

CITY OF  
TAMPA, FLORIDA

NOTICE TO BIDDERS, INSTRUCTIONS TO BIDDERS  
PROPOSAL, BID BOND, FORM OF NOTICE OF AWARD,  
AGREEMENT, PERFORMANCE BOND AND  
SPECIFICATIONS

FOR

**Contract 24-C-00041**

# **Ditch Rehabilitation - Grady Avenue & 43rd Street**

City of Tampa  
CONTRACT ADMINISTRATION DEPARTMENT  
TAMPA MUNICIPAL OFFICE BUILDING  
306 E. JACKSON STREET - 4<sup>TH</sup> FLOOR NORTH  
TAMPA, FLORIDA 33602

SEPTEMBER 2024

CITY OF TAMPA  
CONTRACT ADMINISTRATION DEPARTMENT  
306 E. Jackson Street 280A4N  
Tampa, FL 33602

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**BID NOTICE MEMO**

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**Electronic Bids are not allowed for these projects.**

**Physical Bids will be received no later than 1:30 p.m.** at the above address on the indicated Date(s) for the following Project(s):

\*\*\*\*\*

**CONTRACT NO.:** 24-C-00041; Ditch Rehabilitation – Grady Avenue & 43<sup>rd</sup> Street

**BID OPENING:** 1:30PM, Tuesday, **ESTIMATE:** \$3,400,000 **SCOPE:** Ditch rehabilitation to address vegetation overgrowth, and bank erosion by providing clearing, sediment removal, and stabilization of banks to restore the facilities conveyance capacity and reduce the necessary maintenance.

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Bids will be opened in the 4th Floor Conference Room, Tampa Municipal Office Building, 306 E. Jackson Street, Tampa, Florida 33602. The public is not allowed to attend in person. To view the Bid Opening follow these instructions:

To join the Microsoft Teams meeting from your computer, tablet, or smartphone.

[Click here to join the meeting](#)

Meeting ID: 292 828 652 204 Passcode: hE5XMy

[Download Teams](#) | [Join on the web](#) Or call in (audio only) [+1 941-263-1615,,135358761#](#) United States, Sarasota Phone Conference ID: 135 358 761# [Find a local number](#) | [Reset PIN](#)

<https://www.tampa.gov/>

In accordance with the Americans with Disabilities Act (“ADA”) and Section 286.26, Florida Statutes, persons with disabilities needing a reasonable accommodation to participate in this public hearing or meeting should contact the City of Tampa’s ADA Coordinator at least 48 hours prior to the proceeding. The ADA Coordinator may be contacted by phone at 813-274-3964, email at TampaADA@tampagov.net, or by submitting an ADA - Accommodations Request online form available at <http://www.tampagov.net/ADARequest>.

Please note that the City of Tampa may not be able to accommodate any request received less than 48 hours before the scheduled public hearing or meeting.

Plans and Specifications and Addenda for this work may be examined at, and downloaded from, [www.demandstar.com](http://www.demandstar.com).

Files are also available at <http://www.tampagov.net/contract-administration/programs/construction-project-bidding>.

**Email Questions to:** [contractadministration@tampagov.net](mailto:contractadministration@tampagov.net).

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NOTICE TO BIDDERS  
CITY OF TAMPA, FLORIDA  
Contract 24-C-00041; Ditch Rehabilitation - Grady Avenue & 43rd Street

Sealed Proposals will be received by the City of Tampa no later than 1:30 P.M., in the 4<sup>th</sup> Floor Conference Room, Tampa Municipal Office Building, 306 E. Jackson Street, Tampa, Florida, there to be publicly opened and read aloud.

The proposed work is to include, but not be limited to, Ditch rehabilitation to address vegetation overgrowth, and bank erosion by providing clearing, sediment removal, and stabilization of banks to restore the facilities conveyance capacity and reduce the necessary maintenance. with all associated work required for a complete project in accordance with the Contract Documents.

The Instructions to Bidders, Proposal, Form of Bid Bond, Agreement, Form of Public Construction Bond, Specifications, Plans and other Contract Documents are posted at DemandStar.com. Backup files may be downloaded from <http://www.tampagov.net/contract-administration/programs/construction-project-bidding>. One set may be available for reference at the office of the Contract Administration Department, Municipal Office Building, Fourth Floor North, City Hall Plaza, Tampa, Florida 33602.

Each Proposal must be submitted on the Proposal form included in the Specifications and must be accompanied by a certified check or cashier's check on a solvent bank or trust company in compliance with Section 255.051, Florida Statutes, made payable to the City of Tampa, in an amount of not less than five per cent of the total bid, or a Bid Bond, of like amount, on the form set forth in the Contract Documents, as a guarantee that, if the Proposal is accepted, the Bidder will execute the Proposed Contract and furnish a Public Construction Bond within twenty (20) days after receipt of Notice of Award of Contract.

To be eligible to submit a proposal, a Bidder must hold the required and/or appropriate current license, certificate, or registration (e.g. DBPR license/certificate of authorization, etc.) in good standing at the time of receipt of Bids. **Per Section 489.131, Florida Statutes, Proposals submitted for the construction, improvement, remodeling, or repair of public projects must be accompanied by evidence that the Bidder holds the required and/or appropriate current certificate or registration, unless the work to be performed is exempt under Section 489.103, Florida Statutes.**

The City of Tampa reserves the right to reject any or all Bids and to waive any informalities in the Bid and/or Bid Bond. Acceptance or rejection of Proposals will be made as soon as practicable after the Proposals are received, but the City reserves the right to hold Proposals for ninety (90) days from the date of Opening.

Bid Protest Procedures: Unless subsequently indicated otherwise, in a revised posting on the Department's web page for Construction Project Bidding, the City of Tampa intends to award the referenced project to the lowest bidder listed in the tabulation posted on or about the date of Bid Opening. A bidder aggrieved by this decision may file a protest not later than 4:30 P.M., five (5) business days from the first posting thereof, pursuant to City of Tampa Code Chapter 2, Article V, Division 3, Section 2-282, Procurement Protest Procedures. Protests not conforming therewith shall not be reviewed.

Pursuant to Section 2-282, City of Tampa Code, during the solicitation period, including any protest and/or appeal, NO CONTACT with City officers or employees is permitted from any bidder or proposer, other than as specifically stated in this solicitation and as follows:  
Director of the Contract Administration Department (CAD)  
Contracts Management Supervisor, Jim Greiner  
Contract Officer, Jody Gray  
City legal department

Any Requests For Information must be submitted by email to [ContractAdministration@tampagov.net](mailto:ContractAdministration@tampagov.net)

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 on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids 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 Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list." Refer to Section 287.133, Florida Statutes.

Pursuant to Section 287.087, Florida Statutes, under certain circumstances preference may be given to businesses with a drug-free workplace program that meets the requirements of said Section.

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.01 GENERAL:

The proposed work is the Ditch Rehabilitation - Grady Avenue & 43rd Street in the City of Tampa, as required for a complete project, as shown on the plans and detailed in the specifications. The work is located on land owned or controlled by the City of Tampa.

To be eligible to submit a proposal, a Bidder must hold the required and/or appropriate current license, certificate, or registration (e.g. DBPR license/certificate of authorization, etc.) in good standing at the time of receipt of Bids. **Per Section 489.131, Florida Statutes, Proposals submitted for the construction, improvement, remodeling, or repair of public projects must be accompanied by evidence that the Bidder holds the required and/or appropriate current certificate or registration, unless the work to be performed is exempt under Section 489.103, Florida Statutes.**

I-1.02 FORM PREPARATION AND PRESENTATION OF PROPOSALS: Replace the second sentence with the following: Submission of the entire specification book is not required.

I-1.03 ADDENDA – Section I-2.03 is replaced with the following: No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any Bidder orally.

Every request for such interpretation must be in writing, addressed to the City of Tampa, Contract Administration Department, 306 E. Jackson St., 4th Floor, Tampa, Florida 33602 and then emailed to [ContractAdministration@tampagov.net](mailto:ContractAdministration@tampagov.net). To be given consideration, such request must be received at least seven (7) days prior to the date fixed for the opening of the Proposals. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be posted on DemandStar.Com and on the Department's web page. Failure of any Bidder to receive any such addenda shall not relieve said Bidder from any obligation under his Proposal as submitted. All addenda so issued shall become part of the Contract Documents.

I-1.04 INSTRUCTIONS TO BIDDERS

**SECTION 2 – GENERAL INSTRUCTIONS.** Section I-2.07 SIGNATURE AND QUALIFICATIONS OF BIDDERS is replaced with the following:

Proposals must be signed in ink by the Bidder with signature in full. When firm is a Bidder, the Proposal shall be signed in the name of the firm by one or more partners. When a corporation is a bidder the officer signing shall set out the corporate name in full beneath which he shall sign his name and give the title of his office.

If the bidder referred to in Section I-2.07 is a corporation, it must submit; upon request, a copy of its filed Articles of Incorporation. In addition, if the bidder was incorporated in another state, it must establish that it is authorized to do business in the State of Florida. If the bidder is using a fictitious name, it must submit upon request, proof of registration of such name with the Clerk of the Circuit Court of the County where its principal place of business is. Failure to submit what is required is grounds to reject the bid of that bidder.

**SECTION 2 – GENERAL INSTRUCTIONS.** Section I-2.14 NONDISCRIMINATION IN EMPLOYMENT is changed to add the following to the end of the existing text:

The following provisions are hereby incorporated into any contract executed by or on behalf of the City. Contractor shall comply with the following Statement of Assurance: During the performance of the Contract, the Contractor assures the City, that the Contractor is in compliance with Title VII of the 1964 Civil Rights Act, as amended, the Florida Civil Rights Act of 1992, and the City of Tampa Code of Ordinances, Chapter 12, in that Firm/Contractor does not on the grounds of race, color, national origin, religion, sex, sexual orientation, gender identity or expression, age, disability, familial status, or marital status, discriminate in any form or manner against said Firm's/Contractor's employees or applicants for employment. Contractor understands and agrees that the Contract is conditioned upon the veracity of this Statement of Assurance, and that violation of this condition shall be considered a material breach of the Award/Contract. Furthermore, Contractor herein assures the City that said Contractor will comply with Title VI of the Civil Rights Act of 1964 when federal grant(s) is/are

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

involved. This Statement of Assurance shall be interpreted to include Vietnam-Era Veterans and Disabled Veterans within its protective range of applicability. Firm/Contractor further acknowledges and agrees to provide the City with all information and documentation that may be requested by the City from time to time regarding the solicitation, selection, treatment and payment of subcontractors, suppliers and vendors in connection with this Award/Contract. Firm/Contractor further acknowledges that it must comply with City of Tampa Code of Ordinances, Chapter 26.5.

I-1.05 TIME FOR COMPLETION:

The work shall be arranged to be completed in accordance with a progress schedule approved by the Construction Engineer.

The time for completion of this project, referred in Article 4.01 of the Agreement, shall be 365 consecutive calendar days. The period for performance shall start from the date indicated in the Notice To Proceed.

I-1.06 LIQUIDATED DAMAGES:

The amount of liquidated damages, referred to in Article 4.06 of the Agreement, for completion of this project shall be \$500 per calendar day.

I-1.07 BASIS OF AWARD OF CONTRACT:

The basis of award referred to in Item I-2.11 of Instructions to Bidders shall be the greatest amount of work, which can be accomplished within the funds available as budgeted. The award may be made on the basis of the total bid, base bid, alternates(s) if any, unit bids if any, or any combination thereof deemed to be in the best interest of the City.

Unless all bids are rejected, the award will be made within 90 days after opening proposals.

I-1.08 GROUND BREAKING CEREMONY:

Arrangement may be made by the City in coordination with the Contractor, for construction to commence with a Ground Breaking Ceremony. Details will be discussed at the pre-construction conference.

I-1.09 INSURANCE:

The insurance required for this project shall be as indicated on the attached and incorporated Special Instructions pages beginning with page INS-1 entitled CITY OF TAMPA INSURANCE REQUIREMENTS, which among other things requires the Contractor to provide a Certificate of Insurance to the City prior to commencing work. The City may from time to time use a third party vendor to manage its insurance certificates and related documentation which vendor may periodically initiate contact, requests for information, etc. on the City's behalf.

I-1.10 TESTING:

The Contractor shall perform all Quality Control (QC) testing to meet the FDOT requirements in the Florida Department of Transportation, JULY 2022 Standard Specifications for Road and Bridge Construction

INSTRUCTIONS TO BIDDERS  
SECTION 1 – SPECIAL INSTRUCTIONS

I-1.11 EQUAL BUSINESS OPPORTUNITY PROGRAM (EBO) REQUIREMENTS / PROJECT SUBCONTRACTING GOAL(S)

**BIDDERS MUST SUBMIT COMPLETED AND SIGNED CITY OF TAMPA FORMS MBD-10 AND MBD-20 WITH THEIR BIDS. BIDS SUBMITTED WITHOUT THESE COMPLETED FORMS (INCLUDING SIGNATURES) WILL BE DEEMED NON-RESPONSIVE. INSTRUCTIONS ON COMPLETING THE FORMS ARE INCLUDED AFTER EACH FORM IN THIS BID PACKAGE.**

**THE CHECKED BOX INDICATES SECTION THAT APPLIES TO THIS BID.**



**SUBCONTRACTING GOAL – (WMBE and SLBE)**

In accordance with the City of Tampa's EBO Program, Chapter 26.5, City of Tampa Code, the subcontracting goal(s) has/have been established for subcontracting with City-certified underutilized WMBEs (Women and Minority Business Enterprises) and/or SLBEs (Small Local Business Enterprises) on this project (hereinafter "Goal"). *The Goal is based, in part, upon the availability of City-certified firms to perform the anticipated scope of work (Bid is subject to the subcontracting project goal(s) section for which a corresponding numerical percent is indicated).* Project Industry Category: Construction

- Project Goal(s): \_\_\_\_\_% **U-WMBE (Underutilized Woman and Minority Business Enterprise) (EBO Program)**  
per MBD Form-70 the U-WMBE subcontract Classification for Construction is African American (BBE)
- \_\_\_\_\_% **SLBE (Small Local Business Enterprise) (EBO Program)** only City-certified SLBEs
- 13.7% **U-WMBE/SLBE Combined (EBO Program)**  
per MBD Form-70 the U-WMBE subcontract Classification for Construction is African American (BBE)  
together with City-certified SLBEs
- \_\_\_\_\_% **WMBE/SLBE ASPIRATIONAL (EBO Program)** An all-inclusive SLBE/WMBE goal; any City certified firm counts towards goal attainment.

BIDDERS MUST SOLICIT ALL COMPANIES ON THE ATTACHED AVAILABILITY CONTACT LIST at least **five (5) City business days or more prior to bid opening as a first step** to demonstrate Good Faith Efforts to achieve the Goal. Substantive documentation that demonstrates Good Faith Efforts to achieve the Goal **must be submitted with the bid**, including emails, faxes, phone calls, letters, and other communication with City-certified firms. Bidders may explore other potential opportunities for subcontracting by consulting the current directory of all certified firms posted by the City of Tampa at <https://tampa.diversitysoftware.com> as the Availability Contact List may not be inclusive of all firms that could count toward Goal attainment. However, ONLY SUBCONTRACTING with those specific WMBEs designated as "underutilized" by Classification in the appropriate industry category (and, if made applicable by being specifically included in the above Goal, SLBEs) will count toward meeting the Goal. Making Good Faith Efforts through these and other means (not pro-forma) is the responsibility of the Bidder. See the attached Good Faith Effort Compliance Plan (GFECP) (MBD Form-50) for specific requirements.

GOOD FAITH EFFORT COMPLIANCE PLAN (GFECP) REQUIRED (MBD FORM-50). When a Goal has been established, the Bidder **must submit** with its bid a Good Faith Effort Compliance Plan (GFECP) using the attached MBD Form-50 together with supporting documentation as specified therein. **Submittals that do not contain MBD Form-50 when a Goal has been established will be deemed non-responsive.** Additional explanation and documentation is required whenever a City-certified subcontractor's quote is not utilized. Any additional information regarding GFECP (post-bid) shall be only upon the City's request for clarification of information submitted with bid and not to "cure" omissions or deficiencies of the bid.

**NOTE:** When U-WMBEs are included in a Goal, only those City-certified subcontractors whose WMBE Classification is designated "underutilized" will count toward Goal attainment. Refer to **MBD Form-70** to identify underutilized WMBEs by subcontract Classification for the applicable project industry category. A prime bidder who is a City-certified WMBE and/or SLBE is not exempt from the **GFECP MBD Form-50** requirements.



**SUBCONTRACTING GOAL – (DBE) FDOT DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

The City of Tampa is required to use the Florida Department of Transportation (FDOT) Disadvantaged Business Enterprise (DBE) program on contracts with Federal Highway Administration (FHWA) funds. Effective October 1, 2017 through to September 30, 2020, the overall FDOT DBE aspirational goal is **10.67%** and is *race neutral*, meaning that FDOT believes the aspirational DBE goal may be achieved entirely through ordinary, competitive procurement methods. Despite the absence of a contract specific DBE goal on this project, the City encourages bidders to seek out and use DBEs and other minority, small businesses. For assistance in identifying certified DBEs, FDOT offers the use of its supportive services program accessed via FDOT's Equal Opportunity Office at <http://www.fdot.gov/equalopportunity/serviceproviders.shtm>. FDOT DBE rules and regulations apply to this solicitation, including the requirement to report bidder opportunity information in the FDOT Equal Opportunity Compliance (EOC) web-based application within three (3) business days of submission of the bid for ALL subcontractors who quoted bidder for this specific project. The five (5) char/digit LAP Agreement Contract Number for this project is G \_\_\_\_\_. The web address to the EOC system is: <https://fdotwp1.dot.state.fl.us/EqualOpportunityCompliance/Account.aspx/LogIn?ReturnUrl=%2fEqualOpportunityCompliance>

**NOTE:** Regardless of FDOT DBE program applicability, for data collection purposes bidder still **must submit** City Forms MBD-10 and MBD-20 completed and signed with its bid or the bid will be deemed non-responsive.

**DIVERSITY MANAGEMENT INITIATIVE (DMI) DATA REPORTING FORMS REQUIRED FOR ALL CONTRACTS**

Bidder **must submit**, with its bid, completed and signed Forms MBD-10 and MBD-20 to be considered a responsive bid. Specifically, the 'Schedule of All Solicited Sub-(Contractors/Consultants/Suppliers) (Form MBD-10)' listing all subcontractors (including non-certified) solicited and 'Schedule of All -To Be Utilized Sub-(Contractors/Consultants/Suppliers) (Form MBD-20)' listing all subcontractors (including non-certified) to be utilized. Supplemental forms, such as 'Form MBD-40 Official Letter Of Intent' (LOI), can be submitted with the bid or once declared lowest-responsive bidder. After an award, 'DMI Sub-(Contractors/Consultants/Suppliers) Payment Form (Form MBD-30)' is to be submitted with payment requests to report payments to subcontractors and using the on-line automated EBO compliance software system available at <https://tampa.diversitysoftware.com>

**For additional information about the WMBE and SLBE programs contact the Office of Equal Business Opportunity at 813-274-5522. (3-18)**

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.12 BID SECURITY:

Surety companies shall have a rating of not less than B+ Class VI as evaluated in the most recently circulated Best KeyRating Guide Property/Casualty.

I-1.13 PUBLIC CONSTRUCTION BOND:

The Bidder who is awarded the Contract will be required to furnish a Public Construction Bond upon the form provided herein, equal to 100 percent of the Contract price, such Bond to be issued and executed by (a) surety company(ies) acceptable to the City and licensed to underwrite contracts in the State of Florida. After execution of the Agreement and before commencing work, the Contractor must provide the City a certified copy of the officially recorded Bond.

I-1.14 AGREEMENT

**SECTION 2 – POWERS OF THE CITY’S REPRESENTATIVES**, new Article 2.05:

Add the following:

Article 2.05 CITY’S TERMINATION FOR CONVENIENCE:

The City may, at any time, terminate the Contract in whole or in part for the City’s convenience and without cause. Termination by the City under this Article shall be by a notice of termination delivered to the Contractor, specify the extent of termination and the effective date.

Upon receipt of a notice of termination, the Contractor shall immediately, in accordance with instructions from the City, proceed with performance of the following duties regardless of delay in determining or adjusting amounts due under this Paragraph:

- (a) cease operations as specified in the notice;
- (b) place no further orders and enter into no further subcontracts for materials, labor, services or facilities except as necessary to complete continued portions of the Contract;
- (c) terminate all subcontracts and orders to the extent they relate to the Work terminated;
- (d) proceed to complete the performance of Work not terminated; and
- (e) take actions that may be necessary, or that the City may direct, for the protection and preservation of the terminated Work.

The amount to be paid to the Contractor by the City because of the termination shall consist of:

- (a) for costs related to work performed on the terminated portion of the Work prior to the effective date including termination costs relative to subcontracts that are properly chargeable to the terminated portion of the Work;
- (b) the reasonable costs of settlement of the Work terminated, including accounting, legal, clerical and other expenses reasonable necessary for the preparation of termination settlement proposals and supporting data; additional costs of termination and settlement of subcontracts excluding amounts of such settlements; and storage, transportation, and other costs incurred which are reasonably necessary for the preservation, protection or disposition of the terminated Work; and
- (c) a fair and reasonable profit on the completed Work unless the Contractor would have sustained a loss on the entire Contract had it been completed.

Allowance shall be made for payments previously made to the Contractor for the terminated portion of the Work, and claims which the City has against the Contractor under the Contract, and for the value of materials supplies, equipment or other items that are part of the costs of the Work to be disposed of by the Contractor.

**SECTION 4 – TIME PROVISIONS**, Article 4.07, Page A-6, last paragraph:

Replace the second paragraph with the following: “However, if such inspection reveals items of work still to be performed the Contractor shall provide for approval by the Engineer an estimate of the cost of each item and promptly perform them and then request a reinspection to be made within ten (10) days after receipt of such request. If, upon any reinspection, the Engineer determines that the work is complete, the date of final completion shall be deemed to be the last day of such reinspection.”

**SECTION 5 – SUBCONTRACTS AND ASSIGNMENTS**, Article 5.01, Page A-7, last paragraph:

Change “...twenty-five (25) percent...” to “...fifty-one (51) percent...”



INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

**SECTION 8 – CONTRACTOR'S EMPLOYEES**, Article 8.03, Page A-9, delete Article 8.03 in its entirety and Replace with the following new article:

**ARTICLE 8.03 EMPLOYMENT OPPORTUNITIES**

The Contractor shall, in the performance of the work required to be done under this Contract, employ all workers without discrimination and must not maintain, provide or permit facilities that are segregated.

**SECTION 10 – PAYMENTS**, Article 10.05, Page A-10, 1<sup>st</sup> Paragraph, 1<sup>st</sup> Sentence:

Change "...fair value of the work done, and may apply for..." to "...fair value of the work done, and shall apply for..." Note: Retainage as referenced in Article 10.05 is limited to a maximum of five percent (5%).

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.02, Page A-12, 1<sup>st</sup> Paragraph, 2<sup>nd</sup> Sentence:

Delete the 2<sup>nd</sup> Sentence in its entirety and replace it with the following new 2<sup>nd</sup> Sentence:

Without limiting application of Article 11.07, below, whenever the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall indemnify, defend, and hold harmless the City Indemnified Parties (as defined below) from any and all Claims (as defined below) for infringement by reason of the use of any such patented design, device, tool, material, equipment, or process, to be performed under the Contract and damages which may be incurred by reason of such infringement at any time during the prosecution or after completion of the work.

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.03, Page A-12:

Delete Article 11.03 in its entirety and replace with the following new article:

**ARTICLE 11.03 INTENTIONALLY OMITTED.**

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.07, Page A-12:

Delete Article 11.07 in its entirety and replace with the following new article:

**ARTICLE 11.07 INDEMNIFICATION PROVISIONS**

Whenever there appears in this Agreement, or in the other Contact Documents made a part hereof, an indemnification provision within the purview of Chapter 725.06, Laws of Florida, the monetary limitation on the extent of the indemnification under each such provision shall be One Million Dollars or a sum equal to the total Contract price, whichever shall be the greater.

Contractor releases and agrees to defend, indemnify and hold harmless the City, its officers, elected and appointed officials, employees, and/or agents (collectively, "City Indemnified Parties") from and against any and all losses, liabilities, damages, penalties, settlements, judgments, charges, or costs (including without limitation attorneys' fees, professional fees, or other expenses) of every kind and character arising out of any and all claims, liens, is entitled to indemnification hereunder. This obligation shall in no way be limited in any nature whatsoever by any limitation on the amount or type of Contractor's insurance coverage.

The parties agree that to the extent the written terms of this indemnification are deemed by a court of competent jurisdiction to be in conflict with any provisions of Florida law, in particular Sections 725.06 and 725.08, Florida Statutes, the written terms of this indemnification shall be deemed by any court of competent jurisdiction to be modified in such a manner as to be in fully and complete compliance with all such laws and to contain such limiting conditions or limitations of liability, or to not contain any unenforceable or prohibited term or terms, such that this indemnification shall be enforceable in accordance with and to the maximum extent permitted by Florida law.

The obligation of Contractor under this Article is absolute and unconditional; it is not conditioned in any way on any attempt by a City Indemnified Party to collect from an insurer any amount under a liability insurance policy, and is not subject to any set-off, defense, deduction, or counterclaim that the Contractor might have against the City Indemnified Party. The duty to defend hereunder is independent and separate from the duty to indemnify, and the

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

duty to defend exists regardless of any ultimate liability of Contractor, the City, and any City Indemnified Party. The duty to defend arises immediately upon presentation of a Claim by any party and written notice of such Claim being provided to Contractor. Contractor's defense and indemnity obligations hereunder will survive the expiration or earlier termination of this Contract.

Contractor agrees and recognizes that the City Indemnified Parties shall not be held liable or responsible for any Claims which may result from any actions or omissions of Contractor in which the City Indemnified Parties participated either through providing data or advice and/or review or concurrence of Contractor's actions. In reviewing, approving or rejecting any submissions by Contractor or other acts of Contractor, the City in no way assumes or shares any responsibility or liability of Contractor or any tier of subcontractor/subconsultant/supplier, under this Contract.

In the event the law is construed to require a specific consideration for such indemnification, the parties agree that the sum of Ten Dollars and 00/100 (\$10.00), receipt of which is hereby acknowledged, is the specific consideration for such indemnification and the providing of such indemnification is deemed to be part of the specifications with respect to the services provided by Contractor.

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.12, Page A-13:

Change Article 11.12 to add the following new language after existing text:

The City of Tampa is a public agency subject to Chapter 119, Florida Statutes. In accordance with Florida Statutes, 119.0701, Contractor agrees to comply with Florida's Public Records Law, including the following:

1. Contractor shall keep and maintain public records required by the City to perform the services under this Agreement;
2. Upon request by the City, provide the City with copies of the requested records, having redacted records in total on in part that are exempt from disclosure by law or allow the records to be inspected or copied within a reasonable time (with provision of a copy of such records to the City) on the same terms and conditions that the City would provide the records and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;
3. Ensure that records, in part or in total, that are exempt or that are confidential and exempt from disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion (or earlier termination) of the Agreement if Contractor does not transfer the records to the City;
4. Upon completion (or earlier termination) of the Agreement, Contractor shall within 30 days after such event either transfer to the City, at no cost, all public records in possession of the Contractor or keep and maintain the public records in compliance with Chapter 119, Florida Statutes. If Contractor transfers all public records to the City upon completion (or earlier termination) of the Agreement, Contractor shall destroy any duplicate records that are exempt or confidential and exempt from public records disclosure requirements. If Contractor keeps and maintains public records upon completion (or earlier termination) of the Agreement, Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City in a format that is compatible with the information technology systems of the agency.

The failure of Contractor to comply with Chapter 119, Florida Statutes, and/or the provisions set forth in this Article shall be grounds for immediate unilateral termination of the Agreement by the City; the City shall also have the option to withhold compensation due Contractor until records are received as provided herein.

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

**IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 813-274-8598, JIM.GREINER@TAMPAGOV.NET, AND CONTRACT ADMINISTRATION DEPARTMENT, TAMPA MUNICIPAL OFFICE BUILDING, 4TH FLOOR, 306 E. JACKSON ST. TAMPA, FLORIDA 33602.**

I-1.15 Contractors must utilize the U.S. Department of Homeland Security's E-Verify Systems to verify the employment eligibility of all persons employed during the term of the Contract to perform employment duties within the State of Florida and all persons, including subcontractors, assigned by Contractor to perform work pursuant to the contract.

E-Verify. In accordance with Section 448.095, Florida Statutes, the Contractor agrees to register with and utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired during the term of the Contract for the services specified in the Contract. The Contractor must also include a requirement in subcontracts that the subcontractor must register with and utilize the E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term. If the Contractor enters into a contract with a subcontractor, the subcontractor must provide the Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of the Contract. If the City has a good faith belief that the Contractor has knowingly violated Section 448.09(1), Florida Statutes, the City shall terminate the Contract with the Contractor, and the Contractor may not be awarded a contract with the City for at least 1 year after the date on which the Contract was terminated. The Contractor is liable for any additional costs incurred by the City as a result of the termination of the Contract. If the City has a good faith belief that a subcontractor knowingly violated the law, but the Contractor has otherwise complied with the law, the City shall promptly notify the Contractor and order the Contractor to immediately terminate the contract with the subcontractor.

I-1.16 GENERAL PROVISIONS; G-2.02 Copies Furnished to Contractor: Replace the first paragraph with the following:

The Contractor shall acquire for its use copies of the plans and specifications as needed, which may be downloaded from the City's web site, at <http://www.tampagov.net/contract-administration/programs/construction-project-bidding>.

Bidder as part of the solicitation process (and as Contractor if Bidder is successful) may hold, come into possession of, and/or generate certain building plans, blueprints, schematic drawings, including draft, preliminary, and final formats, which depict the internal layout and structural elements of a building, facility, or other structure owned or operated by the City or an agency (singularly or collectively "Exempt Plans"), which pursuant to Section 119.071(3), Florida Statutes, are exempt from Section 119.07(1), Florida Statutes and Section 24(a), Art. I of the Florida State Constitution. Contractor certifies it has read and is familiar with the exemptions and obligations of Section 119.071(3), Florida Statutes; further that Contractor is and shall remain in compliance with same, including without limitation maintaining the exempt status of such Exempt Plans, for so long as any Exempt Plans are held by or otherwise in its possession.

I-1.17 PAYMENT DISPUTE RESOLUTION

Any dispute pertaining to pay requests must be presented to the City pursuant to Executive Order 2003-1.

INSTRUCTIONS TO BIDDERS  
SECTION 1 – SPECIAL INSTRUCTIONS

I-1.18 SCRUTINIZED COMPANIES CERTIFICATION

Section 287.135, Florida Statutes, prohibits agencies or local governmental entities from contracting for goods or

services of any amount with companies that are on the Scrutinized Companies that Boycott Israel List or are engaged in a boycott of Israel, and of \$1 million or more with companies that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or are engaged in business operations in Cuba or Syria. Specifically, Section 287.135(2), Florida Statutes, states: “A company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with an agency or local governmental entity for goods or services of: (a) Any amount if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725, or is engaged in a boycott of Israel; or (b) One million dollars or more if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company: 1. Is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Terrorism Sectors List, created pursuant to s. 215.473; or 2. Is engaged in business operations in Cuba or Syria.”

Upon submitting its bid or proposal, a bidder/proposer: (i) certifies the company is not in violation of Section 287.135, Florida Statutes, and shall not be in violation at the time the company enters into or renews any resulting contract; and (ii) agrees any such resulting contract shall be deemed to contain a provision that allows the City, at its option, to terminate such contract for cause if the company is found to have submitted a false certification, been placed on one or any of the foregoing Lists, been engaged in a boycott of Israel, or been engaged in business operations in Cuba or Syria.

I-1.19 FLORIDA'S PUBLIC RECORDS LAW; DATA COLLECTION

Pursuant to Section 119.071(5)(a)2a, Florida Statutes, social security numbers shall only be collected from Bidders and/or Contractor by the City should such number be needed for identification, verification, and/or tax reporting purposes. To the extent Bidder and/or Contractor collects an individual's social security number in the course of acting on behalf of the City pursuant to the terms and conditions of its Proposal or, if awarded, the Agreement, Bidder and/or Contractor shall follow the requirements of Florida's Public Records Law.

I-1.20 BIDDER'S CRIMINAL HISTORY SCREENING PRACTICES

Per City of Tampa Code of Ordinances, Section 2-284, Bidder is requested to provide information as to whether Bidder has criminal history screenings similar in nature to the practices contained in Chapter 12, Article VI, City of Tampa Code of Ordinances. If the Bidder voluntarily agrees to comply with the City's criminal screening practices as provided in Chapter 12, Article IV of the City Code, the Bidder will receive a two percent (2%) discount for evaluation purposes only if Bidder submits notarized documentation with its bid, and an assurance of compliance with Section 2-284 if awarded the contract

INSTRUCTIONS TO BIDDERS  
SECTION 1 – SPECIAL INSTRUCTIONS

(“Ban the Box Requirements”). The City of Tampa’s municipal codes are published online by the Municipal Code Corporation at the website link below.

[https://library.municode.com/fl/tampa/ordinances/code\\_of\\_ordinances?nodeId=1171018](https://library.municode.com/fl/tampa/ordinances/code_of_ordinances?nodeId=1171018)

Bidders must complete Form BTB-1 and include with its bid.

I-1.21 FLORIDA STATUTES 287.05701

The City of Tampa will not request documentation of or consider a bidder’s (proposer’s) social, political, or ideological interests when determining if the bidder (proposer) is a responsible vendor and will not give preference to a bidder (proposer) based on the bidder’s (proposer’s) social, political, or ideological interests.

# INSTRUCTIONS TO BIDDERS

## SECTION 2 GENERAL INSTRUCTIONS

### I-2.01 BIDDER'S RESPONSIBILITY

Before submitting Proposals, Bidders shall carefully examine the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and make all necessary investigations to inform themselves thoroughly as to the facilities necessary for delivering, placing and operating the necessary construction equipment, and for delivering and handling materials at the site, and inform themselves thoroughly as to all difficulties involved in the completion of all the work in accordance with the Contract Documents.

