

SANTA ROSA COUNTY, FLORIDA



ITB # 20-008 Tibet Drive Drainage Improvements

January 2020

**OWNER: BOARD OF COUNTY COMMISSIONERS
SANTA ROSA COUNTY, FLORIDA**

**SAM PARKER
ROBERT A. "BOB" COLE
W.D. "DON" SALTER
DAVE PIECH
LANE LYNCHARD**

**-DISTRICT I
-DISTRICT II
-DISTRICT III
-DISTRICT IV
-DISTRICT V**



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

TABLE OF CONTENTS

SRC Form Toc 023_00_083019

1. SOLICITATION INTRODUCTION

SECTION I. Invitation to Bid.....	04
SECTION II. Instruction to Bidders and Submittal Requirements.....	07

2. REQUIRED COUNTY DOCUMENTATION AND FORMS

SECTION III. County Documents and Forms.....	14
Bid Submittal Checklist (026)	15
Bid Form including Schedule of Values	16
Cone of Silence (013)	19
Sworn Statement Public Entity Crimes (016).....	20
Debarment Form (022)	22
References Form (024)	23
Conflict of Interest Form	26
Insurance Requirements.....	27
General Provisions	29
Supplementary Provisions	63

3. PROJECT MANUAL, SPECIFICATIONS, PLANS AND SUPPORTING DOCUMENTATION

SECTION IV. Project Manual.....	64
Technical Specifications	65
Bid Plans.....	103

SECTION I.
INVITATION TO BID

This Page Intentionally Left Blank



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

MEMORANDUM

SRC Procurement Form Memo 015_00_082719

TO: Company Addressed DATE: January 9, 2020

FROM: Santa Rosa County Procurement Office

SUBJECT: **ITB 20-008 Tibet Drive Drainage Improvements**

Notice is hereby given that the Santa Rosa County Board of County Commissioners will receive sealed bids for the installation of drainage improvements as indicated within the bid package. Only properly licensed and insured Underground Utility Contractors are invited to bid.

This Drainage Improvements Project is for Tibet Drive located off Highway 98 in the Tiger Point Community. This project consists of replacing an existing underground pipe under Tibet Drive and in the existing drainage easement. The existing pipe is actively failing and was previously slip-lined several years ago. The proposed improvements removal of existing pipe and structures and the construction of new storm drain structures, storm drain piping, riprap, and sodding. The proposed improvements will be built to meet all applicable standards and specifications from Santa Rosa County.

All bids must be in writing and delivered by hand, overnight courier service, or U.S. Mail to the Santa Rosa County Procurement Department, 6495 Caroline Street, Suite L, Milton, Florida 32570, and **must be received by 10:00 A.M. on January 30, 2020** at which time will be publicly opened. Secondary delivery location shall be to Suite M at the above address. Only bids received by the afore stated time and date will be considered. E-mailed proposal responses will be rejected. All bids shall be sealed and clearly labeled, "**ITB 20-008 Tibet Drive Drainage Improvements**". Please provide the original proposal, labeled "ORIGINAL", and three (3) copies labeled "COPY" (4 total complete packages) along with one (1) electronic file in OCR (readable) PDF format.

A pre-bid (non-mandatory) conference will be held on January 16, 2020 at 8:30 A.M. at the Santa Rosa County Engineering Department, 6051 Old Bagdad Highway, Suite 300 Milton, Florida 32583. All interested parties are strongly encouraged to attend.

Specifications may be secured by download from the Santa Rosa County Website: www.santarosa.fl.gov (keyword BIDS). Questions concerning this request should be directed to the Santa Rosa County Procurement Office in writing at bidinfo@santarosa.fl.gov **prior to 4:30 p.m. on January 23, 2020.**

Santa Rosa County Board of County Commissioners encourages all segments of the business community to participate in its procurement opportunities, including small businesses, minority/women owned businesses, and disadvantaged business enterprises. The Board does not discriminate on the basis of race, color, religion, national origin, disability, sex, or age in the administration of contracts.



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

The Board of County Commissioners reserves the right to waive irregularities in bids, to reject any or all bids with or without cause, and to award the bid that it determines to be in the best interest of Santa Rosa County.

By order of the Board of County Commissioners of Santa Rosa, Florida

SECTION II.
STD ITB – BID INSTRUCTIONS, SUBMITTAL
REQUIREMENTS AND GENERAL BID
REQUIREMENTS

This Page Intentionally Left Blank

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

PRE-BID ACTIVITY

Except as provided in this section, respondents are prohibited from contacting or lobbying the County, County Administrator, Commissioners, County staff, and Review Committee members, or any other person authorized on behalf of the County related or involved with the solicitation. All inquiries on the scope of work, specifications, additional requirements, attachments, terms and general conditions or instructions, or any issue must be directed in writing, by US mail or email to: Santa Rosa County Procurement Office, 6495 Caroline Street, Suite L Milton Fl. 32570. Email; Bidinfo@santarosa.fl.gov.

All questions or inquiries must be received no later than the last day for questions stated in the ITB & Legal Notice. Any addenda or other modification to the bid documents will be issued by the County five (5) days prior to the date and time of bid closing, as written addenda, and will be posted to the Santa Rosa County website at <https://www.santarosa.fl.gov> keyword; Bids.

Such written addenda or modification shall be part of the bid documents and shall be binding upon each respondent. Each respondent is required to acknowledge receipt of any and all addenda in writing and submit with their bid. No respondent may rely upon any verbal modification or interpretation.

PROPOSED SCHEDULE

Invitation to Bid Published;	January 9, 2020
Pre-Bid Conference;	January 16, 2020 @ 8:30 a.m.
Deadline for Questions	January 23, 2020 @ 4:30 p.m.
Bids Due	January 30, 2020 @10:00 a.m.
Bid Reviews/Evaluation	TBT
Recommendation Due	TBT
Award by BOCC	TBT
Notification of Award	TBT

PREPERATION OF BID

A Bid form is included in these specifications. The Owner may consider as informal any bid on which there is an alteration of or departure from the Bid Form hereto attached. The respondent shall submit bids in accordance with the public notice.

All blanks in the bid documents shall be completed by printing in ink or by typewriter in both words and numbers with the amounts extended, totaled and the bid signed. A bid price shall be indicated for each section, bid item, alternative, adjustment unit price item, and unit price item listed therein, or the words “No Bid”, “No Change”, or “Not Applicable” entered. No changes shall be made to the phraseology of the form or in the items mentioned therein. In case of any discrepancy between the written amount and the numerical figures, the written amount shall govern. Any bid which contains any omissions, erasures, alterations, additions, irregularities of any kind, or items not called for which shall in any manner fail to conform

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

to the conditions of public notice inviting bids may be rejected.

A bid submitted by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature). The official address of the partnership shall be shown below the signature.

A bid submitted by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown below the signature.

A bid submitted by an individual shall show the respondent's name and official address.

A bid submitted by a joint venture shall be executed by each joint venture in the manner indicated on the bid form. The official address of the joint venture must be shown below the signature.

It is preferred that all signatures be in blue ink with the names type or printed below the signature. Santa Rosa County does not accept electronic signatures in bid submissions.

The bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the form. The address and telephone # for communications regarding the bid shall be shown.

If the respondent is an out-of-state corporation, the bid shall contain evidence of respondent's authority and qualification to do business as an out-of-state corporation in the State of Florida. A state contractor license # for the State of Florida shall also be included on the bid form. Respondent shall be licensed in accordance with the requirements of Chapter 489, Florida Statutes.

The Bid shall be based upon the completion of the Work according to the drawings and specifications, together with all addenda thereto.

Bids must include lump sum pricing. Use Bid Form provided in this document. All proposed fees and costs must be broken down and disclosed in the bid.

SUBMITTAL OF BID

A bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be sealed and clearly labeled with the words "**ITB # 20-008 TIBET DRIVE DRAINAGE IMPROVEMENTS**", name of bidder and date and time of opening so as to guard against premature opening of any bid and shall be accompanied by the bid security and other required documents. It is the respondent's responsibility to assure that its bid is delivered at the proper time and place. Offers by email, facsimile, or telephone will NOT be accepted.

Each contractor's submittal shall include all the items listed on the Bidders Submission Checklist, in order, with the Checklist on the top of the submission.

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

INTEGRITY OF BID DOCUMENTS

Respondents shall use the original Bid documents provided by the Santa Rosa County Procurement Office and enter information only in the spaces where a response is requested. Respondents may use an attachment to the Bid documents if sufficient space is not available. Any modifications or alterations to the original bid documents by the respondent, whether intentional or otherwise, will constitute grounds for rejection of a bid. Any such modification or alteration that a respondent wishes to propose must be clearly stated in the respondent's response in the form of an addendum to the original bid documents.

WITHDRAWAL OF SUBMITTALS

Any Respondent may withdraw its Submittal, either personally or by written request, at any time prior to the scheduled time for opening Submittals.

INTERPRETATION

No oral interpretation will be made to any Bidder as to the meaning of the drawings or specifications. Every interpretation made to a Bidder will be in the form of an Addendum to the specifications. Addenda will be furnished to each Bidder, but it shall be the Bidder's responsibility to make inquiry as to Addenda issued. All such addenda shall become part of the contract and all Bidders shall be bound by such Addenda whether or not received by the Bidders.

BIDS TO REMAIN SUBJECT TO ACCEPTANCE

All bids will remain subject to acceptance or rejection by Santa Rosa County for sixty (60) calendar days after the day of the bid opening. The County may, in its sole discretion, release any bid and return the bid security prior to the end of this period.

CONDITIONAL & INCOMPLETE BIDS

Santa Rosa County specifically reserves the right to reject any conditional bid.

ADDITION/DELETION OF ITEM

The County reserves the right to add or delete any item from this bid or resulting contract when deemed to be in the County's best interest.

SPECIFICATION EXCEPTIONS

Specifications are based on the most current literature available. Respondent shall clearly list any change in the manufacturer's specifications which conflict with the bid specifications. Respondent must also explain any deviation from the bid specification in writing, as a foot note on the applicable bid page and enclose a copy of the manufacturer's specifications data detailing the changed item(s) with their bid. Failure of the respondent to comply with these

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

provisions will result in respondents being held responsible for all costs required to bring the equipment in compliance with bid specifications.

FAMILIARITY WITH LAWS

All applicable Federal and State laws, County and municipal ordinances, orders, rules and regulations of all authorities having jurisdiction over the project shall apply to the bid throughout, and they will be deemed to be included in the contract the same as though they were written in full therein.

EXAMINATION OF DOCUMENTS AND SITE

Before submitting their proposal, the Bidder shall familiarize themselves with the nature and extent of the work and any local conditions that may in any manner affect the work to be done and the equipment, materials, and labor required. Bidder shall also examine all drawings, specifications, addenda and other Contract Documents to be thoroughly informed regarding any and all conditions and requirements that may in any manner affect the work to be performed under the contract.

RIGHT TO REJECT PROPOSAL

The Owner reserves the right to waive informalities in bids to reject any or all bids with or without cause and accept the bid that in its judgment is in the best interest of the County.

DISQUALIFICATION OF RESPONDENTS

Any of the following reasons may be considered as sufficient for the disqualification of a respondent and the rejection of its bid:

Submission of more than one proposal for the same work from an individual, firm or corporation under the same or different name. Evidence that the respondent has a financial interest in the firm of another respondent for the same work.

Evidence of collusion among respondents. Participants in such collusion will receive no recognition as respondents for any future work of the County until such participant has been reinstated as a qualified respondent.

Uncompleted work which in the judgment of the County might hinder or prevent the prompt completion of additional work if awarded.

Failure to pay or satisfactorily settle all bills due for labor and material on former contracts in force at the time of advertisement of proposals. Default under previous contract.

Listing of the respondent by any Local, State or Federal Government on its barred/suspended vendor list.

DISCRIMINATION

An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work,

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

may not submit bids on leases of real property to a public entity, may not award or perform work as a contractor, supplier, subcontractor, or consultant under contract with any public entity, and may not transact business with any public entity.

REVIEW OF PROCUREMENT DOCUMENTS

Per Florida Statute 119.071 (1) 2, sealed bids, proposals, or replies received by the County pursuant to a competitive solicitation are exempt from public disclosure until such time as the County provides notice of an intended decision or until 30 days after opening the bids, proposals, or final replies, whichever is earlier.

COMPLIANCE WITH FLORIDA STATUTE 119.0701

The Respondent shall comply with all the provisions of section 119.0701, Florida Statutes relating to the public records which requires, among other things, that the Respondent: (a) Keep and maintain public records; (b) Provide the public with access to public records on the same terms and conditions that the public agency would provide the records; (c) ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law; and (d) Meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the respondent upon termination of the contract.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (850) 983-1925, wandap@santarosa.fl.gov; 6495 CAROLINE STREET, SUITE C, MILTON, FLORIDA 32570.

SUSPENSION OR TERMINATION FOR CONVENIENCE

The County may, at any time, without cause, order Respondent in writing to suspend, delay or interrupt the work in whole or in part for such period of time as the County may determine, or to terminate all or a portion of the Contract for the County's convenience. Upon such termination, the Contract Price earned to the date of termination shall be paid to Respondent, but Respondent waives any claim for damages, including loss of profits arising out of or related to the early termination. Those Contract provisions which by their nature survive final acceptance shall remain in full force and effect. If the County orders a suspension, the Contract price and Contract time may be adjusted for increases in the cost and time caused by suspension, delay or interruption. No adjustment shall be made to the extent that performance is, was or would have been so suspended, delayed or interrupted by reason for which Respondent is responsible; or that an equitable adjustment is made or denied under another provision of this Contract.

FAILURE OF PERFORMANCE/DELIVERY

In case of default by the respondent, the County after due notice (oral or written) may procure

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

the necessary supplies or services from other sources and hold the respondent responsible for difference in cost incurred. Continuous instances of default shall result in cancellation of the award and removal of the respondent from the bid list for duration of one (1) year, at the option of the County.

AUDIT

If requested, respondent shall permit the County or an authorized, independent audit agency to inspect all data and records of respondent relating to its performance and its subcontracts under this bid from the date of the award through three (3) years after the expiration of contract.

NON-COLLUSION

Respondent certifies that it has entered into no agreement to commit a fraudulent, deceitful, unlawful or wrongful act, or any act which may result in an unfair advantage over other respondents. See Florida Statute 838.22.

PUBLIC ENTITY CRIME INFORMATION

Pursuant to Florida Statute 287.133, a respondent 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 s. 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.

Note: For respondent's convenience, this certification form is enclosed and is made a part of the bid package.

INVESTIGATION OF RESPONDENT

The County may make such investigations, as it deems necessary to determine the stability of the respondent to perform the work and that there is no conflict of interest as it relates to the project. The respondent shall furnish to the Owner any additional information and financial data for this purpose as the County may request.

CONE OF SILENCE CLAUSE

The Santa Rosa County Board of County Commissioners has established a solicitation silence policy (Cone of Silence Clause) that prohibits oral and written communication regarding all formal solicitations for goods and services (formal bids, Request for Proposals, Requests for Qualifications) issued by the Board through the Procurement Office. The period commences from the date of advertisement until award of contract. All communications shall be directed to the Procurement Office.

Note: For respondent's convenience, this certification form is enclosed and is made a part of the bid package.

STD ITB – BID INSTRUCTIONS, SUBMITTAL REQUIREMENTS AND GENERAL BID CONDITIONS

EVALUATION OF BIDS AND AWARD OF CONTRACT

Santa Rosa County Staff will review all bids and will provide the recommendation to award to the Procurement Office, the County Administrator and the Board of County Commissioners. The County will award the bid to the responsive and responsible vendor(s) with the lowest responsive bid(s). The County reserves the right to award the bid to the respondent submitting a responsive bid with a resulting negotiated agreement which is most advantageous and in the best interest of the County, and to reject any and all bids or to waive any irregularity or technicality in bids received. Santa Rosa County shall be the sole judge of the bid and the resulting negotiated agreement that is in its best interest and its decision shall be final.

Santa Rosa County reserves its right to reject any or all Bids, including without limitation nonconforming, nonresponsive, unbalanced or conditional Bids. The County further reserves the right to reject the Bid of any Bidder whom it finds after reasonable inquiry and evaluation to not be responsible. In evaluating Bidders, the County may consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted with the Bid Form.

Santa Rosa County reserves the right to waive any informalities or reject any and all bids, in whole or part, to utilize any applicable state contracts in lieu of or in addition to this bid and to accept the bid that in its judgment will best serve the interest of the County.

Santa Rosa County reserves the right to reject any conditional bids and will normally reject those which made it impossible to determine the true amount of the bid. Each item must be bid separately, and no attempt is to be made to tie any item or items to any other item or items.

FORM OF AGREEMENT:

The Contract form shall be provided by the County Attorney. The successful contractor shall, within 10 days after receipt of the Notice of Award and the contract forms or documents, sign and deliver to the County Legal Office all required contract documents. The awarded contractor shall also deliver the policies of insurance or insurance certificate as required. All insurance documents shall be approved by Santa Rosa County Legal Office before the successful contractor may proceed with the work.

SECTION III.
SANTA ROSA COUNTY DOCUMENTS AND FORMS

This Page Intentionally Left Blank



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

BID SUBMISSION CHECKLIST

SRC Form Toc 026_01_091619

Project Name: **ITB 20-008 Tibet Drive Drainage Improvements**

Date of Bid Opening: 1/30/2020 Time: 10:00 a.m.

- _____ Sealed Bid Package with Bid Name and Number, Firm name and Address with Contact information clearly marked on the outside of envelope/box.
- _____ 1 Original Bid Package and 3 Copies with 1 Electronic Copy in .pdf on a CD or USB Drive
- _____ Bid Submittal Checklist attached to top of Original Bid Package
- _____ Bid Form with Schedule of Values
- _____ Certified Check/Bid Bond
- _____ Addendum(s) if applicable
- _____ Cone of Silence
- _____ Sworn Statement Public Entity Crimes
- _____ Debarment Form
- _____ References Form
- _____ Contractors valid State of Florida Business License and Santa Rosa County Business Tax receipt.
- _____ Contractors/Business Insurance Document or letter of insurability from carrier with Santa Rosa County listed as interest.
 - Commercial General Liability 1,000,000
 - Business Auto Liability 500,000 combined single limit
 - Workman’s Compensation

All required documentation submitted must be updated with most current and complete information from date of bid opening) including notarizations where required. Failure to submit all required forms may result in your submittal being deemed non-responsive. **ATTACH THIS PAGE TO THE TOP OF YOUR BID SUBMISSION**

Firm: _____

By: _____
(Print)

Signature: _____

Title: _____



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

BID FORM

SRC Procurement Form Memo 025_01_091619

(May be copied by the Bidder on his own letterhead)

TO: Santa Rosa County Procurement Department
Attention Procurement Officer
6495 Caroline Street, Suite L
Milton, Florida 32570

REFERENCE: **ITB 20-008 TIBET DRIVE DRAINAGE IMPROVEMENTS**

To whom it may concern,

I, _____ have received and reviewed the Bidding Documents consisting of Drawings and Specifications (Project Manual) entitled **ITB 20-008 Tibet Drive Drainage Improvements**, prepared by Santa Rosa County Engineering, 6051 Old Bagdad Highway, Suite 300, Milton, Florida 32570.

I have also received Addenda Numbers _____ and have included their provisions in my Bid.

In submitting the Bid, I agree:

1. To hold my bid in full force and effect for a period of sixty (60) calendar days after the time of the opening of this Bid.
2. To accept the provisions of the Instructions to Bidders regarding disposition of Bid Guarantee.
3. To enter into and execute a Contract within 10 (ten) calendar days after said Contract is delivered to me, if awarded on the basis of this Bid.
4. To accomplish the work in accordance with the Contract Documents.
5. To commence work under this Contract on or before a date to be specified in written "Notice of Proceed" by the County Attorney and to complete project within one hundred twenty (120) calendar days thereafter.
6. To pay as liquidated damages, the sum of \$1000.00 for each consecutive calendar day after completion date, as called for in the Contract Agreement as modified.
7. Provide Santa Rosa County with performance Bonds and adhere to Supplementary Conditions.



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

I will construct this project for the lump sum price of:

TOTAL BID: _____ \$ _____.

REFERENCE: TIBET DRIVE DRAINAGE IMPROVEMENTS

Pay Item	Description	Quantity	Unit	Unit Price	Total Amount
1	MAINTENANCE OF TRAFFIC	1	LS		
2	MOBILIZATION	1	LS		
3	EROSION CONTROL AND BMP'S (Construction entrance, tree protection, silt fence, hay bales, etc.)	1	LS		
4	CLEARING & GRUBBING	1	LS		
5	REMOVE EXISTING PIPE	220	LF		
6	REMOVE EXISTING RIP-RAP HEADWALL	1	EA		
7	REMOVE EXISTING STORM INLET	1	EA		
8	GROUT FILL & CAP 42" PIPE	9	CY		
9	SAWCUT & REMOVE EXISTING CONCRETE CART PATH	15	SY		
10	REMOVE EXISTING LANDSCAPE	1	LS		
11	1" MILL	50	SY		
12	6" AGGREGATE BASE COURSE	160	SY		
13	1" FC 9.5 SP	160	SY		
14	1.5" SP 12.5 ASPHALT	25	SY		
15	4" CONCRETE CART PATH	15	SY		
16	60" x 38" ERCP	48	LF		
17	48" HP STORM	197	LF		
18	FDOT CONCRETE HEADWALL	1	EA		
19	FDOT TYPE D INLET W/DBL SLOTS & J BOTTOM	1	EA		
20	6' DIA CONCRETE MANHOLE	1	EA		
21	CONCRETE ENDWALL WITH 45° WINGS	1	EA		
22	CLEAN FILL & FINISH GRADE	20	CY		
23	RIP-RAP W/ FILTER FABRIC	7	TN		
24	NEW LANDSCAPING	1	LS		
25	TOPSOIL (4" THICK)	350	SY		
26	ST. AUGUSTINE SOD	350	SY		
27	TIFWAY 419 BERMUDA SOD	50	SY		
28	RE-ESTABLISH LAYDOWN AREA (RE-GRADE/SEED/MULCH/SOD)	5555	SY		
29	RE-GRADE & SOD HAUL ROUTE (TIFWAY BERMUDA SOD)	6225	SY		
30	CLEAN OUT POND / REMOVE SILT	110	CY		
31	AS-BUILT SURVEY	1	LS		



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

This is a lump sum project. The purpose for providing a bid tabulation format is to provide unit prices in case of change order. There is no implied statement by the engineer or Santa Rosa County as to the accuracy of the stated quantities within the bid tab or that the bid tab is all inclusive of the work items within the plans. It is the contractor's responsibility to carefully review the plans, specifications, and project to determine what is needed to do the whole job, and to reflect this in his LUMP SUM BID. This basis of award will be the total base bid for the project.

FIRM: _____

BY (print): _____

SIGNATURE: _____

TITLE: _____

DATE: _____

MAILING ADDRESS _____

PHONE (____) _____ FAX (____) _____

EMAIL _____



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

CONE OF SILENCE FORM

SRC Procurement Form COS 013_01_091619

The Board of County Commissioners have established a solicitation silence policy (Cone of Silence) that prohibits oral and written communication regarding all formal solicitations for goods and services (ITB, RFP, ITQ, ITN, and RFQ) or other competitive solicitation between the bidder (or its agents or representatives) or other entity with the potential for a financial interest in the award (or their respective agents or representatives) regarding such competitive solicitation, and any County Commissioner or County employee, selection committee member or other persons authorized to act on behalf of the Board including the County's Architect, Engineer or their sub-consultants, or anyone designated to provide a recommendation to award a particular contract, other than the Procurement Department Staff.

The period commences from the time of advertisement until contract award.

Any information thought to affect the committee or staff recommendation submitted after bids are due, should be directed to the Procurement Officer or an appointed representative. It shall be the Procurement Officers decision whether to consider this information in the decision process.

Any violation of this policy shall be grounds to disqualify the respondent from consideration during the selection process.

All respondents must agree to comply with this policy by signing the following statement and including it with their submittal.

I, _____ representing _____

(Print)

(Company)

On this _____ day of _____ 2020 hereby agree to abide by the County's "Cone of Silence" clause and understand violation of this policy shall result in disqualification of my proposal/submittal.

(Signature)



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

SWORN STATEMENT UNDER SETION 287.133 (3) (A) FLORIDA STATUTE ON PUBLIC ENTITY CRIMES

SRC Procurement Form SSPEC 016 01 091619

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

1. This sworn statement is submitted with Bid, Proposal or Contract for: _____

2. This sworn statement is submitted by, _____, whose business address is, _____, and (if applicable) Federal Employer Identification Number (FEIN) is _____ (if the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement).
3. My name is _____ and my relationship to the entity named above is _____ (title).
4. I understand that a "public entity crime" as defined in paragraph 287.133 (1) (g) Florida Statute, 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 any agency or public subdivision of any other state or of the United States and involved antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy or material misrepresentation.
5. I understand that "convicted" or "convicted" as defined in paragraph 287.133 (1) (b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime with or without an adjudication of guilt, in any federal or state trial court of records 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.
6. I understand that an "affiliate" as defined in Paragraph 287 .133 (1) (a), Florida Statutes, means:
 - a. A predecessor or successor of a person convicted of a public entity crime; or
 - b. An entity under the control of any natural person who is active in the management of the entity and who 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 of shares constituting a controlling income among persons when not for fair interest in another person, or a pooling of equipment or income among persons when not for fair market value under an length agreement, shall be a prima facie case that one person controls another person. A person who knowingly convicted of a public entity crime, in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a "person" as defined in paragraph 287 .133 (1) (e), Florida Statutes, means any natural person or entity organized under the laws of the state or of the United States with the legal power to enter into a binding contract 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.



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

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

- Neither the entity submitting this sworn statement, nor any officers, directors, executive, partners, shareholders, employees, member, or agents who are active in management of the entity, nor affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989 And (please attach a copy of the final order)
- The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order)
- The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by, or pending with, the department of General Services)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM

Name

Signature

Date

PERSONALLY APPEARED BEFORE ME, the undersigned authority, who, after first being sworn by me, affixed his/her signature at the space provided above on this day of _____, 20____, and is personally known to me, or has provided _____ as identification.

STATE OF FLORIDA
COUNTY OF: _____
My Commission expires: _____

Notary Public



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

DEBARMENT FORM

SRC Procurement Form Debar 022_00_082719

Certification Regarding Debarment, Suspension, And Other Responsibility Matters

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name: _____ Title: _____

Signature: _____

Firm: _____

Street Address: _____

City: _____

State: _____ Zip Code: _____

Solicitation Name: **ITB# 20-008 Tibet Drive Department Drainage Improvements**



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

REFERNCES FORM

SRC Procurement Form Memo 024_00_082719

List work which best illustrates current qualifications relevant to this solicitation accomplished by personnel that will be assigned to the County's project. List at least three but no more than five (5) projects. (This form may be reproduced.)

YOUR FIRMS NAME _____
PROPOSAL POINT OF CONTACT _____ PHONE _____
EMAIL _____

REFERENCE I.

