

BID DOCUMENT AND SPECIFICATIONS
YOTHERS ROAD IMPROVEMENTS
S.R. 429 TO PLYMOUTH-SORRENTO ROAD

June 2016

BID NUMBER: 2016-13

CITY OF AOPKA

Mayor: JOE KILSHEIMER

City Commissioners:
BILLIE L. DEAN
DIANE VELAZQUEZ
DOUG BANKSON
KYLE BECKER

City Administrator: GLENN IRBY, MPA

Public Services Director: R. JAY DAVOLL, P.E.

PUBLIC SERVICES DEPARTMENT
STREET MAINTENANCE DIVISION
CITY OF AOPKA
748 E. CLEVELAND STREET
AOPKA, FLORIDA 32703
(407) 703-1731

CITY OF AOPKA

**YOTHERS ROAD IMPROVEMENTS
S.R. 429 TO PLYMOUTH-SORRENTO ROAD**

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SECTION 00010
BID NO. 2016-13

INVITATION TO BID

Sealed bids will be received by the City of Apopka until 10:00 a.m. E.S.T. on Tuesday, July 12, 2016 at the Apopka City Clerk's office, 120 E. Main Street, Apopka, Florida 32703 for the construction of the following project:

Yothers Road Improvements
S.R. 429 to Plymouth-Sorrento Road

and publicly opened and read aloud at 10:15 a.m. in the City Council Chambers. The project consists of furnishing all transportation, materials, equipment, labor, services and supplies necessary to construct approximately 900 L.F. of new roadway including base material, asphalt & roadway markings.

A non-mandatory pre-bid meeting has been scheduled for Thursday, June 23, 2016 at 3:00 p.m. in the Public Services Conference Room located at 748 E. Cleveland St., Apopka, Florida. Bidders are encouraged to obtain and review plans and specifications prior to the pre-bid meeting so that questions may be presented at that time.

Copies of the plan and specifications are available at the Public Services Complex, 748 E. Cleveland Street, Apopka, Florida 32703, telephone (407) 703-1731, for \$25.00 per set (non-refundable). Payments by check or money order are to be made payable to City of Apopka. If shipment is required, provide a commercial carrier (FedEx or UPS) account number. Plans and specifications are also available electronically at no charge, reference businesses section at www.apopka.net.

Each bid shall be made out and submitted in duplicate on a form furnished as part of the Bid Document and must be accompanied by cashier's check, certified check or a bidder's bond in the amount of five percent (5%) of the total bid price, make payable to the City of Apopka. Said check or bond shall be given as guarantee that the bidder will enter into a contract with the owner and furnish a performance bond and payment bond in the amount of 100% of the total bid price within fifteen (15) days from the date of notification of award. Bonds are required from companies licensed in the State of Florida.

In accordance with the Americans with Disabilities Act (ADA), persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office at 120 East Main Street, Apopka FL 32703, Telephone: 407-703-1704, no less than 48 hours prior to the proceeding.

The Owner reserves the right to reject any and all bids and to waive any and all irregularity in any bid.

SECTION 00020
INSTRUCTIONS TO BIDDERS

1. Defined Terms.

Terms used in these Instructions to Bidders which are defined in the General Terms and Conditions, Section 00160, have the meanings assigned to them in the General Terms and Conditions. The term "Successful Bidder" means the lowest, qualified, responsible Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

2. Copies of Bidding Documents.

- 2.1 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Advertisement of invitation may be obtained from Engineer (unless another issuing office is designated in the Advertisement of Invitation to Bid).
- 2.2 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.3 Owner and Engineer in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3. Qualifications of Bidders.

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within seven (7) days of Owner's request written evidence of the types set forth here, such as financial data, previous experience and evidence of authority to conduct business in the jurisdiction where the Project is located. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

In order for the Owner to obtain the best quality of work in a reasonable period of time, the Owner reserves the right to reject bids from Contractors who are unable to meet the following requirements.

- a. Contractor must have had at least three (3) years' experience in the construction of similar projects of this size and larger.
- b. Contractor must have successfully constructed, as prime Contractor, at least three (3) projects similar in scope to this project in the last five (5) years.
- c. Contractor must have good recommendations from at least three (3) clients similar to the Owner.
- d. Contractor must be able to provide evidence of authority to conduct business in the

jurisdiction in which the project is located.

- e. The Contractor's superintendent and assistant must be qualified in similar projects in all categories.

4. Examination of Contract Documents and Site.

- 4.1 Before submitting a Bid, each Bidder must (a) examine the Contract Documents thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the work; and (d) study and carefully correlate Bidder's observations with the Contract Documents.
- 4.2 The lands upon which the Work is to be performed, rights-of-way for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Special Provisions, General Requirements or Drawings.
- 4.3 The submission of a Bid will constitute an incontrovertible representation by the Bidder that he has complied with every requirement of this Article 4 and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

5. Interpretations.

All questions about the meaning or intent of the Contract Documents shall be submitted to Engineer in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than five days prior to the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

6. Bid Security.

- 6.1 Bid Security shall be made payable to Owner, in the amount specified in the Bid Form and in the form of a certified or bank check or a Bid Bond (see Section 00050).
- 6.2 The Bid Security of the Successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required Contract Security, whereupon it will be returned; if the successful Bidder fails to execute and deliver the Agreement and furnish the required Contract Security within 15 days of the Notice of Award, Owner may annul the Notice of Award and the Bid Security of the Bidder will be forfeited. The Bid Security of any Bidder whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh day after the "effective date of the Agreement" (which term is defined as the date on which the Agreement is signed by

the representative for the City of Apopka) and the required Contract Security is furnished or the sixty-first day after the Bid opening. Bid Security of other Bidders will be returned within seven days of the Bid opening.

7. Contract Time.

The number of days within which, or the date by which, the Work is to be completed (the Contract Time) is set forth in the Bid Form and will be included in the Agreement.

8. Liquidated Damages.

Provisions for liquidated damages, if any, are set forth in the Agreement.

9. Substitute Material and Equipment.

The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer until after the "effective date of the Agreement". The procedure for submittal of any such application by Contractor and consideration by Engineer is set forth in Article 7 of the General Terms and Conditions.

10. Subcontractors, etc.

10.1 The General Terms and Conditions require the identity of certain Subcontractors and other person and organizations to be submitted to Owner in advance of the Notice of Award. The apparent Successful Bidder, and any other Bidder so requested, will within seven days after the day of the Bid opening submit to Owner a list of all Subcontractors and other persons and organizations (including those who are to furnish the principal items of material and equipment) proposed for those portions of the Work as to which such identification is so required. Such list shall be accompanied by an experience statement with pertinent information as to similar projects and other evidence of qualification for each such Subcontractor, person and organization if requested by Owner. If Owner or Engineer after due investigation has reasonable objection to any proposed Subcontractor, other person or organization, either may before giving the Notice of Award request the apparent Successful Bidder to submit an acceptable substitute without an increase in Bid price. If the apparent Successful Bidder declines to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any Subcontractor, other person or organization to listed and to whom Owner or Engineer does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer.

10.2 No Contractor shall be required to employ any Subcontractor, other person or organization against whom he has reasonable objection.

11. Bid Form.

- 11.1 The Bid Form is attached hereto; additional copies may be obtained from Engineer.
- 11.2 Bid Forms must be completed in ink or typed. The Total Bid price on the form must be stated in words and numerals.
- 11.3 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary. The corporate address and state of incorporation shall be shown below the signature.
- 11.4 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.
- 11.5 All names must be typed or printed below the signature.
- 11.6 The bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).
- 11.7 The address to which communications regarding the Bid are to be directed must be shown.
- 11.8 All supporting information requested in the Bid Form must be furnished. Do not leave any questions or requests unanswered.

12. Submission of Bids.

- 12.1 Bids shall be submitted at the time and place indicated in the Invitation to Bid and shall be included in an opaque sealed envelope, marked with the Project title and name and address of the Bidder and accompanied by a completed Section 00150, Statement on Public Entity Crimes, a completed Section 00140, Sworn Statement Under the Florida Trench Safety Act, the Bid Security and other required documents which are included in the Contract Documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face thereof.

13. Modification and Withdrawal of Bids.

- 13.1 Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.
- 13.2 If, within twenty-four hours after Bids are opened, any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of his Bid, that

Bidder may withdraw his Bid and the Bid Security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work.

14. Opening of Bids.

Bids will be opened publicly. When Bids are opened publicly they will be read aloud, and an abstract of the amounts of the base Bids and major alternates (if any) will be made available after the opening of Bids.

15. Bids to Remain Open.

All Bids shall remain open for sixty days after the day of the Bid opening, but Owner may, at his sole discretion, release any Bid and return the Bid Security prior to that date.

16. Award of Contract.

16.1 Owner reserves the right to reject any and all Bids, to waive any and all informalities and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive or conditional Bids. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between the indicated extension of unit prices and the correct extension thereof will be resolved in favor of the correct extension.

16.2 In evaluating Bids, Owner shall consider the qualifications of the bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the bid forms. It is Owner's intent to accept alternates (if any are accepted) in the order in which they are listed in the Bid form but Owner may accept them in any order or combination.

16.3 Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted as provided in the Supplementary Conditions. Operating costs, maintenance considerations, performance data and guarantees of materials and equipment may also be considered by Owner.

16.4 Owner may conduct such investigations as he deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Bidders, proposed Subcontractors and other persons and organizations to do the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

16.5 Owner reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to Owner's satisfaction.

- 16.6 If the contract is to be awarded it will be awarded to the lowest responsive, responsible Bidder on the basis of the Total Base Bid.
- 16.7 If the contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within sixty days after the day of the Bid opening.

17. Performance and Other Bonds.

Section 4 of the Agreement Form sets forth Owner's requirements as to performance and other Bonds. When the Successful Bidder delivers the executed Agreement to Owner it shall be accompanied by the required Contract Security.

18. Signing of Agreement.

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by at least three unsigned counterparts of the Agreement and all other Contract Documents. Within fifteen days thereafter Contractor shall sign and deliver at least three counterparts of the Agreement to Owner with all other contract Documents attached. Within ten days thereafter Owner will deliver all fully signed counterparts to Contractor. Engineer will identify those portions of the Contract Documents not fully signed by Owner and Contractor and such identification shall be binding on all parties.

19. Definitions.

19.1 OWNER refers to the City of Apopka.

19.2 DAYS refers to calendar days unless otherwise specified.

20. Construction Qualified Business License Requirements.

Prior to award of contract, the successful apparent low bidder must possess a Construction Qualified Business License issued by the State of Florida Department of Business and Professional Regulation.

END OF SECTION

This contract document has important legal consequences; consultation with an attorney is encouraged with respect to its completion or modification.

SECTION 00030
BID FORM
PROPOSAL TO THE CITY OF APOPKA

YOTHERS ROAD IMPROVEMENTS
S.R. 429 TO PLYMOUTH-SORRENTO ROAD

NAME OF BIDDER: _____

BUSINESS ADDRESS: _____

PHONE NO: _____

FAX NO: _____

TO THE CITY COUNCIL OF THE CITY OF APOPKA.

Pursuant to and in compliance with your notice inviting sealed proposals and the other documents related thereto, the undersigned bidder having familiarized himself with the terms of the Contract Documents, local conditions affecting the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to provide and furnish any and all utility and transportation services necessary to perform the contract and complete in a workmanlike manner, all of the work required in connection with the construction of said work all in strict conformity with the plans and specifications and other Contract Documents, including Addenda Nos. _____, _____ and _____.

The work shall be substantially completed within Sixty (60) calendar days from the commencement date (herein "contract time").

The undersigned as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any person, firm or corporation; and he proposes and agrees, if the proposal is accepted, that he will execute a contract with the Owner in the form set forth in the Contract Documents and that he will accept in full payment thereof the following prices to wit:

**Yothers Road Improvements
S.R. 429 to Plymouth-Sorrento Road**

| <i>BID ITEM</i> | <i>DESCRIPTION</i> | <i>UNITS</i> | <i>QTY.</i> | <i>COST PER UNIT</i> | <i>TOTAL COST</i> |
|-------------------------------|--|--------------|-------------|--------------------------|-----------------------|
| 101-1 | Mobilization | LS | 1 | | |
| 102-1 | Maintenance of Traffic | LS | 1 | | |
| 104-13-2 | Prevention, Control and Abatement of Erosion | LS | 1 | | |
| 110-1 | Clearing & Grubbing | LS | 1 | | |
| 120-1 | Excavation, Embankment & Grading | LS | 1,000 | | |
| 160-4 | Type B Stabilized Sub Base | SY | 3,000 | | |
| 230-1-1 | Limerock Stabilized Base, 8" (LBR 100) | SY | 700 | | |
| 334-1-13-A | Superpave Asphalt Concrete, 1.5" (SP-9.5) | SY | 3,000 | | |
| 522-2 | Concrete Driveway (6" thick) | SY | 40 | | |
| 570-1-2 | Performance Turf (Sod, Type Bahia) | SY | 1,000 | | |
| 706-3 | Raised Retro-Reflective Pavement markers | EA | 127 | | |
| 710-1-26 | Painted Traffic Stripe, Yellow 6" | LF | 130 | | |
| 710-1-27 | Painted Traffic Stripe, White 6" | LF | 2200 | | |
| 710-1-27-1 | Painted Traffic Stripe, White 24" | LF | 92 | | |
| 711-11-121 | 6" White Solid (Thermoplastic, Standard) | LF | 2,200 | | |
| 711-11-125 | 24" White Solid (Thermoplastic, Standard) | LF | 92 | | |
| 711-11-170 | White Arrow (Thermoplastic, Standard) | EA | 4 | | |
| 711-11-221 | 6" Yellow (Thermoplastic, Standard) | LF | 3,020 | | |
| 711-11-224 | 18" Yellow (Thermoplastic, Standard) | LF | 165 | | |
| 711-7 | Remove Existing Thermoplastic | SF | 400 | | |
| Total Price in Numbers | | | | | |
| Total Price in Words | | | | | |

The names of all persons interested in the foregoing proposals as principals are as follows: (Notice - If bidder or other interested person is a corporation, state a legal name of corporation, and names of the president; if a partnership, state true name of firm, also names of all individual co-partners composing firms; if bidder or other interested person is an individual, state first and last names in full):

Licensed in accordance with an Act providing for the registration of contractors.

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth below, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation and corporate seal; if bidder is a co-partnership, the true name of the firm shall be set forth below, together with the signature of the partner or partners authorized to sign contracts on behalf of the co-partnership; and if the bidder is an individual, his signature shall be placed below; if a special partnership, the names of the general partners.

SIGNATURE OF BIDDER: _____

BY: _____

ITS: _____

DATED: _____

SECTION 00040
BIDDER'S CERTIFICATION

I have carefully examined the Invitation to Bid, Instructions to Bidders, General and/or Special Conditions, Notes, Specifications, proposed agreement and any other documents accompanying or made a part of this Invitation.

I hereby propose to furnish the goods or services specified in the Invitation at the prices or rates quoted in my bid. I agree that my bid will remain firm for a period of up to _____ days in order to allow the City adequate time to evaluate the bids.

I agree to abide by all conditions of this bid and understand that a background investigation may be conducted by the Apopka Police Department prior to award.

I certify that all information contained in this bid is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this bid on behalf of the vendor/contractor as its act and deed and that the vendor/contractor is ready, willing and able to perform if awarded the bid.

I further certify, under oath, that this bid is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a bid for the same product or service; no officer, employee or agent of the City of Apopka or of any other bidder is interested in said bid; and that the undersigned executed this Bidder's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.

NAME OF BUSINESS

BY:

SIGNATURE

NAME & TITLE, TYPE OR PRINTED

MAILING ADDRESS

CITY, STATE, ZIP CODE

TELEPHONE NUMBER

Sworn to and subscribed

before me this _____ day of

_____ 20__

Notary Public

State of _____

My Commission Expires: _____

SECTION 00050
BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principle, and _____ as Surety,

are held and firmly bound unto the City of Apopka hereinafter called the OWNER in the penal sum of _____

_____ Dollars (\$ _____), lawful money of

the United States, for the payment of which sum well and truly be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that whereas the Principal has submitted the accompanying bid dated _____, 20__ for the construction of

YOTHERS ROAD IMPROVEMENTS
S.R. 429 TO PLYMOUTH-SORRENTO ROAD

NOW THEREFORE, if the Principal shall not withdraw said bid within the period of time set forth in the contract documents, and shall within fifteen (15) calendar days after the prescribed forms are presented to him for signature enter into a written contract with the OWNER in accordance with the bid as accepted, and if the Principal shall give the required bonds with good and sufficient sureties for the faithful performance and proper fulfillment of such contract and for the protection of laborers and material men, or in the even of the withdrawal of said bid within the periods specified, or the failure to enter into said contract, and give such bonds within the time specified, if the Principal shall within sixty (60) days after request by the OWNER pay to the OWNER the difference between the amount specified in said bid and the amount for which the OWNER may procure the required work if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

It is further agreed that if the OWNER is required to initiate legal proceedings to recover on this bond, it may also recover its costs relating thereto including a reasonable amount for attorneys' fees.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals this ____ day of _____, 20__, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative

BID BOND

pursuant to authority of its governing body.

WITNESSES (if individual)

PRINCIPAL

_____ By _____

Title _____

ATTEST (if corporation)

Title _____

Corporate Seal

SURETY

By _____

Title _____

Any claims under this bond may be addressed to:

Name and Address of Surety _____

Telephone Number _____

Name and Address of Agent
or Representative in Florida if
Different From Above

Telephone Number _____

ATTEST

Title _____

Corporate Seal

SECTION 00060
AGREEMENT FORM

THE CITY OF APOPKA, FLORIDA, (“Owner”), hereby contracts with _____ (“Contractor”) of City, State, to perform all work (“Work”) in connection with certain roadway, improvements within the City of Apopka generally referred to as Yothers Road Improvements S.R. 429 to Plymouth-Sorrento Road as said Work is set forth in the Plans and Specifications prepared by Owner and the other Contract Documents, all of such documents being hereafter specified. Notwithstanding the foregoing, wherever the term “Engineer” is used herein, especially with regard to the administration of this Contract, it shall be deemed to mean the Engineer, Owner, or another consultant of Owner, as may be designated by Owner in writing from time to time. Owner is sometimes referred to as the “City” in the Contract Documents.

Owner and Contractor, for the consideration herein set forth, agree as follows:

Section 1 Contract Documents

A. The Contract Documents consist of this Agreement, all Change Orders, Work Directive Changes, Field Orders and Amendments hereafter executed by the parties in writing, in accordance with the terms herein. All of the foregoing Contract Documents are incorporated by reference and made a part of this Agreement (all of said documents including the Agreement sometimes being referred to herein as the “Contract Documents” and sometimes as the “Agreement”). A copy of the Contract Documents shall be maintained by Contractor at the Project site at all times during the performance of the Work.

B. Owner shall furnish to the Contractor up to five (5) sets of the Contract Documents as are reasonably necessary for execution of the Work. Additional copies of the Contract Documents shall be furnished, upon request, at the cost of reproduction.

Section 2 Scope of Work

Contractor agrees to furnish and pay for all management, supervision, financing, labor, materials, tools, fuel, supplies, utilities, equipment and services of every kind and type necessary to diligently, timely, and fully perform and complete in a good and workmanlike manner the Work required by the Contract Documents.

Section 3 Contract Amount

A. In consideration of the faithful performance by Contractor of the covenants in this Agreement, to the full satisfaction and acceptance of Owner, Owner agrees to pay or cause to be paid to Contractor, in accordance with the terms of this Agreement, an amount equal to the sum of the unit prices established for each separately identified item of Work times the corresponding estimated quantity for those items, all set forth in Contractor's bid sheet attached hereto as Bid Form, Section 00030 (herein "Contract Amount"). Based upon the estimated quantities set forth in Bid Form, Section 00030, the total estimated amount of the Contract Amount is _____ . As hereby stated, estimated quantities are not guaranteed, and determination of actual quantities and classifications is to be made by Engineer as provided in sub paragraph 4.1.1. of the General Conditions. The established unit prices have been computed as provided in sub paragraph 4.1.2 of the General Conditions.

B. Contractor hereby acknowledges that the bid it submitted, as well as the Contract Documents, reference the trench safety standards that will be in effect during the period of construction of the Project and that the Contractor shall perform all trench excavation in compliance with all applicable trench safety standards. Also, Contractor acknowledges that its bid included the following cost line item for compliance with all applicable trench safety standards.

Section 4 Bonds

A. Contractor shall provide Performance and Payment Bonds, in the form prescribed in Section 00070, in the amount of 100% of the Contract Amount, the costs of which to be paid by Contractor. The Performance and Payments 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 as to general policy holders rating and Class "V" or higher rating as to financial size category and the amount required shall not exceed 5% 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.

B. 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 Documents, 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.

Section 5 Contract Time and Liquidated Damages

A. Time is of the essence in the performance of the Work under this Agreement. The "Commencement Date" shall be established in the Notice to Proceed to be issued by the Owner or the Engineer within thirty (30) days from the date this Agreement has been executed by both parties. Contractor shall commence the Work within five (5) calendar days from the Commencement Date. No Work shall be performed at the Project site prior to the Commencement Date. Any Work performed by Contractor prior to the Commencement Date shall be at the sole risk of Contractor. The Work shall be substantially completed within sixty (60) calendar days from the Commencement Date (herein "Contract Time"). The Work shall be fully completed and ready for final acceptance by the Owner within Fifteen (15) calendar days after the date Substantial Completion of the Work is achieved.

B. Owner and Contractor recognize that, since time is of the essence for this Agreement, Owner will suffer financial loss if the Work is not substantially completed within the time specified above, as said time may be adjusted as provided herein. Should Contractor fail to substantially complete the Work within the Contract Time, as said time period may be adjusted pursuant to the terms herein, Owner shall be entitled to assess, as liquidated damages, but not as a penalty, \$500 for each calendar day thereafter until substantial completion is achieved. The Project shall be deemed to be substantially completed on the date the Work has progressed to the point where, in the reasonable opinion of the Engineer and Owner, it is sufficiently complete, in accordance with the requirements of the Contract Documents, so that the Work can be utilized for the purposes for which it is intended. The date of substantial completion shall be noted in a Certificate of Substantial Completion, to be issued by Engineer pursuant to the terms hereof. Contractor hereby expressly waives and relinquishes any right which it may have to seek to characterize the above noted liquidated damages as a penalty, which the parties agree represents a fair and reasonable estimate of the owner's actual damages at the time of contracting if Contractor fails to substantially complete the Work in a timely manner.

C. When any period of time is referenced to by days herein, it shall be computed to exclude the first day and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday the law of the applicable

jurisdiction, such day shall be omitted from the computation, and the last day shall become the next succeeding day which is not a Saturday, Sunday or legal holiday.

Section 6 The following documents are expressly agreed to be incorporated by reference and made a part of this Agreement.

DIVISION 0: BIDDING AND CONTRACT REQUIREMENTS

- 00010 Invitation to Bid
- 00020 Instruction to Bidders
- 00030 Bid Form
- 00040 Bidder’s Certification
- 00050 Bid Bond
- 00060 Agreement Form
- 00070 Performance and Payment Bond
- 00080 Bid Protest Procedures
- 00090 Insurance Requirements / Hold Harmless Agreement
- 00100 Certificate of Insurance – Worker’s Compensation
- 00110 Certificate of Insurance – General Liability
- 00120 Drug Free Workplace
- 00150 Public Entity Crimes
- 00160 General Terms and Conditions
- 00170 Special Provisions
- 00180 Notice of Award Form
- 00190 Notice to Proceed Form
- 00200 Change Order Form
- 00210 Application for Payment Form
- 00220 Certificate of Substantial Completion Form
- 00230 Release and Affidavit
- 00240 Contractor Request for Information Form

DIVISION I – TECHNICAL PROVISIONS

- 101 Mobilization
- 102 Maintenance of Traffic
- 104 Prevention, Control and Abatement of Erosion
- 110 Clearing & Grubbing
- 120 Excavation & Embankment
- 160 Stabilized Sub Base
- 230 Limerock Stabilized Base

- 334 Superpave Asphalt Concrete
- 522 Concrete Driveway
- 570 Performance Turf
- 706 Raised Retro-Reflective Pavement markers
- 710 Painted Traffic Stripe
- 711 Thermoplastic Traffic Stripes and Markings
- 1150 Measurement & Payment
- 1340 Shop Drawings, Working Drawings and Samples

Section 7 Notices

A. All notices required or made pursuant to this Agreement by the Contractor to the Owner shall be in writing and delivered by hand or by United States Postal Service Department, first class mail, postage pre-paid, return receipt requested, addressed to the following:

City of Apopka
 Public Services Department
 748 E. Cleveland St.
 Apopka FL 32703
 Phone (407) 703-1731
 Fax (407) 703-1748
 Attn: R. Jay Davoll, P.E., Public Services Director

B. All notices required or made-pursuant to this Agreement by Owner to Contractor shall be made in writing and shall be delivered by hand or by United States Postal Service Department, first class mail, postage pre-paid, return receipt requested, addressed to the following:

C. Either party may change its above noted address by giving written notice to the other party in accordance with the requirements of this Section.

Section 8 Modification

No modification or change to the Agreement shall be valid or binding upon the parties unless in writing and executed by the party or parties intended to be bound by it.

Section 9 Successors and Assigns

Subject to other provisions hereof, the Agreement shall be binding upon and shall insure to the benefit of the successors and assigns of the parties to the Agreement.

Section 10 Governing Law

The Agreement shall be interpreted under and its performance governed by the laws of the State of Florida.

Section 11 No Waiver

The failure of the Owner to enforce at any time or for any period of time any one or more of the provisions of the Agreement shall not be construed to be and shall not be a waiver of any such provision or provisions or of its right thereafter to enforce each and every such provision.

Section 12 Entire Agreement

Each of the parties hereto agrees and represents that the Agreement comprises the full and entire agreement between the parties affecting the Work contemplated, and no other agreement or understanding of any nature concerning the same has been entered into or will be recognized, and that all negotiations, acts, work performed, or payments made prior to the execution hereof shall be deemed merged in, integrated and superseded by the Agreement.