Bidders must examine the Plans, Specifications, and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done, and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amounts or quantities necessary to complete the work in strict compliance with the Contract Documents.

Elevations of the ground are shown on the Plans and are believed to be reasonably correct, but are not guaranteed to be absolutely so and are presented only as an approximation. Bidders shall satisfy themselves as to the correctness of all elevations.

The City may have acquired, for its own use, certain information relating to the character of materials, earth formations, probable profiles of the ground, conditions below ground, and water surfaces to be encountered at the site of the proposed work. This information, if it exists, is on file at the offices of the Department of Public Works and Bidders will be permitted to see and examine this information for whatever value they consider it worth. However, this information is not guaranteed, and Bidders should satisfy themselves by making borings or test pits, or by such other methods as they may prefer, as to the character, location, and amounts of water, peat, clay, sand, quicksand, gravel, boulders, conglomerate, rock, gas or other material to be encountered or work to be performed.

Various underground and overhead structures and utilities are shown on the plans. The location and dimensions of such structures and utilities, where given, are believed to be reasonably correct, but do not purport to be absolutely so. These structures and utilities are plotted on the Plans for the information of the Bidders, but information so given is not to be construed as a representation or assurance that such structures will be found or encountered as plotted, or that such information is complete or accurate.

### I-2.02 FORM, PREPARATION AND PRESENTATION OF PROPOSALS

Each Proposal shall be submitted upon the Proposal Form and in accordance with the instructions included herein. The Proposal Form must not be detached herefrom. All blank spaces for bid prices must be filled in, in both words and figures, with the unit or lump sum prices, or both, for which the Proposal is made. The computed total price for each unit price Contract Item shall be determined by multiplying the estimated quantity of the item, as set forth in the Proposal Form, by the corresponding unit price bid for such item. The resulting product shall be entered in the appropriate blank space under the column headed "Computed Total Price for Item". The lump sum price bid for each lump sum price Contract Item shall also be entered in the column headed "Computed Total Price for Item". If a Proposal contains any omissions, erasures, alterations, additions, or items not called for in the itemized Proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of the Proposal. In case of any discrepancy in the unit price or amount bid for any item in the Proposal, the price as expressed in written words will govern. In no case is the Agreement Form to be filled out or signed by the Bidder.

In the case of certain jobs bid Lump Sum a "Schedule of Unit Prices" must be filled out as an attachment to the Lump Sum proposal. These prices may be used as a guide for the negotiation of change orders, at the City's option.

The proposal must be signed and certified and be presented on the prescribed form in a sealed envelope on/or before the time and at the place stated in the Notice of Bidders, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the Proposal is made.

Unless the apparent low bidder is now engaged in or has recently completed contract work for the City of Tampa, he, if requested, shall furnish to the City, after the opening of bids and prior to award, a summary statement of record of construction experience over the past three (3) years with proper supporting evidence, and, if required by the City, shall also furnish a list of equipment and other facilities pertinent to and available for the proper execution of the proposed work, and a statement of financial resources to the extent necessary to establish ability to carry on the proposed work. The City may make further investigations as considered necessary with respect to responsibility of the Bidder to whom it appears may be awarded the Contract.

If forwarded by mail, the sealed envelope containing the Proposal, endorsed as directed above, must be enclosed in another envelope addressed as specified in the Notice to Bidders and sent by registered mail.

### I-2.03 ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any Bidder orally.

Every request for such interpretation must be in writing, addressed to the Contract Administration Department, Tampa Municipal Office Building, 4th Floor North, City Hall Plaza, Tampa, Florida 33602. To be given consideration, such request must be received at least seven (7) days prior to the date fixed for the opening of the Proposals. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by certified mail, with return receipt requested, to all prospective bidders at the respective addresses furnished, for such purposes, not later than three (3) working days prior to the date fixed for the opening of the Proposals, and if requested, a copy will be delivered to the prospective bidder's representative. Failure of any Bidder to receive any such addenda shall not relieve said Bidder from any obligation under his Proposal as submitted. All addenda so issued shall become part of the Contract Documents.

### I-2.04 BID SECURITY

Each Proposal must be accompanied by a certified or cashier's check issued by a solvent bank or trust company and payable at sight to the City of Tampa, in compliance with Section 255.051 Florida Statutes, or a Bid Bond upon the form provided herein, in an amount of not less than five percent of the sum of the computed total amount of the Bidder's Proposal as a guarantee that if the Proposal is accepted, the Bidder will execute and fill in the proposed Contract and Public Construction Bond within twenty (20) days after notice of award of the Contract. Certified checks shall have all necessary documentary revenue stamps attached if required by law. Surety on Bid Bonds shall be a duly authorized surety company authorized to do business in the State of Florida, and all such Bonds shall be issued or countersigned by a local resident producing agent, and satisfactory evidence of the authority of the person or persons executing such Bond to Execute the same shall be submitted with the Bond. Bid Bonds shall be issued by a surety company acceptable to the City.

Within ten (10) days after the opening of Proposals, the bid security of all but the three lowest Bidders will be returned. The bid security of the remaining two Bidders whose Proposals are not accepted will be

returned within ten (10) days after the execution of the Contract, or, if no such Contract has been executed, within ninety (90) days after the date of opening Proposals. The bid security of the Bidder whose Proposal is accepted will be returned only after he has duly executed the Contract and furnished the required Public Construction Bond and insurance.

Should it be necessary for the City to retain the bid security and said bid security is in the form of checks, the checks of these Bidders will be returned if replaced by Bid Bonds in an amount equal to the amount of the checks of such Bidders in such form and issued by a surety company acceptable to the City.

A Bidder may withdraw his Proposal before the time fixed for the opening of Proposals, without prejudice to himself, by communicating his purpose, in writing, to the Mayor and City Council, and when his communication is received, the Proposal will be handed to him or his authorized agent unopened. No Bidder may withdraw his Proposal within ninety (90) days after the day of opening Proposals.

The Bidder whose Proposal is accepted shall enter into a written contract, upon the Agreement form included herein, for the performance of the work and furnish the required Public Construction Bond within twenty (20) days after written notice by the City of Award of Contract has been served on such Bidder personally or after receipt of the written notice by registered mail to such Bidder at the address given in his Proposal.

If the Bidder to whom a Contract is awarded refuses or neglects to execute it or fails to furnish the required Public Construction Bond within twenty (20) days after receipt by him of the Notice of Award of Contract, the amount of his bid security shall be forfeited and shall be retained by the City as liquidated damages, and not as a penalty, it being now agreed that said sum is a fair estimate of the amount of damages that the City will sustain in case said Bidder fails to enter into a Contract and furnish the required Public Construction Bond. If a Bid Bond was furnished, the full amount of the Bond shall become due and payable as liquidated damages caused by such failure. The full amount of the bid security shall be forfeited as liquidated damages without consideration of the fact that an award may be less than the full amount of the Bidder's Proposal, excepting that the award shall be within the conditions of said Proposal relating to the basis of consideration for an award. No plea of mistake in the bid or misunderstanding of the conditions of forfeiture shall be available to the Bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

#### I-2.05 LAWS AND REGULATIONS

The Bidder who is awarded the Contract must comply with all laws of the State of Florida, and all applicable Ordinances of the City of Tampa respecting labor and compensation and with all other statutes, ordinances, rules and regulations applicable and having the force of law.

#### I-2.06 PUBLIC CONSTRUCTION BOND

The Bidder who is awarded the Contract will be required to furnish a Public Construction Bond upon the form provided herein, equal to 100 percent of the Contract price, such Bond to be executed by a surety company acceptable to the City of Tampa and licensed to underwrite contracts in the State of Florida. Surety companies shall have a rating of not less than: B+ Class VI as evaluated in the most recently circulated BEST'S KEY RATING GUIDE PROPERTY-LIABILITY.

#### I-2.07 SIGNATURE AND QUALIFICATIONS OF BIDDERS

Proposals must be signed in ink by the Bidder with signature in full. When a firm is a Bidder, the Proposal shall be signed in the name of the firm by one or more of the partners. When a corporation is a Bidder the officer signing shall set out the corporate name in full beneath which he shall sign his name and give the title of his office. The Proposal shall also bear the seal of the corporation attested by its secretary. Anyone signing the Proposal as agent must file with it legal evidence of his authority to do so.

Bidders who are nonresident corporations shall furnish to the City a

duly certified copy of their permit to transact business in the State of Florida, signed by the Secretary of State, within ten days of the notice to do so. Such notice will be given to Bidders who are nonresident corporations, to whom it appears an award will be made, and the copy of the permit must be filed with the City before the award will be made. Failure to promptly submit this evidence of qualification to do business in the State of Florida may be basis for rejection of the Proposal.

#### I-2.08 REJECTION OF PROPOSALS

The City reserves the right to reject any Proposal if investigation of the Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all Proposals will be rejected if there is reason to believe that collusion exists among Bidders. Proposals will be considered irregular and may be rejected if they show serious omissions, alterations in form, additions not called for, conditions or unauthorized alternates, or irregularities of any kind. The City reserves the right to reject any or all Proposals and to waive such technical errors as may be deemed best for the interests of the City.

#### I-2.09 QUANTITIES ESTIMATED ONLY

The estimate of quantities of the various items of work and materials, if set forth in the Proposal Form, is approximate only and is given solely to be used as a uniform basis for the comparison of Proposals.

The quantities actually required to complete the Contract work may be less or more than so estimated, and if awarded a Contract for the work specified, the Contractor agrees that he will not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work assumed for comparison of Proposals and quantities of work actually performed. The City further reserves the right to vary the quantities in any amount.

#### I-2.10 COMPARISON OF PROPOSALS

Except jobs bid on a "One Lump Sum" basis, proposals will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantity of each item and the corresponding unit price of each item, and including any lump sum prices on individual items.

The computed total prices for individual Contract Items and the total computed price for the entire Contract, as entered by the Bidder in the Proposal Form, are for convenience only and are subject to correction in the tabulation and computation of the Proposals.

#### I-2.11 BASIS OF AWARD

The Contract will be awarded, if at all, to the lowest responsible Bidder or Bidders, as determined by the City and by the terms and conditions of the Contract Documents. Unless all bids are rejected, the award will be made within ninety (90) days after the opening of Proposals. The successful Bidder will be required to possess, or obtain, a valid City Occupational License.

#### I-2.12 INSURANCE REQUIRED

The successful Bidder and his subcontractors will be required to procure and pay for insurance covering the work in accordance with the provisions of Article 6.02 of the Agreement as indicated on special instructions pages beginning with INS-1.

#### I-2.13 NO ASSIGNMENT OF BID

No Bidder shall assign his bid or any rights thereunder.

#### I-2.14 NONDISCRIMINATION IN EMPLOYMENT

Contracts for work under this Proposal will obligate the contractors and subcontractors not to discriminate in employment practices.

Bidders must, if requested, submit with their initial bid a signed statement as to whether they have previously performed work subject to the President's Executive Order Nos. 11246 and 11375.

Bidders must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the Contract.

Successful Bidders must, if requested, submit a list of all subcontractors who will perform work on the project and written,

signed statement from authorized agents of the labor pools with which they will or may deal for employees on the work together with supporting information to the effect that said labor pools practices and policies are in conformity with Executive Order No. 11246 and that said labor pools will affirmatively cooperate in or offer no hindrance to the recruitment, employment and equal treatment of employees seeking employment and performing work under the Contract, or a certification as to what efforts have been made to secure such statements when such agents or labor pools have failed or refused to furnish them prior to the award of the Contract.

#### I-2.15 LABOR STANDARDS

The Bidder's attention is directed to the Contract Provisions of the Labor Standards for federally assisted projects which may be attached to and made a part of the Agreement.

#### I-2.16 NOTICE TO LABOR UNIONS

If applicable, the successful Bidder will be required to provide Labor Unions and other organizations of workers a completed copy of the form entitled "Notice to Labor Unions or Other Organizations of Workers", and such form may be made a part of the Agreement.

#### I-2.17 NOTICE TO PROSPECTIVE FEDERALLY-ASSISTED CONSTRUCTION CONTRACTORS

A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted to said Secretary prior to the award of a federally-assisted construction and Contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause. The form of certification may be bound herein following the form of Bid Bond.

Contractors receiving federally-assisted construction Contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractor for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause:

#### NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

"A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause."

"Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide from the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause."

The United States requires a pre-award conference if a proposed construction contract exceeds one million dollars to determine if the the prospective contractor is in compliance with the Equal Employment Opportunity requirements of Executive Order 11246 of September 24, 1965. In such instances, a meeting may be scheduled at which the prospective contractor must specify what affirmative action he has taken or proposed to take to assure equal employment opportunity which must be approved by the United States before award of the contract will be authorized.

Bidders must be prepared to submit an Equal Employment Opportunity (EEO) plan at a pre-award conference. The plan must include bidding opportunities offered by the Bidder to minority subcontractors.

On October 13, 1971, President Nixon issued Executive Order 11246 emphasizing the government's commitment to the promotion of minority business enterprise. Accordingly, the United States is firmly

committed to the utilization of available resources to support this important program. U.S. agencies are most interested in realizing minority participation on the subject. Achieving equal employment opportunity compliance is required through Executive Order 11246. WE cannot emphasize too strongly that minority subcontractors be extended subcontractors bidding opportunities as but one step in your affirmative action policy.

Due to the importance of this contract, U.S. Agencies may conduct an EEO Conference prior to the award of the Contract. It is suggested that the responsive Bidder confirm the minority subcontractors he contacted for bids or quotations in his EEO plan submitted at the conference.

#### I-2.18 EEO AFFIRMATIVE ACTION REQUIREMENTS

By the submission of a Proposal, each Bidder acknowledges that he understands and will agree to be bound by the equal opportunity requirements of Federal regulations which shall be applicable throughout the performance of work under any contract awarded pursuant to solicitation. Each Bidder agrees that if awarded a contract, he will similarly bind contractually each subcontractor. In policies, each Bidder further understands and agrees that if awarded a contract, he must engage in Affirmative Action directed to promoting and ensuring equal employment opportunity in the work force used under the contract (and he must require contractually the same effort of all subcontractors whose subcontracts exceed \$100,000). The Bidder understands and agrees that "Affirmative Action" as used herein shall constitute a good faith effort to achieve and maintain minority employment in each trade in the on-site work force used on the project. \*\*\*\*\* END of SECTION \*\*\*\*\*



# CITY OF TAMPA INSURANCE REQUIREMENTS

Prior to commencing any work or services or taking occupancy under that certain written agreement or award (for purposes of this document, Agreement) between the City of Tampa, Florida (City) and Firm/Awardee/Contractor/Consultant/Lessee/non-City party, etc. (for purposes of this document, Firm) to which this document is attached and incorporated as an Exhibit or otherwise, and continuing during the term of said Agreement (or longer if the Agreement and/or this document so requires), Firm shall provide, pay for, and maintain insurance against claims for injuries to persons (including death) or damages to property which may arise from or in connection with the performance of the Agreement (including without limitation occupancy and/or use of certain property/premises) by Firm, its agents, representatives, employees, suppliers, subtenants, or subcontractors (which term includes sub-consultants, as applicable) of any tier subject to the terms and conditions of this document. Firm's maintenance of insurance coverage as required herein is a material element of the Agreement and the failure to maintain or renew coverage or provide evidence of same (defined to include without limitation Firm's affirmative duty to provide from time to time upon City's request certificates of insurance, complete and certified copies of Firm's insurance policies, forms, and endorsements, information on the amount of claims payments or reserves chargeable to the aggregate amount of coverage(s) whether during the term of the Agreement or after as may be requested by the City in response to an issue or potential claim arising out of or related to the Agreement to which Firm's insurance obligations hereunder may apply or possibly help mitigate) may be treated as a material breach of the Agreement. Should at any time Firm not maintain the insurance coverages required, City at its sole option (but without any obligation or waiver of its rights) may (i) terminate the Agreement or (ii) purchase such coverages as City deems necessary to protect itself (charging Firm for same) and at City's option suspending Firm's performance until such coverage is in place. If Firm does not reimburse City for such costs within 10 days after demand, in addition to any other rights, City shall also have the right to offset such costs from amounts due Firm under any agreement with the City. All provisions intended to survive or to be performed subsequent to the expiration or termination of the Agreement shall survive, including without limitation Firm's obligation to maintain or renew coverage, provide evidence of coverage and certified copies of policies, etc. upon City's request and/or in response to a potential claim, litigation, etc.

The City reserves the right from time to time to modify or waive any or all of these insurance requirements (or to reject policies) based on the specific nature of goods/services to be provided, nature of the risk, prior experience, insurer, coverage, financial condition, failure to operate legally, or other special circumstances. If Firm maintains broader coverage and/or higher limits than the minimums shown herein, the City requires and shall be entitled to such broader coverage and/or higher limits maintained by Firm. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City. No representation is made that the minimum insurance requirements are sufficient to cover Firm's interests, liabilities, or obligations. Required insurance shall not limit Firm's liability.

Firm acknowledges and agrees Firm and not the City is the party in the best position to determine applicability (e.g. "IF APPLICABLE"), confirm, and/or verify its insurance coverage. Acceptance by the City, or by any of its employees, representatives, agents, etc. of certificates or other documentation of insurance or policies pursuant to the terms of this document and the Agreement evidencing insurance coverages and limits does not constitute approval or agreement that the insurance requirements have been met or that coverages or policies are in compliance. Furthermore, receipt, acceptance, and/or approval of certificates or other documentation of insurance or policies or copies of policies by the City, or by any of its employees, representatives, agents, etc., which indicate less coverage than required does not constitute a waiver of Firm's obligation to fulfill these insurance requirements.

## MINIMUM SCOPE AND LIMIT OF INSURANCE <sup>1</sup>

A. Commercial General Liability (CGL) Insurance on the most current Insurance Services Office (ISO) Form CG 00 01 or its equivalent on an "occurrence" basis (Modified Occurrence or Claims Made forms are not acceptable without prior written consent of the City). Coverage must be provided to cover liability contemplated by the Agreement including without limitation premises and operations, independent contractors, contractual liability, products and completed operations, property damage, bodily, personal and advertising injury, contractual liability, explosion, collapse, underground coverages, personal injury liability, death, employees-as-insureds. Products and completed operations liability coverage maintained for at least 3 years after completion of work. Limits shall not be less than \$1M per occurrence and \$2M general aggregate for Agreements valued at \$2M or less; if valued over \$2M, a general aggregate limit that equals or exceeds the Agreement's value. If a general aggregate limit applies; it shall apply separately to the project/location (ISO CG 2S 03 or 2S 04 or equivalent). **(ALWAYS APPLICABLE)**

B. Automobile Liability (AL) Insurance in accordance with Florida law, as to the ownership, maintenance, and use of all owned, non-owned, leased, or hired vehicles. AL insurance shall not be less than: (a) \$500,000 combined single limit each occurrence bodily injury and property damage for Agreements valued at \$100,000 or less or (b) \$1M combined single limit each occurrence bodily injury and property damage for Agreements valued over \$100,000. If transportation of hazardous material involved, the MCS-90 endorsement (or equivalent). **(ALWAYS APPLICABLE)**

C. Worker's Compensation (WC) & Employer's Liability Insurance for all employees engaged under the Agreement, Worker's Compensation as required by Florida law. Employer's Liability with minimum limits of (a) \$500,000 bodily injury by accident and each accident, bodily injury by disease policy limit, and bodily injury by disease each employee for Agreements valued at \$100,000 and under or (b) \$1M bodily injury by accident and each accident, bodily injury by disease policy limit, and bodily injury by disease each for all other Agreements. **(ALWAYS APPLICABLE)**

D. Excess (Umbrella) Liability Insurance for Agreements valued at \$2M or more, at least \$4M per occurrence in excess of underlying limits and no more restrictive than underlying coverage for all work performed by Firm. May also compensate for a deficiency in CGL, AL, or WC. **(ALWAYS APPLICABLE)**

E. Builder's Risk Insurance for property loss exposure associated with construction/renovation/additions to buildings or structures, including materials or fixtures to be incorporated. Must be "All Risk" form with limits of no less than the project's completed value, have no coinsurance penalties, eliminate the "occupancy clause", cover Firm (together with its contractors, subcontractors of every tier, and suppliers), and name City as a Loss Payee. **(IF APPLICABLE)**

F. Installation Floater coverage for property (usually highly valued equipment or materials such as compressors, generators, etc.) during its installation. Coverage must be "All Risk" including installation and transit for no less than 100% of the installed replacement cost value. **(IF APPLICABLE)**

G. Architects & Engineers Liability/ Professional Liability (E&O)/ Contractors Professional Liability (CPL)/ Medical Malpractice Insurance where Agreement involves Florida-regulated professional services (e.g. architect, engineer, design-builder, CM, accountant, appraiser, investment banker medical professional) at any tier, whether employed or independent, vicarious design liability exposure (e.g. construction means & methods, design supervision), value engineering, constructability assessments/reviews, BIM process, and/or performance specifications. Limits of at least \$1M per occurrence and \$2M aggregate; deletion of design/ build liability exclusions, as applicable, and maintained for at least 3 years after completion of work/services and City's acceptance of same. **(IF APPLICABLE)**

H. Railroad Protective Liability CRPL Insurance for construction within 50ft of operated railroad track(s) or where affects any railroad bridge, trestle, tunnel, track(s) roadbed, or over/under pass. Subject to involved rail road's approval prior to commencement of work. **(IF APPLICABLE)**.

I. Pollution and/or Asbestos Legal Liability Insurance where Agreement involves asbestos and/or environmental hazards/contamination risks (defined broadly, e.g. lead, mold, bacteria, fuel storage, underground work, cleanup (owned or non-owned sites), pollutant generation/transportation, marine/natural resource damage, contamination claim, restitution, business interruption, mold, fungus, lead-based paint, 3rd party claims/removal, etc.), with limits of at least \$1M per occurrence and \$2M aggregate, maintained for at least 3 years after Agreement completion. **(IF APPLICABLE)**

J. Cyber Liability Insurance where Agreement involves portals allowing access to obtain, use, or store data; managed dedicated servers; cloud hosting services; software/hardware; programming; and/or other IT services

<sup>1</sup> "M" indicates million(s), for example \$1M is \$1,000,000

and products are involved. Limits of not less than \$2M per occurrence and \$2M aggregate. Coverage sufficiently broad to respond to duties and obligations undertaken by Firm, and shall include, but not be limited to, claims involving infringement of intellectual property/copyright, trademark, trade dress, invasion of privacy violations, damage to or destruction of electronic information, information theft, release of confidential and/or private information, alteration of electronic information, extortion, virus transmission, and network security. Coverage, as applicable and with sufficient limits to respond, for breach response costs, regulatory fines and penalties, credit monitoring expenses. **(IF APPLICABLE)**

K. Drone/UAV Liability Insurance where Agreements involves unmanned aerial vehicles/drones. Coverage to include products and completed operations, property damage, bodily injury with limits no less than \$1M per occurrence, and \$2M aggregate; may be provided by CGL endorsement subject to City's prior written approval. **(IF APPLICABLE)**

L. Longshore & Harbor Workers' Compensation Act/Jones Act for work being conducted near, above, or on "navigable waters" for not less than the above Employer's Liability Insurance limit. **(IF APPLICABLE)**

M. Garagekeeper/Hangerkeeper/Marina Operator Legal Liability Insurance and/or Hull/P&I Insurance where parking lot, valet, dealership, garage services, towing, etc. and/or operation of a hangar, marina, or air

plane/ship repairer, providing safe berth, air/watercraft storage/docking (on land/ in water), fueling, tours, charters, ferries, dredges, tugs, mooring, towing, boat/aircraft equipment/repair/alteration/maintenance, etc.; cover- age against liability for damage to vehicles air/watercraft, their machinery in Firm's care, custody, or control both private & commercial. Limits at least equal to greater of \$1M, value of max number of vehicles that may be in Firm's custody, or of most costly object in Firm's custody. **(IF APPLICABLE)**

N. Property Insurance and Interruption of Business CIOB) Insurance where premises, building, structure, or improved real property is leased, licensed, or otherwise occupied by Firm. Property Insurance against all risks of loss to any occupant/tenant improvements at full replacement cost with no coinsurance penalty, including fire, water, leak damage, and flood, as applicable, vandalism and malicious mischief endorsements. IOB by which minimum monthly rent will be paid to City for up to 1 year if premises are destroyed, rendered inaccessible or untenable, including disruption of utilities, water, or telecommunications. **(IF APPLICABLE)**

O. Liquor Liability/Host Liquor Liability where Firm directly or indirectly provides alcoholic beverages, limits of at least \$1M per occurrence and \$1M aggregate. **(IF APPLICABLE)**

P. Educators Legal Liability Insurance where day care, after school program, recreational activities, etc. limits per G above. **(IF APPLICABLE)**

### ADDITIONAL REQUIREMENTS

ACCEPTABILITY OF INSURERS- Insurance is to be placed with insurers admitted in the State of Florida and who have a current A.M. Best rating of no less than **A-:VII** or, if not rated by A.M. Best, as otherwise approved by the City in advance and in writing.

ADDITIONAL INSURED - **City, its elected officials, departments, officers, officials, employees, and volunteers together with, as applicable, any associated lender of the City shall be covered as additional insureds on all liability coverage** (e.g. CGL, AL, and Excess (Umbrella) Liability) as to liability arising out of work or operations performed by or on behalf of Firm including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of Firm. Coverage can be provided in the form of an endorsement to Firm's insurance (at least as broad as ISO Form CG 20 10 11 85 or **both** CG 10 20, CG 20 26, CG 20 33, or CG 20 38 **and** CG 20 37 if later revisions used).

CANCELLATION/NON-RENEWAL - Each insurance policy shall provide that at least 30 days written notice must be given to City of any cancellation, intent to non-renew, or material reduction in coverage (except aggregate liability limits) and at least 10 days' notice for non-payment of premium. Firm shall also have an independent duty to notify City in like manner, within 5 business days of Firm's receipt from its insurer of any notices of same. If any policy's aggregate limit is reduced, Firm shall directly take steps to have it reinstated. Notice and proof of renewal/continued coverage/certifications, etc. shall be sent to the City's notice (or Award contact) address as stated in the Agreement with a copy to the following:

- Contract Administration Department, 306 E Jackson St, Tampa, FL 33602     Purchasing Department, 306 E Jackson Street, Tampa, FL 33602  
 Other: \_\_\_\_\_

CERTIFICATE OF INSURANCE (COI) - to be provided to City by insurance carrier prior to Firm beginning any work/services or taking occupancy and, if the insurance expires prior to completion of the work or services or Agreement term (as may be extended), a renewal COI at least 30 days before expiration to the above address(es). COIs shall specifically identify the Agreement and its subject (project, lease, etc.), shall be sufficiently comprehensive to insure City (named as additional insured) and Firm and to certify that coverage extends to subcontractors' acts or omissions, and as to permit the City to determine the required coverages are in place without the responsibility of examining individual policies. **Certificate Holder must be The City of Tampa, Florida.**

CLAIMS MADE - If any liability insurance is issued on a claims made form, Firm agrees to maintain such coverage uninterrupted for at least 3 years following completion and acceptance of the work either through purchase of an extended reporting provision or purchase of successive renewals. The Retroactive Date must be shown and be a date not later than the earlier of the Agreement date or the date performance/occupancy began thereunder.

DEDUCTIBLES/ SELF-INSURED RETENTIONS (SIR) - must be disclosed to City and, if over \$500,000, approved by the City in advance and in writing, including at City's option being guaranteed, reduced, or eliminated (additionally if a SIR provides a financial guarantee guaranteeing payment of losses and related investigations, claim administration, and defense expenses). Firm shall be fully responsible for any deductible or SIR (without limiting the foregoing a policy with a SIR shall provide or be endorsed to provide that the SIR may be satisfied by either the City or named insured). In the event of loss which would have been covered but for a deductible or SIR, City may withhold from any payment due Firm, under any agreement with the City, an amount equal to same to cover such loss should full recovery not be obtained under the policy.

PERFORMANCE- All insurance policies shall be fully performable in Hillsborough County, Florida (the County), and construed in accordance with Florida law. Further, all insurance policies must expressly state that the insurance company will accept service of process in the County and that the exclusive venue for any action concerning any matter under those policies shall be in the appropriate state court of the County.

PRIMARY POLICIES - Firm's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as to the City, its elected officials, departments, officers, employees, and volunteers. Any insurance or self-insurance maintained by the City, its elected officials, departments, officers, employees, and volunteers shall be excess of the Firm's insurance and shall not contribute with it.

SUBCONTRACTORS/INDEPENDENT ASSOCIATES/CONSULTANTS/SUBTENANTS/SUBLICENSEE - **Firm shall require and verify that all such entities maintain insurance meeting all requirements stated herein with the City as an additional insured** by endorsement (ISO FORM CG 20 38, or broader) or otherwise include such entities within Firm's insurance policies. Upon City's request, Firm shall furnish complete and certified copies of copies of such entities' insurance policies, forms, and endorsements.

SUBCONTRACTOR DEFAULT INSURANCE CONTROLLED INSURANCE PROGRAM, WRAP-UP. Use requires express prior written consent of City Risk Manager.

UNAVAILABILITY- To the fullest extent permitted by law, if Firm is out of business or otherwise unavailable at the time a claim is presented to City, Firm hereby assigns to the City all of its right, title and interest (but not any liabilities or obligations) under any applicable policies of insurance.

WAIVER OF SUBROGATION - With regard to any policy of insurance that would pay third party losses, Firm hereby grants City a waiver of any right to subrogation which any insurer of Firm may acquire against the City by virtue of the payment of any loss under such insurance. Firm agrees to obtain any endorsement that may be necessary to affect such waiver, but this provision shall apply to such policies regardless.

WAIVER/RELEASE AGREEMENT - Where Firm has a defined group of persons who might be exposed to harm (e.g. participants in an athletic event/program, volunteers) any waiver or release agreement used by Firm whereby such persons (and their parent/guardian as applicable) discharge Firm from claims and liabilities, shall include the City, its elected officials, departments, officers, officials, employees, and volunteers to the same extent as Firm.

# Procurement Guidelines To Implement Minority & Small Business Participation

## Underutilized WMBE Primes by Industry Category

| <b>FORMAL PROCUREMENT</b> | Construction | Construction-Related | Professional | Non-Professional | Goods      |
|---------------------------|--------------|----------------------|--------------|------------------|------------|
|                           | Black        | Asian                | Black        | Black            | Black      |
|                           | Hispanic     | Native Am.           | Hispanic     | Asian            | Hispanic   |
|                           | Native Am.   | Woman                | Asian        | Native Am.       | Asian      |
|                           | Woman        |                      | Native Am.   |                  | Native Am. |
|                           |              |                      | Woman        |                  | Woman      |

## Underutilized WMBE Sub-Contractors / Sub-Consultants

| <b>SUB WORK</b> | Construction | Construction-Related | Professional | Non-Professional | Goods      |
|-----------------|--------------|----------------------|--------------|------------------|------------|
|                 | Black        | Black                | Black        | Black            | Black      |
|                 |              | Asian                | Asian        | Asian            | Asian      |
|                 |              | Native Am.           | Native Am.   | Native Am.       | Native Am. |
|                 |              | Woman                | Woman        |                  | Woman      |
|                 |              |                      | Hispanic     |                  |            |

**Policy**

The Guidelines apply to formal procurements and solicitations. WMBE participation will be narrowly-tailored for affected groups.

**Index**

**Black (BBE)** = Black/African-American Business Enterprise

**Hispanic (HBE)** = Hispanic Business Enterprise

**Asian (ABE)** = Asian Business Enterprise

**Native American (NBE)** = Native American Business Enterprise

**Woman (WBE)** = Woman Business Enterprise (Caucasian)

**Industry Categories**

**Construction** is defined as: new construction, renovation, restoration, maintenance of public improvements and underground utilities.

**Construction-Related Services** are defined as: architecture, professional engineering, landscape architecture, design build, construction management services, or registered surveying and mapping.

**Professional Services** are defined as: attorney, accountant, medical doctor, veterinarian, miscellaneous consultant, etc.

**Non-Professional Services** are defined as: lawn maintenance, painting, janitorial, printing, hauling, security guard, etc.

