grade. All obstructions shall be removed.

#### **IRRIGATION SYSTEMS**

### PART 1 GENERAL

#### 1.01 Section Includes

Irrigation system for landscaped and grassed areas

#### 1.02 Related Sections

### 1.03 Submittals

A. Manufacturer's specification data and product literature.

# 1.04 Quality Assurance

- A. The Drawings and Specifications are intended to describe a complete equipment installation for the purposes specified; however, the Contractor shall be responsible for all details necessary to properly install, adjust and place in operation the complete and working system.
- B. The installer of the irrigation system shall have a minimum of 3 consecutive years experience in area of project and having installed other jobs of similar size and scope. Provide minimum of 3 references and list of similar projects with owner's names, addresses, and telephone numbers, when requested by Owner.

# 1.07 Spare Parts

Provide a minimum of two spares for each type of sprinkler head.

# 1.08 Special Tools

Furnish to the Owner two sets of any special tools, calibration devices, or instruments required for operation, calibration, and maintenance of the equipment.

# 1.09 Warranty

Provide a two year warranty on all labor and materials, including valves and controllers.

# PART 2 PRODUCTS

# 2.01 General

- A. All equipment, parts and materials of the sprinkling system shall be the latest model products of one manufacturer.
- B. Pipe sizes have been determined by computation of pressure losses in the piping based on the consumption and required operation pressure of the specified sprinklers. The positioning and placement of the sprinklers have also been determined by the operating characteristics of the specified sprinklers.

# PART 3 EXECUTION

#### 3.01 General

- A. The sprinkling system shall be installed before placing top soil and the sodding or seeding. Drive a stake and marker at the location of every sprinkler head that will show at least 24" above the finish grade. These stakes shall be left in place until sodding and seeding is complete.
- B. The Contractor shall be responsible for installing the sprinkling system to avoid interfering with existing and new buried piping or utilities.
- C. The entire system shall be frost-proof and drainable. Automatic drain valves and manual drain valves with valve boxes shall be installed at all low points and as shown on the Drawings on each sprinkler main.

# 3.02 Functional Description

The complete system shall be divided into zones indicated on Drawings. Supply connections to the water mains or reclaimed water mains shall be provided at the locations indicated on the Drawings.

# 3.03 Piping

- A. Perform piping installation in accordance with Section 02510 or as specified on the Construction Drawings.
- B. Minimum cover from top of piping to finished grade shall be provided as follows:
- C. In grassed or landscaped areas, mains and control valves shall be at a minimum of 18 inches cover, and laterals shall be at a minimum of 12 inches cover.
- D. Under streets, drives, or parking areas, all piping shall be installed in sleeves, with the sleeves installed at a minimum of 24 inches cover. Extend sleeves 12-inches beyond paving at each end.

# 3.04 Valves

- A. Do not locate beneath paved surfaces.
- B. Install plumb to within 1/16-inch.
- C. Locate within valve box with 6-inch deep layer of coarse gravel beneath bottom of valve.
- D. Top of quick coupler valves shall be 6-inches to top of valve box. Top of gravel layer shall be 3-inches below top of valve.

# 3.05 Sprinklers

- A. Install plumb to within 1/16-inch, with top collar, not nozzle, flush with finish grade.
- B. Provide swing joint with each sprinkler, except where entire head is raised above grade and/or where rigid riser piping is required.
- C. Heads adjacent to paving and curb shall be located between 6-inch and 12-inches from edge of paving or back of curb to prevent car overhang to conflict with a fully extended sprinkler.

### 3.06 Electrical Connections And Control Wire

- A. Provide electrical connection to system as designated on Construction Drawings and as specified herein.
- B. Provide continuous runs of wire between controller and valves. Splices shall be made with one of following:
  - 1. Watertight below ground electrical junction boxes.
  - 2. Water-tight connectors, such as utilized for valves, and located within valve box for ease of locating.
- C. Bury control wire beside pipe in same trench. Bundle and tape together at not more than 10-ft intervals.
- D. Expansion loops shall be constructed by wrapping wire around 1/2-inch diameter pipe to create coil. A 3-foot section of wire shall be used to create 12-inch coil with 6-foot section being used to create 24-inch coil.
- E. Provide 12-inch coils at each wire splice, not including valves, and at each change of wire direction.
- F. Provide 24-inch coils at each control valve and where each valve enters conduit for automatic controller.

# 3.07 Closeout and Start Up

- A. Prior to acceptance, conduct an operational test, under the observation of the Engineer, to determine if the installed equipment meets the purpose and intent of the Specifications.
- B. Following installation, make final adjustments to irrigation system prior to Owner's final inspection.
- C. Flush system completely, with nozzles and screens removed, to extract debris.
- D. Verify sprinkler operation and alignment for direction of throw. Correct as necessary.
- E. Check pop-up spray nozzling for proper arc of spray with no overthrow onto pavement. Adjust nozzles as necessary for proper throw.
- F. Ensure uniform distribution exists.
- G. Ensure proper sprinkler head operational after landscaping and/or sod installation.
- H. Following final adjustment, operate entire installation to demonstrate complete and successful operation of equipment.
- I. Test shall demonstrate that the equipment and work is not defective and is in safe and satisfactory operating condition.

#### **LANDSCAPING**

### **PART 1 GENERAL**

### 1.01 Section Includes

Materials, installation, maintenance of littoral plantings.

#### 1.02 Related Sections

Section 02920 - Grassing

# 1.03 General Requirements

- A. Furnish all labor, materials, equipment, and incidentals required to install trees, ground cover, and shrubs, to place accessory planting materials and to maintain and guarantee all planted areas, in areas as shown on the Drawings. All work shall be in strict adherence with sound nursery practice and shall include maintenance and watering of all the work of this Contract until final completion and acceptance by the Owner.
- B. The landscaping shall be performed by a subcontractor who is fully experienced in projects of this scope and whose main business is landscaping. The subcontractor shall be subject to the approval of the Engineer.
- C. Provide under this Section all landscaping appurtenances as shown on the landscaping drawings and specifications.