Section 13 Severability

Should any provision of the Agreement be determined by a court to be unenforceable, such a determination shall not affect the validity or enforceability of any other section or part thereof.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) indicated below.

CONTRACTOR:

ATTEST:

Secretary

ATTEST:

City Clerk

By: _____

Print Name: _____

Its:

Date: _____

[Corporate Seal]

OWNER:

CITY OF APOPKA, FLORIDA

By: _____

Print Name:

Its:

Date: _____

SECTION 00070
PERFORMANCE AND PAYMENT BOND

BOND NO. _____

KNOW ALL MEN BY THESE PRESENTS: That _____
_____, as Principal, and _____
_____, as Surety, located at _____
_____, (Business Address) are held and firmly bound unto _____
_____ County, Florida, as Obligee in the sum of _____
_____ (\$ _____) for the payment whereof we bind
ourselves, our heirs, executors, personal representatives, successors and assigns, jointly and
severally, firmly by these presents.

WHEREAS, Principal has entered into a contract dated as of the ____ day of
_____ 20 ____, with Obligee for _____

in accordance with drawings and specifications, which contract is by reference made a
part hereof, and is hereinafter referred to as the Contract.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the Contract at the times and in the manner prescribed in the Contract;
and
2. Promptly make payments to all claimants as defined in Section 255.05(1), Florida
Statutes, supplying the Principal with labor, materials or supplies, as used directly or indirectly
by the Principal in the prosecution of the work provided for in the Contract; and

3. Pays Obligee any and all losses, damages, costs and attorneys' fees, including appellate proceedings, that Obligee sustains because of any default by Principal under the Contract, including all delay damages (whether liquidated or unliquidated); and

4. Performs the guarantee of all work and materials furnished under the Contract for the time specified in the Contract, then this-bond is void; otherwise it remains in full force.

The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or other work to be performed hereunder, or the specifications referred to therein, nor compliance or noncompliance with any formalities connected with the Contract or any changes thereto, shall in anywise affect or alter its obligation under this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, additions, compliance or noncompliance.

This bond is intended to be a statutory bond pursuant to Section 255.05, Florida Statutes, and shall be construed accordingly.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their several seals this ____ day of _____, 20__ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Signed, sealed and delivered
in the presence of:

Witnesses as to Principal

PRINCIPAL:

By: _____
Name: _____
Its: _____

OR

Witnesses as to Attorney In Fact

By: _____
Name: _____
Its: _____

Attorney In Fact
(Attach Power)

STATE OF _____
COUNTY OF _____

I, the undersigned authority, hereby certify that on this ____ day of _____
_____, 20____, before me personally appeared _____ as _____
_____ of _____, to me known to be the person(s) described
in and who executed the foregoing instrument, and acknowledged execution thereof to be a free
act and deed for the use and purposes therein mentioned.

WITNESS my hand and official seal on the date aforesaid.

(SEAL)
Notary Public, State of _____
at Large
My commission Expires: _____

ATTEST:

SURETY: _____
(Printed Name)

(Business Address)

Witness

(Authorized Signature)

Witness

(Printed Name)

OR

Witness

As Attorney In Fact (Attach Power)

(Business Address)

(Printed Name)

(Telephone Number)

SECTION 00080
POLICY NO. 109
BID PROTEST PROCEDURES

109.1 OVERVIEW

1. It is the policy of the City of Apopka (the City) to provide those participants in its competitive award process whose interests are adversely affected by bid document provisions and/or an award recommendation with respect to City capitol projects involving the expenditure of over twenty-five thousand dollars (\$25,000.00) the opportunity to protest.
2. The requirements and procedures described herein govern a bid protest brought by an adversely affected participant in any competitive process utilized for selection of a person or other entity to design and/or construct any public improvement, to provide supplies, materials or services (including professional or management services), or to lease any City property.
3. A Party (as hereafter defined) who wishes to file a protest regarding the terms, conditions, or specifications contained in a solicitation, including any provisions governing the methods for ranking bids, proposals, or replies, awarding contracts, reserving rights of further negotiation, or modifying or amending any contract, shall file such a protest according to the procedures and requirements established in Section 109.2, below. Failure to file a notice of protest or failure to file a formal written protest in the manner provided in Section 109.2 shall constitute a waiver of the opportunity to protest the terms, conditions, and specifications contained in the solicitation.
4. A Party who wishes to file a protest regarding a proposed bid award or a proposed rejection of some or all responses to a solicitation, shall file such a protest according to the procedures and requirements established in Section 109.3, below. Failure to file a notice of protest or failure to file a formal written protest in the manner provided in Section III shall constitute a waiver of the opportunity to protest such proposed award.
5. For the purposes of these Bid Protest Procedures, the term "Party" shall mean a bidder, proposer, potential bidder, or potential proposer whose substantial interests are adversely affected by the City's decision or proposed decision regarding a contract solicitation, contract award, or rejection of one or more responses to a contract solicitation.
6. Monies required hereunder as bid protest security shall be in the form of either a protest bond issued by a Florida-licensed surety agency or a cashier's check issued by a bank located and authorized to transact business in the State of Florida.

109.2 PROTESTING BIDDING DOCUMENT SPECIFICATIONS

1. All contract solicitation documents issued by the City shall contain the following statement:

Failure to file a protest within the time prescribed by the City of Apopka's Bid Protest Procedures shall constitute a waiver of right to protest.

2. Within seventy-two (72) hours (excluding Saturdays, Sundays, and City holidays) after a Party's receipt of any contract solicitation documents, the Party wishing to protest the terms, conditions, or specification contained in such documents shall deliver to the City Clerk a written notice of intent to protest. Delivery is not deemed to have been completed until the notice of intent to protest is actually received by the office of the City Clerk.
3. The notice of intent to protest shall be accompanied by a cashier's check or a protest bond from a Florida-licensed agency payable to the City in the amount of \$5,000.00. Should the protesting Party be successful, the security submitted will be returned to the Party. Should the protesting Party be unsuccessful, the security submitted shall be retained by the City as liquidated damages and Party shall have no right to any refund of such security.
4. Within five (5) days from the delivery of its notice of protest, including Saturdays, Sundays, and City holidays, the Party shall deliver to the City Clerk a Formal Written Protest that states the facts and law upon which its protest is based. If the fifth day falls on a Saturday, Sunday, or City holiday, the deadline for delivery of the Formal Written Protest shall be extended until 5:00 p.m. on the next day that is not a Saturday, Sunday, or City holiday. Delivery is not deemed to have been completed until the Formal Written Protest is actually received by the office of the City Clerk.
5. Upon receipt of a timely filed Formal Written Protest, the City shall stop the solicitation process until the subject of the Formal Written Protest is resolved. However, the City may continue with the solicitation process if it determines, in writing, that halting the solicitation process
 - a) would cause or perpetuate an immediate and serious danger to public health, safety or welfare;
 - b) would result in a substantial loss of funding to the City; or
 - c) would otherwise be detrimental to the interests of the City.
6. The City shall refer the protest for proceedings before the City Administrator or his delegee. The Party shall have fourteen (14) days, including Saturdays, Sundays, or City holidays, to submit to the City Administrator or his delegee any documents and sworn testimony in support of its protest. The City Administrator shall issue a

decision, in writing, within fourteen (14) days thereafter and shall provide a copy to the Party by certified mail.

109.3 PROTESTING AWARD DECISION OR REJECTION OF BIDS

1. All bids and proposals shall be evaluated by the City for compliance with the terms, conditions, and specifications of the solicitation documents.
2. All notices of decision or notice of intended decision regarding the award of a contract or the rejection of one or more bids or proposals shall be posted by the City in a public place designated by the City for that purpose.
3. The notice of decision or notice of intended decision shall contain the following statement:

Failure to file a protest within the time prescribed by the City of Apopka's Bid Protest Procedures shall constitute a waiver of right to protest.

4. Within seventy-two (72) hours (excluding Saturdays, Sundays, and City holidays) after the City's posting of notice of a decision or proposed decision to award a contract or reject one or more bids or proposals, a Party wishing to protest the decision or proposed decision shall deliver to the City Clerk a written notice of intent to protest. Delivery is not deemed to have been completed until the notice of intent to protest is actually received by the office of the City Clerk.
5. The notice of intent to protest shall be accompanied a cashier's check or a protest bond from a Florida-licensed agency payable to the City in the amount of \$5,000.00 or one percent (1%) of the contract price submitted by the Party, whichever is greater. Should the protesting Party be successful, the security submitted shall be returned to the Party. Should the protesting Party be unsuccessful, the security submitted shall be retained by the City as liquidated damages and Party shall have no right to any refund of such security.
6. Within five (5) days from the delivery of its notice of protest, including Saturdays, Sundays, and City holidays, the Party shall deliver to the City Clerk a Formal Written Protest that states the facts and law upon which its protest is based. If the fifth day falls on a Saturday, Sunday, or City holiday, the deadline for delivery of the Formal Written Protest shall be extended until 5:00 p.m. on the next day that is not a Saturday, Sunday, or City holiday. Delivery is not deemed to have been completed until the Formal Written Protest is actually received by the office of the City Clerk.
7. Upon receipt of a timely filed Formal Written Protest, the City shall stop the solicitation process until the subject of the Formal Written Protest is resolved. However, the City may continue with the solicitation process if it determines, in writing, that halting the solicitation process

- a) would cause or perpetuate an immediate and serious danger to public health, safety or welfare;
 - b) would result in a substantial loss of funding to the City; or
 - c) would otherwise be detrimental to the interests of the City.
8. The City shall refer the protest for proceedings before the City Administrator or his delegee. The Party shall have fourteen (14) days, including Saturdays, Sundays, or City holidays, to submit to the City Administrator or his delegee any documents and sworn testimony in support of its protest. The City Administrator shall issue a decision, in writing, within fourteen (14) days thereafter and shall provide a copy to the Party by certified mail.

END OF SECTION

SECTION 00090
INSURANCE REQUIREMENTS

Please submit a copy of your insurance certificate with your proposal. Upon execution of a contract, the Vendor shall maintain insurance during the life of the Contract. Vendor shall not commence work under the contract until the City has received a certificate or certificates of insurance and endorsement evidencing the required insurance. Vendor shall provide the City written notice of cancellation, nonrenewal or any other changes in coverage no later than ten (10) days prior to the effective date of the change.

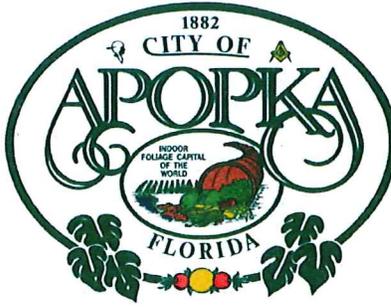
The City reserves the right to increase insurance coverage as determined for higher risk contracts.

- Vendor shall, at its sole cost and expense, procure and maintain throughout the term of this agreement, Comprehensive General Liability and Workers' Compensation insurance, including Employer Liability insurance, with minimum policy limits of \$500,000 Combined Single Limits, or to the extent and in such amounts as required and authorized by Florida Law. If such CGL insurance contains a general aggregate limit, it shall apply separately to this location/project in the amount of \$1,000,000. Products and completed operations aggregate shall be \$1,000,000. CGL insurance shall be written on an occurrence form and shall include bodily injury and property damage liability for premises, operations, independent contractors, products and completed operations, contractual liability, broad form property damage and property damage resulting from explosion, collapse or underground (x, c, u) exposures, personal injury and advertising injury. Damage to rented premises shall be included at \$100,000.
- Vendor must also provide an Automobile Liability insurance policy in the minimum amount of \$1,000,000 Combined Single Limit. Such insurance shall cover liability arising out of any auto (including owned, hired and non-owned autos). The policy shall be endorsed to provide contractual liability coverage.
- Vendor shall purchase and maintain Professional Liability or Malpractice or Errors or Omissions insurance with minimum limits of \$1,000,000 per occurrence. Professional Liability Insurance must cover the project for a period of two (2) years after the project is completed.
- Vendor shall purchase and maintain Builders Risk Insurance to cover the subject property for all risks of, subject to a waiver of coinsurance, and covering off-site storage, transit and installation risks. The policy is to be endorsed to cover the interests of all parties, including the City of Apopka and all contractors and subcontractors. The insurance is to be endorsed to cover the testing and to grant permission to occupy the facility under construction/renovation during such activity.
- All insurance policies shall: 1) provide that the insurance carrier shall not cancel, terminate or otherwise modify the terms and conditions of said policies except upon thirty days written notice to the City's contract administrator; 2) be evidenced by

an endorsed Certificate of Insurance generated and executed by a licensed insurance broker, brokerage, or similar licensed insurance professional evidencing such coverage, and naming the City of Apopka as a named additional insured, as well as furnishing the City with a certified copy, or copies, of said insurance policies; and 3) be approved as to form and sufficiency by the City's contract administrator. The original insurance certificates, all extensions to the insurance certificate, and declaration sheet should be sent to City of Apopka, Attn: Risk Management, 120 East Main Street, Apopka, FL 32703 or e-mailed to riskmanagement@apopka.net. All insurance coverage shall be written with a company having an A.M. Best Rating of at least the "A" category and size category of VIII.

- Vendor is solely responsible for all applicable policy premiums, deductibles, and/or self-insured retentions attached to any required coverages. Said insurance coverages procured by the Vendor as required herein shall be considered, and the Vendor agrees that said insurance coverages it procures as required herein shall be considered, as primary insurance over and above any other insurance, or self-insurance, available to the City, and that any other insurance, or self-insurance available to the City shall be considered secondary to, or in excess of, the insurance coverage(s) procured by the Vendor as required herein.
- Vendor hereby grants to the City of Apopka a waiver of right to subrogation which any insurer of the Vendor may acquire against the City of Apopka by virtue of the payment of any loss under such insurance. Vendor agrees to obtain an endorsement that may be necessary to effect this Waiver of Subrogation, but this provision applies regardless of whether or not the City of Apopka has received a Waiver of Subrogation endorsement from the insurer.
- Vendor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein. Vendor further agrees that any person or entity that they subcontract with shall be considered an additional insured or covered under their insurance policy.

Nothing herein shall be construed to extend the City of Apopka's liability beyond that provided in section 768.28, Florida Statutes.



Public Services Department • 748 E. Cleveland Street • Apopka, Florida 32703

Phone (407) 703-1731 • Fax (407) 703-1748

STANDARD HOLD HARMLESS AND INDEMNITY AGREEMENT

_____ agrees through the signing of this document by an authorized party or agent that it shall defend, indemnify and hold harmless the City of Apopka, and it agents, employees, and public officials from and against all suits, losses, claims, demands, judgments, liabilities and actions, including attorneys' fees and all costs of litigation and judgments of every name and description arising out of or incidental to the performance of this contract or work performed thereunder, whether or not due in whole or in part to or caused by the negligence of the City of Apopka, its agents, employees, and public officials excluding only the sole negligence of the City of Apopka, its agents, employees, and public officials.

This provision shall also pertain to any claims brought against the City of Apopka, its agents, employees, and public officials by an employee of the named Contractor, any Sub-contractor, or anyone directly or indirectly employed by any of them.

_____ obligation to indemnify the City of Apopka, its agents, employees and public officials under this provision shall be limited to \$1,000,000 per occurrence which the parties agree bears a reasonable commercial relationship to the contract.

_____ agrees to accept, as adequate remuneration, the consideration of \$100.00, the promises contained herein, and other good and valuable consideration, which is hereby acknowledged, for agreeing to enter into this Hold Harmless and Indemnity Agreement. Owner and Contractor agree the first \$100.00 of the Contract Amount paid by owner to Contractor shall be given as separate consideration being acknowledged by Contractor and by Contractor's execution of the Agreement.

Printed Name of Contractor: _____

Signature of Contractor: _____

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me this ____ day of _____,
20____, by _____, and who is personally known to me or who has produced
_____ as identification and who did (did not) take an oath.

Notary Public : _____

Commission No: _____

Commission Expires: _____

SECTION 00100

THIS SECTION RESERVED FOR
THE CONTRACTOR'S CERTIFICATE OF INSURANCE
WORKER'S COMPENSATION

SECTION 00110

THIS SECTION RESERVED FOR
THE CONTRACTOR'S CERTIFICATE OF INSURANCE
GENERAL LIABILITY

SECTION 00120
DRUG FREE WORKPLACE CERTIFICATION

The undersigned vendor in accordance with Florida Statue 287.087 hereby certifies that _____ does:

(Name of Business)

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

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Proposer's Signature

Date

SECTION 00150
SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

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

1. This sworn statement is submitted to _____

By _____
(print individual's name and title)

for _____
(print name of entity submitting statements)

whose business address is _____

and if applicable whose Federal Employer Identification Number (FEIN) is _____.

If the entity has no FEIN, include the Social Security Number of the individual signing

this sworn Statement: _____.

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid, proposal, reply, or contract for goods or services, any lease for real property, or any contract for the construction or repair of a public building or public work, involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:
 1. A predecessor or successor of a person convicted of a public entity crime; or
 2. 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 person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies).

____ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or any affiliate of the entity has been charged with and convicted of a public entity crime within the past 36 months.

____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime within the past 36 months.

AND

____ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime within the past 36 months. However, there has been a subsequent proceeding before a Hearing Officers of the State of Florida, Division of Administrative Hearings and the Final Order by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (Attached is a copy of the final order).

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THE PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED AND FOR THE PERIOD OF THE CONTRACT ENTERED INTO, WHICHEVER PERIOD IS LONGER. 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.

(Signature)

STATE OF FLORIDA

COUNTY OF _____

Sworn and subscribed before me this ____ day of _____, 20__ by

_____ who is Personally known to me

_____ Or who produced identification - _____
(Type of Identification)

(Signature) Notary Public - State of Florida

(Printed, typed or stamped commissioned name of notary public)

My commission expires _____ (SEAL)

SECTION 00160
GENERAL TERMS AND CONDITIONS

1. Intent of Contract Documents.

1.1 It is the intent of the Contract Documents to describe a functionally complete project (or portion thereof) to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals-or codes of any technical society, organization or association or to the laws or regulations of any governmental authority having jurisdiction over the Project, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, law or regulation in affect at the time the Work is performed, except as may be otherwise specifically stated herein.

1.2 If during the performance of the Work Contractor discovers a conflict, error or discrepancy in the Contract Documents, Contractor immediately shall report same to Engineer in writing and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from the Engineer or Architect. Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to Contractor with the Contract Documents before commencing any portion of the Work.

1.3 Drawings are intended to show general arrangements, design and extent of Work and are not intended to serve as shop drawings. Specifications are separated into divisions for convenience of reference only and shall not be interpreted as establishing divisions for the Work, trades, subcontracts, or extent of any part: of the Work. In the event of a discrepancy between or among the drawings, specifications or other Contract Document provisions, Contractor shall be required to comply with the provision which is the more restrictive or stringent requirement upon the Contractor, as determined by the Engineer or Architect. Unless otherwise specifically mentioned, all anchors, bolts, screws, fittings, fillers, hardware, accessories, trim and other parts required in connection with any portion of the Work to make a

complete, serviceable, finished and first quality installation shall be furnished and installed as part of the Work, whether or not called for by the Contract Documents.

2. Investigation and Utilities.

2.1 Contractor shall have the sole responsibility of satisfying itself concerning the nature and location of the Work and the general and local conditions, and particularly, but without limitation, with respect to the following: those affecting transportation, access, disposal, handling and storage of materials; availability and quality of labor; water and electric power; availability and condition of roads; work area; living facilities; climatic conditions and seasons; physical conditions at the work-site and the Project area as a whole; topography and ground surface conditions; nature and quantity of the surface materials to be encountered; subsurface conditions; equipment and facilities needed preliminary to and during performance of the Work; and all other costs associated with such performance. The failure of Contractor to acquaint itself with any applicable conditions shall not relieve Contractor from any of its responsibilities to perform under the Contract Documents, nor shall it be considered the basis for any claim for additional time or compensation. Provided, however, the terms of this Paragraph 2.1 shall be subject to the provisions of Paragraph 10.8 herein.

2.2 Contractor shall locate all existing roadways, railways, drainage facilities and utility services above, upon, or under the Project site, said roadways, railways, drainage facilities and utilities being referred to in this Section 2 as the "Utilities". Contractor shall timely contact the owners of all Utilities to determine the necessity and the Utilities owner's scheduling requirements for relocating or temporarily interrupting any Utilities during the construction of the Project. Contractor shall schedule and coordinate its Work around the Utilities owner's scheduling requirements for any such relocation or temporary service interruption. Contractor shall be responsible for properly shoring, supporting and protecting all Utilities at all times during the course of the Work. To the extent Contractor is unreasonably delayed in the performance of its Work due to the failure of any Utilities owner to timely perform with respect to any relocation or temporary service interruption of its Utility, so long as such delay is not due to the fault or neglect of Contractor, Contractor may seek an extension to the Contract Time in accordance with the procedures set forth in Paragraph 9.2 hereafter. In no event shall Contractor be entitled to any increase to the Contract Amount as a result of any such delay.

3. Schedule.

3.1 The Contractor, within ten (10) calendar days after the execution of this Agreement by both parties, shall prepare and submit to Owner and Engineer, for their review and acceptance, a progress schedule for the Project (herein "Progress Schedule"). The Progress Schedule shall relate to all Work required by the Contract Documents and shall provide for expeditious and practicable execution of the Work within the Contract Time. The Progress Schedule shall indicate the dates for starting and completing the various stages of the Work.

3.2 The Progress Schedule shall be updated monthly by the Contractor. All monthly updates to the Progress Schedule shall be subject to the Owner's and Engineer's review and acceptance. Contractor shall submit the updates to the Progress Schedule with its monthly Applications for Payment noted below. The Owner's and Engineer's review and acceptance of the submitted Progress Schedule updates shall be a condition precedent to the Owner's obligation to pay Contractor.

4. Progress Payments.

4.1 The first Application for Payment shall be submitted no earlier than thirty (30) days after the Commencement Date. Within ten (10) calendar days after the execution of this Agreement by both parties, Contractor shall submit to Owner and Engineer, for their review and approval, a schedule of values based upon the Contract Amount, listing the various items of the Work and the dollar value for each element. Said schedule of values to be developed from the Contractor's bid sheet attached as Section 00030. After its approval by Owner and Engineer, this schedule of values shall be used as the basis for Contractor's monthly Applications for Payment. This schedule shall be updated and submitted each month to Engineer along with a completed and notarized copy of the Application for Payment form attached to the Agreement as Section 00210.

4.1.1 As noted in Section 3.A of the Agreement to which these General Conditions are attached, initially the Contract Amount is based upon an amount equal to the sum of the established unit prices for each separately identified item of Work times the estimated quantity for each item as reflected in attached Section 00030. The estimated quantities of items of Work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Amount. Determinations of the actual quantities and classifications of Work

performed by Contractor will be made by Engineer in accordance with the procedures in subparagraph 4.1.3 below.

4.1.2 The unit price for each item of Work will be deemed to include an amount considered by Contractor to be adequate to compensate Contractor for its overhead and profit for each separately identified item of Work.

4.1.3 Engineer will determine the actual quantities and classifications of Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding upon Contractor, unless Contractor files a Claim contesting such determination within five (5) business days after Engineer has rendered its decision.

4.1.4 If the quantity of any item of Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in Section 00030 (such difference must be at least twenty (20) per cent) and such difference will cause substantial inequity to either the Owner of Contractor, the applicable unit price shall be equitably adjusted by Change Order. If Contractor believes any such difference exists, it must file a Claim in accordance with the procedures set forth in Article 11 hereafter.

4.2 Within ten (10) calendar days after the execution of this Agreement by both parties, Contractor shall submit to Owner and the Engineer a complete list of all its proposed subcontractors and materialmen, showing the work and materials involved and the dollar amount of each proposed subcontract and purchase order. Said list of proposed subcontractors and materialmen is to be based upon the list provided with Contractor's bid for this Project.

4.3 Payment for materials and equipment not incorporated into the Project, but delivered and suitably stored at the site, shall be subject to the Owner's discretion. If Owner consents, such payments shall not exceed 50% of the value of such unincorporated items, and the Application for Payment shall be accompanied by a bill of sale, invoice or other documentation warranting that, conditioned solely upon Contractor's receipt of full payment for such items, the Owner has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances, together with evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interest therein, all of which shall be subject to the Owner's satisfaction. Owner shall

not make any payments, and Contractor shall not include in any of its Applications for Payment, any amounts for equipment or materials stored off-site.

4.4 Contractor shall submit three (3) copies of its monthly Application for Payment to the Engineer on or before the 25th day of each month for Work performed during the previous month. Invoices received after the 25th day of each month shall be considered for payment as part of the next month's application. Within ten (10) calendar days after receipt of each Application for Payment, the Engineer shall either: (1) indicate its approval of the requested payment; (2) indicate its approval of only a portion of the requested payment, stating in writing its reasons therefore; or (3) return the Application for Payment to the Contractor indicating, in writing, the reason for refusing to approve payment. In the event of a total denial and return of the Application for Payment by the Engineer, the Contractor may make the necessary corrections and resubmit the Application for Payment. So long as the Contractor has submitted a complete and proper Application for Payment with all required supporting documentation, Owner shall, within thirty (30) calendar days after its receipt of the Application for Payment, pay the Contractor the amounts approved by the Engineer and Owner. Provided, however, in no event shall the Owner be obligated to pay an amount greater than that portion of the Application for Payment approved by the Engineer.

4.5 Owner shall retain ten percent (10%) of the gross amount of each monthly payment request or ten percent (10%) of the portion thereof approved by the Owner for payment, whichever is less. Such sum shall be accumulated and not released to Contractor until final payment is due. Any interim interest on such sums shall accrue to Owner.

4.6 Monthly payments to Contractor shall in no way imply approval or acceptance of the Work.

4.7 Each Application for Payment shall be accompanied by Release and Affidavits, in the form attached as Section 00230, from Contractor (and each of its subcontractors and suppliers on a form substantially similar to Section 00230 as approved by Owner) with respect to that portion of the Work upon which payment is being requested. The Owner shall not be required to make payment until and unless these affidavits are furnished by Contractor.