**Goods** are defined as: all supplies, materials, pipes, equipment, machinery, appliances, and other commodities.

**MBD Form-70**

**FY24 Ditch Rehabilitation - Grady Avenue 43rd Street**  
**FY 24 Project 24-C-00041**  
**U-WMBE Availability Contact List**  
**(The Underutilized WMBE Industry Category for Construction Subcontracts is BBE )**

| This Certified Contact List is the minimum contacts available and may require further searches for certified firms to meet Good Faith Efforts. |                           |  |              |              |                                       |                                  |                 |       |       |           |     |                  |
|--|---------------------------|--|--------------|--------------|---------------------------------------|----------------------------------|-----------------|-------|-------|-----------|-----|------------------|
| #'s  | Subtask                   | Business Name  | Phone        | Fax          | Email                                 | Address                          | City            | State | Zip   | FEIN      | EBO | Ethnicity        |
| 1  | survey                    | Barnes, Ferland and Associates, Inc                  | 407-896-8608 | 407-896-1822 | bfa@bfaenvironmental.com              | 1230 Hillcrest Street, Suite 100 | Orlando         | FL    | 32803 | 593237612 | BBE | African American |
| 1  | survey                    | Spectra Engineering & Research, Inc.                 | 407-951-8844 | 850-942-2717 | spectra@spectraengr.com               | 4401 Vineland Road S, Suite A6   | Orlando         | FL    | 32811 | 593009648 | BBE | African American |
| 3  | MOT                       | Cornerstone Barricades Inc.                          | 352-373-8001 | 352-377-8976 | seyi.falade@cornerstonebarricades.com | 3201 SW 42nd Street              | Gainesville     | FL    | 32608 | 810763816 | BBE | African American |
| 4  | Demolition                | CB CAPITAL RESOURCES INC                             | 305-491-2551 | 813-217-9370 | Truconstructioncg@gmail.com           | 3707 W WALLACE AVE               | TAMPA           | FL    | 33611 | 881511126 | BBE | African American |
| 4  | Demolition                | E Johnson Construction and Hauling, LLC              | 813-417-9116 |              | johnsonhauling78@gmail.com            | 3205 East 24th Ave               | Tampa           | FL    | 33605 | 813301557 | BBE | African American |
| 4  | Demolition                | Excel 4 Llc  | 407-686-3588 | 407-000-0000 | excel4llc@yahoo.com                   | 750 S Orange Blossom Trl         | Orlando         | FL    | 32805 | 854149326 | BBE | African American |
| 4  | Demolition                | KIY Enterprises, INC                                 | 813-416-6679 |              | Lmcnair@kiyinc.com                    | 3615 E Hanna Ave                 | Tampa           | FL    | 33610 | 593599323 | BBE | African American |
| 4  | Demolition                | MBattle Construction llc                             | 727-214-4301 | 727-517-3774 | moebattle@hotmail.com                 | 470 maple way                    | safety harbor   | FL    | 34695 | 760840117 | BBE | African American |
| 4  | Demolition                | Mudd Muggers LLC                                     | 813-485-1837 |              | Muddmuggers@gmail.com                 | 2000 E 12th Ave                  | Tampa           | FL    | 33605 | 822518545 | BBE | African American |
| 4  | Demolition                | Paragon Building Contractors, Inc.                   | 813-373-3154 | 813-435-2289 | Jeriel.davis@gmail.com                | 2019 east Hanna Avenue           | TAMPA           | FL    | 33604 | 592464751 | BBE | African American |
| 4  | Demolition                | Promise Construction and Repair Solutions LLC        | 813-988-8633 | 813-988-1555 | promisecarellc@outlook.com            | 10711 N 53rd St                  | Tampa           | FL    | 33617 | 864723775 | BBE | African American |
| 4  | Demolition                | R&R Demolition and Recycling, LLC.                   | 813-477-3688 |              | rickie@rrdemorecycle.com              | 705 Hitchcock St                 | Plant City      | FL    | 33563 | 832720743 | BBE | African American |
| 4  | Demolition                | Silver-Smith Development, LLC                        | 888-752-7282 | 888-729-4184 | info@bernexis.com                     | 1196 Capital Circle NE           | Tallahassee     | FL    | 32301 | 874603444 | BBE | African American |
| 4  | Demolition                | V&R Enterprise of Jacksonville, Inc.                 | 904-383-5290 | 727-631-2667 | valwilliam@vrenterprise.com           | 3757 Leeds Ct.                   | PALM HARBOR     | FL    | 34685 | 200899602 | BBE | African American |
| 6  | Permanent Erosion Control | A Purpose Construction LLC                           | 727-417-4106 |              | andrew@apurposeconst.com              | 3866 37th Street South unit #46  | St. Petersburg  | FL    | 33711 | 822640354 | BBE | African American |
| 6  | Permanent Erosion Control | E Johnson Construction and Hauling, LLC              | 813-417-9116 |              | johnsonhauling78@gmail.com            | 3205 East 24th Ave               | Tampa           | FL    | 33605 | 813301557 | BBE | African American |
| 6  | Permanent Erosion Control | E/S Concrete Service, Inc.                           | 727-560-0957 | 727-821-5029 | enorisslysr@yahoo.com                 | 726 E. Harbor Drive              | St. Petersburg  | FL    | 33705 | 593119582 | BBE | African American |
| 6  | Permanent Erosion Control | LMCC Specialty Contractors                           | 407-298-6936 | 407-290-1217 | lynn@mimsconstruction.com             | 119 S. Pine Hills Rd.            | Orlando         | FL    | 32811 | 593442318 | BBE | African American |
| 6  | Permanent Erosion Control | Paragon Building Contractors, Inc.                   | 813-373-3154 | 813-435-2289 | Jeriel.davis@gmail.com                | 2019 east Hanna Avenue           | TAMPA           | FL    | 33604 | 592464751 | BBE | African American |
| 6  | Permanent Erosion Control | Provisions Construction & Development, Inc.          | 407-985-2442 | 407-985-2440 | marrington@provisionscdi.com          | 3401 Lake Breeze Drive Bldg 601  | Orlando         | FL    | 32808 | 862802435 | BBE | African American |
| 6  | Permanent Erosion Control | WC Boxes, Inc.                                       | 813-478-1102 | 813-864-4386 | wcindustries2003@gmail.com            | 17620 Lake Key Drive             | Odessa          | FL    | 33556 | 872682190 | BBE | African American |
| 7  | Tree Services             | 4678 Landscaping Incorporated                        | 813-850-7958 |              | 4678LandscapingInc@gmail.com          | 4440 DEVINSHIRE FIELDS LOOP      | PLANT CITY      | FL    | 33567 | 842268587 | BBE | African American |
| 7  | Tree Services             | AB5 Enterprises                                      | 813-847-9563 |              | ab5enterprises@aol.com                | 11226 Southwind Lake Dr          | Gibsonton       | FL    | 33534 | 851020544 | BBE | African American |
| 7  | Tree Services             | all natural extreme team llc                         | 813-765-2318 | 813-373-5140 | xteam200@gmail.com                    | 3107 east 25th ave               | TAMPA           | FL    | 33605 | 262262940 | BBE | African American |
| 7  | Tree Services             | BAY LIGHT, LLC                                       | 813-972-4057 |              | baylightllc25@gmail.com               | 1717 E Busch Blvd                | Tampa           | FL    | 33612 | 855079825 | BBE | African American |
| 7  | Tree Services             | Built2last Property Management                       | 813-579-7894 |              | Cedric_upshaw@yahoo.com               | 7901 4th St N                    | St. Petersburg  | FL    | 33702 | 863129895 | BBE | African American |
| 7  | Tree Services             | Cannida Group LLC                                    | 727-642-3709 |              | info@cannidagroup.com                 | 2820 17th avenue south           | St. Petersburg  | FL    | 33712 | 833004250 | BBE | African American |
| 7  | Tree Services             | Capital P Enterprises                                | 813-361-8260 | 813-681-7465 | capitalpent@gmail.com                 | 3209 Pearson Rd                  | Valrico         | FL    | 33596 | 842324503 | BBE | African American |
| 7  | Tree Services             | Cultiv8 Landscape Services LLC                       | 813-220-8212 | 813-220-8212 | mulcheverywhere@gmail.com             | 582 8TH ST NW                    | Ruskin          | FL    | 33570 | 824642460 | BBE | African American |
| 7  | Tree Services             | Cut-Ups Lawn Service                                 | 813-361-8871 | 813-238-2397 | cutupslawnservice@yahoo.com           | 3217 East Powhatan Ave.          | Tampa           | FL    | 33610 | 811412916 | BBE | African American |
| 7  | Tree Services             | D/J'S PRESSURE WASHING AND IRRIGATION SERVICE L.L.C. | 813-601-3258 |              | johndonnie2002@yahoo.com              | 4544 Ashburn Square Dr           | Tampa           | FL    | 33610 | 853281955 | BBE | African American |
| 7  | Tree Services             | Global Solutionz                                     | 813-539-6414 | 813-539-6414 | silas.william74@gmail.com             | 6409 n 24 st                     | tampa           | FL    | 33610 | 821245634 | BBE | African American |
| 7  | Tree Services             | irene&joe's lawn care &tree trimming                 | 813-928-0124 |              | rechibutler@yahoo.com                 | 2921 E 33rd Ave                  | Tampa           | FL    | 33610 | 262612745 | BBE | African American |
| 7  | Tree Services             | Kirocz Cleaning Services & More LLC                  | 813-399-6628 |              | kiroczcleaningservicesllc@gmail.com   | 4221 Empire Pl                   | Tampa           | FL    | 33610 | 843758991 | BBE | African American |
| 7  | Tree Services             | KIY Enterprises, INC                                 | 813-416-6679 |              | Lmcnair@kiyinc.com                    | 3615 E Hanna Ave                 | Tampa           | FL    | 33610 | 593599323 | BBE | African American |
| 7  | Tree Services             | Merion Landscape Services                            | 813-279-8067 |              | bsimms@merionls.com                   | 2708 - 2710 E Louisiana Avenue   | Tampa           | FL    | 33610 | 842660956 | BBE | African American |
| 7  | Tree Services             | MOMAR-ENTERPRISE.COM                                 | 813-981-1172 |              | Mobetterfit@GMAIL.COM                 | 8629 deep maple drive            | Riverview       | FL    | 33578 | 813830701 | BBE | African American |
| 7  | Tree Services             | Moses & Wourman Maintenance Inc.                     | 813-244-7134 | 813-920-1430 | ctmoses11@msn.com                     | 17102 downs dr                   | Odessa          | FL    | 33556 | 850105210 | BBE | African American |
| 7  | Tree Services             | One and Done Pressure Washing and Lawncare SVS       | 813-614-6008 |              | oneanddone34@yahoo.com                | 5601 Drew Ct                     | Tampa           | FL    | 33619 | 853425049 | BBE | African American |
| 7  | Tree Services             | PROFESSIONAL ULTIMATE PAINTING LLC                   | 561-305-4790 |              | propaintctfl@gmail.com                | 2029 Okeechobee Blvd             | West Palm Beach | FL    | 33409 | 845184348 | BBE | African American |
| 7  | Tree Services             | Promise Construction and Repair Solutions LLC        | 813-988-8633 | 813-988-1555 | promisecarellc@outlook.com            | 10711 N 53rd St                  | Tampa           | FL    | 33617 | 864723775 | BBE | African American |
| 7  | Tree Services             | T&T Lawn Care & HandyMan Services                    | 813-613-9898 |              | tandtlanwcare_20@yahoo.com            | 4739 E Whiteway Dr               | Tampa           | FL    | 33617 | 844208434 | BBE | African American |
| 7  | Tree Services             | T.C.C Enterprise Inc                                 | 813-606-9148 | 813-237-0396 | tcc_inc@live.com                      | 3902 E POWHATAN AVE              | TAMPA           | FL    | 33610 | 863223645 | BBE | African American |
| 7  | Tree Services             | Trimen Precision Lawn Care, LLC                      | 813-863-9328 |              | account@trimenlandscape.com           | 450 S Taylor Rd                  | Seffner         | FL    | 33584 | 874625126 | BBE | African American |
| 7  | Tree Services             | Upscale Divas Cleaning Services                      | 813-516-7780 |              | Poohslawnwcare@gmail.com              | 710 E 119th Avenue               | Tampa           | FL    | 33612 | 801268462 | BBE | African American |

African American/Black Business Enterprises (BBE) shall count toward the subcontract goal. Refer to MBD Form 70 - Procurement Guidelines

**FY24 Ditch Rehabilitation - Grady Avenue 43rd Street**  
**FY 24 Project 24-C-00041**  
**U-WMBE Availability Contact List**  
**(The Underutilized WMBE Industry Category for Construction Subcontracts is BBE )**

| #'s | Subtask                | Business Name                                       | Phone        | Fax          | Email                               | Address                         | City            | State | Zip   | FEIN       | EBO | Ethnicity        |
|-----|------------------------|---|--------------|--------------|-------------------------------------|---------------------------------|-----------------|-------|-------|------------|-----|------------------|
| 7   | Tree Services          | Walkers landscape and lawncare services             | 813-553-0549 |              | bwalker1cs@gmail.com                | 9821 e fowler ave               | Thonotosassa    | FL    | 33592 | 843912131  | BBE | African American |
| 7   | Tree Services          | Williams Landscape Management Co., Inc.             | 813-628-8048 | 813-628-8041 | tonywilliams@wmlandscape.com        | 5710 N 50th St                  | Tampa           | FL    | 33610 | 893516370  | BBE | African American |
| 9   | Miscellaneous Concrete | A Purpose Construction LLC                          | 727-417-4106 |              | andrew@apurposeconst.com            | 3866 37th Street South unit #46 | St. Petersburg  | FL    | 33711 | 822640354  | BBE | African American |
| 9   | Miscellaneous Concrete | E Johnson Construction and Hauling, LLC             | 813-417-9116 |              | johnsonhauling78@gmail.com          | 3205 East 24th Ave              | Tampa           | FL    | 33605 | 813301557  | BBE | African American |
| 9   | Miscellaneous Concrete | E/S Concrete Service, Inc.                          | 727-560-0957 | 727-821-5029 | enorisslysr@yahoo.com               | 726 E. Harbor Drive             | St. Petersburg  | FL    | 33705 | 893119582  | BBE | African American |
| 9   | Miscellaneous Concrete | LMCC Specialty Contractors                          | 407-298-6936 | 407-290-1217 | lynn@mimsconstruction.com           | 119 S. Pine hills Rd.           | Orlando         | FL    | 32811 | 893442318  | BBE | African American |
| 9   | Miscellaneous Concrete | Paragon Building Contractors, Inc.                  | 813-373-3154 | 813-435-2289 | Jeriel.davis@gmail.com              | 2019 east Hanna Avenue          | TAMPA           | FL    | 33604 | 892464751  | BBE | African American |
| 9   | Miscellaneous Concrete | Provisions Construction & Development, Inc.         | 407-985-2442 | 407-985-2440 | marrington@provisionscdi.com        | 3401 Lake Breeze Drive Bldg 601 | Orlando         | FL    | 32808 | 862802435  | BBE | African American |
| 9   | Miscellaneous Concrete | WC Boxes, Inc.                                      | 813-478-1102 | 813-864-4386 | wcindustries2003@gmail.com          | 17620 Lake Key Drive            | Odessa          | FL    | 33556 | 872682190  | BBE | African American |
| 11  | Fencing                | CB CAPITAL RESOURCES INC                            | 305-491-2551 | 813-217-9370 | Truconstructiongc@gmail.com         | 3707 W WALLACE AVE              | TAMPA           | FL    | 33611 | 881511126  | BBE | African American |
| 12  | Landscaping            | 4678 Landscaping Incorporated                       | 813-850-7958 |              | 4678LandscapingInc@gmail.com        | 4440 DEVINSHIRE FIELDS LOOP     | PLANT CITY      | FL    | 33567 | 842268587  | BBE | African American |
| 12  | Landscaping            | AB5 Enterprises                                     | 813-847-9563 |              | ab5enterprises@aol.com              | 11226 Southwind Lake Dr         | Gibsonton       | FL    | 33534 | 851020544  | BBE | African American |
| 12  | Landscaping            | all natural extreme team llc                        | 813-765-2318 | 813-373-5140 | xteam200@gmail.com                  | 3107 east 25th ave              | TAMPA           | FL    | 33605 | 862262940  | BBE | African American |
| 12  | Landscaping            | BAY LIGHT, LLC                                      | 813-972-4057 |              | baylightllc25@gmail.com             | 1717 E Busch Blvd               | Tampa           | FL    | 33612 | 855079825  | BBE | African American |
| 12  | Landscaping            | Built2last Property Management                      | 813-579-7894 |              | Cedric_upshaw@yahoo.com             | 7901 4th St N                   | St. Petersburg  | FL    | 33702 | 863129895  | BBE | African American |
| 12  | Landscaping            | Cannida Group LLC                                   | 727-642-3709 |              | info@cannidagroup.com               | 2820 17th avenue south          | St. Petersburg  | FL    | 33712 | 833004250  | BBE | African American |
| 12  | Landscaping            | Capital P Enterprises                               | 813-361-8260 | 813-681-7465 | capitalpent@gmail.com               | 3209 Pearson Rd                 | Valrico         | FL    | 33596 | 842324503  | BBE | African American |
| 12  | Landscaping            | CB CAPITAL RESOURCES INC                            | 305-491-2551 | 813-217-9370 | Truconstructiongc@gmail.com         | 3707 W WALLACE AVE              | TAMPA           | FL    | 33611 | 881511126  | BBE | African American |
| 12  | Landscaping            | Cultiv8 Landscape Services LLC                      | 813-220-8212 | 813-220-8212 | mulcheverywhere@gmail.com           | 582 8TH ST NW                   | Ruskin          | FL    | 33570 | 824642460  | BBE | African American |
| 12  | Landscaping            | Cut-Ups Lawn Service                                | 813-361-8871 | 813-238-2397 | cutupslawnservice@yahoo.com         | 3217 East Powhatan Ave.         | Tampa           | FL    | 33610 | 811412916  | BBE | African American |
| 12  | Landscaping            | DJ'S PRESSURE WASHING AND IRRIGATION SERVICE L.L.C. | 813-601-3258 |              | johndonnie2002@yahoo.com            | 4544 Ashburn Square Dr          | Tampa           | FL    | 33610 | 853281955  | BBE | African American |
| 12  | Landscaping            | D3 Contracting Services LLC                         | 813-203-0189 |              | d3contractingservices@gmail.com     | 4522 W Village Dr               | Tampa           | FL    | 33624 | 832393671  | BBE | African American |
| 12  | Landscaping            | Global Solutionz                                    | 813-539-6414 | 813-539-6414 | silas.william74@gmail.com           | 6409 n 24 st                    | tampa           | FL    | 33610 | 821245634  | BBE | African American |
| 12  | Landscaping            | irene&joe's lawn care &tree trimming                | 813-928-0124 |              | rechibutler@yahoo.com               | 2921 E 33rd Ave                 | Tampa           | FL    | 33610 | 8621612745 | BBE | African American |
| 12  | Landscaping            | Kirocz Cleaning Services & More LLC                 | 813-399-6628 |              | kiroczcleaningservicesllc@gmail.com | 4221 Empire Pl                  | Tampa           | FL    | 33610 | 843758991  | BBE | African American |
| 12  | Landscaping            | KIY Enterprises, INC                                | 813-416-6679 |              | Lmcnair@kiyinc.com                  | 3615 E Hanna Ave                | Tampa           | FL    | 33610 | 893599323  | BBE | African American |
| 12  | Landscaping            | Merion Landscape Services                           | 813-279-8067 |              | bsimms@merions.com                  | 2708 - 2710 E Louisiana Avenue  | Tampa           | FL    | 33610 | 842660956  | BBE | African American |
| 12  | Landscaping            | MOMAR-ENTERPRISE.COM                                | 813-981-1172 |              | Mobetterfit@GMAIL.COM               | 8629 deep maple drive           | Riverview       | FL    | 33578 | 813830701  | BBE | African American |
| 12  | Landscaping            | Moses & Wourman Maintenance Inc.                    | 813-244-7134 | 813-920-1430 | ctmoses11@msn.com                   | 17102 downs dr                  | Odessa          | FL    | 33556 | 850105210  | BBE | African American |
| 12  | Landscaping            | One and Done Pressure Washing and Lawncare Services | 813-614-6008 |              | oneanddone34@yahoo.com              | 5601 Drew Ct                    | Tampa           | FL    | 33619 | 853425049  | BBE | African American |
| 12  | Landscaping            | PROFESSIONAL ULTIMATE PAINTING LLC                  | 561-305-4790 |              | propaintctfl@gmail.com              | 2029 Okeechobee Blvd            | West Palm Beach | FL    | 33409 | 845184348  | BBE | African American |
| 12  | Landscaping            | Promise Construction and Repair Solutions LLC       | 813-988-8633 | 813-988-1555 | promisecarellc@outlook.com          | 10711 N 53rd St                 | Tampa           | FL    | 33617 | 864723775  | BBE | African American |
| 12  | Landscaping            | T&T Lawn Care & HandyMan Services                   | 813-613-9898 |              | tandtlanwcare_20@yahoo.com          | 4739 E Whiteway Dr              | Tampa           | FL    | 33617 | 844208434  | BBE | African American |
| 12  | Landscaping            | T.C.C Enterprise Inc                                | 813-606-9148 | 813-237-0396 | tcc_inc@live.com                    | 3902 E POWHATAN AVE             | TAMPA           | FL    | 33610 | 863223645  | BBE | African American |
| 12  | Landscaping            | Trimen Precision Lawn Care, LLC                     | 813-863-9328 |              | account@trimenlandscape.com         | 450 S Taylor Rd                 | Seffner         | FL    | 33584 | 874625126  | BBE | African American |
| 12  | Landscaping            | Upscale Divas Cleaning Services                     | 813-516-7780 |              | Poohslawncares@gmail.com            | 710 E 119th Avenue              | Tampa           | FL    | 33612 | 801268462  | BBE | African American |
| 12  | Landscaping            | Walkers landscape and lawncare services             | 813-553-0549 |              | bwalker1cs@gmail.com                | 9821 e fowler ave               | Thonotosassa    | FL    | 33592 | 843912131  | BBE | African American |
| 12  | Landscaping            | WC Boxes, Inc.                                      | 813-478-1102 | 813-864-4386 | wcindustries2003@gmail.com          | 17620 Lake Key Drive            | Odessa          | FL    | 33556 | 872682190  | BBE | African American |
| 12  | Landscaping            | Williams Landscape Management Co., Inc.             | 813-628-8048 | 813-628-8041 | tonywilliams@wmlandscape.com        | 5710 N 50th St                  | Tampa           | FL    | 33610 | 893516370  | BBE | African American |

**FY24 Ditch Rehabilitation - Grady Avenue 43rd Street  
FY 24 Project 24-C-00041  
SLBE Availability Contact List**

This Certified Contact List is the minimum contacts available and may require further searches for certified firms to meet Good Faith Efforts.

| #'s | Subtask                   | Business Name                              | Phone        | Fax          | Email                                  | Address                            | City           | State | Zipcode | FEIN      | EBO  | Ethnicity         |
|-----|---------------------------|--|--------------|--------------|--|------------------------------------|----------------|-------|---------|-----------|------|-------------------|
| 1   | survey                    | D.C. Johnson & Associates, Inc.            | 352-588-2768 | 352-588-2713 | jennifer@dcjohnson.com                 | 11911 S Curley St.                 | San Antonio    | FL    | 33576   | 592214086 | SLBE | Caucasian         |
| 1   | survey                    | Ferguson Land Surveyors, PLLC              | 727-230-9606 | 727-230-9234 | Ben@FLSurveyors.com                    | 806 Franklin Street                | Clearwater     | FL    | 33756   | 475661955 | SLBE | Caucasian         |
| 1   | survey                    | Land Precision Corporation                 | 727-796-2737 | 727-796-3326 | rcorbitt@landprecision.com             | 2683 SUNSET POINT ROAD             | CLEARWATER     | FL    | 33759   | 593088679 | SLBE | Caucasian         |
| 1   | survey                    | Suncoast Land Surveying, Inc.              | 813-854-1342 | 813-354-3435 | katie@suncoastls.com                   | 111 Forest Lakes Blvd. S.          | Oldsmar        | FL    | 34677   | 592733609 | SLBE | Caucasian         |
| 1   | survey                    | Northwest Surveying Inc.                   | 813-889-9236 | 813-886-3315 | jsilva@nsitampa.com                    | 8409 SUNSTATE STREET               | TAMPA          | FL    | 33634   | 592899240 | SLBE | Hispanic American |
| 3   | MOT                       | M.P.G. & Company, Inc.                     | 727-518-1761 | 727-518-1751 | mpg8949@aol.com                        | 8949 131ST PLACE NORTH             | LARGO          | FL    | 33773   | 593143615 | SLBE | Caucasian         |
| 3   | MOT                       | Beato Group, Inc.                          | 813-252-0196 |              | Info@BeatoGroup.com                    | 8961 Turnstone Haven Place         | Tampa          | FL    | 33619   | 454003966 | SLBE | Hispanic American |
| 4   | Demolition                | 2 Meyer Corp.                              | 813-210-4864 | 813-645-5634 | Renatonjr@aol.com                      | 6308 Lake Sunrise Dr.              | Apollo Beach   | FL    | 33572   | 562384669 | SLBE | Caucasian         |
| 4   | Demolition                | John Varrati, LLC                          | 813-938-1818 |              | magnumdemo@live.com                    | 1609 North 31st Street             | Tampa          | FL    | 33605   | 272161968 | SLBE | Caucasian         |
| 4   | Demolition                | Johnson's Excavation & Services, Inc.      | 813-752-7097 | 813-719-9052 | sales@jescontracting.com               | 1706 East Trapnell Road            | Plant City     | FL    | 33566   | 593031174 | SLBE | Caucasian         |
| 4   | Demolition                | Pavemaster Asphalt Paving LLC              | 813-671-7300 | 813-671-7311 | Dawn@pavemasterfl.com                  | 6115 Hartford St                   | Tampa          | FL    | 33619   | 830708817 | SLBE | Caucasian         |
| 4   | Demolition                | Tampa Bay Construction & Engineering, Inc. | 813-984-9898 | 813-111-1111 | tampabayconstructioninc@gmail.com      | 10503 Palm Cove Ave                | Tampa          | FL    | 33647   | 593713572 | SLBE | Caucasian         |
| 4   | Demolition                | TNT Environmental, LLC                     | 352-437-5563 | 352-437-3515 | tntenvironmental@gmail.com             | 17852 Pine Knoll Drive             | Dade City      | FL    | 33523   | 263864129 | SLBE | Caucasian         |
| 4   | Demolition                | AJ GENERAL CONSTRUCTION SERVICES INC       | 863-943-4095 | 813-315-6432 | irma@ajgeneralconstruct.com            | 5415 SHAKESPEAR DR                 | DOVER          | FL    | 33527   | 820821263 | SLBE | Hispanic American |
| 4   | Demolition                | American Grinding Concrete LLC             | 813-453-8075 | 813-453-8075 | julioagconcrete@gmail.com              | 5370 Nichols Rd                    | Mulberry       | FL    | 33860   | 850922983 | SLBE | Hispanic American |
| 4   | Demolition                | Central Eagles Construction, Inc.          | 813-484-4272 |              | Halvarado@centraleaglesinc.com         | 8307 State Road 674                | Wimauma        | FL    | 33598   | 921855671 | SLBE | Hispanic American |
| 4   | Demolition                | Central Florida Contractors Inc            | 727-596-0708 |              | sidewalks@aol.com                      | 13345 Pine Bark Ct                 | Largo          | FL    | 33774   | 593119568 | SLBE | Hispanic American |
| 4   | Demolition                | Charles Utilities Inc                      | 813-388-8350 |              | jlouro@charlesutilities.com            | 726 N Forbes Rd                    | Plant City     | FL    | 33566   | 464884435 | SLBE | Hispanic American |
| 4   | Demolition                | Ortzak Construction Group, LLC             | 813-961-6023 | 813-961-6023 | dcastro@ortzak.com                     | 13014 N. Dale Mabry Hwy, Suite 623 | Tampa          | FL    | 33618   | 454837502 | SLBE | Hispanic American |
| 4   | Demolition                | SOUTHEAST ABATEMENT SERVICES, Inc          | 727-530-3038 | 727-530-3068 | sanava@seasusa.com                     | 230 Commerce Dr N                  | Largo          | FL    | 33770   | 223922403 | SLBE | Hispanic American |
| 4   | Demolition                | YD Enterprises, Inc                        | 813-704-7941 | 813-704-7941 | yamil.YDEnterprises@gmail.com          | 20067 Oakflower Ave                | Tampa          | FL    | 33647   | 464653975 | SLBE | Hispanic American |
| 6   | Permanent Erosion Control | CARJA CONSTRUCTION, INC                    | 813-304-7158 |              | Carly@puleosconcrete.com               | 2010 chickwood ct                  | Tampa          | FL    | 33618   | 463665283 | SLBE | Caucasian         |
| 6   | Permanent Erosion Control | SGM INDUSTRIAL WORKS, INC.                 | 813-380-6691 |              | smoreno@sgmworks.org                   | 613 E SAM ALLEN RD                 | PLANT CITY     | FL    | 33563   | 922128681 | SLBE | Caucasian         |
| 6   | Permanent Erosion Control | H.B. Underground Inc                       | 813-455-5815 |              | hugo726b@gmail.com                     | 11500 N Dale Mabry Hwy             | Tampa          | FL    | 33618   | 842208449 | SLBE | Hispanic American |
| 7   | Tree Services             | lavishblossoms                             | 727-221-3887 |              | lavishblossoms@gmail.com               | 8405 Boulder Place                 | Tampa          | FL    | 33615   | 853081562 | SLBE | Asian American    |
| 7   | Tree Services             | J & J Diversified, LLC                     | 850-509-4800 |              | john.mader@mac.com                     | 4967 72nd Ave North                | Pinellas Park  | FL    | 33781   | 862042363 | SLBE | Caucasian         |
| 7   | Tree Services             | JFSR Enterprise LLC                        | 813-284-5979 |              | jfsrenterprise@gmail.com               | 9610 Norwood Dr                    | Tampa          | FL    | 33624   | 872653544 | SLBE | Caucasian         |
| 7   | Tree Services             | JTCM Inc                                   | 813-935-7724 |              | office@lawnsculptures.net              | 817 S MacDill Ave                  | Tampa          | FL    | 33609   | 562418914 | SLBE | Caucasian         |
| 7   | Tree Services             | Always Green Landscaping                   | 813-516-0823 |              | alwaysgreenlandscapinginc@gmail.com    | 6750 Shelby Lynn Way               | Zephyrhills    | FL    | 33542   | 820580963 | SLBE | Hispanic American |
| 7   | Tree Services             | Baron's Landscaping Services, Inc.         | 813-404-1509 | 813-443-4919 | baronslawncare@gmail.com               | 1704 N Riverhills Drive            | Temple Terrace | FL    | 33617   | 850837654 | SLBE | Hispanic American |
| 7   | Tree Services             | Bella Luna Services LLC                    | 813-569-8763 | 813-200-8948 | bellalunallc@yahoo.com                 | 106 E Lumsden rd                   | Brandon        | FL    | 33511   | 463933808 | SLBE | Hispanic American |
| 7   | Tree Services             | D & J LAWN SERVICES OF LAKELAND LLC        | 863-859-3525 |              | estimator@sodbydandj.com               | 575 Old Polk City Road             | Lakeland       | FL    | 33809   | 273279070 | SLBE | Hispanic American |
| 7   | Tree Services             | DPI Pressure Washing LLC                   | 813-991-7243 |              | mauricio@pressurewashingclearwater.com | 1132 Sunset Point Rd               | Clearwater     | FL    | 33755   | 454121954 | SLBE | Hispanic American |
| 7   | Tree Services             | ELITE GROUNDS FL                           | 813-678-6410 |              | elitegroundsfl@gmail.com               | 11406 n dale mabry hwy             | tampa          | FL    | 33618   | 850491094 | SLBE | Hispanic American |
| 7   | Tree Services             | Lago Consulting & Services                 | 813-774-5559 | 813-774-5045 | maria@lago-consulting.com              | 4237 Henderson Boulevard           | Tampa          | FL    | 33629   | 461766533 | SLBE | Hispanic American |
| 7   | Tree Services             | Nelson's Tree Farm and Nursery             | 813-842-4663 | 813-350-9139 | kimberly.martinez33@gmail.com          | 19139 Geraci Rd.                   | Lutz           | FL    | 33549   | 593404710 | SLBE | Hispanic American |
| 7   | Tree Services             | Olvera Landscaping                         | 813-360-2942 |              | olveralandscapingvega@gmail.com        | 1706 W Charlotte St Apt C          | Plant City     | FL    | 33563   | 864994209 | SLBE | Hispanic American |
| 7   | Tree Services             | Pine Lake Services, Inc.                   | 813-948-4736 | 813-948-4914 | janet@pinelakenurseryinc.com           | 2122 Henley Rd.                    | Lutz           | FL    | 33548   | 273360158 | SLBE | Hispanic American |