PROJECT NAME: _____

AGENCY: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CONTACT PERSON: _____

TITLE: _____

EMAIL: _____

TELEPHONE: _____

PROJECT COST: _____

COMPLETION DATE: _____

SCOPE of Project (list tasks, attach samples of deliverables, outlines or descriptions of items:
(You may attach information to this form)

List key personnel assigned to this project that will work on the County project (include assignments. You may attach information to this form):



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

REFERENCE II.

PROJECT NAME: _____

AGENCY: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CONTACT PERSON: _____

TITLE: _____

EMAIL: _____

TELEPHONE: _____

PROJECT COST: _____

COMPLETION DATE: _____

SCOPE of Project (list tasks, attach samples of deliverables, outlines or descriptions of items:
(You may attach information to this form)

List key personnel assigned to this project that will work on the County project (include assignments. You may attach information to this form):

REFERENCE III.

PROJECT NAME: _____

AGENCY: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CONTACT PERSON: _____

TITLE: _____

EMAIL: _____

TELEPHONE: _____

PROJECT COST: _____

COMPLETION DATE: _____

SCOPE of Project (list tasks, attach samples of deliverables, outlines or descriptions of items:
(You may attach information to this form)

List key personnel assigned to this project that will work on the County project (include assignments. You may attach information to this form):



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

REFERENCE IV.

PROJECT NAME: _____

AGENCY: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CONTACT PERSON: _____

TITLE: _____

EMAIL: _____

TELEPHONE: _____

PROJECT COST: _____

COMPLETION DATE: _____

SCOPE of Project (list tasks, attach samples of deliverables, outlines or descriptions of items:
(You may attach information to this form)

List key personnel assigned to this project that will work on the County project (include assignments. You may attach information to this form):

REFERENCE V.

PROJECT NAME: _____

AGENCY: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CONTACT PERSON: _____

TITLE: _____

EMAIL: _____

TELEPHONE: _____

PROJECT COST: _____

COMPLETION DATE: _____

SCOPE of Project (list tasks, attach samples of deliverables, outlines or descriptions of items:
(You may attach information to this form)

List key personnel assigned to this project that will work on the County project (include assignments. You may attach information to this form):



SANTA ROSA COUNTY PROCUREMENT DEPARTMENT

6495 Caroline Street, Suite L | Milton, Florida 32570 850-983-1870 procurement@santarosa.fl.gov

CONFLICT OF INTEREST DISCLOSURE FORM

SRC Procurement Form COS 027_00_091319

For purposes of determining any possible conflict of interest, all respondents, must disclose if any Santa Rosa Board of County Commissioner, employee(s), elected officials(s), or if any of its agencies is also an owner, corporate officer, agency, employee, etc., of their business.

Indicate either "yes" (a county employee, elected official, or agency is also associated with your business), or "no". If yes, give person(s) name(s) and position(s) with your business.

Yes: _____ No: _____

Name(s)

Position(s)

All respondents must agree to comply with this policy by signing the following statement and including it with their submittal.

FIRM NAME: _____

BY (PRINTED): _____

BY (SIGNATURE): _____

TITLE: _____

ADDRESS: _____ State _____ Zip Code _____

PHONE NO: _____

E-MAIL: _____

Date: _____

SANTA ROSA COUNTY
BOARD OF COUNTY COMMISSIONERS
INSURANCE REQUIREMENTS
SRC Procurement Form INS Std _ 017_00_082119

INSURANCE REQUIREMENTS

1) THE SUBMITTER RECEIVING AN AWARD WILL OBTAIN OR POSSESS THE FOLLOWING INSURANCE COVERAGE'S AND WILL PROVIDE CERTIFICATES OF INSURANCE TO THE OWNER TO VERIFY SUCH COVERAGE:

A. WORKERS' COMPENSATION – MEET STATUTORY LIMITS IN COMPLIANCE WITH THE WORKERS COMPENSATION LAWS OF FLORIDA. THIS POLICY MUST INCLUDE EMPLOYER LIABILITY WITH A LIMIT OF \$100,000 FOR EACH ACCIDENT, \$500,000 DISEASE POLICY LIMIT AND \$100,000 DISEASE EACH EMPLOYEE LIMIT.

CONTRACTOR WILL PROVIDE A COPY OF THEIR EXEMPTION CERTIFICATE AND ARTICLES OF INCORPORATION IF CLAIMING EXCEPTION TO WORKERS COMPENSATION REQUIREMENT. THE DIVISION OF WORKERS' COMPENSATION OFFERS AN ONLINE SYSTEM FOR APPLICANTS TO APPLY FOR OR RENEW A CERTIFICATE OF ELECTION TO BE EXEMPT FROM FLORIDA'S WORKERS' COMPENSATION LAW, MODIFY AN EXEMPTION APPLICATION, OR PRINT THEIR CERTIFICATE. THE WEBSITE IS; WC_EXEMPTION@MYFLORIDACFO.COM.

B. COMMERCIAL GENERAL LIABILITY – COVERAGE SHALL PROVIDE MINIMUM LIMITS OF LIABILITY OF \$1,000,000 PER OCCURRENCE, \$2,000,000 AGGREGATE, FOR BODILY INJURY AND PROPERTY DAMAGE. THIS SHALL INCLUDE COVERAGE FOR:

- i. PREMISES/OPERATIONS
- ii. PRODUCTS/COMPLETE OPERATIONS
- iii. CONTRACTUAL LIABILITY
- iv. INDEPENDENT CONTRACTORS

C. BUSINESS AUTO LIABILITY – COVERAGE SHALL PROVIDE MINIMUM LIMITS \$500,000. COMBINED SINGLE LIMIT FOR BODILY INJURY AND PROPERTY DAMAGE. IF SPLIT LIMIT COVERAGE IS PROVIDED LIMITS OF 500,000 PER PERSON/500,000 PER ACCIDENT AND 500,000 FOR PROPERTY DAMAGE ARE REQUIRED. THIS SHALL INCLUDE COVERAGE FOR:

- i. OWNED AUTOS

- ii. HIRED AUTOS
- iii. NON-OWNED AUTOS

SPECIAL REQUIREMENTS

2) PRIOR TO EXECUTION OF A CONTRACT OR AGREEMENT, CERTIFICATES OF INSURANCE WILL BE PRODUCED THAT SHALL PROVIDE FOR THE FOLLOWING:

A. SANTA ROSA COUNTY SHALL BE NAMED AS AN ADDITIONAL INSURED ON THE COMMERCIAL GENERAL LIABILITY POLICY, INCLUDING PRODUCTS/COMPLETED OPERATIONS COVERAGE.

B. SANTA ROSA COUNTY SHALL BE NAMED AS AN ADDITIONAL INSURED ON THE BUSINESS AUTO LIABILITY POLICY.

C. SANTA ROSA COUNTY WILL BE GIVEN THIRTY (30) DAYS' NOTICE PRIOR TO CANCELLATION OR MODIFICATION OF ANY STIPULATED INSURANCE.

3) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL SUBCONTRACTORS COMPLY WITH ALL INSURANCE REQUIREMENTS.

4) IT SHOULD BE NOTED THAT THESE ARE MINIMUM REQUIREMENTS WHICH ARE SUBJECT TO MODIFICATION IN RESPONSE TO SPECIALIZED OR HIGH HAZARD OPERATIONS. IN THE EVENT OF UNUSUAL CIRCUMSTANCES, THE COUNTY ADMINISTRATOR OR HIS DESIGNEE, MAY ADJUST THESE INSURANCE REQUIREMENTS.

5) **A COPY OF THESE COVERAGES ON A CERTIFICATE OF INSURANCE OR A LETTER OF INSURABILITY FROM YOUR CARRIER STATING THAT YOU WILL OBTAIN THE LEVELS OF COVERAGE ABOVE SHALL BE PROVIDED WITH YOUR BID SUBMISSION.**

SANTA ROSA COUNTY
BOARD OF COUNTY COMMISSIONERS
GENERAL PROVISIONS
SRC Procurement Form GP 019_01_090519

ARTICLE 1: GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the Agreement between Owner and Contractor (hereinafter the Agreement), Conditions of the Contract (General, Supplementary and other Conditions), Drawings/maps/sketches, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Engineer. Unless specifically enumerated in the Agreement, the Contract Documents do not include other documents such as bidding requirements (advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or portions of Addenda relating to bidding requirements).

1.1.2 THE CONTRACT

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Engineer and Contractor, (2) between the Owner and a Subcontractor or Sub-Subcontractor, (3) between the Owner and Engineer or (4) between any persons or entities other than the Owner and Contractor. The Engineer shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Engineer's duties.

1.1.3 THE WORK

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

1.1.4 THE PROJECT

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate Contractors.

1.1.5 THE DRAWINGS

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

1.1.6 THE SPECIFICATIONS

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

1.1.7 THE PROJECT MANUAL

The Project Manual is a volume assembled for the Work which may include the bidding

requirements, sample forms, Conditions of the Contract and Specifications.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

1.2.3 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

1.3 CAPITALIZATION

1.3.1 Terms capitalized in these General Conditions include those which are (1) specifically defined, (2) the titles of numbered articles and identified references to Paragraphs, Subparagraphs and Clauses in the document.

1.4 INTERPRETATION

1.4.1 In the interest of brevity the Contract Documents frequently omit modifying words such as “all” and “any” and articles such as “the” and “an”, but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.5 EXECUTION OF CONTRACT DOCUMENTS

1.5.1 The Contract Documents shall be signed by the Owner and Contractor. If either the Owner or Contractor or both do not sign all the Contract Documents, the Engineer shall identify such unsigned Documents upon request.

1.5.2 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

1.6 OWNERSHIP AND USE OF DRAWINGS/MAPS/SKETCHES, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

1.6.1 The Drawings/maps/sketches, Specifications and other documents, including those in electronic form, prepared by the Engineer and the Engineer's consultants are Instruments of Service through which the Work to be executed by the Contractor is described. The Contractor may retain one record set. Neither the Contractor nor any Subcontractor, Sub-Subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications and other documents prepared by the Engineer or the Engineer's consultants, and unless otherwise indicated the Engineer and the Engineer's consultants shall be deemed the authors of them and will retain all common law, statutory and other reserved rights, in addition to the copyrights. All copies of Instruments of Service, except the Contractor's record set, shall be returned or suitably accounted for to the Engineer, on request, upon completion of the Work. The Drawings, Specifications and other documents prepared by the Engineer and the Engineer's consultants, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Sub-Subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the

specific written consent of the Owner, Engineer and the Engineer's consultants. The Contractor, Subcontractors, Sub-Subcontractors and material or equipment suppliers are authorized to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Engineer and the Engineer's consultants appropriate to and for use in the execution of their Work under the Contract Documents. All copies made under this authorization shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Engineer and the Engineer's consultants. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Engineer's or Engineer's consultants' copyrights or other reserved rights.

ARTICLE 2: OWNER

2.1 GENERAL

2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Subparagraph **4.2.1**, the Engineer does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

2.1.2 The Owner shall furnish to the Contractor within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

2.2.1 The Owner shall, at the written request of the Contractor, prior to commencement of the Work and thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Furnishing of such evidence shall be a condition precedent to commencement or continuation of the Work. After such evidence has been furnished, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

2.2.2 Except for permits and fees, including those required under Subparagraph **3.7.1**, which are the responsibility of the Contractor under the Contract Documents, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

2.2.3 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

2.2.4 Information or services required of the Owner by the Contract Documents shall be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Contractor's performance of the Work under the Owner's control shall be furnished by the Owner after receipt from the Contractor of a written request for such information or services.

2.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, such copies of Drawings and Project Manuals as are reasonably necessary for execution of the Work.

2.3 OWNER'S RIGHT TO STOP THE WORK

2.3.1 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Paragraph **12.2** or persistently fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Subparagraph **6.1.3**.

2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

2.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period give the Contractor a second written notice to correct such deficiencies within a three-day period. If the Contractor within such three-day period after receipt of such second notice fails to commence and continue to correct any deficiencies, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Engineer's additional services made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Engineer. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

ARTICLE 3: CONTRACTOR

3.1 GENERAL

3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative.

3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Engineer in the Engineer's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

3.2.1 Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various Drawings and other Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Subparagraph **2.2.3**, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Engineer as a request for information in such form as the Engineer may require.

3.2.2 Any design errors or omissions noted by the Contractor during this review shall be reported promptly to the Engineer, but it is recognized that the Contractor's review is made in the Contractor's capacity as a Contractor and not as a licensed design professional unless

otherwise specifically provided in the Contract Documents. The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but any nonconformity discovered by or made known to the Contractor shall be reported promptly to the Engineer.

3.2.3 If the Contractor believes that additional cost or time is involved because of clarifications or instructions issued by the Engineer in response to the Contractor's notices or requests for information pursuant to Subparagraphs **3.2.1** and **3.2.2**, the Contractor shall make Claims as provided in Subparagraphs **4.3.6** and **4.3.7**. If the Contractor fails to perform the obligations of Subparagraphs **3.2.1** and **3.2.2**, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. The Contractor shall not be liable to the Owner or Engineer for damages resulting from errors, inconsistencies or omissions in the Contract Documents or for differences between field measurements or conditions and the Contract Documents unless the Contractor recognized such error, inconsistency, omission or difference and knowingly failed to report it to the Engineer.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Engineer and shall not proceed with that portion of the Work without further written instructions from the Engineer. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any resulting loss or damage.

3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors.

3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

3.4 LABOR AND MATERIALS

3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

3.4.2 The Contractor may make substitutions only with the consent of the Owner, after evaluation by the Engineer and in accordance with a Change Order.

3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

3.5 WARRANTY

3.5.1 The Contractor warrants to the Owner and Engineer that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.6 TAX

3.6.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

3.7 PERMITS, FEES AND NOTICES

3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received or negotiations concluded.

3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities applicable to performance of the Work.

3.7.3 It is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Engineer and Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

3.7.4 If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Engineer and Owner, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

3.8 ALLOWANCES

3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

3.8.2 Unless otherwise provided in the Contract Documents:

- 1** allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- 2** Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances;
- 3** whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Clause **3.8.2.1** and (2)

changes in Contractor's costs under Clause **3.8.2.2**.

3.8.3 Materials and equipment under an allowance shall be selected by the Owner in sufficient time to avoid delay in the Work.

3.9 SUPERINTENDENT

3.9.1 The Contractor shall employ competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case.

3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for prior approval by Owner and Engineer Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

3.10.2 The Contractor shall prepare and keep current, for the Engineer's approval, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the Engineer reasonable time to review submittals.

3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Engineer.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

3.11.1 The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record field changes and selections made during construction, and one record copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Engineer and shall be delivered to the Engineer for submittal to the Owner upon completion of the Work.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

3.12.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the Engineer is subject to the limitations of Subparagraph **4.2.7**. Informational submittals upon which the Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Engineer without action.

- 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve and submit to the Engineer Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate Contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Engineer without action.
- 3.12.6** By approving and submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- 3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals until the respective submittal has been approved by the Engineer.
- 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Engineer's approval of Shop Drawings, Product Data, Samples, or similar submittals unless the Contractor has specifically informed the Engineer in writing of such deviation at the time of submittal and (1) the Engineer has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by the Engineer's approval thereof.
- 3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Engineer on previous submittals. In the absence of such written notice the Engineer's approval of a resubmission shall not apply to such revisions.
- 3.12.10** The Contractor shall not be required to provide professional services which constitute the practice of Engineering or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Engineer will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design 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 the Engineer. The Owner and the Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided the Owner and Engineer have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Subparagraph **3.12.10**, the Engineer will review, approve or take

other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

3.13 USE OF SITE

3.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

3.14 CUTTING AND PATCHING

3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate Contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate Contractor except with written consent of the Owner and of such separate Contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate Contractor the Contractor's consent to cutting or otherwise altering the Work.

3.15 CLEANING UP

3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials.

3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.

3.16 ACCESS TO WORK

3.16.1 The Contractor shall provide the Owner and Engineer access to the Work in preparation and progress wherever located.

3.17 ROYALTIES, PATENTS AND COPYRIGHTS

3.17.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Engineer harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Engineer. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Engineer.

3.18 INDEMNIFICATION

3.18.1 To the fullest extent permitted by law and to the extent claims, damages, losses or expenses are not covered by Project Management Protective Liability insurance purchased by the Contractor in accordance with Article 11, the Contractor shall indemnify and hold harmless the Owner, Engineer, Engineer's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor,

anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph **3.18**.

3.18.2 In claims against any person or entity indemnified under this Paragraph **3.18** by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Subparagraph **3.18.1** shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

4.1 ENGINEER

4.1.1 The Engineer is the person lawfully licensed to practice Engineerure or an entity lawfully practicing Engineerure identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Engineer" means the Engineer or the Engineer's authorized representative.

4.1.2 Duties, responsibilities and limitations of authority of the Engineer as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner, Contractor and Engineer. Consent shall not be unreasonably withheld.

4.1.3 If the employment of the Engineer is terminated, the Owner shall employ a new Engineer against whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the former Engineer.

4.2 ENGINEER'S ADMINISTRATION OF THE CONTRACT

4.2.1 The Engineer will provide administration of the Contract as described in the Contract Documents, and will be an Owner's representative (1) during construction, (2) until final payment is due and (3) with the Owner's concurrence, from time to time during the one-year period for correction of Work described in Paragraph **12.2**. The Engineer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

4.2.2 The Engineer, as a representative of the Owner, will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if the Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Engineer will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Engineer will neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Subparagraph **3.3.1**.

4.2.3 The Engineer will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Engineer will not have control over or charge of and will not be responsible for acts or omissions of the Contractor,

Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

- 4.2.4** Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Engineer about matters arising out of or relating to the Contract. Communications by and with the Engineer's consultants shall be through the Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate Contractors shall be through the Owner.
- 4.2.5** Based on the Engineer's evaluations of the Contractor's Applications for Payment, the Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.
- 4.2.6** The Engineer will have authority to reject Work that does not conform to the Contract Documents. Whenever the Engineer considers it necessary or advisable, the Engineer will have authority to require inspection or testing of the Work in accordance with Subparagraphs **13.5.2** and **13.5.3**, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Engineer nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Engineer to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.
- 4.2.7** The Engineer will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Engineer's action will be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or separate Contractors, while allowing sufficient time in the Engineer's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Engineer's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Paragraphs **3.3**, **3.5** and **3.12**. The Engineer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Engineer, of any construction means, methods, techniques, sequences or procedures. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- 4.2.8** The Engineer will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Paragraph **7.4**.
- 4.2.9** The Engineer will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion, will receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of the Contract Documents.
- 4.2.10** If the Owner and Engineer agree, the Engineer will provide one or more project representatives to assist in carrying out the Engineer's responsibilities at the site. The duties,

responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

4.2.11 The Engineer will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Engineer's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If no agreement is made concerning the time within which interpretations required of the Engineer shall be furnished in compliance with this Paragraph **4.2**, then delay shall not be recognized on account of failure by the Engineer to furnish such interpretations until **15** days after written request is made for them.

4.2.12 Interpretations and decisions of the Engineer will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and initial decisions, the Engineer will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions so rendered in good faith.

4.2.13 The Engineer's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

4.3 CLAIMS AND DISPUTES

4.3.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. Claims must be initiated by written notice. The responsibility to substantiate claims shall rest with the party making the Claim.

4.3.2 Time Limits on Claims. Claims by either party must be initiated within **21** days after occurrence of the event giving rise to such Claim or within **21** days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be initiated by written notice to the Engineer and the other party.

4.3.3 Continuing Contract Performance. Pending final resolution of a Claim except as otherwise agreed in writing or as provided in Subparagraph **9.7.1** and Article **14**, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

4.3.4 Claims for Concealed or Unknown Conditions. If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before Conditions are disturbed and in no event later than **21** days after first observance of the conditions. The Engineer will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Engineer determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Engineer shall

so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within **21** days after the Engineer has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Engineer for initial determination, subject to further proceedings pursuant to Paragraph **4.4**.

4.3.5 Claims for Additional Cost. If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph **10.6**.

4.3.6 If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Engineer, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Engineer, (4) failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner's suspension or (7) other reasonable grounds, Claim shall be filed in accordance with this Paragraph **4.3**.

4.3.7 CLAIMS FOR ADDITIONAL TIME

4.3.7.1 If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

4.3.7.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

4.3.8 Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding **21** days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

4.3.9 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

4.3.10 Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the

Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Subparagraph 4.3.10 shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

4.4 RESOLUTION OF CLAIMS AND DISPUTES

4.4.1 The Engineer will review Claims and take one or more of the following preliminary actions within ten days of receipt of a Claim: (1) request additional supporting data from the claimant; (2) submit a schedule to the parties indicating when the Engineer expects to take action; (3) reject the Claim in whole or in part stating reasons for rejection; (4) recommend approval of the Claim by the other party; or (5) suggest a compromise. The Engineer may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.

4.4.2 If a Claim has been resolved, the Engineer will prepare or obtain appropriate documentation.

4.4.3 If a Claim has not been resolved, the party making the Claim shall, within ten days after the Engineer's preliminary response take one or more of the following actions: (1) submit additional supporting data requested by the Engineer; (2) modify the initial Claim; or (3) notify the Engineer that the initial Claim stands.

4.4.4 If a Claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Engineer, the Engineer will notify the parties in writing that the Engineer's decision will be made within seven days, which decision shall be final and binding on the parties. Upon expiration of such time period, the Engineer will render to the parties the Engineer's written decision relative to the Claim, including any change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Engineer may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

ARTICLE 5: SUBCONTRACTORS

5.1 DEFINITIONS

5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate Contractor or Subcontractors of a separate Contractor.

5.1.2 A Sub-Subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-Subcontractor or an authorized representative of the Sub-Subcontractor.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Engineer the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Engineer will promptly reply to the Contractor in writing stating

whether or not the Owner or the Engineer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Engineer to reply promptly shall constitute notice of no reasonable objection.

5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Engineer has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

5.2.3 If the Owner or Engineer has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Engineer has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

5.2.4 The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner or Engineer makes reasonable objection to such substitute.

5.3 SUBCONTRACTUAL RELATIONS

5.3.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Engineer. Each subcontract agreement shall preserve and protect the rights of the Owner and Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-Subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-Subcontractors.

5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner provided that:

- 1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Paragraph **14.2** and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- 2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

5.4.2 Upon such assignment, if the Work has been suspended for more than **30** days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

- 6.1.1** The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Paragraph 4.3.
- 6.1.2** When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- 6.1.3** The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate Contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate Contractors and the Owner until subsequently revised.
- 6.1.4** Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11 and 12.

6.2 MUTUAL RESPONSIBILITY

- 6.2.1** The Contractor shall afford the Owner and separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- 6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Engineer apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.
- 6.2.3** The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a separate Contractor because of delays, improperly timed activities or defective construction of the Contractor. The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work, or defective construction of a separate Contractor.
- 6.2.4** The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate

Contractors as provided in Subparagraph **10.2.5**.

6.2.5 The Owner and each separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Subparagraph **3.14**.

6.3 OWNER'S RIGHT TO CLEAN UP

6.3.1 If a dispute arises among the Contractor, separate Contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Engineer will allocate the cost among those responsible.

ARTICLE 7: CHANGES IN THE WORK

7.1 GENERAL

7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor and Engineer; a Construction Change Directive requires agreement by the Owner and Engineer and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Engineer alone.

7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

7.2 CHANGE ORDERS

7.2.1 A Change Order is a written instrument prepared by the Engineer and signed by the Owner, Contractor and Engineer, stating their agreement upon all of the following:

- 1 change in the Work;
- 2 the amount of the adjustment, if any, in the Contract Sum; and
- 3 the extent of the adjustment, if any, in the Contract Time.

7.2.2 Methods used in determining adjustments to the Contract Sum may include those listed in Subparagraph **7.3.3**.

7.3 CONSTRUCTION CHANGE DIRECTIVES

7.3.1 A Construction Change Directive is a written order prepared by the Engineer and signed by the Owner and Engineer, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

7.3.3 If the Construction Change directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- 1 mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- 2 unit prices stated in the Contract Documents or subsequently agreed upon;
- 3 cost to be determined in a manner agreed upon by the parties and a mutually acceptable

fixed or percentage fee; or

4 as provided in Subparagraph 7.3.6.

7.3.4 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Engineer of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

7.3.5 A Construction Change Directive signed by the Contractor indicates the agreement of the Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

7.3.6 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Engineer on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clause 7.3.3.3, the Contractor shall keep and present, in such form as the Engineer may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Subparagraph 7.3.6 shall be limited to the following:

- 1 costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
- 2 costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- 3 rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- 4 costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- 5 additional costs of supervision and field office personnel directly attributable to the change.

7.3.7. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Engineer. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

7.3.8 Pending final determination of the total cost of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs. For any portion of such cost that remains in dispute, the Engineer will make an interim determination for purposes of monthly certification for payment for those costs. That determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a claim in accordance with Article 4.

7.3.9 When the Owner and Contractor agree with the determination made by the Engineer concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach

agreement upon the adjustments, such agreement shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.

7.4 MINOR CHANGES IN THE WORK

7.4.1 The Engineer will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

ARTICLE 8: TIME

8.1 DEFINITIONS

8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

8.1.2 The date of commencement of the Work is the date established in the Agreement. The date shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.

8.1.3 The date of Substantial Completion is the date certified by the Engineer in accordance with Paragraph **9.8**.

8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

8.2 PROGRESS AND COMPLETION

8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the work.

8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article **11** to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by the Contract Documents or a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.

8.2.3 The Contractor shall proceed with the project expeditiously and continuously with adequate forces and shall achieve Substantial Completion within the Contract Time. Contractor shall progress with and maintain continuous construction even if construction is ahead of the approved construction schedule.

If the percentage dollar value of the completed work is 15% or more below the dollar value of work that should have been completed in accordance with the approved construction schedule, further payment under this contract to Contractor shall be suspended until the percentage dollar value of completed work is within 5% of the dollar value of work that should have been completed in accordance with the approved construction schedule.

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Engineer, or of an employee of either, or of a separate Contractor employed by the Owner, or by changes ordered in the Work, or by labor

disputes, fire, unusual delay in deliveries; unavoidable casualties or other causes beyond the Contractor's control, then the Contract Time shall be extended by Change Order for such reasonable time as the Engineer may determine.

8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Paragraph 4.3.

ARTICLE 9: PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Engineer a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Engineer may require. This schedule, unless objected to by the Engineer, shall be used as a basis for reviewing the Contractor's Applications for Payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Engineer an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner or Engineer may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for in the Contract Documents.

9.3.1.1 As provided in Subparagraph 7.3.8, such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives, or by interim determination of the Engineer, but not yet included in Change Orders.

9.3.1.2 Such applications may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided

labor, materials and equipment relating to the Work.