5. Payments Withheld.

5.1 The Engineer or Owner may decline to approve any Application for Payment, or portions thereof, because of subsequently discovered evidence or subsequent inspections. The

Engineer or Owner may nullify the whole or any part of any approval for payment previously issued and Owner may withhold any payments otherwise due Contractor under this Agreement or any other agreement between Owner and Contractor, to such extent as may be necessary in the Engineer's or Owner's opinion to protect it from loss because of: (a) defective Work not remedied; (b) third party claims filed or reasonable evidence indicating probable filing of such claims; (c) failure of Contractor to make payment properly to subcontractors or materialmen for labor, materials or equipment; (d) reasonable doubt that the Work can be completed for the unpaid balance of the Contract Amount; (e) reasonable indication that the Work will not be completed within the Contract Time; (f) unsatisfactory prosecution of the Work by the Contractor; or (g) any other material breach of the Contract Documents by Contractor. If these conditions are not remedied or removed, Owner may, after three (3) days written notice, rectify the same at Contractor's expense. Owner also may offset against any sums due Contractor the amount of any liquidated or unliquidated obligations of Contractor to Owner, whether relating to or arising out of this Agreement or any other agreement between Contractor and Owner.

6. Final Payment.

6.1 Owner shall make final payment to Contractor within thirty (30) calendar days after the Work is finally inspected and accepted by both Owner and the Engineer in accordance with Section 20.1 herein, provided that Contractor first, and as an explicit condition precedent to the accrual of Contractor's right to final payment, shall have furnished Owner with a properly executed and notarized copy of the Release and Affidavit attached as Section 00230, as well as, a duly executed copy of the Surety's consent to final payment and such other documentation that may be required by the Contract Documents, Engineer or Owner.

6.2 Contractor's acceptance of final payment shall constitute a full waiver of any and all claims by Contractor against Owner arising out of this Agreement or otherwise relating to the Project, except those previously made in writing and identified by Contractor as unsettled in its final Application for Payment. Neither the acceptance of the Work nor payment by Owner shall be deemed to be a waiver of Owner's right to enforce any obligations of Contractor hereunder or to the recovery of damages for defective Work not discovered by the Engineer or Owner at the time of final inspection.

7. Submittals and Substitutions.

7.1 Contractor shall carefully examine the Contract Documents for all requirements for approval of materials to be submitted such as shop drawings, data, test results, schedules and samples. Contractor shall submit all such materials at its own expense and in such form as required by the Contract Documents in sufficient time to prevent any delay in the delivery of such materials and the installation thereof.

7.2 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other suppliers may be accepted by Owner if sufficient information is submitted by Contractor to allow the Owner to determine that the material or equipment proposed is equivalent or equal to that named. Requests for review of substitute items of material and equipment will not be accepted by Owner from anyone other than Contractor and all such requests must be submitted by Contractor to Engineer within thirty (30) calendar days after Notice of Award is received by Contractor.

7.3 If Contractor wishes to furnish or use a substitute item of material or equipment, Contractor shall make application to the Engineer for acceptance thereof, certifying that the proposed substitute shall perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application shall state that the evaluation and acceptance of the proposed substitute will not prejudice Contractor's achievement of substantial completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for the Project) to adapt the design to the proposed substitute and whether or not incorporation or use by the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service shall be indicated. The application also shall contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs for redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the Engineer in

evaluating the proposed substitute. The Engineer may require Contractor to furnish at Contractor's expense additional data about the proposed substitute.

7.4 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the Engineer, if Contractor submits sufficient information to allow the Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedures for submission to and review by the Engineer shall be the same as those provided herein for substitute materials and equipment.

7.5 The Engineer shall be allowed a reasonable time within which to evaluate each proposed substitute. The Engineer and Owner shall be the sole judges of acceptability, and no substitute will be ordered, installed or utilized without the Engineer's and the Owner's prior written acceptance which shall be evidenced by either a Change Order or an approved Shop Drawing. The Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute. The Engineer will record time required by the Engineer and the Engineer's consultants in evaluating substitutions proposed by Contractor and making changes in the Contract Documents occasioned thereby. Whether or not the Owner accepts a proposed substitute, Contractor shall reimburse Owner for the charges of the Engineer and the Engineer's consultants for evaluating each proposed substitute.

8. Daily Reports, As-Builts and Meetings.

8.1 Unless waived in writing by Owner, Contractor shall complete and submit to Engineer on a weekly basis a daily log of the Work for the preceding week in a format approved by the Engineer and Owner. The daily log shall document all activities of Contractor at the Project site including, but not limited to, the following:

8.1.1 Weather conditions showing the high and low temperatures during work hours, the amount of precipitation received on the Project site, and any other weather conditions which adversely affect the Work;

8.1.2 Soil conditions which adversely affect the Work;

8.1.3 The hours of operation by Contractor's and subcontractor's personnel;

8.1.4 The number of Contractor's and subcontractor's personnel present and working at the Project site, by subcontract and trade;

8.1.5 All equipment present at the Project site, description of equipment use and designation of time equipment was used (specifically indicating any down time);

8.1.6 Description of Work being performed at the Project site;

8.1.7 Any unusual or special occurrences at the Project site;

8.1.8 Materials received at the Project site; and

8.1.9 A list of all visitors to the Project site.

The daily log shall not constitute nor take the place of any notice required to be given by Contractor to Owner or Engineer pursuant to the Contract Documents.

8.2 Contractor shall maintain in a safe place at the Project site one-record copy of the Contract Documents, including, but not limited to, all drawings, specifications, addenda, amendments, Change Orders, Work Directive Changes and Field Orders, as well as all written interpretations and clarifications issued by the Engineer, in good order and annotated to show all changes made during construction. The annotated drawings shall be continuously updated by the Contractor throughout the prosecution of the Work to accurately reflect all field changes that are made to adapt the Work to field conditions, changes resulting from Change Orders, Work Directive Changes and Field Orders.

8.3 Contractor shall keep all records and supporting documentation which concern or relate to the Work hereunder for a minimum of five (5) years from the date of termination of this Agreement or the date the Project is completed, whichever is later. Owner, or any duly authorized agents or representatives of Owner, shall have the right to audit, inspect and copy all such records and documentation as often as they deem necessary during the period of this Agreement and during the five (5) year period noted above; provided, however, such activity shall be conducted only during normal business hours.

9. Contract Time and Time Extensions.

9.1 Contractor shall diligently pursue the completion of the Work and coordinate the Work being done on the Project by its subcontractors and materialmen, as well as coordinating its Work with all work of others at the Project Site, so that its Work or the work of others shall not be delayed or impaired by any act or omission by Contractor. Contractor shall be solely

responsible for all construction means, methods, techniques, sequences, and procedures, as well as coordination of all portions of the Work under the Contract Documents.

9.2 Should Contractor be obstructed or delayed in the prosecution of or completion of the Work as a result of unforeseeable causes beyond the control of Contractor, and not due to its fault or neglect, including but not restricted to acts of God or of the public enemy, acts of government, fires, floods, epidemics, quarantine regulation, strikes or lockouts, Contractor shall notify the Owner in writing within forty-eight (48) hours after the commencement of such delay, stating the cause or causes thereof, or be deemed to have waived any right which Contractor may have had to make a claim for increased time or costs. Contractor shall be entitled to an extension to the Contract Time for any such delays, to the extent its performance of critical path Work has been delayed, so long as such delay is beyond its control and not due to its fault or neglect and Contractor has provided the written notice as required herein.

9.3 No interruption, interference, inefficiency, suspension or delay in the commencement or progress of the Work from any cause whatever, including those for which Owner may be responsible, in whole or in part, shall relieve Contractor of his duty to perform or give rise to any right to damages or additional compensation from Owner. Contractor expressly acknowledges and agrees that it shall receive no damages for delay. Contractor's sole remedy, if any, against Owner will be the right to seek an extension to the Contract Time; provided, however, the granting of any such time extension shall not be a condition precedent to the aforementioned "No Damage For Delay" provision. This paragraph shall expressly apply to claims for early completion, as well as to claims based on late completion. Notwithstanding the foregoing, if the Work is delayed due to the fault or neglect of Owner or anyone for whom Owner is liable ("Owner Delay"), and such Owner Delay exceeds a cumulative total of 90 calendar days, Contractor may make a claim in accordance with the procedures set forth in this Contract, for the actual and direct increased field costs it incurs as a result of such Owner Delay accruing after said 90 calendar days. Provided, however, Contractor expressly acknowledges and agrees that its actual and direct increased field costs shall not exceed \$500.00 per calendar day.

10. Changes in the Work.

10.1 Owner shall have the right at any time during the progress of the Work to increase or decrease the Work. Promptly after being notified of a change, Contractor shall

submit an itemized estimate of any cost or time increases or savings it foresees as a result of the change. Except in an emergency endangering life or property, or as expressly set forth herein, no addition or changes to the Work shall be made except upon written order of Owner, and Owner shall not be liable to the Contractor for any increased compensation without such written order. No officer, employee or agent of Owner is authorized to direct any extra or changed Work orally.

10.2 A Change Order, in the form attached as Section 00200 to this Agreement, shall be issued and executed promptly after an agreement is reached between Contractor and Owner concerning the requested changes. Contractor shall promptly perform changes authorized by duly executed Change Orders. The Contract Amount and Contract Time shall be adjusted in the Change Order in the manner as Owner and Contractor shall mutually agree.

10.3 If Owner and Contractor are unable to agree on a Change Order for the requested change, Contractor shall, nevertheless, promptly perform the change as directed by Owner in a written Work Directive Change. In that event, the Contract Amount and Contract Time shall be adjusted as directed by Owner. If Contractor disagrees with the Owner's adjustment determination, Contractor must make a claim pursuant to Section 11 of these General Conditions or else be deemed to have waived any claim on this matter it might otherwise have had.

10.4 In the event a requested change results in an increase to the Contract Amount, the amount of the increase shall be limited to the Contractor's reasonable direct labor and material costs and reasonable actual equipment costs as a result of the change (including allowance for labor burden costs) plus a maximum ten percent (10%) markup for all overhead and profit. In the event such change Work is performed by a subcontractor, a maximum ten percent (10%) markup for all overhead and profit for that subcontractors' direct labor and material costs and actual equipment costs shall be permitted, with a maximum five percent (5%) markup thereon by the Contractor for all of its overhead and profit, for a total maximum markup of fifteen percent (15%). All compensation due Contractor and any subcontractor for field and home office overhead is included in the markups noted above.

10.5 Owner shall have the right to conduct an audit of Contractor's books and records to verify the accuracy of the Contractor's claim with respect to Contractor's costs associated with any Change Order.

10.6 The Engineer shall have authority to order minor changes in the Work not involving an adjustment to the Contract Amount or an extension to the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the Contractor.

10.7 If Contractor encounters on the Project site any materials reasonably believed by Contractor to be petroleum or petroleum related products or other hazardous or toxic substances which have not been rendered harmless, Contractor immediately shall (i) stop Work in the area affected and (ii) immediately report the condition to Owner and Engineer. If the Work is so stopped and hazardous material is found, the Work in the affected area shall not thereafter be resumed except by Change Order. Any such Change Order shall include, but not be limited to, an adjustment to the Contract Time and Contract Amount, as appropriate. If no hazardous material is found after the Work is stopped, no Change Order is required to resume the Work in the affected area. Further, if the hazardous material was generated or caused by Contractor or any of its employees, agents, subcontractors or materialmen, no Change Order will be required, nor any adjustment to either the Contract Time or Contract Amount shall be made, and Contractor shall indemnify, defend and hold Owner harmless from any costs or expenses incurred by Owner with respect to such hazardous material.

10.8 Subject to the provisions of Paragraph 6 of the Special Provisions attached to the Agreement as Section 00170, if conditions are encountered at the Project site which are (i) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or (ii) unknown physical conditions of an unusual nature, which differ material from those ordinarily found to exist and generally recognized as inherent in construction activities for the character provided for in the Contract Documents, then Contractor shall provide Owner with prompt written notice thereof before conditions are disturbed and in no event later than 48 hours after the first observance of such conditions. Contractor's failure to provide such written notice shall be deemed a waiver of any claim Contractor otherwise may have made with respect to any such conditions. Owner and Engineer shall properly investigate such conditions and, if they differ materially and cause an increase or decrease in Contractor's cost of, or time required for, performance of any part of the Work, Owner will acknowledge and agree to an equitable adjustment to the Contract Amount or Contract Time, or both, for such Work. If Owner determines that the conditions at the site are

not materially different from those indicated in the Contract Documents or not of an unusual nature or should have been discovered by Contractor as part of its site investigations, and that no change in the terms of the Contract Documents is justified, Owner shall so notify Contractor in writing, stating its reasons. Claims by Contractor in opposition to such determination by Owner must be made within seven (7) calendar days after Contractor's receipt of Owner's written notice of such decision. If Contractor fails to provide Owner and Engineer written notice of such claim within said seven calendar (7) day period, Contractor shall be deemed to have waived any such claim. If Owner and Contractor cannot agree on the adjustment to the Contract Amount or Contract Time, the dispute resolution procedures set forth in the Contract Documents shall be complied with by the parties.

11. Claims and Disputes.

11.1 A Claim is a demand or assertion by one of the parties seeking an adjustment or interpretation of the terms of the Contract Documents, payment of money, extension of time or other relief with respect to the terms of the Contract Documents. The term "Claim" also includes other disputes and matters in question between Owner and Contractor arising out of or relating to the Contract Documents. The responsibility to substantiate a Claim shall rest with the party making the Claim.

11.2 Claims by the Contractor shall be made in writing to the Owner and Engineer within the time period set forth in the Contract Documents for such claim event, or if no such time period is stated, then within forty-eight (48) hours after the first day of the event giving rise to such Claim. Contractor's failure to comply with these notice requirements shall be deemed a waiver of the Claim by Contractor. Written supporting data shall be submitted to the Owner and Engineer within fifteen (15) calendar days after the occurrence of the event, unless the Owner grants additional time in writing, or else the Contractor shall be deemed to have waived the Claim. All Claims shall be priced in accordance with the provisions of Subsection 10.4.

11.3 The Contractor shall proceed diligently with its performance as directed by the Owner, regardless of any pending Claim action, suit, arbitration or administrative proceeding, unless otherwise agreed to by the Owner in writing, and Owner shall continue to make payments in accordance with the Contract Documents during the pendency of any Claim.

12. Other Work.

12.1 Owner may perform other work related to the Project at the site with Owner's own forces, have other work performed by utility owners or let other direct contracts. If the fact that such other work is to be performed is not noted in the Contract Documents, notice thereof will be given to Contractor prior to starting any such other work. If Contractor believes that such performance will involve additional expense to Contractor or require additional time, Contractor shall file a Claim in accordance with the procedures set forth in Article 11 above.

12.2 Contractor shall afford each utility owner and other contractors who are a party to a direct contract with Owner (or Owner, if Owner is performing the additional work with Owner's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work and shall properly connect and coordinate its Work with theirs. Contractor shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the Engineer and the others whose work will be affected.

12.3 If any part of the Work depends for proper execution or results upon the work of any other contractor or utility owner (or Owner), Contractor shall inspect and promptly report to Engineer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. Contractor's failure to report will constitute an acceptance of the other work as fit and proper for integration with the Work except for latent defects in such other work not reasonably discovered by Contractor.

13. Indemnification and Insurance.

13.1 To the maximum extent permitted by Florida law, Contractor agrees to save harmless and indemnify Owner and its officers and employees from any and all liabilities, claims, damages penalties, demands, judgments, actions proceedings, losses or costs, including, but not limited to reasonable attorneys' fees and paralegals' fees, whether resulting from any claimed breach of this Agreement by Contractor or from personal injury, property damage, direct or consequential damages, or economic loss, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of Contractor or anyone employed or utilized by the Contractor in the performance of this Agreement. 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, the sufficiency of such separate consideration being acknowledged by Contractor by Contractor's execution of the Agreement.

13.1.1 Contractor agrees to defend the Owner and its employees, officers, directors and agents, and at the Owner's discretion, upon written demand to the Contractor, the Engineer and their respective employees, officers, directors and agents (collectively "Defended Parties"), from any and all liabilities, claims, damages, penalties, demands, losses, actions or proceedings, whether for personal injury, property damage, direct or consequential damages, or economic loss, arising directly or indirectly on account of or in connection with any negligent or wrongful act or omission of Contractor or anyone for whom Contractor is legally liable, or resulting from any breach of this Agreement by Contractor or anyone for whom Contractor is legally liable, or resulting from the use by Contractor, or by anyone for whom Contractor is legally liable, of any materials, tools, machinery or other property of any of Defended Party. The selection of counsel for defense of any such matter is subject to approval by Owner. Owner has the right to direct the defense of any matter under this Paragraph. Provided, however, nothing herein shall be construed as requiring Contractor to defend any particular Defended Party in claims arising solely from the negligence or misconduct of that Defended Party. And further provided that, following settlement or satisfaction of any claim against a Defended Party, nothing herein shall be construed to limit or abrogate the rights of Contractor to seek common law contribution for such settlement or satisfaction. Owner and Contractor agree the second \$100.00 of the Contract Amount paid by Owner to Contractor shall be given as separate consideration for this duty to defend, the sufficiency of such separate consideration being acknowledged by Contractor by Contractor's execution of the Agreement.

13.2 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 Division 00090 to the Agreement. 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 which are registered with the State of Florida. Within ten (10) calendar days after the execution of this Agreement by both parties, 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. 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. In addition, certified, true and exact copies of all insurance policies required hereunder shall be provided to Owner, on a timely basis, when requested by Owner.

13.3 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.

13.4 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.

13.5 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 Section 00090, 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 Owner as an additional insured and shall contain severability of interest provisions. 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 expiration.

13.6 Should at any time the Contractor not maintain the insurance coverages required herein, the Owner may terminate the Agreement for cause 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.

13.7 Contractor shall submit to Engineer a copy of all accident reports arising out of any injuries to its employees or those of any firm or individual to whom it may have subcontracted a portion of the Work, or any personal injuries or property damages arising or alleged to have arisen on account of any work by Contractor under the Contract Documents.

14. Compliance with Laws.

14.1 Contractor agrees to comply, at its own expense, with all federal, state and local laws, codes, statutes, ordinances rules, regulations and requirements applicable to the Project, including but not limited to those dealing with taxation, worker's compensation, equal employment and safety. If Contractor observes that the Contract Documents are at variance therewith, it shall promptly notify Owner and Engineer in writing prior to performing any such portion of the Work.

15. Cleanup and Protections.

15.1 Contractor agrees to keep the Project site clean at all times of debris, rubbish and waste materials arising out of the Work. At the completion of the Work, Contractor shall remove all debris, rubbish and waste materials from and about the Project site, as well as all tools, appliances, construction equipment and machinery and surface materials, and shall leave the Project site clean and ready for occupancy by Owner.

15.2 Any existing surface or subsurface improvements (subject to the provisions of Paragraph 10.8 above), including, but not limited to, pavements, curbs, sidewalks, pipes, utilities, footings, structures, trees and shrubbery, not indicated in the Contract Documents to be removed or altered, shall be protected by Contractor from damage during the prosecution of the Work. Any such improvements so damaged shall be restored by Contractor to the condition equal to that existing at the time of Contractor's commencement of the Work.

16. Assignment.

16.1 Contractor shall not assign this Agreement or any part thereof, without the prior written consent of Owner, which consent shall be at Owner's sole discretion. Contractor shall not be released from this Agreement as the result of any such assignment.

17. Permits, Licenses and Taxes.

17.1 Except for St. John River Water Management Permit for surface water drainage and FDEP permits for water and sewer utility improvements, all permits and licenses necessary for the prosecution of the Work (including all dewatering and NPDES permits) shall be procured and paid for by Contractor. If Contractor performs any Work without obtaining, or contrary to, such permits or licenses, Contractor shall bear all costs arising therefrom. Except for all City of Apopka permit and inspection fees, which have been waived by Owner, Contractor shall pay all other governmental charges and inspection fees necessary for the prosecution of the Work.

17.2 Contractor shall pay all sales, consumer, use and other similar taxes associated with the Work or portions thereof, which are applicable during the performance of the Work.

18. Termination for Default.

18.1 Contractor shall be considered in material default of the Agreement and such default shall be considered cause for Owner to terminate Contractor's right to continue to perform under 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 the Engineer 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.

18.2 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 (unless the cure cannot reasonably be accomplished within said seven (7) calendar days, in which event Contractor must commence the cure within said seven (7) calendar days and thereafter diligently and continuously prosecute such cure to completion, but in no event shall such time period to cure exceed thirty (30) calendar days following receipt by Contractor of Owner's default 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 the Work by whatever means, method or agency which Owner, in its sole discretion, may choose.

18.3 If Owner deems any of the foregoing remedies necessary, Contractor agrees that it 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 Engineer's and 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, shall be certified by the Engineer, upon application, and this obligation for payment shall survive termination of the Agreement.

18.4 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 therefore or reletting the Work, and in settlement, discharge or compromise of any claims, demands, suits, and judgments pertaining to or arising out of the Work hereunder. Owner may rely upon the Engineer's recommendations and determinations with respect to any default by Contractor hereunder, including whether any such default has been appropriately cured by Contractor.

18.5 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 was 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 under Section 19 below.

19. Termination for Convenience and Right of Suspension.

19.1 Owner shall have the right to terminate this Agreement, in whole or in part, 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.

19.2 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 may seek an extension of time to its schedule in accordance with the terms and conditions of Paragraphs 9.2 and 9.3 herein. 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.

20. Completion.

20.1 When the entire Work (or any portion thereof designated in writing by Owner) is ready for its intended use, Contractor shall notify Owner and Engineer in writing that the entire Work (or such designated portion) is substantially complete and request that Engineer issue a Certificate of Substantial Completion (or Certificate of Partial Substantial Completion).

Within a reasonable time thereafter, Owner, Contractor and Engineer shall make an inspection of the Work (or designated portion thereof) to determine the status of completion. If Owner and Engineer do not consider the Work (or designated portion) substantially complete, Engineer shall notify Contractor in writing giving the reasons therefor. If Owner and Engineer consider the Work (or designated portion) substantially complete, Engineer shall prepare and deliver to Contractor a Certificate of Substantial Completion (or Certificate of Partial Substantial Completion) which shall fix the date of Substantial Completion for the entire Work (or designated portion thereof) and include a tentative punch-list of items to be completed or corrected by Contractor before final payment. Owner shall have the right to exclude Contractor from the Work and Project site (or designated portion thereof) after the date of Substantial Completion, but Owner shall allow Contractor reasonable access to complete or correct items on the tentative punch list.

20.2 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 shall promptly make such inspection and, if it finds the Work acceptable and fully performed under the Contract Documents, Engineer shall promptly issue a final Certificate for Payment, stating that, on the basis of its observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor is due and payable. Neither the final payment nor the retainage shall become due and payable until Contractor submits: (1) the Release and Affidavit in the form attached as Section 00230, (2) consent of surety to final payment, and (3) if required by Owner or Engineer, other data establishing payment or satisfaction of all obligations, such as receipts, releases and waivers, arising out of the Contract Documents, to the extent and in such form as may be designated by Owner or Engineer. Owner reserves the right to inspect the Work and make an independent determination as to the Work's acceptability, even though the Engineer may have issued its certificate. Unless and until the Owner is completely satisfied, neither the final payment nor the retainage shall become due and payable.

21. Warranty.

21.1 Contractor shall obtain and assign to Owner all express warranties given to Contractor or any subcontractors by any materialmen supplying materials, equipment or fixtures to be incorporated into the Project. Contractor warrants to Owner that any materials

and equipment furnished under the Contract Documents shall be new unless otherwise specified, and that all Work shall be of good quality, free from all defects and in conformance with the Contract Documents. Contractor further warrants to Owner that all materials and equipment furnished under the Contract Documents shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturers, fabricators, suppliers or processors except as otherwise provided for in the Contract Documents. If, within one (1) year after final completion, any Work is found to be defective or not in conformance with the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner. Contractor shall also be responsible for and pay for replacement or repair of adjacent materials or Work which may be damaged as a result of such replacement or repair. These warranties are in addition to those implied warranties to which Owner is entitled as a matter of law or any other express warranties contained within the Contract Documents.

22. Tests and Inspections.

22.1 Owner, Engineer, their respective representatives, agents and employees, and governmental agencies with jurisdiction over the Project shall have access at all times to the Work, whether the Work is being performed on or off of the Project site, for their observation, inspection and testing. Contractor shall provide proper, safe conditions for such access. Contractor shall provide Engineer with timely notice of readiness of the Work for all required inspections, tests or approvals.

22.2 If the Contract Documents or any codes, laws, ordinances, rules or regulations of any public authority having jurisdiction over the Project requires any portion of the Work to be specifically inspected, tested or approved, Contractor shall assume full responsibility therefore, pay all costs in connection therewith and furnish Engineer the required certificates of inspection, testing or approval. All inspections, tests or approvals shall be performed in a manner and by organizations acceptable to the Engineer and Owner.

22.3 If any Work that is to be inspected, tested or approved is covered without written concurrence from the Engineer, such Work must, if requested by Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness to respond to such notice. If any Work is covered

contrary to written directions from Engineer, such Work must, if requested by Engineer, be uncovered for Engineer's observation and be replaced at Contractor's sole expense.

22.4 The Owner shall charge to Contractor and may deduct from any payments due Contractor all engineering and inspection expenses incurred by Owner in connection with any overtime work. Such overtime work consisting of any Work performed during the construction period beyond the regular eight (8) hour day and for any work performed on Saturday, Sunday or holidays.

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

23. Defective Work.

23.1 Work not conforming to the requirements of the Contract Documents shall be deemed defective Work. If required by Owner or Engineer, Contractor shall as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the defective Work has been rejected by Owner or Engineer, remove it from the site and replace it with non-defective Work. Contractor shall bear all direct, indirect and consequential costs of such correction or removal (including, but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby, and shall hold Owner harmless for same.