**FY24 Ditch Rehabilitation - Grady Avenue 43rd Street**  
**FY 24 Project 24-C-00041**  
**SLBE Availability Contact List**

| #'s | Subtask                | Business Name                               | Phone        | Fax          | Email                                  | Address                         | City           | Sta<br>te | Zipcode | FEIN      | EBO  | Ethnicity         |
|-----|------------------------|---|--------------|--------------|--|---------------------------------|----------------|-----------|---------|-----------|------|-------------------|
| 7   | Tree Services          | Ramos Top Pro-Services LLC                  | 407-883-8535 |              | Darianr89@yahoo.com                    | 111 Emily Lane                  | Brandon        | FL        | 33510   | 852635748 | SLBE | Hispanic American |
| 7   | Tree Services          | THE TEIDE LANDSCAPING INC                   | 813-580-4056 |              | THE_TEIDE@HOTMAIL.COM                  | 12353 JILLIAN CIR               | HUDSON         | FL        | 34669   | 852221492 | SLBE | Hispanic American |
| 7   | Tree Services          | Tronco's Land of Florida, Inc.              | 813-751-9443 |              | troncosland@gmail.com                  | 9202 Celebration Ct             | Tampa          | FL        | 33647   | 842385721 | SLBE | Hispanic American |
| 9   | Miscellaneous Concrete | CARJA CONSTRUCTION, INC                     | 813-304-7158 |              | Carly@puleosconcrete.com               | 2010 chickwood ct               | Tampa          | FL        | 33618   | 463665283 | SLBE | Caucasian         |
| 9   | Miscellaneous Concrete | SGM INDUSTRIAL WORKS, INC.                  | 813-380-6691 |              | smoreno@sgmworks.org                   | 613 E SAM ALLEN RD              | PLANT CITY     | FL        | 33563   | 822128681 | SLBE | Caucasian         |
| 9   | Miscellaneous Concrete | H.B. Underground Inc                        | 813-455-5815 |              | hugo726b@gmail.com                     | 11500 N Dale Mabry Hwy          | Tampa          | FL        | 33618   | 842208449 | SLBE | Hispanic American |
| #   | Fencing                | JEB Management, Inc.                        | 813-968-1921 | 813-241-6070 | info@fence4u.biz                       | 5804 N. Occident Street         | Tampa          | FL        | 33614   | 830416868 | SLBE | Caucasian         |
| #   | Fencing                | Specialist Fence/Concrete LLC               | 813-677-3555 | 813-671-4172 | info@specialistfence.org               | 12719 US Highway 41             | Gibson         | FL        | 33534   | 812219552 | SLBE | Caucasian         |
| #   | Fencing                | Ballfer Service Corp                        | 305-303-5567 |              | ballferservice@gmail.com               | 1517 South US-HWY 41, Suite 102 | Ruskin         | FL        | 33570   | 843583354 | SLBE | Hispanic American |
| #   | Fencing                | Best Made Enterprises, Inc.                 | 813-248-5266 | 813-248-1299 | Info@BestMadeFence.com                 | 4133 Causeway Blvd.             | Tampa          | FL        | 33619   | 893498525 | SLBE | Hispanic American |
| #   | Fencing                | Ultimate Property Enhancement LLC           | 813-369-1571 |              | info@ultimateservices.com              | 8313 FOUNTAIN AVE               | Tampa          | FL        | 33615   | 872449403 | SLBE | Hispanic American |
| #   | Landscaping            | lavishblossoms                              | 727-221-3887 |              | lavishblossoms@gmail.com               | 8405 Boulder Place              | Tampa          | FL        | 33615   | 853081562 | SLBE | Asian American    |
| #   | Landscaping            | 2 Meyer Corp.                               | 813-210-4864 | 813-645-5634 | Renatonjr@aol.com                      | 6308 Lake Sunrise Dr.           | Apollo Beach   | FL        | 33572   | 862384669 | SLBE | Caucasian         |
| #   | Landscaping            | Aqua Pro Irrigation & Outdoor Services, LLC | 813-814-4437 | 813-814-9710 | ken@aquaproirrigation.com              | 375 Douglas Road East           | Oldsmar        | FL        | 34677   | 900843885 | SLBE | Caucasian         |
| #   | Landscaping            | J & J Diversified, LLC                      | 850-509-4800 |              | john.mader@mac.com                     | 4967 72nd Ave North             | Pinellas Park  | FL        | 33781   | 862042363 | SLBE | Caucasian         |
| #   | Landscaping            | JFSR Enterprise LLC                         | 813-284-5979 |              | jfsrenterprise@gmail.com               | 9610 Norwood Dr                 | Tampa          | FL        | 33624   | 872653544 | SLBE | Caucasian         |
| #   | Landscaping            | Johnson's Excavation & Services, Inc.       | 813-752-7097 | 813-719-9052 | sales@jescontracting.com               | 1706 East Trapnell Road         | Plant City     | FL        | 33566   | 893031174 | SLBE | Caucasian         |
| #   | Landscaping            | JTCM Inc                                    | 813-935-7724 |              | office@lawnsculptures.net              | 1707 S MacDill Ave              | Tampa          | FL        | 33609   | 862418914 | SLBE | Caucasian         |
| #   | Landscaping            | Sunbelt Sod & Grading Company               | 813-641-9855 | 813-434-9038 | lesley@sunbeltsod.com                  | 819 - 9th St. N.E.              | Ruskin         | FL        | 33570   | 834250933 | SLBE | Caucasian         |
| #   | Landscaping            | Tampa Bay Construction & Engineering, Inc.  | 813-984-9898 | 813-111-1111 | tampabayconstructioninc@gmail.com      | 10503 Palm Cove Ave             | Tampa          | FL        | 33647   | 893713572 | SLBE | Caucasian         |
| #   | Landscaping            | Always Green Landscaping                    | 813-516-0823 |              | alwaysgreenlandscapinginc@gmail.com    | 6750 Shelby Lynn Way            | Zephyrhills    | FL        | 33542   | 820580963 | SLBE | Hispanic American |
| #   | Landscaping            | Baron's Landscaping Services, Inc.          | 813-404-1509 | 813-443-4919 | baronslawncare@gmail.com               | 1704 N Riverhills Drive         | TEMPLE TERRACE | FL        | 33617   | 850837654 | SLBE | Hispanic American |
| #   | Landscaping            | Bella Luna Services LLC                     | 813-569-8763 | 813-200-8948 | bellalunallc@yahoo.com                 | 106 E Lumsden rd                | Brandon        | FL        | 33511   | 863933808 | SLBE | Hispanic American |
| #   | Landscaping            | D & J LAWN SERVICES OF LAKE LAND LLC        | 863-859-3525 |              | estimator@sodydandj.com                | 575 Old Polk City Road          | Lakeland       | FL        | 33809   | 873279070 | SLBE | Hispanic American |
| #   | Landscaping            | DPI Pressure Washing LLC                    | 813-991-7243 |              | mauricio@pressurewashingclearwater.com | 1132 Sunset Point Rd            | Clearwater     | FL        | 33755   | 854121954 | SLBE | Hispanic American |
| #   | Landscaping            | ELITE GROUNDS FL                            | 813-678-6410 |              | elitergroundsfll@gmail.com             | 11406 n dale mabry hwy          | tampa          | FL        | 33618   | 850491094 | SLBE | Hispanic American |
| #   | Landscaping            | Lago Consulting & Services                  | 813-774-5559 | 813-774-5045 | maria@lago-consulting.com              | 4237 Henderson Boulevard        | Tampa          | FL        | 33629   | 861766533 | SLBE | Hispanic American |
| #   | Landscaping            | Nelson's Tree Farm and Nursery              | 813-842-4663 | 813-350-9139 | kimberly.martinez33@gmail.com          | 19139 Geraci Rd.                | Lutz           | FL        | 33549   | 893404710 | SLBE | Hispanic American |
| #   | Landscaping            | Olvera Landscaping                          | 813-360-2942 |              | olveralandscapingvega@gmail.com        | 1706 W Charlotte St Apt C       | Plant City     | FL        | 33563   | 864994209 | SLBE | Hispanic American |
| #   | Landscaping            | Pine Lake Services, Inc.                    | 813-948-4736 | 813-948-4914 | janet@pinelakenurseryinc.com           | 2122 Henley Rd.                 | Lutz           | FL        | 33548   | 873360158 | SLBE | Hispanic American |
| #   | Landscaping            | Ramos Top Pro-Services LLC                  | 407-883-8535 |              | Darianr89@yahoo.com                    | 111 Emily Lane                  | Brandon        | FL        | 33510   | 852635748 | SLBE | Hispanic American |
| #   | Landscaping            | RODRIGUEZ SOD RANCH INC                     | 813-886-2163 |              | rodriguezsod ranch@yahoo.com           | 7608 W Linebaugh Ave            | Tampa          | FL        | 33625   | 855303273 | SLBE | Hispanic American |
| #   | Landscaping            | THE TEIDE LANDSCAPING INC                   | 813-580-4056 |              | THE_TEIDE@HOTMAIL.COM                  | 12353 JILLIAN CIR               | HUDSON         | FL        | 34669   | 852221492 | SLBE | Hispanic American |
| #   | Landscaping            | Tronco's Land of Florida, Inc.              | 813-751-9443 |              | troncosland@gmail.com                  | 9202 Celebration Ct             | Tampa          | FL        | 33647   | 842385721 | SLBE | Hispanic American |

## FY24 Ditch Rehabilitation - Grady Avenue 43rd Street

## FY 24 Project 24-C-00041

## Non-UWMBE/SLBE Availability Contact List

| #'s | Subtask                   | Business Name                                  | Phone        | Fax          | Email                                   | Address                            | City              | e  | Zipcode | FEIN      | EBO | Ethnicity         |
|-----|---------------------------|--|--------------|--------------|---|------------------------------------|-------------------|----|---------|-----------|-----|-------------------|
| 1   | survey                    | L & S Diversified, LLC                         | 407-681-3836 | 000-000-0000 | sherry.manor@lssurveyor.com             | 489 FL-436                         | Casselberry       | FL | 32730   | 272336599 | ABE | Asian American    |
| 1   | survey                    | Element Engineering Group, LLC                 | 813-386-2101 | 813-386-2106 | dgl@elementeg.com                       | 1713 E 9th Avenue                  | Tampa             | FL | 33605   | 562565488 | HBE | Hispanic American |
| 1   | survey                    | F.R. Aleman & Associates, Inc.                 | 305-591-8777 | 305-599-8749 | marketing@fr-aleman.com                 | 3014 US Highway 301 N              | TAMPA             | FL | 33619   | 592751524 | HBE | Hispanic American |
| 1   | survey                    | Kisinger Campo & Assoc., Corp.                 | 813-871-5331 | 813-871-5135 | operations@kisingercampo.com            | 201 N Franklin St.                 | Tampa             | FL | 33602   | 591677145 | HBE | Hispanic American |
| 1   | survey                    | Northwest Surveying Inc.                       | 813-889-9236 | 813-886-3315 | jsilva@nshitampa.com                    | 8409 SUNSTATE STREET               | TAMPA             | FL | 33634   | 592899240 | HBE | Hispanic American |
| 1   | survey                    | On Point Surveying, Inc.                       | 407-989-8102 | 407-989-8102 | operations@on-pointsurveying.com        | 502 Oakland Terrace                | Lake Mary         | FL | 32746   | 364943884 | HBE | Hispanic American |
| 1   | survey                    | Hyatt Survey Services Inc                      | 941-748-4693 | 941-744-1643 | pam@hyatt-survey.com                    | 2012 Lena Rd                       | Bradenton         | FL | 34211   | 030476653 | WBE | Caucasian         |
| 1   | survey                    | Land Precision Corporation                     | 727-796-2737 | 727-796-3326 | rcorbitt@landprecision.com              | 2683 SUNSET POINT ROAD             | CLEARWATER        | FL | 33759   | 593088679 | WBE | Caucasian         |
| 1   | survey                    | Madrid Engineering Group, Inc. dba Madrid CPWG | 813-361-2644 | 863-533-8997 | sheila.tarte@madridcpwg.com             | 3918 North Highland Ave            | Tampa             | FL | 33603   | 593156722 | WBE | Caucasian         |
| 1   | survey                    | Suncoast Land Surveying, Inc.                  | 813-854-1342 | 813-354-3435 | katie@suncoastls.com                    | 111 Forest Lakes Blvd. S.          | Oldsmar           | FL | 34677   | 592733609 | WBE | Caucasian         |
| 3   | MOT                       | M.P.G. & Company, Inc.                         | 727-518-1761 | 727-518-1751 | mrg8949@aol.com                         | 8949 131ST PLACE NORTH             | LARGO             | FL | 33773   | 593143615 | WBE | Caucasian         |
| 3   | MOT                       | TRAFFIC CONTROL PRODUCTS OF FLORIDA INC        | 813-621-8484 | 813-621-4611 | kw@trafficcontrolproducts.org           | 5514 CARMACK RD                    | TAMPA             | FL | 33610   | 592582822 | WBE | Caucasian         |
| 3   | MOT                       | USA Protek                                     | 863-944-1422 | 000-000-0000 | dstengel@usaprotek.com                  | 2404 Crews Lake Hills Loop North   | Lakeland          | FL | 33813   | 872299161 | WBE | Caucasian         |
| 3   | MOT                       | B & E Signal and Lighting, Inc.                | 941-210-2557 |              | nisa@beutility.com                      | 8450 N Tamiami Trl                 | Sarasota          | FL | 34243   | 202880417 | ABE | Asian American    |
| 3   | MOT                       | Beato Group, Inc.                              | 813-252-0196 |              | Info@BeatoGroup.com                     | 8961 Turnstone Haven Place         | Tampa             | FL | 33619   | 654003966 | HBE | Hispanic American |
| 4   | Demolition                | AJ GENERAL CONSTRUCTION SERVICES INC           | 863-943-4095 | 813-315-6432 | irma@ajgeneralconstruct.com             | 5415 SHAKESPEAR DR                 | DOVER             | FL | 33527   | 820821263 | HBE | Hispanic American |
| 4   | Demolition                | American Grinding Concrete LLC                 | 813-453-8075 | 813-453-8075 | julioagconcrete@gmail.com               | 5370 Nichols Rd                    | Mulberry          | FL | 33860   | 850922983 | HBE | Hispanic American |
| 4   | Demolition                | Central Eagles Construction, Inc.              | 813-484-4272 |              | Halvarado@centraleaglesinc.com          | 8307 State Road 674                | Wimauma           | FL | 33598   | 821855671 | HBE | Hispanic American |
| 4   | Demolition                | Central Florida Contractors Inc                | 727-596-0708 |              | sidewalks@aol.com                       | 13345 Pine Bark Ct                 | Largo             | FL | 33774   | 593119568 | HBE | Hispanic American |
| 4   | Demolition                | Charles Utilities Inc                          | 813-388-8350 |              | jlouro@charlesutilities.com             | 726 N Forbes Rd                    | Plant City        | FL | 33566   | 664884435 | HBE | Hispanic American |
| 4   | Demolition                | Cherokee Enterprises, Inc.                     | 305-828-3353 | 305-828-9317 | pgomez@cherokeecorp.com                 | 12981 NW 113th Ct                  | Medley            | FL | 33178   | 650891158 | HBE | Hispanic American |
| 4   | Demolition                | Cornerstone Construction Services, Inc.        | 407-299-3299 | 407-299-3294 | astone@ccsorlando.com                   | 4205 Edgewater Drive Suite A       | Orlando           | FL | 32804   | 592864526 | HBE | Hispanic American |
| 4   | Demolition                | Flotech Environmental, LLC                     | 305-505-5565 |              | ynet.quintana@flotechllc.com            | 657 South Drive                    | Miami             | FL | 33166   | 654556187 | HBE | Hispanic American |
| 4   | Demolition                | Ortzak Construction Group, LLC                 | 813-961-6023 | 813-961-6023 | dcastro@ortzak.com                      | 13014 N. Dale Mabry Hwy, Suite 623 | Tampa             | FL | 33618   | 654837502 | HBE | Hispanic American |
| 4   | Demolition                | Qualis Concrete LLC                            | 813-376-6305 |              | santiagoz@qualisconcrete.com            | 275 Lakay Pl                       | Longwood          | FL | 32779   | 842202184 | HBE | Hispanic American |
| 4   | Demolition                | SOUTHEAST ABATEMENT SERVICES, Inc              | 727-530-3038 | 727-530-3068 | sanava@seasusa.com                      | 230 Commerce Dr N                  | Largo             | FL | 33770   | 223922403 | HBE | Hispanic American |
| 4   | Demolition                | UIT LLC  | 786-519-4534 |              | uitllc@aol.com                          | 6993 NW 82 Ave                     | Miami             | FL | 33166   | 272127262 | HBE | Hispanic American |
| 4   | Demolition                | YD Enterprises, Inc                            | 813-704-7941 | 813-704-7941 | yamil.YDEnterprises@gmail.com           | 20067 Oakflower Ave                | Tampa             | FL | 33647   | 664653975 | HBE | Hispanic American |
| 4   | Demolition                | Blacktip Services, Inc.                        | 813-463-0255 | 321-285-2995 | blacktipemail@yahoo.com                 | 52 RILEY RD STE 422                | CELEBRATION       | FL | 34747   | 274431832 | WBE | Caucasian         |
| 4   | Demolition                | Flave A. Williams III Dozer Service, Inc.      | 727-856-3765 | 727-856-6298 | nwilliams@flavewilliamsdozerservice.com | 14717 Hays Road                    | Spring Hill       | FL | 34610   | 593225884 | WBE | Caucasian         |
| 4   | Demolition                | FORRISTALL ENTERPRISES INC                     | 941-729-8150 | 941-729-7345 | jessica@forristall.com                  | 2712 63rd Avenue East              | Bradenton         | FL | 34203   | 650227771 | WBE | Caucasian         |
| 4   | Demolition                | Pavemaster Asphalt Paving LLC                  | 813-671-7300 | 813-671-7311 | Dawn@pavemasterfl.com                   | 6115 Hartford St                   | Tampa             | FL | 33619   | 030708817 | WBE | Caucasian         |
| 5   | Temp Erosion Control      | ABSOLUTE EROSION CONTROL LLC                   | 407-729-5881 |              | KORTI@ABSOLUTEEROSION.COM               | 270 ARBOR DRIVE WEST               | PALM HARBOR       | FL | 34683   | 204394426 | HBE | Hispanic American |
| 5   | Temp Erosion Control      | Blacktip Services, Inc.                        | 813-463-0255 | 321-285-2995 | blacktipemail@yahoo.com                 | 52 RILEY RD STE 422                | CELEBRATION       | FL | 34747   | 274431832 | WBE | Caucasian         |
| 5   | Temp Erosion Control      | Koncept Carma, Inc.                            | 888-346-7779 | 407-792-2920 | kathryn@kcinow.com                      | 4445 Edgewater Dr                  | Orlando           | FL | 32804   | 671222102 | WBE | Caucasian         |
| 6   | Permanent Erosion Control | CARIA CONSTRUCTION, INC                        | 813-304-7158 |              | Carly@puleosconcrete.com                | 2010 chickwood ct                  | Tampa             | FL | 33618   | 663665283 | WBE | Caucasian         |
| 6   | Permanent Erosion Control | Diamant Development LLC                        | 352-551-3194 |              | diamantdevelopmentllc@gmail.com         | 905 Spring Valley Rd               | Altamonte Springs | FL | 32714   | 813746486 | WBE | Caucasian         |
| 6   | Permanent Erosion Control | Liberty Concrete Structures, LLC               | 407-864-2325 | 407-378-4250 | Bfiorillo@libertyconcretestructures.com | 13650 W Colonial Dr                | Winter Garden     | FL | 34787   | 825399301 | WBE | Caucasian         |
| 6   | Permanent Erosion Control | SGM INDUSTRIAL WORKS, INC.                     | 813-380-6691 |              | smoreno@sgmworks.org                    | 613 E SAM ALLEN RD                 | PLANT CITY        | FL | 33563   | 922128681 | WBE | Caucasian         |
| 6   | Permanent Erosion Control | Cornerstone Construction Services, Inc.        | 407-299-3299 | 407-299-3294 | astone@ccsorlando.com                   | 4205 Edgewater Drive Suite A       | Orlando           | FL | 32804   | 592864526 | HBE | Hispanic American |
| 6   | Permanent Erosion Control | H.B. Underground Inc                           | 813-455-5815 |              | hugo726b@gmail.com                      | 11500 N Dale Mabry Hwy             | Tampa             | FL | 33618   | 842208449 | HBE | Hispanic American |
| 7   | Tree Services             | lavishblossoms                                 | 727-221-3887 |              | lavishblossoms@gmail.com                | 8405 Boulder Place                 | Tampa             | FL | 33615   | 853081562 | ABE | Asian American    |
| 7   | Tree Services             | Always Green Landscaping                       | 813-516-0823 |              | alwaysgreenlandscapinginc@gmail.com     | 6750 Shelby Lynn Way               | Zephyrhills       | FL | 33542   | 320580963 | HBE | Hispanic American |
| 7   | Tree Services             | Baron's Landscaping Services, Inc.             | 813-404-1509 | 813-443-4919 | baronslawncare@gmail.com                | 1704 N Riverhills Drive            | Temple Terrace    | FL | 33617   | 650837654 | HBE | Hispanic American |
| 7   | Tree Services             | Batalan Enterprises Inc                        | 561-805-8687 |              | christina@propertyworksonline.net       | 3201 N Florida Avenue              | Tampa             | FL | 33603   | 870720106 | HBE | Hispanic American |
| 7   | Tree Services             | Bella Luna Services LLC                        | 813-569-8763 | 813-200-8948 | bellalunalc@yahoo.com                   | 106 E Lumsden rd                   | Brandon           | FL | 33511   | 663933808 | HBE | Hispanic American |
| 7   | Tree Services             | CES Consultants, Inc.                          | 813-444-5190 | 305-827-1121 | cesinfo@cesconsult.com                  | 2002 N Lois Avenue                 | Tampa             | FL | 33607   | 650792884 | HBE | Hispanic American |





**FY24 Ditch Rehabilitation - Grady Avenue 43rd Street  
 FY 24 Project 24-C-00041  
 Non-UWMBE/SLBE Availability Contact List**

| #'s | Subtask     | Business Name                       | Phone        | Fax          | Email                        | Address                 | City    | e  | Zipcode | FEIN      | EBO | Ethnicity         |
|-----|-------------|-------------------------------------|--------------|--------------|------------------------------|-------------------------|---------|----|---------|-----------|-----|-------------------|
| 12  | Landscaping | Pine Lake Nursery & Landscape, Inc. | 813-948-4736 | 813-948-4914 | Janet@pinelakenurseryinc.com | 12980 Tarpon Springs Rd | Odessa  | FL | 33556   | 893499734 | HBE | Hispanic American |
| 12  | Landscaping | Pine Lake Services, Inc.            | 813-948-4736 | 813-948-4914 | janet@pinelakenurseryinc.com | 2122 Henley Rd.         | Lutz    | FL | 33548   | 773360158 | HBE | Hispanic American |
| 12  | Landscaping | Ramos Top Pro-Services LLC          | 407-883-8535 |              | Darian89@yahoo.com           | 111 Emily Lane          | Brandon | FL | 33510   | 852635748 | HBE | Hispanic American |
| 12  | Landscaping | RODRIGUEZ SOD RANCH INC             | 813-886-2163 |              | rodriguezsod ranch@yahoo.com | 7608 W Linebaugh Ave    | Tampa   | FL | 33625   | 455303273 | HBE | Hispanic American |
| 12  | Landscaping | THE TEIDE LANDSCAPING INC           | 813-580-4056 |              | THE_TEIDE@HOTMAIL.COM        | 12353 JILLIAN CIR       | HUDSON  | FL | 34669   | 852221492 | HBE | Hispanic American |
| 12  | Landscaping | Tronco's Land of Florida, Inc.      | 813-751-9443 |              | troncosland@gmail.com        | 9202 Celebration Ct     | Tampa   | FL | 33647   | 842385721 | HBE | Hispanic American |

Instructions Regarding Use of the WMBE/SLBE Availability Contact List

**Bidders must solicit a subcontracting bid from ALL of the firms listed on the WMBE/SLBEs list provided within the Specifications,** and provide documentation of emails, faxes, phone calls, letters, or other communication with the firms as a first step in demonstrating Good-Faith Efforts to achieve the goal set for WMBE/SLBE participation on this contract.

The list is formatted to facilitate e-mailing of a solicitation to the listed firms by copying and pasting the email addresses.

The WMBE/SLBE participation Goal is based upon the availability of the certified firms indicated on the contact list. The Goal and Requirements of the City's Equal Business Opportunity Program are stated in the Bid/Contract Document, Specifications.

PROPOSAL

To the Mayor and City Council of the City of Tampa, Florida:

Legal Name of Bidder: \_\_\_\_\_

Bidder's Fictitious Name, *if applicable*: \_\_\_\_\_

Bidder is a/an:  Individual  Partnership\*  Joint Venture\*  LLC  Corp.  Other:

Bidder is organized under the laws of:  State of Florida  Other:

Bidder Mailing Address: \_\_\_\_\_

Bidder's Federal Employee Identification No. (FEI/EIN): \_\_\_\_\_

Bidder's License No.: \_\_\_\_\_ Bidder's FDOS (SUNBIZ) Doc. No.: \_\_\_\_\_  
(See Ch. 489, FS; use entity's, individual's only if applicable)

Bidder Contact Name\*\*: \_\_\_\_\_ Email: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

The below named person, appearing before the undersigned authority and after being first duly sworn, for him/herself and on behalf of the entity submitting this Proposal does hereby affirm and declare as follows:

- (1) He/She is of lawful age and is authorized to act on behalf of Bidder (the individual, partnership, corporation, entity, etc. submitting this Proposal) and that all statements made in this document are true and correct to the best of my knowledge.
- (2) If Bidder is operating under a fictitious name, Bidder has currently complied with any and all laws and procedures governing the operation of businesses under fictitious names in the State of Florida
- (3) No person or entity other than Bidder has any interest in this Proposal or in the Contract proposed to be entered into.
- (4) This Proposal is made without any understanding, agreement, or connection with any person or entity making Proposal for the same purposes, and is in all respects fair and without collusion or fraud.
- (5) Bidder is not in arrears to the City of Tampa, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the City of Tampa.
- (6) That no officer or employee or person whose salary is payable in whole or in part from the City Treasury is, shall be or become interested, directly or indirectly, as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the supplies, materials, or equipment and work or labor to which it relates, or in any portion of the profits thereof.
- (7) Bidder has carefully examined and fully understands the Solicitation and has full knowledge of the scope, nature, and quality of the work to be performed; furthermore, Bidder has carefully examined the site of the work and that, from his own investigations, he has satisfied himself as to the nature and location of the work, the character, quality, and quantity of materials and the kinds and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, affect the work or its performance.
- (8) Bidder (including its principals)  has |  has NOT been debarred or suspended from contracting with a public entity.
- (9) Bidder  has |  has NOT implemented a drug-free workplace program that meets the requirements of Section 287.087, Florida Statutes.
- (10) For bids \$1,000,000 and over;  The Bidder or its subcontractors participate in an apprenticeship program that is registered with the Florida Department of Education or the United States Department of Labor; or  Bidder commits that at the time it executes a construction contract that it or its subcontractors will be participating in such an apprenticeship program or an on-the-job training program; or  Bidder has submitted documentation that confirms, to the satisfaction of the City of Tampa, that there are no registered apprenticeship or on-the-job training programs for any work to be performed on the construction project.
- (11) Bidder has carefully examined and fully understands all the component parts of the Contract Documents and agrees Bidder will execute the Contract, provide the required Public Construction Bond, and will fully perform the work in strict accordance with the terms of the Contract and Contract Documents therein referred to for the following prices, to wit:

\* If a Partnership or Joint Venture, attach Partnership or Joint Venture Agreement.

\*\* Someone the City may contact with questions/correspondence regarding this Solicitation and/or permits.

**Contract 24-C-00041**  
**Ditch Rehabilitation – Grady Avenue 43rd Street**  
**Site 1: Grady Avenue**  
**Site 2: 43rd Street**

| Bid Item | Item No | Item Description                       | Unit | Quantity       |               |           | Unit Cost in Words           | Unit Cost | Total Price |
|----------|---------|--|------|----------------|---------------|-----------|------------------------------|-----------|-------------|
|          |         |  |      | Site 1 (Grady) | Site 2 (43rd) | Total Bid |                              |           |             |
| 1        | 100.01A | Contingency, Site 1 (Grady)*           | LS   | 1              | 0             | 1         | one hundred thousand dollars | \$100,000 | \$100,000   |
| 2        | 100.01B | Contingency, Site 2 (43rd)*            | LS   | 0              | 1             | 1         | one hundred thousand dollars | \$100,000 | \$100,000   |
| 3        | 100.02A | Mobilization, Site 1 (Grady)           | LS   | 1              | 0             | 1         |                              |           |             |
| 4        | 100.02B | Mobilization, Site 2 (43rd)            | LS   | 0              | 1             | 1         |                              |           |             |
| 5        | 100.03A | Maintenance of Traffic, Site 1 (Grady) | LS   | 1              | 0             | 1         |                              |           |             |
| 6        | 100.03B | Maintenance of Traffic, Site 2 (43rd)  | LS   | 0              | 1             | 1         |                              |           |             |
| 7        | 100.004 | Dewatering                             | LS   | 0.5            | 0.5           | 1         |                              |           |             |
| 8        | 100.005 | Construction Staking                   | LS   | 0.5            | 0.5           | 1         |                              |           |             |
| 9        | 100.006 | As-Built Plans                         | LS   | 0.5            | 0.5           | 1         |                              |           |             |
|          |         |  |      |                |               |           | <b>Subtotal (Items 1-9)</b>  | \$        | -           |
| 10       | 104.643 | Channel Check Structure, Rock          | LF   | 0              | 75            | 75        |                              |           |             |
| 11       | 104.646 | Silt Fence                             | LF   | 1600           | 0             | 1600      |                              |           |             |
| 12       | 104.647 | Floating Turbidity Barrier             | LF   | 0              | 80            | 80        |                              |           |             |
| 13       | 104.648 | Inlet Protection                       | EA   | 10             | 0             | 10        |                              |           |             |
| 14       | 110.001 | Clearing and Grubbing                  | AC   | 0.6            | 1             | 1.6       |                              |           |             |
| 15       | 110.023 | Tree Removal                           | EA   | 64             | 2             | 66        |                              |           |             |
| 16       | 110.086 | Guardrail Removal                      | LF   | 783            | 0             | 783       |                              |           |             |
| 17       | 110.520 | Concrete Curb Removal                  | LF   | 0              | 692           | 692       |                              |           |             |
| 18       | 110.525 | Concrete Removal                       | SY   | 0              | 30            | 30        |                              |           |             |
| 19       | 110.530 | Rip Rap Removal                        | SY   | 0              | 312           | 312       |                              |           |             |
| 20       | 110.550 | Fence Removal                          | LF   | 0              | 343           | 343       |                              |           |             |
| 21       | 115.001 | Roof Drain Modifications               | EA   | 0              | 2             | 2         |                              |           |             |
| 22       | 125.001 | Excavation, Earth                      | CY   | 100            | 0             | 100       |                              |           |             |
| 23       | 125.002 | Excavation (Unsuitable Material)       | CY   | 10             | 582           | 592       |                              |           |             |
| 24       | 125.003 | Embankment (Backfill)                  | CY   | 1300           | 0             | 1300      |                              |           |             |

**Contract 24-C-00041**  
**Ditch Rehabilitation – Grady Avenue 43rd Street**  
**Site 1: Grady Avenue**  
**Site 2: 43rd Street**

| Bid Item | Item No | Item Description                            | Unit | Quantity       |               |           | Unit Cost in Words              | Unit Cost | Total Price |
|----------|---------|---|------|----------------|---------------|-----------|---------------------------------|-----------|-------------|
|          |         |   |      | Site 1 (Grady) | Site 2 (43rd) | Total Bid |                                 |           |             |
| 25       | 125.104 | Structural Fill                             | CY   | 50             | 1074          | 1124      |                                 |           |             |
| 26       | 145.001 | Geotextile Fabric                           | SF   | 0              | 24850         | 24850     |                                 |           |             |
| 27       | 204.057 | Aggregate, FDOT No. 57 (Washed)             | CY   | 0              | 918           | 918       |                                 |           |             |
| 28       | 327.001 | Mill and Resurface, Asphalt (2")            | SY   | 0              | 2159          | 2159      |                                 |           |             |
| 29       | 350.006 | Concrete Slope Protection, Reinforced       | CY   | 0              | 631           | 631       |                                 |           |             |
| 30       | 425.001 | Inlet, FDOT 425-052, Type H                 | EA   | 6              | 0             | 6         |                                 |           |             |
| 31       | 425.004 | Junction Box, FDOT 425-010, Type J, 4' x 4' | EA   | 1              | 0             | 1         |                                 |           |             |
| 32       | 425.005 | Junction Box, FDOT 425-010, Type J, 6' x 4' | EA   | 1              | 0             | 1         |                                 |           |             |
| 33       | 425.006 | Junction Box, FDOT 425-010, Type J, 6' x 6' | EA   | 2              | 0             | 2         |                                 |           |             |
| 34       | 430.001 | Demolish and Remove Existing Culvert Pipe   | LF   | 57             | 0             | 57        |                                 |           |             |
| 35       | 430.015 | Pipe, RCP Storm Sewer, 15"                  | LF   | 8              | 0             | 8         |                                 |           |             |
| 36       | 430.018 | Pipe, RCP Storm Sewer, 18"                  | LF   | 12             | 0             | 12        |                                 |           |             |
| 37       | 430.024 | Pipe, RCP Storm Sewer, 24"                  | LF   | 6              | 0             | 6         |                                 |           |             |
| 38       | 430.036 | Pipe, RCP Storm Sewer, 36"                  | LF   | 201            | 0             | 201       |                                 |           |             |
| 39       | 430.45E | Pipe, ERCP Storm Sewer, 45"x29"             | LF   | 10             | 0             | 10        |                                 |           |             |
| 40       | 430.60E | Pipe, ERCP Storm Sewer, 60"x38"             | LF   | 487            | 0             | 487       |                                 |           |             |
| 41       | 440.004 | Pipe, Perforated PVC, 4"                    | LF   | 0              | 2800          | 2800      |                                 |           |             |
| 42       | 520-001 | Concrete Curb, Type D                       | LF   | 0              | 793           | 793       |                                 |           |             |
| 43       | 520-005 | Concrete Spillway                           | EA   | 0              | 4             | 4         |                                 |           |             |
| 44       | 530.001 | Endwall, Sand-Cement                        | EA   | 1              | 0             | 1         |                                 |           |             |
| 45       | 530.003 | Rip Rap, Rubble, 2 ft deep                  | SY   | 37             | 97            | 134       |                                 |           |             |
| 46       | 550.002 | Fence, Chainlink, FDOT Type B, 6 ft         | LF   | 36             | 395           | 431       |                                 |           |             |
| 47       | 550.003 | Fence, Chainlink, Swing Gate                | EA   | 0              | 1             | 1         |                                 |           |             |
| 48       | 570.001 | Sod   | SY   | 2904           | 1451          | 4355      |                                 |           |             |
| 49       | 710.001 | Pavement Marking, Paint, 4"                 | LF   | 0              | 600           | 600       |                                 |           |             |
|          |         |   |      |                |               |           | <b>Subtotal (Items 10 - 49)</b> |           |             |
|          |         |   |      |                |               |           | <b>Total</b>                    |           |             |

Computed Total Price in Words: \_\_\_\_\_  
 \_\_\_\_\_ dollars and \_\_\_\_\_ cents.

Computed Total Price in Figures: \$ \_\_\_\_\_

Bidder acknowledges that the following addenda have been received and that the changes covered by the addendum(s) have been taken into account in this proposal: #1 \_\_\_\_ #2 \_\_\_\_ #3 \_\_\_\_ #4 \_\_\_\_ #5 \_\_\_\_ #6 \_\_\_\_ #7 \_\_\_\_ #8 \_\_\_\_.

Bidder acknowledges the requirements of the City of Tampa's Equal Business Opportunity Program.

Bidder acknowledges that it is aware of Florida's Trench Safety Act (Sections 553.60-553.64, Florida Statutes), and agrees that Bidder together with any involved subcontractors will comply with all applicable trench safety standards. Bidder further acknowledges that included in the various items of this Proposal and the total bid price (as applicable) are costs for complying with the Trench Safety Act. Bidder further identifies the costs and methods summarized below:

|                       | Trench Safety Measure<br>(Description) | Unit of Measure<br>(LF, SY) | Unit<br>Quantity | Unit<br>Cost | Extended<br>Cost |
|-----------------------|--|-----------------------------|------------------|--------------|------------------|
| A.                    | _____                                  | _____                       | _____            | _____        | _____            |
| B.                    | _____                                  | _____                       | _____            | _____        | _____            |
| C.                    | _____                                  | _____                       | _____            | _____        | _____            |
| <b>Total Cost: \$</b> |  |                             |                  | _____        | _____            |

Accompanying this Proposal is a certified check, cashier's check or Tampa Bid Bond (form included herein must be used) for at least five percent (5%) of the total amount of the Proposal which check shall become the property of the City, or which bond shall become forthwith due and payable to the City, if this Proposal shall be accepted by the City and the Bidder shall fail to enter into a legally binding contract with and to furnish the required Public Construction Bond to the City within twenty (20) days after the date of its receipt of written Notice of Award by the City so to do.