### 1.04 Submittals

- A. Submit to the Engineer for approval, complete written maintenance instructions for each type of plant furnished under the Contract.
- B. Submit representative samples of any or all of required accessory planting materials as ordered by the Engineer.
- C. All trees, shrubs and sod shall have a valid and current state of Florida, Division of Plant Industry (DPI) inspection certification prior to being transported to the construction site. Submit the DPI certification to the Engineer and maintain a copy of the certification onsite with the construction records.

# 1.05 Warranty

The life and satisfactory condition of all plant material planted shall be guaranteed by the Contractor for a minimum of one calendar year. Guarantee shall include complete

replacement with material of the same kind and size as in the original work if not in a healthy condition, as determined by the Engineer, at the end of the warranty period.

### 1.06 Maintenance

- A. Plant material maintenance shall begin when planting operations start and shall extend until final acceptance of the work.
- B. Maintain all plant materials under this Contract to the satisfaction of the Engineer. Maintenance shall include necessary watering, cultivation, weeding, pruning, spraying, tightening and repair to guy wires, removal of dead material, resetting, and other work required to conform with referenced standards and accepted nursery standards as approved.
- C. Plant materials which are in a tilted or in a leaning position shall be properly righted
- D. After final acceptance by the Owner and until 120 days after acceptance of all plantings, the landscaping subcontractor shall make monthly inspections of materials and report in writing to the Engineer the conditions of the plants and the necessary requirements to keep the plants in a healthy growing condition.

### **PART 2 PRODUCTS**

#### 2.01 Materials

- A. Plant species and size shall conform to those indicated in the Plant List and in plant locations shown on the Drawings. All plants shall be Florida Grade No. 1, or better.
- B. Plants shall be sound, healthy, vigorous, free from plant diseases, insects, pest, or their eggs, and shall have healthy normal root systems. Plants shall be nursery grown stock, freshly dug. No heeled in, cold storage or collected stock will be acceptable.

# C. Shape and Form:

- 1. Plant material shall be symmetrical, typical for the variety and species, and shall conform to the measurements specified in the Plant List.
- 2. Plants used where symmetry is required shall be matched as nearly as possible.
- 3. Plants shall not be pruned prior to delivery except as authorized.
- 4. All plants shall have been transplanted or root pruned at least once in the past 3 years.
- D. Substitutions in plant species or size shall be made only with the written approval of the Engineer.

# E. Planting Soil:

- Soil for backfilling around plants and planting beds shall be a good grade of garden loam as approved. Soil shall be free of heavy clay, coarse sand, stones, lumps, sticks or other foreign material. The soil shall not be delivered or used in a muddy condition.
- 2. The soil shall be taken from ground that has never been stripped. There shall be a slight acid reaction to the soil with no excess of calcium or carbonate. The soil shall be free from excess weeds or other objectionable material.

#### PART 3 EXECUTION

# 3.01 Planting Procedures

- A. Plant Locations: All plants shall be located as shown on the Drawings, to dimensions if shown, to scale if not dimensioned. Large areas or beds shall be scaled and the plants spaced evenly. Approval by the Engineer is required before any plants are installed.
- B. Digging and Handling:
  - 1. Plants shall be handled at all times so that roots or balls are adequately protected from sun or drying winds. Tops or roots of plants allowed to dry out will be rejected.
  - Balled or burlapped plants shall be moved with firm, natural balls of soil, not less than 1-foot diameter of ball to every 1-inch caliper of trunk, and a depth of not less than 2/3 of ball diameter. No plant shall be accepted when the ball of earth surrounding its roots has been cracked or broken.
  - 3. Bare root plants shall be dug with spread of root and of sufficient depth to ensure full recovery of the plant.
- E. When balled and burlapped plants are set, planting soil shall be carefully tamped under and around the base of the balls to prevent voids. All burlap, rope, wires, etc., shall be removed from the sides and tops of balls, but no burlap shall be pulled from underneath. Roots of bare rooted plants shall be properly spread out and planting soil carefully worked in among them.
- F. Before plants are backfilled with planting soil, fertilizer tables, Agriform 20-10-5 or equal, shall be placed in each pit. Provide three tablets for each tree and one for each shrub or vine.
- G. All plants shall be set straight or plumb, in locations shown on the Drawings. Except as otherwise specified, plants shall be planted in pits and shall be set at such level that, after settlement, they bear the same relation of the finished grade or surrounding ground as they bore to the grade of the soil from which they are taken.

- H. Pruning shall be carefully done by experienced plantsmen. Prune immediately upon acceptance by the Owner, including any broken branches, thinning all small branches and tipping back main branches (except main leaders).
- I. Excess soil and debris shall be disposed of off the project site unless ordered stockpiled by the Engineer.

### 3.02 Obstructions Below Ground

- A. If underground construction utilities or obstructions are encountered in excavation of the planting areas, or pits, other locations for the plant material may be selected by the Engineer.
- B. Such changes shall be done without additional compensation.

### 3.03 Tree and Plant Protection – N/A

# 3.04 Replacement

- A. At the end of the warranty period, any plant required under this Contract that is dead or not in satisfactory growth as determined by the Engineer shall be removed. Plants replaced shall be guaranteed for 90 days after date of replacement.
- B. Replacement of plants necessary during the guarantee period shall be the responsibility of the Contractor, except for possible replacements of plants resulting from removal, vandalism, acts of neglect on the part of others, or acts of God.
- C. All replacements shall be plants of the same kind and size as specified in the landscape drawings. They shall be furnished and planted as herein specified. The cost shall be the responsibility of the Contractor.

#### **GRASSING**

### PART 1 GENERAL

# 1.01 Section Includes

Soil preparation, sodding, mulching, fertilizing, watering, and maintenance of grassed areas

#### 1.02 References

Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest implemented edition.