23.2 If the Owner or Engineer consider it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Owner's or Engineer's request, shall uncover, expose or otherwise make available for observation, inspection or tests as Owner or Engineer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, Contractor shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals), and Owner shall be entitled to an appropriate decrease in the Contract Amount. If, however, such Work is not found to be defective, Contractor shall be allowed an increase in the Contract Amount and/or an extension to the Contract Time, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

23.3 If any portion of the Work is defective, or Contractor fails to supply sufficient skilled workers with suitable materials or equipment, or fails to finish or perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner or Engineer may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner and Engineer to stop the Work shall not give rise to any duty on the part of Owner or Engineer to exercise this right for the benefit of Contractor or any other party.

23.4 Should the Owner determine, at its sole opinion, it is in the Owner's best interest to accept defective Work, the Owner may do so. Contractor shall bear all direct, indirect and consequential costs attributable to the Owner's evaluation of and determination to accept defective Work. If such determination is rendered prior to final payment, a Change Order or Work Change Directive shall be issued evidencing such acceptance of such defective Work, incorporating the necessary revisions in the Contract Documents and reflecting an appropriate decrease in the Contract Amount. If the Owner accepts such defective Work after final payment, Contractor shall promptly pay Owner an appropriate amount determined by Owner to adequately compensate Owner for its acceptance of the defective Work.

23.5 If Contractor fails, within a reasonable time after the written notice from Owner or Engineer, to correct defective Work or to remove and replace rejected defective Work as required by Engineer or Owner, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any of the provisions of the Contract Documents, Owner may, after seven (7) days written notice to Contractor, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, Owner may exclude Contractor from any or all of the Project site, take possession of all or any part of the Work, and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Project site and incorporate in the Work all materials and equipment stored at the Project site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Engineer and their respective representatives, agents, and employees such access to the Project site as may be necessary to enable Owner to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of Owner in exercising such rights and remedies shall be charged against Contractor, and a Change Order or Work Change Directive

shall be issued, incorporating the necessary revisions to the Contract Documents, including an appropriate decrease to the Contract Amount. Such direct, indirect and consequential costs shall include, but not be limited to, fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of Contractor's defective Work. Contractor shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by Owner of Owner's rights and remedies hereunder.

24. Supervision and Superintendents.

24.1 Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be responsible to see that the finished Work complies accurately with the Contract Documents. Contractor shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without prior written notice to Owner and Engineer except under extraordinary circumstances. The superintendent shall be Contractor's representative at the Project site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor. Owner shall have the right to direct Contractor to remove and replace its Project superintendent, with or without cause.

25. Protection of Work.

25.1 Contractor shall fully protect the Work from loss or damage and shall bear the cost of any such loss or damage until final payment has been made. If Contractor or any one for whom Contractor is legally liable for is responsible for any loss or damage to the Work, or other work or materials of Owner or Owner's separate contractors, Contractor shall be charged with the same, and any monies necessary to replace such loss or damage shall be deducted from any amounts due Contractor.

25.2 Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

26. Emergencies.

26.1 In the event of an emergency affecting the safety or protection of persons or the Work or property at the Project site or adjacent thereto, Contractor, without special instruction or authorization from Owner or Engineer is obligated to act to prevent threatened damage, injury or loss. Contractor shall give Engineer written notice within forty-eight (48) hours after the occurrence of the emergency, if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If the Engineer determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Change Order shall be issued to document the consequences of the changes or variations. If Contractor fails to provide the forty-eight (48) hour written notice noted above, the Contractor shall be deemed to have waived any right it otherwise may have had to seek an adjustment to the Contract Amount or an extension to the Contract Time.

27. Use of Premises.

27.1 Contractor shall confine all construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other lands and areas permitted by law, rights of way, permits and easements, and shall not unreasonably encumber the Project site with construction equipment or other material or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or any land or areas contiguous thereto, resulting from the performance of the Work.

28. Safety.

28.1 Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

28.1.1 All employees on the Work and other persons and/or organizations who may be affected thereby;

28.1.2 All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Project site; and

28.1.3 Other property on the Project site or adjacent thereto, including trees, shrubs, laws, walks, pavements, roadways, structures, utilities and any underground structures or improvements not designated for removal, relocation or replacement in the Contract Documents.

28.2 Contractor shall comply with all applicable codes, laws, ordinances, rules and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss (including, but not limited to, the Trench Safety Act, Chapter 553, Florida Statutes). Contractor shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of underground structures and improvements and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation or replacement of their property. Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as the Work is completed and final acceptance of same by Owner has occurred.

28.3 Contractor shall designate a responsible representative at the Project site whose duty shall be the prevention of accidents. This person shall be Contractor's superintendent unless otherwise designated in writing by Contractor to Owner.

29. Project Meetings.

29.1 Prior to the commencement of Work, the Contractor shall attend a preconstruction conference with the Engineer and others as appropriate to discuss the Progress Schedule, procedures for handling shop drawings and other submittals, and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work. During the prosecution of the Work, the Contractor shall attend any and all meetings convened by the Engineer or Owner with respect to the Project, when directed to do so by Owner or Engineer. Contractor shall have its subcontractors and suppliers attend all such meetings (including the preconstruction conference) as may be directed by the Owner or Engineer.

30. Securing Agreement.

30.1 Contractor warrants that Contractor has not employed or retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement and that Contractor has not paid or agreed to pay any person, company,

corporation, individual or firm, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this Agreement.

31. Public Entity Crimes.

31.1 By its execution of this Contract, Contractor acknowledges that it has been informed by Owner of the terms of Section 287.133(2)(a) of the Florida Statutes which read as follows:

“A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.”

32. Equal Employment Opportunity/Non-Discrimination

32.1 In performing all services to be provided hereunder, Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. Contractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such actions shall include, but not be limited to the following: (i) employment, upgrading, demotion or transfer; (ii) recruitment or recruitment advertising; (iii) layoff or termination; (iv) rates of pay or other forms of compensation; and (v) selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to all employees and applicants for employment notices setting forth the terms of this Equal Employment Opportunity Non-Discrimination Clause and stating that all qualified candidates will receive consideration for employment without regard to race, color, religion, sex or national origin.

33. Drug-Free Workplace

33.1 By its execution of this Contract, Contractor acknowledges that it has been informed by Owner of the terms of Section 287.087 of the Florida Statutes which reads as

follows: “Whenever two or more bids, proposals, or replies that are equal with respect to price, quality, and service are received by the state or by any political subdivision for the procurement of commodities or contractual services, a bid, proposal, or reply received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

(1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

(2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

(3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

(4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by, any employee who is so convicted.

(6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.”

END OF GENERAL TERMS AND CONDITIONS

SECTION 00170
SPECIAL PROVISIONS

1. STANDARD SPECIFICATIONS

The project shall be constructed in accordance with these specifications and the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction, latest Edition, hereafter referred to as the "Standard Specifications," and "Orange County Road Construction Specifications for County Roads."

When reference is made to a Division, Section or Article, it shall mean a Division, Section or Article of said "Standard Specifications" or "Orange County Road Construction Specifications."

2. LABORATORY TESTING

a. Cost of all required laboratory testing, except the soil cement mix design, shall be borne by the City, except that the cost of all retesting due to defective materials or construction shall be borne by the Contractor.

b. Owner will make available to the Contractor one copy of any and all laboratory testing performed by the Owner and or Engineer as a part of this project's design.

3. COOPERATION WITH OTHERS

The Contractor shall cooperate with the owners of any underground or overhead utilities in their removal and rearrangement operations, in order that these operations may progress in a reasonable manner and that service rendered by these parties will not be interrupted.

4. METHOD OF MEASUREMENT

All measurement for payment will be based on the completed work performed in strict accordance with the drawings and specifications. All work completed under this contract shall be measured by the Contractor or his representatives in the presence of the Engineer or his representative.

5. NOTIFICATION TO AND COORDINATION WITH UTILITY COMPANIES

The excavators shall comply with FL 77-153 regarding notification of existing gas and oil pipeline company owners. During the period of this contract, it shall be the Contractor's responsibility to coordinate all utility adjustments necessary for the completion of the project.

6. SUBSURFACE INVESTIGATIONS

The Contractor shall be responsible for having determined to his satisfaction, prior to the submission of his bid, the nature of the work, the conformation of the ground, the

character and quality of the nature of the groundwater conditions and all other matters which can in any way affect the work under this contract. The prices established for the work to be done will reflect all costs pertaining to the work.

Information on subsoil conditions may be included in the Contract Documents and will be as information only and solely for the convenience of bidders. The City will not warrant or guarantee the accuracy or correctness of the material with respect to actual subsurface conditions.

7. CLEAN-UP

Upon completion of construction of all facilities, the entire construction area shall be cleaned up and all trash, debris and excess material must be hauled away and disposed of to the satisfaction of the City.

8. PERMITS, LICENSES AND NOTICES

The Contractor shall procure all permits and licenses required by Contract Documents. The Contractor shall give all notice necessary and incidental to the due and lawful prosecution of the work.

9. USE OF PUBLIC ROADS AND STREETS

The use of public roads and streets shall be such as to provide a minimum of inconvenience to the public and to other traffic. Any earth or excavated material spilled from trucks shall be removed by the Contractor and the street cleaned to the satisfaction of the Owner. Contractor shall be responsible for any and all damage to existing facilities whether caused by themselves or their subcontractor. It is highly recommended that Contractor notify all subcontractor's of this liability in an effort to prevent or minimize damage.

10. CARE OF TREES, SHRUBS AND GRASS

The Contractor shall be fully responsible for maintaining in good condition all cultivated grass plots, trees and shrubs beyond the grading limits of this Contract. Where maintained shrubbery or grassed strips must be removed or destroyed incident to the construction operation, the Contractor shall, after completion of the work, replace or restore to the original condition, all destroyed or damaged shrubbery or grass. Tree limbs which interfere with equipment operation and are approved for pruning, shall be neatly trimmed and the tree cut coated with tree paint.

11. DAMAGE TO EXISTING STRUCTURES AND UTILITIES

The Contractor shall be responsible for and make good all damage to pavement beyond the limits of this contract, buildings, telephone, power or other cables, water pipes, storm

sewer facilities, sanitary pipe, gas lines, or other structures which may be encountered whether or not shown on the Drawings.

12. RECORD DRAWINGS

After completion of the work and with request for final payment, the Contractor shall submit to the Engineer/Owner one set of Record Drawings including an Autocad file on CD (release 2000 or later) of all structures installed. This shall include the vertical and horizontal alignment of all pipelines, storm drain structures and roadway (min. of every 100'). The as-built plan shall be signed and sealed by a professional Surveyor licensed to perform business in the state of Florida.

13. USE OF EXPLOSIVES

No blasting shall be done except upon approval by the City and the governmental agency or political subdivision having jurisdiction. When the use of explosives is approved by the City as necessary for the execution of the work, the Contractor shall use the utmost care so as not to endanger life or property, and assume responsibility for any such damage resulting from his blasting operations, and whenever explosives shall be stored in a secure manner and all such storage places shall be marked clearly "DANGEROUS EXPLOSIVES" and shall be in the care of competent watchmen. All permits required for the use of explosives shall be obtained by the Contractor at his expense. All requirements of the governmental agency issuing permits shall be observed.

14. CITY INSPECTOR'S OFFICE

Not required.

15. GEOPHYSICAL REPORTS

Owner will make available to the Contractor one copy of any and all geophysical reports performed by the Owner and or Engineer as a part of this project's design.

16. MONTHLY PROGRESS SCHEDULE

Monthly progress schedule shall include the necessary manpower and equipment required to maintain the projected progress schedule. Should the Contractor fail to maintain the progress schedule he has provided to the City and is unable to recover prior to the next month's pay requisition, the City may elect to withhold a portion of or all of the following payments until such time that the Contractor has recovered his loss time. The City may request the Contractor to submit a revised schedule with evidence, by means of additional manpower and equipment, displaying his intentions to make up for the loss of time. If the City agrees and believes that the Contractor will recover, the City may elect to continue with the monthly payments.

END OF SPECIAL PROVISIONS

SECTION 00180
NOTICE OF AWARD

CONTRACTOR:

DATE: _____

Project: YOTHERS ROAD IMPROVEMENTS (S.R. 429 TO PLYMOUTH-SORRENTO ROAD)

Date of Bid Opening: _____

You are hereby notified that you are the apparent successful Bidder on the Project noted above. Upon compliance with the conditions precedent to be fulfilled by you within the time specified, the Agreement will be executed and delivered to you.

| No. Copies | Item |
|------------|--|
| 3 | Agreement between Owner and Contractor |
| 3 | Performance and Payment Bond |
| 1 | Notice of Award |

Please take the following actions:

1. Execute Agreements and Seal.
2. Have your insurance company provide 3 copies each of Certificate of Insurance as described in Section 00100 and 00110.
3. Provide Performance and Payment bonds.
4. Return all 3 copies of Agreement, insurance certificates and bonds to:

City of Apopka
748 E. Cleveland St.
Apopka, FL 32703
Attn: R. Jay Davoll, P.E., Public Services Director

We will return a fully executed copy of the Contract Documents to you along with a Notice to Proceed.

OWNER: BY:

CITY OF APOPKA
748 E. CLEVELAND ST.
APOPKA, FL 32703

R. Jay Davoll, P.E., Public Services Director

SECTION 00190
NOTICE TO PROCEED

CONTRACTOR:

DATE: _____

RE: Notice to Proceed On Project: Yothers Road Improvements (S.R. 429 to Plymouth-Sorrento Road)

You are hereby notified that you may proceed with the work on the subject Project as of _____ as you requested. A pre-con meeting has been scheduled for _____. The plans and specifications will be distributed to you at that time.

OWNER:

CITY OF APOPKA
748 E. CLEVELAND ST.
APOPKA, FL 32703

BY:

R. Jay Davoll, P.E., Public Services Director

SECTION 00200
CHANGE ORDER

No. _____

Date: _____

Project: Yothers Road Improvements (S.R. 429 to Plymouth-Sorrento Road)

Bid No.: _____

Owner: City of Apopka

Contract Date: _____

Contractor:

Phone No.: _____

Nature of the Change:

Total Cost of Change Order: \$ _____
CHANGE ORDER

00200-1

The changes result in the following adjustment of Contract Price:

| | |
|---|----------|
| Original Contract Price | \$ _____ |
| Change Order Amount Prior to this Change Order | \$ _____ |
| Contract Price Prior to this Change Order | \$ _____ |
| Net (Increase) (Decrease) Resulting from this Change Order | \$ _____ |
| Current Contract Price Including this Change Order | \$ _____ |
| Contract Time Prior to this Change Order _____ (date/days) | |

Net (Increase) (Decrease) Resulting from this Change Order _____
(date/days)

Current Contract Time Including this Change Order _____
(date/days)

The Above Changes Are Approved:

Public Services Director

By: R. Jay Davoll, P.E.

Date: _____

The Above Changes Accepted:

Contractor

By: _____

Date: _____

SECTION 00210
APPLICATION FOR PAYMENT

Application No.: _____ Progress: _____ Final: _____ Project No.: _____

Project: _____

Contractor: _____ Contract Date: _____

Contract for: _____

Application Date: _____ Period Ending: _____

ANALYSIS OF WORK PERFORMED

1. Value of original contract price _____
2. Cumulative change orders _____
3. Current contract price _____
4. Value of work completed to date _____
5. Plus material stored 50% _____
6. Total value of work completed to date _____
7. Less _____ % retainage _____
8. Less liquidated damages _____
9. Less amount of previous payments _____
10. Balance due this estimate _____

CONTRACTORS CERTIFICATION

The undersigned Contractor hereby swears under penalty of perjury that (1) all previous progress payments received from the Owner on account of Work performed under the contract referred to above have been applied by the undersigned to discharge in full all obligations of the undersigned incurred in connection with Work covered by prior Application for Payment numbered 1 through ___ inclusive; and (2) all materials and equipment incorporated in said project or otherwise listed in or covered by this Application for Payment are free and clear of all liens, claims, security interest and encumbrances; and (3) all applicable provisions of the Florida Prevailing Wage Law (Florida Statutes, 448-110)

regarding apprentices and payment of wages have been complied with and to the best of my knowledge and belief by all subcontractors. (Contractor shall attach like affidavits by all subcontractors.)

(DATE) (CONTRACTOR)

By: _____
(PRINT/TYPE)

COUNTY OF _____

STATE OF _____

Before me on this __ day of _____ 20__, personally appeared _____, known to me, who being duly sworn, deposes and says that (s)he executed the above Application for Payment and statement of behalf of said Contractor; and that all of the statements contained therein are true, correct and complete.

Notary Public
My Commission Expires:

PROJECT MANAGER/ENGINEER APPROVAL

In accordance with above contract, the undersigned approves payment to the Contractor of the Amount Due as shown above.

City of Apopka Public Services
748 E. Cleveland St.
Apopka, FL 32703

By: _____
R. Jay Davoll, P.E.

Public Services Director
(Title)

Date: _____

SECTION 00220
CERTIFICATE OF SUBSTANTIAL COMPLETION

Project No: _____

Project: _____

Contractor: _____ Contract Date: _____

Contract For: _____

Project or Specified Part Shall Include: _____

DEFINITION OF SUBSTANTIAL COMPLETION

The date of Substantial Completion of a Project or Specified part of a Project is the date when the construction is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part of the Project can be utilized for the purpose for which it was intended.

To: _____
(Owner)

And To: _____

Date of Substantial Completion: _____

The Work performed under this contract has been inspected by authorized representatives of the Owner, Contractor and Engineer, and the Project (or specified part of the Project, as indicated above) is hereby declared to be substantially completed on the above date.

A tentative list of items to be completed or corrected is appended hereto. This list may not be exhaustive, and the failure to include an item on it does not alter the responsibility of the Contractor to

complete all the Work in accordance with Contract Documents. These items shall be completed by the Contractor within _____ days of Substantial Completion.

Contractor accepts this Certificate of Substantial Completion on _____, 20__

Contractor

By: _____

Owner accepts this Certificate of Substantial Completion on _____, 20__

Owner

By: _____

SECTION 00230
RELEASE AND AFFIDAVIT

COUNTY OF ORANGE, STATE OF FLORIDA, before me, the undersigned authority, personally appeared _____ who after being duly sworn, deposes and says:

1. In accordance with the Contract Documents and conditioned upon receipt of payment in the amount of \$ _____, _____ (“Contractor”) hereby releases and waives for itself and its subcontractors, material men, successors and assigns, except for unpaid retainage, all claims demands, damages, costs and expenses, whether in contract or in tort, against the City of Apopka, Florida (“Owner”) relating in any way to the performance of the Agreement between Contractor and Owner , dated _____, 20____, for the period from _____ to _____, except for such still pending claims as Contractor previously may have filed in accordance with the terms of the Contract Documents and which are expressly identified as follows: _____

2. Contractor certifies for itself and its subcontractors, material men, successors and assigns, that all charges for labor, materials, supplies, lands, licenses and other expenses for which Owner might be sued or for which a lien or a demand against any payment bond might be filed, have been fully satisfied and paid through the previous month’s Application for Payment No. _____, except for unpaid retainage and the following expressly identified items:

_____.

3. Contractor agrees to indemnify, defend and save harmless Owner from all demands or suits, actions, claims of liens or other charges filed or asserted against the Owner arising out of the performance by Contractor of the Work covered by this Release and Affidavit.

4. This Release and Affidavit is given in connection with Contractor’s [monthly/final] Application for Payment No. _____.

CONTRACTOR:

By: _____

Its: President

Date: _____

[Corporate Seal]

Witnesses

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me this __ day of _____, 20____, by

_____, as _____ President of

_____ on behalf of the corporation.

Notary Public, State of Florida

My Commission Expires: _____

(SEAL)

SECTION 00240
CONTRACTOR REQUEST FOR INFORMATION

Question:

Reference Section: _____

Drawing No.: _____

By: _____

Date: _____

Reply:

By: _____

Date: _____

CC: _____

RFI No.: _____

TECHNICAL PROVISIONS

SECTION 101
MOBILIZATION

Mobilization shall include all items detailed in Article 101-1 of the "Standard Specifications," the Special Provisions and on the plans.

Basis of Payment

The work and incidental costs covered under Mobilization will be paid for at the contract lump sum price and will be paid in partial payments in accordance with Article 101-2.2.

Payment shall be made under:

Item No. 101-1 Mobilization, Lump Sum

**SECTION 102
MAINTENANCE OF TRAFFIC**

102-1 Description.

Maintain traffic within the limits of the project for the duration of the construction period, including any temporary suspensions of the work. Construct and maintain detours. Provide facilities for access to residences, businesses, etc., along the project. Furnish, install and maintain traffic control and safety devices during construction. Furnish and install work zone pavement markings for maintenance of traffic (MOT) in construction areas. Provide any other special requirements for safe and expeditious movement of traffic specified in the Plans. MOT includes all facilities, devices and operations as required for safety and convenience of the public within the work zone.

Do not maintain traffic over those portions of the project where no work is to be accomplished or where construction operations will not affect existing roads. Do not obstruct or create a hazard to any traffic during the performance of the work, and repair any damage to existing pavement open to traffic.

BASIS OF PAYMENT:

Payment shall be made under:

Item No. 102.1 Maintenance of Traffic, Lump Sum.

SECTION 104
PREVENTION, CONTROL, AND ABATEMENT OF
EROSION AND WATER POLLUTION

104-1 Description.

Provide erosion control measures on the project and in areas outside the right-of-way where work is accomplished in conjunction with the project, so as to prevent pollution of water, detrimental effects to public or private property adjacent to the project right-of-way and damage to work on the project. Construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the Plans or as may be directed by the Engineer.

104-2 General.

Coordinate the installation of temporary erosion control features with the construction of the permanent erosion control features to the extent necessary to ensure economical, effective, and continuous control of erosion and water pollution throughout the life of the Contract.

Due to unanticipated conditions, the Engineer may direct the use of control features or methods other than those included in the original Contract. In such event, the City will pay for this additional work as unforeseeable work.

104-3 Control of Contractor's Operations Which May Result in Water Pollution.

Prevent pollution of streams, canals, lakes, reservoirs, and other water impoundments with fuels, oils, bitumens, calcium chloride, or other harmful materials. Also, conduct and schedule operations to avoid or otherwise minimize pollution or siltation of such water impoundments, and to avoid interference with movement of migratory fish. Do not dump any residue from dust collectors or washers into any live stream.

Restrict construction operations in rivers, streams, lakes, tidal waters, reservoirs, canals, and other water impoundments to those areas where it is necessary to perform filling or excavation to accomplish the work shown in the Plans and to those areas which must be entered to construct temporary or permanent structures. As soon as conditions permit, promptly clear rivers, streams, and impoundments of all obstructions placed therein or caused by construction operations.

Do not frequently ford live streams with construction equipment. Wherever an appreciable number of stream crossings are necessary at any one location, use a temporary bridge or other structure.

Except as necessary for construction, do not deposit excavated material in rivers, streams, canals, or impoundments, or in a position close enough thereto, to be washed away by high water or runoff.

Where pumps are used to remove highly turbid waters from enclosed construction areas such as cofferdams or forms, treat the water by one or more of the following methods prior to discharge into State waters: pumping into grassed swales or appropriate vegetated areas or sediment basins, or confined by an appropriate enclosure such as turbidity barriers when other methods are not considered appropriate.

Do not disturb lands or waters outside the limits of construction as staked, except as authorized by the Engineer.

Obtain the Engineer's approval for the location of, and method of operation in, borrow pits, material pits, and disposal areas furnished for waste material from the project (other than commercially operated sources) such that erosion during and after completion of the work will not result in probability of detrimental siltation or water pollution.

104-4 Materials for Temporary Erosion Control.

The Engineer will not require testing of materials used in construction of temporary erosion control features other than as provided for geotextile fabric in 985-3 unless such material is to be incorporated into the completed project. When no testing is required, the Engineer will base acceptance on visual inspection.

The Contractor may use new or used materials for the construction of temporary silt fence, staked turbidity barriers, and floating turbidity barrier not to be incorporated into the completed project, subject to the approval of the Engineer.

104-5 Preconstruction Requirements.

At the Preconstruction Conference, provide to the City an Erosion Control Plan meeting the requirements or special conditions of all permits authorizing project construction. If no permits are required or the approved permits do not contain special conditions or specifically address erosion and water pollution, the project Erosion Control Plan will be governed by 7-1.1, 7-2.2, 7-8.1, 7-8.2, and Section 104 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

When the Stormwater Pollution Prevention Plan (SWPPP) is required, prepare the Erosion Control Plan in accordance with the planned sequence of operations and present in a format acceptable to the City. The Erosion Control Plan shall describe, but not be limited to, the following items or activities:

(1) For each phase of construction operations or activities, supply the following information:

- (a) Locations of all erosion control devices
- (b) Types of all erosion control devices
- (c) Estimated time erosion control devices will be in operation
- (d) Monitoring schedules for maintenance of erosion control devices
- (e) Methods of maintaining erosion control devices
- (f) Containment or removal methods for pollutants or hazardous wastes

(2) The name and telephone number of the person responsible for monitoring and maintaining the erosion control devices.

(3) Submit for approval the Erosion Control Plans meeting paragraphs 3a and 3b below:

(a) Projects permitted by the St. Johns River Water Management District, require the following:

Obtain the Engineer's approval of the Erosion Control Plan.

Do not begin construction activities until the Erosion Control Plan receives written approval from the Engineer.

(b) Projects authorized by permitting agencies other than the Water Management Districts or projects for which no permits are required require the following:

The Engineer will review and approve the Contractor's Erosion Control Plan.

Do not begin construction activities until the Erosion Control Plan receives written approval from the Engineer.

Comply with the approved Erosion Control Plan.

104-6 Construction Requirements.

104-6.1 Limitation of Exposure of Erodible Earth: The Engineer may limit the surface areas of unprotected erodible earth exposed by the construction operation and may direct the Contractor to provide erosion or pollution control measures to prevent contamination of any river, stream, lake, tidal waters, reservoir, canal, or other water impoundments or to prevent detrimental effects on property outside the project right-of-way or damage to the project. Limit the area in which excavation and filling operations are being performed so that it does not exceed the capacity to keep the finish grading, turf, sod, and other such permanent erosion control measures current in accordance with the accepted schedule.