**FAILURE TO COMPLETE THE ABOVE MAY RESULT IN THE PROPOSAL BEING DECLARED NON-RESPONSIVE.**

[SEAL] Name of Bidder: \_\_\_\_\_  
 Authorized Signature: \_\_\_\_\_  
 Signer's Printed Name: \_\_\_\_\_  
 Signer's Title: \_\_\_\_\_

STATE OF \_\_\_\_\_  
 COUNTY OF \_\_\_\_\_

For an entity: The forgoing instrument was sworn (or affirmed) before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_, a/n  Partnership  Joint Venture  LLC  Corp  Other: \_\_\_\_\_, on behalf of such entity. Such individual is  personally known to me or  produced a/n \_\_\_\_\_ state driver's license as identification.

For an individual: The forgoing instrument was sworn (or affirmed) before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_, who is  personally known to me or  produced a/n \_\_\_\_\_ state driver's license as identification.

[NOTARY SEAL] Notary Public, State of \_\_\_\_\_  
 Notary Printed Name: \_\_\_\_\_  
 Commission No.: \_\_\_\_\_  
 My Commission Expires: \_\_\_\_\_

**COERCION FOR LABOR OR SERVICES ATTESTATION**

Pursuant to Section 787.06(13), F.S., this form must be completed by an officer or representative of a nongovernmental entity when a contract is executed, renewed, or extended between the nongovernmental entity and a governmental entity.

\_\_\_\_\_ [name of entity] \_\_\_\_\_ does not use coercion for labor or services as defined in this Section 787.06, F.S.

Under penalties of perjury, I declare that I have read the foregoing statement and that the facts stated in it are true.

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**Bidder's Statement Regarding  
Bidder's Criminal History Screening Practices:**

Pursuant to Sec. 2-284. - Bidder's Criminal History Screening Practices, the bidder declares as follows:

The Bidder hereby declines any discount or incentive related to Section 2-284 Bidder's Criminal History Screening Practices.

The Bidder hereby applies for applicable discount or incentive related to Section 2-284 Bidder's Criminal History Screening Practices. The following documentation and assurances are provided:

\_\_\_ Notarized past employment analysis that includes the number of disadvantaged workers the bidder has hired in the past, or, if the bidder has never hired a disadvantaged worker, an explanation that the bidder made a good faith effort to hire a disadvantaged worker: and,

\_\_\_ An estimate of the number of disadvantaged workers that the bidder has hired or plans to hire if the bidder is awarded the project; and,

\_\_\_ Evidence that the bidder's recruitment literature and employment policy does not include language that is disadvantageous to a disadvantaged worker.

\_\_\_ Identifies, [ ]hereon [ ]in attached document, potential job opportunities under the project that may be available for disadvantaged workers if the City awards the Bidder the project; and,

\_\_\_ Agrees to consider for job placement at least one otherwise qualified disadvantaged worker, to the extent a job opportunity is available, if and after the Bidder is awarded the project; or

\_\_\_ The Bidder currently employs a percentage of disadvantaged workers consistent with industry standards as determined by the director of the soliciting department or designee.

Signed \_\_\_\_\_

Date \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Firm \_\_\_\_\_

Project \_\_\_\_\_



# Good Faith Effort Compliance Plan (GFCEP) Guidelines

for Women/Minority Business Enterprise/Small Local Business Enterprise Participation  
City of Tampa - Equal Business Opportunity Program  
**(Form MBD 50 – detailed instructions on page 2 of 2)**

Contract Name \_\_\_\_\_ Bid Date \_\_\_\_\_

Bidder/Proposer \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

The Compliance Plan with attachments is a true account of Good Faith Efforts (GFE) made to achieve the participation goals as specified for Women/Minority Business Enterprises/Small Local Business Enterprises (WMBE/SLBE) on the referenced contract:

- WMBE/SLBE participation **Goal is Not Specified for this Solicitation** however participation is aspirational and **GFCEP is required**.
- WMBE/SLBE participation **Goal is Met or Exceeded** (refer to Goal-Set Form MBD-90).
- WMBE/SLBE participation Goal is **Not Fully Achieved** (refer to Goal-Set Form MBD-90).

For each checkbox above Bidders/Proposers shall submit DMI Forms 10 and 20 which accurately report all subcontractors solicited and all subcontractors to-be-utilized. The following list is an overview of the required baseline GFCEP action steps for all bids/proposals. Furthermore, it is understood that these GFCEP requirements are weighted in the compliance evaluation based on the veracity and demonstrable degree of documentation provided with the bid/proposal:

(Check applicable boxes below - Must enclose supporting documents accordingly with Qualifying Remarks)

- (1) Solicited through reasonable and available means the interest of WMBE/SLBEs that have the capability to perform the work of the contract. The Bidder or Proposer must solicit this interest within enough time to allow the WMBE/SLBEs to respond. The Bidder or Proposer must take appropriate steps to follow up initial solicitations with interested WMBE/SLBEs.  See DMI report forms for subcontractors solicited.  See enclosed supplemental data on solicitation efforts.
  - Qualifying Remarks
- (2) Provided interested WMBE/SLBEs with adequate, specific scope information about the plans, specifications, and requirements of the contract, including addenda, in a timely manner to assist them in responding to the requested scope identified by bidder/proposer for the solicitation.  See enclosed actual solicitations used.
  - Qualifying Remarks
- (3) Negotiated in good faith with interested WMBE/SLBEs that have submitted bids (e.g. adjusted quantities or scale). Documentation of negotiation must include the names, addresses, and telephone numbers of WMBE/SLBEs that were solicited; the date of each such solicitation; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why agreements could not be reached with WMBE/SLBEs to perform the work. Additional costs involved in soliciting and using subcontractors is not a sufficient reason for a bidder/proposer's failure to meet goals or achieve participation, as long as such costs are reasonable. Bidders are not required to accept excessive quotes in order to meet the goal.
  - DMI Utilized Forms for sub-(contractor/consultant) reflect genuine negotiations  This project is an RFQ/RFP in nature and negotiations are limited to clarifications of scope/percentages, specifications, qualifications and subs fee schedules.  See enclosed documentation.
  - Qualifying Remarks
- (4) Not rejecting WMBE/SLBEs as being unqualified without justification based on a thorough investigation of their capabilities. The WMBE/SLBEs standing within its industry, membership in specific groups, organizations / associations and political or social affiliations are not legitimate causes for rejecting or not soliciting bids to meet the goals.
  - Not applicable.  See attached justification for rejection of a subcontractor's bid or proposal.  Qualifying Remarks
- (5) Made scope(s) of work available to WMBE/SLBE subcontractors and suppliers; and, segmented portions of the work or material consistent with the available WMBE/SLBE subcontractors and suppliers, to facilitate meeting the goal.  In addition, Sub-Contractors could bid on their own choice of work or trade without restriction to a pre-determined portion.  See enclosed comments.  Qualifying Remarks
- (6) Made good faith efforts, despite the ability or desire of Bidder/Proposer to perform the sub-tasks of a contract with its own forces/organization. A Bidder/Proposer who desires to self-perform the sub-tasks of a contract must demonstrate good faith efforts if the goal has not been met.  Sub-Contractors were not prohibited from submitting bids/proposals and were solicited on work typically self-performed by the prime.  Qualifying Remarks w/Documents
- (7) Segmented the portions of the work to be performed by WMBEs/SLBEs in order to increase the likelihood that the goals will be met. This includes, where appropriate, breaking out contract work items into economically feasible units (quantities/scale) to facilitate WMBE/SLBE participation, even when the Bidder/Proposer might otherwise prefer to perform these work items with its own forces.  Sub-Contractors could bid on their own choice of work or trade without restriction to a pre-determined portion.  Sub-Contractors were not prohibited from submitting bids/proposals and were solicited on work typically self-performed by the prime.  See enclosed comments.  Qualifying Remarks
- (8) Made efforts to assist interested WMBEs/SLBEs in obtaining bonding, lines of credit, or insurance as required by the City or contractor.
  - See enclosed documentation on initiatives undertaken and methods to accomplish.  Qualifying Remarks
- (9) Made efforts to assist interested WMBEs/SLBEs in obtaining necessary equipment, supplies, materials, or related assistance or services, including participation in an acceptable mentor-protégé program.  See enclosed documentation of initiatives and/or agreements.  Qualifying Remarks
- (10) Effectively used the services of the City and other organizations that provide assistance in the recruitment and placement of WMBEs/SLBEs.
  - See enclosed documentation of services engaged.  Overview (attached) of tactical actions and resources employed toward recruitment

**Note:** Any unsolicited information in support of your Bid/RFP Compliance must accompany your submittal.  Identify Information Submitted



**Participation Plan: Guidance for Complying with Good Faith Efforts Outreach**  
**(page 2 of 2)**

- (1) All firms on the WMBE/SLBE Goal Setting List must be solicited and documentation provided for email, fax, letters, phone calls, and other methods of outreach/communication with the listed firms. The DMI Solicited and DMI-Utilized forms must be completed for all firms solicited and all firms utilized. Other opportunities for subcontracting should be explored to attain participation. May consult Tampa EBO Office and/or researching the on-line Diversity Management Business System Directory for Tampa certified WMBE/SLBE firms.
- (2) Solicitation of WMBE/SLBEs, via written or electronic notification, should provide specific information on the services needed, where plans can be reviewed and assistance offered in obtaining these, if required. Solicitations should be sent a minimum of a week (i.e. 5 city business days or more) before the bid/proposal date. Actual copies of the bidder's solicitation containing their scope-specific instructions should be provided.
- (3) With any quotes received, a follow-up should be made when needed to confirm detail scope of work. For any WMBE/SLBE low quotes rejected, an explanation shall be provided detailing negotiation efforts.
- (4) If a low bid WMBE/SLBE is rejected or deemed unqualified the contractor must provide an explanation and supporting documentation for this decision.
- (5) Prime shall break down portions of work into economical feasible opportunities for subcontracting. The WMBE/SLBE directory may be useful in identifying additional subcontracting opportunities and certified firms not listed in the "WMBE/SLBE Goal Setting Firms Contact List."
- (6) Contractor shall not preclude WMBE/SLBEs from bidding on any part of work, even if the Contractor may desire to self-perform aspects of the work.
- (7) Contractor shall avoid relying solely on subcontracting those scopes of work where WMBE/SLBE availability is not sufficient to attain pre-determined goals; including RFP/RFQ solicitations, all of which require GFECF compliance to achieve sub-consultant participation.
- (8) In its solicitations, the Bidder should offer assistance to WMBE/SLBEs in obtaining bonding, insurance, et cetera, if required of subcontractors by the City or Prime Contractor.
- (9) In its solicitation, the Bidder should offer assistance in obtaining equipment for a specific job to WMBE/SLBEs, if needed. This includes mobilization where applicable.
- (10) Contractor should use the services offered by such agencies as the Small Business Development Center (SBDC) @ University South Fla.; SBDC @ Hillsborough County Entrepreneur Collaborative Center; Hillsborough NAACP Empowerment Center; Hillsborough County Economic Development Department DM/DWBE/SBE Program and Prospera-Hispanic Business Assoc. to name a few for the recruitment and placement of available WMBEs/SLBEs.



**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**

**Page 1 of 4 – DMI Solicited/Utilized Schedules  
City of Tampa – Schedule of **All Solicited** Sub-(Contractors/Consultants/Suppliers)  
(FORM MBD-10)**

Contract No.: \_\_\_\_\_ Contract Name: \_\_\_\_\_  
Company Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Check applicable box(es). Detailed Instructions for completing this form are on page 2 of 4.

**No Firms were contacted or solicited for this contract.**

**No Firms were contacted because:** \_\_\_\_\_

**See attached list of additional Firms solicited and all supplemental information (List must comply to this form)**

**Note: Form MBD-10 must list ALL subcontractors solicited including Non-minority/small businesses**

NIGP Code Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

| S = SLBE<br>W=WMBE<br>O = Neither | Company Name<br>Address<br>Phone, Fax, Email | Type of Ownership<br>(F=Female M=Male)<br>BF BM = African Am.<br>HF HM = Hispanic<br>AF AM = Asian Am.<br>NF NM = Native Am.<br>CF CM = Caucasian | Trade or<br>Services<br><br>NIGP Code<br>(listed<br>above) | Contact<br>Method<br>L=Letter<br>F=Fax<br>E=Email<br>P=Phone | Quote<br>or<br>Response<br>Received<br>Y/N |
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Failure to Complete, Sign and Submit  
this form with your Bid or Proposal  
Shall render the Bid Non-Responsive  
(Do Not Modify This Form)

It is hereby certified that the information provided is an accurate and true account of contacts and solicitations for sub-contracting opportunities on this contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**  
**Forms must be included with Bid / Proposal**



## Page 2 of 4 – DMI Solicited/Utilized

### Instructions for completing The Sub-(Contractors/Consultants/ Suppliers) Solicited Form (Form MBD-10)

**This form must be submitted with all bids or proposals.** All subcontractors (regardless of ownership or size) solicited and subcontractors from whom unsolicited quotations were received must be included on this form. The instructions that follow correspond to the headings on the form required to be completed. Note: Ability or desire to self-perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

- **Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.
- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business and/or doing business as (dba) if applicable.
- **Address.** The physical address of your business.
- **Federal ID.** FIN. A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **No Firms were contacted or solicited for this contract.** Checking the box indicates that a pre-determined Subcontract Goal or Participation Plan Requirement was not set by the City resulting in your business not using subcontractors and will self-perform all work. If during the performance of the contract you employ subcontractors, the City must pre-approve subcontractors. Use of the “Sub-(Contractors/Consultants/Suppliers) Payments” form (MBD Form-30) must be submitted with every pay application and invoice. Note: Certified **SLBE or WMBE firms** bidding as Primes **are not exempt** from outreach and solicitation of subcontractors.
- **No Firms were contacted because.** Provide brief explanation why no firms were contacted or solicited.
- **See attached documents.** Check box, if after you have completed the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the form. All DMI data not submitted on the MBD Form-10 must be in the same format and have all requested data from MBD Form-10 included.

The following instructions are for information of any and all subcontractors solicited.

- **“S” = SLBE, “W” = WMBE.** Enter “S” for firms Certified by the City as Small Local Business Enterprises and/or “W” for firms Certified by the City as either Women/Minority Business Enterprise; **“O” = Non-certified others.**
- **Federal ID.** FIN. A number assigned to a business for tax reporting purposes. This information is critical in proper identification and payment of the contractor/subcontractor.
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Type of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business.
- **Trade, Services, or Materials** indicate the trade, service, or materials provided by the subcontractor. NIGP codes aka “National Institute of Governmental Purchasing” are listed at top section of document.
- **Contact Method L=letter, F=fax, E=Email, P=Phone.** Indicate with letter the method(s) of soliciting for bid.
- **Quote or Resp. (response) Rec’d (received) Y/N.** Indicate “Y” Yes if you received a quotation or if you received a response to your solicitation. Indicate “N” No if you received no response to your solicitation from the subcontractor. Must keep records: log, ledger, documentation, etc. that can validate/verify.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Office of Equal Business Opportunity at (813) 274-5522.



**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**

**Page 3 of 4 – DMI Solicited/Utilized Schedules  
City of Tampa – Schedule of All To-Be-Utilized Sub-(Contractors/Consultants/Suppliers)  
(FORM MBD-20)**

Contract No.: \_\_\_\_\_ Contract Name: \_\_\_\_\_  
Company Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Check applicable box(es). Detailed Instructions for completing this form are on page 4 of 4.

See attached list of additional Firms Utilized and all supplemental information (List must comply to this form)

**Note: Form MBD-20 must list ALL subcontractors To-Be-Utilized including Non-minority/small businesses**

No Subcontracting/consulting (of any kind) will be performed on this contract.

No Firms are listed to be utilized because: \_\_\_\_\_

NIGP Code General Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

Enter "S" for firms Certified as Small Local Business Enterprises, "W" for firms Certified as Women/Minority Business Enterprise, "O" for Other Non-Certified

| S = SLBE<br>W=WMBE<br>O =Neither | Company Name<br>Address<br>Phone, Fax, Email | Type of Ownership<br>(F=Female M=Male)<br>BF BM = African Am.<br>HF HM = Hispanic Am.<br>AF AM = Asian Am.<br>NF NM = Native Am.<br>CF CM = Caucasian | Trade,<br>Services,<br>or Materials<br><br>NIGP Code<br>Listed<br>above | \$ Amount<br>of Quote.<br>Letter of<br>Intent (LOI)<br>if available | Percent<br>of<br>Scope or<br>Contract<br>% |
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Failure to Complete, Sign and Submit  
this form with your Bid or Proposal  
Shall render the Bid Non-Responsive.  
(Do Not Modify This Form)

Total ALL Subcontract / Supplier Utilization \$ \_\_\_\_\_  
Total SLBE Utilization \$ \_\_\_\_\_  
Total WMBE Utilization \$ \_\_\_\_\_  
Percent SLBE Utilization of Total Bid/Proposal Amt. \_\_\_\_\_% Percent WMBE Utilization of Total Bid/Proposal Amt. \_\_\_\_\_%

It is hereby certified that the following information is a true and accurate account of utilization for sub-contracting opportunities on this Contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive  
Forms must be included with Bid / Proposal**



## Page 4 of 4 DMI – Solicited/Utilized

### Instructions for completing The Sub-(Contractors/Consultants/ Suppliers) to be Utilized Form (Form MBD-20)

**This form must be submitted with all bids or proposals. All subcontractors (regardless of ownership or size) projected to be utilized must be included on this form.** Note: Ability or desire to self-perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

**Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.

- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business and/or doing business as (dba) if applicable.
- **Address.** The physical address of your business.
- **Federal ID. FIN.** A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **No Subcontracting/consulting (of any kind) will be performed on this contract.** Checking box indicates your business will not use subcontractors when no Subcontract Goal or Participation Plan Requirement was set by the City, but will self-perform all work. When subcontractors are utilized during the performance of the contract, the “Sub-(Contractors/Consultants/Suppliers) Payments” form (MBD Form-30) must be submitted with every pay application and invoice. Note: certified SLBE or WMBE firms bidding as Primes are not exempt from outreach and solicitation of subcontractors, including completion and submitting Form-10 and Form-20.
- **No Firms listed To-Be-Utilized.** Check box; provide brief explanation why no firms were retained when a goal or participation plan requirement was set on the contract. Note: mandatory compliance with Good Faith Effort outreach (GFECF) requirements applies (MBD Form-50) and supporting documentation must accompany the bid.
- **See attached documents.** Check box, if after completing the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the scope/value/percent utilization of subcontractors. Reproduce copies of MBD-20 and attach. All data not submitted on duplicate forms must be in the same format and content as specified in these instructions.

The following instructions are for information of Any and All subcontractors To Be Utilized.

- **Federal ID. FIN.** A number assigned to a business for tax reporting purposes. This information is critical in proper identification of the subcontractor.
- **“S” = SLBE, “W” = WMBE.** Enter “S” for firms Certified by the City as Small Local Business Enterprises and/or “W” for firms Certified by the City as Women/Minority Business Enterprise; **“O” = Non-certified others.**
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Type of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business.
- **Trade, Services, or Materials (NIGP code if Known)** Indicate the trade, service, or material provided by the subcontractor. Abbreviated list of NIGP is available at <http://www.tampagov.net/mbd> “Information Resources”.
- **Amount of Quote, Letters of Intent** (required for both SLBEs and WMBEs).
- **Percent of Work/Contract.** Indicate the percent of the total contract price the subcontract(s) represent. For CCNA only (i.e. Consultant A/E Services) you must indicate subcontracts as percent of total scope/contract.
- **Total Subcontract/Supplier Utilization.** – Provide total dollar amount of all subcontractors/suppliers projected to be used for the contract. (Dollar amounts may be optional in CCNA depending on solicitation format).
- **Total SLBE Utilization.** Provide total dollar amount for all projected SLBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Total WMBE Utilization.** Provide total dollar amount for all projected WMBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Percent SLBE Utilization.** Total amount allocated to SLBEs divided by the total bid/proposal amount.
- **Percent WMBE Utilization.** Total amount allocated to WMBEs divided by the total bid/proposal amount.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Office of Equal Business Opportunity at (813) 274-5522.

TAMPA BID BOND  
Contract 24-C-00041; Ditch Rehabilitation - Grady Avenue & 43rd Street

KNOW ALL MEN BY THESE PRESENTS, that we, \_\_\_\_\_

\_\_\_\_\_ (hereinafter called the Principal) and \_\_\_\_\_

(hereinafter called the Surety) a Corporation chartered and existing under the laws of the State of \_\_\_\_\_, with its principal offices in the City of \_\_\_\_\_, and authorized to do business in the State of Florida, are held and firmly bound unto the City of Tampa, a Municipal Corporation of Hillsborough County, Florida, in the full and just sum of 5% of the amount of the (Bid) (Proposal) good and lawful money of the United States of America, to be paid upon demand of the City of Tampa, Florida, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally and firmly these presents.

WHEREAS, the Principal is about to submit, or has submitted to the City of Tampa, Florida, a Proposal for the construction of certain facilities for the City designated Contract 24-C-00041, Ditch Rehabilitation - Grady Avenue & 43rd Street.

WHEREAS, the Principal desires to file this Bond in accordance with law, in lieu of a certified Bidder's check otherwise required to accompany this Proposal.

NOW, THEREFORE: The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within twenty (20) days after the date of receipt of written Notice of Award, execute a contract in accordance with the Proposal and upon the terms, conditions and price set forth therein, in the form and manner required by the City of Tampa, Florida and execute a sufficient and satisfactory Public Construction Bond payable to the City of Tampa, Florida in an amount of one hundred percent (100%) of the total contract price, in form and with security satisfactory to said City, then this Bid Bond obligation is to be void; otherwise to be and remain in full force and virtue in law, and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid City, upon demand, the amount thereof, in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Principal

\_\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

(SEAL)

\_\_\_\_\_  
Producing Agent

\_\_\_\_\_  
Producing Agent's Address

\_\_\_\_\_  
Name of Agency

\_\_\_\_\_  
The addition of such phrases as "not to exceed" or like import shall render the (Bid) (Proposal) non-responsive.



AGREEMENT

For furnishing all labor, materials and equipment, together with all work incidental thereto, necessary and required for the performance of the work for the construction of Contract 24-C-00041 in accordance with your Proposal dated \_\_\_\_\_, amounting to a total of \$ \_\_\_\_\_ as completed in accordance with subsections I-2.09 and I-2.10 of the Instruction to Bidders.

This AGREEMENT, made and entered into in triplicate, between the City of Tampa, Florida, hereinafter called the City, and \_\_\_\_\_ hereinafter called the Contractor, as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ when the City Council of the City of Tampa, Florida adopted a Resolution authorizing, among other things, the Mayor's execution of this Agreement.

WITNESSETH that, in consideration of the mutual stipulations, agreements, and covenants herein contained, the parties hereto have agreed and hereby agree with each other, the Party of the First Part for itself, its successors and assigns, and the Party of the Second Part for itself, or himself, or themselves, and its successors and assigns, or his or their executors, administrators and assigns, as follows:

Contract 24-C-00041; Ditch Rehabilitation - Grady Avenue & 43rd Street, shall include, but not be limited to, Ditch rehabilitation to address vegetation overgrowth, and bank erosion by providing clearing, sediment removal, and stabilization of banks to restore the facilities conveyance capacity and reduce the necessary maintenance. with all associated work required for a complete project in accordance with the Contract Documents.

Contract Documents referred to in Article 1.01 of this Agreement also includes this volume, applicable standard drawings, the plans and any provisions referred to whether actually attached or not.

# TAMPA AGREEMENT

## SECTION 1 GENERAL

### ARTICLE 1.01 THE CONTRACT

Except for titles, subtitles, headings, running headlines, and tables of contents (all of which are printed herein merely for convenience), the following, except for such portions thereof as may be specifically excluded, constitute the Contract:

The Notice to Bidders;  
The Instructions to Bidders, including Special Instructions and General Instructions;  
The Proposal;  
The Bid Bond;  
The Certification of Nonsegregated Facilities;  
The Notice of Award;  
The Agreement;  
The Performance Bond;  
The Notice To Proceed;  
The Specifications, including the General Provisions, the Workmanship and Materials, the Specific Provisions or the Contract Items  
The Plans;  
All Supplementary Drawings Issued after award of the Contract;  
All Addenda issued by the City prior to the receipt of proposals;  
All provisions required by law to be inserted in this Contract, whether actually inserted or not.

### ARTICLE 1.02 DEFINITIONS

The following words and terms, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless different meaning is clear from the context:

(a)"City" shall mean the City of Tampa, Florida, represented by its Mayor and City Council, Party of the First Part, or such other City official as shall be duly empowered to act for the City on matters relating to this Contract.

(b)"Contractor" shall mean the Party of the Second Part hereto, whether corporation, firm or individual, or any combination thereof, and its, their, or his successors, personal representatives, executors, administrators, and assigns, and any person, firm or corporation who or which shall at any time be substituted in the place of the Party of the Second Part under this Contract.

(c)"Engineer" shall mean the Director of the Department or his duly authorized representative.

(d)"Consultant" shall mean the engineering or architectural firm or individual employed by the City to consult with and advise the City in the construction of the project.

(e)"Surety" shall mean any person, firm or corporation that has executed as Surety the Contractor's Performance Bond securing the performance of this Contract.

(f)"The Work" shall mean everything expressly or implied required to be furnished and done by the Contractor under the Contract, and shall include both Contract Work

and Extra Work.

(g)"Contract Work" shall mean everything expressly or implied required to be furnished and done by the Contractor by any one or more of the Contract parts referred to in Article 1.01 hereof, except Extra Work, as hereinafter defined; it being understood that, in case of any inconsistency in or between any part or parts of this Contract, the Engineer shall determine which shall prevail.

(h)"Contract" or "Contract Documents" shall mean each of the various part of the Contract referred to in Article 1.01 hereof, both as a whole and severally.

(i)"Extra Work" shall mean work other than that required either expressly or implied by the contract in its present form.

(j)"Plans" shall mean only those drawings specifically referred to as such in these documents, or in any Addendum. Drawings issued after the execution of the Contract to explain further, or to illustrate, or to show changes in the work, will be known as "Supplementary Drawings" and shall be binding upon the Contractor with the same force as the Plans.

(k)"Specifications" shall mean all of the directions, requirements, and standards of performance applying to the work, as hereinafter detailed and designated as such, or which may be issued in an addendum.

(l)"Addendum or Addenda" shall mean the additional contract provisions issued in writing prior to the receipt of bids.

(m)"Notice" shall mean written notice. Notice shall be served upon the Contractor, either personally or by leaving the said notice at his residence or with any employee found on the work, or addressed to the Contractor at the residence or place of business given in his proposal and deposited in a postpaid wrapper in any post office box regularly maintained by the United States Post Office.

(n)"Project" shall mean the entire improvement package or related work. The "project" may consist of several different, but related, contracts.

(o)"Site" shall mean, and be limited to, the area upon or in which the Contractor's operations are carried on and such other appropriate areas as may be designed as such by the Engineer.

(p)"Subcontractor" shall mean any person, firm, or corporation, other than employees of the Contractor, who or which contracts with the Contractor to furnish, or actually furnishes labor, or labor and materials, or labor and equipment or labor, materials, and equipment at the site.

(q)Whenever in the Contract the words "directed", "required", "permitted", "ordered", "designated", "prescribed", and words of like import are used, they shall imply the direction, requirement, permission, order, designation, or prescription of the Engineer; and "approved", "acceptable", "satisfactory", "in the judgement of", and words of like import shall mean approved by, or acceptable to, or satisfactory to, or in the judgment of the Engineer.

(r)Whenever in the Contract the word "day" is used, it shall mean calendar day.

(s)"Final Acceptance" shall mean acceptance of the

work as evidenced by an official resolution of the City. Such acceptance shall be deemed to have taken place only if and when an approving resolution has been adopted by the City Council. The final acceptance shall be signed only after the City has assured itself by tests, inspection, or otherwise, that all of the provisions of the Contract have been carried out to its satisfaction.

(t)"Eastern Standard Time" shall be construed as the time being observed in the City on the day proposals are received or other documents issued or signed.

## **SECTION 2 POWERS OF THE CITY'S REPRESENTATIVES**

### **ARTICLE 2.01 THE ENGINEER**

It is covenanted and agreed that the Engineer, in addition to those matters elsewhere herein expressly made subject to his determination, direction, or approval, shall have the power, subject to such express provisions and limitations herein contained as are not in conflict herewith, and subject to review by the Mayor and City Council:

(a)To monitor the performance of the work.

(b)To determine the amount, kind, quality, sequence, and location of the work to be paid for hereunder and, when completed, to measure such work for payment.

(c)To determine all questions of an engineering character in relation to the work, to interpret the Plans, Specifications and Addenda.

(d)To determine how the work of this Contract shall be coordinated with the work of other contractors engaged simultaneously on this project.

(e)To make minor changes in the work as he deems necessary, provided such changes do not result in a net increase in the cost to the City or to the Contractor of the work to be done under the Contract.

(f)To amplify the Plans, add explanatory information and furnish additional Specifications and Drawings consistent with the intent of the Contract Documents.

The power of the Engineer shall not be limited to the foregoing enumeration, for it is the intent of this Contract that all of the work shall be subject to his determinations and approval, except where the determination or approval of someone other than the Engineer is expressly called for herein and except as subject to review by the Mayor and City Council. All orders of the Engineer requiring the Contractor to perform work as Contract work shall be promptly obeyed by the Contractor.

The Engineer shall not, however, have the power to issue an extra work order, and the performance of such work on the order of the Engineer without previously obtaining written confirmation thereof from the Mayor in accordance with Article 7.02 hereof may constitute a waiver of any right to extra compensation therefor. The Contractor is warned that the Engineer has no power to change the terms and provisions of this Contract, except minor changes where such change results in no net increase in the Contract Price.

### **ARTICLE 2.02 DIRECTOR**

The Director of the Department in addition to those matters

expressly made subject to his determination, direction or approval in his capacity as "Engineer", shall also have the power:

(a)To review any and all questions in relation to this Contract and its performance, except as herein otherwise specifically provided, and his determination upon such review shall be final and conclusive upon the Contractor.

(b)With the approval of the Mayor and City Council to authorize modifications or changes in the Contract so as to require: (1) the performance of extra work, or (2) the omission of Contract work whenever he deems it in the interest of the City to do so, or both.

(c)To suspend the whole or any part of the work whenever, in his judgment, such suspension is required: (1) in the interest of the City generally, or (2) to coordinate the work of the various Contractors engaged on this project, or (3) to expedite the completion of the entire project, even though the completion of this particular Contract may be thereby delayed, without compensation to the Contractor for such suspension other than extending the time for the completion of the work, as much as it may have been, in the opinion of the City, delayed by such a suspension.

(d)If, before the final acceptance of all the work contemplated herein, it shall be deemed necessary to take over, use, occupy, or operate any part of the completed or partly completed work, the Engineer shall have the right to do so and the Contractor will not, in any way, interfere with or object to the use, occupation, or operation of such work by the City after receipt of notice in writing from the Engineer that such work or part thereof will be used by the City on and after the date specified in such notice. Such taking over, use, occupancy or operation of any part of the completed or partially completed work shall not constitute final acceptance or approval of any such part of the work.

### **ARTICLE 2.03 NO ESTOPPEL**

The City shall not, nor shall any department, officer, agent, or employee thereof, be bound, precluded, or estopped by any determination, decision, acceptance, return, certificate, or payment made or given under or in connection with this Contract by any officer, agent or employee of the City at any time either before or after final completion and acceptance of the work and payment therefor: (a) from showing the true and correct classification, amount, quality, or character of the work done, or that any determination, decision, acceptance, return certificate or payment is untrue, incorrect or improperly made in any particular, or that the work or any part thereof does not in fact conform to the requirements of the Contract Documents, and (b) from demanding and recovering from the Contractor any overpayments made to him or such damages as it may sustain by reason his failure to comply with the requirements of the Contract of Documents, or both.

### **ARTICLE 2.04 NO WAIVER OF RIGHTS**

Neither the inspection, nor any order, measurements or certificate of the City or its employees, officers, or agents, nor by any order of the City for payment of money, nor any money, nor payments for or acceptance of the whole or any part of the work by the City, nor any extension of time, nor any changes in the Contract, Specifications or Plans, nor any possession by the City or its employees shall operate as a

waiver of any provisions of this Contract, nor any power herein provided nor shall any waiver of any breach of this Contract be held as a waiver of any other subsequent breach.

Any remedy provided in this Contract shall be taken and construed as cumulative, namely, in addition to each and every other suit, action, or legal proceeding. The City shall be entitled as of right to an injunction against any breach of the provisions of this Contract.

### **SECTION 3 PERFORMANCE OF WORK**

#### **ARTICLE 3.01 CONTRACTOR'S RESPONSIBILITY**

The Contractor shall do all the work and furnish, at his own cost and expense, all labor, materials, equipment, and other facilities, except as herein otherwise provided, as may be necessary and proper for performing and completing the work under this Contract. The Contractor shall be responsible for the entire work until completed and finally accepted by the City.

The work shall be performed in accordance with the true intent and meaning of the Contract Documents. Unless otherwise expressly provided, the work must be performed in accordance with the best modern practice, with materials as specified and workmanship of the highest quality, all as determined by and entirely to the satisfaction of the Engineer.

Unless otherwise expressly provided, the means and methods of construction shall be such as the Contractor may choose, subject, however, to the approval of the Engineer. Only adequate and safe procedure, methods, structures and equipment shall be used. The Engineer's approval or the Engineer's failure to exercise his right thereon shall not relieve the Contractor of obligations to accomplish the result intended by the Contract, nor shall such create a cause of action for damages.

#### **ARTICLE 3.02 COMPLIANCE WITH LAWS**

The Contractor must comply with all local, State and Federal laws, rules, ordinances and regulations applicable to this Contract and to the work done hereunder, and must obtain, at his own expense, all permits, licenses or other authorization necessary for the prosecution of the work.

No work shall be performed under this Contract on Sundays, legal holidays or after regular working hours without the express permission of the Engineer. Where such permission is granted, the Engineer may require that such work be performed without additional expense to the City.