### 1.03 Submittals

- A. All sod shall have a valid and current state of Florida, Division of Plant Industry (DPI) inspection certification prior to being transported to the construction site. Submit the DPI certification to the Owner and maintain a copy of the certification onsite with the construction records.
- B. Tickets from each sod pallet of sod delivered to the site shall be provided to the Owner. The tickets are to identify the sod type, the sod farm (source) of the sod, and the date the sod was cut.
- C. Provide signed copies of a statement by the vendor certifying that each lot of seed has been tested by a recognized laboratory for seed testing within 6 months of date of delivery. This statement shall include: name and address of laboratory, date of test, lot number for each kind of seed, and the results of tests as to name, percentages of purity and of germination, and percentage of weed content for each kind of seed furnished, and, in case of a mixture, the proportions of each kind of seed.

# 1.04 Quality Assurance

- A. Sod shall be no more than 10% brown per piece of sod when delivered to the site and shall be free of weeds and other grass contamination.
- B. Sod shall be delivered to the site no more than 48 hours after it has been cut and shall be installed upon delivery. Sod shall be fresh and uninjured.
- C. Sod shall have a soil mat of sufficient thickness adhering firmly to the roots in order to withstand all necessary handling.

# 1.05 Delivery, Storage, and Handling

- A. Sod delivered to the site shall be in pallets, with sod pieces generally 16-inches by 24-inches (+/-) with no sod piece smaller than 12-inches on any side.
- B. Sod delivered to the site shall be kept out of direct sunlight and shall be kept moist until installation.
- C. Sod not meeting these specifications upon delivery as determined by the Owner shall be removed from the project site and not installed.

# 1.06 Warranty

All seeding shall be warrantied by the General Contractor to be true to name and in a vigorous growing condition through one growing cycle including one summer and one winter season.

# 1.07 Certification

Sod shall have a valid and current State of Florida, Division of Plant Industry (DPI) inspection certification prior to being transported to the construction site.

#### 1.08 Maintenance

- A. Maintenance for lawns shall begin immediately after seeding or sodding. Provide fertilizing, watering, mowing and replanting and continue as necessary until a close healthy stand of specified grasses is established.
- B. Mowing and watering shall be continued until project completion as directed by the Owner.

### PART 2 PRODUCTS

# 2.01 Lime

Lime shall be agricultural grade dolomitic limestone, ground sufficiently fine so that at least 80 percent will pass through a No. 8 sieve, and it shall contain not less than 80 percent calcium carbonate equivalent. Moisture content at time of delivery shall not exceed 8 percent.

### 2.02 Fertilizer

Fertilizer shall be a composition recommended by a local County Agricultural Agent or State Agricultural Extension Service or a preformulated 10-6-4 mixture.

#### 2.03 Water

Water shall be free from oil, acid, alkali, salts, and other harmful substances.

# 2.04 Sod

- A. Sodding is to match existing adjacent lawns and shall be well matted with grass roots.
- B. Sod shall be either field or nursery grown sod that is native to the locality of the Project. The Contractor shall obtain the Owner's approval of the source of the sod prior to cutting the sod.
- C. Sod grown on soil high in organic matter, such as peat, will not be acceptable. The consistency of sod shall be such that it will not break, crumble or tear during handling and placing. Sod shall be reasonably free of stones, crab grass, noxious weeds, and other objectionable plants or substances injurious to plant growth.
- D. Sod shall have at least 1 inch of soil adhering firmly to the roots and cut in rectangular pieces with the shortest side not less than 12 inches. At the time of cutting sod the grass shall be mowed to a height not less than 2 inches nor more than 4 inches.
- E. Sod cut for more than 48 hours shall not be used without the approval of the Owner.
- F. Bermuda Sodding shall be 419 Tifway Bermuda.
- G. Bahia Sodding shall be Argentine Bahia Sod.
- H. If so designated on the drawings, Bahia Sodding along coastal areas subject to high salt content shall be Seashore Paspalum Bahia (Paspalum vagination), such as Sea Isle 1, as produced by Turfgrass America, or approved equal.
- I. St. Augustine sodding is to be provided in those areas where the adjacent sod is St. Augustine sod.

### 2.05 Seed and Mulch

A. Mulch shall be dry mulch in accordance with FDOT specification 981.

# PART 3 EXECUTION

## 3.01 General

A. All grassing, whether temporary or permanent, will be inspected by the Owner or the Owner's representative at the time of installation or shortly thereafter to determine whether it is acceptable in accordance with these specifications. Any sod found to be unacceptable shall be removed and replaced with new sod within 48 hours (prior to root establishment) as directed by the Owner.

B. Grassed areas will be inspected by the Owner or the Owner's representative throughout the construction period, not just at project completion. Any established sod subsequently found to be unacceptable shall be removed and replaced with new sod within 7 calendar days as directed by the Owner.

# 3.02 Timing Requirements

- A. Grass all disturbed areas, whether temporary or permanent grassing, within 7 days of initial disturbance.
- B. Permanently grass disturbed areas after all required testing is complete.

# 3.03 Regrading of Topsoil

Topsoil shall be graded reasonably smooth and level after final settlement. All humps shall be removed and depressions or eroded areas filled in with additional topsoil before proceeding with seeding or sodding.

# 3.04 Preparation for Sodding

- A. Preparation shall not be started until all other site and utility work and finished grading within the areas to be seeded have been completed.
- B. Loosen topsoil by tilling it to a depth of at least 3 inches and smooth out all surface resulting irregularities. Leave area free of rocks or hard soil clods that will not pass through the tines of a standard garden rake.
- C. Apply fertilizer uniformly at a rate of 20 pounds per 1000 square feet. Work fertilizer into soil prior to sodding.
- D. The area over which sod is to be placed shall be scarified or loosened to a depth of 2 inches and then raked smooth and free of debris.
- E. The area shall be graded as needed to ensure the new sod matches the existing sod grade.