Do not allow the surface area of erodible earth that clearing and grubbing operations or excavation and filling operations expose to exceed 750,000 square feet without specific prior approval by the Engineer. This limitation applies separately to clearing and grubbing operations and excavation and filling operations.

The Engineer may increase or decrease the amount of surface area the Contractor may expose at any one time.

104-6.2 Incorporation of Erosion and Sediment Control Features: Incorporate permanent erosion control features into the project at the earliest practical time. Use temporary erosion and sediment control features found in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (E&SC Manual) to correct conditions that develop during construction which were not foreseen at the time of design, to control erosion and sediment prior to the time it is practical to construct permanent control features, or to provide immediate temporary control of erosion and sediment that develops during normal construction operations,

which are not associated with permanent erosion control features on the project. An electronic version of the E&SC Manual can be found at the following URL:

<http://www.dot.state.fl.us/specificationsoffice/Implemented/URLinSpecs/Files/FLerosionSedimentManual.pdf>

Install all sediment control devices in a timely manner to ensure the control of sediment and the protection of lakes, streams, gulf or ocean waters, or any wetlands associated therewith and to any adjacent property outside the right-of-way as required.

At sites where exposure to such sensitive areas is prevalent, complete the installation of any sediment control device prior to the commencement of any earthwork.

After installation of sediment control devices, repair portions of any devices damaged at no expense to the City. The Engineer may authorize temporary erosion and sediment control features when finished soil layer is specified in the Contract and the limited availability of that material from the grading operations will prevent scheduled progress of the work or damage the permanent erosion control features.

104-6.3 Scheduling of Successive Operations: Schedule operations such that the area of unprotected erodible earth exposed at any one time is not larger than the minimum area necessary for efficient construction operations, and the duration of exposure of uncompleted construction to the elements is as short as practicable.

Schedule and perform clearing and grubbing so that grading operations can follow immediately thereafter. Schedule and perform grading operations so that permanent erosion control features can follow immediately thereafter if conditions on the project permit.

104-6.4 Details for Temporary Erosion and Sediment Control Features:

104-6.4.1 General: Use temporary erosion, sediment and water pollution control features found in the E&SC Manual. These features consist of, but are not limited to, temporary turf, rolled erosion control products, sediment containment systems, runoff control structures, sediment barriers, inlet protection systems, silt fences, turbidity barriers, and chemical treatment. For design details for some of these items, refer to the Design Standards and E&SC Manual.

104-6.4.2 Temporary Turf: The Engineer may designate certain areas of turf or sod constructed in accordance with Section 570 of the FDOT Standard Specifications for Road and Bridge Construction 2013 as temporary erosion control features. For areas not defined as sod, constructing temporary turf by seeding only is not an option for temporary erosion control under this Section. The Engineer may waive the turf establishment requirements of Section 570 for areas with temporary turf that will not be a part of the permanent construction.

104-6.4.3 Runoff Control Structures: Construct runoff control structures in accordance with the details shown in the Plans, the E&SC Manual, or as may be approved as suitable to adequately perform the intended function.

104-6.4.4 Sediment Containment Systems: Construct sediment containment systems in accordance with the details shown in the Plans, the E&SC Manual, or as may be approved as suitable to adequately perform the intended function. Clean out sediment containment systems as necessary in accordance with the Plans or as directed.

104-6.4.5 Sediment Barriers: Provide and install sediment barriers according to details shown in the Plans, as directed by the Engineer, or as shown in the E&SC Manual to protect against downstream accumulation of sediment. Sediment Barriers include, but are not limited to synthetic bales, silt fence, fiber logs and geosynthetic barriers. Reusable barriers that have had sediment deposits removed may be reinstalled on the project as approved by the Engineer.

104-6.4.6 Silt Fence:

104-6.4.6.1 General: Furnish, install, maintain, and remove silt fences, in accordance with the manufacturer's directions, these Specifications, the details as shown in the Plans, the Design Standards, and the E&SC Manual.

104-6.4.6.2 Materials and Installation: Use a geotextile fabric made from woven or nonwoven fabric, meeting the physical requirements of Section 985 of the FDOT Standard Specifications for Road and Bridge Construction 2013 according to those applications for erosion control.

Choose the type and size of posts, wire mesh reinforcement (if required), and method of installation. Do not use products which have a separate layer of plastic mesh or netting. Provide a durable and effective silt fence that controls sediment comparable to the Design Standards and the E&SC Manual.

Erect silt fence at upland locations, across ditchlines and at temporary locations shown in the Plans or approved by the Engineer where continuous construction activities change the natural contour and drainage runoff. Do not attach silt fence to existing trees unless approved by the Engineer.

104-6.4.6.3 Inspection and Maintenance: Inspect all silt fences immediately after each rainfall and at least daily during prolonged rainfall. Immediately correct any deficiencies. In addition, make a daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, install additional silt fences as directed by the Engineer.

Remove sediment deposits when the deposit reaches approximately 1/2 of the volume capacity of the silt fence or as directed by the Engineer. Dress any sediment deposits remaining in place after the silt fence is no longer required to conform with the finished grade, and prepare and seed them in accordance with Section 570 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

104-6.4.7 Floating Turbidity Barriers and Staked Turbidity Barriers: Install, maintain, and remove turbidity barriers to contain turbidity that may occur as the result of dredging, filling, or other construction activities which may cause turbidity to occur in the waters of the State. The Contractor may need to deploy turbidity barriers around isolated areas of concern such as seagrass beds, coral communities, etc. both within as well as outside the right-of-way limits. The Engineer will identify such areas. Place the barriers prior to the commencement of any work that could impact the area of concern. Install the barriers in accordance with the details shown in the Plans or as approved by the Engineer. Ensure that the type barrier used and the deployment and maintenance of the barrier will minimize dispersion of turbid waters from the construction site. The Engineer may approve alternate methods or materials.

Operate turbidity barriers in such a manner to avoid or minimize the degradation of the water quality of the surrounding waters and minimize damage to areas where floating barriers installed.

104-6.4.8 Inlet Protection System: Furnish and install inlet protection systems as shown in the Plans, Design Standards and the E&SC Manual.

104-6.4.10 Chemical Treatment: Provide chemical treatment in accordance with the E&SC Manual. Chemical treatment may be used to clarify turbid or sediment laden water that does not yet meet state water quality standards or as an amendment to other erosion prevention and sediment control products to aid in their performance. The contractor must provide all of the required toxicity testing information in accordance with the E&SC Manual to the Engineer for review and acceptance prior to using any chemical treatment on the project site.

104-6.5 Removal of Temporary Erosion Control Features: In general, remove or incorporate into the soil any temporary erosion control features existing at the time of construction of the permanent erosion control features in an area of the project in such a manner that no detrimental effect will result. The Engineer may direct that temporary features be left in place.

104-7 Maintenance of Erosion and Sediment Control Features.

104-7.1 General: Provide routine maintenance of permanent and temporary erosion and sediment control features, at no expense to the City, until the project is complete and accepted. If reconstruction of such erosion and sediment control features is necessary due to the Contractor's negligence or carelessness or, in the case of temporary erosion and sediment control features, failure by the Contractor to install permanent erosion control features as scheduled, the Contractor shall replace such erosion control features at no expense to the City. If reconstruction of permanent or temporary erosion and sediment control features is necessary due to factors beyond the control of the Contractor, the City will pay for replacement under the appropriate Contract pay item or items.

Inspect all erosion and sediment control features at least once every seven calendar days and within 24 hours of the end of a storm of 0.50 inches or greater. Maintain all erosion control features as required in the Stormwater Pollution Prevention Plan, Contractor's Erosion Control Plan and as specified in the State of Florida Department of Environmental Protection Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

104-8 Protection During Suspension of Contract Time.

If it is necessary to suspend the construction operations for any appreciable length of time, shape the top of the earthwork in such a manner to permit runoff of rainwater, and construct earth berms along the top edges of embankments to intercept runoff water. Provide temporary slope drains to carry runoff from cuts and embankments that are in the vicinity of rivers, streams, canals, lakes, and impoundments. Locate slope drains at intervals of approximately 500 feet, and stabilize them by paving or by covering with waterproof materials. Should such preventive measures fail, immediately take such other action as necessary to effectively prevent erosion and siltation. The Engineer may direct the Contractor to perform, during such suspensions of operations, any other erosion and sediment control work deemed necessary.

104-9 Method of Measurement.

When separate items for temporary erosion control features are included in the Contract, the quantities to be paid for will be: (1) the area, in square yards, of rolled erosion control products; (2) the length, in feet, of runoff control structures, measured along the surface of the work constructed; (3) the number of sediment containment systems constructed and accepted; (4) the number of sediment containment system cleanouts accomplished and

accepted; (5) the length, in feet, of sediment barriers; (6) the length, in feet, of floating turbidity barrier; (7) the length, in feet, of staked turbidity barrier; (8) the number of inlet protection systems; (9) the area, in square yards, of chemical treatment.(10) the number of floc logs or drums of product for chemical treatment.

Upon acceptance by the Engineer, the quantity of floating turbidity barriers, sediment barriers, staked turbidity barriers, and inlet protection devices will be paid for regardless of whether materials are new, used, or relocated from a previous installation on the project.

104-10 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including construction and routine maintenance of temporary erosion control features.

Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control features, will be included in the Contract unit prices for the item or items to which such costs are related. The work of performance turf designated as a temporary erosion control feature in accordance with 104-6.4.2 will be paid for under the appropriate pay items specified in Sections 570 and 580.

Separate payment will not be made for the cost of constructing temporary earth berms along the edges of the roadways to prevent erosion during grading and subsequent operations. The Contractor shall include these costs in the Contract prices for grading items.

Additional temporary erosion control features constructed as directed by the Engineer will be paid for as unforeseeable work.

In case of repeated failure on the part of the Contractor to control erosion, pollution, or siltation, the Engineer reserves the right to employ outside assistance or to use the City's own forces to provide the necessary corrective measures. Any such costs incurred, including engineering costs, will be charged to the Contractor and appropriate deductions made from the monthly progress estimate.

Payment will be made under:

Item No. 104-13-2 Erosion Control/Silt Fence (Type IV), lump sum.

**SECTION 110
CLEARING AND GRUBBING**

110-1 Description.

Clear and grub within the areas of the roadway right-of-way and of borrow pits, sand- clay base material pits, lateral ditches, and any other areas shown in the Plans to be cleared and grubbed. Remove and dispose of all trees, stumps, roots and other such protruding objects, buildings, structures, appurtenances, existing flexible asphalt pavement, and other facilities necessary to prepare the area for the proposed construction. Remove and dispose of all product and debris not required to be salvaged or not required to complete the construction.

Also, perform certain miscellaneous work the Engineer considers necessary for the complete preparation of the overall project site, as follows:

(a) Plug any water wells that are encountered within the right-of-way and that are to be abandoned.

(b) Level the terrain outside the limits of construction for purposes of facilitating maintenance and other post-construction operations in accordance with 110-10.3.

(c) Trim trees and shrubs within the project right-of-way that are identified in the Contract Documents.

Meet the requirements for such miscellaneous work as specified in 110-10.

110-2 Standard Clearing and Grubbing.

110-2.1 Work Included: Completely remove and dispose of all buildings, timber, brush, stumps, roots, rubbish, debris, and all other obstructions resting on or protruding through the surface of the existing ground and the surface of excavated areas, and all other structures and obstructions necessary to be removed and for which other items of the Contract do not specify the removal thereof, including septic tanks, building foundations, and pipes.

Perform Standard Clearing and Grubbing within the following areas:

(a) All areas where excavation is to be done, including borrow pits, lateral ditches, right-of-way ditches, etc.

(b) All areas where roadway embankments will be constructed.

(c) All areas where structures will be constructed, including pipe culverts and other pipe lines.

110-2.2 Depths of Removal of Roots, Stumps, and Other Debris: In all areas where excavation is to be performed, or roadway embankments are to be constructed, remove roots and other debris to a depth of 12 inches below the ground surface. Remove roots and other debris from all excavated material to be used in the construction of roadway embankment or roadway base. Plow the surface to a depth of at least 6 inches, and remove all roots thereby exposed to a depth of at least 12 inches. Completely remove and dispose of all stumps within the roadway right-of-way.

Remove all roots, etc., protruding through or appearing on the surface of the completed excavation within the roadway area and for structures, to a depth of at least 12 inches below the finished excavation surface.

Basis of Payment:

Payment will be made under:

Item No. 110-1 Clearing and Grubbing, Lump Sum

SECTION 120
EXCAVATION AND EMBANKMENT

120-1 Description.

All excavation, embankment and grading work shall conform to the requirements of Section 120 of the FDOT Standard Specifications for Road and Bridge Construction 2016 except as amended by this Section.

120-2 Basis of Payment.

Excavation, embankment and grading will be paid for at the contract lump sum price. Compensation will be made in partial payment and based on progress of the work as determined by the Engineer.

Payment shall constitute full compensation for all work described herein and in the Special Provisions and shall include the grading of shoulders, graded road connections, slopes, pond areas, compacting as required, final dressing, subsoil excavation and replacement material, and all work required for completing the project that is not paid for under the other pay items.

Removal and off-site disposal or on-site utilization, as directed by the Engineer, of all materials, structures, abandoned utilities and obstructions shall be included under this Section.

Payment will be made under:

Item No. 120-1 Excavation & Embankment, lump sum.

SECTION 160 STABILIZING SUBBASE

160-1 Description.

Stabilize designated portions of the roadbed to provide a firm and unyielding subgrade, having the required bearing value specified in the Plans. Perform work in accordance with an approved Quality Control Plan meeting the requirements of Section 105.

160-2 Materials.

160-2.1 Commercial Material: Meet the requirements of Section 914.

160-2.2 Local Material: Meet the requirements of Section 914. Test material from each source, or if authorized by the Engineer, test blended materials. Submit test results to the Engineer at least 14 days prior to the stabilization operation.

160-2.3 Existing Base: When the material from an existing base is used as all, or a portion, of the stabilizing additives, no further testing is required unless directed by the Engineer.

160-2.4 Granular Subbase: The Engineer may allow, at no additional cost to the City, the substitution of 6 inches of Granular Subbase meeting the requirements of 290-2 and 290-3, when 12 inches of Stabilization requiring a Limerock Bearing Ratio (LBR) value of 40 is specified.

160-3 Construction Methods.

160-3.1 General: Prior to the beginning of stabilizing operations, construct the area to be stabilized to an elevation such that, upon completion of stabilizing operations, the completed stabilized subgrade will conform to the lines, grades, and cross-section shown in the Plans. Prior to spreading any additive stabilizing material, bring the surface of the roadbed to a plane approximately parallel to the plane of the proposed finished surface.

Construct mainline pavement lanes, turn lanes, ramps, parking lots, concrete box culverts and retaining wall systems meeting the requirements of 120-8.1, except replace "Embankment" with "Subgrade".

Construct shoulder-only areas, sidewalk, and bike/shared use path areas meeting the requirements of 120-8.1 except replace "Embankment" with "Subgrade" and meet the acceptance criteria of 160-4.2.

Isolated mixing operations will be considered as separate LOTS. Curbspads and shoulders compacted separately shall be considered separate LOTS. Isolated compaction operations will be considered as separate LOTS. For multiple phase construction, a LOT shall not extend beyond the limits of the phase.

160-3.2 Application of Stabilizing Material: After substantially completing the roadbed grading operations, determine the type and quantity (if any) of stabilizing material necessary for compliance with the bearing value requirements. Notify the Engineer of the approximate quantity to be added before spreading. When additive stabilizing materials are required, spread the material uniformly over the area to be stabilized.

160-3.2.1 Sampling and Testing of Local Material: Randomly select locations for sampling using a random number generator approved by the Engineer in accordance with FM 1-T 267 and test at the minimum frequency listed in the table below before mixing. The Engineer will reject the material for failing QC test results. The Engineer will sample for

Verification and Resolution testing at the minimum frequency listed in the table below. The Engineer will perform Verification tests at the minimum frequency listed in the table below.

| Test Name | Quality Control | Verification | Resolution |
|--|------------------|--------------------|--------------------|
| Liquid Limit (LL), Plastic Index (PI), and Organic Content | One per two LOTs | One per eight LOTs | One per eight LOTs |

160-3.2.1.1 Verification Comparison Criteria and Resolution

Procedures: If the QC and the Department’s Verification tests meet the requirements of Section 914 then the Engineer will accept the corresponding LOTs. Otherwise, the Engineer will submit the Resolution sample to the State Materials Office or an AASHTO accredited laboratory designated by the State Materials Office to perform Resolution testing.

If the Resolution Test results meet the requirements of Section 914 then the Engineer will accept the LOTs in question. Otherwise remove the material and apply new material meeting the requirements of Section 914 and retest in accordance with 160-3.2.

160-3.3 Mixing: Perform mixing using rotary tillers, a plant or other equipment meeting the approval of the Engineer. The subgrade may be mixed in one course if the equipment and method of construction provides the uniformity, particle size limitation, compaction and other desired results of 160-4. Thoroughly mix the area to be stabilized throughout the entire depth and width of the stabilizing limits.

Perform the mixing operations, as specified, (either in place or in a plant) regardless of whether the existing soil, or any select soils placed within the limits of the stabilized sections, have the required bearing value without the addition of stabilizing materials.

160-3.4 Maximum Particle Size of Mixed Materials: At the completion of the mixing, ensure that the gradation of the material within the limits of the area being stabilized is such that 97% will pass a 3 1/2 inch sieve and that the material does not have a plasticity index greater than eight or liquid limit greater than 30. Remove any materials not meeting the plasticity requirements from the stabilized area. Break down or remove from the stabilized area materials, including clay lumps or lumps made of clay-size particles (any particle size 2 microns or less), not meeting the gradation requirements.

160-3.5 Bearing Value: Meet the bearing value requirements for the subgrade in accordance with 160-4.

160-3.6 Compaction: After completing the mixing operations and satisfying the requirements for bearing value, uniformity, and particle size. Compact the materials at a moisture content permitting the specified compaction in 160-4.2.3. If the moisture content of the material is improper for attaining the specified density, either add water or allow the material to dry until reaching the proper moisture content for the specified compaction.

160-3.7 Finish Grading: Shape the completed stabilized subgrade to conform with the finished lines, grades, and cross-section indicated in the Plans. Check the subgrade using elevation stakes or other means approved by the Engineer.

160-3.8 Requirements for Condition of Completed Subgrade: After completing the stabilizing and compacting operations, ensure that the subgrade is firm and substantially

unyielding to the extent that it will support construction equipment and will have the bearing value required by the Plans.

Remove all soft and yielding material, and any other portions of the subgrade which will not compact readily, and replace it with suitable material so that the whole subgrade is brought to line and grade, with proper allowance for subsequent compaction.

160-3.9 Maintenance of Completed Subgrade: After completing the subgrade as specified above, maintain it free from ruts, depressions, and any damage resulting from the hauling or handling of materials, equipment, tools, etc. The Contractor is responsible for maintaining the required density until the subsequent base or pavement is in place including any repairs, replacement, etc., of curb and gutter, sidewalk, etc., which might become necessary in order to recompact the subgrade in the event of underwash or other damage occurring to the previously compacted subgrade. Perform any such recompaction at no expense to the City. Construct and maintain ditches and drains along the completed subgrade section.

160-4 Acceptance Program.

160-4.1 General Requirements: Meet the requirements of 120-10, except use 160-4.2 instead of 120-10.2, 160-4.3 instead of 120-10.3, and 160-4.4 instead of 120-10.4.

160-4.2 Acceptance Criteria:

160-4.2.1 Bearing Value Requirements:

160-4.2.1.1 General: Within the entire limits of the width and depth of the areas to be stabilized, obtain the required minimum bearing value for each LOT. For any area where the bearing value obtained is deficient from the value indicated in the Plans, in excess of the tolerances established herein, spread and mix additional stabilizing material in accordance with 160-3.3. Perform this reprocessing for the full width of the roadway being stabilized and longitudinally for a distance of 50 feet beyond the limits of the area in which the bearing value is deficient.

Determine the quantity of additional stabilizing material to be used in reprocessing.

160-4.2.1.2 Under-tolerances in Bearing Value Requirements: The under-tolerances are allowed for the following specified Bearing Values:

| Specified Bearing Value | Under-tolerance |
|-------------------------|-----------------|
| LBR 40 | 5.0 |
| LBR 35 | 4.0 |
| LBR 30 (and under) | 2.5 |

The following unsoaked bearing value requirement is based on tests performed on samples obtained after completing mixing operations:

| Specified Bearing Value | Unsoaked Bearing Value Required | Under-tolerance |
|-------------------------|---------------------------------|-----------------|
| LBR 40 | LBR 43 | 0.0 |

160-4.2.2 Mixing Depth Requirements: Do not exceed individual plan depth thickness by more than 2 inches or exceed LOT-average depth thickness by more than 1 inch measured to the nearest 0.25 inch. No undertolerance of mixing depth is allowed.

As an exception to the above mixing requirements, where the subgrade is of rock, the Engineer may waive the mixing operations (and the work of stabilizing), and the City will not pay for stabilization for such sections of the roadway.

160-4.2.3 Density Requirements:

160-4.2.3.1 General: Within the entire limits of the width and depth of the areas to be stabilized, other than as provided in 160-4.2.3.2, obtain a minimum density at any location of 98% of the Modified Proctor maximum density as determined by FM 1-T 180, Method D.

160-4.2.3.2 Exceptions to Density Requirements: The Contractor need not obtain the minimum density specified in 160-4.2.3.1 if within the following limits:

(a) The width and depth of areas which are to be subsequently incorporated into a base course under the same contract.

(b) The upper 6 inches of areas to be grassed under the same contract. Compact these areas to a reasonably firm condition as directed by the Engineer.

160-4.2.4 Frequency: Conduct QC sampling and testing at a minimum frequency listed in the table below. The Engineer will perform Verification sampling and tests at a minimum frequency listed in the table below.

| Test Name | Quality Control | Verification | Verification for Shoulder-Only, Bike/Shared Use Path and Sidewalk Construction |
|--|------------------------------|--------------------------------|--|
| Modified Proctor Maximum Density | One per two consecutive LOTs | One per eight consecutive LOTs | One per four LOTs |
| Density | One per LOT | One per four LOTs | One per two LOTs |
| Stabilizing Mixing Depth | Three per 500 feet | Witness one per LOT | Witness one per LOT |
| LBR | One per two consecutive LOTs | One per eight consecutive LOTs | One per four LOTs |
| Gradation, LL/PI & Soil Classification (Local materials) | Not Required | One per eight consecutive LOTs | One per four LOTs |

160-4.3 Additional Requirements:

160-4.3.1 Quality Control Testing:

160-4.3.1.1 Bearing Values: Test the Stabilized Subgrade sample collected in 160-4.3.1.3. Determine the LBR in accordance with FM 5-515 and 160-4.2.4.

160-4.3.1.1.1 Unsoaked LBR: If Unsoaked LBR is desired, submit request for approval to the Engineer. Upon approval by the Engineer to consider the use of Unsoaked LBR, randomly sample and test from three locations in the initial Lot for both Soaked and Unsoaked LBR in accordance with FM 5-515. Ensure all of the tests demonstrate the material achieves the LBR values in 160-4.2.1.2. Continue testing Unsoaked LBR at the frequency shown in 160-4.2.4. Discontinue Unsoaked LBR testing if any unsatisfactory QC LBR test result is obtained or resolution determines an unsatisfactory LBR.

160-4.3.1.2 Mixing Depths: Meet required plan mixing-depths by measuring from the proposed Final Grade Line. Determine test locations, including Stations and Offsets, using the Random Number generator approved by the City. Notify the Engineer a minimum of 24 hours before checking mixing depths. Record results on forms supplied by the City.

160-4.3.1.3 Modified Proctor Maximum Density Requirement: Collect enough material to split and create three separate samples. Determine test locations, including Stations and Offsets, using the Random Number generator approved by the City for the two LOTs under consideration. Retain the Verification and Resolution samples for the City until the Engineer accepts the LOTs represented by the samples.

160-4.3.2 City Verification Tests:

160-4.3.2.1 Bearing Value & Soil Classification: The Engineer will collect a sample at a location other than the location where the sample was collected in 160-4.3.1.3, and test the Stabilized Subgrade for determination of the LBR in accordance with FM 5-515. The Engineer will select test locations, including Stations and Offsets, using a Random Number generator, based on the LOTs under consideration.

If Local Material is used for stabilizing, the Engineer will determine compliance with embankment utilization requirements and 160-3.4 by testing and classifying the Stabilized Subgrade in accordance with AASHTO T88 and AASHTO M 145 at the frequency shown in 160-4.2.4.

160-4.3.2.1.1 Unsoaked LBR: The Engineer will sample and test the initial LOT for one soaked and one unsoaked LBR if consideration of the Unsoaked LBR has been approved.

160-4.3.2.2 Mixing Depth: The Engineer will witness the Contractor's mixing depth checks to ensure compliance with 160-4.2.2. The Engineer will select test locations, including Stations and Offsets, using a Random Number generator.

160-4.3.2.3 Modified Proctor Maximum Density: The Engineer will randomly select one of the retained split samples and test in accordance with FM 1-T 180, Method D.

160-4.4 Verification Comparison Criteria and Resolution Procedures:

160-4.4.1 Bearing Value & Soil Classification: If the Department's Verification test meets the requirements of 160-4.2.1 and embankment utilization requirements, the Engineer will accept the corresponding LOTs. Otherwise, the Engineer will collect an additional sample in the same LOT the Verification sample was obtained. The State Materials Office or an AASHTO accredited laboratory designated by the State Materials Office will perform Resolution testing on the additional sample. The material will be sampled and tested in accordance with FM 5-515. If Local Material is used for stabilization, the sample will be tested in accordance with AASHTO T-88, and AASHTO M-145.

If the Resolution Testing results meet the requirements of 160-4.2.1 and embankment utilization requirements then the Engineer will accept the LOTs in question. Otherwise reprocess the corresponding LOTs in accordance with 160-3 and retest in accordance with 160-4.3.1.1.