#### **ARTICLE 3.03 INSPECTION**

During the progress of the work and up to the date of final acceptance, the Contractor shall, at all times, afford the representatives of the City, the Florida Department of Environmental Regulation, and if applicable, the Federal Environmental Protection Agency and the Federal Department of Labor every reasonable, safe and proper facility for inspecting the work done or being done at the

site. The inspection of any work shall not relieve the Contractor of any of his obligations to perform proper and satisfactory work as herein specified. Finished or unfinished work found not to be in strict accordance with the Contract shall be replaced as directed by the Engineer, even though such work may have been previously approved and payment made therefor.

The City shall have the right to reject materials and workmanship which are defective or require their correction. Rejected work and materials must be promptly removed from the site, which must at all times be kept in a reasonably clean and neat condition.

Failure or neglect on the part of the City to condemn or reject bad or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if it becomes evident at any time prior to the final acceptance of the work by the City. Neither shall it be construed as barring the City at any subsequent time from the recovery of damages of such a sum of money as may be needed to build anew all portions of the work in which inferior work or improper materials were used, wherever found.

Should it be considered necessary or advisable by the City at any time before final acceptance of the entire work to make examinations of work already completed, by removing or tearing out all or portions of such work, the Contractor shall, on request, promptly furnish all necessary facilities, labor, and material for that purpose. If such work is found to be defective in any material respect, due to the fault of the Contractor or his subcontractors, he shall defray all expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the cost of examination and restoration of the work shall be considered an item of extra work to be paid for in accordance with the provisions of Article 7.02 hereof.

#### **ARTICLE 3.04 PROTECTION**

During performance and until final acceptance, the Contractor shall be under an absolute obligation to protect the finished and unfinished work against any damage, loss, or injury. The Contractor shall take proper precaution to protect the finished work from loss or damage, pending completion and the final acceptance of all the work included in the entire Contract, provided that such precaution shall not relieve the Contractor from any and all liability and responsibility for loss or damage to the work occurring before final acceptance by the City. Such loss or damage shall be at the risk of and borne by the Contractor, whether arising from acts or omissions of the Contractor or others. In the event of any such loss or damage, the Contractor shall forthwith repair, replace, and make good the work without extension of time therefor, except as may be otherwise provided herein.

The provisions of this Article shall not be deemed to create any new right of action in favor of third parties against the Contractor or the City.

#### **ARTICLE 3.05 PRESERVATION OF PROPERTY**

The Contractor shall preserve from damage all property along the line of the work, or which is in the vicinity of or is in anywise affected by the work, the removal or destruction of which is not called for by the Plans. This applies, but is not limited, to the public utilities, trees, lawn areas, building monuments, fences, pipe and underground structures, public streets (except natural wear and tear of streets resulting from legitimate use thereof by the Contractor), and wherever such property is damaged due to the activities of the Contractor, it shall be immediately restored to its original condition by the Contractor and at his own expense.

In case of failure on the part of the Contractor to restore such property, or make good such damage or injury, the City may, upon forty-eight (48) hour written notice, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due the Contractor under this Contract. Nothing in this clause shall prevent the Contractor from receiving proper compensation for the removal, damage, or replacement of any public or private property not shown on the Plans, when this is made necessary by alteration of grade or alignment authorized by the Engineer, provided that such property has not been damaged through fault of the Contractor, his employees or agents.

**ARTICLE 3.06 BOUNDARIES**

The Contractor shall confine his equipment, apparatus, the storage of materials, supplies and apparatus of his workmen to the limits indicated on the plans, by law, ordinances, permits or direction of the Engineer.

**ARTICLE 3.07 SAFETY AND HEALTH REGULATIONS**

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91- 596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL91-54).

**ARTICLE 3.08 TAXES**

All taxes of any kind and character payable on account of the work done and materials furnished under this Contract shall be paid by the Contractor and shall be deemed to have been included in his bid. The laws of the State of Florida provide that sales and use taxes are payable by the Contractor upon the tangible personal property incorporated in the work and such taxes shall be paid by the Contractor and shall be deemed to have been included in his bid.

**ARTICLE 3.09 ENVIRONMENTAL CONSIDERATIONS**

The Contractor, in the performance of the work under this Contract, shall comply with all Local, State and Federal laws, statutes, ordinances, rules and regulations applicable to protection of the environment; and, in the event he violates any of the provisions of same, he shall be answerable to the Local, State and Federal agencies designated by law to protect the environment. In the event the City receives, from any of the environmental agencies, a citation which is occasioned by an act or omission of the Contractor or his

subcontractor or any officers, employees or agents of either, it is understood and agreed that the Contractor shall automatically become a party-respondent under said citation; and the City immediately shall notify the Contractor and provide him with a copy of said citation.

The Contractor shall comply with the requirements of the citation and correct the offending condition(s) within the time stated in said citation and further shall be held fully responsible for all fines and/or penalties.

**SECTION 4  
TIME PROVISIONS**

**ARTICLE 4.01 TIME OF START AND COMPLETION**

The Contractor must commence work within thirty (30) days subsequent to the date of the receipt of the "Notice to Proceed" by the City unless otherwise provided in the Specific Provisions and Special Instructions. Time being of the essence of this Contract, the Contractor shall thereafter prosecute the work diligently, using such means and methods of construction as well as secure its full completion in accordance with the requirements of the Contract Documents no later than the date specified therefor, or on the date to which the time for completion may be extended.

The Contractor must complete the work covered by this Contract in the number of consecutive calendar days set forth in the Instructions to Bidders, unless the date of completion is extended pursuant to the provisions of Article 4.05 hereof.

The period for performance shall start from the date of signing of this Agreement by the City.

The actual date of completion will be established after a final inspection as provided in Article 4.07 hereof.

**ARTICLE 4.02 PROGRESS SCHEDULE**

To enable the work to be laid out and prosecuted in an orderly and expeditious manner, the Contractor shall submit to the Engineer a proposed progress schedule within fifteen (15) days after the award of this Contract.

The schedule shall state the Contract starting date, time for completion and date of completion and shall show the anticipated time of starting and completion of each of the various operations to be performed under this Contract, together with all necessary and appropriate information regarding sequence and correlation of work and an estimated time required for the delivery of all materials and equipment required for the work. The proposed schedule shall be revised as directed by the Engineer until finally approved by him, and, after such approval, shall be strictly adhered to by the Contractor. The approved progress schedule may be changed only with the written permission of the Engineer.

If the Contractor shall fail to adhere to the approved progress schedule or the schedule as revised, he shall promptly adopt such other or additional means and methods of construction as will make up for the time lost, and will assure completion in accordance with the contract time.

**ARTICLE 4.03 APPROVAL REQUESTS**

From time to time, as the work progresses and in the sequence indicated by the approved schedule, the Contractor must submit to the Engineer a specific request, in writing, for each item of information or approval required of him by the Contract. These requests must be submitted sufficiently in advance of the date upon which the information or approval is actually required by the Contractor to allow for the time the Engineer may take to act upon such submissions or resubmissions. The Contractor shall not have any right to an extension of time on account of delays due to his failure to submit his requests for the required information or the required approval in accordance with these requirements.

**ARTICLE 4.04 COORDINATION WITH OTHER CONTRACTORS**

During progress of the work, other Contractors may be engaged in performing other work on this project or on other projects on the site. In that event, the Contractor shall coordinate the work to be done hereunder with the work of such other Contractors in such manner as the Engineer may direct.

**ARTICLE 4.05 EXTENSION OF TIME**

If such an application is made, the Contractor shall be entitled to an extension of time for delay in completion of the work should the Contractor be obstructed or delayed in the commencement, prosecution or completion of any part of said work by any act or delay of the City, or by acts or omissions of other Contractors on this project, or by a riot, insurrection, war, pestilence, acts of public authorities, fire, lightning, hurricanes, earthquakes, tornadoes, floods, extremely abnormal and excessive inclement weather as indicated by the records of the local weather bureau for a five-year period preceding the date of the Contract, or by strikes, or other causes, which causes of delay mentioned in this Article, in the opinion of the City, are entirely beyond the expectation and control of the Contractor.

The Contractor shall, however, be entitled to an extension of time for such causes only for the number of days of delay which the City may determine to be due solely to such causes and only to the extent that such occurrences actually delay the completion of the project and then only if the Contractor shall have strictly complied with all of the requirements of Articles 4.01, 4.02, 4.03 and 4.04 hereof. It is hereby understood that the determination by the Engineer as to the order and sequence of the work shall not in itself constitute a basis for extension of time.

The determination made by the City on an application for an extension of time shall be binding and conclusive on the Contractor.

Delays caused by failure of the Contractor's materialmen, manufacturers, and dealers to furnish approved working drawings, materials, fixtures, equipment, appliances, or other fittings on time or failure of subcontractors to perform their work shall not constitute a basis of extension of time.

The Contractor agrees to make no claim for damages for delay in the performance of this Contract occasioned by any

act or omission to act of the City or any of its representatives or because of any injunction which may be brought against the City or its representatives and agrees that any such claim shall be fully compensated for by an extension of time to complete performance of the work as provided herein.

**ARTICLE 4.06 LIQUIDATED DAMAGES**

It is mutually agreed between the parties that time is the essence of this Contract and that there will be on the part of the City considerable monetary damage in the event the Contractor should fail to complete the work within the time fixed for completion in the Contract or within the time to which such completion may have been extended.

The amount per day set forth in the Instructions to Bidders is hereby agreed upon as the liquidated damages for each and every calendar day that the time consumed in completing the work under this Contract exceeds the time allowed.

This amount shall, in no event, be considered as a penalty or otherwise than as the liquidated and adjusted damages to the City because of the delay and the Contractor and his Surety agree that the stated sum per day for each such day of delay shall be deducted and retained out of the monies which may become due hereunder and if not so deductible, the Contractor and his Surety shall be liable therefor.

**ARTICLE 4.07 FINAL INSPECTION**

When the work has been completed in accordance with the requirements of the Contract and final cleaning up performed, a date for final inspection of the work by the Engineer shall be set by the Contractor in a written request therefor, which date shall be not less than ten (10) days after the date of such request. The work will be deemed complete as of the date so set by the Contractor if, upon such inspection, the Engineer determines that no further work remains to be done at the site.

If such inspection reveals interms of work still to be performed, however, the Contractor shall promptly perform them and then request a reinspection. If, upon such inspection, the Engineer determines that the work is complete, the date of final completion shall be deemed to be the last day of such reinspection.

**SECTION 5  
SUBCONTRACTS AND ASSIGNMENTS**

**ARTICLE 5.01 LIMITATIONS AND CONSENT**

The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract or of his right, title, or interest therein, or his power to execute such Contract, or to assign any monies due or to become due thereunder to any other person, firm or corporation unless the previous written consent of the City shall first be obtained thereto and the giving of any such consent to a particular subcontract or assignment shall not dispense with the necessity of such consent to any further or other assignment.

Before making any subcontract, the Contractor must submit a

written statement to the Engineer, giving the name and address of the proposed contractor, the portion of the work and materials which he is to perform and furnish and any other information tending to prove that the proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract.

If the City finds that the proposed subcontractor is qualified, the Contractor will be notified in writing. The City may revoke approval of any subcontractor when such subcontractor evidences an unwillingness or inability to perform his work in strict accordance with these Contract Documents. Notice of such revocation of approval will be given in writing to the Contractor.

The Contractor will promptly, upon request, file with the City a conformed copy of the subcontract. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of these Contract Documents, insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontracts that the City may exercise over the Contractor under provisions of these Contract Documents.

The Contractor shall be required to perform with his own forces at least twenty-five (25) percent of the work, unless written consent to subcontract a greater percentage of the work is first obtained from the City.

#### **ARTICLE 5.02 RESPONSIBILITY**

The approval by the City of a subcontractor shall not relieve the Contractor of any of his responsibilities, duties, and liabilities hereunder. The Contractor shall be solely responsible to the City for the acts or defaults or omissions of his subcontractor and of such subcontractor's officers, agents, and employees, each of whom shall for all purposes be deemed to be the agent or employee of the Contractor. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the City.

### **SECTION 6 SECURITY AND GUARANTY**

#### **ARTICLE 6.01 CONTRACT SECURITY**

The Contractor shall execute and deliver to the City a Performance Bond on the form as provided herein, in an amount at least equal to one hundred (100) percent of the full Contract price, such Bond to be executed by a surety company acceptable to the City. The surety on such Performance Bond shall be a surety company duly authorized to do business in the State of Florida, and the Bond shall be issued or countersigned by a local resident producing agent of such surety company who is a resident of the State of Florida, regularly commissioned and licensed in said State, and satisfactory evidence of the authority of the person or persons executing such Bond shall be submitted with the Bond. The Performance Bond shall serve as security for the faithful performance of this Contract, including

maintenance and guaranty provisions, and for the payment of all persons performing labor and furnishing materials in connection with the Contract. The premiums on the Performance Bond shall be paid by the Contractor.

If, at any time, the City shall become dissatisfied with any surety or sureties then upon the Performance Bond, or if for any other reason such bond shall cease to be adequate security for the City, the Contractor shall, within five days after notice so to do, substitute an acceptable Bond in such form and sum and signed by such other sureties as may be satisfactory to the City. The premiums on such Bond shall be paid by the Contractor. No further partial payments shall be deemed due or shall be made until the new sureties have qualified.

#### **ARTICLE 6.02 CONTRACTORS INSURANCE**

Insurance required shall be as indicated on Special Instructions pages beginning with "INS-1"

#### **ARTICLE 6.03 AGAINST CLAIMS AND LIENS**

The City may withhold from the Contractor as much as any approved payments to him as may, in the opinion of the City, be necessary to secure (a) just claims of any persons supplying labor or materials to the Contractor or any of his subcontractors for the work then due and unpaid; (b) loss due to defective work not remedied, or (c) liability, damage, or loss due to injury to persons or damages to the work or property of other contractors, subcontractors, or others, caused by the act or neglect of the Contractor or of any of his subcontractors. The City shall have the right, as agent for the Contractor, to apply any such amounts so withheld in such manner as the City may deem proper to satisfy such claims or to secure such protection. Such application of such money shall be deemed payments for the account of the Contractor.

#### **ARTICLE 6.04 MAINTENANCE AND GUARANTY**

The Contractor hereby guarantees all the work furnished under this Contract against any defects in workmanship and materials for a period of one year following the date of final acceptance of the work by the City. Under this guarantee, the Contractor hereby agrees to make good, without delay, at his own expense, any failure of any part of the work due to faulty materials or manufacture, construction, or installation, or the failure of any equipment to perform satisfactorily all the work put upon it within the limits of the Contract Documents, and further, shall make good any damage to any part of the work caused by such failure. It is hereby agreed that the Performance Bond shall fully cover all guarantees contained in this Article.

It is also agreed that all warranties, expressed or implied, inure to the benefit of the City and are enforceable by the City.

### **SECTION 7 CHANGES**

#### **ARTICLE 7.01 MINOR CHANGES**

The City reserves the right to make such additions, deductions, or changes to this Contract from time to time as

it deems necessary and in a manner not materially affecting the substance thereof or materially changing the price to be paid in order to carry out and complete more fully and perfectly the work herein agreed to be done and performed. This Contract shall in no way be invalidated by any such additions, deductions, or changes, and no claim by the Contractor shall be made for any loss of anticipated profits thereby.

Construction conditions may require that minor changes be made in the location and installation of the work and equipment to be furnished and other work to be performed hereunder, and the Contractor when ordered by the Engineer, shall make such adjustments and changes in said locations and work as may be necessary, without additional cost to the City, provided such adjustments and changes do not alter the character, quantity or cost of the work as a whole, and provided further that Plans and Specifications showing such adjustments and changes are furnished to the Contractor by the City within a reasonable time before any work involving such adjustment and changes is begun. The Engineer shall be the sole judge of what constitutes a minor change for which no additional compensation shall be allowed.

#### **ARTICLE 7.02 EXTRA WORK**

The City may at any time by a written order and without notice to the sureties require the performance of such extra work as it may find necessary or desirable. An order for extra work shall be valid only if issued in writing and signed by the Mayor and the work so ordered must be performed by the Contractor.

The amount of compensation to be paid to the Contractor for any extra work as so ordered shall be determined as follows:

(a) By such applicable unit prices, if any, as are set forth in the Proposal; or

(b) If no such unit prices are set forth then by a lump sum or other unit prices mutually agreed upon by the City and the Contractor; or

(c) If no such unit prices are set forth in the Proposal and if the parties cannot agree upon a lump sum or other unit prices then by the actual net cost in money to the Contractor of the extra work performed, which cost shall be determined as follows:

(1) For all labor and foreman in direct charge of the authorized operations, the Contractor shall receive the current local rate of wages to be agreed upon, in writing, before starting such work for each hour that said labor and foremen are actually engaged thereon, to which shall be added an amount equal to 25 percent of the sum thereof which shall be considered and accepted as full compensation for general supervision, FICA taxes, contributions under the Florida Unemployment Compensation Act, insurance, bond, subcontractor's profit and overhead, the furnishing of small tools and miscellaneous equipment used, such as picks, shovels, hand pumps, and similar items.

(2) For all materials used, the Contractor shall receive the actual cost of such materials delivered at the site or previously approved delivery point as established by original receipted bills. No percentage shall be added to this cost.

(3) For special equipment and machinery such as power-driven pumps, concrete mixers, trucks, and tractors, or other equipment, required for the economical performance of the authorized work, the Contractor shall receive payment based on the average local area rental price for each item of equipment and the actual time of its use on the work. No percentage shall be added to this sum.

(4) Records of extra work done under this procedure shall be reviewed at the end of each day by the Contractor or his representative and the Engineer. Duplicate copies of accepted records shall be made and signed by both Contractor or his representative and the Engineer, and one copy retained by each.

Request for payment for approved and duly authorized extra work shall be submitted in the same form as Contract work or in the case of work performed under paragraph (c) (1) above upon a certified statement supported by receipted bills. Such statement shall be submitted for the current Contract payment for the month in which the work was done.

#### **ARTICLE 7.03 DISPUTED WORK**

If the Contractor is of the opinion that any work required, necessitated, or ordered violates the terms and provisions of this Contract, he must promptly notify the Engineer, in writing, of his contentions with respect thereto and request a final determination thereof. If the Engineer determines that the work in question is Contract work and not extra work or that the order complained of is proper, he will direct the Contractor to proceed and the Contractor shall promptly comply. In order, however, to reserve his right to claim compensation for such work or damages resulting from such compliance, the Contractor must, within five (5) days after receiving notice of the Engineer's determination and direction, notify the City in writing that the work is being performed or that the determination and direction is being complied with under protest. Failure of the Contractor to notify shall be deemed as a waiver of claim for extra compensation or damages therefor.

Before final acceptance by the City, all matters of dispute must be adjusted to the mutual satisfaction of the parties thereto. Final determinations and decisions, in case any questions shall arise, shall constitute a condition precedent to the right of the Contractor to receive the money therefor until the matter in question has been adjusted.

#### **ARTICLE 7.04 OMITTED WORK**

The City may at any time by a written order and without notice to the sureties require the omission of such Contract work as it may find necessary or desirable.

An order for omission of work shall be valid only if signed by the Mayor and the work so ordered must be omitted by the Contractor. The amount by which the Contract price shall be reduced shall be determined as follows:

(a) By such applicable unit prices, if any, as are set forth in the Contract; or

(b) By the appropriate lump sum price set forth in the Contract; or

(c) By the fair and reasonable estimated cost to the City



of such omitted work as determined by the Engineer and approved by the City.

## **SECTION 8 CONTRACTOR'S EMPLOYEES**

### **ARTICLE 8.01 CHARACTER AND COMPETENCY**

The Contractor and his subcontractors shall employ upon all parts of the work herein contracted for only competent, skillful, and trustworthy workers. Should the Engineer at any time give notice, in writing, to the Contractor or his duly authorized representative on the work that any employee in his opinion is incompetent, unfaithful, disorderly, careless, unobservant of instructions, or in any way a detriment to the satisfactory progress of the work, such employee shall immediately be dismissed and not again allowed upon the site.

### **ARTICLE 8.02 SUPERINTENDENCE**

The Contractor shall give his personal supervision to the faithful prosecution of the work and in case of his absence shall have a competent, experienced, and reliable supervisor or superintendent, acceptable to the Engineer on the site who shall follow without delay all instructions of the Engineer in the prosecution and completion of the work and every part thereof, in full authority to supply workers, material, and equipment immediately. He shall keep on hand at all times copies of the Contract Documents.

### **ARTICLE 8.03 EMPLOYMENT OPPORTUNITIES**

The Contractor shall, in the performance of the work required to be done under this Contract, employ all workers without discrimination regarding race, creed, color, sex or national origin and must not maintain or provide facilities that are segregated on the basis of race, color, creed or national origin.

### **ARTICLE 8.04 RATES OF WAGES**

On federally assisted projects, the rates of wages to be paid under this Contract shall not be less than the rates of wages set forth in Section 12 of this Agreement.

On other projects, no wage rate determination is included. Florida's Prevailing Wage Law (Section 215.19, Florida Statutes) was repealed effective April 25, 1979.

### **ARTICLE 8.05 PAYROLL REPORTS**

The Contractor and each subcontractor shall, if requested to do so, furnish to the Engineer a duly certified copy of his payroll and also any other information required by the Engineer to satisfy him that the provisions of the law as to the hours of employment and rate of wages are being observed.

Payrolls shall be prepared in accordance with instructions furnished by the City and on approved forms. The Contractor shall not carry on his payroll any persons not employed by him. Subcontractor's employees shall be carried only on the payrolls of the employing subcontractor.

## **SECTION 9 CONTRACTOR'S DEFAULT**

### **ARTICLE 9.01 CITY'S RIGHT AND NOTICE**

It is mutually agreed that: (a) if the Contractor fails to begin work when required to do so, or (b) if at any time during the progress of the work it shall appear to the Engineer that the Contractor is not prosecuting the work with reasonable speed, or is delaying the work unreasonably and unnecessarily, or (c) if the force of workmen or quality or quantity of material furnished are not sufficient to insure completion of the work within the specified time and in accordance with the Specifications hereto attached, or (d) if the Contractor shall fail to make prompt payments for materials or labor or to subcontractors for work performed under the Contract, or (e) if legal proceedings have been instituted by others than the City in such manner as to interfere with the progress of the work and may subject the City to peril of litigation or outside claims of (f) if the Contractor shall be adjudged a bankrupt or make an assignment for the benefit of creditors, or (g) if in any proceeding instituted by or against the Contractor an order shall be made or entered granting an extension of time of payment, composition, adjustment, modification, settlement or satisfaction of his debts or liabilities, or (h) if a receiver or trustee shall be appointed for the Contractor or the Contractor's property, or (i) if the Contract or any part thereof shall be sublet without the consent of the City being first obtained in writing, or (j) if this Contract or any right, monies, or claim thereunder shall be assigned by the Contractor, otherwise than as herein specified, or (k) if the Contractor shall fail in any manner of substance to observe the provisions of this Contract, or (l) if any of the work, machinery, or equipment shall be defective, and shall not be replaced as herein provided, or (m) if the work to be done under this Contract shall be abandoned, then such fact or conditions shall be certified by the Engineer and thereupon the City without prejudice to any other rights or remedies of the City, shall have the right to declare the Contractor in default and so notify the Contractor by a written notice, setting forth the ground or grounds upon which such default is declared and the Contractor must discontinue the work, either as a portion of the work or the whole thereof, as directed.

### **ARTICLE 9.02 CONTRACTOR'S DUTY UPON DEFAULT**

Upon receipt of notice that his Contract is in default, the Contractor shall immediately discontinue all further operations on the work or such part thereof, and shall immediately quit the site or such part thereof, leaving untouched all plant, materials, equipment, tools, and supplies.

### **ARTICLE 9.03 COMPLETION OF DEFAULTED WORK**

The City, after declaring the Contractor in default, may then have the work completed or the defective equipment or machinery replaced or anything else done to complete the work in strict accordance with the Contract Documents by such means and in such manner, by Contract with or without public letting, or otherwise, as it may deem advisable,

utilizing for such purpose without additional cost to the City such of the Contractor's plant, materials, equipment, tools, and supplies remaining on the site, and also such subcontractors as it may deem advisable.

The City shall reimburse all parties, including itself, for the expense of such completion, including liquidated damages, if any, and the cost of reletting. The City shall deduct this expense from monies due or to become due to the Contractor under this Contract, or any part thereof, and in case such expense is more than the sum remaining unpaid of the original contract price, the Contractor and his sureties shall pay the amount of such deficiency to the City.

#### **ARTICLE 9.04 PARTIAL DEFAULT**

In case the City shall declare the Contractor in default as to a part of the work only, the Contractor shall discontinue such part, shall continue performing the remainder of the work in strict conformity with the terms of the Contract, and shall in no way hinder or interfere with any other contractor or person whom the City may engage to complete the work as to which the Contractor was declared in default.

### **SECTION 10 PAYMENTS**

#### **ARTICLE 10.01 PRICES**

For the Contractor's complete performance of the work, the City will pay and the Contractor agrees to accept, subject to the terms and conditions hereof, the lump sum prices or unit prices in the Contractor's Proposal and the award made therein, plus the amount required to be paid for any extra work ordered under Article 7.02 hereof, less credit for any work omitted pursuant to Article 7.04 hereof. Under unit price items, the number of units actually required to complete the work under the Contract may be more than stated in the Proposal. The Contractor agrees that no claim will be made for any damages or for loss of profits because of a difference between the quantities of the various classes of work assumed and stated in the Proposal Form as a basis for comparing Proposals and the quantities of work actually performed.

The sum as awarded for any lump sum Contract or lump sum Contract Item shall represent payment in full for all of the various classes of work, including materials, equipment, and labor necessary or required to complete, in conformity with the Contract Document, the entire work shown, indicated or specified under the lump sum Contract or lump sum Contract Item.

The amount as awarded as a unit price for any unit price Contract Item shall represent payment in full for all the materials, equipment, and labor necessary to complete, in conformity with the Contract Documents, each unit of work shown, specified, or required under the said unit price Contract Item.

No payment other than the amount as awarded will be made for any class of work included in a lump sum Contract Item or a unit price Contract Item, unless specific provision is

made therefor in the Contract Documents.

#### **ARTICLE 10.02 SUBMISSION OF BID BREAKDOWN**

Within fifteen (15) days after the execution of this Contract, the Contractor must submit to the Engineer in duplicate an acceptable breakdown of the lump sums and unit prices bid for items of the Contract, showing the various operations to be performed under the Contract, as described in the progress schedule required under Article 4.02 hereof, and the value of each of such operations, the total of such items to equal the total price bid. The Contractor shall also submit such other information relating to the bid prices as may be required and shall revise the bid breakdown as directed. Thereafter, the breakdown may be used for checking the Contractor's applications for partial payments hereunder but shall not be binding upon the City or the Engineer for any purpose whatsoever.

#### **ARTICLE 10.03 REPORTS, RECORDS AND DATA**

The Contractor shall furnish to the Engineer such schedules of quantities and costs, progress schedules, reports, invoices, delivery tickets, estimates, records, and other data as the Engineer may request concerning work performed or to be performed and the materials furnished under the Contract.

#### **ARTICLE 10.04 PAYMENTS BY CONTRACTOR**

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered, (b) for all materials, tools, and equipment delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools, and equipment are incorporated or used, and (c) to each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors, to the extent of each subcontractor's interest therein; and proof of such payments or releases therefor shall be submitted to the Engineer upon request.

#### **ARTICLE 10.05 PARTIAL PAYMENTS**

On or about the first of each month, the Contractor shall make and certify an estimate, on forms prescribed by the City, of the amount and fair value of the work done, and may apply for partial payment therefor. The Contractor shall revise the estimate as the Engineer may direct. When satisfactory progress has been made, and shows that the value of the work completed since the last payment exceeds one percent (1%) of the total Contract price in amount, the Engineer will issue a certificate that such work has been completed and the value thereof. The City will then issue a voucher to the Contractor in accordance with the following schedule:

#### **FOR CONTRACT AMOUNTS UNDER \$250,000**

(A) In the amount of ninety percent (90%) of the value of the work completed as certified until construction is one hundred percent (100%) complete (operational or beneficial occupancy), the withheld amount may be reduced below ten percent (10%), at the Engineer's option, to only that amount necessary to assure completion.

**FOR CONTRACT AMOUNTS OVER \$250,000**

(A) In the amount of ninety percent (90%) of the value of the work completed as certified until construction is fifty percent (50%) complete.

(B) When the dollar value, as determined by the Engineer, of satisfactorily completed work in place is greater than fifty percent (50%) of the original contract price, vouchers for partial payment will be issued by the City to the Contractor in the amount of one hundred percent (100%) of the value of the work, above 50%, completed as certified for that payment period.

(C) If the Contractor has performed satisfactorily and the work is substantially complete (operational or beneficial occupancy) the withheld amount may be reduced, at the Engineer's option, to only that amount necessary to assure completion.

In addition to the Conditions set forth in (A), (B), and (C) above, payments will always be less any sums that may be retained or deducted by the City under the terms of any of the contract documents and less any sums that may be retained to cover monetary guarantees for equipment, materials or progress performance.

Payment on estimates made on or about the first of the month may be expected on or about the 20th of the month.

Unless specified otherwise in the Contract Items, the delivered cost of equipment and nonperishable materials suitably stored at the site of the work and tested for adequacy may be included in the Contractor's application for partial payment provided, however, that the Contractor shall furnish evidence satisfactory to the City that the Contractor is the unconditional owner and in possession of such materials or equipment. The amount to be paid will be 90 percent of the invoice cost to the Contractor which cost shall be supported by receipted bills within 30 days of the date of payment by the City to the Contractor. Such payment shall not relieve the Contractor from full responsibility for completion of the work and for protection of such materials and equipment until incorporated in the work in a permanent manner as required by the Contract Documents.

Before any payment will be made under this Contract, the Contractor and every subcontractor, if required, shall deliver to the Engineer a written, verified statement, in satisfactory form, showing in detail all amounts then due and unpaid by such Contractor or subcontractor to all laborers, workmen, and mechanics, employed by him under the Contract for the performance of the work at the site thereof, for daily or weekly wages, or to other persons for materials, equipment, or supplies delivered at the site of the work during the period covered by the payment under consideration.

**ARTICLE 10.06 FINAL PAYMENT**

Under determination of satisfactory completion of the work under this Contract as provided in Article 4.07 hereof, the Engineer will prepare the final estimate showing the value of the completed work. This estimate will be prepared within 30 days after the date of completion or as soon thereafter as the necessary measurements and computations can be made.

All prior certificates and estimates, being approximate only, are subject to correction in the final estimate and payment.

When the final estimate has been prepared and certified by Engineer, he will submit to the Mayor and City Council the final certificate stating that the work has been completed and the amount based on the final estimate remaining due to the Contractor. The City will then accept the work as fully completed and will, not later than 30 days after the final acceptance, as defined in Article 1.02, of the work done under this Contract, pay the Contractor the entire amount so found due thereunder after deduction of all previous payments and all percentages and amounts to be kept and retained under provisions of this Contract; provided, however, and it is understood and agreed that, as a precedent to receiving final payment, the Contractor shall submit to the City a sworn affidavit that all bills for labor, service, materials, and subcontractors have been paid and that there are no suits pending in connection with this work. The City, at its option, may permit the Contractor to execute a separate surety bond in a form satisfactory to the City. The surety bond shall be in the full amount of the suit or suits.

Neither the final payment nor any part of the retained percentage shall be paid until the Contractor, if required, shall furnish the City with a complete release from any should remain unsatisfied after all payments are made, the Contractor shall refund to the City all monies which the City may be compelled to pay in discharging such claim, including incidental costs and attorney's fees.

**ARTICLE 10.07 ACCEPTANCE OF FINAL PAYMENT**

The acceptance by the Contractor, or by anyone claiming by or through him, of the final payment shall operate as and shall be a release to the City and every officer and agent thereof from any and all claims and liability to the Contractor for anything done or furnished in connection with the work or project and for any act or neglect of the Contractor or of any others relating to or affecting the work. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this Contract or the Performance Bond.

**SECTION 11 MISCELLANEOUS PROVISIONS**

**ARTICLE 11.01 CONTRACTOR'S WARRANTIES**

In consideration of, and to induce the award of this contract to him, the Contractor represents and warrants:

- (a) That he is not in arrears to the City upon debt or contract, and he is not a defaulter, as surety, contractor, or otherwise.
- (b) That he is financially solvent and sufficiently experienced and competent to perform the work.
- (c) That the work can be performed as called for by the Contract Documents.
- (d) That the facts stated in his proposal and the information given by him are true and correct in all respects.
- (e) That he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be

furnished for the completion of this Contract, and that his information was secured by personal investigation and research.

**ARTICLE 11.02 PATENTED DEVICES, MATERIAL AND PROCESSES**

It is mutually understood and agreed that Contract prices include all royalties and costs arising from patents, trademarks, and copyrights in any way involved in the work. Whenever the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall indemnify and save harmless the City, its officers, agents and employees from any and all claims for infringement by reason of the use of any such patented design, device, tool, material, equipment, or process, to be performed under the Contract, and shall indemnify the said City, its officers, agents, and employees for any costs, expenses, and damages which may be incurred by reason of such infringement at any time during the prosecution or after completion of the work.

**ARTICLE 11.03 SUITS AT LAW**

In case any action at law or suit in equity may or shall be brought against the City or any of its officers, agents, or employees for or on account of the failure, omission, or neglect of the Contractor or his subcontractors, employees, or agents, to do or perform any of the covenants, acts, matters, or things by this Contract undertaken to be done or performed by the Contractor or his subcontractors, employees, or agents, or from any injuries done to property or persons and caused by the negligence or alleged negligence of the Contractor or his subcontractors, employees, or agents, or in any other manner arising out of the performance of this Contract, then the Contractor shall immediately assume and take charge of the defense of such actions or suits in like manner and to all intents and purposes as if said actions or suits have been brought directly against the Contractor, and the Contractor shall also indemnify and save harmless the City, its officers, agents, and employees from any and all loss, cost or damage whatever arising out of such actions or suits, in like manner and to all intents and purposes as if said actions or suits have been brought directly against the Contractor.