# 3.05 Sodding

- A. Sodding operations shall follow immediately behind operations for the preparation of the areas for sodding and shall generally take place on the same day.
- B. Provide sod in areas indicated on the Drawings. Generally, all disturbed areas are to be sodded. Sodding shall also be used in ditches and drainage swales and on all embankment slopes steeper than 3 to 1 unless protection is provided against erosion of seeding.
- C. Sod which has been cut for more than 72 hours prior to installation shall not be used unless specifically authorized by the Owner.

- D. Place sod with the edges in close contact and alternate courses staggered. Lightly tamp or roll to eliminate air pockets. On slopes 2 to 1 or steeper, stake sod with not less than 4 stakes per square yard and with at least one stake for each piece of sod. Stakes shall be driven with the flat side parallel to the slope.
- E. Do not place sod when the ground surface is frozen or when air temperature may exceed 90 degrees F. Sodding shall not be performed when weather and soil conditions are, in the Owner's opinion, unsuitable for proper results.
- F. In ditches, the sod shall be placed with the longer dimension perpendicular to the flow of water in the ditch. On slopes, starting at the bottom of the slope, the sod shall be placed with the longer dimension parallel to the contours of the ground. In order to prevent vertical edges at the outer limits, the outer pieces of sod shall be tamped into place.
- G. Any voids shall be sanded prior to watering and rolling.
- H. Upon completion of the sodding, the entire area shall be rolled thoroughly with the equipment specified. The area shall be rolled, then watered, and then rolled a second time providing a total of two trips over the entire area that has been sodded.

# 3.08 Watering

Immediately after placing erosion control or mulch, water seeded areas thoroughly with a fine mist spray. Keep soil thoroughly moist until seeds have sprouted and achieved a growth of 1 inch. For sod, immediately begin watering and continually keep moist until the sod has firmly knit itself to the topsoil.

# 3.09 Protection of Work

Protect newly seeded and sodded areas from all traffic by erecting temporary fences and signs. Protect slopes from erosion. Properly and promptly repair all damaged work when required.

# 3.10 Application of Fertilizer

Six weeks after completion of seeding or sodding apply granular fertilizer over all areas at the rate of two pounds of nitrogen nutrients per 1000 square feet of area.

## 3.11 Turf Establishment

- A. Any sod that is more than 10% brown and has not become green within 14 calendar days of installation shall be re-sodded as directed by the Owner.
- B. Any sod that does not have root establishment (can be pulled up by hand) 14 calendar days or more after installation shall be re-sodded as directed by the Owner.

- C. All bare spots larger than 1 square foot shall be re-grassed as directed by the Owner.
- D. Any bare areas compromising more than 1% of any given 1000 square foot area shall be re-grassed as directed by the Owner.
- E. For the re-grassing, areas that were sodded are to be re-sodded and areas that were seeded are to be re-seeded.
- F. Scattered bare spots, none of which is larger than one square foot, will be allowed up to a maximum of 3% of the total area.
- G. Except for factors caused by a third party (other than the Contractor, subcontractor or supplier for the project), all re-grassing or repair of washed out and eroded areas shall be at no additional cost to the Owner.
- H. Grassed areas not showing a close uniform stand of healthy specified grasses at the time of substantial completion shall be replaced and maintained until final payment is made to the Contractor.

# 3.12 Clean-Up

At the time of final inspection of work, but before final acceptance, remove from seeded and sodded areas all debris, rubbish, excess materials, tools, and equipment.

### **CONCRETE FORMS**

### **PART 1 GENERAL**

### 1.01 Section Includes

General formwork, forms, form liners, and coatings, form ties.

#### 1.02 Related Sections

Section 03150 - Concrete Accessories

#### 1.03 References

- A. American Concrete Institute (ACI) latest edition:
  - 1. ACI 301 Structural Concrete for Buildings
  - 2. ACI 318 Building Code Requirements for Reinforced Concrete
  - 3. ACI 347 Guide to Formwork for Concrete
  - 4. ACI SP-4 Formwork for Concrete

# 1.04 System Description

Provide formwork to produce members of the size, shape, and exterior finish required, for the structural adequacy of the forms to carry construction loads without excessive deflection, and for the safe use of forms in connection with completion of the concrete work. The Contractor shall be responsible for any injury or damage arising from inadequate forms or from premature removal of formwork.

### 1.05 Submittals

Submit samples of patterned concrete form liner panels and form ties.

### **PART 2 PRODUCTS**

### 2.01 Formwork

- A. Form ties shall be a watersealing snap-in type. For patterned concrete, use stainless steel snap ties.
- B. Plywood forms and liners shall be minimum grade B-B High Density Overlay Concrete Form Panels, Class I.
- C. Formwork lumber shall be straight and clean. All nails shall be withdrawn and surfaces in contact with concrete shall be thoroughly cleaned before reuse

D. Metal forms shall be in accordance with ACI SP-4.

### 2.02 Patterned Concrete Form Liners

- A. The special liners shall be configured in such a manner as to produce patterned finish concrete that will duplicate the surface appearance of the cut limestone building panels. The location, extent, and configuration of the surface treatment shall be as indicated on the Drawings. In addition to form release agents, rustication may be slightly beveled, approximately 1 to 8 maximum, to facilitate form release.
- B. Produce the patterned concrete with a smooth finish by using either plywood and/or tempered hardboard, complying with requirements for Grade A Forms, in conjunction with finished lumber, or approved fiberglass liners; or an approved equal liner. Liner joint marks shall not be apparent.

### PART 3 EXECUTION

#### 3.01 General

- A. Coordinate with other trades and properly place and locate in position all necessary dowels, bolts, anchors, anchor slots, inserts, sleeves, openings, hangers, metal ties and other fastening devices required for attachment and support of adjacent work. Securely anchor all embedded items.
- B. Formwork shall comply with ACI 347 and to shape, lines and dimensions of the members as indicated on the Drawings. Joints in forms shall be horizontal or vertical. Forms shall be properly braced or tied to maintain position and shape under all dead and live loads and to prevent leakage. Forms shall be assembled so their removal will not damage the concrete. Tolerances for formed surfaces shall be in compliance with ACI 301.
- C. Lumber formwork may be used for surfaces which will not be exposed to view. Use plywood or metal forms for exposed surfaces.
- D. Provide temporary openings at the base of forms greater than 4 feet high, if necessary, to facilitate cleaning and inspection immediately before depositing concrete.
- E. All external corners of concrete exposed to view shall be chamfered by using 3/4 inch by 3/4 inch by 45 degree wood stripping, except as otherwise indicated on the Drawings.