160-4.4.2 Mixing Depth Thickness: The City will witness the mixing depth checks.

1. If the depth checks meet the requirements of 160-4.2.2 the Engineer will accept that 500-foot section.

2. If the depth checks confirm shallow depth, re-mix the 500-foot section to an appropriate Depth and re-measure in accordance with 160-4.3.1.2. The Engineer will repeat the witness process.

3. If the depth checks confirm extra deep mixing, conduct an additional QC density test after compaction for the bottom 12 inches of the subgrade for that 500-foot section in addition to a QC density test for the top 12 inches. The additional Density test must meet the requirements of 160-4.2.3.

160-4.4.3 Modified Proctor Maximum Density Determination: The Engineer will compare the Verification test results of 160-4.3.2.3 to the corresponding Quality Control test results. If the test result is within 4.5 lb/ft^3 of the QC test result, the LOTs will be verified. Otherwise, the Engineer will collect the Resolution split sample corresponding to the Verification sample tested. The State Materials Office or an AASHTO accredited laboratory designated by the State Materials Office will perform Resolution testing. The material will be sampled and tested in accordance with FM 1-T 180, Method D.

The Engineer will compare the Resolution Test results with the Quality Control test results. If the Resolution Test result is within 4.5 lb/ft^3 of the corresponding Quality Control test result, the Engineer will use the Quality Control test results for material acceptance purposes for each corresponding pair of LOTs. If the Resolution test result is not within 4.5 lb/ft^3 of the corresponding Quality Control test, the Engineer will collect the remaining Verification split samples for testing. Verification Test results will be used for material acceptance purposes for the LOTs in question.

160-4.4.4 Density: When a Verification or Independent Verification density test does not meet 160-4.2.3 (Acceptance Criteria), retest at a site within a 5 feet radius of the Verification test location and observe the following:

1. If the Quality Control retest meets the Acceptance Criteria and compares favorably with the Verification or Independent Verification test, the Engineer will accept the LOTs in question.

2. If the Quality Control retest does not meet the Acceptance Criteria and compares favorably with the Verification or Independent Verification test, rework and retest the material in that LOT. The Engineer will re-verify the LOTs in question.

3. If the Quality Control retest and the Verification or Independent Verification test do not compare favorably, complete a new equipment-comparison analysis as defined in 120-10.1.2. Once acceptable comparison is achieved, retest the LOTs. The Engineer will perform new verification testing. Acceptance testing will not begin on a new LOT until the Contractor has a gauge that meets the comparison requirements.

160-5 Method of Measurement.

The quantity to be paid for will be the plan quantity, in square yards, completed and accepted.

160-6 Basis of Payment.

Price and payment will constitute full compensation for all work and materials specified in this Section, including furnishing, spreading and mixing of all stabilizing material required and any reprocessing of stabilization areas necessary to attain the specified bearing value. The City will make full payment 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 high-bearing materials from other sources within the limits of the stabilizing.

If the item of borrow excavation is included in the Contract, any stabilizing materials obtained from designated borrow areas will be included in the pay quantity for borrow excavation.

Payment will be made under:

Item No. 160-4 Type B Stabilization, per square yard.

**SECTION 230
LIMEROCK STABILIZED BASE**

230-1 Description.

Construct a base course composed of roadbed soil stabilized with limerock.

230-2 Materials.

Meet the limerock material requirements as specified in Section 911.

230-3 Equipment.

230-3.1 For Mixing: For mixing in the roadway, provide a heavy-duty rotary tiller or other equipment approved by the Engineer as equally effective for this work.

230-3.2 For Compaction: Select the equipment for compacting the stabilized material, except that for the final finish use a steel-wheeled roller.

230-4 Preparation of Roadbed.

Complete the area to be stabilized to the lines shown in the Plans and to a grade parallel to the finished elevation of the stabilized base, before adding the stabilizing material. Ensure that the elevation of the roadbed is such that the base will conform to the typical cross-section upon completing the work. Dispose of any surplus excavated materials resulting from this work, as specified in 120-5.

230-5 Incorporation of Stabilizing Material and Mixing-In.

230-5.1 Spreading and Mixing: Place the limerock on the areas to be stabilized, and spread it uniformly to the loose depth shown in the Plans or ordered by the Engineer. Then, thoroughly mix the limerock with the soil. Perform mixing as soon as practicable but not later than one week after placing the limerock on the road. Do not spread more limerock in advance of the mixing operations than can be mixed-in with the soil within one week.

230-5.2 Further Mixing Operations: Repeat the mixing operations as often as may be necessary to distribute the limerock uniformly throughout the soil, as determined by the Engineer. Further manipulate the material to uniformly distribute the limerock throughout the width and depth of the base course.

230-5.3 Plant Mixing: The Contractor may mix the soil, limerock, and water using the central plant-mix method in lieu of mixing in place, provided he obtains a uniform mixture with the proper amount of water.

230-5.4 Shaping Surface: After mixing, shape the surface so it conforms to the grade and typical cross-section shown in the Plans after compacting.

230-5.5 Depth of Mixing Stabilizing Material: Ensure that the depth of mixing of the stabilizing material is in accordance with the following table:

| Specified Base Thickness (inches) | Required Mixing Depth (inches) | |
|-----------------------------------|--------------------------------|---------|
| | Minimum | Maximum |
| 6 | 5 1/2 | 7 1/2 |
| 8 | 7 1/4 | 9 3/4 |
| 10 | 9 | 12 |

In the event that the measured depth of mixing is less than the minimum specified above, remix the base course, as directed by the Engineer, until the stabilizing material is distributed to the required depth throughout the base course.

Where the measured depth of mixing exceeds the maximum limits specified in the table, add 1 inch, loose measure, of stabilizing material for each 1 inch of mixing depth in excess of the allowable depth (but in no case less than 1 inch of material, for any excess depth), and mix the added material in the top 6 inches of the base as specified in 230-5.1 and 230-5.2, at no expense to the City. The City will not include the volume of stabilizing material, which is added to compensate for excess mixing depth, in the pay quantity, and will not allow any additional compensation for the extra mixing required.

230-6 Compacting and Finishing Base.

Meet the requirements of Section 200-6 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

230-7 Testing Surface.

Test the surface in accordance with the requirements of Section 200-7 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

230-8 Priming and Maintaining.

Meet the requirements of Section 200-8 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

230-9 Method of Measurement.

230-9.1 General: The quantities to be paid for will be the plan quantity, in square yards, completed and accepted.

230-10 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including furnishing, hauling, placing, spreading, mixing, compacting, prime coat application as specified in Section 300-7 of the FDOT Standard Specifications for Road and Bridge Construction 2013 and finishing all limerock stabilizing material; any necessary excavating below the finished grade of the base to provide for placing the stabilizing material; and disposing of all surplus excavation resulting from this work.

Where extra limerock material is placed at locations of culverts, etc., as detailed in the Plans, the volume of such material, determined as provided above, will be included in the quantity of limerock material to be paid for, but no adjustment will be made in the area of base to be paid for.

Payment will be made under:

Item No. 230-1-1 Limerock Stabilized Base, 8" (LBR 100), per square yard.

SECTION 334
SUPERPAVE ASPHALT CONCRETE

334-1 Description.

Work specified in this Section consists of applying Type SP-9.5 (S-III) Asphaltic Surface Course properly laid upon a prepared base. The plant, operations and methods and equipment shall conform to Section 320 of the FDOT Standard Specifications for Road and Bridge Construction 2013; general construction requirements shall be as specified in Section 334; and, materials and compositions shall conform to Section 334 of the FDOT Standard Specifications for Road and Bridge Construction 2016 unless noted otherwise in this Section.

Minimum stability of SP-9.5 Asphaltic Concrete shall be 750 pounds as determined by the Marshall Stability Test.

The Job Mix Design shall be submitted to and approved by the Engineer prior to constructing the Asphaltic Concrete Pavement.

334-2 Method of Measurement.

Quantities measured for payment under this Section shall be the actual area in square yards of asphaltic concrete installed within the limits of the contract.

334-3 Basis of Payment.

The Type SP-9.5 (S-III) Asphaltic Concrete will be paid for at the contract unit price per square yard, completed and accepted. No additional payment will be made for thickness greater than indicated on the plans or for pavement of unauthorized areas.

Payment shall constitute full compensation for all labor, equipment and materials, including bituminous materials (plant mix), and all other incidental costs necessary to complete the work as specified.

Payment shall be made under:

Item No. 334-1 1.5-inch Superpave Asphaltic Concrete (SP-9.5), per square yard.

**SECTION 522
CONCRETE SIDEWALK**

All concrete Driveways shall be performed in accordance with the requirements of Section 522 of the "Standard Specifications" except as directed by the Engineer.

Basis of Payment

All materials, work and incidental costs related to concrete sidewalk construction as herein specified will be paid for at the contract unit price.

Payment shall be made under:

| | |
|----------------|---|
| Item No. 522-1 | Concrete Driveway (6"), per Square Yard (Including wire mesh or fiber mesh) |
|----------------|---|

**SECTION 570
PERFORMANCE TURF**

570-1 Description.

Establish a growing, healthy turf over all areas designated in the Plans. Use sod in areas designated in the Plans to be sodded. Use seed, hydroseed, bonded fiber matrix, or sod in all other areas. Maintain turf areas until final acceptance of all contract work in accordance with Section 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

570-2 Materials.

Meet the following requirements:

| | |
|----------------------|---------------|
| Turf Materials | Section 981 * |
| Fertilizer | Section 982 * |
| Water..... | Section 983 * |

*Refer to FDOT Standard Specifications for Road and Bridge Construction 2013.

570-3 Construction Methods.

570-3.1 General: Incorporate turf installation into the project at the earliest practical time.

Shape the areas to be planted to the plan typical sections and lines and grade shown in the Contract Documents.

Except in areas where the Contract Documents requires specific types of grass to match adjoining private property, any species of grass designated in Section 981 of the FDOT Standard Specifications for Road and Bridge Construction 2013 may be used. Use the methods and materials necessary to establish and maintain the initial grassing until acceptance of the Contract work in accordance with 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013. All of the permanent grassing material shall be in place prior to final acceptance.

The City will only pay for replanting as necessary due to factors determined by the Engineer to be beyond control of the Contractor.

Complete all grassing on shoulder areas prior to the placement of the friction course on adjacent pavement.

570-3.2 Seeding: Not applicable to this project

570-3.3 Sod: Place the sod on the prepared surface, with edges in close contact. Do not use sod which has been cut for more than 48 hours.

Place the sod to the edge of all landscape areas as shown in the Plans and as shown in the Design Standards.

Peg sod at locations where the sod may slide. Drive pegs through sod blocks into firm earth, flush with the sod soil surface, at intervals approved by the Engineer. The work and materials for pegging of sod as directed by the Engineer will be paid for as Unforeseeable Work.

Place rolled sod parallel with the roadway and cut any exposed netting even with the sod edge.

Monitor placed sod for growth of pest plants and noxious weeds. If pest plants and/or noxious weeds manifest themselves within 30 days of placement of the sod during the months April through October, within 60 days of placement of the sod during the months of November through March treat affected areas by means acceptable to the City at no

**SECTION 570
PERFORMANCE TURF**

570-1 Description.

Establish a growing, healthy turf over all areas designated in the Plans. Use sod in areas designated in the Plans to be sodded. Use seed, hydroseed, bonded fiber matrix, or sod in all other areas. Maintain turf areas until final acceptance of all contract work in accordance with Section 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

570-2 Materials.

Meet the following requirements:

| | |
|----------------------|---------------|
| Turf Materials | Section 981 * |
| Fertilizer | Section 982 * |
| Water..... | Section 983 * |

*Refer to FDOT Standard Specifications for Road and Bridge Construction 2013.

570-3 Construction Methods.

570-3.1 General: Incorporate turf installation into the project at the earliest practical time.

Shape the areas to be planted to the plan typical sections and lines and grade shown in the Contract Documents.

Except in areas where the Contract Documents requires specific types of grass to match adjoining private property, any species of grass designated in Section 981 of the FDOT Standard Specifications for Road and Bridge Construction 2013 may be used. Use the methods and materials necessary to establish and maintain the initial grassing until acceptance of the Contract work in accordance with 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013. All of the permanent grassing material shall be in place prior to final acceptance.

The City will only pay for replanting as necessary due to factors determined by the Engineer to be beyond control of the Contractor.

Complete all grassing on shoulder areas prior to the placement of the friction course on adjacent pavement.

570-3.2 Seeding: Not applicable to this project

570-3.3 Sod: Place the sod on the prepared surface, with edges in close contact. Do not use sod which has been cut for more than 48 hours.

Place the sod to the edge of all landscape areas as shown in the Plans and as shown in the Design Standards.

Peg sod at locations where the sod may slide. Drive pegs through sod blocks into firm earth, flush with the sod soil surface, at intervals approved by the Engineer. The work and materials for pegging of sod as directed by the Engineer will be paid for as Unforeseeable Work.

Place rolled sod parallel with the roadway and cut any exposed netting even with the sod edge.

Monitor placed sod for growth of pest plants and noxious weeds. If pest plants and/or noxious weeds manifest themselves within 30 days of placement of the sod during the months April through October, within 60 days of placement of the sod during the months of November through March treat affected areas by means acceptable to the City at no

expense to the City. If pest plants and/or noxious weeds manifest themselves after the time frames described above from date of placement of sod, the Engineer, at his sole option, will determine if treatment is required and whether or not the Contractor will be compensated for such treatment. If compensation is provided, payment will be made as Unforeseeable Work as described in 4-4 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

Remove and replace any sod as directed by the Engineer.

570-3.4 Hydroseeding: Not applicable to this project.

570-3.5 Bonded Fiber Matrix (BFM): Not applicable to this project.

570-3.6 Watering: Water all turf areas as necessary to produce a healthy and vigorous stand of turf. Ensure that the water used for turf irrigation meets the requirements of Section 983 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

570-3.7 Fertilizing: Fertilize as necessary based on soil testing performed in accordance with Section 162 of the FDOT Standard Specifications for Road and Bridge Construction 2013. Refer to Section 982 for fertilizer rates.

For bid purposes, base estimated quantities on an initial application of 265 lbs/acre and one subsequent application of 135 lbs/acre of 16-0-8.

570-4 Turf Establishment.

Perform all work necessary, including watering and fertilizing, to sustain an established turf until final acceptance, at no additional expense to the City. Provide the filling, leveling, and repairing of any washed or eroded areas, as may be necessary.

Established turf is defined as follows:

Established root system (leaf blades break before seedlings or sod can be pulled from the soil by hand).

No bare spots larger than one square foot.

No continuous streaks running perpendicular to the face of the slope.

No bare areas comprising more than 1% of any given 1,000 square foot area.

No deformation of the turf areas caused by mowing or other Contractor equipment.

Monitor turf areas and remove all competing vegetation, pest plants, and noxious weeds (as listed by the Florida Exotic Pest Plant Council, Category I "List of Invasive Species", Current Edition, <http://www.fleppc.org>). Remove such vegetation regularly by manual, mechanical, or chemical control means, as necessary. When selecting herbicides, pay particular attention to ensure use of chemicals that will not harm desired turf or wildflower species. Use herbicides in accordance with 7-1.7 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

If at the time that all other work on the project is completed, but all turf areas have not met the requirements for established turf set forth in 570-4, continuously maintain all turf areas until the requirements for established turf set forth in 570-4 have been met.

During the entire establishment period and until turf is established in accordance with this specification, continue inspection and maintenance of erosion and sedimentation control items in accordance with Section 104. Take responsibility for the proper removal and disposal of all erosion and sedimentation control items after turf has been established.

Notify the Engineer, with a minimum of seven calendar days advance notice, to conduct inspections of the turf at approximate 90-day intervals during the establishment period to determine establishment. Results of such inspections will be made available to the Contractor within seven calendar days of the date of inspection. Determination of an established turf will be based on the entire project and not in sections.

Upon the determination by the Engineer that the requirements of 570-4 have been met and an established turf has been achieved and all erosion and sedimentation control items have been removed, the Engineer will release the Contractor from any further responsibility provided for in this Specification.

The Contractor's establishment obligations of this specification will not apply to deficiencies due to the following factors, if found by the Engineer to be beyond the control of the Contractor, his subcontractors, vendors or suppliers:

a. Determination that the deficiency was due to the failure of other features of the Contract.

b. Determination that the deficiency was the responsibility of a third party performing work not included in the Contract or its actions.

The City will only pay for replanting as necessary due to factors determined by the City to be beyond the control of the Contractor.

570-5 Responsible Party.

For the purposes of this Specification, the Contractor shall be the responsible party throughout construction and establishment periods.

Upon final acceptance of the Contract in accordance with 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013, the Contractor's responsibility for maintenance of all the work or facilities within the project limits of the Contract will terminate in accordance with 5-11; with the sole exception that the facilities damaged due to lack of established turf and the obligations set forth in this Specification for performance turf shall continue thereafter to be responsibility of the Contractor as otherwise provided in this Section.

570-6 Disputes Resolution.

The Contractor and the City acknowledge that use of the Statewide Disputes Review Board is required and the determinations of the Statewide Disputes Review Board for disputes arising out of the performance turf specification will be binding on both the Contractor and the City, with no right of appeal by either party, for the purposes of this Specification.

Any and all Statewide Disputes Review Board meetings after final acceptance of the Contract in accordance with 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013 shall be requested and paid for by the Contractor. The City will reimburse the Contractor for all fees associated with meetings.

570-7 Failure to Perform.

Should the Contractor fail to timely submit any dispute to the Statewide Disputes Review Board, refuse to submit any dispute to the Statewide Disputes Review Board, fail to provide an established turf in accordance with 570-4 within one year of final acceptance of the Contract in accordance with 5-11 of the FDOT Standard Specifications for Road and Bridge Construction 2013, or fail to compensate the City for any remedial work performed by the City in establishing a turf and other remedial work associated with lack of an established turf, including but not limited to, repair of shoulder or other areas due to erosion and removal of sediments deposited in roadside ditches and streams, as determined by the Statewide Disputes Review Board to be the Contractor's responsibility, the City shall suspend, revoke or deny the Contractor's certificate of qualification under the terms of Section 337.16(d)(2), Florida Statutes, until the Contractor provides an established turf or makes full and complete payment for the remedial work performed by the City. In no case shall the period of suspension, revocation, or denial of the Contractor's certificate of qualification be less than six months. Should the Contractor choose to

challenge the City notification of intent for suspension, revocation or denial of qualification and the City's action is upheld, the Contractor shall have its qualification suspended for a minimum of six months or until the remedial action is satisfactorily performed, whichever is longer.

570-8 Method of Measurement.

The quantities to be paid for will be plan quantity in square yards based on the area shown in the Plans, completed and accepted.

570-9 Basis of Payment.

Prices and payments will be full compensation for all work and materials specified in this Section.

Payment will be made under:

Item No. 570-1-2 Performance Turf (Sod, Type Bahia), per square yard.

SECTION 706
RAISED RETRO-REFLECTIVE PAVEMENT
MARKERS AND BITUMINOUS ADHESIVE

706-1 Description.

Place raised retro-reflective pavement markers (RPMs) and adhesive, which upon installation produces a positive guidance system to supplement other reflective pavement markings.

706-2 Materials.

Use only Class B markers unless otherwise shown in the Plans.

Meet the requirements of Section 970 of the FDOT Standard Specifications for Road and Bridge Construction 2013.

706-2.1 Product Acceptance on the Project. Use only reflective pavement markers and bituminous adhesive that are listed on the FDOT's Qualified Products List (QPL).

Provide to the Engineer a manufacturer's certification conforming to the requirements of Section 6 of the FDOT Standard Specifications for Road and Bridge Construction 2013, which confirms that each product meets the requirements of this Section.

706-3 Equipment.

Use equipment having either thermostatically controlled double boiler type units utilizing heat transfer oil or thermostatically controlled electric heating pots to install hot applied bituminous adhesive. Do not use direct flame melting units with flexible adhesives; however, this type of unit may be used with standard adhesive in accordance with manufacturer's recommendations. Use a melter/applicator unit suited for both melting and pumping the adhesive through heated applicator hoses.

Heat the adhesive to between 375°F and 425°F and apply directly to the bonding surface from the melter/applicator by either pumping or pouring. Maintain the application temperature between 375°F and 425°F. The adhesive may be reheated. However, do not exceed the manufacturer's recommendations for pot life at application temperatures.

706-4 Application.

Apply RPMs to the bonding surface using bituminous adhesives only. The Engineer will conduct field testing in accordance with FM 5-566. Correct RPMs not applied in accordance with these requirements at no cost to the Department.

Prior to application of adhesive, clean the portion of the bonding surface of any material which would adversely affect the adhesive.

Apply the adhesive to the bonding surface (not the marker) so that 100% of the bonding area of the marker will be covered, in accordance with adhesive manufacturer's recommendations. Apply sufficient adhesive to ensure, that when the marker is pressed downward into the adhesive, adhesive will be forced out around the entire perimeter of the marker.

Immediately remove excess adhesive from the bonding surface and exposed surfaces of the RPMs. Soft rags moistened with mineral spirits meeting Federal Specifications TT-T-291 or kerosene may be used to remove adhesive from exposed faces of the RPMs. Do not use any other solvent. If any adhesive, pavement marking materials or other foreign matter adheres to the reflective face of the marker, replace the marker at no cost to the City.

Install RPMs with the reflective face of the RPM perpendicular to a line parallel to the roadway centerline.

Ensure that all final RPMs are in place prior to opening the road to traffic.

If more than 2% of the RPMs fail in adhesion or alignment within the first 45 days under traffic, replace all failed markers at no expense to the City. If more than 5% of the markers fail in adhesion and or alignment during the initial 45 day period, the Engineer will extend the replacement period an additional 45 days from the date that all replacement markers have been installed. If, at the end of the additional 45 day period, more than 2% of all markers (initial installation and 45 day replacements combined) fail in adhesion or alignment, replace all failed markers at no expense to the City.

706-5 Contractor's Responsibility for Notification.

Notify the Engineer prior to the placement of RPMs. At the time of notification, indicate the manufacturer and the LOT numbers of RPMs and bituminous adhesive that are intended for use. Verify that the approved LOT numbers appear on the material packages. Furnish a test report to the Engineer certifying that the materials meet all requirements specified.

706-6 Method of Measurement.

The quantities to be paid for will be the number of RPMs, furnished and installed, completed and accepted.

706-7 Basis of Payment.

706-7.1 General: Price and payment will be full compensation for all work specified in this Section.

Payment will be made under:

Item No. 706-3 Retro-Reflective Pavement Markers, each.

**SECTION
710**

PAINTED TRAFFIC STRIPES

Furnishing and Installing all striping as shown on plans shall conform to the requirements of sections 710 of the F.D.O.T. Standard specifications for road and bridge construction.

Basis of Payment

Payment for items under this section will be made at the contract unit prices completed and accepted. Payment shall be full compensation for all the work specified herein and shall include all equipment, labor and materials required for an acceptable installation.

| | |
|-------------------|---|
| Item No. 710-26 | Solid Traffic Stripe (Yellow 6"), Linear Feet |
| Item No. 710-27 | Solid Traffic Stripe (White 6"), Linear Feet |
| Item No. 710-27-1 | Solid Traffic Stripe (White 24"), Linear Feet |

SECTION 711 THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS

711-1 Description.

Apply new thermoplastic traffic stripes and markings, or refurbish existing thermoplastic traffic stripes and markings, in accordance with the Contract Documents.

711-2 Materials.

711-2.1 Thermoplastic: Use only thermoplastic materials listed on the QPL. The Engineer will take random samples of all material in accordance with the Department's Sampling, Testing and Reporting Guide schedule.

711-2.1.1 Initial or Recapped Stripes and Markings: Use materials meeting the requirements of 971-1 and 971-5.

711-2.1.2 Refurbishing Existing Stripes and Markings: Use materials meeting the requirements of 971-1 and 971-5.

711-2.1.3 Preformed Stripes and Markings: Use Materials meeting the requirements of 971-1 and 971-6.

711-2.2 Glass Spheres: Use only glass spheres listed on the QPL, meeting the requirements of 971-1 and 971-2. The Engineer will take random samples of all glass spheres in accordance with ASTM D1214 and the Department's Sampling, Testing and Reporting Guide schedule.

711-2.3 Sand: Use materials meeting the requirements of 971-5.4.

711-3 Equipment.

Use equipment capable of providing continuous uniform heating of striping materials to temperatures exceeding 390°F, mixing and agitation of the material reservoir to provide a homogeneous mixture without segregation. Use equipment that will maintain the striping material in a plastic state, in all mixing and conveying parts, including the line dispensing device until applied. Use equipment which can produce varying width traffic stripes and which meets the following requirements:

(a) capable of traveling at a uniform, predetermined rate of speed, both uphill and downhill, in order to produce a uniform application of striping material and capable of following straight lines and making normal curves in a true arc.

(b) is capable of applying glass spheres to the surface of the completed stripe by a double drop application for initial traffic striping and marking and a single drop application for recapping and refurbishing. The bead dispenser for the first bead drop shall be attached to the striping machine in such a manner that the beads are dispensed closely behind with the thermoplastic material. The second bead dispenser bead shall be attached to the striping machine in such a manner that the beads are dispensed immediately after the first bead drop application. Glass spheres dispensers shall be equipped with an automatic cut-off control that is synchronized with the cut-off of the thermoplastic material and applies the glass spheres in a manner such that the spheres appear uniform on the entire traffic stripes and markings surface with, 50 to 60% embedment.

(c) equipped with a special kettle for uniformly heating and melting the striping material. The kettle must be equipped with an automatic temperature control device and material thermometer for positive temperature control and to prevent overheating or scorching of the thermoplastic material.

(d) meet the requirements of the National Fire Protection Association, state, and local authorities.

711-4 Application.

711-4.1 General: Remove existing pavement markings such that scars or traces of removed markings will not conflict with new stripes and markings by a method approved by the Engineer. Cost for removing conflicting pavement markings during maintenance of traffic operations to be included in Maintenance of Traffic, Lump Sum.