9.4 CERTIFICATES FOR PAYMENT

9.4.1 The Engineer will, within seven days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Engineer determines is properly due, or notify the Contractor and Owner in writing of the Engineer's reasons for withholding certification in whole or in part as provided in Subparagraph **9.5.1**.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Engineer to the Owner, based on the Engineer's evaluation of the Work and the data comprising the Application for Payment, that the Work has progressed to the point indicated and that, to the best of the Engineer's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Engineer. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Engineer has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

9.5.1 The Engineer may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Engineer's opinion the representations to the Owner required by Subparagraph **9.4.2** cannot be made. If the Engineer is unable to certify payment in the amount of the Application, the Engineer will notify the Contractor and Owner as provided in Subparagraph **9.4.1**. If the Contractor and Engineer cannot agree on a revised amount, the Engineer will promptly issue a Certificate for Payment for the amount for which the Engineer is able to make such representations to the Owner. The Engineer may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Engineer's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Subparagraph **3.3.2**, because of:

- 1** defective Work not remedied;
- 2** third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- 3** failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- 4** reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- 5** damage to the Owner or another Contractor;
- 6** reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages

for the anticipated delay; or

7 persistent failure to carry out the Work in accordance with the Contract Documents.

9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

9.6 PROGRESS PAYMENTS

9.6.1 After the Engineer has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Engineer.

9.6.2 The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-Subcontractors in a similar manner.

9.6.3 The Engineer will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Engineer and Owner on account of portions of the Work done by such Subcontractor.

9.6.4 Neither the Owner nor Engineer shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

9.6.5 Payment to material suppliers shall be treated in a manner similar to that provided in Subparagraphs 9.6.2, 9.6.3 and 9.6.4.

9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

9.7 FAILURE OF PAYMENT

9.7.1 If the Engineer does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Engineer or awarded by arbitration, then the Contractor may, upon seven additional days' written notice to the Owner and Engineer, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

9.8 SUBSTANTIAL COMPLETION

- 9.8.1** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.
- 9.8.2** When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Engineer a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- 9.8.3** Upon receipt of the Contractor's list, the Engineer will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Engineer's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Engineer. In such case, the Contractor shall then submit a request for another inspection by the Engineer to determine Substantial Completion.
- 9.8.4** When the Work or designated portion thereof is substantially complete, the Engineer will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate, Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.
- 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

9.9 PARTIAL OCCUPANCY OR USE

- 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Article 11 and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Engineer as provided under Subparagraph **9.8.2**. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Engineer.
- 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Contractor and Engineer

shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

9.10 FINAL COMPLETION AND FINAL PAYMENT

9.10.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Engineer will promptly make such inspection and, when the Engineer finds the Work acceptable under the Contract Documents and the Contract fully performed, the Engineer will promptly issue a final Certificate for Payment stating that to the best of the Engineer's knowledge, information and belief, and on the basis of the Engineer's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Engineer's final Certificate for Payment will constitute a further representation that conditions listed in Subparagraph **9.10.2** as precedent to the Contractor's being entitled to final payment have been fulfilled.

9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Engineer (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Engineer so confirms, the Owner shall, upon application by the Contractor and certification by the Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Engineer prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except

those arising from:

- 1 liens, claims, security interests or encumbrances arising out of the Contract and unsettled;
- 2 failure of the Work to comply with the requirements of the Contract Documents; or
- 3 terms of special warranties required by the Contract Documents.

9.10.5 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:

- 1 employees on the Work and other persons who may be affected thereby;
- 2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-Subcontractors; and
- 3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Clauses 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Engineer or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Paragraph 3.18.

10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the

Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Engineer.

10.2.7 The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

10.3 EMERGENCIES

10.3.1 In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Paragraph **4.3** and Article **7**.

ARTICLE 11: INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

- 1** claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- 2** claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- 3** claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- 4** claims for damages insured by usual personal injury liability coverage;
- 5** claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- 6** claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- 7** claims for bodily injury or property damage arising out of completed operations; and
- 8** claims involving contractual liability insurance applicable to the Contractor's obligations under Paragraph **3.18**.

11.1.2 The insurance required by Subparagraph **11.1.1** shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.

11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These certificates and the insurance policies required by this Paragraph **11.1** shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least **30** days prior written notice has been given to the Owner. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Subparagraph **9.10.2**. Information concerning reduction of coverage on account

of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.

11.2 INDEMNIFICATION AND INSURANCE

11.2.1. Contractor agrees to save harmless, indemnify, and defend Owner and its, agents, officers and employees from any and all claims, losses, penalties, interest, demands, judgments, and costs of suit, including attorneys fees and paralegals' fees, for any expense, damage or liability incurred by any of them, whether for personal injury, death, property damage, direct or consequential damages, or economic loss, including environmental impairment, arising directly or indirectly on account of or in connection with the work done by Contractor under this agreement or by any person, firm or corporation (including but not limited to the Engineer/engineer) to whom any portion of the work is subcontracted by Contractor or resulting from the use by Contractor, or by any one for whom Contractor is legally liable, of any materials, tools, machinery or other property of Owner. Owner and Contractor agree the first \$100.00 of the contract amount paid by Owner to Contractor shall be given as separate consideration for this indemnification, and any other indemnification of Owner by Contractor provided for within the Contract Documents, the sufficiency of such separate consideration being acknowledged by Contractor by Contractor's acceptance and execution of the agreement. The Contractor's obligation shall not be limited by, or in any way to, any insurance coverage or by any provision in or exclusion or omission from any policy of insurance. The Contractor agrees to pay on behalf of Santa Rosa County, as well as provide a legal defense for the Owner, both of which will be done only if and when requested by the Owner, for all claims made. Such payment on the behalf of the Owner shall be in addition to any and all other legal remedies available to the Owner and shall not be considered to be the Owner's exclusive remedy.

11.2.2. Contractor shall obtain and carry, at all times during its performance under the Contract Documents, insurance of the types and in the amounts set forth in Article 11. All insurance policies shall be from responsible companies duly authorized to do business in the State of Florida and/or responsible risk retention group insurance companies or trusts which are registered with the State of Florida. Foreign or offshore insurance carriers are not acceptable for work under this contract unless admitted to the State of Florida. All commercial insurance carriers providing the Contractor with required insurance shall be "A" (excellent) rated with a minimum financial size category of "IX", according to the A. M. Best Key Rating Guide, latest edition. Within ten (10) calendar days after notice of award is received by Contractor and prior to the commencement of work, Contractor shall provide Owner with properly executed certificates of insurance to evidence Contractor's compliance with the insurance requirements of the Contract Documents. Said certificates of insurance shall be on forms approved by Owner, such as "Acord Form 25". The certificates of insurance shall be personally, manually signed by the authorized representatives of the insurance company/companies shown on the certificates of insurance, with proof that they are authorized representatives thereof. Certificates of insurance shall be mailed to Santa Rosa County Board of County Commissioners in care of: Daniel J. Schebler, County Administrator, 6495 Caroline Street, Suite D, Milton, Florida 32570. In addition, true and exact copies of all insurance policies required hereunder shall be provided to Owner, on a timely basis, when requested by Owner.

11.2.3. The certificates of insurance and required insurance policies shall contain provisions that thirty (30) days prior written notice by registered or certified mail shall be given Owner of any cancellation, intent not to renew, or reduction in the policies or coverages, except in the application of the aggregate limits provisions. In the event of a reduction in the

aggregate limit of any policy, Contractor shall immediately take steps to have the aggregate limit reinstated to the full extent permitted under such policy.

- 11.2.4.** All insurance coverages of the Contractor shall be primary to any insurance or self insurance program carried by the Owner applicable to this project. The acceptance by Owner of any certificate of insurance does not constitute approval or agreement by the Owner that the insurance requirements have been satisfied or that the insurance policy shown on the certificate of insurance is in compliance with the requirements of the Contract Documents. No work shall commence at the project site unless and until the required certificates of insurance are received by the Owner
- 11.2.5.** Contractor shall require each of its Subcontractors to procure and maintain, until the completion of the Subcontractor's work, insurance of the types and to the limits specified in Article 11, unless such insurance requirements for the Subcontractor is expressly waived in writing by the Owner. All liability insurance policies, other than professional liability, worker's compensation and employer's liability policies, obtained by Contractor to meet the requirements of the Contract Documents shall name the Santa Rosa County Board of County Commissioners as an additional insured and shall contain severability of interest provisions. The Board of County Commissioners shall also be designated as certificate holder with the address of 6495 Caroline Street, Suite M, Milton, Florida 32570. If any insurance provided pursuant to the Contract Documents expires prior to the completion of the work, renewal certificates of insurance and, if requested by Owner, certified, true copies of the renewal policies, shall be furnished by Contractor within thirty (30) days prior to the date of expiration. Upon expiration of an insurance policy term during the course of work under the contract, succeeding insurance policies shall be consecutive to the expiring policy.
- 11.2.6** All liability policies shall be underwritten on the "occurrence" basis, unless otherwise approved in writing by the county division of risk management. "Claims made" policies, if approved by the risk manager, and subsequent insurance certificates shall provide a "retro-date" which shall include the effective date of the contract. "Claims-made" renewals or carrier and policy replacements shall reflect the original "retro-date."
- 11.2.7** Should at any time the Contractor not maintain the insurance coverages required herein, the Owner may terminate the agreement or at its sole discretion shall be authorized to purchase such coverages and charge the Contractor for such coverages purchased. The Owner shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the Owner to purchase such insurance coverages shall in no way be construed to be a waiver of any of its rights under the Contract Documents.
- 11.2.8** Contractor shall submit to Owner a copy of all accident reports arising out of any personal injuries or property damages arising or alleged to have arisen on account of any work by Contractor or Subcontractor under the Contract Documents.
- 11.2.9** Duty to Provide Legal Defense. The Contractor agrees to pay, to Santa Rosa County, as well as provide a legal defense for the Owner, which shall include attorneys' fees and costs, both of which will be done only if and when requested by the Owner, for all claims as described in paragraph 13.1. Such payment on the behalf of the Owner shall be in addition to any and all other legal remedies available to the Owner and shall not be considered to be the Owner's exclusive remedy.

11.3 PERFORMANCE BOND AND PAYMENT BOND

11.3.1 BONDS

11.3.1.1 Contractor shall provide performance and payment bonds, in the form prescribed in Exhibit B, in the amount of 100% of the contract amount, the costs of which to be paid by Contractor. The performance and payment bonds shall be underwritten by a surety authorized to do business in the State of Florida and otherwise acceptable to Owner; provided; however, the surety shall be rated as "A" or better and Class XII or higher rating as to financial size category and the amount required shall not exceed 2% of the reported policy holders surplus, all as reported in the most current best key rating guide, published by A.M. Best Company, Inc. of 75 Fulton Street, New York, New York 10038.

11.3.1.2 If the surety for any bond furnished by Contractor is declared bankrupt, becomes insolvent, its right to do business is terminated in the State of Florida, or it ceases to meet the requirements imposed by the Contract Document, the Contractor shall, within five (5) calendar days thereafter, substitute another bond and surety, both of which shall be subject to the Owner's approval.

11.3.1.3 As per Florida Statutes, Section 255.05, the Contractor shall be required to execute and record the performance and payment bonds. The bonds must state the name and principal business address of both the principal and the surety and a description of the project sufficient to identify it.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 If a portion of the Work is covered contrary to the Engineer's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Engineer, be uncovered for the Engineer's examination and be replaced at the Contractor's expense without change in the Contract Time.

12.1.2 If a portion of the Work has been covered which the Engineer has not specifically requested to examine prior to its being covered, the Engineer may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate Contractor in which event the Owner shall be responsible for payment of such costs.

12.2 CORRECTION OF WORK

12.2.1 BEFORE OR AFTER SUBSTANTIAL COMPLETION

12.2.1.1 The Contractor shall promptly correct Work rejected by the Engineer or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections and compensation for the Engineer's services and expenses made necessary thereby, shall be at the Contractor's expense.

12.2.2 AFTER SUBSTANTIAL COMPLETION

12.2.2.1 In addition to the Contractor's obligations under Paragraph 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Subparagraph 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract

Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one- year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Engineer, the Owner may correct it in accordance with Paragraph 2.4.

12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work.

12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Paragraph 12.2.

12.2.3 The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate Contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

12.2.5 Nothing contained in this Paragraph 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the one-year period for correction of Work as described in Subparagraph 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 ACCEPTANCE OF NONCONFORMING WORK

12.3.1 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13: MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

13.1.1 The Contract shall be governed by the law of the place where the Project is located.

13.2 SUCCESSORS AND ASSIGNS

13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Subparagraph 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.2.2 The Owner may, without consent of the Contractor, assign the Contract to an institutional lender providing construction financing for the Project. In such event, the lender shall assume the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

13.3 WRITTEN NOTICE

13.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

13.4.2 No action or failure to act by the Owner, Engineer or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS

13.5.1 Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Engineer timely notice of when and where tests and inspections are to be made so that the Engineer may be present for such procedures. The Owner shall bear costs of tests, inspections or approvals which do not become requirements until after bids are received or negotiations concluded.

13.5.2 If the Engineer, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Subparagraph **13.5.1**, the Engineer will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Engineer of when and where tests and inspections are to be made so that the Engineer may be present for such procedures. Such costs, except as provided in Subparagraph **13.5.3**, shall be at the Owner's expense.

13.5.3 If such procedures for testing, inspection or approval under Subparagraphs **13.5.1** and **13.5.2** reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Engineer's services and expenses shall be at the Contractor's expense.

13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Engineer.

13.5.5 If the Engineer is to observe tests, inspections or approvals required by the Contract Documents, the Engineer will do so promptly and, where practicable, at the normal place of testing.

13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

13.6 INTEREST

13.6.1 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

13.7 COMMENCEMENT OF STATUTORY LIMITATION PERIOD

13.7.1 As between the Owner and Contractor:

- 1** Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;
- 2** Between Substantial Completion and Final Certificate for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and
- 3** After Final Certificate for Payment. As to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any Warranty provided under Paragraph **3.5**, the date of any correction of the Work or failure to correct the Work by the Contractor under Paragraph **12.2**, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner, whichever occurs last.

ARTICLE 14: TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of **30** consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-Subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons.

- 1** issuance of an order of a court or other public authority having jurisdiction which requires all Work to be stopped;
- 2** an act of government, such as a declaration of national emergency which requires all Work to be stopped;
- 3** because the Engineer has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Subparagraph **9.4.1**, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- 4** the Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Subparagraph **2.2.1**.

14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-Subcontractor or their agents or employees or any other persons

or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Paragraph 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

14.1.3 If one of the reasons described in Subparagraph 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner and Engineer, terminate the Contract and recover from the Owner only as provided in Subparagraph 14.3.1.

14.1.4 *If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has persistently failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner and the Engineer, terminate the Contract and recover from the Owner only as provided in Subparagraph 14.3.1.*

14.2 TERMINATION FOR DEFAULT

14.2.1 Contractor shall be considered in material default of the agreement and such default shall be considered cause for Owner to terminate the agreement, in whole or in part, as further set forth in this section, if Contractor: (1) fails to begin the work under the Contract Documents within the time specified herein; or (2) fails to properly and timely perform the work as directed by the Owner or as provided for in the approved progress schedule; or (3) performs the work unsuitably or neglects or refuses to remove materials or to correct or replace such work as may be rejected as unacceptable or unsuitable; or (4) discontinues the prosecution of the work; or (5) fails to resume work which has been suspended within a reasonable time after being notified to do so; or (6) becomes insolvent or is declared bankrupt, or commits any act of bankruptcy; or (7) allows any final judgment to stand against it unsatisfied for more than ten (10) days; or (8) makes an assignment for the benefit of creditors; or (9) fails to obey any applicable codes, laws, ordinances, rules or regulations with respect to the work; or (10) materially breaches any other provision of the Contract Documents.

14.2.2 Owner shall notify Contractor in writing of Contractor's default(s). If Owner determines that Contractor has not remedied and cured the default(s) within seven (7) calendar days following receipt by Contractor of said written notice, then Owner, at its option, without releasing or waiving its rights and remedies against the Contractor's sureties and without prejudice to any other right or remedy it may be entitled to hereunder or by law, may terminate Contractor's right to proceed under the agreement, in whole or in part, and take possession of all or any portion of the work and any materials, tools, equipment, and appliances of Contractor, take assignments of any of Contractor's subcontracts and purchase orders, and complete all or any portion of Contractor's work by whatever means, method or agency which Owner, in its sole discretion, may choose.

14.2.3 If Owner deems any of the foregoing remedies necessary, Contractor agrees that is shall not be entitled to receive any further payments hereunder until after the project is completed. All monies expended and all of the costs, losses, damages and extra expenses, including all management, administrative and other overhead and other direct and indirect expenses (including attorneys' fees) or damages incurred by Owner incident to such completion, shall be deducted from the contract amount, and if such expenditures exceed the unpaid balance of the contract amount, Contractor agrees to pay promptly to Owner

on demand the full amount of such excess, including costs of collection, attorney's fees (including appeals) and interest thereon at the maximum legal rate of interest until paid. If the unpaid balance of the contract amount exceeds all such costs, expenditures and damages incurred by the Owner to complete the work, such excess shall be paid to the Contractor. The amount to be paid to the Contractor or Owner, as the case may be, and this obligation for payment shall survive termination of the agreement.

14.2.4. The liability of Contractor hereunder shall extend to and include the full amount of any and all sums paid, expenses and losses incurred, damages sustained, and obligations assumed by Owner in good faith under the belief that such payments or assumptions were necessary or required, in completing the work and providing labor, materials, equipment, supplies, and other items therefor or re-letting the work, in settlement, discharge or compromise of any claims, demands, suits, and judgments pertaining to or arising out of the work hereunder.

14.2.5 If, after notice of termination of Contractor's right to proceed pursuant to this section, it is determined for any reason that Contractor was not in default, or that its default was excusable, or that Owner is not entitled to the remedies against Contractor provided herein, then Contractor's remedies against Owner shall be the same as and limited to those afforded Contractor below under subsection **14.3.1**, termination for convenience.

14.3 TERMINATION FOR CONVENIENCE AND RIGHT OF SUSPENSION

14.3.1. Owner shall have the right to terminate this agreement without cause upon seven (7) calendar days written notice to Contractor. In the event of such termination for convenience, Contractor's recovery against Owner shall be limited to that portion of the contract amount earned through the date of termination, together with any retainage withheld and reasonable termination expenses incurred, but Contractor shall not be entitled to any other or further recovery against Owner, including, but not limited to, damages or any anticipated profit on portions of the work not performed.

14.3.2. Owner shall have the right to suspend all or any portions of the work upon giving Contractor two (2) calendar days' prior written notice of such suspension. If all or any portion of the work is so suspended, Contractor's sole and exclusive remedy shall be to seek an extension of time to its schedule in accordance with the procedures set forth in the Contract Documents. In no event shall the Contractor be entitled to any additional compensation or damages. Provided, however, if the ordered suspension exceeds three (3) months, the Contractor shall have the right to terminate the agreement with respect to that portion of the work which is subject to the ordered suspension.

SANTA ROSA COUNTY
BOARD OF COUNTY COMMISSIONERS
SUPPLEMENTAL PROVISIONS
SRC Procurement Form SP 020_00_082719

ARTICLE 1: SUPPLEMENTAL PROVISIONS

1.0 GENERAL CONDITIONS:

The following conditions supplement, modify, change, delete from or add to the General Provisions of the Contract, Articles 1 through 14. Where an Article of the General Provisions is modified or a Paragraph, Subparagraph, or Clause thereof is modified or deleted by these supplements, the unaltered provisions of that Article, Paragraph, Subparagraph, or Clause shall remain in effect.

2.0 FORM OF CONTRACT AND BONDS:

The contract form as furnished by Santa Rosa County shall be utilized. Performance and Payment Bond forms as approved by Santa Rosa County shall be utilized.

3.0 MATERIALS:

Whenever “or approved equal” is indicated, items proposed for use shall be submitted for Engineer’s approval. Wherever an item or class of material is specified exclusively by trade name or by name of the maker or by catalog reference, only such items shall be used unless previously approved through addenda by the Engineer. Should the Contractor desire to substitute another material for one or more specified by name they shall state the credit or extra involved by the use of such material, in their bid. No such materials shall be used unless approved in writing by the Engineer.

4.0 PROGRESS CHART:

Within ten (10) days after receipt of signed Contract the Contractor shall file with the Engineer a progress chart showing the order in which the Contractor proposes to accomplish the work, the dates on which he proposes to begin the various parts of the work and the dates he contemplates completing them.

5.0 TIME FOR COMPLETION:

Time for completion of all work included in this contract shall not exceed **120 days** from date of written Notice to proceed. The number of days allowed does not include an allowance for calendar days missed due to weather. Extension of time will be allowed for delays due to weather if properly documented and reported to the Engineer.

6.0 PRECONSTRUCTION CONFERENCE:

Within ten (10) days after the effective date of the agreement, but before Contractor starts the work at the Project site, a conference will be held for review and acceptance of the schedules referred to in paragraph 4.0, to establish procedures for processing applications for payment, and to establish a working understanding among the parties as to the work.

7.0 RECORD KEEPING

The Contractor shall maintain all relevant project records for three years after the Owner has made final payment to the Contractor.

SECTION IV.
PROJECT MANUAL, SPECIFICATIONS, PLANS AND
SUPPORTING DOCUMENTATION

This Page Intentionally Left Blank

SECTION 02230 - CLEARING & GRUBBING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions shall apply to this Section.
- B. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (FDOT Specs), Section 110, latest edition. Work shall comply with requirements of FDOT Specs as modified herein.
- C. GENERAL EXCEPTIONS: Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred herein, or otherwise listed in this document.

1.2 SUMMARY

- A. This Section includes, but is not limited to, the following:
 - 1. Removal of trees and other vegetation.
 - 2. Clearing and grubbing.
 - 3. Removing above-grade improvements.
 - 4. Removing below-grade improvements.
- B. Extent of clearing & grubbing shall remain in right-of-way or easements unless otherwise noted or instructed.

1.3 PROJECT CONDITIONS

Provide protection for all public land corners and monuments within the limits of construction. Any Monuments disturbed while performing the work will be replaced at the contractor's expense.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 SITE CLEARING

A. General

Remove trees, shrubs, grass, and other vegetation, improvements, or obstructions, as required, to permit installation of new construction. Remove similar items elsewhere on site or premises as specifically indicated. Removal includes digging out and off-site disposal of stumps and roots. Carefully and cleanly cut minor roots

and branches of trees indicated to remain in a manner where such roots and branches obstruct installation of new construction.

B. Clearing and Grubbing

Clear site of trees, shrubs, and other vegetation, except for those indicated to remain.

1. Completely remove all stumps within the roadway. Remove roots and other debris to a depth of 12" below the ground surface.
2. Use only hand methods for grubbing inside drip line of trees indicated to remain.
3. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated in accordance with earthwork specification.

C. Removal of Improvements

Remove existing above-grade and below-grade improvements as indicated and as necessary to facilitate new construction, and other work as indicated.

3.2 DISPOSAL OF WASTE MATERIALS

A. Burning

Burning is not permitted on County property. Requests to burn will be considered on a case by case basis. If approved, Contractor is to acquire permits and provide copy to the Engineer.

B. Removal from County Property

Remove waste materials and unsuitable or excess topsoil from County property and dispose of off-site in a legal manner.

END OF SECTION 02230

SECTION 02300 – EARTHWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.
- B. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (FDOT Specs), Section 120, latest edition. Work shall comply with requirements of FDOT Specs as modified herein.
- C. GENERAL EXCEPTIONS: Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred herein, or otherwise listed in this document.

1.2 SUMMARY

- A. This Section includes preparing and grading sub-grades for pavements and curbs.
- B. Related Sections: The following Sections contain requirements that relate to this Section.
 - 1. Section 2230 "Clearing & Grubbing" for clearing, grubbing, and tree protection.
 - 2. Section 2600 "Stormwater System" for installation of stormwater systems.

1.3 DEFINITIONS

- A. Excavation consists of the removal of material encountered to sub-grade elevations and the reuse or disposal of materials removed.
- B. Sub-grade: The uppermost surface of an excavation or the top surface of a fill or backfill immediately below sub-base, base, drainage fill, or topsoil materials.
- C. Borrow: Soil material obtained off-site when sufficient approved soil material is not available from excavations.
- D. Subbase Course: The layer placed between the subgrade and base course in a paving system or the layer placed between the subgrade and surface of a pavement or sidewalk or the existing layer beneath this base.
- E. Base Course: The layer placed between the subbase and surface pavement in a paving system.
- F. Unauthorized excavation consists of removing materials beyond indicated subgrade elevations or dimensions without direction by the Engineer.

Unauthorized excavation, as well as remedial work directed by the Engineer, shall be at the Contractor's expense.

- G. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below ground surface.
- H. Utilities include on-site above ground utilities, overhead utilities and underground utilities including: pipes, conduits, ducts, and cables, as well as related appurtenances and underground services within building lines.
- I. Unsuitable Material: Any material such as muck, wood, rock, organic peat, garbage, very fine soil particles unsuitable for compaction, and any other material that is considered unsuitable by the County or its representative shall be considered unsuitable.
- J. Topsoil: Topsoil is defined as friable clay loam surface soil found normally to a depth of at least 4 inches. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones, and other objects over 2 inches in diameter, and without weeds, roots, and other objectionable material.

1.4 SUBMITTALS

- A. General: Submit the following in accordance with Section 1300, "Submittals and the General Conditions."
- B. Product Data and Samples of the following:
 - 1. 1-lb representative samples of each proposed fill and backfill soil material from borrow sources as selected by the Engineer.
 - 2. 12-by-12-inch sample of filter fabric.
- C. Test Reports: In addition to test reports required under field quality control, submit the following original copy directly to the Engineer from the testing services, with a copy to the Contractor:
 - 1. Laboratory analysis of each soil material proposed for fill and backfill from borrow sources.
 - 2. One optimum moisture-maximum density curve for each soil material.
 - 3. Report of actual unconfined compressive strength and/or results of bearing tests of each stratum tested.

1.5 QUALITY ASSURANCE

- A. Codes and Standards: Perform earthwork complying with all requirements of authorities having jurisdiction. All material and construction methods shall be in accordance with the Standard Specifications for Road and Bridge Construction, State of Florida, Department of Transportation, latest edition.

- B. Testing and Inspection Service: During earthwork operations employ, at the Contractor's expense, a qualified independent geotechnical engineering testing agency, under the direction of a Professional Engineer, licensed in the State of Florida to classify, perform soil tests, and provide inspection services for quality control. All proposed borrow soils will require the testing agency to verify that soils comply with specified requirements and to perform required field and laboratory testing. Contractor shall replace materials removed for testing purposes. Should any work or materials fail to meet the requirements set forth in the plans and specifications, contractor shall pay for re-testing of same.
- C. Testing Laboratory Qualifications: To qualify for acceptance, the geotechnical testing laboratory must demonstrate to the Engineer's satisfaction, based on evaluation of laboratory-submitted criteria, that it has the experience and capability to conduct required field and laboratory geotechnical testing without delaying the progress of the work.