# 3.02 Grade A Forms

A. Unless otherwise indicated, Grade A forms shall be used for all exposed concrete.

- B. Grade A forms shall consist of steel forms lined with 3/16 inch thick tempered hardboard or 1/4 inch thick plywood, or by using plywood forms.
- C. Full sized sheets shall be used wherever possible. The edges of all sheets shall be straightened to insure tight, close fitting joints. Bulges or depressions more than 1/8 inch in 4 feet will not be permitted. Open joints which would permit leakage shall be sufficient cause for rejection of forms. Other tolerances shall be as allowed by ACI 347.

### 3.03 Grade B Forms

- A. Use lumber, plywood or metal forms. All joints shall be solidly backed, aligned and made leakproof.
- B. Unless otherwise indicated, Grade B Forms are intended for use where concrete will not be exposed to view, such as below grade, below normal liquid levels in water-retaining structures, or inside manholes, boxes, vaults, etc.

#### 3.04 Surface Treatment of Formwork

The inside surface of lumber forms shall be soaked with clean water prior to placing concrete. All other forms shall be treated with an approved form oil or lacquer. If oil is used, all excess oil shall be wiped off.

# 3.05 Inspection of Formwork

Concrete shall not be placed until the forms have been inspected by the E/A to assure surfaces in conformance with the Drawings and Specifications. The inspection of formwork by the E/A does not relate to the structural adequacy or the safety of the formwork.

### 3.06 Removal of Forms

Forms shall be removed in accordance with requirements of ACI 318, without damaging the concrete. Leave shoring in place until concrete will safely support its own weight plus any live loads that may be placed upon it.

### **CONCRETE ACCESSORIES**

### **PART 1 GENERAL**

#### 1.01 Section Includes

Construction joints, anchors and inserts

#### 1.02 Related Sections

- A. Section 03100 Concrete Forms
- B. Section 07900 Joint Sealants

# 1.04 Submittals

Provide samples and certifications of all proposed materials.

### **PART 2 PRODUCTS**

# 2.01 Joint Fillers

- A. Joint fillers shall be products of the following manufacturers, or equal
  - 1. W. R. Meadows, Inc., Elgin, Illinois
  - 2. W. R. Grace and Co., Cambridge, Massachusetts
- B. Preformed bituminous fiber joint filler shall be non-extruding type conforming to ASTM D1751.
- C. Control joint strips shall have a minimum depth of 25 percent of slab thickness and a minimum thickness of 1/8 inch.

### 2.02 Joint Sealants

A. Sealants for joints shall be in accordance with Section 07900.

# PART 3 EXECUTION

# 3.01 Preparation

Remove existing concrete and provide openings for installation of new work as indicated on Drawings. Repair all damage to existing work caused by concrete removal.

# 3.03 Horizontal Joints

Provide methods of achieving a leakproof joint. No horizontal construction joints will be permitted in slabs, beams, or girders

#### **CAST-IN-PLACE CONCRETE**

### **PART 1 GENERAL**

#### 1.01 Section Includes

General requirements for formwork, reinforcement, accessories and cast-in-place concrete.

# 1.02 References

- A. American Concrete Institute (ACI) latest edition:
  - 1. ACI 301 Structural Concrete for Buildings
  - 2. ACI 305 Hot Weather Concreting
  - 3. ACI 306 Cold Weather Concreting
  - 4. ACI 315 Detailing Manual
  - 5. ACI 318 Building Code Requirements for Structural Concrete
  - 6. ACI 347 Formwork for Concrete
- B. American Association of State Highway and Transportation Officials (AASHTO) latest edition:
  - AASHTO T152 Air Content of Freshly Mixed Concrete by the Pressure Method
- C. American Society for Testing and Materials (ASTM) latest edition:
  - 1. ASTM A185 Steel Welded Wire Reinforcement, Plain, for Concrete
  - 2. ASTM A615 Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
  - 3. ASTM C31 Making and Curing Concrete Test Specimens in the Field
  - 4. ASTM C33 Concrete Aggregates
  - 5. ASTM C39 Test Method for Compressive Strength of Cylindrical Concrete Specimens
  - 6. ASTM C94 Ready-Mixed Concrete
  - 7. ASTM C138 Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
  - 8. ASTM C143 Test Method for Slump of Hydraulic Cement Concrete
  - 9. ASTM C150 Portland Cement
  - ASTM C173 Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
  - 11. ASTM C231 Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

- 12. ASTM C260 Air-Entraining Admixtures for Concrete
- 13. ASTM C309 Liquid Membrane-Forming Compounds for Curing Concrete
- 14. ASTM D1751 Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Bituminous Types)

### 1.03 Submittals

- A. Submit reinforcement steel shop drawings prepared in accordance with ACI 315, Manual of Standard Practice for Detailing Reinforced Concrete Structures. Drawings shall indicate bending diagrams, shapes, dimensions, clearances, splicing and laps, accessories, and installation notes.
- B. Submit manufacturer's literature for all admixtures proposed for the work.
- C. Submit delivery tickets in accordance with ASTM C94 for each batch of readymixed concrete. Information on the ticket shall include class of concrete, water content, time of loading, truck number, admixtures, and quantity.
- D. At least 35 days prior to placing of concrete, the Contractor shall submit proposed mix proportions and samples of proposed materials.

# 1.04 Quality Control

- A. Materials and methods of mixing and placing concrete shall conform to ACI 318, Building Code Requirements for Reinforced Concrete.
- B. Tests for slump shall be made when directed by the Engineer in accordance with ASTM C143.
- C. Air content tests shall be made, when directed by the Engineer, in accordance with ASTM C138, C173, C231, or AASHTO T-152.