Before applying traffic stripes and markings, remove any material by a method approved by the Engineer that would adversely affect the bond of the traffic stripes.

Before applying traffic stripes to any portland cement concrete surface, apply a primer, sealer or surface preparation adhesive of the type recommended by the manufacturer. Offset longitudinal lines at least 2 inches from any longitudinal joints of portland cement concrete pavement. Apply traffic stripes or markings only to dry surfaces, and when the ambient air and surface temperature is at least 50°F and rising for asphalt surfaces and 60°F and rising for concrete surfaces. Apply striping to the same tolerances in dimensions and in alignment specified in 710-5. When applying traffic stripes and markings over existing markings, ensure that no more than 2 inches on either end and not more than 1 inch on either side of the existing line is visible. Apply thermoplastic material

to the pavement either by spray, extrusion or other means approved by the Engineer. Conduct field tests in accordance with FM 5-541. Take test readings presentative of the striping performance. Remove and replace traffic stripes and markings not meeting the requirements of this Section at no additional cost to the Department. Apply all final pavement markings prior to opening the road to traffic.

711-4.1.1 Preformed Thermoplastic: Apply markings only to dry surfaces and when ambient air temperature is at least 32°F. Prior to installation, follow the manufacturer's recommendations for pre-heating.

711-4.2 Thickness:

711-4.2.1 Initial or Recapped Stripes and Markings: Apply or recap traffic stripes or markings such that all lane lines, center lines, transverse markings and traffic stripes and markings within traffic wearing areas, will have a thickness of 0.10 to 0.15 inch when measured above the pavement surface. Also, all gore, island, and diagonal stripe markings, bike lane symbols and messages, wherever located, will have a thickness of 0.09 to 0.12 inch when measured above the pavement surface. Measure, record and certify on Department approved form and submit to the Engineer, the thickness of white and yellow pavement markings in accordance with FM 5-541.

711-4.2.2 Refurbishing Existing Traffic Stripes and Markings: Apply a minimum of 0.06 inch of thermoplastic material. Ensure that the combination of the existing stripe and the overlay after application of glass spheres does not exceed the maximum thickness of 0.150 inch for all lines.

711-4.3 Retroreflectivity: Apply white and yellow traffic stripes and markings that will attain an initial retroreflectivity of not less than 450 mcd/lx·m² and not less than 350 mcd/lx·m², respectively for all longitudinal lines. All transverse lines, messages and arrows will attain an initial retroreflectivity of not less than 300 mcd/lx·m² and 250 mcd/lx·m² for white and yellow respectively. All pedestrian crosswalks, bike lane symbols or messages in a proposed bike lane

shall attain an initial retroreflectivity of not less than 275 mcd/lx·m². Measure, record and certify on Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with FM 5-541.

711-4.4 Glass Spheres:

711-4.4.1 Longitudinal Lines: For initial traffic striping and marking, apply the first drop of Type 4 or larger glass spheres immediately followed by the second drop of Type 1 glass spheres. For refurbishing, apply a single drop of Type 3 glass spheres. Apply reflective glass spheres to all markings at the rates determined by the manufacturer's recommendations.

711-4.4.2 Transverse Stripes and Markings: Apply a single drop of Type 1 glass spheres. Apply reflective glass spheres to all markings at the rates determined by the manufacturer's recommendations. Apply a mixture consisting of 50% glass spheres and 50% sharp silica sand to all thermoplastic pedestrian crosswalk lines and bike lane symbols at the rates determined by the manufacturer's recommendations.

711-4.4.3 Preformed Markings: These markings are factory supplied with glass spheres and skid resistant material. No additional glass spheres or skid resistant material should be applied during installation.

711-5 Contractor's Responsibility for Notification.

Notify the Engineer prior to the placement of the thermoplastic materials. Furnish the Engineer with the manufacturer's name and batch numbers of the thermoplastic materials and glass spheres to be used. Ensure that the approved batch numbers appear on the thermoplastic materials and glass spheres packages.

711-6 Protection of Newly Applied Traffic Stripes and Markings.

Do not allow traffic onto or permit vehicles to cross newly applied pavement markings until they are sufficiently dry. Remove and replace any portion of the pavement markings damaged by passing traffic or from any other cause, at no additional cost to the Department

711-7 Observation Period.

Longitudinal pavement markings are subject to a 180 day observation period under normal traffic. The observation period shall begin with the satisfactory completion and acceptance of the work. The longitudinal pavement markings shall show no signs of failure due to blistering, excessive cracking, chipping, discoloration, poor adhesion to the pavement, loss of reflectivity or vehicular damage. The retroreflectivity shall meet the initial requirements of 711-4.3. The Department reserves the right to check the color and retroreflectivity any time prior to the end of the observation period. Replace, at no additional expense to the Department, any longitudinal pavement markings that do not perform satisfactorily under traffic during the 180 day observation period.

711-8 Corrections for Deficiencies.

Recapping applies to conditions where additional striping material is applied to new or refurbished traffic stripes or markings to correct a deficiency. Recap a 1.0 mile section centered around the deficiency with additional striping material or by complete removal and reapplication at no additional cost to the Department. If recapping will result in a thickness exceeding the maximum allowed, the traffic stripes or markings will be removed and reapplied.

711-9 Submittals.

711-9.1 Submittal Instructions: Prepare a certification of quantities, using the Department's current approved form, for each project in the Contract. Submit the certification of quantities and daily worksheets to the Engineer. The Department will not pay for any disputed items until the Engineer approves the certification of quantities.

711-9.2 Contractor's Certification of Quantities: Request payment by submitting a certification of quantities no later than Twelve O clock noon Monday after the estimate cut-off date or as directed by the Engineer, based on the amount of work done or completed. Ensure the certification of quantities consists of the following:

(a) Contract Number, FPID Number, Certification Number, Certification Date and the period that the certification represents.

(b) The basis for arriving at the amount of the progress certification, less payments previously made and less any amount previously retained or withheld. The basis will include a detailed breakdown provided on the certification of items of payment.

711-10 Method of Measurement.

The quantities to be paid for under this Section will be as follows:

(a) The length, in net miles, of 6 inch solid traffic stripe, authorized and acceptably applied.

(b) The total traversed distance in gross miles of 10-30 or 3-9 skip line. The actual applied line is 25% of the traverse distance, for a 1:3 ratio. This equates to 1,320 feet of marking per mile of single line.

(c) The net length, in feet, of all other types of lines and stripes, authorized and acceptably applied.

(d) The area, in square feet, of removal of existing pavement markings, acceptably removed.

(e) The number of pavement messages, symbols and directional arrows, authorized and acceptably applied.

711-11 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including, all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work. Final payment will be withheld until all deficiencies are corrected.

Payment will be made under:

| | |
|------------|--|
| 711-7 | REMOVE EXISTING THERMOPLASTIC., SF |
| 711-11-121 | THERMOPLASTIC, STANDARD, WHITE, SOLID, 6", LF |
| 711-11-125 | THERMOPLASTIC, STANDARD, WHITE, SOLID, 24", LF |
| 711-11-170 | THERMOPLASTIC, STANDARD, WHITE, ARROW, EA |
| 711-11-221 | THERMOPLASTIC, STANDARD, YELLOW, SOLID, 6", LF |
| 711-11-224 | THERMOPLASTIC, STANDARD, YELLOW, SOLID 18", LF |

**SECTION 1150
MEASUREMENT AND PAYMENT**

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the method used to determine quantities of Work performed or materials supplied for which a price is given in the Bid. It establishes the basis upon which payment will be made for Payment Items.
- B. Subject to the provisions in General Conditions, all Work and payment for the Work is represented by Payment and associated unit prices.

1.02 PAYMENT

- A. Subject to all other contract requirements, the Contractor shall be paid for “as-built” quantities of Work for which a price is given in the bid.
- B. Quantities on the Bid Form are for comparison in competitive bidding only and do not constitute the basis for payment or measurement of quantities.
- C. Quantities on the Bid Form are estimated and may be increased or decreased without limit.
- D. No separate payment will be made for one Payment Item as Work incidentally required to complete the Work of another.
- E. Payment for Work performed shall be made in accordance with the unit prices in the Bid. Retainage shall apply to all Contractor payments prior to final acceptance.

1.03 MEASUREMENT FOR PAYMENT

- A. Payment Limit Lines:
 - 1. Where payment limit lines are shown on the Contract Drawings, measurements of a Payment Item quantity will be made up to, but not beyond such lines.
 - 2. Where the actual Work of a Payment Item falls short of the payment limit line, measurement will be made to the line of the actual Work.
 - 3. No payment will be made for quantities outside of payment limit lines unless authorized in writing by the Owner.

B. Methods of Measurement:

1. Measurements of lengths, widths, slope angles, and depths or elevations shall be made to determine “as-built” quantities of lengths, areas and volumes pertinent to Payment Items.
 - a. Unless otherwise specified, all lengths shall be horizontal distances.
 - b. Slope angles and elevations shall be measured using land surveying equipment.
2. Graphic representations of measured quantities shall be drafted to scale using the Drawings where convenient and appropriate. Additional drawings shall be drafted if required.
 - a. Irregular shapes representing areas and volumes shall be measured using a compensating polar planimeter or a computer digitizer.
 - b. Regular shapes shall be scaled.
3. Use of Drawings:
 - a. Unless otherwise agreed upon between the Contractor and Owner, the Drawings shall be used as the basis to establish existing grades and other existing topographic features.

C. Payment limits where Payment Lines are not shown on the Drawings:

1. Pipe Length: Measurement of pipe shall be made along the top of pipe, excluding fittings, valves and manholes, in place, taken as the laying length.
2. Except as specified otherwise, measurements of Payment Item quantities of weights, lengths, areas and volumes shall be made;
 - a. On “as-built” and in-place completed Work, during construction of at the time of Substantial Completion.
 - b. If no other feasible and practical method of measurement is available, by delivery slips delivered to the Owner.

1.04 PAYMENT ITEMS

- A. Separate payment will be made for the Unit Price and Lump Sum Items listed on the Bid Form. Related work not specifically listed or identified below in 1.04 B, but evidently necessary for satisfactory completion of the Item shall be considered to be included.

B. No separate payment will be made for the following Work, and its cost shall be included in the Bid Price of the Payment Item to which it is associated.

1. Trench excavation, sheeting, shoring and bracing.
2. Dewatering, erosion and sedimentation control, and turbidity screening.
3. Fill, backfill, grading and removal of unsuitable material.
4. Removal, replacement and restoration of dirt driveways, mailboxes and plantings.
5. Cleanup.
6. Disinfection and testing including all materials and equipment.
7. Maintenance of utility service.
8. Appurtenant work.
9. Field verification or location of buried utilities.
10. Removal and replacement of fencing.
11. Record Drawings.
12. Construction photographs and video.
13. Field office, if applicable.
14. Saw cutting.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

SECTION 1340
SHOP DRAWINGS, WORKING DRAWINGS AND SAMPLES

PART 1 – GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. The Contractor shall submit to the Engineer for review and approval such working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this Section called data), and material samples (hereinafter in this Section called samples) as are required for the proper control of the Work, including but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Drawings.
2. Within thirty (30) days after the Effective Date of the Agreement, the Contractor shall submit to the Engineer a complete list of preliminary data on items for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way be expressed or implied to relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc. fully in accordance with the Specifications. This procedure is required in order to expedite final review of shop drawings.
3. The Contractor shall maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting. This log should include the following items:
 - a. Submittal, description and number assigned.
 - b. Date to Owner.
 - c. Date returned to Contractor from Engineer.
 - d. Status of submittal (Approved, Approved as Noted, Rejected/Resubmit).
 - e. Date of resubmittal and return (as applicable).
 - f. Date material release (for fabrication).
 - g. Projected date of fabrication.
 - h. Projected date of delivery to site.

- i. Status of O&M manuals submittal.
- j. Specification Section.
- k. Drawings sheet number.

1.02 CONTRACTOR'S RESPONSIBILITY

- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for the Contractor before submitting them to the Engineer for review. Each and every copy of the drawings and data shall bear Contractor's stamp showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents. If the Contractor takes exception to the Specifications, the Contractor shall note the exception in the letter of transmittal to the Engineer.
- B. Determine and Verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
 - 4. Conformance with Specifications.
- C. The Contractor shall furnish the Engineer a schedule of shop drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
- D. The Contractor shall not begin any of the work covered by a drawing, data or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him, by the Engineer, with approval.
- E. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than twenty-one (21) calendar days for checking and appropriate action from the time the Engineer receives them.
- F. All submittals shall be accompanied with the completed shop drawing submittal form shown in this Section in duplicate containing the following information.

1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. The number of each shop drawings, project data and sample submitted.
 5. Notification of deviations from Contract Documents.
- G. The Contractor shall submit three (3) copies of descriptive or product data submittals to complement shop drawings for the Engineer plus the number of copies which the Contractor requires returned. The Engineer will retain five (5) sets. All blueprint shop drawings shall be submitted with one (1) set of mylar reproducibles and three (3) sets of prints. The Engineer will review the blueprints and return to the Contractor the set of marked-up mylar reproducibles with appropriate review comments.
- H. The Contractor shall be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of the work prior to the completion of the review by Engineer of the necessary shop drawings.
- I. The Contractor shall be fully responsible for observing the need for and making any changes in the arrangement of piping, manner of installation, etc., which may be required by the materials/equipment that the Contractor proposes to supply both as it pertains to the Contractor's own work and any work affected under other parts, headings, or divisions of the Drawings and Specifications.

1.03 ENGINEER'S REVIEW OF SHOP DRAWINGS

- A. The Engineer's review of drawings, data and samples submitted by the Contractor will cover only general conformity to the Specifications, external connections and dimensions which affect the installation. The Engineer's review and exceptions, if any, will not constitute an approval of dimensions, quantities and details of the material, equipment, device or item shown.
- B. The review of the drawings and schedules will be general and shall not be construed.
1. As permitting any departure from the Contract requirements;
 2. As relieving the Contractor of responsibility for any errors, including details, dimensions and materials; or
 3. As approving departures from details furnished by the Owner, except as otherwise provided herein.

- C. If the drawings or schedules as submitted describe variations per Paragraph 1.02A, and show a departure from the Contract requirements which are found to be in the interest of the Owner and to be so minor as not to involve a change in Contract Price of Time for Performance, the Engineer may return the reviewed drawings without noting an exception.
- D. When reviewed by the Engineer, each of the shop drawings will be identified as having received such review being so stamped and dated on the shop drawings submittal form. Shop drawings stamped "REVISE AND RESUBMIT" and with required corrections shown will be returned to the Contractor for correction and resubmittal.
- E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the Contractor shall direct specific attention, in writing or on resubmittal shop drawings, to revisions other than the corrections requested on previous submissions. The Contractor shall make any corrections required by the Engineer.
- F. If the Contractor considers any correction indicated on the drawings to constitute a change to the Drawings or Specifications, the Contractor shall give written notice thereof to the Engineer.
- G. Shop drawings and submittal data shall be reviewed by the Owner for each original submittal and first and second resubmittal; thereafter review time for subsequent resubmittals shall be charged to the Contractor.
- H. When the shop drawings have been completed to the satisfaction of the Owner, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.
- I. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal. Unless otherwise specifically permitted by the Engineer, make all submittals in groups containing all associated items for:
 - 1. Systems.
 - 2. Processes.
 - 3. As indicated in specific specifications sections.
- J. All drawings, schematics, manufacturer's product data, certifications and other shop drawing submittals required by a system specification shall be submitted at one time as a package to facilitate interface checking.

1.04 SHOP DRAWINGS

- A. When used in the Contract Documents, the term “shop drawings” shall be considered to mean Contractor’s plans for materials and equipment which become an integral part of the Project. These drawings shall be complete and detailed. Shop drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer’s scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance and test data, shall be considered only as supportive to required shop drawings as defined above. As used herein, the term “manufactured” applies to standard units usually mass-produced; and “fabricated” means items specifically assembled or made out of selected materials to meet individual design requirements.
- B. Manufacturer’s catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. Delete information which is not applicable to the Work by striking or cross-hatching.
- C. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor’s stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.
- D. Each shop drawing shall have a blank area 3 ½ inches by 3 ½ inches, located adjacent to the title block. The title block shall display the following.
 - 1. Project title and number.
 - 2. Number and title of the shop drawing.
 - 3. Date of shop drawing or revision.
 - 4. Name of Contractor and subcontractor submitting drawing.
 - 5. Supplier/manufacturer.
 - 6. Separate detailer when pertinent.
 - 7. Specification title and number.
 - 8. Specification section.
 - 9. Application Contract Drawing Number.
- E. If drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the Contract shall be

implemented where appropriate. If the Contractor fails to describe such variations, he shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such drawings have been reviewed.

- F. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.
- G. Only the Engineer will utilize the color "red" in marking shop drawing submittals.

1.05 WORKING DRAWINGS

- A. When used in the Contract Documents, the term "working drawings" shall be considered to mean the Contractor's plan for temporary structures such as temporary bulkheads, support of open cut excavations, support of utilities, ground water control systems, forming and falsework; underpinning; and for such other work as may be required for construction but does not become an integral part of the project.
- B. Copies of working drawings as noted in Paragraph 1.05 A. above shall be submitted where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.
- C. Working drawings shall be signed by a registered professional engineer, currently licensed to practice in the State of Florida and shall convey, or be accompanied by calculations or other sufficient information to completely explain the structure, machine, or system described and its intended manner of use. Prior to commencing such work, working drawings must have been reviewed without specific exceptions by the Engineer, which review will be for general conformance and will not relieve the Contractor in any way from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error are assumed by the Contractor; the Engineer shall have no responsibility thereof.

1.06 SAMPLES

- A. The Contractor shall furnish, for the approval of the Engineer, samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integrally related parts and attachment devices.
 2. Full range of color, texture and pattern.
 3. A minimum of two (2) samples of each item shall be submitted.
- C. Each sample shall have a label indicating:
1. Name of project.
 2. Name of Contractor and subcontractor.
 3. Material or equipment represented.
 4. Place of origin.
 5. Name of producer and brand (if any).
 6. Location in Project.

(Samples of finished materials shall have additional marking that will identify them under the finished schedules).

- D. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required in Paragraph 1.06 B. above. The Contractor shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use named in such approval and shall not be construed to change or modify any Contract requirements.
- E. Approved samples not destroyed in testing shall be sent to the Engineer or stored at the site of the Work. Approved samples of the hardware in good condition will be marked for identification and may be used in the Work. Materials and equipment incorporated in the Work shall match the approved samples. Samples which failed testing or were not approved will be returned to the Contractor at the Contractor's expense, if so requested at time of submission.

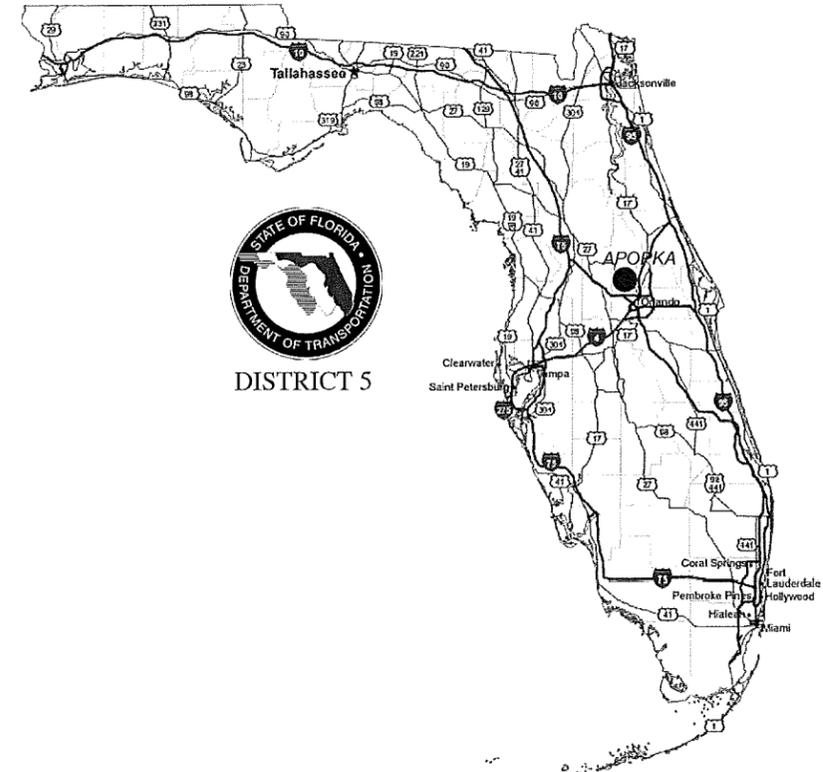
PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

STATE OF FLORIDA
ORANGE COUNTY
CITY OF APOPKA
Indoor Foliage Capital of the World

CONSTRUCTION PLANS

YOTHERS ROAD ROADWAY IMPROVEMENTS

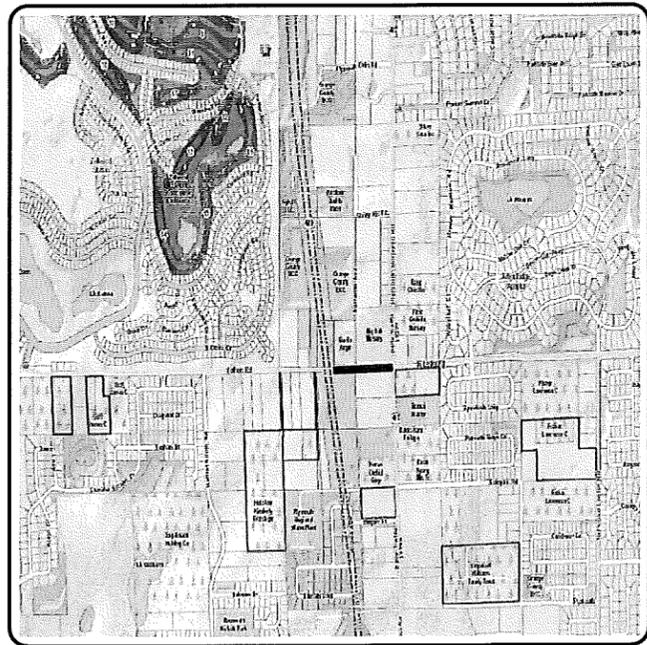


| INDEX OF CONSTRUCTION PLANS | |
|-----------------------------|--------------------------------|
| SHEET NO. | SHEET DESCRIPTION |
| 1 | COVER |
| 2 | GENERAL NOTES & SPECIFICATIONS |
| 3 | ROADWAY GEOMETRY PLAN |
| 4 | GRADING PLAN & SECTIONAL VIEW |
| 5 | PLAN & PROFILE VIEW |
| 6 | SIGNING & PAVEMENT MARKINGS |
| 7 | POLLUTION PREVENTION DETAILS |

PROJECT DESCRIPTION
2- Lane Urban Roadway
Total Length of Project = 850 LF (0.16 MILES)

GOVERNING DESIGN STANDARDS & SPECIFICATIONS
State of Florida DEP Rules & Regulations (2016 Edition)
State of Florida DOT Design Standards (2016 Edition)
FDOT Standard Specifications for Road and Bridge Construction (2016 Edition)
City of Apopka Utility Design and Construction Manual (2016 Edition)

| UTILITY CONTACT INFORMATION | |
|-----------------------------------|----------------|
| UTILITY COMPANY NAME | TELEPHONE |
| City of Apopka (Public Services) | (407) 703-1731 |
| Progress Energy | (407) 646-8569 |
| CenturyLink | (407) 814-5310 |
| Bright House Networks | (407) 532-8509 |
| Lake Apopka Natural Gas | (407) 656-2734 |
| Florida Gas Transmission | (407) 838-7362 |
| Qwest Communications | (303) 992-2469 |



MAYOR
Joe Kilsheimer

COUNCIL MEMBERS
Billie L. Dean
Diane Velazquez
Doug Bankson
Kyle Becker



CITY ADMINISTRATOR
Glenn A. Irby

PUBLIC SERVICES DIRECTOR
R. Jay Davoll, P.E.