1.6 PROJECT CONDITIONS

- A. Site Information: Data in the subsurface investigation report was used for the basis of the design and are available to the contractor for information only. Conditions are not intended as representations or warranties of accuracy or continuity between soil borings. The Engineer/ Owner will not be responsible for interpretations or conclusions drawn from this data by the contractor.
- B. Existing Utilities: Contractor is responsible for contacting all utility companies to obtain locations of all existing utilities or obstructions that he may encounter during construction. After location of utilities by the appropriate utility company, it is the Contractor's liability to protect all such utility lines, including service lines and appurtenances, and to replace at his own expense any that may be damaged by the Contractor's equipment or forces during construction of the Project.
 - 1. Provide a minimum of 48-hours' notice to the Engineer and receive written notice to proceed before interrupting any utility.
 - 2. The contractor is responsible for contacting all utility companies to verify locations of all existing utilities, utility-related obstructions, or utility relocations that he may encounter during construction.
 - 3. Adequate provision shall be made for the flow of existing sewers, drains, and water courses encountered during construction, and structures which may be disturbed shall be satisfactorily restored by the Contractor.
- C. Should uncharted, or incorrectly charted, piping or other utilities be encountered during the course of the work, consult Engineer immediately for directions. Cooperate with owner and utility companies in keeping respective services and facilities in operation.

PART 2 – PRODUCTS

2.1 SOIL MATERIALS

- A. General: Soils used as fill shall be clean sands, similar to existing site soil, with less than 5% passing the number 200 sieve when existing subgrade conditions are considered wet as per the County and/or its representative. Soils as described above with less than 12% passing the number 200 sieve and meeting the requirements of Section 902-6 of the FDOT Specifications may be used when existing subgrade conditions are considered dry as per the County and/or its representative. The sand shall have a maximum dry density of at least 100 pounds per cubic foot, according to the Standard Proctor compaction test, AASHTO T-99, ASTM D698. Provide approved borrow soil materials from off-site when sufficient satisfactory soil materials are not available from excavations. Provide laboratory certification that soils meet requirements of specifications.

If the Contractor elects to import any materials other than that excavated on site, then he will do so only with Engineer's approval and at his own expense, unless separate payment for such items are called for in these specifications.

- B. Sub-base Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand, ASTM D 2940, with at least 95 percent passing a 1-1/2-inch sieve, and not more than 8 percent passing a No. 200 sieve.

PART 3 – EXECUTION

3.1 DEWATERING

- A. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding project site and surrounding area.
- B. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.
- C. The Contractor shall prevent the accumulation of water in excavated areas, and shall remove by pumping or other means any water that accumulates in the excavation. The Contractor shall prevent the accumulation of water in both structural and trench excavations and shall remove by well point system or by other means water which accumulates. The Contractor shall provide, install and operate a suitable and satisfactory dewatering system. The contractor shall include the cost of this pumping equipment and work in the unit price bid for the work.
- D. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rainwater and water removed from excavations to collection or runoff areas. Do not use trench excavations as temporary drainage ditches.

3.2 EXCAVATION

- A. Explosives: Not permitted.
- B. Unclassified Excavation: Excavation is unclassified and includes excavation to required subgrade elevations regardless of the character of materials and obstructions encountered.
- C. Strip topsoil to whatever depths encountered in a manner to prevent intermingling with underlying subsoil or other objectionable material. Remove heavy growths of grass from areas before stripping. Where existing trees are indicated to remain, leave existing topsoil in place within drip lines to prevent damage to root systems.

3.3 STABILITY OF EXCAVATIONS

- A. Comply with local codes, ordinances, and requirements of authorities having jurisdiction to maintain stable excavations.
- B. All excavation work shall conform to all applicable OSHA Publications, latest editions. The Contractor's method of providing protective support to prevent cave-ins shall conform to OSHA requirements. Slope excavations, shoring, and trench box usage in the field must be based on tabulated data and designed by the Contractor. The contractor is solely responsible for job site safety.

3.4 EXCAVATION FOR STRUCTURES

Excavate to indicated elevations and dimensions within a tolerance of plus or minus 0.10 foot. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, installing services and other construction, and for inspections.

- A. Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
- B. Pile Foundations: Stop excavations from 6 inches to 12 inches above bottom of footing before piles are placed. After piles have been driven, remove loose and displaced material. Excavate to final grade, leaving solid base to receive concrete pile caps.
- C. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Appurtenances: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 0.10 foot. Do not disturb bottom of excavations intended for bearing surface.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

Excavate surfaces under walks and pavements to indicated cross sections, elevations, and grades.

3.6 EXCAVATION FOR STORMWATER SYSTEMS

Excavate and compact the backfill of trenches to the densities specified for embankment or subgrade, as applicable, and in accordance with the requirements of Section 2600.

3.7 STORAGE OF SOIL MATERIALS

- A. Stockpile excavated materials acceptable for backfill and fill soil materials, including acceptable borrow materials. Stockpile soil materials without intermixing. Place, grade and shape stockpiles to drain surface water. Cover to prevent wind-blown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.
 - 2. Stockpile topsoil and other reusable soils in storage piles in areas indicated or directed. Construct storage piles to provide free drainage of surface water. Cover storage piles, if required, to prevent erosion.

3.8 BACKFILL

- A. Backfill excavations promptly, but not before completing the following:
 - 1. Acceptance of construction below finish grade including, where applicable, filter fabric, installation, and gravel bedding.
 - 2. Surveying locations of underground utilities for record documents.
 - 3. Testing, inspecting, and approval of underground utilities.
 - 4. Removal of trash and debris from excavation.
 - 5. Removal of temporary shoring, bracing, and sheeting unless specified to remain.
- B. No backfill material shall be placed, spread or rolled during unfavorable weather conditions. When the work is interrupted by heavy rain, backfill operations shall not be resumed until the moisture content and density of the fill are as previously specified.

3.9 FILL

- A. Preparation: Remove vegetation, topsoil, debris, wet and unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placing fills. Plow strip or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing surface. In order to insure proper bond and prevent slipping between the original ground and fill, the surface of the original ground shall be scarified to a depth of at least three inches. Each layer of fill material shall be compacted until the required density is achieved.

- B. When sub grade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface to depth required, pulverize, moisture-condition or aerate soil and re-compact to required density.
- C. Place fill material in layers to required elevations for each location listed below.
 - 1. Under grass, use satisfactory excavated or borrow soil material.
 - 2. Under walks and pavements, steps, ramps, building slabs, footings, and foundations use subbase or base material, or satisfactory excavated or borrow soil material.

3.10 MOISTURE CONTROL

Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2 percent of optimum moisture content.

- 1. Do not place backfill or fill material on surfaces that contain excessive moisture.
- 2. Remove and replace or scarify and air-dry satisfactory soil material that is too wet to compact to specified density. Stockpile or spread and dry removed wet satisfactory soil material.

3.11 COMPACTION

- A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers. The Contractor may construct embankments in successive layers of not more than 12" compacted thickness, if he can demonstrate with field tests that he has compacting equipment efficient to achieve required density for the full depth of a thicker lift. The Engineer reserves the right to terminate the Contractor's use of thick lift construction and have him revert to the 8" loose lifts whenever it is determined that satisfactory results are not being achieved.
- B. Place backfill and fill materials evenly on all sides of structures to required elevations. Place backfill and fill uniformly along the full length of each structure.
- C. Percentage of Maximum Dry Density Requirements:
Compact soil to not less than the following percentages of maximum dry density according to ASTM D698 (Standard Proctor):
 - 1. Under structures, building slabs, steps, and pavements, compact each layer of backfill or fill material at 100 percent maximum dry density.
 - 2. Under lawn or unpaved areas, compact each layer of backfill or fill material at 95 percent maximum dry density.

3.12 GRADING

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between existing adjacent grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to conform to required surface tolerances.
- B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - 1. Lawn or Unpaved Areas: Plus or minus 0.10 foot.
 - 2. Walks: Plus or minus 0.10 foot.
 - 3. Pavements: Plus or minus ½ inch.

3.13 STABILIZED SUBGRADE

- A. For stabilized subgrade the type of materials, commercial or local, is at the Contractor's option and no separate payment for stabilizing materials will be made (other than as may be paid for as borrow).
- B. When stabilizing is designated as Type B, compliance with the bearing value requirements will be determined by the Lime rock Bearing Ratio Method. Minimum LBR shall be 40.
- C. It is the Contractor's responsibility that the finished roadbed section meets the bearing value requirements, regardless of the quantity of stabilizing materials necessary to be added. Also, full payment will be made for any areas where the existing subgrade materials meet the design bearing value requirements without the addition of stabilizing additives, as well as areas where the Contractor may elect to place select highbearing materials from other sources, within the limits of the stabilizing.
- D. After the roadbed grading operations have been substantially completed, the Contractor shall make his own determination as to the quantity (if any) of stabilizing material, of the type selected by him, necessary for compliance with the bearing value requirements. The contractor shall notify the Engineer of the approximate quantity to be added, and the spreading and mixing-in of such quantity of materials shall meet the approval of the Engineer as to uniformity and effectiveness.

3.14 FIELD QUALITY CONTROL

- A. Testing Agency Services: Allow testing agency to inspect and test each subgrade and each fill or backfill layer. Do not proceed until test results for previously completed work verify compliance with requirements.
 - 1. Perform field in-place density tests according to ASTM D 1556 (sand cone method), ASTM D 2167 (rubber balloon method), or ASTM D 2937 (drive cylinder method), as applicable.
 - a. Field in-place density tests may also be performed by the nuclear method according to ASTM D 2922, provided that calibration curves are periodically checked and adjusted to correlate to tests performed using ASTM D 1556. With each density calibration check, check the calibration curves furnished with the moisture gauges according to ASTM D 3017.
 - b. When field in-place density tests are performed using nuclear methods, make calibration checks of both density and moisture gauges at beginning of work, on each different type of material encountered, and at intervals as directed by the Engineer.
 - 2. Paved Areas: Make at least one field density test of subgrade, base, and each compacted fill layer for every 300 linear feet of roadway or equivalent area, but in no case less than three tests. Tests shall be staggered to ensure representative sampling.
 - 3. Unpaved Areas: Make at least one field density test of each compacted fill layer or subgrade for every 1000 square yards of area, but in no case less than three tests.
 - 4. Other tests may be required at Engineer's discretion.
- B. If in the opinion of the Engineer, based on testing service reports and inspection, sub grades, fills, or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depth required, re-compact, and re-test until required density is obtained at no additional expense.

3.15 REPAIR & CORRECTIONS

- A. Protecting Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Repair and re-establish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or lose compaction due to subsequent construction operations or weather conditions. Scarify or remove and replace material to depth directed by the Engineer; reshape and re-compact at optimum moisture content to the required density.
- B. Settling: Where settling occurs during the warranty period, remove finished surfacing, backfill with additional approved material, compact, and reconstruct

surfacing. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

- C. When traffic must cross open trenches, the contractor shall provide suitable bridges. (See Section 4060 for additional requirements.)
- D. Erosion Control: The Contractor shall be responsible for the prevention of erosion from the site and for maintaining filled and graded surfaces for the duration of the project. This includes, but is not limited to, the erection of a silt fence and hay bale barricade as per Florida Department of Transportation Design Standard indexes 102 and 104, as shown in the construction plans. The Contractor shall take whatever steps necessary to prevent erosion and sedimentation and will be responsible for any damages which might occur to down-land properties as a result of run-off from the site during sitework construction. Provide erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.16 DISPOSAL OF SURPLUS AND WASTE MATERIALS

Surplus excavated material becomes the property of the Contractor unless otherwise noted. Waste materials, including unsatisfactory soils, trash and debris shall be removed and legally disposed of, off the Owner's property.

3.17 CLEAN-UP AND FINAL INSPECTION

Before final inspection and acceptance, the Contractor shall clean ditches, shape shoulders and restore all disturbed areas, including street crossings, grass plots, re-grassing if necessary, to as good a condition as existed before work started.

END OF SECTION 02300

SECTION 02340 – RIPRAP

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Specification Sections, apply to work of this Section.
- B. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (FDOT Specs), and Design Standard Plans, latest edition. Work shall comply with requirements of FDOT Specs as modified herein.
- C. GENERAL EXCEPTIONS

Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred herein, or otherwise listed in this document.

1.2 DESCRIPTION OF WORK

This section shall cover the work of furnishing and constructing the Riprap which shall consist of a protective course of stone or other approved materials on embankment slopes, in channels, or other work as shown on the plans or directed, with or without a Filter Blanket, all in accordance with these Specifications and in conformity with the lines and grades noted in the plan details.

PART 2 – PRODUCTS

2.1 MATERIALS

Rubble/Stone Riprap shall comply with Florida Department of Transportation Standard Specifications

- A. Banks and shore protection shall comply with Florida Department of Transportation Standard Specifications.
- B. Ditch lining shall comply with Florida Department of Transportation Standard Specifications.
- C. Broken stone and broken concrete shall comply with Florida Department of Transportation Standard Specifications.
- D. Geotextile fabric shall comply with Florida Department of Transportation Standard Specification 514 and Florida Department of Transportation Design Standard Plans according to its application.
- E. Bedding stone shall comply with Florida Department of Transportation Standard Specifications.

- F. Sand/Cement Riprap: Materials and placement shall comply with Florida Department of Transportation Standard Specifications.

PART 3 – EXECUTION

3.1 EXECUTION

A. Construction Requirements

All slopes to be treated with riprap shall be trimmed to the lines and grades indicated by the plans or directed, loose material shall be compacted by methods approved by the Engineer or removed.

Slopes which require a filter blanket under the riprap shall, in addition to the above, be prepared as noted below.

Placement of any riprap on a filter blanket shall be by such means that will not damage or destroy the blanket. Any damage to the blanket shall be repaired without additional compensation.

If directed by the Engineer or shown by plan details, all outer edges and the top of riprap where the riprap terminates shall be formed so that the surface of the riprap will be embedded and even with the surface of the ground and/or slope.

All riprap construction shall begin at the bottom of the slope and progress upward. Filter Blanket: Unless otherwise specified by the plans or ordered in writing, a fabric blanket will not be allowed for soils with 85% by weight passing the No. 200 sieve (U.S. Std.).

The bedding stone shall be constructed in accordance with Florida Department of Transportation Specifications.

Foundation Preparation: Areas on which filter fabrics are to be placed shall be uniformly trimmed and dressed to conform to cross-sections shown by the plans.

B. Plastic Filter Fabric

Plastic filter fabric shall be placed in the manner and at the locations shown in the plans or as directed by the Engineer. At the time of installation, fabric shall be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacturer, transportation or storage. The fabric shall be placed with the long dimension parallel to the centerline of the channel or shoreline unless otherwise directed by the Engineer, and shall be laid smooth and free of tension, stress, folds, wrinkles or creases. The strips shall be placed to provide a minimum width of 24 inches of overlap for each joint with the upstream strip of fabric overlapping the downstream strip.

Overlap joints and seams shall be measured as a single layer of cloth. Securing pins with washers shall be inserted through both strips of overlapped cloth at not greater than the following intervals along a line through the midpoint of the overlap.

<u>Pin Spacing</u>	<u>Slope</u>
2 ft.	Steeper than 3:1
3 ft.	3:1 to 4:1
5 ft.	Flatter than 4:1

The fabric shall be turned down and buried two feet at all exterior limits except where a stone-filled key is provided below natural ground.

Additional pins regardless of location shall be installed as necessary to prevent any slippage of the filter fabric. Overlaps in the fabric shall be placed so that any upstream strip of fabric will overlap the downstream strip. Should the engineer direct that the fabric be placed with the long dimension perpendicular to the centerline of the channel or shoreline, the lower strip of fabric shall underlap the next higher strip. Each securing pin shall be pushed through the fabric until the washer bears against the fabric and secures it firmly to the foundation. The fabric shall be protected at all times during construction from contamination by surface runoff and any fabric so contaminated shall be removed and replaced with uncontaminated fabric. Any damage to the fabric during its installation or during placement of riprap shall be replaced by the Contractor. The work shall be scheduled so that 5 days does not expire between placement of the fabric and the covering of the fabric with riprap.

3.2 STONE AND CONCRETE RUBBLE RIPRAP

General

Unless otherwise shown by plan details or directed, stone or concrete shall not be placed on slopes steeper than the natural angle or repose of the riprap material.

Placement of stone or concrete may, unless otherwise noted hereinafter, be placed by methods and equipment approved by the Engineer suitable for the purpose of placing the riprap in accordance with the requirements for the class riprap involved without damaging any existing facility or construction feature.

The stone or concrete shall be placed in such a manner as to produce a reasonably well graded mass of rock with the minimum practical percentage of voids. Stone or concretes shall be laid with close broken joints and resting on the embankment slope. The riprap shall be constructed to the lines, grades and thickness shown by the plans or as directed. Riprap shall be placed to its full course thickness in one operation and in such a manner as to avoid displacing or damaging the filter blanket material. The larger stone or concretes shall be well distributed and the entire mass of stone or concretes in their final position shall conform to a reasonable uniform gradation. The finished riprap shall be free from objectionable pockets of small stone or concretes and clusters of larger stone or

concretes. Open joints shall be filled with spalls, or small stone or concretes in such manner that all stone or concretes are tightly wedged or keyed. Placing riprap by dumping into chutes or by other methods likely to cause segregation of sizes will not be permitted. The desired distribution of the various sizes of stone or concretes throughout the mass shall be obtained by selective loading of the material at the source, by controlled dumping of successive loads during final placing, or by other methods of placement which will produce the specified results. The individual pieces of stone or concrete in each horizontal course shall be laid so that they will break away from embankment. Rearranging of individual stone or concretes by mechanical equipment, or by hand, will be required to the extent necessary to obtain a reasonably well graded distribution of stone or concrete as specified above.

3.3 SAND/CEMENT RIPRAP

A. Placing

Immediately following mixing, the mixture shall be placed in the bags, tied (so that when laid in position, they will flatten out and give a thickness of not less than six inches) and placed flat on the area designed. Bags shall be layered and rammed against each other to form closed joints, with tied ends of sacks all laid in the same direction. Sacks ripped or torn in placing shall be removed and replaced with sound, unbroken sacks. When required to be placed under water, special care shall be taken to see that bags are closely jointed to give the same tight joints as required on dry slopes. After the riprap is placed, it shall be sprinkled with water as directed and kept damp for not less than three days. No sand/cement riprap shall be mixed in freezing weather.

B. Grouting

Immediately after watering, all openings between sacks shall be filled with dry grout composed of one part portland cement and five parts sand.

C. Pinned Bags

Bags shall be pinned when called for on drawings.

D. Maintenance

The Contractor shall maintain all riprap until the contract work is accepted, and shall replace, without additional compensation, any damaged or lost riprap.

E. Clean Up

Before final inspection and acceptance, the Contractor shall remove all excess material from site and restore all disturbed areas to as good a condition as existed before work started.

END OF SECTION 02340

SECTION 02600 - STORMWATER SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Specification Sections and Design Standard Indexes, apply to this Section.
- B. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, latest edition. Work shall comply with requirements of FDOT Specs as modified herein.
- C. GENERAL EXCEPTIONS: Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred herein, or otherwise listed in this document

1.2 SUMMARY

This Section includes stormwater system piping and appurtenances. All labor, material, equipment, appurtenances, services, and other work or costs necessary to construct the facilities and place them into operation shall be furnished by the Contractor.

1.3 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract.
- B. Shop drawings for pre-cast concrete storm drainage manholes and catch basins, including frames, covers, and grates.
- C. Shop drawings for cast-in-place concrete or field-erected masonry storm drainage manholes and catch basins, including frames and covers.

1.4 QUALITY ASSURANCE

- A. Environmental Compliance: Comply with applicable portions of local environmental agency regulations pertaining to stormwater systems.
- B. Utility Compliance: Comply with local utility regulations and standards pertaining to stormwater systems.

1.5 PROJECT CONDITIONS

Site Information: Perform site inspection, research public utility records, and verify existing utility locations. Verify that stormwater system piping may be installed in

compliance with design plans and referenced standards. Locate existing stormwater system piping and structures that are to be abandoned and closed.

1.6 SEQUENCING AND SCHEDULING

- A. Notify the County Inspector assigned to the subdivision prior to pouring form work and for inspection of subbase prior to installing base. Also provide the inspector copies of field density tests when they are received (if required by design).
- B. Coordinate connection to existing drainage system with Owner.
- C. Coordinate with other utility work.

PART 2 - PRODUCTS

2.1 MATERIALS

Pipe: Meet the following requirements of FDOT Specifications, latest edition:

- Concrete Pipe
- Round Rubber Gaskets
- Corrugated Polypropylene Pipe
- Polyvinyle Chloride (PVC)

Only conventional steel RCP or elliptical equivalent (class III) (excludes fiber reinforced concrete pipe), A-2000 (double gasket) and HP Storm polypropylene shall be allowed under dedicated County roads. All joints shall be filter wrapped, and the minimum cover shall be one foot including over bell joints. The pipe system shall be grouted/sealed *water-tight* prior to acceptance by the County and at the end of the 2-Year Warranty period.

2.2 MANHOLES

- A. Precast Concrete Manholes: Per FDOT Standard Specifications and ASTM C 478, recast reinforced concrete, of depth indicated with provision for rubber gasket joints.
- B. Cast-in-Place Manholes: Per FDOT Standard Specification 425 Cast reinforced concrete of dimensions and with appurtenances indicated.
- C. Manhole Frames and Covers: Construct Per FDOT Standard Specifications and Standard Plans. All units shall bear the lettering "STORM SEWER" cast into cover. All proposed substitutes must have equal or greater opening sizes and weights.

2.3 INLETS

- A. Precast Concrete Catch Basins Inlets: Construct per FDOT Standard Specifications.
- B. Cast-in-Place Inlets: Construct per FDOT Standard Specifications to dimensions and with appurtenances indicated.
 - 1. Bottom, Walls, and Top: Reinforced concrete.
 - 2. Channel and Bench: Concrete.
- C. Inlet Frames and Grates: Per FDOT Standard Specifications & Standard Plans. All units shall bear the lettering "STORM SEWER" cast into cover.
- D. Modified A curb inlets are not acceptable for County dedicated roads.

2.4 OUTFALL STRUCTURES

- A. Pipe systems shall be utilized for primary outfall of retention/detention areas.
- B. Weirs and flumes are acceptable for use as primary pond outfall structures or to primarily route stormwater to retention/detention areas at the end of downgradient roadways.

2.5 END TREATMENT

General: Construct pipe, head wall, apron, tapered sides, per FDOT Standard Specifications.

2.6 CONCRETE AND REINFORCEMENT

- A. Concrete: Portland cement mix, 3,000 psi.
 - 1. Cement: ASTM C 150, Type II.
 - 2. Fine Aggregate: ASTM C 33, sand.
 - 3. Coarse Aggregate: ASTM C 33, crushed gravel.
 - 4. Water: Potable.
- B. Reinforcement: Steel conforming to the following:
 - 1. Fabric: ASTM A 185, welded wire fabric, plain.
 - 2. Reinforcement Bars: ASTM A 615, Grade 60, deformed.
- C. Forms:
 - 1. Form Materials: Plywood, metal, metal-framed plywood, or other acceptable panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces without distortion or defects. Material shall be of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal.

2. Form Release Agent: Provide commercial formulation form-release agent with a maximum of 350 mg/l volatile organic compounds (VOCs) that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces. Release agent to be within allowable volatile limits according to applicable local, state and federal codes.

2.7 MASONRY

Materials for accessories shall be per FDOT Standard Specification 949. Mortar shall be one part Portland cement and three parts masonry sand to which shall be added lime putty in the amount of 50% of the volume of cement. Special commercial mortar mixes may be used if approved by the Engineer. All masonry materials shall conform to the latest applicable ASTM specifications. Set all masonry units in full beds of mortar, with full joints and strike all joints flush. Masonry reinforcements shall be galvanized Dur-O-Wal, or approved equal, and shall be installed at every other bed joint. Hollow block poured with re-bar.

2.8 CURING MATERIALS

Conform to FDOT Standard Specification 520-8.

2.9 BEDDING STONE

Subbase or base materials meeting requirements of FDOT Standard Specification 530.

PART 3 - EXECUTION

3.1 EXCAVATIONS FOR MANHOLES, INLETS, AND PIPE

Excavation shall be sufficient enough to leave at least 12 inches in the clear between their outer surfaces and the embankment. Excavation for all structures shall be made to the dimensions and elevations indicated on the drawings. Where the excavation is made below the indicated elevations, the excavation shall be restored to the proper elevation with suitable material approved by the engineer and without extra compensation.

3.2 PREPARATION OF FOUNDATION FOR BURIED STORMWATER SYSTEMS

- A. Grade trench bottom to provide a smooth, firm, stable, and rock-free foundation, throughout the length of the pipe.
- B. Remove unstable, soft, and unsuitable materials at the surface upon which pipes are to be laid, and backfill with bedding stone per FDOT Standard Specification 530 to indicated level.
- C. Shape bottom of trench to fit bottom of pipe. Fill unevenness with tamped sand backfill. Dig bell holes at each pipe joint to relieve the bells of all loads and to ensure continuous bearing of the pipe barrel on the foundation.

3.3 PIPE INSTALLATION

- A. Drawings (plans and details) indicate the general location and arrangement of the underground stormwater system piping. Location and arrangement of piping layout takes into account many design considerations. Install the piping as indicated, to the extent practical.
- B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert, unless approved otherwise by the Engineer. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's recommendations for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line and pull past each joint as it is completed. The pipe shall be carefully examined for defects and the inside cleaned. After placing pipe in the ditch, the ends shall be wiped free from all dirt, sand and foreign material. All pipe and joints shall be made, handled, and installed in strict accordance with the manufacturer's recommendations and instructions. Install pipe in accordance with FDOT Standard Specification 430.
- C. Install piping pitched down in direction of flow, at minimum slope per plans and in accordance with manufacturer's recommendations and specifications.
- D. Tunneling: Install pipe under streets or other obstructions that cannot be disturbed, by tunneling, jacking, or a combination of both. These methods of installation are not allowed for roadways under the 2-year warranty period.
- E. All RCP joints shall be sock/filter wrapped prior to backfilling unless a manufacturer- recommended coupling is used.
- F. Field repairs of pipeline shall be in strict accordance with manufacturer's recommendations and specifications.

3.4 MANHOLES

- A. General: Install manholes complete with accessories as indicated. Form continuous concrete or split pipe section channel and benches between inlets and outlet. Set tops of frames and covers flush with finish surface where manholes occur in pavements. Elsewhere, set tops 3 inches above finished grade, unless otherwise indicated.
- B. Place precast concrete manhole sections as indicated and install in accordance with ASTM C 891.
- C. Construct cast-in-place manholes as indicated.
- D. Provide rubber joint gasket complying with ASTM C 443 at joints of sections.

- E. Apply bituminous mastic coating at joints of sections.

3.5 INLETS

- A. Construct inlets to sizes and shapes indicated per FDOT Standard Specification 425-6, or County detail.
- B. Set frames and grates to elevations indicated.

3.6 END TREATMENT

Construct End Treatment per FDOT Standard Specification 430-4.6.

3.7 STORMWATER SYSTEM BACKFILL

Place and compact backfill material in accordance with FDOT specification 125-8.

3.8 CLOSING ABANDONED STORMWATER SYSTEMS

- A. Abandoned Piping: Close open ends of abandoned underground piping that is indicated to remain in place. Provide sufficiently strong closures to withstand hydrostatic or earth pressure that may result after ends of abandoned utilities have been closed.
 - 1. Close open ends of concrete pipe or structures with not less than 8-inch-thick brick masonry bulkheads.
 - 2. Close open ends of other piping with plastic plugs, or other acceptable methods suitable for size and type of material being closed. Wood plugs are not acceptable.
- B. Abandoned Structures: Remove structure and close open ends of the remaining piping or remove top of structure down to not less than 3 feet below final grade; fill structure with stone, rubble, gravel, or compacted dirt, to within 1 foot of top of structure remaining, and fill with concrete.