# **PART 2 PRODUCTS**

#### 2.01 Formwork

Formwork lumber shall be straight and clean. All nails shall be withdrawn and surfaces in contact with concrete shall be thoroughly cleaned before reuse.

# 2.02 Reinforcement

- A. Reinforcement bars shall be ASTM A615, Grade 60 deformed bars, except as otherwise indicated.
- B. Welded wire fabric shall conform to ASTM A185. Where welded wire fabric is shown but not sized on Drawings, use 6" x 6" x W2.9 x W2.9 WWF.

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**CAST-IN-PLACE CONCRETE** 

- C. Accessories for proper installation of reinforcement shall conform to CRSI "Manual of Standard Practice for Reinforced Concrete Construction". Bar supports at exposed surfaces shall be Class C-Plastic Protected.
- D. Reinforcement fabrication shall conform to ACI 315 and ACI 318, and approved shop drawings.
- E. Where the Drawings require Fibermesh concrete, the reinforcement shall be polypropylene fibers engineered and designed for secondary reinforcement of concrete slabs, complying with ASTM C 1116 Type III, as manufactured by Fibermesh Co., or approved equal.

# 2.03 Joint Fillers

- A. Joint fillers shall be products of the following manufacturers, or equal:
  - 1. W. R. Meadows, Inc., Elgin, Illinois
  - 2. W. R. Grace and Co., Cambridge, Massachusetts.
- B. Preformed bituminous fiber joint filler shall be non-extruding type conforming to ASTM D1751.
- C. Control joint strips shall have a minimum depth of 25 percent of slab thickness and a minimum thickness of 1/8 inch.

### 2.04 Concrete Materials

- A. Water shall be clean and potable
- B. Portland cement shall be ASTM C150 Type I, II or III.
- C. Fine and coarse aggregate shall be clean, hard, natural, or manufactured material conforming to ASTM C33.
- D. The nominal maximum size of the aggregate shall not be larger than three-fourths of the minimum clear spacing between individual reinforcing bars. Coordinate with maximum aggregate sizes specified hereafter for classes of concrete.
- E. Admixtures shall conform to ASTM C260 (air entrainment) or C494 (water reduction) and shall be products of one of the following manufacturers, or equal.
  - 1. Dewey and Almy Chemical Div., W. R. Grace and Co.
  - 2. Euclid Chemical Co.
  - 3. Master Builders Co.
  - 4. Sika Chemical Corp.

#### 2.05 Miscellaneous Materials

- A. Vapor barrier shall be polyethylene film 0.006 inches thick and shall conform to Product Standard PS-17.
- B. Liquid membrane curing compound shall conform to ASTM C309, Type 1 or Type 2. Type 2 compound shall be used for P.C.C. pavement only. All permanently exposed exterior slabs shall receive clear acrylic curing and sealing compound. Moisture loss shall not be more than 0.055 gr./sq. cm when applied to 200 sq. ft./qal.
- C. Liquid membrane curing compound shall be products of one of the following manufacturers, or equal:
  - W.R. Meadows "Curettard"
  - 2. Sonneborn-Contech "Sonsil"
  - 3. Burke Co. "Res-Xnu"
  - 4. Lambert Corp. "Gardseal"
- D. Chemical hardener shall be colorless aqueous solution containing a blend of magnesium fluosilicate and zinc fluosilicate combined with a wetting agent, conforming to Federal Specifications TT-C-800A and Corps of Engineers Specification CE 204.
- E. Chemical hardener shall be products of one of the following manufacturers, or equal:
  - 1. Euclid Chemical Co. "Surfhard"
  - 2. Sonneborn-Contech "Lapidolith"
  - 3. Master Builders "Saniseal"
  - 4. Lambert Corp. "Solidus"

### 2.06 Concrete Mixtures

- A. Concrete not indicated otherwise shall be Class A concrete.
- B. The proportions of cement, aggregate, and water shall be selected by the Contractor in accordance with ACI 318 to provide a plastic and workable mix. Coarse aggregate shall be limited to prevent harshness and honeycombing. Coarse aggregate size shall not be greater than the maximum listed for the various classes of concrete and as previously specified under aggregate.
- C. Class A structural concrete shall have a 28 day strength of 4000 psi, shall contain not less than 540 pounds (5-3/4 bags) of cement per cubic yard of concrete, shall have a water-cement ratio of not more than 0.47 (5-1/4 gallons per bag of cement), and shall contain 4 percent to 6 percent entrained air, by

volume, except interior slabs subject to abrasion shall not contain more than 3 percent entrained air. In addition, Class A concrete shall contain a water-reducing, densifying admixture and have a maximum slump of 4 inches. The maximum aggregate size for slabs shall be 1 inch.

- D. Class B lean concrete shall have a 28 day strength of 3000 psi, it shall contain not less than 420 pounds (4-1/2 bags) of cement per cubic yard of concrete, shall have a water-cement ratio of not more than 0.71 (8 gallons per bag of cement), and shall have a 5 inch maximum slump. The maximum aggregate size shall be 2 inches.
- E. Water-reducing densifying admixture added to Class A concrete shall reduce the water-cement ratio while maintaining slump and compressive strength. Use as manufacturer recommends.
- F. Other admixtures may be proposed by the Contractor or requested by the Engineer and shall be provided at no additional cost to the Owner. Subject to approval, admixtures may be used for the following:
  - 1. To increase slump up to 50 percent while maintaining compressive strength and water-cement ratio.
  - 2. To retard set during hot weather
- G. Calcium chloride, admixtures containing calcium chloride, or admixtures not approved, in writing by the Engineer, are prohibited.