DESIGN ENGINEERING DIVISION
Vladimir Simonovski
Naret Teran, P.E.
Jarvin Vines



PLANS PREPARED BY:
**CITY OF APOPKA
PUBLIC SERVICES
DESIGN ENGINEERING DIVISION**
748 E. CLEVELAND STREET
APOPKA, FLORIDA 32703
TEL: (407) 703-1731
FAX: (407) 703-1748

ENGINEER OF RECORD
NARET TERAN, P.E.
LICENSE NO. 73796

MAY, 2016

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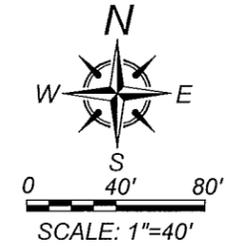
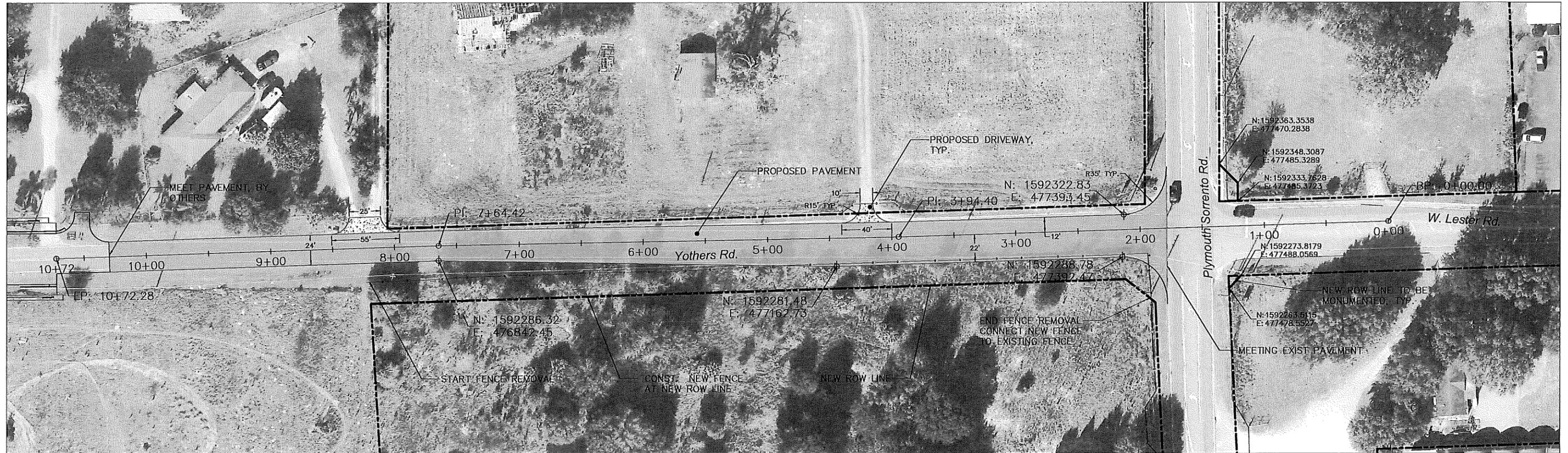
GENERAL NOTES

1. Governing standards and specifications on this project are considered the Florida Department of Transportation (FDOT) Design Standards (2016 Edition), FDOT Standard Specifications for Road and Bridge Construction (2016 Edition), and City of Apopka Utility Design and Construction Manual (2016 Edition).
2. All personal property, except mail boxes located within the public right-of-way (not relocated by the property owner), shall be removed by the Contractor as necessary to construct the project in accordance with the Construction Plans. Mail boxes shall be relocated by the Contractor in accordance with FDOT Index No. 532.
3. The disposal of excess earthwork materials shall be the responsibility of the Contractor. Approval of disposal sites shall be obtained from the City of Apopka prior to disposal.
4. All existing trees and stumps within the limits of the project are to be removed as clearing and grubbing unless otherwise directed.
5. Seed and mulch all disturbed areas not covered by sod unless otherwise directed.
6. All pavement offsets shown are to the proposed centerline of construction, as where radius dimensions are to the edge of pavement, unless otherwise noted.
7. Turnout locations and widths shown in the Construction Plans are approximate and may be adjusted as necessary or as directed by the Engineer. All turnouts shall be constructed in accordance with FDOT Index No. 515.
8. The various permits included in the bid specifications payment are included in the bid price for Section 104. The Contractor shall perform his work in accordance with the requirements of "Prevention, Control, and Abatement of Erosion and Water Pollution", excluding items specified elsewhere. Environmental controls shall be used at locations designated in the plans and/or designated by the Engineer.
9. The information shown on these drawings concerning type and location of underground and other utilities are based on available records and surveys, but is not guaranteed to be accurate or all inclusive. The Contractor shall make his own determination as to the type and location of utilities as may be necessary to avoid damage there to, and is responsible for coordinating utility relocation.
10. Prior to ordering drainage structures, the Contractor shall determine if drainage utility conflicts exist. Information about possible conflicts shall be submitted to the Engineer as soon as possible after discovery of such for resolution.
11. The Contractor shall notify all gas utility companies a minimum of two working days prior to excavation as required by Chapter 77-153 of the Florida Statutes.
12. All inlet/manhole - pipe joints shall be filled with non-shrink grout, covered with an asphaltic mastic coating, and wrapped with a filter fabric material per Section 13.03.03 of the Orange County Road Construction Specifications.
13. All curb inlets, ditch bottom inlets, and manholes shall have traffic bearing frames and covers or grates meeting HS-20 loading requirements.
14. Changes of pipe inverts not exceeding plus or minus one foot will not be considered as a basis for additional compensation for the pertinent pipe bid item or for modification of precast structures.
15. All benchmarks (irons and monuments) shown in the Construction Plans, or found, shall be preserved.

- Those shown in proposed pavement shall be protected with a cast iron valve box.
16. Public land corners within the limits of construction shall be protected. If a corner monument is in danger of being destroyed or disturbed, the Contractor shall notify the Engineer, without delay, by telephone. The Contractor shall provide written follow up confirmation within 48-hours of telephone notification.
 17. Prior to beginning of any construction, the Contractor shall submit to the Engineer a set of field notes verifying the benchmark elevations and the reference point connections on the plan and profile view sheets, and/or a set of field notes for all additional benchmark and reference point connections proposed to be used in constructing the project with their location, description and elevation, based on North American Vertical Datum (NAVD88). All submittals shall be signed and sealed by a Professional Land Surveyor registered in the State of Florida.
 18. Within 21 calendar days after notice to proceed, the Contractor shall stake the public right-of-way at 50 foot intervals and the right-of-way breaks with corresponding stations shown on the stakes. No invoice for payment for mobilization (Pay Item No. 101-1) will be processed until the right-of-way has been staked to the satisfaction of the Engineer.
 19. Any United States Code (USC) and National Geodetic Survey (NGS) monuments within the limits of construction shall be protected. If in danger of damage, the Contractor shall notify the Engineer, and both shall notify:
State Geodetic Advisor, David Newcomer, NOAA
3900 Commonwealth Blvd. - MS105
Tallahassee, FL Phone (850) 245-2606
 20. It shall be the responsibility of the Contractor to acquire all necessary right-of-way and maintenance of traffic permits. The City will waive all permits required for construction activities within the limits of public right-of-way owned and maintained by the City of Apopka. For construction activity within the limits of public right-of-way maintained by the City but owned by Orange County or the State of Florida, the Contractor shall acquire the required permits from the agencies. It shall be the responsibility of the Contractor to insure that all required permits are obtained and in-hand before beginning any construction.
 21. The location of all existing utilities, storm drainage systems, and topographic features shown on the plans have been determined from the best available information and are provided for the convenience of the Contractor. The Engineer assumes no responsibility for their inaccuracy. Should a discrepancy arise between these plans and actual field conditions, which would appreciably affect the execution of these plans, the Contractor shall halt construction and notify the Engineer immediately.
 22. The Contractor shall be responsible for notifying the City within 48 hours before any inspections. Also, the Contractor shall be responsible for meeting all inspection criteria, schedules and signing said inspections.
 23. The Contractor shall not excavate, remove or otherwise disturb any material, structure or part of a structure which is located outside the lines, grades or grading section, established for this project, except where such excavations or removal is provided or in the Contract Construction Plans or Technical Specifications.
 24. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified

25. All work shall be accomplished in strict accordance with all applicable federal, state and local codes, ordinances and regulations.
26. Apparent errors, discrepancies or omissions in the Construction Plans shall be brought to the Engineer's attention before bidding.
27. After completion of construction, the Contractor shall provide to the City a completed as-built plan one week prior to the final inspection. Before the final acceptance it shall be the Contractor's responsibility to perform a site cleanup for the removal of trash, debris, excess materials, and equipment to present the project site clean and in good order.
28. No extra payments shall be allowed for any work required due to misunderstanding of job or site conditions affecting the work as described in the Technical Specifications or shown on the Construction Plans. The Contractor shall not take advantage of any apparent error or omission in the Construction Plans or Technical Specifications and the Engineer shall be permitted to make corrections and interpretation as may be deemed necessary for the fulfillment of the intent of the Contract Documents. By entering the bidding process the bidders acknowledge acceptance of these conditions.
29. The Contractor shall submit four (4) sets of detailed shop drawings of all major items proposed for this project to the Engineer prior to ordering any of the equipment or material. Two (2) copies of the shop drawings will be returned to the Contractor. Upon the Contractor's receipt of approved shop drawings from the Engineer, the Contractor may proceed with the work.
30. The Contractor shall comply with the legal load restrictions in hauling of materials in public roads beyond the limits of construction work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material and equipment.
31. During construction, no direct discharge of water to downstream receiving waters will be allowed. The Contractor is responsible for maintaining water quality and route discharge water in such a manner as to adequately remove silt prior to runoff from the site.
32. Connection to existing lines to which utility pipe of the Contract must connect, the following work shall be performed:
 - A. Expose buried lines to confirm or determine end connection, pipe material and diameter.
 - B. Furnishing and installing piping and making proper connections.

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|-----|------------|-------|--|---|--|---|---|--|---|
| NO. | REVISIONS: | DATE: | |  | <p align="center">CITY OF APOPKA PUBLIC SERVICES DEPARTMENT DESIGN ENGINEERING DIVISION</p> <p align="center">748 E. CLEVELAND STREET APOPKA, FLORIDA 32703 TEL: (407) 703-1731 FAX: (407) 703-1748</p> | <p>ENGINEER OF RECORD NARET TERAN, P.E. FBPE LICENSE NO. 73796</p> <p>_____ SIGNATURE</p> <p>_____ DATE</p> | <p>PROJECT NAME: Yothers Rd. - Roadway Improvements</p> <p>SCALE: AS NOTED</p> <p>DATE: MAY, 2016</p> <p>DWG File: Sheet 2 (General Notes)</p> | <p>SHEET DESCRIPTION: CONSTRUCTION PLANS GENERAL NOTES & SPECIFICATIONS (YOTHERS RD., APOPKA, FL)</p> | <p>SHEET NO. 2</p> |
|-----|------------|-------|--|---|--|---|---|--|---|



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| BEGINNING: | 0+00.00 | N 1592317.5900 | E 477606.4800 |
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| LENGTH: | 394.4 | | |
| PI: | 3+94.40 | N 1592305.0700 | E 477212.2800 |
| DIRECTION: | S88° 57' 21" W | | |
| LENGTH: | 370.02 | | |
| PI: | 7+64.42 | N 1592298.3200 | E 476842.3400 |
| DIRECTION: | S88° 05' 44" W | | |
| LENGTH: | 307.86 | | |
| END: | 10+72.28 | N 1592288.0900 | E 476534.6300 |

| NO. | REVISIONS: | DATE: |
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ENGINEER OF RECORD
 NARET TERAN, P.E.
 FBPE LICENSE NO. 73796

 SIGNATURE

 DATE

PROJECT NAME:
 Yothers Rd. - Roadway Improvements

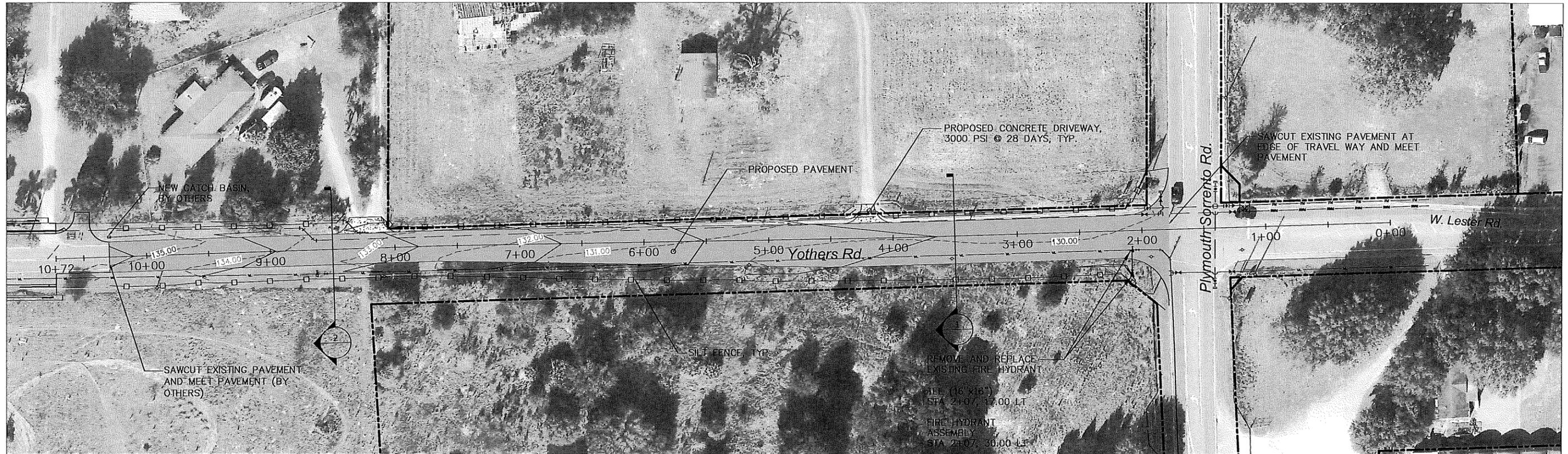
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DATE: MAY, 2016

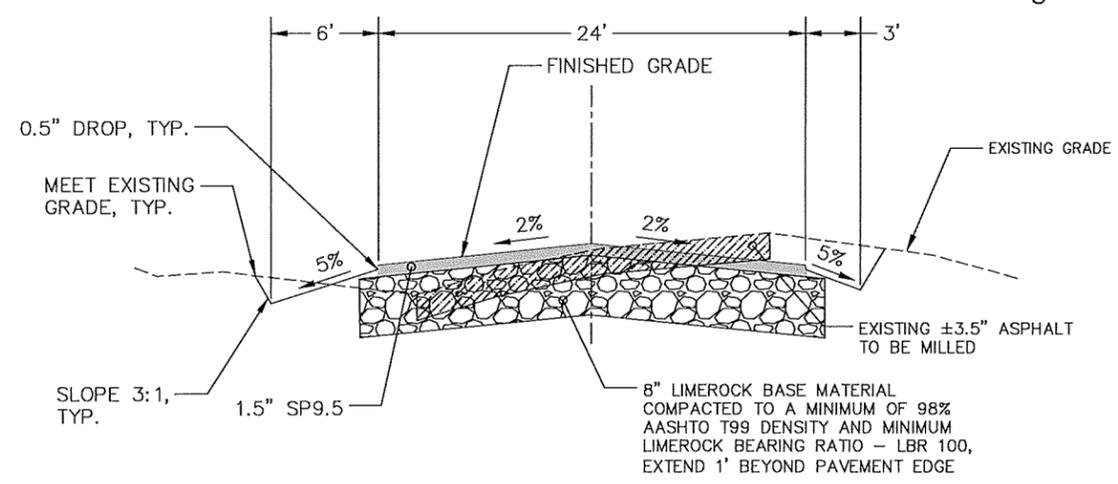
DWG File: Sheet 3 (Geometry Plan)

SHEET DESCRIPTION:
 GEOMETRY PLAN VIEW
 (YOTHERS RD., APOPKA, FL)

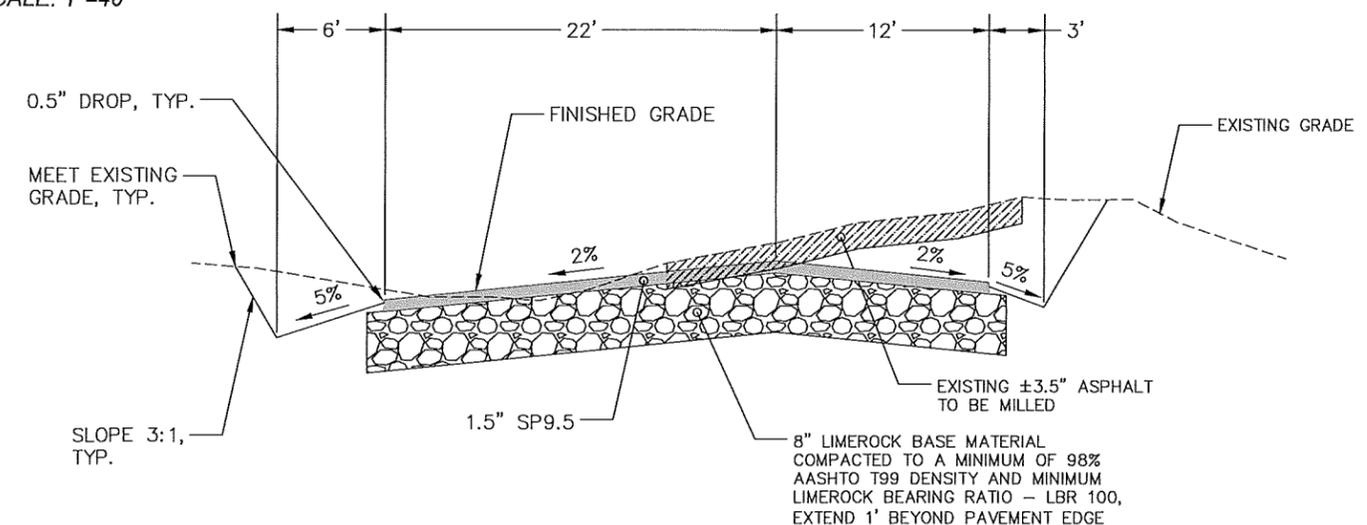
SHEET NO.
3



0 40' 80'
SCALE: 1"=40'



2 STA. 8+50 SECTION
NTS



1 STA. 3+50 SECTION
NTS

| NO. | REVISIONS: | DATE: |
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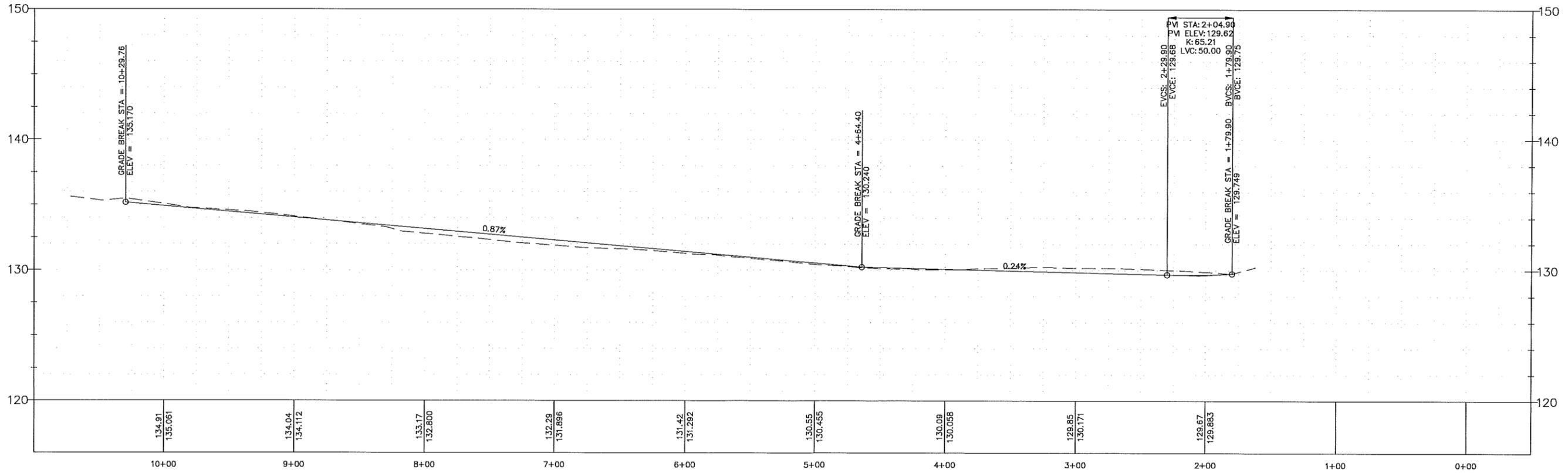
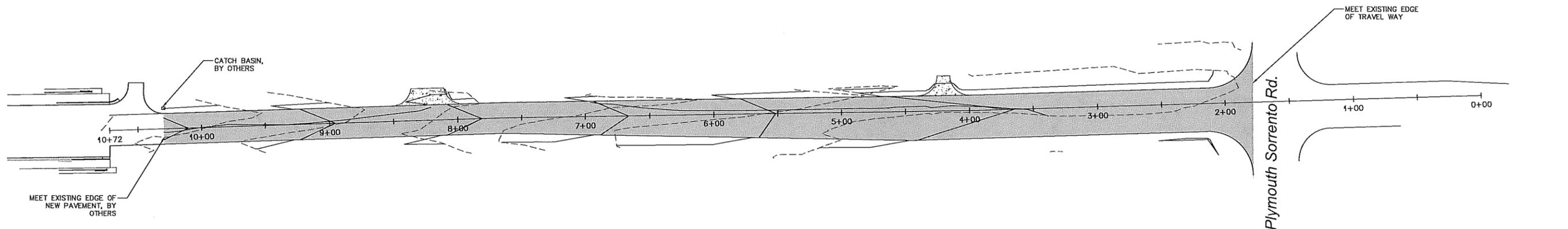
ENGINEER OF RECORD
MARET TERAN, P.E.
FBPE LICENSE NO. 73796

SIGNATURE _____
DATE _____

PROJECT NAME:
Yothers Rd. - Roadway Improvements
SCALE: AS NOTED
DATE: MAY, 2016
DWG File: Sheet 4 (Grading Plan & Section)

SHEET DESCRIPTION:
GRADING PLAN AND SECTIONS
(YOTHERS RD., APOPKA, FL)

SHEET NO.
4



| NO. | REVISIONS: | DATE: |
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ENGINEER OF RECORD
NARETT TERAN, P.E.
FBPE LICENSE NO. 73796

SIGNATURE

DATE

PROJECT NAME:
Yothers Rd. - Roadway Improvements

SCALE: AS NOTED

DATE: MAY, 2016

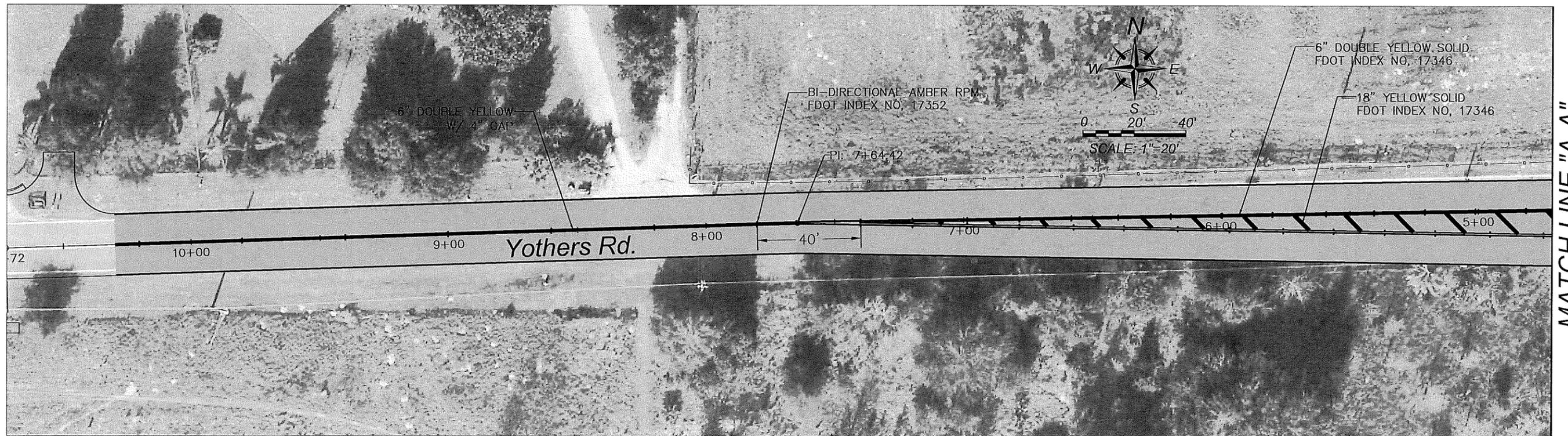
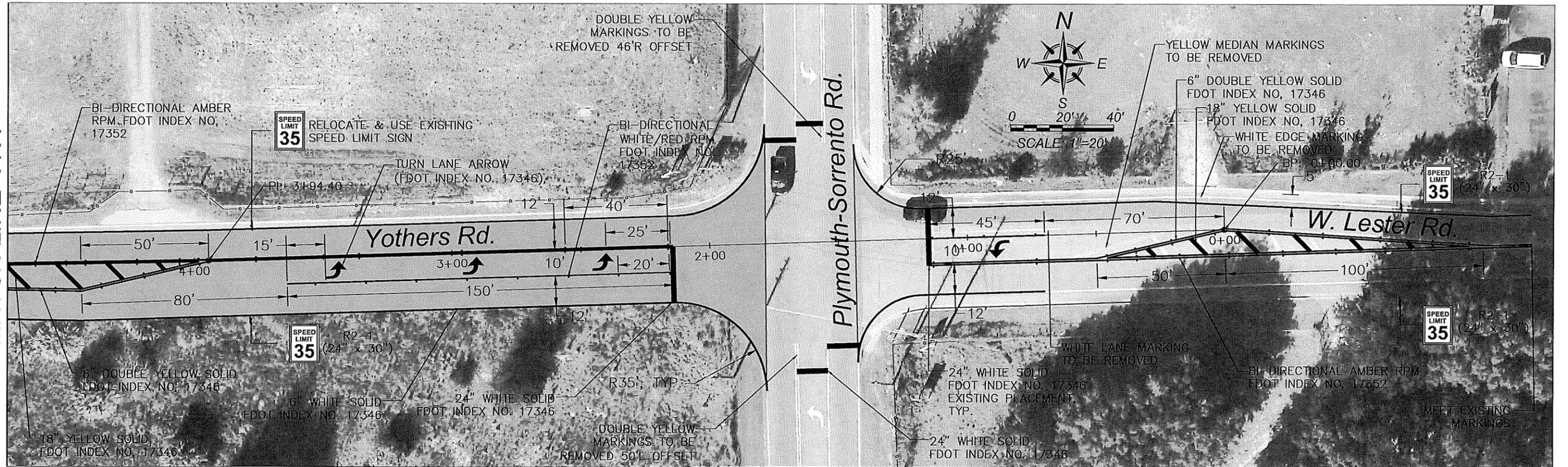
DWG File: Sheet 5 (Plan & Profile View)

SHEET DESCRIPTION:
CONSTRUCTION PLANS -
PLAN & PROFILE VIEW
(YOTHERS RD., APOPKA, FL)

SHEET NO.
5

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MATCH LINE "A-A"



MATCH LINE "A-A"

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PROJECT NAME:
 Yothers Rd. - Roadway Improvements

SCALE: AS NOTED

DATE: MAY, 2016

DWG File: Sheet 6 (Marking Plan)

SHEET DESCRIPTION:
 MARKING PLAN - PLAN VIEW
 (YOTHERS RD., APOPKA, FL)

SHEET NO.
6