3.9 FIELD QUALITY CONTROL

- A. Testing: Perform testing of completed piping in accordance with local authorities having jurisdiction. All sampling and testing shall be conducted by a testing laboratory under the direction of a Professional Engineer, licensed in the State of Florida. Submit test results directly to the Engineer. The following tests shall be taken:
 - 1. 28-day compressive test of concrete, minimum of three test cylinders, for each day's pour and every 50 cubic yards of concrete poured thereafter.
 - 2. Air content, minimum one test for each day's pour.
 - 3. Slump test, minimum one test for each day's pour.
 - 4. Contractor shall replace materials removed for testing purposes.

5. Should any work or materials fail to meet the requirements set forth in the plans and specifications, contractor shall pay for retesting of same.
- B. Cleaning: Clear interior of piping and structures of dirt and other superfluous material as work progresses. Maintain swab or drag in piping and pull past each joint as it is completed.
1. In large, accessible piping, brushes and brooms may be used for cleaning.
 2. Place plugs in ends of uncompleted pipe at end of day or whenever work stops.
 3. Flush piping between manholes, to remove collected debris.
- C. Interior Inspection: Inspect piping to determine whether line displacement or other damage has occurred.
1. Make inspections after pipe between manholes has been installed, cleaned and approximately 2 feet of backfill is in place, and again at completion of project. Each section of pipe between structures is to show from either end on examination, a full circle of light. Each appurtenance to the system shall be of the specified size and form, to be neatly and substantially constructed, with the top set permanently to exact position and grade.
 2. If inspection indicates poor alignment, debris, displaced pipe, infiltration, or other defects, correct such defects and re-inspect. All repairs shown necessary by the inspections are to be made, broken or cracked pipe replaced, all deposits removed and the pipe left true to line and grade as herein specified, or shown on the plans, entirely clean and free from abnormalities and ready for use at no additional expense to the county.
- D. Trench Backfill atop Pipe:
1. In each compacted backfill layer, perform at least one field in place density test for each 100 feet or less of trench, but no fewer than two tests.
 2. Other tests may be required at Engineer's discretion.
- E. Clean Up: Before final inspection and acceptance, the Contractor shall clean ditches, shape shoulders and restore all disturbed areas, including street crossings, grass plots, to as good as condition as existed before work started. All trenches shall be leveled and loose material removed from pavement gutters, sidewalks, pipelines, and inlet sediment traps, employing hand labor, if necessary.

END OF SECTION 02600

SECTION 02900 – EROSION CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and General and Supplemental Provisions of the Contract, apply to this Section.

1.2 PRODUCTS

All materials used for erosion control shall meet federal, state and local requirements and shall conform with the requirements of FDOT Specification Section 104, 105, 107, 571, 981-987.

1.3 SUBMITTAL PROCEDURES

A. The Contractor shall take steps and make suitable provisions to prevent or minimize siltation and erosion which may result from, or be as a result of, his operations during the course of construction of these projects.

B. The Contractor shall maintain silt fence barriers, turbidity screens, tree protection, and other erosion control devices at all times during construction where siltation and erosion may occur and as shown on the project drawings.

C. The Contractor shall submit to the engineer, for written approval prior to construction, the methods to be used to control siltation and erosion. The Engineer's approval of the method to be used in no way relieves the Contractor of liability in case of a citation by federal, state, or local regulatory agency having jurisdiction thereof.

END OF SECTION 02900

SECTION 03300 – PORTLAND CEMENT CONCRETE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Specification Sections, apply to this Section.
- B. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (FDOT Specs) latest edition.
- C. GENERAL EXCEPTIONS: Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred herein, or otherwise listed in this document.

1.2 SUMMARY

This Section includes concrete work for the following:

- A. Roadways.
- B. Parking lots.
- C. Curbs and gutters.
- D. Walkways.
- E. Pads.
- F. Flumes.
- G. Curb Ramps

1.3 SUBMITTALS

- A. Product data for proprietary materials and items, including reinforcement and forming accessories, admixtures, joint systems, curing compounds, dry-shake finish materials, and others if requested by Engineer.
- B. Design mixes for each class of concrete. Include revised mix proportions when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Material certificates in lieu of material laboratory test reports when permitted by Engineer. Material certificates shall be signed by manufacturer and Contractor certifying that each material item complies with or exceeds requirements. Provide certification from admixture manufacturers that chloride content complies with requirements.

1.4 PROJECT CONDITIONS

- A. Traffic Control: Comply with requirements of Section, "Maintenance of Traffic."

- B. Utilize flagmen, barricades, warning signs and warning lights as required, as shown on plans, or as directed by the Engineer.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. Concrete shall conform to requirements of FDOT Specs, for curbs, gutters, walks, structures and miscellaneous concrete.
- B. Concrete for pavement shall conform to requirements of FDOT Specifications.
- C. Curb Ramps shall conform to FDOT Standard Plans.

2.2 REINFORCING MATERIALS

- A. Reinforcing Bars and Tie Bars: ASTM A 615, Grade 60, deformed.
- B. Welded Steel Wire Fabric: ASTM A 185.
 - 1. Furnish in flat sheets, not rolls, unless otherwise acceptable to Engineer.
- C. Deformed-Steel Welded Wire Fabric: ASTM A 497.
- D. Fabricated Bar Mats: Welded or clip-assembled steel bar mats, ASTM A 184. Use ASTM A 615, Grade 60 steel bars, unless otherwise indicated.
- E. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 60. Cut bars true to length with ends square and free of burrs.
- F. Hook Bolts: ASTM A 307, Grade A bolts, internally and externally threaded. Design hook bolt joint assembly to hold coupling against pavement form and in position during concreting operations, and to permit removal without damage to concrete or hook bolt.
- G. Supports for Reinforcement: Chairs, spacers, dowel bar supports and other devices for spacing, supporting, and fastening reinforcing bars, welded wire fabric, and dowels in place. Use wire bar-type supports complying with CRSI specifications. Use supports with sand plates or horizontal runners where base material will not support chair legs.

2.3 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type I.
 - 1. Use one brand of cement throughout Project unless otherwise acceptable to Engineer.

2. All concrete shall develop a 28-day compressive strength of 3000 psi. If any concrete should fail to meet the strength requirement the structure shall be removed as necessary to remove the defective concrete and shall then be rebuilt at the contractor's expense.
- B. Fly Ash: ASTM C 618, Type F.
 - C. Normal-Weight Aggregates: ASTM C 33, Class 4, and as follows. Provide aggregates from a single source unless otherwise approved by the Engineer.
 1. Maximum Aggregate Size: 1-1/2 inches.
 2. Do not use fine or coarse aggregates that contain substances that cause spalling.
 3. Local aggregates not complying with ASTM C 33 that have been shown to produce concrete of adequate strength and durability by special tests or actual service may be used when acceptable to Engineer.
 - D. Water: Potable.
 - E. Fiber Reinforcement: Synthetic fibers engineered and designed for secondary reinforcement of concrete slabs, complying with ASTM C 1116, Type III.

2.4 ADMIXTURES

- A. Provide concrete admixtures that contain not more than 0.1 percent chloride ions.
- B. Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required admixtures.
- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. High-Range Water-Reducing Admixture: ASTM C 494, Type F or Type G.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
- F. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.

2.5 CONCRETE MIX

- A. Prepare design mixes for each type and strength of normal-weight concrete per FDOT Standard Specifications. Use a qualified independent testing laboratory for preparing and reporting proposed mix designs. Do not use the Owner's field quality-control testing laboratory as the independent testing laboratory.
- B. Fiber Reinforcement: Add to mix at rate of 1.5 lb per cu. yd., unless manufacturer recommends otherwise.

- C. Adjustment to Concrete Mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, project conditions, weather, test results, or other circumstances warrant.

2.6 CONCRETE MIXING

Ready-Mixed Concrete: Comply with requirements of FDOT Standard Specifications.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

- A. Proof-roll prepared base or subgrade surface to check for unstable areas and verify need for additional compaction. Do not begin concrete work until such conditions have been corrected and are ready to receive paving.
- B. Remove loose material from compacted subbase surface immediately before placing concrete.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for paving to required lines, grades, and elevations. Install sufficient forms to allow continuous progress of work and so that forms can remain in place at least 24 hours after concrete placement.
- B. Check completed formwork and screeds for grade and alignment to following tolerances:
 - 1. Top of Forms: Not more than 1/8 inch in 10 feet.
 - 2. Vertical Face on Longitudinal Axis: Not more than 1/4 inch in 10 feet.
- C. Clean forms after each use and coat with form release agent as required to ensure separation from concrete without damage.

3.3 PLACING REINFORCEMENT

- A. General: Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars" for placing and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers and hangers, as required.

Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces. Maintain minimum cover to reinforcement.

- D. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- E. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities or replace units as required before placement. Set mats for a minimum 2-inch overlap to adjacent mats.

3.4 JOINTS

- A. General: Construct contraction, construction, and isolation joints true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to the centerline, unless indicated otherwise. When joining existing paving, place transverse joints to align with previously placed joints, unless indicated otherwise.
- B. Contraction Joints: Provide weakened-plane contraction joints, sectioning concrete into areas as shown on Drawings. If not specified on drawings intervals shall be not greater than 10 feet or less than 5 feet. Construct contraction joints for a depth equal to at least 1/4 of the concrete thickness, as follows:
 - 1. Tooled Joints: Form contraction joints in fresh concrete by grooving and finishing each edge of joint with a radiused jointer tool.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into hardened concrete when cutting action will not tear, abrade, or otherwise damage surface and before development of random contraction cracks.
 - 3. Inserts: Form contraction joints by inserting premolded plastic, hardboard, or fiberboard strips into fresh concrete until top surface of strip is flush with paving surface. Radius each joint edge with a jointer tool. Carefully remove strips or caps of two-piece assemblies after concrete has hardened. Clean groove of loose debris.
- C. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than 1/2 hour, unless paving terminates at isolation joints.
 - 1. Provide preformed galvanized steel or plastic keyway-section forms or bulkhead forms with keys, unless indicated otherwise. Embed keys at least 1-1/2 inches into concrete.
 - 2. Continue reinforcement across construction joints unless indicated otherwise.

- D. Expansion Joints: Form expansion joints of preformed joint filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 30 feet, unless indicated otherwise.
 - 2. Extend joint fillers full width and depth of joint, not less than ½ inch or more than 1 inch below finished surface where joint sealant is indicated. Place top of joint filler flush with finished concrete surface when no joint sealant is required.
 - 3. Furnish joint fillers in one-piece lengths for full width being placed wherever possible. Where more than one length is required, lace or clip joint filler sections together.
 - 4. Protect top edge of joint filler during concrete placement with a metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- E. Filler and Sealants: Submit specifications to Engineer for approval.
- F. Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one half of dowel length to prevent concrete bonding to one side of joint.

3.5 CONCRETE PLACEMENT

- A. Comply with requirements of FDOT Standard Specification for placing concrete.
- B. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place. No concrete will be placed on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness. Deposit concrete as nearly as practical to its final location to avoid segregation. When concrete placing is interrupted for more than ½ hour, place a construction joint.
- C. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- D. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping. Use equipment and procedures to consolidate concrete complying with FDOT Standard Specifications.
- E. Screed paved surfaces with a straightedge and strike off. Use bull floats or darbies to form a smooth surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces prior to beginning finishing operations.
- F. Place concrete in two operations; strike off initial pour for entire width of placement and to the required depth below finish surface. Lay welded wire fabric or fabricated bar mats immediately in final position. Place top layer of concrete, strike off, and screed. Remove and replace portions of bottom layer of concrete

that have been placed more than 15 minutes without being covered by top layer or use bonding agent if acceptable to Engineer.

- G. Curbs and Gutters: Shall be constructed in accordance with FDOT Specs. When automatic machine placement is used for curb and gutter placement, submit revised mix design and laboratory test results that meet or exceed requirements. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing as specified for formed concrete. If results are not acceptable, remove and replace with formed concrete.
- H. Slip-Form Pavers: When automatic machine placement is used for paving, submit revised mix design and laboratory test results that meet or exceed requirements. Produce paving to required thickness, lines, grades, finish, and jointing as required for formed paving. Compact subgrade of sufficient width to prevent displacement of paver machine during operations.
- I. When adjoining pavement lanes are placed in separate pours, do not operate equipment on concrete until pavement has attained 85 percent of its 28-day compressive strength, or sufficient strength to carry loads without damage or injury.
- J. Cold-Weather Placement: Comply with provisions of FDOT Standard Specifications. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
- K. Hot-Weather Placement: Place concrete complying with FDOT Standard Specification and as specified when hot weather conditions exist.

3.6 CONCRETE FINISHING

- A. Float Finish: Begin floating when bleed water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand-floating if area is small or inaccessible to power units. Finish surfaces to true planes within a tolerance of 1/8 inch in 10 feet as determined by a 10-foot-long straightedge placed anywhere on the surface in any direction. Cut down high spots and fill low spots. Refloat surface immediately to a uniform granular texture.
 - 1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across concrete surface perpendicular to line of traffic to provide a uniform fine line texture finish.
 - 2. Tine Finish: Apply to curb cut ramps and other areas as noted on the drawings. Finish shall be applied by an approved hand method and shall consist of transverse grooves which are 0.03 to 0.12 inch in width and 0.10 to 0.15 inch in depth, spaced at approximately 1/2 inch center to center.
- B. Final Tooling: Tool edges of paving, gutters, curbs, and joints formed in fresh concrete with a jointing tool to the following radius. Repeat tooling of edges and

joints after applying surface finishes. Eliminate tool marks on concrete surfaces.
Radius: ½ inch.

3.7 CONCRETE PROTECTION AND CURING

General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with the recommendations of FDOT Standard Specification 350-13 curing.

3.8 FIELD QUALITY CONTROL TESTING

A. A qualified independent testing and inspection laboratory, under the direction of a Professional Engineer, licensed in the State of Florida, shall sample materials, perform tests, and submit test reports during concrete placement as follows:

1. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
 - a. Slump: ASTM C 143; one test at point of placement for each compressive-strength test but no less than one test for each day's pour of each type of concrete. Additional tests will be required when concrete consistency changes.
 - b. Air Content: ASTM C 231, pressure method; one test for each compressive-strength test but no less than one test for each day's pour of each type of air-entrained concrete.
 - c. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F (4 deg C) and below and when 80 deg F (27 deg C) and above, and one test for each set of compressive-strength specimens.
 - d. Compression Test Specimens: ASTM C 31; one set of three standard cylinders for each compressive- strength test, unless directed otherwise. Mold and store cylinders for laboratory-cured test specimens except when field-cured test specimens are required.
 - e. Compressive-Strength Tests: ASTM C 39; one set for each day's pour of each concrete class, plus one set for each additional 50 cu. yd. Test two specimens at 28 days, and retain one specimen in reserve for earlier or later testing if required.
 - f. Contractor shall replace materials removed for testing purposes. Should any work or materials fail to meet the requirements set forth in the plans and specifications, contractor shall pay for retesting of same.
2. Basis for acceptance of concrete will be per FDOT Section 346-10 and 346-11.

B. Test results will be reported in writing to Engineer, concrete manufacturer, and Contractor within 24 hours of testing. Reports of compressive strength tests shall

contain the Project identification name and number, date of concrete placement, name of concrete testing laboratory, concrete type and class, location of concrete batch in the work, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-day and 28-day tests.

- C. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted but shall not be used as the sole basis for acceptance or rejection.
- D. Additional Tests: The testing laboratory will make additional tests of the concrete when test results indicate slump, air entrainment, concrete strengths, or other requirements have not been met, as directed by Engineer. Testing laboratory may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed.

3.9 REPAIRS AND PROTECTION

- A. Remove and replace concrete work that is broken, damaged, or defective, or does not meet the requirements of this Section.
- B. Drill test cores where directed by Engineer when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory concrete areas with Portland cement concrete bonded to paving with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from concrete pavement for at least 14 days after placement. When construction traffic is permitted, maintain concrete as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete work free of stains, discoloration, dirt, and other foreign material. Sweep concrete paving not more than 2 days prior to date scheduled for Substantial Completion inspections.

END OF SECTION 03300

SECTION 04060 – MAINTENANCE OF TRAFFIC

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Specifications Sections, apply to work of this section.
- B. Unless otherwise specified on the plan sheets or in other sections of this contract, all materials and work shall conform to the applicable requirements in the following documents:
 - 1. Florida Department of Transportation Design Standards, latest edition.
 - 2. Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
 - 3. USDOT, Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition, Temporary Traffic Controls.
 - 4. FDOT Minimum Specifications for Traffic control and Devices, latest edition.
- C. GENERAL EXCEPTIONS: Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred here in, or otherwise listed in this document.

1.2 SUMMARY OF WORK

The work under this section includes the maintenance of traffic within the limits of the project for the duration of construction.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 RESPONSIBILITIES OF CONTRACTOR

- A. Control and maintain traffic and provide for the safety of the work in accordance with Maintenance and Traffic Plan included in the contract documents. Conduct operations in a manner that will not interrupt pedestrian and vehicle traffic except as approved by the Engineer. Confine the work area to the smallest area practical

to allow the maximum use of the street and sidewalk and to reduce any hazard to vehicles and pedestrians to a minimum.

- B. Maintain access to properties that adjoin the work. Contact property owners and assure that access is coordinated prior to commencing work that may block access.
- C. Furnish all labor, materials, tools, supplies, equipment, and machinery needed to fully comply with the specifications described on the plan sheets and in this Section. At all times, the Contractor shall use workers and traffic control devices necessary to comply with all applicable provisions contained in the reference documents listed in Section 1.1.
- D. Furnish all labor and materials necessary to control dust on the project site at all times.
- E. Furnish all items necessary to secure the project site.

3.2 PENALTIES AND SUSPENSION OF WORK

The Engineer may verbally direct the Contractor to immediately suspend work if violation of safety regulations is found. In such an event, Contractor shall immediately stop work and secure any potential hazards from the public until the violation is corrected to satisfaction of the Engineer. Law enforcement officers may be called to assist the Engineer in suspending work if the Contractor is not responsive. Suspension of work for violation of safety regulations shall not be grounds for a contract time extension.

END OF SECTION 04060

SECTION 05750 –SODDING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of the Contract, including General and Supplementary Conditions and other Specification Sections, apply to this Section.
- B. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (FDOT Specs) latest edition.
- C. GENERAL EXCEPTIONS: Any reference to FDOT Standard Specifications for Road and Bridge Construction (latest edition) Division I General Requirements & Covenants shall be excluded and not applicable to any specification referred herein, or otherwise listed in this document.

1.2 SUMMARY OR WORK

Establish a stand of grass within sodded areas to ensure a healthy stand of grass.

Extent of grassing work is as specified or shown on the construction plans. Sodded areas disturbed during construction shall be re-sodded to match existing. Areas disturbed beyond specified construction area shall be sodded, at no additional expense, either to match existing or as per Engineer and/or County/CEI direction.

1.3 DELIVERY AND STORAGE

- A. General: Seed, fertilizer, sod and other grassing materials shall be stored under cover and protected from damaged which would make them unacceptable for use.
- B. Seed: All seed shall be labeled in accordance with U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act in effect on the date of invitation for bids. All seed shall be furnished in sealed standard containers, unless exception is granted in writing. Seed, which has become wet, moldy, or otherwise damaged in transit or in storage, shall not be used.
- C. Fertilizer: Fertilizer shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer, which becomes caked or otherwise damaged, making it unsuitable for use, shall not be used.
- D. Sod: Do not use sod which has been cut (stripped) for more than 48 hours. Stack all sod that is not planted 24 hours after cutting and maintain proper moist condition.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Lime
- B. Fertilizer
- C. Sod
 - 1. Bahia Sod
 - 2. St. Augustine Sod
 - 3. All sod shall be healthy Bahia and/or St. Augustine Sod. Sod shall be strongly rooted, free of weeds and undesirable grasses and capable of providing vigorous growth and development when planted. Sod shall match existing species where restoration is required as a result of the Contractor's work.

PART 3 - EXECUTION

3.1 REQUIREMENTS

All areas disturbed by the Contractor's operations, shall be grassed, unless otherwise noted.

3.2 PLANTING SEED: Planting Seed shall be in accordance with FDOT Section 570 and 981

- A. Grading: Areas to be grassed shall be graded to remove depressions, undulations, and irregularities in the surface before grassing. Adhere to grades as shown on plans.
- B. Tillage: The area to be grassed shall be thoroughly tilled to a depth of four inches using a plow and disc harrow or rotary tilling machinery until a suitable bed has been prepared and no clods or clumps remain larger than 1½ inches in diameter. Remove sticks, roots, and rubbish.
- C. Applying Lime: The pH of the soil shall be determined. If the pH is below 5.0, sufficient lime shall be added to provide a pH between 5.5 and 6.5. The lime shall be thoroughly incorporated into the top three to four inches of the soil. Lime and fertilizer may be applied in one operation.
- D. Applying Fertilizer: Fertilizer shall be applied in accordance with the manufacturer recommendations and shall be thoroughly incorporated into the top three to four inches of soil before sod is installed. FDOT Section 982.
- E. Maintenance: Maintenance shall begin immediately following the last operation of grassing and continue until final acceptance. Maintenance shall include watering,

mowing, replanting, and all other work necessary to produce a uniform stand of grass, all at the contractor's expense.

3.3 PLANTING SOD: Planting Seed shall be in accordance with FDOT Section 570 and 981

- A. Use Bahia Sod or St. Augustine sod as noted on the plans. The sod shall have a thick mat of roots (minimum 2") with enough adhering soil to assure growth. Apply sod within 48 hours of stripping. Protect sod against drying and breaking of rolled strips.
- B. Placement: Prepare the ground by loosening the soil. Place sod on the prepared soil to form a solid mass with tightly fitted joints. Ensure the butt ends and sides of sod strips do not overlap. Stagger strips to avoid a continuous downhill seam. Tamp or roll lightly to ensure contact with subgrade. Tamp the outer edges of the sodded area to produce a smooth contour. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass. Water sod thoroughly with a fine spray immediately after planting.
- C. Applying Lime: The pH of the soil shall be determined. If the pH is below 5.0, sufficient lime shall be added to provide a pH between 5.5 and 6.5. The lime shall be thoroughly incorporated into the top three to four inches of the soil. Lime and fertilizer may be applied in one operation.
- D. Watering: Keep sod continuously moist to a depth below the root zone for three weeks after placement. If there is no water available to the site, the Contractor shall provide the water. Do not water in excess of 1" (one inch) per square yard per week for establishment.
- E. Clean-Up: All excess soil, excess grass materials, stones, pallets and other waste shall be removed from the site daily and not allowed to accumulate. All paved areas shall be kept clean at all times.
- F. Maintenance: Maintain sod by watering, fertilizing, weeding, mowing, trimming and other operations such as rolling, re-grading, and re-planting as required to establish a lawn free of eroded or bare areas and acceptable to the Engineer and/or County/CEI. Where inspected work and materials do not comply with requirements, replace rejected work and continue maintenance until re-inspected by Engineer and/or County/CEI and found to be acceptable. Remove rejected materials promptly from the project site. FDOT Section 570-4.