#### PART 3 EXECUTION

### 3.01 General

- A. Comply with ACI 305 or 306 for hot or cold weather concreting.
- B. Do not mix salt, chemicals, or other foreign materials with the concrete to prevent freezing without approval of the Engineer. Maintain the temperature of concrete above 50 degrees F for 5 days after placement. When high early strength Portland cement concrete is used, the temperature shall not be less than 70 degrees F for 2 days or 50 degrees F for 3 days.
- C. In no case shall the temperature of concrete exceed 90 degrees F at the time of placement.

### 3.02 Preparation

A. Remove existing concrete and provide openings for installation of new work as indicated on Drawings. Repair all damage to existing work caused by concrete removal.

- B. Coordinate with other trades and properly place and locate in position all necessary dowels, bolts, anchors, anchor slots, inserts, sleeves, openings, hangers, metal ties and other fastening devices required for attachment and support of adjacent work. Securely anchor all embedded items.
- C. The subgrade and/or bedding shall be compacted and free of frost. If placement is allowed at temperatures below freezing, provide temporary heat and protection as required to remove all frost. Saturate the subgrade approximately 8 hours before placement and sprinkle ahead of the placement of concrete in areas where vapor barrier is not used. Remove all standing water, ice, mud, and foreign matter before concrete is deposited.
- D. On porous subgrade or beddings, or where indicated on the Drawings, provide vapor barrier. Lay vapor barrier sheets with 6 inch edge laps and tape or seal with mastic. Stretch and weight edges and laps to maintain their positions until concrete is placed. Coordinate with placement of reinforcement.

# 3.03 Formwork Requirements

- A. Formwork shall comply with ACI 347 and to shape, lines and dimensions as indicated on the Drawings. Forms shall be properly braced or tied to maintain position and shape under all dead and live loads and to prevent leakage. Forms shall be assembled so their removal will not damage the concrete. Tolerances for formed surfaces shall be in compliance with ACI 301.
- B. Lumber formwork may be used for surfaces which will not be exposed to view. Use plywood or metal forms for exposed surfaces.
- C. The inside surface of lumber forms shall be soaked with clean water prior to placing concrete. All other forms shall be treated with an approved form oil or lacquer. If oil is used, all excess oil shall be wiped off.

### 3.04 Reinforcement

- A. The placement of reinforcing steel shall conform to "Placing Reinforcing Bars", as published by the Concrete Reinforcing Steel Institute except as noted.
- B. Provide continuous reinforcement or dowels through construction joints. One half of reinforcement shall be discontinued across control joints unless otherwise indicated. All reinforcement shall be discontinued across expansion joints.
- C. Splice laps shall be as indicated on the Drawings.
- D. Fabric reinforcement for slabs shall be overlapped at splices not less than the spacing of the cross wires plus 2 inches. Fabric shall extend to within 4 inches of concrete edges.

- E. Unless otherwise shown, place reinforcement 2 to 3 inches below the top of the finished slab. Mesh shall either be sandwiched between two layers of fresh concrete or supported on mesh supports. Supports that may puncture the vapor barrier, if any, shall not be used.
- F. Where reinforcing is fibermesh, incorporate polypropylene fibers fully into the concrete prior to placement.

#### 3.05 Joints

- A. Provide construction joints with shear transfer keyways as indicated.
- B. Tops of edge forms and screeds shall be set to the finished elevations and to provide uniform pitch to drains as indicated on Drawings.
- C. For drives, pavements, parking areas, walks and slabs on grade, provide preformed non-extruding asphalt strip or bituminous fiber joint filler set 1/8 inch below finished surface unless otherwise indicated. Tool concrete edges on each side of joint. No sealant is required.

# 3.06 Batching

- A. Materials for concrete shall be proportioned and batched according to the approved design mix.
- B. Water shall be measured to within 1 pint of the total amount required per batch. Admixtures shall be measured by weight or volume to an accuracy of 3 percent.

# 3.07 Mixing and Transporting Concrete

- A. Concrete shall be ready-mixed or job-mixed at the Contractor's option. Ready-mixed concrete shall be mixed and delivered to the project in accordance with ASTM C94. Job-mixed concrete shall be in accordance with the requirements of ACI 318.
- B. Concrete shall be in its final position within one hour after the water and aggregate have been added to the cement, except in cool weather (50 degrees F or less).
- C. Concrete shall be transported from the mixer to place of final deposit in such manner to prevent separation or loss of ingredients.

### 3.08 General Concrete Placement Schedule

- A. All structural concrete shall be Class A Concrete.
- B. Sidewalks, curbing, and driveways shall be Class B Concrete.

# 3.09 Depositing Concrete

- A. Concrete shall be placed in accordance with the requirements of ACI 318 and within 10 feet of its final position. Place concrete only during normal working hours unless the Engineer is notified at least 24 hours in advance. Concrete shall not be placed until the Engineer has approved the formwork, reinforcement, and embedded items and debris has been removed.
- B. Whenever new concrete is to be placed against existing surfaces, roughen and clean the surface to improve bond.
- C. Provide runways and chutes to discharge concrete close to final position to minimize spreading and segregation.
- D. Place slabs-on-grade using formed construction joints. Maximum size of pour shall be 40 feet each way for slabs with wire mesh reinforcement and 75 feet each way for slabs with bar reinforcement. Allow 24 hours between pours of adjacent slabs. Provide joints as specified or shown. Set continuous joint strips between slabs and abutting vertical surfaces as indicated on the Drawings.

# 3.10 Finishing Slabs and Flatwork

A. Unless otherwise indicated, provide the following slab finishes:

Description	Concrete Finish
Class B concrete surfaces	Float
Submerged slabs	1 Troweling
Exposed slabs	3 Trowelings
Ramps and walks	Float and broom finish

- B. Concrete shall be within ¼ inch of a 10 foot straightedge in all directions except where slabs are dished for drains. Deviations from the elevation indicated shall not exceed ¼ inch.
- C. Slabs sloped for drainage shall not have depressions that retain water.
- D. Immediately after placement, screed concrete with straightedges or power strikeoffs. Do not use roller screeds or vibrating screeds.
- E. Stakes for wet screeds shall be driven down flush with subgrade or pulled out as work progresses to avoid disturbing screeded concrete.
- F. For drains in level slabs, form a 5 foot diameter depression approximately ½ inch below the adjacent slab surface.