The Contractor shall and does hereby assume all liability for and agrees to indemnify the City or its Engineer against any or all loss, costs, damages, and liability for any or by reason of any lien, claims or demands, either for materials purchased or for work performed by laborers, mechanics, and others and from any damages, costs, actions, or causes of action and judgement arising from injuries sustained by mechanics, laborers, or other persons by reason of accidents or otherwise, whether caused by the carelessness or inefficiency or neglect of said Contractor, his subcontractors, agents, employees, workmen or otherwise.

**ARTICLE 11.04 CLAIMS FOR DAMAGES**

If the Contractor shall claim compensation for any damage sustained, other than for extra or disputed work covered by Article 7.02 and 7.03 hereof, by reason of any act or omission of the City, its agents, or any persons, he shall, within five days after sustaining such damage, make and

deliver to the Engineer a written statement of the nature of the damage sustained and of the basis of the claim against the City. On or before the 15th of the month succeeding that in which any damage shall have been sustained, the Contractor shall make and deliver to the Engineer an itemized statement of the details and amounts of such damage, duly verified by the Contractor. Unless such statements shall be made delivered within the times aforesaid, it is stipulated that and all claims for such compensation shall be forfeited and invalidated, and the Contractor shall not be entitled to payment on account of such claims.

**ARTICLE 11.05 NO CLAIMS AGAINST INDIVIDUALS**

No claim whatsoever shall be made by the Contractor against any officer, agent, employee of the City for, or on account of, anything done or omitted to be done in connection with this Contract.

**ARTICLE 11.06 LIABILITY UNAFFECTED**

Nothing herein contained shall in any manner create any liability against the City on behalf of any claim for labor, services, or materials, or of subcontractors, and nothing herein contained shall affect the liability of the Contractor or his sureties to the City or to any workmen or materialsmen upon bond given in connection with this Contract.

**ARTICLE 11.07 INDEMNIFICATION PROVISIONS**

Whenever there appears in this Agreement, or in the other Contract Documents made a part hereof, an indemnification provision within the purview of Chapter 725.06, Laws of Florida, the monetary limitation on the extent of the indemnification under each such provision shall be One Million Dollars or a sum equal to the total Contract price, whichever shall be the greater.

**ARTICLE 11.08 UNLAWFUL PROVISIONS DEEMED STRICKEN**

If this contract contains any unlawful provisions not an essential part of the Contract and which shall not appear to have a controlling or material inducement to the making thereof, such provisions shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the Contract without affecting the binding force of the remainder.

**ARTICLE 11.09 LEGAL PROVISIONS DEEMED INCLUDED**

Each and every provision of any law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein and if, through mistake or otherwise, any such provision is not inserted or is not correctly inserted, then upon application of either party the Contract shall forthwith be physically amended to make such insertion.

**ARTICLE 11.10 DEATH OR INCOMPETENCY OF CONTRACTOR**

In the event of death or legal incompetency of a Contractor who shall be an individual or surviving member of a contracting firm, such death or adjudication of incompetency

shall not terminate the Contract, but shall act as default hereunder to the effect provided in Article 9.01 hereof and the estate of the Contractor and his surety shall remain liable hereunder to the same extent as though the Contractor had lived. Notice of default, as provided in Article 9.01 hereof, shall not be required to be given in the event of such death or adjudication of incompetency.

**ARTICLE 11.11 NUMBER AND GENDER OF WORDS**

Whenever the context so admits or requires, all references herein in one number shall be deemed extended to and including the other number, whether singular or plural, and the use of any gender shall be applicable to all genders.

**ARTICLE 11.12 ACCESS TO RECORDS**

Representatives of Federal Agencies, if applicable, and the State of Florida shall have access to the work whenever it is in preparation of progress. On federally assisted projects the Federal Agency, the Comptroller General of the United States, or any authorized representative shall have access to any books, documents, papers, and records of the Contractor which are pertinent to the project for the purpose of making audit, examination, excerpts, and transcription thereof.

**SECTION 12  
LABOR STANDARDS**

**ARTICLE 12.01 LABOR STANDARDS**

The Contractor shall comply with all of the regulations set forth in "Labor Standards Provisions for Federally Assisted Construction Contracts", which may be attached, and any applicable Florida Statutes.

**ARTICLE 12.02 NOTICE TO LABOR UNIONS**

If required, the Contractor shall provide Labor Unions and other organizations of workers, and shall post, in a conspicuous place available to employees or applicants for employment, a completed copy of the form entitled "Notice to Labor Unions or Other Organizations of Workers" attached to and made a part of this Agreement.

**ARTICLE 12.03 SAFETY AND HEALTH REGULATIONS**

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91- 596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54). Nothing in these Acts shall be construed to supersede or in any manner affect any worker's compensation law or statutory rights, duties, or liabilities of employers and employees under any law with respect to injuries, diseases, or death of employees arising out of, or in the course of, employment.

**ARTICLE 12.04 EEO AFFIRMATIVE ACTION REQUIREMENTS**

The Contractor understands and agrees to be bound by the equal opportunity requirements of Federal regulations which shall be applicable throughout the performance of work under this Contract. The Contractor also agrees to similarly

bind contractually each subcontractor. In policies, the Contractor agrees to engage in Affirmative Action directed at promoting and ensuring equal employment opportunity in the work force used under the Contract (and the Contractor agrees to require contractually the same effort of all subcontractors whose subcontractors exceed \$100,000). The Contractor understands and agrees that "Affirmative Action" as used herein shall constitute a good faith effort to achieve and maintain minority employment in each trade in the on-site work force used on the Contract.

**ARTICLE 12.05 PREVAILING RATES OF WAGES**

Florida's prevailing wage law was repealed effective April 25, 1979.

For Federally assisted projects, appropriate prevailing wage rate determinations are indicated on pages beginning with WR-1.

\* \* \* \* \*

IN WITNESS THEREOF, the parties have hereunto set their hands and seals, and such of them as are corporation have caused these present to be signed by their duly authorized officers.

CITY OF TAMPA, FLORIDA

\_\_\_\_\_  
Jane Castor, Mayor  
(SEAL)

ATTEST:

\_\_\_\_\_  
City Clerk

Approved as to Form:

The execution of this document was authorized  
by Resolution No. \_\_\_\_\_

\_\_\_\_\_  
Justin R. Vaske E/S  
Justin R. Vaske, Senior Assistant City Attorney

Contractor

By: \_\_\_\_\_  
(SEAL)

Title:

ATTEST:

\_\_\_\_\_  
Witness

**PUBLIC CONSTRUCTION BOND**

Bond No. (enter bond number) \_\_\_\_\_

Name of Contractor: \_\_\_\_\_

Principal Business Address of Contractor: \_\_\_\_\_

\_\_\_\_\_

Telephone Number of Contractor: \_\_\_\_\_

Name of Surety (if more than one list each): \_\_\_\_\_

\_\_\_\_\_

Principal Business Address of Surety: \_\_\_\_\_

\_\_\_\_\_

Telephone Number of Surety: \_\_\_\_\_

Owner is The City of Tampa, Florida

Principal Business Address of Owner: \_\_\_\_\_ 306 E Jackson St, Tampa, FL 33602

\_\_\_\_\_ Contract Administration Department (280A4N)

Telephone Number of Owner: \_\_\_\_\_ 813/274-8456

Contract Number Assigned by City to contract which is the subject of this bond: \_\_\_\_\_

Legal Description or Address of Property Improved or Contract Number is: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

General Description of Work and Services: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS That we, \_\_\_\_\_

\_\_\_\_\_  
(Name of Contractor)

as Principal, hereinafter called CONTRACTOR, of the State of \_\_\_\_\_, and

\_\_\_\_\_  
(Name of Surety)

a corporation organized and existing under and by virtue of the laws of the State of \_\_\_\_\_, and regularly authorized to do business in the State of Florida, as SURETY, are held and firmly bound unto the City of Tampa, a municipal corporation organized and existing under the laws of the State of Florida, hereinafter called Owner, in the penal sum of \_\_\_\_\_ Dollars and \_\_\_\_\_ Cents (\$ \_\_\_\_\_), lawful money of the United States of America, for the payment whereof well and truly to be made, we bind ourselves, our heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_, between Principal and Owner for construction of \_\_\_\_\_, the contract being made a part of this bond by reference, in the time and in the manner prescribed in the contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05(1) (Section 713.01), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and
4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.
5. Contractor and Surety acknowledge that the Work for which this bond has been issued may be one of several such contract documents for a group of projects. This bond does not secure covenants to pay for or to perform design services survey or program management services. The Owner/Obligee is expected to reasonably account for damages that are caused to Owner with respect to Principal's (Contractor's) default in performance of the scope of the Work incorporated by reference into the bond, and notwithstanding any contractual or common law remedy permitted to Owner as against Contractor, the obligation of Surety for any damages under this bond shall be determined by the cost of completion of the Work less the contract balance unpaid upon default of Contractor for the Work plus liquidated damages at the rate of \$500.00 per day for delays by the Contractor and/or Surety in reaching substantial completion.
6. The notice requirements for claimants and conditions for entitlement to payment set forth in Section 255.05, Fla. Stat. and the limitations period to actions upon Section 255.05, Fla. Stat. bonds apply to claimants seeking payment from surety under this bond. Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05, Florida Statutes.
7. The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the contract documents or other Work to be performed hereunder, or the specifications referred to therein shall in any way affect its obligations under this bond, and it does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to Work or to the specifications.



8. The above SURETY states that it has read all of the Contract Documents made by the CONTRACTOR with the CITY, hereto attached, and the terms and conditions of the contract and work, and is familiar therewith and in particular those portions of the Agreement concerning the guaranty of such CONTRACTOR for a period of one year following the date of the final acceptance of the completed work under the Contract by the CITY, all of which this BOND includes.

DATED ON \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
(Name of Principal)

\_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Principal Business Address)

\_\_\_\_\_  
(Surety Address)

By \_\_\_\_\_

By \_\_\_\_\_  
(As Attorney in Fact)\*

Title \_\_\_\_\_

\_\_\_\_\_  
Telephone Number of Surety

\_\_\_\_\_  
Telephone Number of Principal

Approved as to legal sufficiency:

**Countersignature:**

By Justin R. Vaske E/S  
Justin R. Vaske, Senior Assistant City Attorney

\_\_\_\_\_  
(Name of Local Agency)

\_\_\_\_\_  
(Address of Resident Agent)

By \_\_\_\_\_

Title \_\_\_\_\_

\_\_\_\_\_  
Telephone Number of Local Agency

\*(As Attorney in Fact) attach Power of Attorney and Current Certificate with Original Signature

# SPECIFICATIONS GENERAL PROVISIONS

## SECTION 1 SCOPE AND INTENT

### G-1.01 DESCRIPTION

The work to be done consists of the furnishing of all labor, materials and equipment, and the performance of all work included in this Contract.

### G-1.02 WORK INCLUDED

The Contractor shall furnish all labor, superintendence, materials, plant, power, light, heat, fuel, water, tools, appliances, equipment, supplies, and other means of construction necessary or proper for performing and completing the work. He shall obtain and pay for all required permits. He shall perform and complete the work in the manner best calculated to promote rapid construction consistent with safety of life and property and to the satisfaction of the Engineer, and in strict accordance with the Contract Documents. The Contractor shall clean up the work and maintain it during and after construction, until accepted, and shall do all work and pay all costs incidental thereto. He shall repair or restore all structures and property that may be damaged or disturbed during performance of the work.

The cost of incidental work described in these General Provisions, for which there are no specific Contract Items, shall be considered as part of the overhead cost of doing the work and shall be included in the prices for the various Contract Items. No additional payment will be made therefor.

The Contractor shall provide and maintain such modern plant, tools, and equipment as may be necessary, in the opinion of the Engineer, to perform in a satisfactory and acceptable manner all the work required by this Contract. Only equipment of established reputation and proven efficiency shall be used. The Contractor shall be solely responsible for the adequacy of his plant and equipment, prior approval of the Engineer notwithstanding.

### G-1.03 PUBLIC UTILITY INSTALLATIONS AND STRUCTURES

Public utility installations and structures shall be understood to include all poles, tracks, pipes, wires, conduits, house service connections, vaults, manholes, and all other appurtenances and facilities pertaining thereto whether owned or controlled by the City, other governmental bodies or privately owned by individuals, firms, or corporations, and used to serve the public with transportation, traffic control, gas, electricity, telephone, sewerage, drainage, water or other public or private property which may be affected by the work.

The Contract Documents contain data relative to existing public utility installations and structures above and below the ground surface. These data are not guaranteed as to their completeness or accuracy and it is the responsibility of the Contractor to make his own investigations to inform himself

fully of the character, condition and extent of all such installations and structures as may be encountered and as may affect the construction operations.

The Contractor shall protect all public utility installations and structures from damage during the work. Access across any buried public utility installation or structure shall be made only in such locations and by means approved by the Engineer. The Contractor shall so arrange his operations as to avoid any damage to these facilities. All required protective devices and construction shall be provided by the Contractor at his expense. All existing public utilities damaged by the Contractor which are shown on the Plans or have been located in the field by the utility shall be repaired by the Contractor, at his expense, as directed by the Engineer. No separate payment shall be made for such protection or repairs to public utility installations or structures.

Public utility installations or structures owned or controlled by the City or other governmental body which are shown on the Plans to be removed, relocated, replaced or rebuilt by the Contractor shall be considered as a part of the general cost of doing the work and shall be included in the prices bid for the various Contract Items. No separate payment shall be made therefor.

Where public utility installations or structures owned or controlled by the City or other governmental body are encountered during the course of the work, and are not indicated on the Plans or in the Specifications, and when, in the opinion of the Engineer, removal, relocation, replacement or rebuilding is necessary to complete the work under this Contract, such work shall be accomplished by the utility having jurisdiction or such work may be ordered, in writing by the Engineer, for the Contractor to accomplish. If such work is accomplished by the utility having jurisdiction it will be carried out expeditiously and the Contractor shall give full cooperation to permit the utility to complete the removal, relocation, replacement or rebuilding as required. If such work is accomplished by the Contractor, it will be paid for as extra work as provided for in Article 7.02 of the Agreement.

The Contractor shall, at all times in performance of the work, employ approved methods and exercise reasonable care and skill so as to avoid unnecessary delay, injury, damage or destruction of public utility installations and structures; and shall, at all times in the performance of the work, avoid unnecessary interference with, or interruption of, public utility services, and shall cooperate fully with the owners thereof to that end.

All City and other governmental utility departments and other owners of public utilities, which may be affected by the work, will be informed in writing by the Engineer within two weeks after the execution of the Contract or Contracts covering the work. Such notice will set out, in general, and direct attention to, the responsibilities of the City and other governmental

utility departments and other owners of public utilities for such installations and structures as may be affected by the work and will be accompanied by one set of Plans and Specifications covering the work under such Contract or Contracts.

In addition to the general notice given by the Engineer, the Contractor shall give written notice to all City and other governmental utility departments and other owners of public utilities of the location of his proposed construction operations, at least forty-eight (48) hours in advance of breaking ground in any area or on any unit of the work. This can be accomplished by making the appropriate contact with the "Underground Utility Notification Center for Excavators (Call Candy)".

The maintenance, repair, removal, relocation, or rebuilding of public utility installations and structures, when accomplished by the Contractor as herein provided, shall be done by methods approved by the Engineer.

## **SECTION 2 PLANS AND SPECIFICATIONS**

### **G-2.01 PLANS**

The Plans referred to in the Contract Documents bear the general project name and number as shown in the Notice To Bidders.

When obtaining data and information from the Plans, figures shall be used in preference to scaled dimensions, and large scale drawings in preference to small scale drawings.

### **G-2.02 COPIES FURNISHED TO CONTRACTOR**

After the Contract has been executed, the Contractor will be furnished with five sets of paper prints, the same size as the original drawings, of each sheet of the Plans and five copies of the Specifications. Additional copies of the Plans and Specifications, when requested, may be furnished to the Contractor at cost of reproduction.

The Contractor shall furnish each of the subcontractors, manufacturers, and material suppliers such copies of the Contract Documents as may be required for his work.

### **G-2.03 SUPPLEMENTARY DRAWINGS**

When, in the opinion of the Engineer, it becomes necessary to explain more fully the work to be done or to illustrate the work further or to show any changes which may be required, drawings known as Supplementary Drawings, with specifications pertaining thereto, will be prepared by the Engineer and five paper prints thereof will be given to the Contractor.

The Supplementary Drawings shall be binding upon the Contractor with the same force as the Plans. Where such Supplementary Drawings require either less or more than the estimated quantities of work, credit to the City or compensation therefor to the Contractor shall be subject to the terms of the Agreement.

### **G-2.04 CONTRACTOR TO CHECK PLANS AND DATA**

The Contractor shall verify all dimensions, quantities, and details shown on the Plans, Supplementary Drawings, Schedules, Specifications, or other data received from the Engineer, and shall notify him of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction or improper operation resulting therefrom nor from rectifying such conditions at his own expense. He will not be allowed to take advantage of any errors or omissions as full instructions will be furnished by the Engineer, should such errors or omissions be discovered. All schedules are given for the convenience of the Engineer and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.

### **G-2.05 SPECIFICATIONS**

The specifications consist of four parts, the General Provisions, the Technical Specifications, the Special Provisions and the Contract Items. The General Provisions and Technical Specifications contain general requirements which govern the work. The Special Provisions and the Contract Items modify and supplement these by detailed requirements for the work and shall always govern, whenever there appears to be conflict.

### **G-2.06 INTENT**

All work called for in the Specifications applicable to this Contract, but not shown on the Plans in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the work, is required and shall be performed by the Contractor as though it were specifically delineated or described.

The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

## **SECTION 3 WORKING DRAWINGS**

### **G-3.01 SCOPE**

The Contractor shall promptly prepare and submit layout, detail and shop drawings to insure proper construction, assembly, and installation of the work using those materials and methods as hereafter specified under the Technical Specifications, Special Provisions and Contract Items.

These drawings shall accurately and distinctly present the following:

- a. All working and erection dimensions.
- b. Arrangements and sectional views.
- c. Necessary details, including complete information for making connections between work under this Contract and work under other Contracts.
- d. Kinds of materials and finishes.
- e. Parts listed and description thereof.

Drawings for mechanical equipment shall present, where applicable, such data as dimensions, weight and performance characteristics. These data shall show conformance with the performance characteristics and other criteria incorporated in the Plans and Specifications.

Each drawing shall be dated and shall contain the name of the project, Division number and description, the technical specifications section number, names of equipment or materials and the location at which the equipment or materials are to be installed. Location shall mean both physical location and location relative to other connected or attached material. The Engineer will return unchecked any submittal which does not contain complete data on the work and full information on related matters.

Stock or standard drawings will not be accepted for review unless full identification and supplementary information is shown thereon in ink or typewritten form.

The Contractor shall review all working drawing submittals before transmitting them to the Engineer to determine that they comply with requirements of the Specifications. Drawings which are incomplete or are not in compliance with the Contract Documents shall not be submitted for processing by the Engineer. The Contractor shall place his stamp of approval on all working drawings submitted to the Engineer to indicate compliance with the above.

#### **G-3.02 APPROVAL**

If the working drawings show departures from the Contract requirements, the Contractor shall make specific mention thereof in his letter of submittal; otherwise approval of such submittals shall not constitute approval of the departure. Approval of the drawings shall constitute approval of the subject matter thereof only and not of any structure, material, equipment, or apparatus shown or indicated.

The approval of drawings will be general and shall not relieve the Contractor of responsibility for the accuracy of such drawings, nor for the proper fitting and construction of the work, nor for the furnishing of materials or work required by the Contract and not indicated on the drawings. No work called for by working drawings shall be done until such drawings have been approved by the Engineer.

The procedure in seeking approval of the working drawings shall be as follows:

1. The Contractor shall submit four complete sets of drawings

and other descriptive data together with one copy of a letter of transmittal to the Engineer for approval. The letter of transmittal shall contain the name of the project, contract number, technical specifications section number, the name of the Contractor, a list of drawings with numbers and titles, and any other pertinent information.

2. Drawings or descriptive data will be stamped "Approved", "Approved Subject to Corrections Marked", or "Examined and Returned for Correction" and one copy with a letter of transmittal will be returned to the Contractor.

3. If a drawing or other data is stamped "Approved", the Contractor shall insert the date of approval on five additional copies of the document and transmit the five copies to the Engineer together with one copy of a letter of transmittal containing substantially the same information as described in Instruction 1. above.

4. If a drawing or other data is stamped "Approved Subject to Corrections Marked", the Contractor shall make the corrections indicated and proceed as in Instruction 3., above.

5. If a drawing or data is stamped "Examined and Returned for Correction", the Contractor shall make the necessary corrections and resubmit the documents as set forth in Instruction 1., above. The letter of transmittal shall indicate that this is a resubmittal.

The Contractor shall revise and resubmit the working drawings as required by the Engineer, until approval thereof is obtained.

## **SECTION 4 MATERIALS AND EQUIPMENT**

### **G-4.01 GENERAL REQUIREMENTS**

All materials, appliances, and types or methods of construction shall be in accordance with the Specifications and shall, in no event, be less than that necessary to conform to the requirements of any applicable laws, ordinances, and codes.

All materials and equipment shall be new, unused, and correctly designed. They shall be of standard first grade quality, produced by expert personnel, and intended for the use for which they are offered. Materials or equipment which, in the opinion of the Engineer, are inferior or of a lower grade than indicated, specified, or required will not be accepted.

The quality of Workmanship and Materials entering into the work under this Contract shall conform to the requirements of the pertinent sections, clauses, paragraphs, and sentences, both directly and indirectly applicable thereto, of that part of the Technical Specifications, whether or not direct reference to such occurs in the Contract Items.

Equipment and appurtenances shall be designed in conformity with ANSI, ASME, IEEE, NEMA and other

generally accepted standards and shall be of rugged construction and of sufficient strength to withstand all stresses which may occur during fabrication, testing, transportation, installation, and all conditions of operation. All bearings and moving parts shall be adequately protected against wear by bushings or other approved means and shall be fully lubricated by readily accessible devices. Details shall be designed for appearance as well as utility. Protruding members, joints, corners, gear covers, and the like, shall be finished in appearance. All exposed welds shall be ground smooth and the corners of structural shapes shall be mitered.

Equipment shall be of the approximate dimensions as indicated on the Plans or as specified, shall fit the spaces shown on the Plans with adequate clearances, and shall be capable of being handled through openings provided in the structure for this purpose. The equipment shall be of such design that piping and electrical connections, ductwork, and auxiliary equipment can be assembled and installed without causing major revisions to the location or arrangement of any of the facilities.

Machinery parts shall conform exactly to the dimensions shown on the working drawings. There shall be no more fitting or adjusting in setting up a machine than is necessary in assembling high grade apparatus of standard design. The equivalent parts of identical machines shall be made interchangeable. All grease lubricating fittings on equipment shall be of a uniform type. All machinery and equipment shall be safeguarded in accordance with the safety codes of the ANSI and applicable state and local codes.

#### **G-4.02 MANUFACTURER**

The names of proposed manufacturers, suppliers, material, and dealers who are to furnish materials, fixtures, equipment, appliances or other fittings shall be submitted to the Engineer for approval, as early as possible, to afford proper investigation and checking. Such approval must be obtained before shop drawings will be checked. No manufacturer will be approved for any materials to be furnished under this Contract unless he shall be of good reputation and have a plant of ample capacity. He shall, upon the request of the Engineer, be required to submit evidence that he has manufactured a similar product to the one specified and that it has been previously used for a like purpose for a sufficient length of time to demonstrate its satisfactory performance.

All transactions with the manufacturers or subcontractors shall be through the Contractor, unless the Contractor shall request, in writing to the Engineer, that the manufacturer or subcontractor deal directly with the Engineer. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.

Any two or more pieces of material or equipment of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer.

#### **G-4.03 REFERENCE TO STANDARDS**

Whenever reference is made to the furnishing of materials or

testing thereof to conform to the standards of any technical society, organization or body, it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the date of advertisement for proposals, even though reference has been made to an earlier standard, and such standards are made a part hereof to the extent which is indicated or intended.

Reference to a technical society, organization or body may be made in the Specifications by abbreviations, in accordance with the following list:

AASHTO for American Association of State Highway and Transportation Officials (formerly AASHO)  
ACI for American Concrete Institute  
AGMA for American Gear Manufacturer's Association  
AFBMA for Anti-Friction Bearing Manufacturer's Association  
AISC for American Institute of Steel Construction  
AISI for American Iron and Steel Institute  
ANSI for American National Standards Institute  
ASCE for American Society of Civil Engineers  
ASTM for American Society for Testing and Materials  
ASME for American Society of Mechanical Engineers  
AWS for American Welding Society  
AWWA for American Water Works Association  
AWPA for American Wood Preservers Association  
CEMA for Conveyor Equipment Manufacturers Association  
CIPRA for Cast Iron Pipe Research Association  
IEEE for Institute of Electrical and Electronic Engineers  
IPCEA for Insulated Power Cable Engineers Association  
NEC for National Electrical Code  
NEMA for National Electrical Manufacturers Association  
SAE for Society of Automotive Engineers  
SHBI for Steel Heating Boiler Institute  
Fed.Spec. for Federal Specifications  
Navy Spec. for Navy Department Specifications  
U.L.,Inc. for Underwriters' Laboratories, Inc.

When no reference is made to a code, standard or specification, the Standard Specifications of the ANSI, the ASME, the ASTM, the IEEE, or the NEMA shall govern.

#### **G-4.04 SAMPLES**

The Contractor shall, when required, submit to the Engineer for approval typical samples of materials and equipment. The samples shall be properly identified by tags and shall be submitted sufficiently in advance of the time when they are to be incorporated into the work, so that rejections thereof will not cause delay. A letter of transmittal, in duplicate, from the Contractor requesting approval must accompany all such samples.

#### **G-4.05 EQUIVALENT QUALITY**

Whenever, in the Contract Documents, an article, material, apparatus, equipment, or process is called for by trade name or by the name of a patentee, manufacturer, or dealer or by reference to catalogs of a manufacturer or dealer, it shall be understood as intending to mean and specify the article, material, apparatus, equipment or process designated, or any

equal thereto in quality, finish, design, efficiency, and durability and equally serviceable for the purposes for which it is intended.

Whenever material or equipment is submitted for approval as being equal to that specified, the decision as to whether or not such material or equipment is equal to that specified shall be made by the Engineer.

Upon rejection of any material or equipment submitted as the equivalent of that specifically named in the Contract, the Contractor shall immediately proceed to furnish the designated material or equipment.

Neither the approval by the Engineer of alternate material or equipment as being equivalent to that specified nor the furnishing of the material or equipment specified, shall in any way relieve the Contractor of responsibility for failure of the material or equipment, due to faulty design, material, or workmanship, to perform the functions required of them by the Specifications.

#### **G-4.06 DELIVERY**

The Contractor shall deliver materials in ample quantities to insure the most speedy and uninterrupted progress of the work so as to complete the work within the allotted time. The Contractor shall also coordinate deliveries in order to avoid a delay in, or impediment of, the progress of the work of any related Contractor.

#### **G-4.07 CARE AND PROTECTION**

The Contractor shall be solely responsible for properly storing and protecting all materials, equipment, and work furnished under the Contract from the time such materials and equipment are delivered at the site of the work until final acceptance thereof. He shall, at all times, take necessary precautions to prevent injury or damage by water, freezing, or by inclemencies of the weather to such materials, equipment and work. All injury or damage to materials, equipment, or work resulting from any cause whatsoever shall be made good by the Contractor.

The Engineer shall, in all cases, determine the portion of the site to be used by the Contractor for storage, plant or for other purposes. If, however, it becomes necessary to remove and restack materials to avoid impeding the progress of any part of the work or interference with the work to be done by any other Contractor, the Contractor shall remove and restack such materials at his own expense.

#### **G-4.08 TOOLS AND ACCESSORIES**

The Contractor shall, unless otherwise stated in the Contract Documents, furnish with each type, kind or size of equipment, one complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain, or repair the equipment. Such tools and appliances shall be furnished in approved painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.

Spare parts shall be furnished as specified.

Each piece of equipment shall be provided with a substantial nameplate, securely fastened in place and clearly inscribed with the manufacturer's name, year of manufacture, serial number, weight and principal rating data.

#### **G-4.09 INSTALLATION OF EQUIPMENT**

The Contractor shall have on hand sufficient proper equipment and machinery of ample capacity to facilitate the work and to handle all emergencies normally encountered in work of this character.

Equipment shall be erected in a neat and workmanlike manner on the foundations at the locations and elevations shown on the Plans, unless directed otherwise by the Engineer during installation. All equipment shall be correctly aligned, leveled and adjusted for satisfactory operation and shall be installed so that proper and necessary connections can be made readily between the various units.

The Contractor shall furnish, install and protect all necessary anchor and attachment bolts and all other appurtenances needed for the installation of the devices included in the equipment specified. Anchor bolts shall be as approved by the Engineer and made of ample size and strength for the purpose intended. Substantial templates and working drawings for installation shall be furnished.

The Contractor shall, at his own expense, furnish all materials and labor for, and shall properly bed in non-shrink grout, each piece of equipment on its supporting base that rests on masonry foundations. Grout shall completely fill the space between the equipment base and the foundation.

#### **G-4.10 OPERATING INSTRUCTIONS**

The Contractor, through qualified individuals, shall adequately instruct designated employees of the City in the operation and care of all equipment installed hereunder, except for equipment that may be furnished by the City.

The Contractor shall also furnish and deliver to the Engineer three complete sets for permanent files, identified in accordance with Subsection G-3.01 hereof, of instructions, technical bulletins and any other printed matter, such as diagrams, prints or drawings, containing full information required for the proper operation, maintenance, and repair, of the equipment installed and the ordering of spare parts, except for equipment that may be furnished by the City.

In addition to the above three copies, the Contractor shall furnish any additional copies that may be required for use during construction and start-up operations.

#### **G-4.11 SERVICE OF MANUFACTURER'S ENGINEER**

The Contract prices for equipment shall include the cost of furnishing a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test and place in operation the equipment in conformity with the Contract Documents. After the equipment is placed in

permanent operation by the City, such engineer or superintendent shall make all adjustments and tests required by the Engineer to provide that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the City in the proper operation and maintenance of such equipment.

## **SECTION 5 INSPECTION AND TESTING**

### **G-5.01 GENERAL**

The Contractor's attention is hereby directed to Article 3.03 of the Agreement.

Inspection and testing of materials will be performed by the City unless otherwise specified.

For tests specified to be made by the Contractor, the testing personnel shall make the necessary inspections and tests and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Contract Documents. Five copies of the reports shall be submitted and authoritative certification thereof must be furnished to the Engineer as a prerequisite for the acceptance of any material or equipment.

If, in the making of any test of any material or equipment, it is ascertained by the Engineer that the material or equipment does not comply with the Contract, the Contractor will be notified thereof and he will be directed to refrain from delivering said material and equipment, or to remove it promptly from the site or from the work and replace it with acceptable material, without cost to the City.

Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with recognized test codes of the ANSI, ASME, or the IEEE, except as may otherwise be stated herein.

The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for damage which may occur to equipment prior to the time when the City formally takes over the operation thereof.

### **G-5.02 COSTS**

All inspection and testing of materials furnished under this Contract will be performed by the City or duly authorized inspection engineers or inspection bureaus without cost to the Contractor, unless otherwise expressly specified.

The cost of shop and field tests of equipment and of certain other tests specifically called for in the Contract Documents shall be borne by the Contractor and such costs shall be deemed to be included in the contract price.

Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the City for compliance. The Contractor shall reimburse the City for the expenditures incurred in making

such tests on materials and equipment which are rejected for noncompliance.

### **G-5.03 INSPECTIONS OF MATERIALS**

The Contractor shall give notice, in writing to the Engineer, sufficiently in advance of his intention to commence the manufacture or preparation of materials especially manufactured or prepared for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the manufacture or preparation of materials. Upon receipt of such notice the Engineer will arrange to have a representative present at such times during the manufacture as may be necessary to inspect the materials or he will notify the Contractor that inspection will be made at a point other than the point of manufacture, or he will notify the Contractor that inspection will be waived. The Contractor must comply with these provisions before shipping any material. Such inspection shall not release the Contractor from the responsibility for furnishing materials meeting the requirements of the Contract Documents.

### **G-5.04 CERTIFICATE OF MANUFACTURE**

When inspection is waived or when the Engineer so requires, the Contractor shall furnish to him authoritative evidence in the form of Certificates of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Contract Documents. These certificates shall be notarized and shall include copies of the results of physical tests and chemical analyses, where necessary, that have been made directly on the product or on similar products of the manufacturer.

### **G-5.05 SHOP TESTS OF OPERATING EQUIPMENT**

Each piece of equipment for which pressure, duty, capacity, rating, efficiency, performance, function, or special requirements are specified shall be tested in the shop of the maker in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents. No such equipment shall be shipped to the work until the Engineer notifies the Contractor, in writing, that the results of such tests are acceptable.

Five copies of the manufacturer's actual test data and interpreted results thereof, accompanied by a certificate of authenticity sworn to by a responsible official of the manufacturing company, shall be forwarded to the Engineer for approval.

The cost of the shop tests and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor.

### **G-5.06 PRELIMINARY FIELD TESTS**

As soon as conditions permit, the Contractor shall furnish all labor, materials, and instruments and shall make preliminary field tests of equipment. If the preliminary field tests disclose any equipment furnished under this Contract which does not comply with the requirements of the Contract Documents, the Contractor shall, prior to the acceptance tests, make all changes, adjustments, and replacements required.

## TEMPORARY STRUCTURES

### G-5.07 FINAL FIELD TESTS

Upon completion of the work and prior to final payment, all equipment and appliances installed under this Contract shall be subjected to acceptance tests as specified or required to prove compliance with the Contract Documents.

The Contractor shall furnish labor, fuel, energy, water and all other materials, equipment, and instruments necessary for all acceptance tests, at no additional cost to the City.

### G-5.08 FAILURE OF TESTS

Any defects in the materials and equipment or their failure to meet the tests, guarantees or requirements of the Contract Documents shall be promptly corrected by the Contractor by replacements or otherwise. The decision of the Engineer as to whether or not the Contractor has fulfilled his obligations under the Contract shall be final and conclusive. If the Contractor fails to make those corrections or if the improved materials and equipment, when tested, shall again fail to meet the guarantees or specified requirements, the City, notwithstanding its partial payment for work, and materials and equipment, may reject the materials and equipment and may order the Contractor to remove them from the site at his own expense.