END OF SECTION 05750

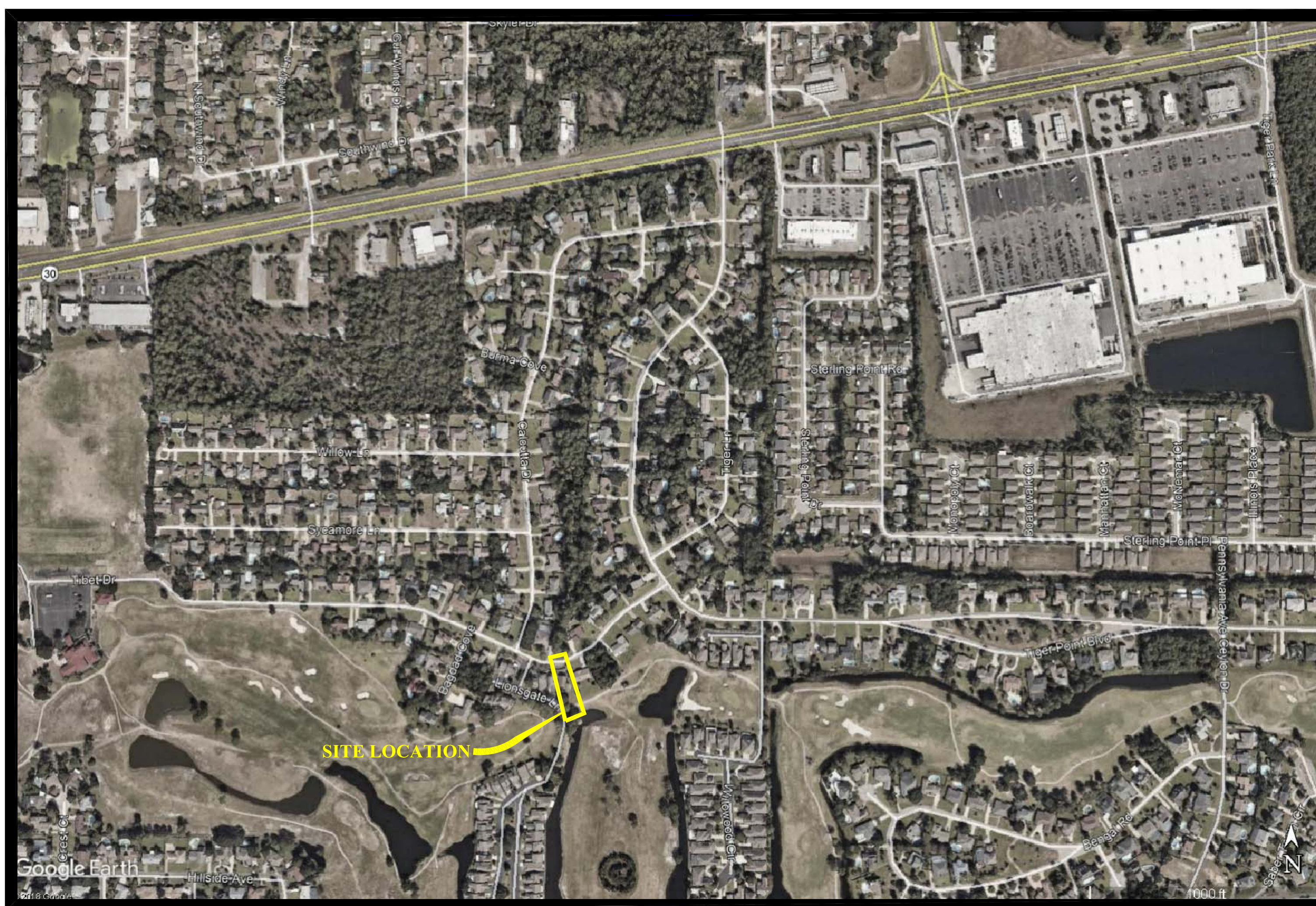
CONSTRUCTION PLANS FOR: TIBET DRIVE DRAINAGE

CITY OF GULF BREEZE ~ SANTA ROSA COUNTY FLORIDA

Dated: SEPTEMBER 2019

GENERAL NOTES:

1. ALL ELEVATIONS AND SLOPES PROVIDED IN THESE PLANS ARE TO BE STRICTLY ADHERED TO. THERE CAN BE NO MODIFICATIONS OR REVISIONS TO THESE PLANS WITHOUT PRIOR FIELD INSPECTION AND WRITTEN APPROVAL FROM THE ENGINEER OF RECORD AND APPROVAL FROM SANTA ROSA COUNTY.
2. ALL NECESSARY PERMITS AND APPROVALS FROM THE AGENCIES GOVERNING THIS WORK SHALL BE SECURED PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION COMMENCEMENT.
3. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF VARIOUS GOVERNMENTAL APPROVALS AND PERMITS.
4. ALL CONSTRUCTION SHALL COMPLY WITH THE SANTA ROSA COUNTY LAND DEVELOPMENT CODE AND THE STANDARDS OF THE LOCAL WATER AND SEWER UTILITY PROVIDER AND THE FLORIDA DEPARTMENT OF TRANSPORTATION. IF THERE ARE ANY DIFFERENCES, THE MOST STRINGENT SHALL PREVAIL.
5. CONTRACTOR SHALL NOTIFY IN WRITING, SANTA ROSA COUNTY, THE LOCAL WATER AND SEWER UTILITY PROVIDER, AND THE ENGINEER OF RECORD AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. UTILITY PROVIDER PERSONNEL SHALL BE PRESENT FOR ALL TAPS OF PROPOSED WATER AND SEWER UTILITIES TO EXISTING WATER AND SEWER UTILITIES.
6. ALL SUITABLE EXCAVATED MATERIAL IS TO REMAIN ON SITE AND BE STOCK PILED AT LOCATIONS DETERMINED BY THE ENGINEER OF RECORD. UNSUITABLE EXCAVATED MATERIALS ARE TO BE REMOVED FROM THE SITE OR SPREAD EVENLY AT LOCATIONS DETERMINED BY THE ENGINEER OF RECORD.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AT LEAST 24 HOURS PRIOR TO BEGINNING AND COMPLETING EACH PHASE OF CONSTRUCTION, I.E. RETENTION POND CONSTRUCTION, SUB-GRADE PREPARATION, BASE WORK, PAVING, CURBING, ETC. FAILURE TO COMPLY WILL CAUSE DELAY OF DISBURSEMENT OF FUNDS TO THE CONTRACTOR AND DELAY OF FINAL CERTIFICATION BY THE ENGINEER OF RECORD.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ANY EXISTING IMPROVEMENTS AND/OR FEATURES, INCLUDING PERMANENT SURVEY MARKERS (PROPERTY CORNERS) AND BENCHMARKS WHICH ARE NOT DESIGNATED TO BE REMOVED OR ALTERED ON THE PLANS.
9. ALL DIMENSIONS AND GRADES ON THESE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE RE-DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
10. ALL DISTURBED AREAS WHICH ARE NOT PAVED SHALL BE STABILIZED WITH SEEDING FERTILIZER AND MULCH, OR SOD. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER (PRIOR TO INCORPORATION INTO THE PROJECT) A CERTIFICATION FROM THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES DIVISION OF PLANT INDUSTRY STATING THAT THE SOD/HAY/STRAW/MULCH/SEED MATERIALS ARE FREE OF NOXIOUS WEEDS INCLUDING TROPICAL SODA APPLE. SOD IS THE RECOMMENDED SLOPE STABILIZATION METHOD.
11. THE CONTRACTOR SHALL ESTABLISH NEW BENCHMARKS PRIOR TO TREE REMOVAL.
12. CONTRACTOR IS ENCOURAGED TO VISIT THE SITE PRIOR TO AND CONTACT THE PROJECT ENGINEER WITH ANY QUESTIONS REGARDING THE SCOPE OF PROJECT TO PLACING A BID.
13. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS DURING CONSTRUCTION WHICH SHOW "AS-BUILT" CONDITIONS OF ALL WORK INCLUDING PIPING, DRAINAGE STRUCTURES, OUTLET STRUCTURES, DIMENSIONS, ELEVATIONS AND ALL GRADING, ETC. THESE DRAWINGS SHALL BE PROVIDED TO THE ENGINEER OF RECORD A MINIMUM OF ONE WEEK PRIOR TO THE REQUEST FOR FINAL INSPECTION.
14. THE ENGINEER OF RECORD SHALL PROVIDE TO SANTA ROSA COUNTY, AND F.D.E.P. AN "AS-BUILT" CERTIFICATION FOR VERIFICATION AND APPROVAL.
15. THE ENGINEER OF RECORD TAKES ABSOLUTELY NO RESPONSIBILITY FOR ANY ITEM LABELED "BY OTHERS" OR FOR SUCH ITEMS AS RETAINING WALLS, BUILDINGS, SUB-SURFACE GEOTECHNICAL CONDITIONS, FOUNDATION DESIGN, OR ANY EXISTING WATER AND SEWER UTILITIES.
16. THE COUNTY, ITS' OFFICERS, AND EMPLOYEES SHALL BE HELD HARMLESS FROM ANY DAMAGES TO PERSONS OR PROPERTY WHICH MIGHT RESULT FROM WORK OR ACTIVITY UNDERTAKEN BY THE CONTRACTOR AND AUTHORIZED BY THE COUNTY.
17. ALL STORM PIPING JOINTS ARE TO BE WRAPPED IN WOVEN FILTER FABRIC.
18. ALL PATCHING, PAVING / OVERLAY AND STORM DRAINAGE CONSTRUCTION TO CONFORM TO SANTA ROSA COUNTY STANDARDS AND FDOT STANDARD SPECIFICATIONS LATEST EDITION.
19. ACCESS TO SITE IS VERY CONSTRAINED. CONTRACTOR SHOULD ANTICIPATE THE LAYDOWN AREA BEING APPROXIMATELY 1/4 MILE FROM THE SITE AND ACCESS ONLY ALONG THE EXISTING 20 FOOT WIDE DRAINAGE EASEMENT. REFER TO MAP ON SHEET 3.
20. CONTRACTOR SHALL USE CAUTION DURING COMPACTION OPERATIONS NEAR STRUCTURES.



VICINITY MAP
NOT TO SCALE

OWNER: BOARD OF COUNTY COMMISSIONERS
SANTA ROSA COUNTY, FLORIDA

SAM PARKER - CHAIRMAN ---- DISTRICT I
ROBERT A. "BOB" COLE ---- DISTRICT II
W.D. "DON" SALTER - VICE CHAIRMAN ---- DISTRICT III
DAVE PIECH ---- DISTRICT IV
LANE LYNCHARD ---- DISTRICT V

UTILITY NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING SUNSHINE UTILITIES 48-HOURS PRIOR TO CONSTRUCTION COMMENCEMENT FOR EXISTING UTILITY LOCATION. (SUNSHINE UTILITIES: 1-800-432-4770) EXISTING UTILITIES, WHICH MAY OR MAY NOT BE INDICATED ON THESE PLANS, ARE SHOWN IN THEIR APPROXIMATE LOCATION ONLY.
2. CONTRACTOR SHALL VERIFY SIZE, LOCATION, AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE WITH NO ADDITIONAL COMPENSATION.
3. UTILITY SYSTEM PERSONNEL SHALL BE PRESENT FOR ALL EXCAVATIONS NEAR EXISTING UTILITIES. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY SYSTEM AT LEAST 48 HOURS PRIOR TO INSTALLATION OF PROPOSED FACILITIES ADJACENT TO EXISTING FACILITIES.
4. CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENT OF EXISTING UTILITIES IF PROPOSED IMPROVEMENTS IMPACT EXISTING UTILITIES.

UTILITY COMPANIES

- | | |
|--|---|
| CITY OF GULF BREEZE
MR. THOMAS LAMBERT
ASSISTANT DIRECTOR OF
PUBLIC WORKS - GAS CONTACT
1070 SHORELINE DRIVE
GULF BREEZE, FL 32561
PHONE: 850-934-4094
EMAIL: tlambert@gulfbreezefl.gov | CITY OF GULF BREEZE
MR. JASON RANDELL
DIRECTOR OF PUBLIC WORKS
P.O. BOX 640
GULF BREEZE, FL 32562
PHONE: 850-934-5108
EMAIL: jrandedl@gulfbreezefl.gov |
| CENTURYLINK / LEVEL 3
MR. JOSEF WIGGINS
7891 SEARS BOULEVARD
PENSACOLA, FL 32514
PHONE: 850-537-2272
EMAIL: josefwiggins@centurylink.com | GULF POWER COMPANY
MR. CHAD SWAILS
ONE ENERGY PLACE
5111 DOGWOOD DRIVE, #4493
PENSACOLA, FL 32520
PHONE: 850-429-2446
EMAIL: chadswails@nexteraenergy.com |
| COX CABLE
852 GULF BREEZE PKWY.
GULF BREEZE, FL 32561
PHONE: 850-677-0298 | AT&T FLORIDA
MR. STAN WRIGHT
605 W. GARDEN STREET, RM. 218
PENSACOLA, FL 32502
PHONE: 850-436-1488
EMAIL: sw1778@att.com |
| MIDWAY WATER SYSTEM
MR. JODY ANDERSON
4971 GULF BREEZE PKWY.
GULF BREEZE, FL 32563
PHONE: 850-932-5188
EMAIL: jonderson@midwaywater.com | UTILITY SERVICE COMPANY
MR. BILL LEE
4326 GULF BREEZE PKWY.
GULF BREEZE, FL 32563
PHONE: 850-932-5342
EMAIL: utilityservice@uscofl.com |
| MEDIACOM
MR. TOMMY GREEN
1613 NANTAHALA BEACH DRIVE
GULF BREEZE, FL 32563
PHONE: 850-934-2564
EMAIL: tgreen@mediacomcc.com | CITY OF GULF BREEZE
MS. JENA ROBERGE
UTILITY MANGER
1108 CORONADO DRIVE
GULF BREEZE, FL 32563
PHONE: 850-934-4057
EMAIL: jROBERGE@GULFBREEZEFL.GOV |

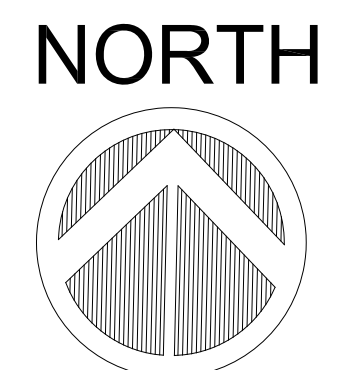
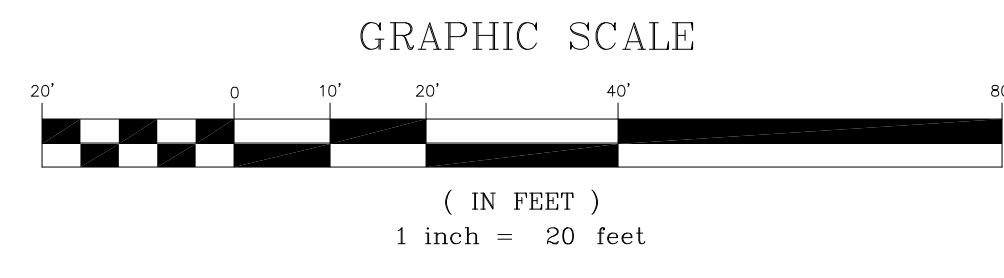
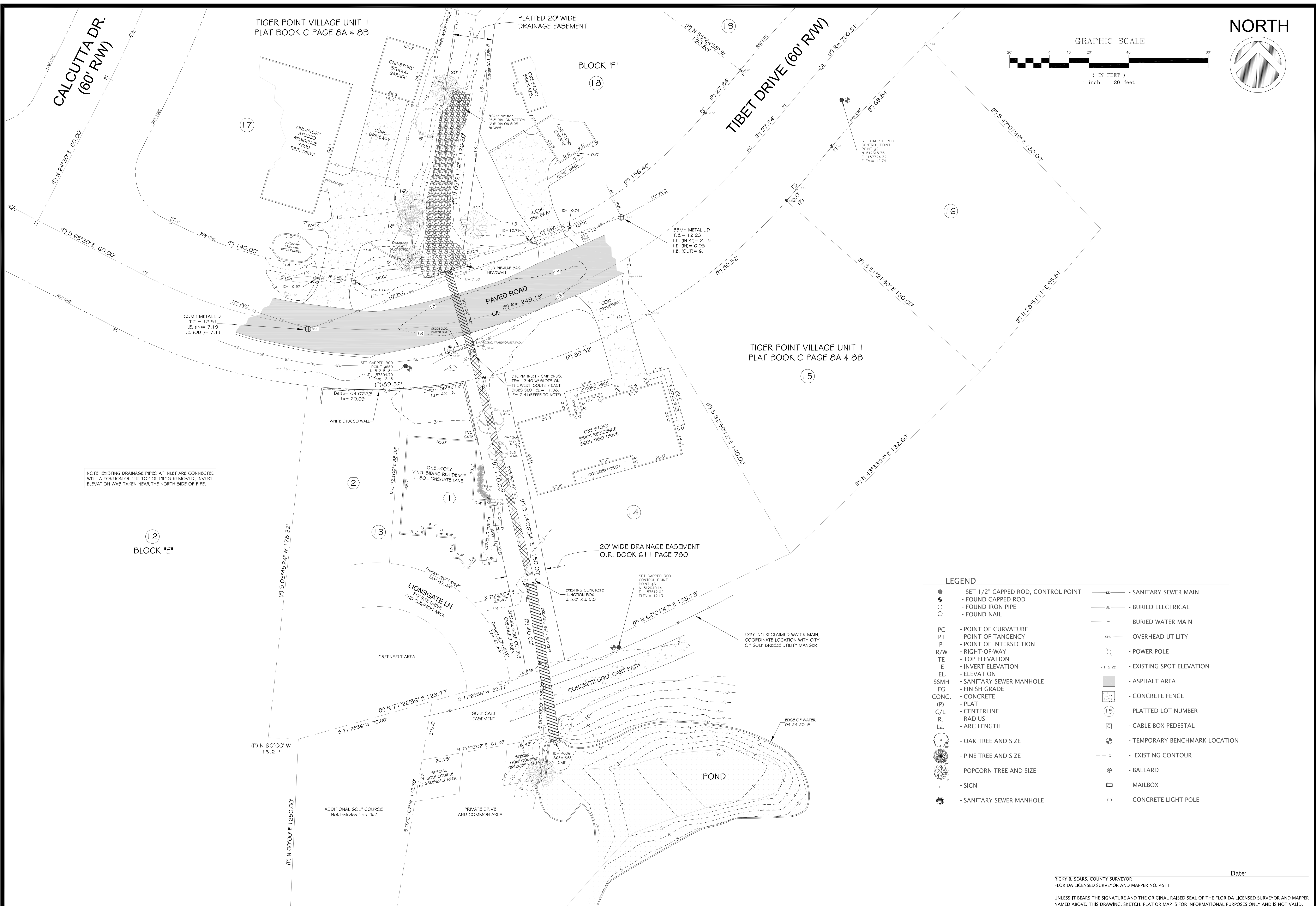
INDEX OF DRAWINGS

SHEET NO.	SHEET DESCRIPTION
SHEET 1	COVER SHEET AND GENERAL NOTES
SHEET 2	EXISTING CONDITIONS & TOPOGRAPHIC SURVEY
SHEET 3	DEMOLITION AND EROSION CONTROL NOTES
SHEET 4	PLAN & PROFILE SHEET PROPOSED FACILITIES
SHEET 5	PROJECT DETAIL SHEET
SHEET 6	FDOT FY 2019-20 STANDARD DETAILS
SHEET 7	FDOT FY 2019-20 STANDARD DETAILS
SHEET 8	FDOT FY 2019-20 STANDARD DETAILS

SANTA ROSA COUNTY ENGINEERING
6051 OLD BAGDAD HIGHWAY
SUITE 300
MILTON, FLORIDA 32583
(850) 981-7100

COVER SHEET - VICINITY MAP & GENERAL NOTES
FOR: TIBET DRIVE DRAINAGE
SANTA ROSA COUNTY, FLORIDA

REVISIONS:	N/A N/A N/A
DRAWN BY:	D.C.G.
DATE DRAWN:	05-20-2019
FIELD DATE:	04-24-2019
F.B.	131
PAGE	51-59 & 77
PAGE	N/A
PROJECT NO.	2019H-031-000
It's the Law! 811	
CALL 811 BEFORE YOU DIG 	
CALLING 811 IN FLORIDA ROUTES YOU TO SUNSHINE STATE THE CALL.	
SHEET	1 OF 8



NOTE: EXISTING DRAINAGE PIPES AT INLET ARE CONNECTED WITH A PORTION OF THE TOP OF PIPES REMOVED. INVERT ELEVATION WAS TAKEN NEAR THE NORTH SIDE OF PIPE.

LEGEND	
●	- SET 1/2" CAPPED ROD, CONTROL POINT
○	- FOUND CAPPED ROD
○	- FOUND IRON PIPE
○	- FOUND NAIL
PC	- POINT OF CURVATURE
PT	- POINT OF TANGENCY
PI	- POINT OF INTERSECTION
R/W	- RIGHT-OF-WAY
TE	- TOP ELEVATION
IE	- INVERT ELEVATION
EL	- ELEVATION
SSMH	- SANITARY SEWER MANHOLE
FG	- FINISH GRADE
CONC.	- PLAT
(P)	- CENTERLINE
C/L	- RADIUS
R.	- ARC LENGTH
La.	- ARC LENGTH
○	- OAK TREE AND SIZE
○	- PINE TREE AND SIZE
○	- POPCORN TREE AND SIZE
○	- SIGN
○	- SANITARY SEWER MANHOLE
—	- SANITARY SEWER MAIN
—	- BURIED ELECTRICAL
—	- BURIED WATER MAIN
—	- OVERHEAD UTILITY
○	- POWER POLE
○	- EXISTING SPOT ELEVATION
■	- ASPHALT AREA
■	- CONCRETE FENCE
○	- PLATTED LOT NUMBER
○	- CABLE BOX PEDESTAL
○	- TEMPORARY BENCHMARK LOCATION
○	- EXISTING CONTOUR
○	- BALLARD
○	- MAILBOX
○	- CONCRETE LIGHT POLE

SANTA ROSA COUNTY ENGINEERING
 6051 OLD BAGDAD HIGHWAY
 SUITE 300
 MILTON, FLORIDA 32583
 (850) 981-7100

EXISTING CONDITIONS & TOPOGRAPHIC SURVEY
FOR: TIBET DRIVE DRAINAGE
 SANTA ROSA COUNTY, FLORIDA

REVISIONS:
 N/A
 N/A
 N/A

DRAWN BY:
 D.C.G.

DATE DRAWN:
 05-20-2019

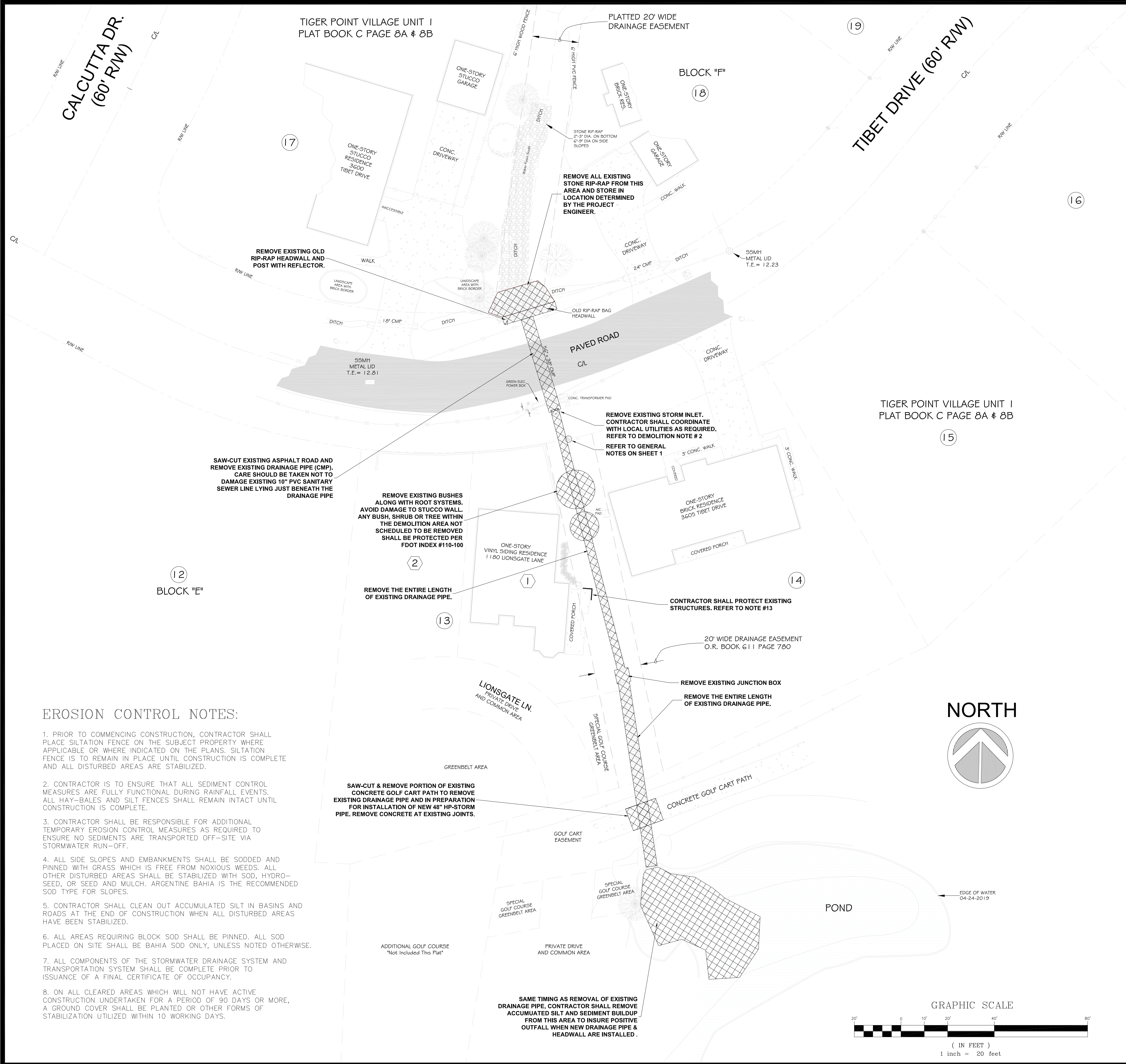
FIELD DATE:
 04-24-2019

F.B. 131
PAGE 51-59 & 77
PAGE N/A

PROJECT NO.
 2019H-031-000

It's the Law!
811
 CALL 48 HOURS BEFORE YOU DIG
 CALLING 811 IN FLORIDA ROUTES YOU TO SUNSHINE STATE ONE CALL
SHEET
2 OF 8

Date: _____
 RICKY B. SEARS, COUNTY SURVEYOR
 FLORIDA LICENSED SURVEYOR AND MAPPER NO. 4511
 UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND MAPPER NAMED ABOVE, THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

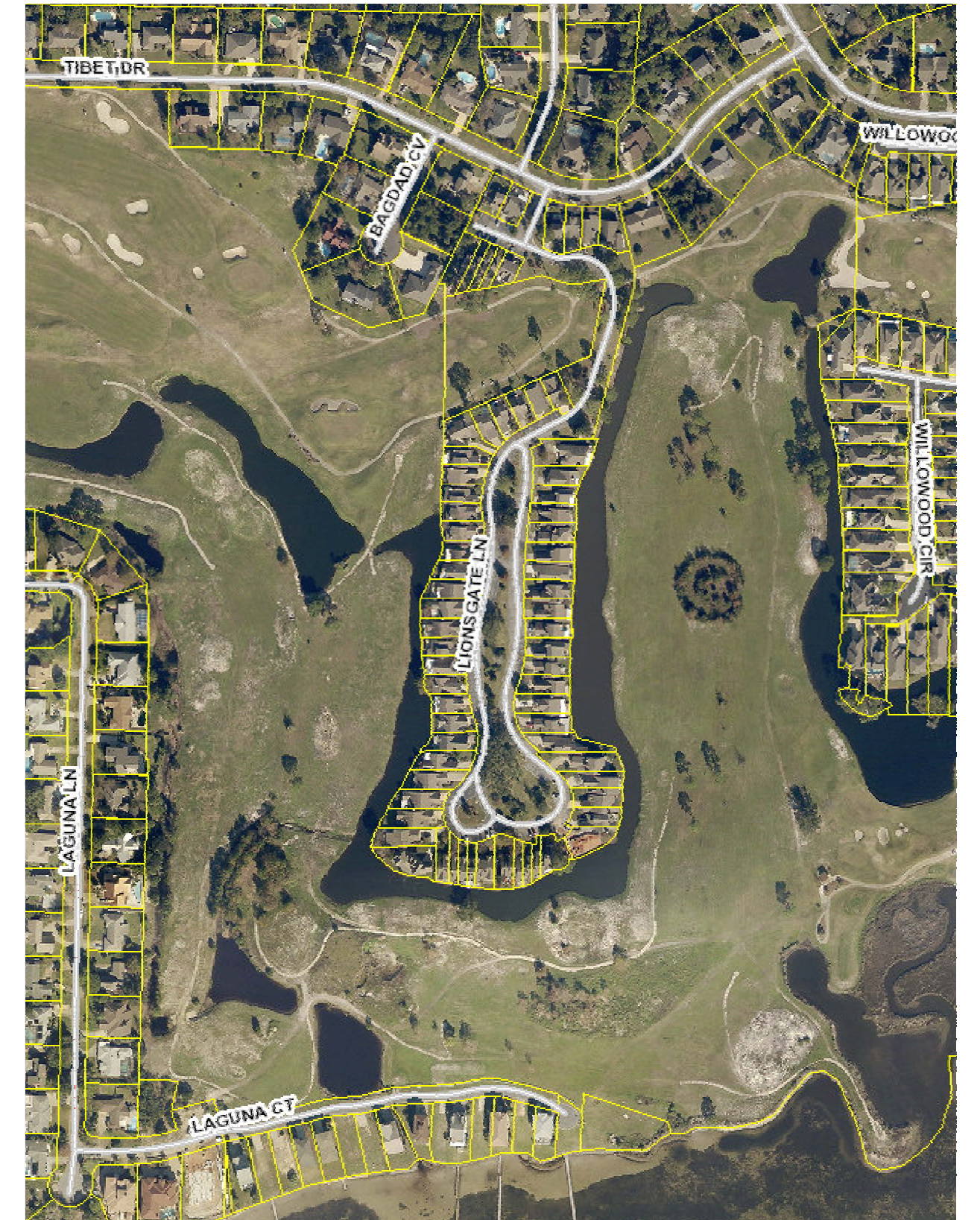


EROSION CONTROL NOTES:

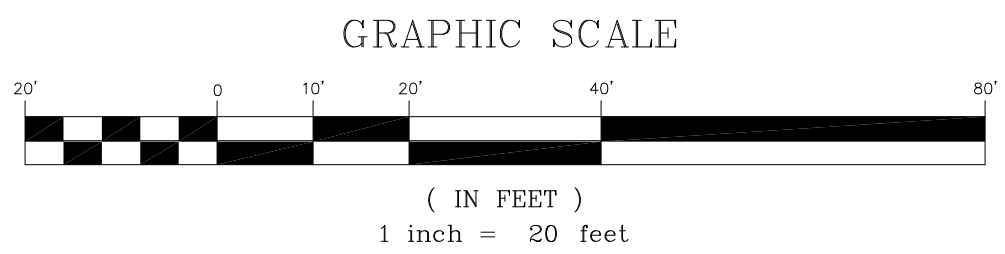
1. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL PLACE SILTATION FENCE ON THE SUBJECT PROPERTY WHERE APPLICABLE OR WHERE INDICATED ON THE PLANS. SILTATION FENCE IS TO REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED.
2. CONTRACTOR IS TO ENSURE THAT ALL SEDIMENT CONTROL MEASURES ARE FULLY FUNCTIONAL DURING RAINFALL EVENTS. ALL HAY-BALES AND SILT FENCES SHALL REMAIN INTACT UNTIL CONSTRUCTION IS COMPLETE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL TEMPORARY EROSION CONTROL MEASURES AS REQUIRED TO ENSURE NO SEDIMENTS ARE TRANSPORTED OFF-SITE VIA STORMWATER RUN-OFF.
4. ALL SIDE SLOPES AND EMBANKMENTS SHALL BE SODDED AND PINNED WITH GRASS WHICH IS FREE FROM NOXIOUS WEEDS. ALL OTHER DISTURBED AREAS SHALL BE STABILIZED WITH SOD, HYDRO-SEED, OR SEED AND MULCH. ARGENTINE BAHIA IS THE RECOMMENDED SOD TYPE FOR SLOPES.
5. CONTRACTOR SHALL CLEAN OUT ACCUMULATED SILT IN BASINS AND ROADS AT THE END OF CONSTRUCTION WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.
6. ALL AREAS REQUIRING BLOCK SOD SHALL BE PINNED. ALL SOD PLACED ON SITE SHALL BE BAHIA SOD ONLY, UNLESS NOTED OTHERWISE.
7. ALL COMPONENTS OF THE STORMWATER DRAINAGE SYSTEM AND TRANSPORTATION SYSTEM SHALL BE COMPLETE PRIOR TO ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY.
8. ON ALL CLEARED AREAS WHICH WILL NOT HAVE ACTIVE CONSTRUCTION UNDERTAKEN FOR A PERIOD OF 90 DAYS OR MORE, A GROUND COVER SHALL BE PLANTED OR OTHER FORMS OF STABILIZATION UTILIZED WITHIN 10 WORKING DAYS.