- G. Unless otherwise indicated on the Drawings, slabs sloped for drainage shall be uniformly pitched toward the drains at 1/8 inch per foot. Form a dished depression at drains unless otherwise indicated.
- H. Immediately after screeding, darby surface with wood or magnesium darby to eliminate ridges and to fill in voids left by screeding.

#### 3.11 Float Finish

- A. Float concrete using magnesium or aluminum hand floats or power floats after the concrete has stiffened to a point where only a ¼ inch indentation can be imparted by normal foot pressure.
- B. Float finish shall result in a uniform, smooth, granular texture. After floating, check slab tolerances with 10-foot straightedge. Fill low spots with fresh concrete; do not sprinkle with dry cement.

### 3.12 Trowel Finish

- A. Where scheduled, or indicated, trowel with steel trowels after floating.
- B. Initial troweling shall be done either by power or by hand with the trowel blade kept as flat as possible against concrete surface to prevent washboard or chatter effect.
- C. Second troweling may be done by power if three trowelings are scheduled. If two trowelings are specified, second troweling shall be done by hand.
- D. Third troweling shall be done by hand and shall continue until the concrete is consolidated to a uniform, smooth, dense surface free of trowel marks and irregularities.
- E. Allow sufficient time between successive trowelings to allow the concrete to become harder. Each successive troweling shall be done with trowels that are progressively smaller and are tipped more to increase compaction of the concrete surface.

## 3.13 Brooming

Broom at right angles to direction of traffic to give a non-skid finish. Use a fine, soft-bristled broom for pedestrian ramps and walks, and a coarse, hard-bristled broom for vehicular pavement.

# 3.14 Control Joints

A. Control joints for non-structural slabs shall consist of partial depth plastic strips set flush with finished surface or 1/8 inch wide joints cut with a diamond saw.

- Control joints shall be one- quarter to one-third the depth of the slab unless otherwise indicated.
- B. Saw joints as soon as concrete has hardened sufficiently so aggregate will not be dislodged but before shrinkage stresses develop cracks. Sawn joints shall be filled with approved joint sealant.
- C. Unless otherwise indicated on the Drawings, spacing of control joints shall not exceed 25 feet in each direction.

# 3.15 Protection and Curing

- A. Comply with ACI 305 and 306 for protecting and curing concrete in hot and cold weather. Fresh concrete shall be protected from rain, premature drying and excessively hot or cold temperatures, and shall be maintained with minimal moisture loss for the period of time necessary for the hydration of the cement and proper hardening of the concrete. Cure all concrete for a minimum period of 7 days (3 days for high early strength concrete) after placing.
- B. Immediately after finishing, begin curing by covering with constantly saturated moisture retaining fabrics, impervious sheeting, or membrane curing compounds. Surfaces shall be thoroughly wetted with a fine spray before they are covered with sheeting.
- C. Sheeting shall provide complete surface coverage with all joints lapped at least 4 inches and shall be placed and secured in a manner that will not mar or damage the concrete surface.
- D. Apply membrane-curing compound in accordance with manufacturer's recommendations. Apply by spraying in a two coat continuous operation. Apply the coats at right angles to each other with a coverage of 200 square feet per gallon per coat. Begin application not later than 4 hours after finishing of the surface. The application shall result in an uninterrupted adherent film free of defects.
- E. On surfaces scheduled to receive sealants, paint, seamless flooring, or other adhesive bonded finishes, either the membrane curing compound shall be compatible with the bonding agent or the curing compound shall be removed with sandblasting, acid etching or grinding, to the satisfaction of the installer of the finish surfacing. Bonded surfaces that fail to adhere to the concrete shall be removed and replaced at no additional cost to the Owner.
- F. Apply hardener to floors of mechanical and electrical rooms and in other areas as required. Application shall be in strict accordance with the manufacturer's recommendations and as follows:

- Hardener shall be applied at original container consistency without dilution to dry, clean surfaces no sooner than 30 days following completion of curing. NOTE: Hardener shall not be applied over surfaces covered with membrane curing agent.
- 2. Application shall generally be a three-coat process adjusted to accommodate extreme concrete densities only if prior review has been obtained from the Engineer. Application coverage shall be made at the approximate rate of one gallon to 100 square feet.
- 3. Apply first and second coats generously to surface, mop or squeegee standing water to leave a uniformly wet surface, allow to dry. Apply third coat in a manner similar to first two, except that surplus must be scrubbed with stiff bristled broom and flushed from floor surface with clear water. Scrubbing and flushing shall remove all traces of effervescence. Remove excess water and allow to dry.

# 3.16 Defective Concrete

- A. All concrete not formed as indicated on the Drawings within tolerances specified in ACI 347 shall be removed and replaced.
- B. Temperature and shrinkage cracks which develop prior to final acceptance of the work shall be repaired.

# 3.17 Miscellaneous Concrete Work

Provide concrete equipment pads and supports as indicated and conforming to approved shop drawings. Fastening devices and accessories shall be located by templates or setting diagrams furnished by the manufacturer.

# 3.18 Clean-Up

- A. All concrete floor construction shall have the surfaces thoroughly scrubbed and cleaned with clear water. After cleaning, the floors shall be protected until they are accepted.
- B. Clean all surfaces affected by the Concrete Work. No extraneous concrete or discoloration shall be left on any construction.

# 3.19 Concrete Testing

A. Compressive Strength Tests: Conform to ASTM C31 and ASTM C39. One set of four cylinders for each 50 cubic yards or fraction thereof, of each strength concrete placed in any one day. Test one specimens at seven days; test two specimens at 28 days. One specimen shall be retained for 56 days and tested only at the direction of the Engineer.

В.	Slump Tests: Conform to ASTM C143. Perform one test for each load point of discharge and one for each set of compressive strength test specimens.
	END OF SECTION