DEMOLITION NOTES:

1. CONTRACTOR SHALL HAVE A MINIMUM OF FIVE (5) YEARS OF EXPERIENCE IN DEMOLITION AND SITE CLEARING. ONCE DEMOLITION PHASE HAS COMMENCED, IT SHALL BE CONTINUED UNTIL COMPLETED.
2. BEFORE COMMENCING DEMOLITION THE CONTRACTOR SHALL NOTIFY ALL UTILITIES HAVING ABOVE OR BELOW GRADE SERVICES AND/OR STRUCTURES WITHIN THE CONSTRUCTION AREA AND IF NECESSARY ARRANGE FOR A UTILITY REPRESENTATIVE TO BE ON SITE DURING DEMOLITION.
3. EXCAVATIONS FROM DEMOLISHED DRAINAGE PIPES AND STRUCTURES SHALL NOT BE FILLED WITH ANY MATERIAL SUBJECT TO DETERIORATION. VOIDS IN EXCAVATION AREAS SHALL NOT BE PERMITTED. ALL OPEN EXCAVATION AREAS WHERE NEW DRAINAGE STRUCTURES ARE TO BE PLACED SHALL BE PROTECTED IN SUCH A WAY AS NOT TO ALLOW ANY DAMAGE TO SURROUNDING STRUCTURES OR PERSONS.
4. NO PART OF THE STREETS, DRIVEWAYS OR PUBLIC WALKS SHALL BE OCCUPIED BY THE CONTRACTOR AND THERE EQUIPMENT. REFER TO GENERAL NOTES FOR CONSTRUCTION STAGING AREA.
5. THE CONTRACTOR'S OPERATION SHALL BE CONFINED TO THE AREAS INCLUDED IN THE DEMOLITION. REFER ALSO TO NOTE #12
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO PRIVATE OR PUBLIC PROPERTY AS A RESULT OF THERE FAULT OR NEGLIGENCE IN CONNECTION WITH THE PROSECUTION OF THE WORK AND SHALL BE RESPONSIBLE FOR THE PROPER CARE AND PROTECTION OF ALL DEMOLITION WORK PERFORMED UNTIL COMPLETION AND FINAL ACCEPTANCE.
7. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND ORDINANCES GOVERNING THE DISPOSAL OF MATERIAL, DEBRIS, RUBBISH AND TRASH OFF OR ON THE PROJECT AREA, AND SHALL COMMIT NO TRESPASS ON ANY PRIVATE PROPERTY IN THE DISPOSAL OF THE MATERIAL WITHOUT SECURING PERMISSION OF THE PROPERTY OWNERS INVOLVED.
8. THE CONTRACTOR SHALL REMOVE ALL DEMOLISHED MATERIALS AND DEBRIS FROM THE PROJECT SITE AS SOON AS POSSIBLE. DEMOLITION DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF AT AN APPROVED LOCATION. NO DEMOLITION DEBRIS SHALL BE ALLOWED TO BE STORED ON SITE.
9. THE CONTRACTOR SHALL ALLOW THE PROJECT ENGINEER OR THEIR REPRESENTATIVE UNHINDERED ACCESS TO THE DEMOLITION AREAS AND ASSIST THE PROJECT ENGINEER IN CARRYING OUT INSPECTIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTIONS AND RELATED WORK OF ALL SUBCONTRACTOR THEY EMPLOY ON THIS PROJECT.
11. POTENTIAL DELAYS AS A RESULT OF LACK OF COORDINATION WITH LOCAL UTILITIES WILL NOT BE CONSIDERED GROUNDS FOR CLAIM FOR ADDITIONAL TIME EXTENSIONS.
12. LIMITATIONS ON PROJECT SITE USAGE AND ACCESSIBILITY THAT IMPACT SITE UTILIZATION SHALL BE COORDINATED IN SUCH A WAY AS TO MINIMIZE LOST TIME AND SPACE FOR STORAGE OF MATERIALS AND EQUIPMENT ON SITE.
13. CONTRACTOR SHALL PROTECT ADJACENT STRUCTURES, DRIVEWAYS, SIDEWALKS, UTILITIES AND ALL OTHER EXISTING FACILITIES WITHIN THE DEMOLITION SITE NOT INTENDED TO BE DEMOLISHED WEATHER INDICATED OR NOT ON PLANS.
14. ALL TRENCHES MUST BE CLOSED AT THE END OF THE DAY.
15. ANY DEWATERING ACTIVITIES MUST MEET FDEP REQUIREMENTS.



HAUL ROUTE & LAYDOWN AREA MAP
NOT TO SCALE



SANTA ROSA COUNTY ENGINEERING
6051 OLD BAGDAD HIGHWAY
SUITE 300
MILTON, FLORIDA 32583
(850) 981-7100

DEMOLITION & EROSION CONTROL PLAN & NOTES
FOR: **TIBET DRIVE DRAINAGE**
SANTA ROSA COUNTY, FLORIDA

REVISIONS:

N/A
N/A
N/A

DRAWN BY:
D.C.G.

DATE DRAWN:
05-20-2019

FIELD DATE:
04-24-2019

F.B. 131
PAGE 51-59 & 77
PAGE N/A

PROJECT NO.
2019H-031-000

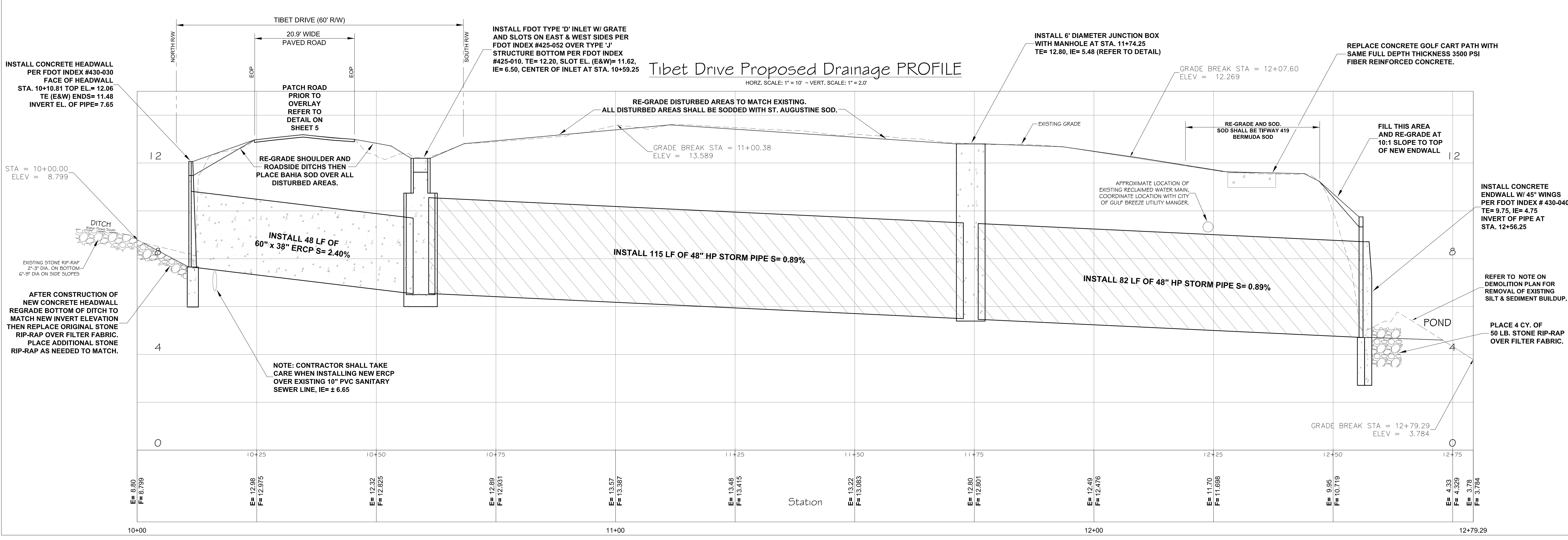
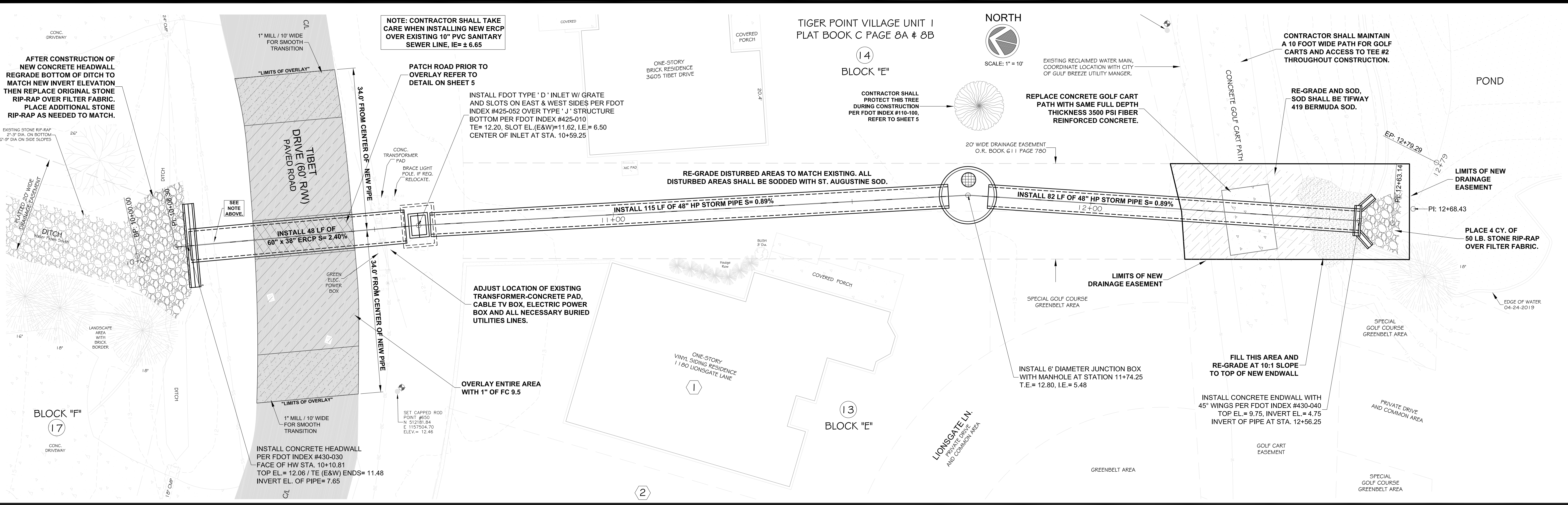
It's the Law!
811

CALL 48 HOURS BEFORE YOU DIG
CALLING 811 IN FLORIDA ROUTES YOU TO SUNSHINE STATE ONE CALL

SHEET
3 OF 8

REBECCA JONES, P.E. #66395 PROJECT ENGINEER

Date:



SANTA ROSA COUNTY ENGINEERING
 6051 OLD BAGDAD HIGHWAY
 SUITE 300
 MILTON, FLORIDA 32583
 (850) 981-7100

PROPOSED AMENITIES PLAN & PROFILE SHEET
FOR: TIBET DRIVE DRAINAGE
 SANTA ROSA COUNTY, FLORIDA

REVISIONS:

N/A
N/A
N/A

DRAWN BY:
D.C.G.

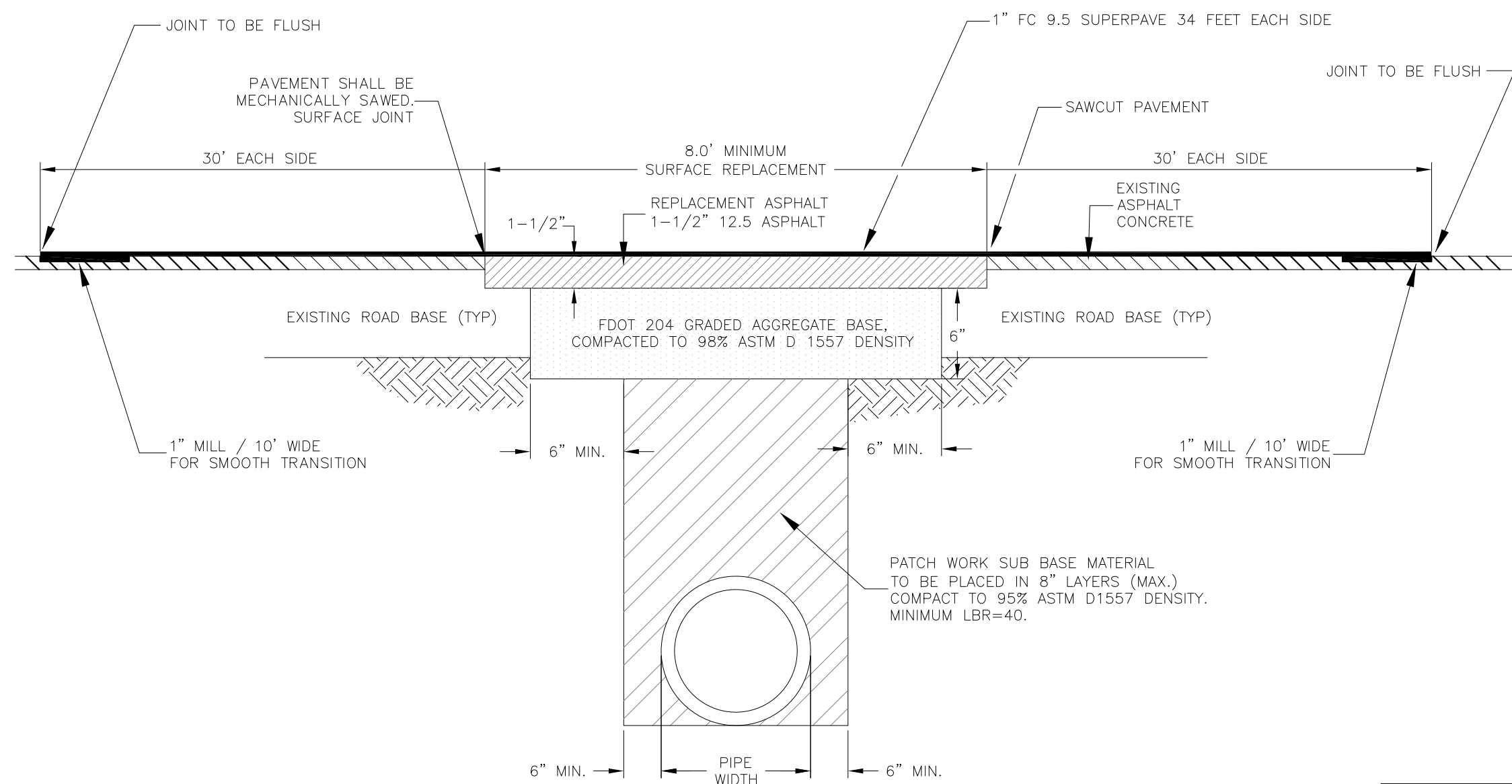
DATE DRAWN:
05-20-2019

FIELD DATE:
04-24-2019

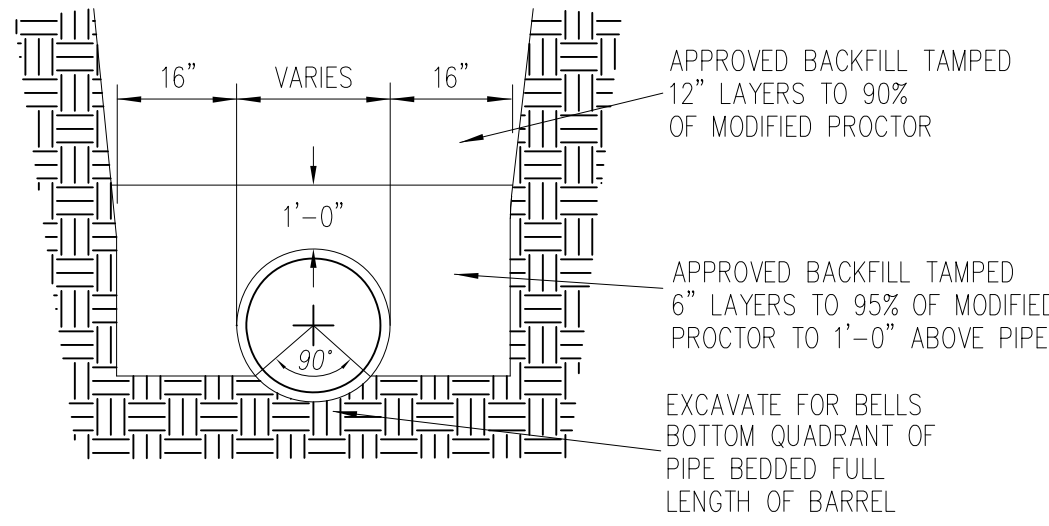
F.B. 131
 PAGE 51-59 & 77
 PAGE N/A

PROJECT NO.
2019H-031-000

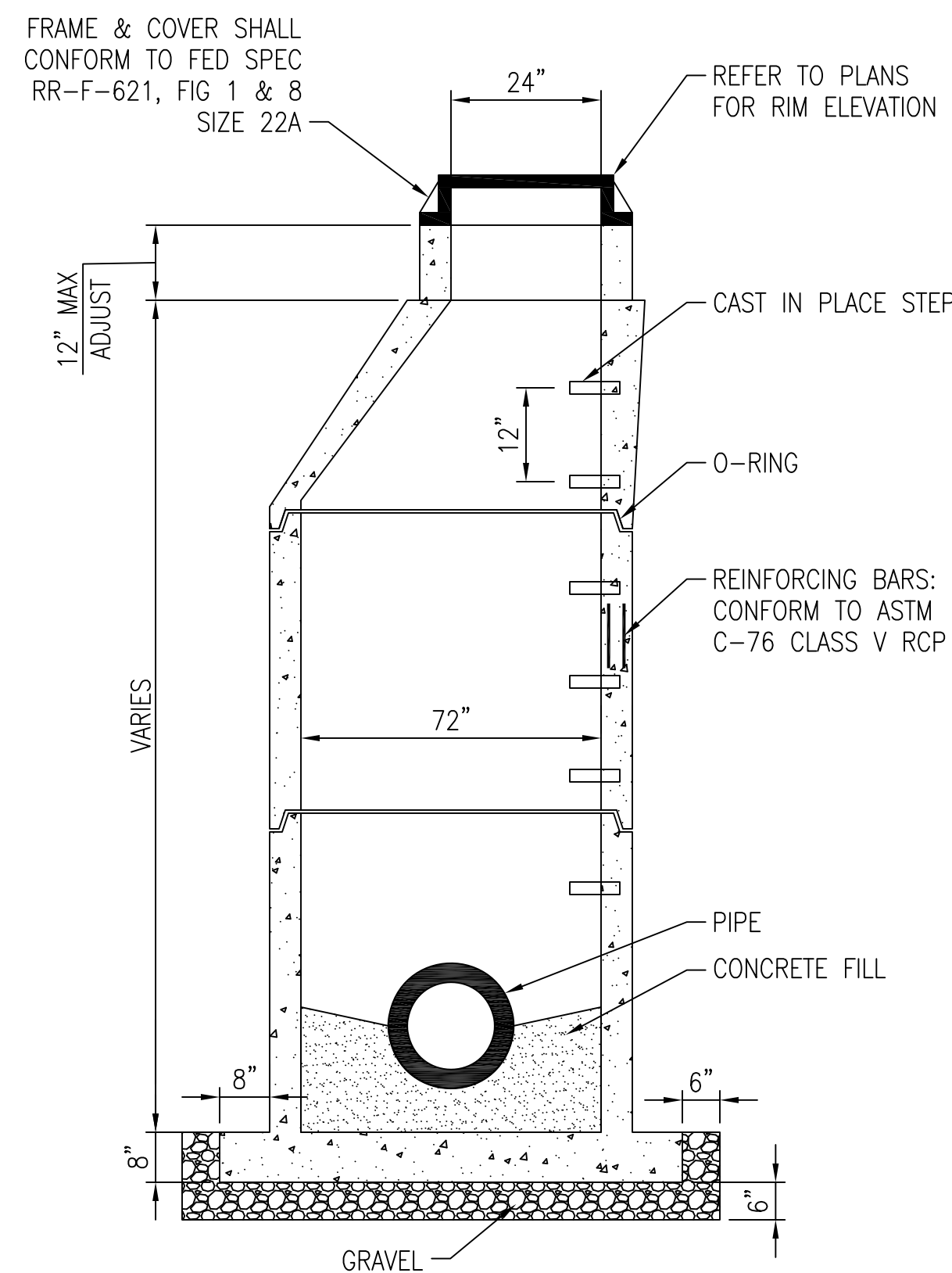
It's the Law
811
 CALL 48 HOURS BEFORE YOU DIG
 CALLING 811 IN FLORIDA ROUTES YOU TO SUBURBANE STATE ONE CALL



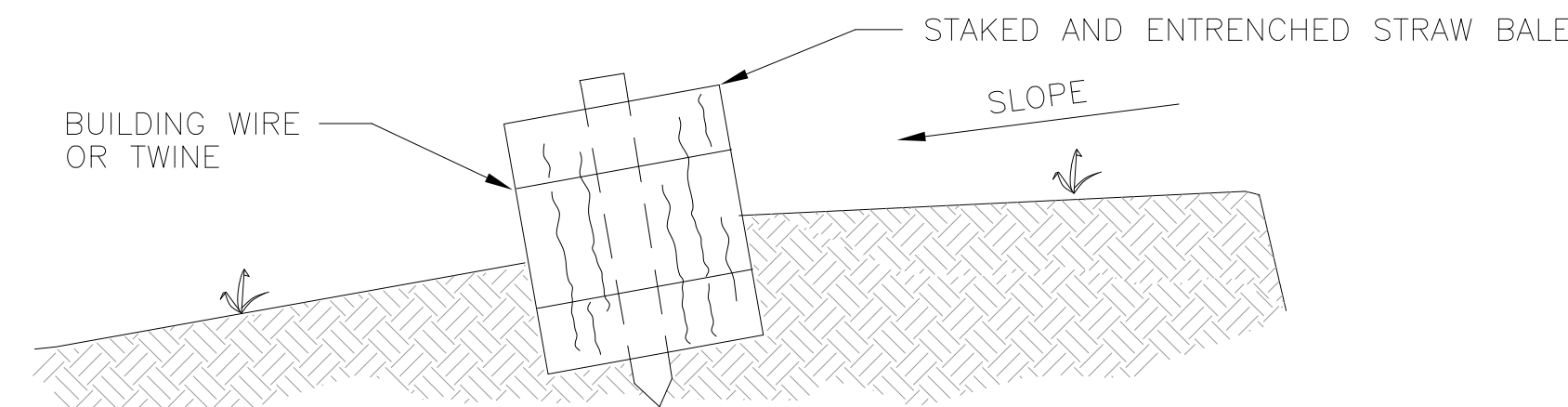
STANDARD PATCH DETAIL
NOT TO SCALE



PIPE BEDDING DETAIL
NOT TO SCALE



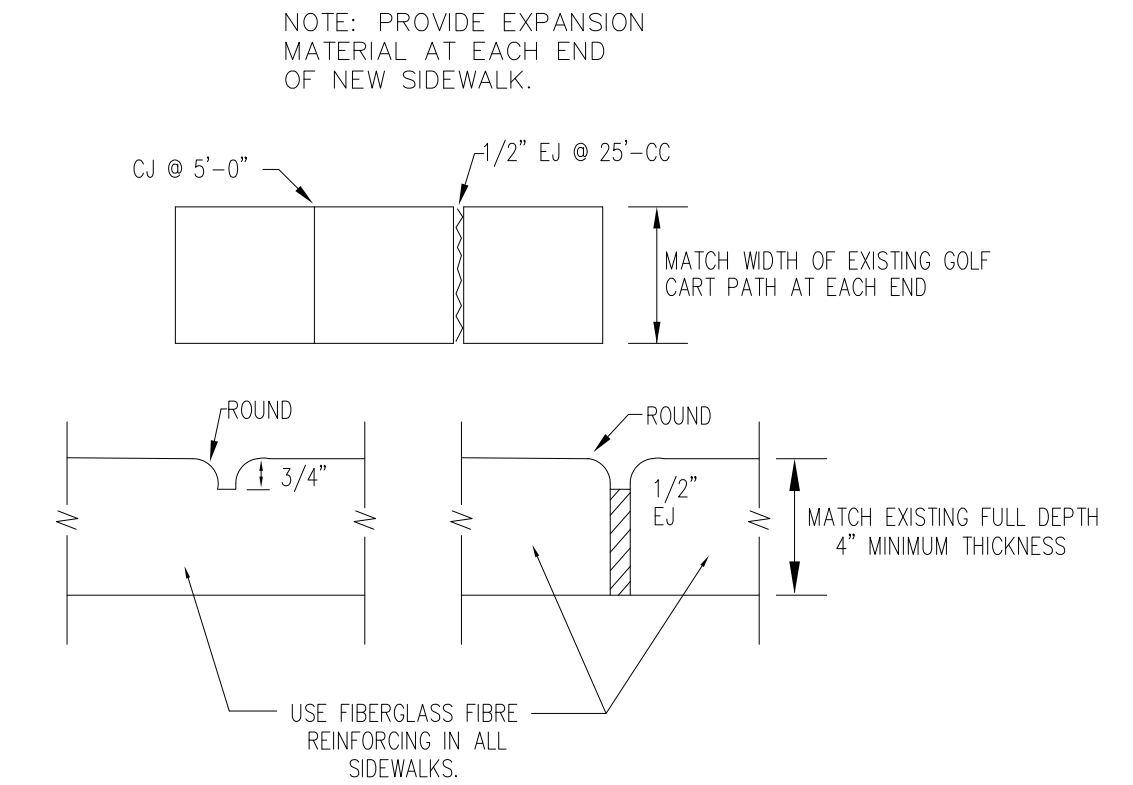
PRECAST CONCRETE MANHOLE
NOT TO SCALE



HAY BALE BARRIER CONSTRUCTION

HAY BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. ALL BALES SHALL BE SECURELY ANCHORED BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES OR REBARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE AS PROMPTLY AS NEEDED. HAY BALE BARRIERS SHALL BE REMOVED AFTER THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. HAY BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.

HAY BALE BARRIER DETAIL
NOT TO SCALE



GOLF CART PATH REPAIR DETAIL
NOT TO SCALE

NOTES:

- Critical Root Zone: Extends in all directions from trunk of tree to a distance equal to one foot per inch of trunk diameter at breast height.
- Staging, storage, dumping, washing and operation of equipment to not be permitted within the limits of the tree protection barrier, including during barrier installation.
- Install all tree protection prior to commencement of construction and remove when directed by the Engineer. Maintain protection at all times.
- For closely spaced groups of trees, place the tree protection barrier around the entire group.
- Inspect trunk protection and tree quarterly to prevent girdling. Adjust bands to allow tree growth as needed.
- See plans for any additional requirements or modifications within the tree protection area.
- Place weather resistant sign every 50' along the barrier, with 6" minimum text height and provide text in English and Spanish. Sign should read "Keep Out Tree Protection Area".
- Alternative tree protection systems approved by the Engineer may be used in lieu of the tree protection barrier detailed on this plan as long as the critical root zone is protected.
- The Critical Root Zone may be reduced, in the field, by a certified Arborist, or Landscape Architect.

PROTECTION BARRIER FOR TREE GROUPINGS

PLAN

- 4" Min Spacing
- Post (2" x 4" Nominal @ 4'-0" O.C. Typ.)
- Tree Protection Barrier
- Tree Trunk
- Canopy
- Critical Root Zone
- Tree Protection Barrier (See Note 4)
- Tree Trunk

Protect any portion of canopy that extends beyond barrier, unless pruning is required. Pruning must be supervised by a Certified Arborist.

Provide access for mowing, litter removal and other maintenance as required.

ELEVATION

- Place Burlap Between The Boards And The Trunk
- Bands (3 Minimum)
- 6" Minimum Height Or To Lowest Branch
- 2" x 4" Boards To Form A Continuous Protective Barrier (Do Not Fasten Boards Into Tree)

SECTION A-A

- 2" x 4" Nominal Boards
- Burlap
- Tree
- Bands

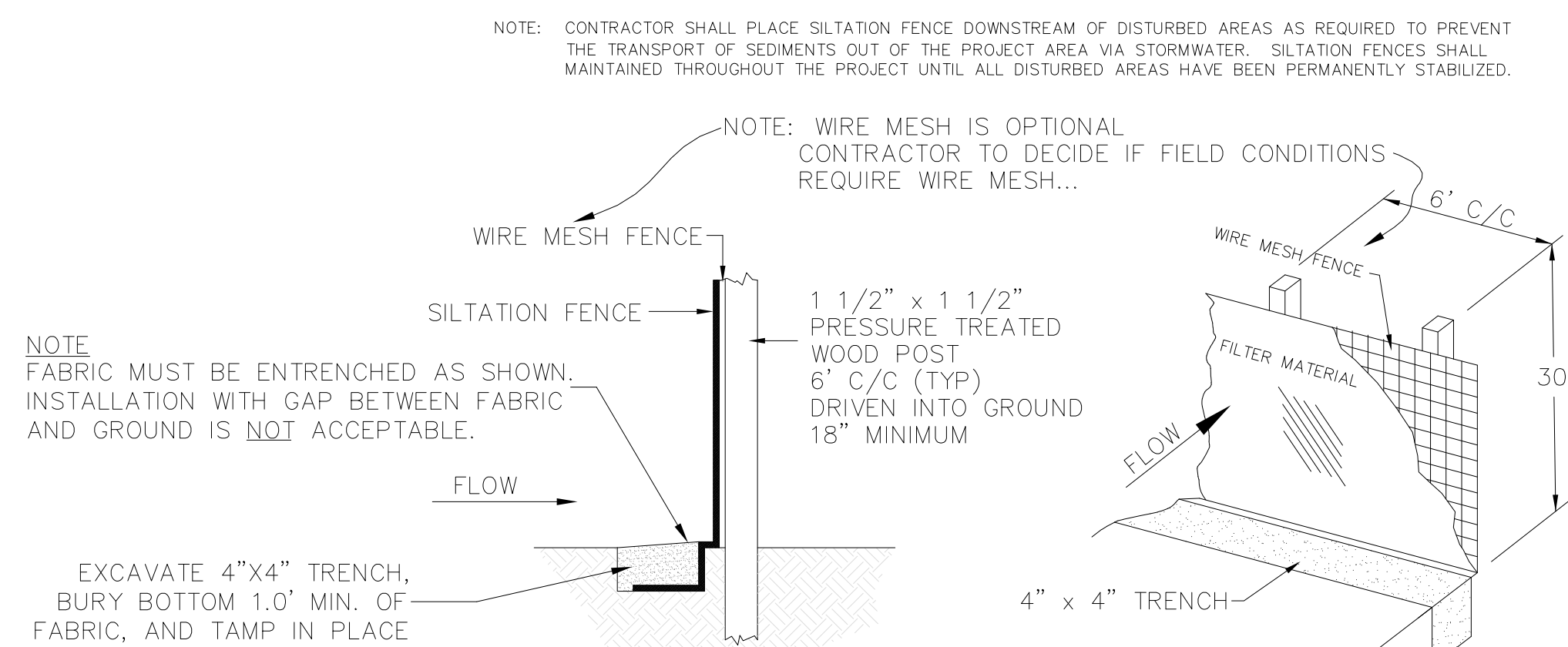
NOTES:

- Trunk protection may be used when Tree Protection Barrier can not be reasonably erected, when approved by Engineer.
- See Selective Clearing and Grubbing Plan for location of trunk protection, when applicable.
- Adjust bands to allow tree growth (inspect quarterly to prevent girdling).

TREE PROTECTION BARRIER

- Weather Resistant Sign (See Note 7)
- 4" Minimum Barrier Height
- Root Pruning Trench, As Required Per Construction Documents
- 4" Minimum Depth
- Install At Depth Sufficient To Maintain Taut Barrier
- No Open Trenching Under The Critical Root Zone of The Tree
- Orange Construction Barrier - Secure Barrier To Posts To Hold Barrier Taut
- Root Pruning Trench, As Required Per Construction Documents
- Maintain Existing Grade Within The Tree Protection Barrier
- Underground Utility
- Trenching May Occur Outside Of The Critical Root Zone, See Note 1

LAST REVISION 11/01/18	DESCRIPTION	FDOT FY 2019-20 STANDARD PLANS	TREE PROTECTION AND PRESERVATION	INDEX 110-100	SHEET 1 of 1
---------------------------	-------------	--------------------------------------	----------------------------------	------------------	-----------------



SILT FENCE DETAIL
NOT TO SCALE

SANTA ROSA COUNTY ENGINEERING
6051 OLD BAGDAD HIGHWAY
SUITE 300
MILTON, FLORIDA 32583
(850) 981-7100

PROJECT DETAIL SHEET
FOR: TIBET DRIVE DRAINAGE
SANTA ROSA COUNTY, FLORIDA

REVISIONS:

N/A
N/A
N/A

DRAWN BY:
D.C.G.

DATE DRAWN:
08-13-2019

FIELD DATE:
N/A

F.B. N/A
PAGE N/A
PAGE N/A

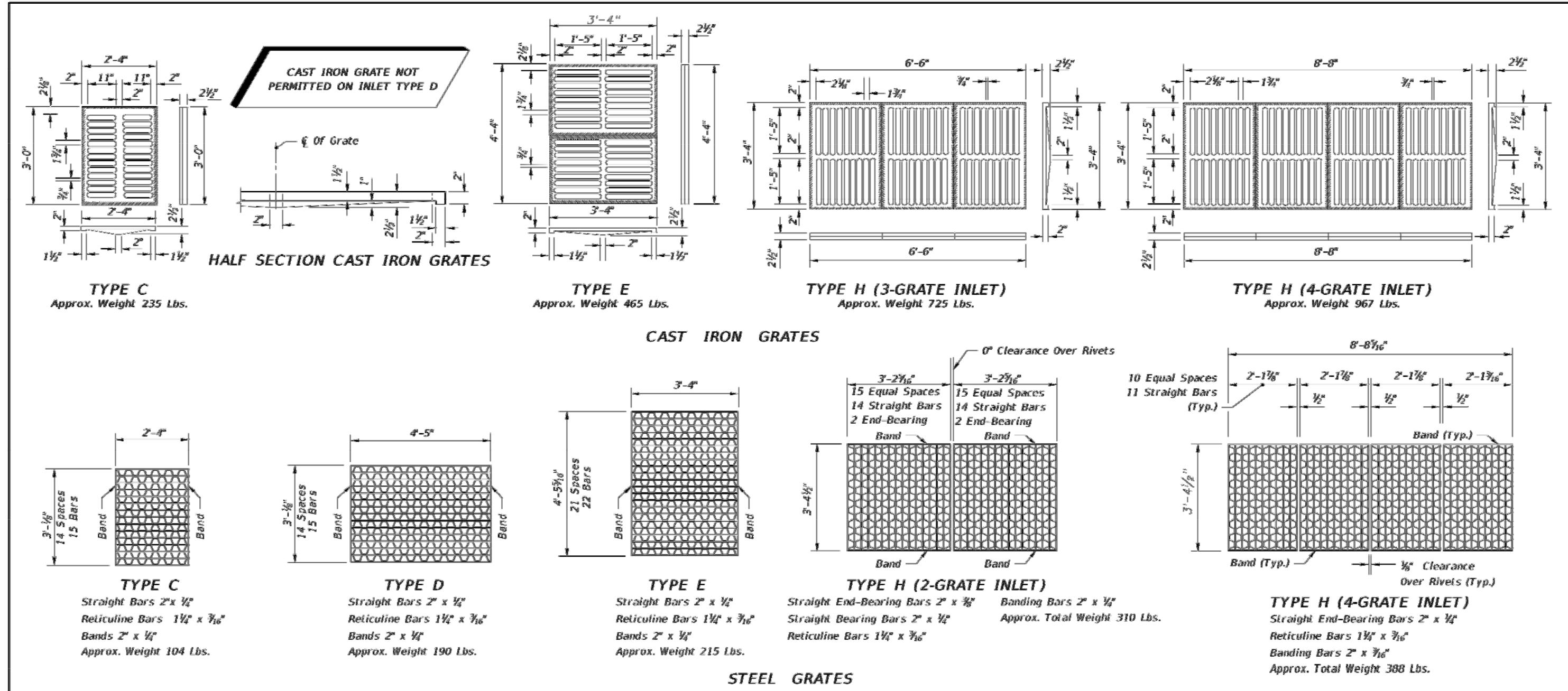
PROJECT NO.
2019H-031-000

It's the Law!
811

CALL 48 HOURS BEFORE YOU DIG

CALLING 811 IN FLORIDA ROUTES YOU TO SUNSHINE STATE ONE CALL

SHEET
5 OF 8



CAST IRON GRATES

TYPE C
Approx. Weight 235 Lbs.

TYPE E
Approx. Weight 465 Lbs.

TYPE H (3-GRATE INLET)
Approx. Weight 725 Lbs.

TYPE H (4-GRATE INLET)
Approx. Weight 967 Lbs.

STEEL GRATES

TYPE C
Straight Bars 2" x 1/2"
Reticular Bars 1 1/2" x 3/8"
Bands 2" x 1/2"
Approx. Weight 104 Lbs.

TYPE D
Straight Bars 2" x 1/2"
Reticular Bars 1 1/2" x 3/8"
Bands 2" x 1/2"
Approx. Weight 190 Lbs.

TYPE E
Straight Bars 2" x 1/2"
Reticular Bars 1 1/2" x 3/8"
Bands 2" x 1/2"
Approx. Weight 215 Lbs.

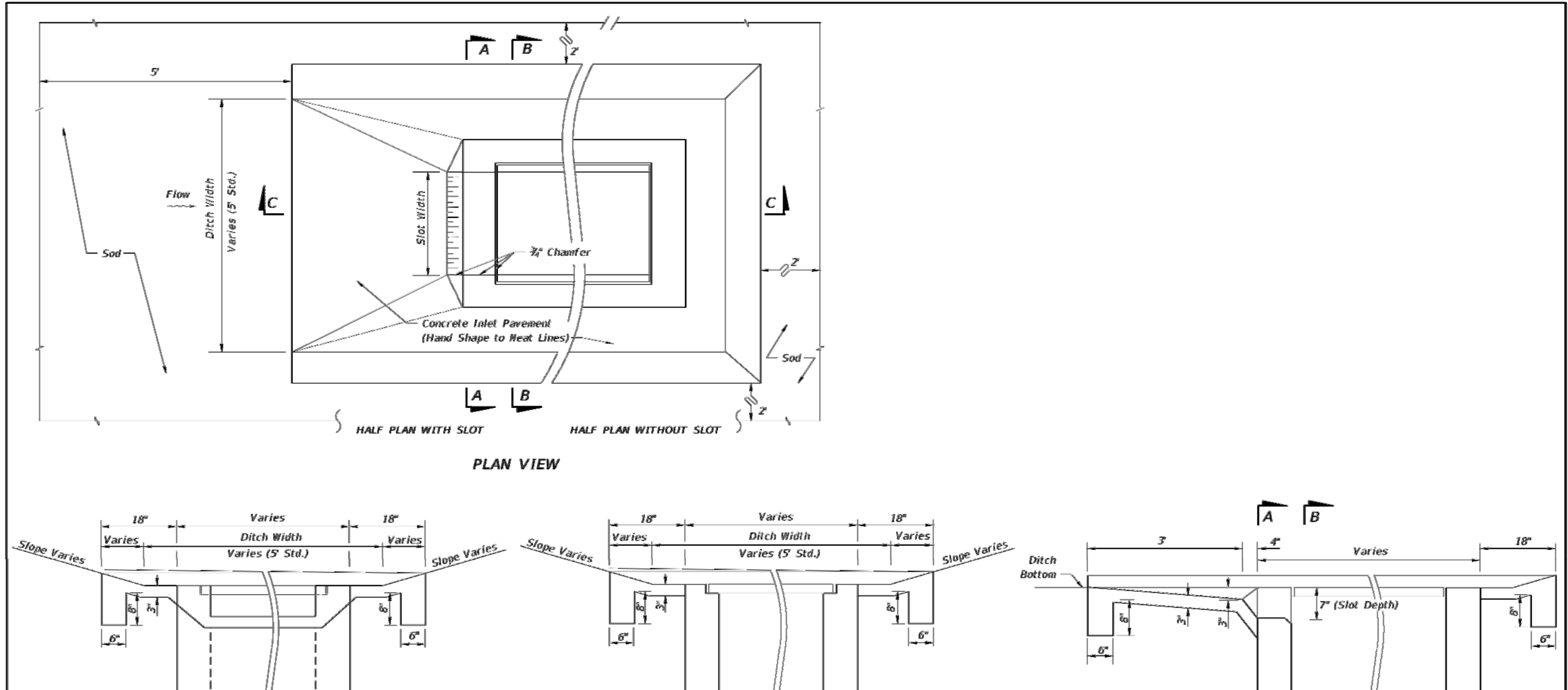
TYPE H (2-GRATE INLET)
Straight End-Bearing Bars 2" x 1/2"
Straight Bearing Bars 2" x 1/2"
Reticular Bars 1 1/2" x 3/8"
Approx. Total Weight 310 Lbs.

TYPE H (4-GRATE INLET)
Straight End-Bearing Bars 2" x 1/2"
Straight Bearing Bars 2" x 1/2"
Reticular Bars 1 1/2" x 3/8"
Banding Bars 2" x 1/2"
Approx. Total Weight 388 Lbs.

GENERAL NOTES

- These inlets are suitable for bicycle traffic and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads. These inlets may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet.
- Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and areas subject to pedestrians shall have traversable slots. The traversable slot modification is not adjustable to inlet Type H. Slots may be constructed at either or both ends as shown on plans. Traversable slots shall not be used in areas subject to occasional bicycle traffic.
- Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when alternate G grate is specified in the plans, either the steel grate, hot dip galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
- Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
- All exposed edges and corners shall be 1/2" chamfer or tool to 1/2" radius.
- Concrete inlet pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
- Traversable slots constructed in existing inlets shall be paid for as inlets partial. For conversion work and method of payment see TRaversable SLOT INLETS (PARTIAL) FOR EXISTING INLETS.
- Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Performance Turf, S1.
- For supplementary details see Index 425-001.
- All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. Bars to be cut or bent for 1/2" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.

LAST REVISION 11/01/17	DESCRIPTION: DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 3 of 7
---------------------------	--	------------------	-----------------

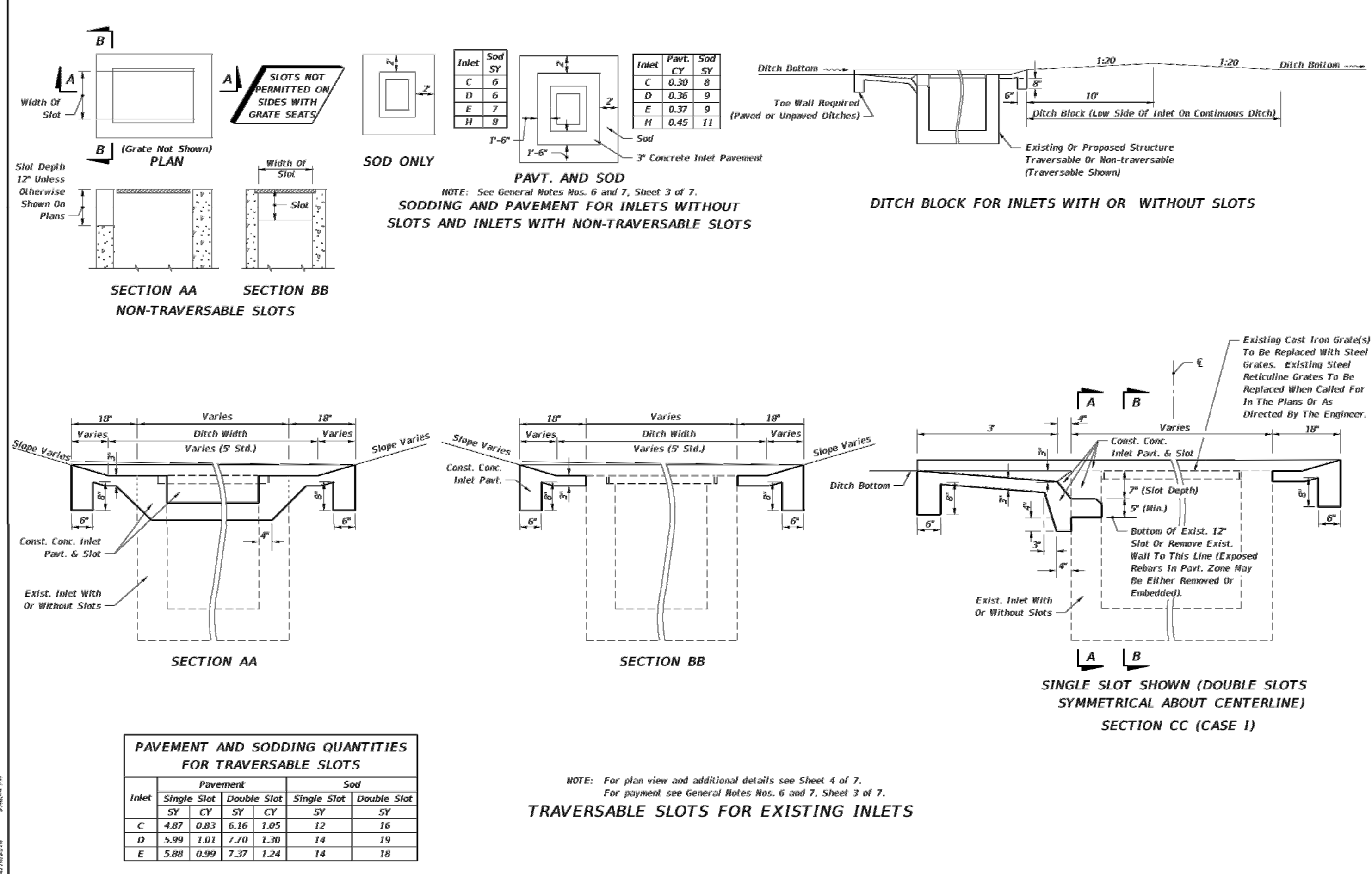


PAVEMENT AND SODDING QUANTITIES FOR TRAVERSABLE SLOTS

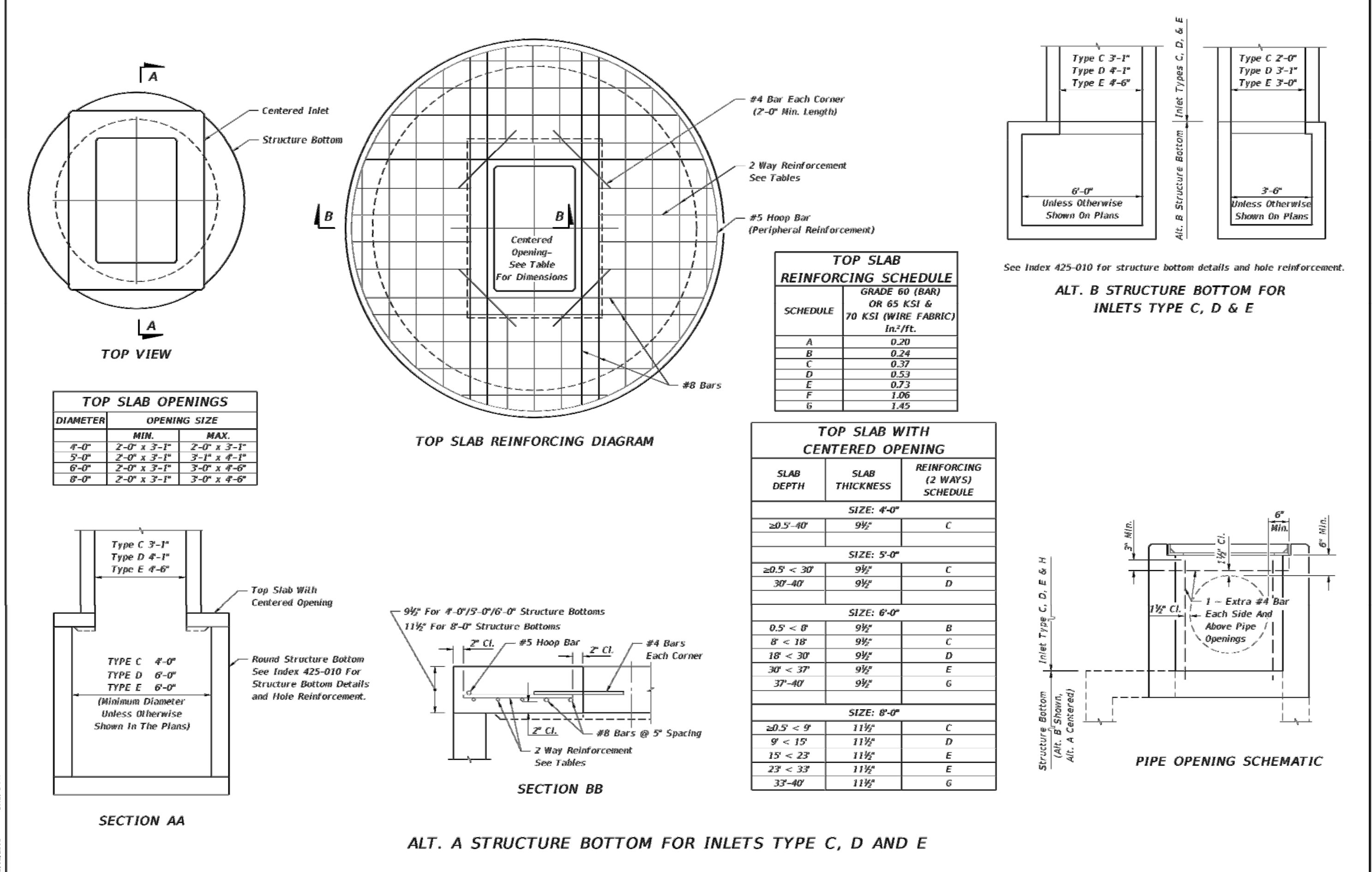
Inlet	Pavement		Sod	
	SY	CY	SY	CY
C	4.87	0.77	6.16	0.93
D	5.99	0.91	7.70	1.10
E	5.88	0.91	7.37	1.08

TRaversable SLOTS

LAST REVISION 11/01/17	DESCRIPTION: DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 4 of 7
---------------------------	--	------------------	-----------------



LAST REVISION 11/01/17	DESCRIPTION: DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 5 of 7
---------------------------	--	------------------	-----------------



LAST REVISION 11/01/17	DESCRIPTION: DITCH BOTTOM INLET TYPES C, D, E AND H	INDEX 425-052	SHEET 7 of 7
---------------------------	--	------------------	-----------------

SANTA ROSA COUNTY ENGINEERING
6051 OLD BAGDAD HIGHWAY
SUITE 300
MILTON, FLORIDA 32583
(850) 981-7100

FDOT FY 2019-20 STANDARD DETAILS
FOR: TIBET DRIVE DRAINAGE
SANTA ROSA COUNTY, FLORIDA

REVISIONS:
N/A
N/A
N/A

DRAWN BY:
FDOT

DATE DRAWN:
N/A

FIELD DATE:
N/A

F.B. N/A
PAGE N/A
PAGE N/A

PROJECT NO.
2019H-031-000

It's the Law!
811

CALL 48 HOURS BEFORE YOU DIG

CALLING 811 IN FLORIDA ROUTES YOU TO SURVIVE STATE ONE CALL.

SHEET
7 OF 8