In case the City rejects any materials and equipment, then the Contractor shall replace the rejected materials and equipment within a reasonable time. If he fails to do so, the City may, after the expiration of a period of thirty calendar days after giving him notice in writing, proceed to replace such rejected materials and equipment, and the cost thereof shall be deducted from any compensation due or which may become due the Contractor under this Contract.

The City agrees to obtain other equipment within a reasonable time and the Contractor agrees that the City may use the equipment furnished by him without rental or other charges until the new equipment is obtained.

Materials or work in place that fails to pass acceptability tests shall be retested at the direction of the construction engineer all such retests shall be at the Contractor's expense. The rates charged shall be in accordance with the Department of Public Works current annual inspection contract which is available for inspection at the offices of the Department of Public Works.

### G-5.09 FINAL INSPECTION

The procedures for final inspection shall be in accordance with the provisions of Article 4.07 of the Agreement. During such final inspections, the work shall be clean and free from water. In no case will the final estimate be prepared until the Contractor has complied with all the requirements set forth and the Engineer has made his final inspection of the entire work and is satisfied that the entire work is properly and satisfactorily constructed in accordance with the requirements of the Contract Documents.

## SECTION 6

### G-6.01 GENERAL

All false work, scaffolding, ladders, hoistways, braces, pumping plants, shields, trestles, roadways, sheeting, centering forms, barricades, drains, flumes, and the like, any of which may be needed in the construction of any part of the work and which are not herein described or specified in detail, must be furnished, maintained and removed by the Contractor, and he shall be responsible for the safety and efficiency of such works and for any damages that may result from their failure or from their improper construction, maintenance, or operation.

### G-6.02 PUBLIC ACCESS

At all points in the work where public access to any building, house, place of business, public road, or sidewalk would be obstructed by any action of the Contractor in executing the work required by this Contract, the Contractor shall provide such temporary structure, bridges or roadway as may be necessary to maintain public access at all times. At least one lane for vehicular traffic shall be maintained in streets in which the Contractor is working. Street closure permits are required from the Department of Public Works.

The Contractor shall provide suitable temporary bridges, as directed by the Engineer, at street intersections when necessary for the maintenance of vehicular and pedestrian traffic.

Prior to temporarily cutting of access to driveways and garages, the Contractor shall give twelve (12) hours notice to affected property owners. Interruptions to use of private driveways shall be kept to a minimum.

### G-6.03 CONTRACTOR'S FIELD OFFICE

The Contractor shall erect, furnish and maintain a field office with a telephone at the site during the entire period of construction. He or an authorized agent shall be present at this office at all times while his work is in progress. Readily accessible copies of both the Contract Documents and the latest approved working drawings shall be kept at this field office.

### G-6.04 TEMPORARY FENCE

If, during the course of the work, it is necessary to remove or disturb any fence or part thereof, the Contractor shall, at his own expense, if so ordered by the Engineer, provide a suitable temporary fence which shall be maintained until the permanent fence is replaced. The Engineer shall be solely responsible for the determination of the necessity for providing a temporary fence and the type of temporary fence to be used.

### G-6.05 RESPONSIBILITY FOR TEMPORARY STRUCTURES

In accepting the Contract, the Contractor assumes full responsibility for the sufficiency and safety of all temporary structures or work and for any damage which may result from their failure or their improper construction, maintenance, or operation and will indemnify and save harmless the City from



all claims, suits or actions and damages or costs of every description arising by reason of failure to comply with the above provisions.

## **SECTION 7 TEMPORARY SERVICES**

### **G-7.01 WATER**

The Contractor shall provide the necessary water supply at his own expense. He shall, if necessary, provide and lay necessary waterlines from existing mains to the place of using, shall secure all necessary permits and pay for all taps to water mains or hydrants and for all water used at the established rates.

### **G-7.02 LIGHT AND POWER**

The Contractor shall provide, at his own expense, temporary lighting and power facilities required for the proper prosecution and inspection of the work. If, in the opinion of the Engineer, these facilities are inadequate, the Contractor will not be permitted to proceed with any portion of the work affected thereby.

### **G-7.03 SANITARY REGULATIONS**

The Contractor shall prohibit and prevent the committing of nuisances on the site of the work or on adjoining property and shall discharge any employee who violates this rule.

Ample washrooms and toilet facilities and a drinking water supply shall be furnished and maintained in strict conformity with the law by the Contractor for use by his employees.

### **G-7.04 ACCIDENT PREVENTION**

Precautions shall be exercised at all times for the protection of persons and property. The safety provisions of applicable laws, building and construction codes shall be observed. The Contractor shall comply with the U. S. Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596), and under Section 107 of the Contract Work. Hours and Safety Standards Act (PL 91-54), except where state and local safety standards exceed the federal requirements and except where state safety standards have been approved by the Secretary of Labor in accordance with provisions of the Occupational Safety and Health Act.

### **G-7.05 FIRST AID**

The Contractor shall keep upon the site, at each location where work is in progress, a completely equipped first aid kit and shall provide ready access thereto at all times when men are employed on the work.

### **G-7.06 HEATING**

The Contractor shall provide temporary heat, at his own expense, whenever required on account of work being carried on during cold weather and to prevent freezing of water pipes and other damage to the work.

## **SECTION 8**

## **LINES AND GRADES**

### **G-8.01 GENERAL**

All work done under this Contract shall be constructed in accordance with the lines and grades shown on the Plans, or as given by the Engineer. The full responsibility for keeping alignment and grade shall rest upon the Contractor.

The Engineer will establish bench marks and base line controlling points. Reference remarks for lines and grades as the work progresses will be located to cause as little inconvenience to the prosecution of the work as possible. The Contractor shall so place excavation and other materials as to cause no inconvenience in the use of the use of the reference marks provided. He shall remove any obstructions placed by him contrary to this provision.

### **G-8.02 SURVEYS**

The Contractor shall furnish and maintain, at his own expense, stakes and other such materials, and give such assistance, including qualified helpers, as may be required by the Engineer for setting reference marks. The Contractor shall check such reference marks by such means as he may deem necessary and, before using them, shall call the Engineer's attention to any inaccuracies. The Contractor shall, at his own expense, establish all working or construction lines and grades as required from the reference marks set by the Engineer, and shall be solely responsible for the accuracy thereof. He shall, however, be subject to the check and review of the Engineer.

The Contractor shall keep the Engineer informed a reasonable time in advance as to his need for line and grade reference marks, in order that they may be furnished and all necessary measurements made for record and payment with the minimum of inconvenience to the Engineer or of delay to the Contractor.

It is the intention not to delay the work for the establishment of reference marks but, when necessary, working operations shall be suspended for such reasonable time as the Engineer may require for this purpose.

### **G-8.03 SAFEGUARDING MARKS**

The Contractor shall safeguard all points, stakes, grade marks, monuments and bench marks made or established on the work, bear the cost of reestablishing them if disturbed, and bear the entire expense of rectifying work improperly installed due to not maintaining or protecting or to removing without authorization such established points, stakes and marks.

The Contractor shall safeguard all existing and known property corners, monuments and marks adjacent to but not related to the work and, if required, shall bear the cost of reestablishing them if disturbed or destroyed.

### **G-8.04 DATUM PLANE**

All elevations indicated or specified refer to the Mean Sea Level Datum of the U.S.C. & G.S. (N.O.S.) which is 0.80 feet above the Mean Low Water Datum of the U. S. Army

Corps of Engineers.

## **SECTION 9 ADJACENT STRUCTURES AND LANDSCAPING**

### **G-9.01 RESPONSIBILITY**

The responsibility for removal, replacement, relocation, repair, rebuilding or protection of all public utility installations, including poles, tracks, pipes, wires, conduits, house service connections, vaults, manholes, sewers, traffic control and fire alarm signal circuit installations and other appurtenances and facilities shall be in accordance with G-1.02 and G-1.03.

The Contractor shall also be entirely responsible and liable for all damage or injury as a result of his operations to all other adjacent public and private property, structures of any kind and appurtenances thereto met with during the progress of the work. The cost of protection, replacement in their original locations and conditions or payment of damages for injuries to such adjacent public and private property and structures affected by the work, whether or not shown on the Plans, and the removal, relocation, and reconstruction of such items called for on the Plans or specified shall be included in the various Contract Items and no separate payment will be made therefor. Where such public and private property, structures of any kind and appurtenances thereto are not shown on the Plans and when, in the opinion of the Engineer, removal or relocation and reconstruction is necessary to avoid interference with the work, payment therefor will be made as provided for extra work in Article 7.02 of the Agreement.

### **G-9.02 PROTECTION OF TREES**

All trees and shrubs shall be adequately protected by the Contractor with boxes or otherwise and, within the City of Tampa, in accordance with ordinances governing the protection of trees. No excavated materials shall be placed so as to injure such trees or shrubs. Trees or shrubs destroyed by negligence of the Contractor or his employees shall be replaced by him with new stock of similar size and age, at the proper season, and at the sole expense of the Contractor.

Beneath trees or other surface structures, where possible, pipelines may be built in short tunnels, backfilled with excavated materials, except as otherwise specified, or the trees or structures carefully supported and protected from damage.

The City may order the Contractor, for the convenience of the City, to remove trees along the line of trench excavation. If so ordered, the City will obtain any permits required for removal of trees. Such tree removal ordered shall be paid for under the appropriate Contract Items.

### **G-9.03 LAWN AREAS**

Lawn areas shall be left in as good condition as before the starting of the work. Where sod is to be removed, it shall be carefully removed and later replaced, or the area where sod has been removed shall be restored with new sod in the

manner described in the Technical Specifications section.

### **G-9.04 RESTORATION OF FENCES**

Any fence, or part thereof, that is damaged or removed during the course of the work shall be replaced or repaired by the Contractor and shall be left in as good a condition as before the starting of the work. The manner in which the fence is repaired or replaced and the materials used in such work shall be subject to the approval of the Engineer. The cost of all labor, materials, equipment, and work for the replacement or repair of any fence shall be deemed included in the appropriate Contract Item or Items, or if no specific Item is provided therefor, as part of the overhead cost of the work, and no additional payment will be made therefor.

## **SECTION 10 PROTECTION OF WORK AND PUBLIC**

### **G-10.01 TRAFFIC REGULATIONS**

The Contractor shall arrange his work to comply with Article G-6.02. The work shall be done with the least possible inconvenience to the public and to that end the work may be confined by the Engineer to one block at a time.

### **G-10.02 BARRIERS AND LIGHTS**

During the prosecution of the work, the Contractor shall put up and maintain at all times such barriers, and lights, as will effectually prevent accidents. The Contractor shall provide suitable barricades, red lights, "danger" or "caution" or "street closed" signs and watchmen at all places where the work causes obstructions to the normal traffic or constitutes in any way a hazard to the public. Such barriers and signs shall be constructed to State of Florida Department of Transportation standards and placed as recommended by the Traffic Division of the City's Department of Public Works.

No open fires will be permitted.

### **G-10.03 SMOKE PREVENTIONS**

The Contractor shall use hard coal, coke, oil or gas as fuel for equipment generating steam. A strict compliance with ordinances regulating the production and emission of smoke will be required.

### **G-10.04 NOISE**

The Contractor shall eliminate noise to as great an extent as practicable at all times. Air compressing plants shall be equipped with silencers and the exhaust of all gasoline motors or other power equipment shall be provided with mufflers. In the vicinity of hospitals and schools, special care shall be used to avoid noise or other nuisances. The Contractor shall strictly observe all local regulations and ordinances covering noise control.

Except in the event of an emergency, no work shall be done between the hours of 7:00 p.m. and 7:00 a.m., or on Sundays.

If the proper and efficient prosecution of the work requires operations during the night, the written permission of the Engineer shall be obtained before starting such items of the work.

**SECTION 13  
CLEANING**

**G-10.05 ACCESS TO PUBLIC SERVICES**

Neither the materials excavated nor the materials or plant used in the construction of the work shall be so placed as to prevent free access to all fire hydrants, valves or manholes.

**G-10.06 DUST PREVENTION**

The Contractor shall prevent dust nuisance from his operations or from traffic by keeping the streets sprinkled with water at all times.

**G-10.07 PRIVATE PROPERTY**

The Contractor shall so conduct the work that no equipment, material, or debris will be placed or allowed to fall upon private property in the vicinity of the work unless he shall have obtained the owner's written consent thereto and shall have shown this consent to the Engineer.

**SECTION 11  
SLEEVES AND INSERTS**

**G-11.01 COORDINATION**

When the Contract requires the placing of conduits, saddles, boxes, cabinets, sleeves, inserts, foundation bolts, anchors, and other like work in floors, roofs, or walls of buildings and structures, they shall be promptly installed in conformity with the construction program. The Contractor who erects the floors, roofs, and walls shall facilitate such work by fully cooperating with the Contractors responsible for installing such appurtenances. The Contractor responsible for installing such appurtenances shall arrange the work in strict conformity with the construction schedule and avoid interference with the work of other contractors.

**G-11.02 OPENINGS TO BE PROVIDED**

In the event timely delivery of sleeves and other materials cannot be made and to avoid delay, the affected Contractor may arrange to have boxes or other forms set at the locations where the appurtenances are to pass through or into the floors, roofs, walls, or other work. Upon the subsequent installation of these appurtenances, the Contractor erecting the structure shall fill around them with materials as required by the Contract. The necessary expenditures incurred for the boxing out and filling in shall be borne by the Contractor or Contractors required to furnish the sleeves and inserts. Formed openings and later installation of sleeves will not be permitted at locations subject to hydrostatic pressure.

**SECTION 12  
CUTTING AND PATCHING**

**G-12.01 GENERAL**

The Contractor shall do all cutting, fitting, or patching of his portion of the work that may be required to make the several parts thereof join and coordinate in a manner satisfactory to the Engineer and in accordance with the Plans and Specifications. The work must be done by competent workmen skilled in the trade required by the restoration.

**G-13.01 DURING CONSTRUCTION**

During construction of the work, the Contractor shall, at all times, keep the site of the work and adjacent premises as free from material, debris, and rubbish as is practicable and shall remove the same from any portion of the site if, in the opinion of the Engineer, such material, debris, or rubbish constitutes a nuisance or is objectionable.

The Contractor shall remove from the site all of his surplus materials and temporary structures when no further need therefor develops.

**G-13.02 FINAL CLEANING**

At the conclusion of the work, all erection plant, tools, temporary structures and materials belonging to the Contractor shall be promptly taken away, and he shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances.

The Contractor shall thoroughly clean all equipment and materials installed by him and shall deliver such materials and equipment undamaged in a bright, clean, polished, and new appearing condition.

**SECTION 14  
MISCELLANEOUS**

**G-14.01 PROTECTION AGAINST SILTATION AND BANK EROSION**

The Contractor shall arrange his operations to minimize siltation and bank erosion on construction sites and on existing or proposed watercourses and drainage ditches.

**G-14.02 EXISTING FACILITIES**

The work shall be so conducted to maintain existing facilities in operation insofar as is possible. Work shall be scheduled to minimize bypassing during construction. Requirements and schedules of operations for maintaining existing facilities in service during construction shall be as described in the Special Provisions.

**G-14.03 USE OF CHEMICALS**

All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

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### SP-1 Scope

The work under these Contract Documents includes the construction of stormwater improvements at two sites within the City of Tampa.

Site 1 – Grady Ave: Project area is located on the east side of N Grady Avenue south of W Spruce Street as is identified as the Grady Avenue Drainage Improvements. Work involves demolition of trees and guardrail, installation of ten (10) storm sewer structures and large diameter piping to enclose an existing 800-ft ditch corridor. Work includes approximately 200 feet of 36" RCP pipe and approximately 490 feet of 60"x38" ERCP pipe and all miscellaneous and appurtenant work.

Site 2 – 43<sup>rd</sup> Street: Project area is located just west of the Tampa Distribution Center located at 1212 N. 50<sup>th</sup> Street as in identified as the 43<sup>rd</sup> Street Drainage Improvements because of the nearest downstream crossing. Work involves approximately 700 feet of concrete slope stabilization of an existing ditch and all miscellaneous and appurtenant work.

The Contractor shall furnish all labor, materials and equipment for the accomplishment of all work, complete and in-place, as described herein, in the Technical Specifications and the Construction Plans and as directed by the Engineer in accordance with the obvious or expressed intent of the Contract.

### SP-2 Intent

It is the intent of these documents to fully describe the work required to complete the full intent of this project. Therefore, any work not specifically addressed in either the Plans or in the Specifications, but which is necessary to provide for the full and complete intent of the project, is required to be included and shall be performed by the Contractor in accordance with all requirements herein, as though it were specifically addressed. The cost of this work shall be included in the cost of the pay item to which it is incidental, and no additional payment will be made therefor.

### SP-3 Permits & Licensing

The City or its design consultant is responsible for obtaining permits, when required, from State, regional or County agencies and railroads having jurisdiction over the project area, as follows:

#### Site 1: Grady Avenue Drainage Improvements

- Statewide (SWFWMD) Environmental Resource Permit – Permit No:43046591.000
- FDEP Section 404 Wetlands Permit – General Permit Coverage
- Hillsborough County Environmental Protection Commission Wetlands Permit – Exemption Verified

#### Site 2: 43<sup>rd</sup> Street Drainage Improvements

- Statewide (SWFWMD) Environmental Resource Permit – Permit No:43042156.002
- FDEP Section 404 Wetlands Permit – No Permit Required Verified
- Hillsborough County Environmental Protection Commission Wetlands Permit – Exemption Verified

The Contractor is responsible for obtaining all other permits required to construct the project. The following permits will be obtained, when required:

- FDEP NPDES Construction Generic Permit
- FDEP Dewatering Permit
- City of Tampa CWS
- City of Tampa Tree Pruning Permit
- All other permits that may be required.

The Contractor shall be required to comply with all provisions of the permits, including those affecting workmanship, schedules, maintenance of traffic (see SP-26), notification of construction start and completion dates, pavement removal and replacement and other conditions under which each permit is issued.

The Contractor shall maintain full responsibility of any violation of the conditions of a permit under his control and shall work with the Authority Having Jurisdiction (AHJ) to correct any such violation. Any penalties imposed resulting from execution of this Contract shall be the responsibility of the Contractor.

The Contractor shall have in his possession the proper license to perform the work before submittal of his bid and shall obtain any required City/County building permits and shall obtain and pay for all other licenses and authorizations required for the prosecution of the work, including the cost of all work performed in compliance with the terms and conditions of such permits, licenses and authorizations, whether by himself or others and pay all permit fees associated with the permits for which he is responsible.

The Contractor shall require all subcontractors to be currently licensed by the City to perform the proposed work in their respective fields and to obtain permits for the execution of said work. All work shall be performed in accordance with the licenses, permits and the requirements of the current Building and Construction Regulations Chapter of the City of Tampa Code.

The Contractor is responsible to schedule and coordinate with the Construction Services of the Contract Administration Department for all required inspections and tests for all phases of work to obtain final approval from the AHJ.

#### SP-4 Standard Drawings

The City of Tampa, Stormwater Engineering Division's Standard Drawings are available on the 6th Floor, North Wing of City Hall Annex, 306 East Jackson Street and online at <https://www.tampa.gov/document/departamental-standards-25996>.

The City of Tampa Transportation Engineering Division Pavement Restoration Standard is available on the 6th Floor, East Wing of City Hall Annex, 306 East Jackson Street and online at <https://www.tampa.gov/document/city-tampa-pavement-restoration-standard-26101>.

#### SP-5 Temporary Water for Testing

Supplemental to the requirements outlined in Article G-7.01 of the General Provisions, all reasonable amounts of water required by the Contractor for water main testing and flushing under this agreement will be furnished by the City from the existing water system without cost to the Contractor. The Contractor shall request temporary hydrant meters with backflow prevention devices when connecting to existing water system hydrants. A security deposit for the meter is required to be paid by the Contractor. The deposit will be returned when the meter is returned to the City. City Crews will install the meter with backflow-preventer on the hydrant. The Contractor shall make any necessary water supply connections at his own expense at a point designated by the City. These connections shall be maintained by the Contractor, who shall furnish all pipe, valves, and such other equipment necessary or required. Temporary piping may run above ground when there is no possibility of traffic, and it can be done safely. Otherwise, it must run underground and in such manner as to meet the approval of the City.

At the discretion of the City, unnecessary waste of water after notification will be cause for use of water to be discontinued. After temporary lines have served their purpose, they shall be removed by the Contractor and all

connections closed or plugged to the satisfaction of the City.

#### SP-6 Construction Start

Construction will not begin prior to receipt by the City of the required permits or until all necessary equipment and materials are on-site. Completion of these efforts shall not be unduly delayed by the Contractor. If start of construction is delayed due to permit acquisition, the contract time will be extended by the number of days after Notice to Proceed date that the permit is issued, but no extra payment will be made to the Contractor.

#### SP-7 Coordination and Cooperation

In performing work under this Contract, the Contractor shall coordinate his work with that of any adjacent contractors for the City, and others, and cooperate with them in every reasonable way, to the end that there shall be the minimum practicable interference with their operations.

#### SP-8 Connections Between Construction Phases

The Contractor shall provide an approved masonry bulkhead, spigot plug, bell cap, or standard pipe plug in the sanitary or storm sewer pipe, manhole, junction chamber, or other location to provide for terminating construction when the work is performed in phases and the connecting phase is delayed or incomplete.

The Contractor shall remove any such bulkhead or plug encountered when connecting to previously completed work.

The cost of furnishing and removing bulkheads and plugs shall be included in the various Contract Items for pipe lines, or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor.

#### SP-9 Use of Private Property for Temporary Construction Use

If, in the opinion of the Contractor, obtaining a temporary construction easement or property rental, lease or use is necessary or desirable, it shall be the sole responsibility of the Contractor to obtain such use from the Owner of the property. If such use is obtained by the Contractor, it shall contain provisions to hold the City harmless from any operations of the Contractor within the use areas. The Contractor shall not conduct construction operations on private property outside the limits of any temporary or permanent easement obtained by the City unless a copy of the temporary construction use agreement is filed with the City.

#### SP-10 Release of Facilities for Use

It is the intent of these Specifications that all newly constructed infrastructure and appurtenant facilities be placed in service as rapidly as possible. A portion of the project may be placed in service upon substantial completion of an agreed upon phase or segment once inspected and approved by the Engineer and the City. Acceptance or use by the City of any portion of the work prior to final acceptance shall not relieve the Contractor of any responsibilities for that work included in the Contract Documents.

#### SP-11 Material and Equipment Approval

The Contractor shall not enter into any subcontracts, or place any order, for the furnishing of any material or equipment until he has received the Engineer's written approval of the manufacturers.



SP-12 Contractor Emergency Response Time

Upon commencement of the work and until final completion of the project, the Contractor must be available to service emergency calls seven (7) days a week, twenty-four (24) hours a day. The response time for emergency calls shall be within two (2) hours. A contact person and telephone number shall be provided to the City for such purposes.

SP-13 Contractor's Field Office

Delete Article G-6.03 Contractor's Field Office from GENERAL PROVISIONS. The Contractor's superintendent or alternate approved by the City shall be present at all times while work is in progress. The Contractor shall maintain copies of the Contract Documents, submittals and supplemental instructions in a complete, organized and up-to-date manner at the job site.

SP-14 Salvage

All existing materials and appurtenances removed by the Contractor and which are not designated to be salvaged shall become the property of the Contractor and shall be removed from the site of the work to the Contractor's own place of disposal.

Items which are designated to be salvaged shall be removed by the Contractor, delivered, and unloaded at a location within the Department's service area, as directed by the City. The cost of removing, disposing, delivering, and unloading as salvage items of pipe and appurtenances shall be included in the various Contract Items or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor.

SP-15 Sequence of Operations

The Contractor shall develop, with the Engineer's input and approval, a complete CPM schedule of the work which, in the opinion of the Engineer, will permit substantial completion of the work, in whole or in part, at the earliest possible date and will minimize disruption to the residents and business owners affected by the work.

Due to the characteristics of this project and/or the specific conditions within the neighborhood(s) where the work will be performed, the Contractor shall adhere to the following restrictions affecting the sequencing of the work:

Site 1: Grady Avenue Drainage Improvements

- The Contractor shall work keep one side of the street open at all time for vehicles and provide flaggers and required.
- All lanes shall be open when Contractor not on site.
- Other construction sequence options may be allowed that would achieve the goal of minimizing disturbance to the neighborhood.

Site 2: 43<sup>rd</sup> Street Drainage Improvements

- City has coordinated with adjacent property owner to identify a temporary construction area. Parking, material storage, work and major construction activities shall be restricted to the drainage easement and the temporary access area unless Contractor makes additional arrangements, see SP-9.
- Primary site access is through industrial park. Contractor shall be responsible for hauling practices and shall make drivers aware of travel paths and safety concerns.

To minimize disturbance to the tenants of the Tampa Distribution Center adjacent to Site 2, the Contractor shall

substantially complete the work at Site 2 prior to commencing work at Site 1 unless the City issues an approval in writing of an alternate sequence of construction.

Acceptance or use by the City of any portion of the work prior to final acceptance shall not relieve the Contractor of any responsibilities for that work included in the Contract Documents.

#### SP-16 Project Sign

The Contractor shall furnish a project sign as shown on the detail included herein and install it in the construction area as directed by the Engineer within 15 days of Notice to Proceed.

The cost of fabrication, erection, maintenance, removal, and proper disposal of the project sign at the completion of the project, including all labor and materials shall be deemed included in the prices bid for the various Contract Items of this Contract, or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor.

#### SP-17 Prevention, Control and Abatement of Erosion and Water Pollution

The Contractor shall be responsible for employing Best Management Practices (BMPs) for the prevention, control and abatement of erosion, siltation and water pollution resulting from construction of the project until final acceptance.

He shall provide, install, construct, and maintain any covering, mulching, sodding, sand bagging, berms, slope drains, sedimentation structures, silt and turbidity barriers and other BMPs necessary to meet City, County, State and Federal regulatory agency requirements.

Storm drainage facilities, both open and closed conduit, serving the construction area shall be protected by the Contractor from pollutant and contaminants. If the Engineer determines that siltation of drainage facilities has resulted due to the project, the Engineer will advise the Contractor to remove and properly dispose of the deposited material and properly restore the area to pre-impacted conditions. Should the Contractor fail to or elect not to remove the deposits, the City will provide maintenance cleaning as needed and will charge all costs of such service against the amount of money due or to become due the Contractor.

Construction operations in rivers, channels, streams, tidal waters, canals and other impoundments shall be restricted 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, rivers, channels, streams and impoundments shall be promptly cleared of all obstructions placed therein or caused by construction operations.

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

The Contractor shall not disturb lands or waters outside the limits of construction except as may be found necessary and authorized by the Engineer.

The location of and methods of operation in all detention areas, borrow pits, material supply pits and disposal areas furnished by the Contractor shall meet the approval of the Engineer as being such that erosion during and after completion of the work will not likely result in detrimental siltation or water pollution.

The Contractor shall comply with the applicable provisions of the Hillsborough County Land Development Code

concerning grading, filling, excavation, soil removal, and the like, as amended.

The Contractor shall schedule his 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 exposed, uncompleted construction to the elements shall be as short as practicable.

Clearing and grubbing shall be so scheduled and performed that grading operations can follow immediately thereafter and grading operations shall be so scheduled and performed that permanent erosion control features can follow immediately thereafter if conditions on the project permit.

The Engineer may limit the surface areas of unprotected erodible earth exposed by clearing and grubbing, excavation or filling operations and may direct the Contractor to provide immediate erosion or pollution control measures to prevent siltation or contamination of any river, stream, channel, tidal waters, reservoir, canal or other impoundment or to prevent damage to the project or property outside the project right of way.

#### SP-19 Demolition

The Contractor shall demolish, remove and dispose of at an offsite location all pipe, structures, pavement, sidewalks, driveways, curb, vegetation and other items shown on the Plans to be removed or otherwise necessary to construct the proposed improvements and/or as directed by the Engineer.

The Contractor shall fill or backfill excavations in accordance with the specifications.

The cost of this work, including all material, labor, equipment, etc., shall be included under the various Contract Items, or in the total Lump Sum Price, as applicable, and no additional payment shall be made therefor.

#### SP-20 Dewatering

Dewatering is the responsibility of the Contractor. All costs associated with dewatering shall be included in the appropriate contract price for items to which dewatering is incidental, or in the total Lump Sum Price, as applicable, and no separate payment shall be made therefor. Contractor shall apply for and obtain, at his cost, all Florida Department of Environmental Protection required permits associated with any proposed dewatering or wellpointing operation.

Before commencing any excavation at the site of the work, the Contractor shall submit to the Engineer and obtain his approval of the methods and equipment and arrangement of facilities proposed for the removal and disposal of water at the site and of all water entering any excavation or other part of the work from any source whatsoever. Adequate standby facilities shall be provided to ensure that the excavation will be kept dry in the event of power failure or mechanical breakdown. Facilities for removal and disposal of water shall be of sufficient capacity to keep the excavation dry under all circumstances with one-half of the facilities out of service. If well points are used, provision shall be made for removing and resetting individual well points without taking the system of which they are a part out of service. Wellpoint piping and discharge should not adversely affect citizens' access to their property. For construction areas within or adjacent to residential areas, day-night average sound levels from dewatering pumps shall be limited to 65dB(A) by the use of a noise abatement enclosure or other approved noise abatement system.

#### SP-21 Unauthorized Filling or Grading

The Contractor, under Sec. 21-27 (Permit Requirements) of the City of Tampa Code, is prohibited from filling or grading any area, public or private, (except where shown on the construction plans) anywhere within the City limits

without a permit. Drainage patterns cannot be altered to the detriment of neighboring property owners or public rights-of-way. A copy of the permit shall be submitted to the Engineer by the Contractor prior to any filling or grading operation.

#### SP-22 Storage of Materials

Storage of materials shall be limited to the right-of-way area within the limits of the project or for phased projects, within the active construction phase. Within these limits, the Contractor may only use that portion of the right-of-way outside of existing or proposed pavement areas provided that this use does not obstruct pedestrian or vehicular traffic and conforms to the City's Tree Ordinance. If the area behind the curb line/off the edge of pavement is insufficient in size to accommodate the Contractor's storage needs, the Contractor is required to secure the use of a vacant parcel of land for use as a storage site for the duration of this project. Upon completion of the project, right-of-way shall be returned to pre-construction conditions and meet City Standards. All other storage areas will be restored to a condition which meets or exceeds the pre-construction condition to the Owner's satisfaction. Payment for use and restoration of storage areas will be included in the appropriate lump sum pay items and unless the area is within the pipeline pay limits, no separate payment will be made therefor.

#### SP-23 Temporary Stockpiling

For temporary stockpiling of the excavated material within project limits (and anywhere within City limits), the Contractor shall follow the following procedure:

##### Public Right-of-Way

- a. The Contractor will not be allowed to stockpile suitable, excavated material within right-of-way for a period in excess of 30 calendar days. Unsuitable excavated material shall not be stockpiled within public right-of-way for a period in excess of 7 calendar days.

##### Location other than Public Right-of-way

- b. The Contractor shall:
  - 1) Obtain the permission (in writing) from the owner of the property where stockpiling is desired.
  - 2) At his own expense present the above letter and a contour plan of the site to the Engineer for approval of the stockpiling site.

The time periods of stockpiling shall be specified by the Contractor in writing.

Upon removal of stockpiled material, the Contractor shall clean up and grade the site to its original contours and conditions.

The City of Tampa shall not be a party to the agreement between the Contractor and the property owner.

Regardless of the location of stockpiling, it shall be the Contractor's responsibility to make sure that stockpiling in no way constitutes a public hazard or nuisance and does not interfere with the natural surface runoff in the area and complies with the NPDES permit requirements, if applicable.

SP-24 Trench Maintenance

Trenches shall be protected at the close of each day's operations by lighted barricades, fences, and other methods to the satisfaction of the Engineer. Fences shall meet OSHA standards and be structurally stable as approved by the Engineer. No excavations shall be left open over a weekend.

In City, State and County highways, excavated materials shall not be stored or cast upon the pavement, unless an advance approval of the AHJ is first obtained by the Contractor.

SP-25 Work Zone Cleanliness

The Contractor shall always keep the work zone free of trash and debris. If the City observes that trash within a work zone becomes excessive, the Contractor will be required to deploy trash barrels or other approved methods within work zones sufficient to keep the area free of trash. It is the Contractor's responsibility to keep the construction site neat and clean with trash and debris to be removed daily.

SP-26 Road and Lane Closures, Traffic Control Plans

The Contractor shall arrange his work in a manner that minimizes traffic disruption. As deemed necessary, roadway and lane closures shall occur during normal business hours or as required by the Right-of-Way Use permit and the Contract Administration Department, Construction Division.

At least seventy-two hours before starting any work in City streets, the Contractor shall obtain a City of Tampa Street or Lane Closure Permit for any traffic lane or street closure within the City. The permit will establish the requirements for closures related to the number of lanes and time of day lanes or streets may be closed. A detailed traffic control plan shall be prepared in accordance with MUTCD and the appropriate FDOT Traffic Control Drawings contained in the FDOT Standard Plans (100 Series Index), latest edition. The plan shall be submitted to the City of Tampa Smart Mobility Division with the application for the Street or Lane Closure Permit. The MOT plan shall include proposed detour routes and locations and descriptions of direction signs for the construction area and detour routes. A copy of the Street or Lane Closure Permit shall be submitted to the Engineer before starting any work in City streets. No changes to the MOT plan will be allowed without prior Smart Mobility Division approval.

The Contractor shall furnish and maintain all signs, barricades, lights and flagmen necessary to control traffic and provide for safety of the public, all in compliance with the approved traffic control plan with subsequent revisions and additions, and to the satisfaction of the Engineer.

The cost of maintaining traffic and of any additional earth excavation, selected fill, temporary wearing surface, temporary bridges, barricades, barriers, warning and traffic lights, flagmen, and similar work required to implement the MOT plan shall be included under the various Contract Items, or in the total Lump Sum Price, as applicable, and no additional payment will be made therefor.

SP-27 Work in Streets and Highways

All work within streets and highways shall be subject to the regulations and requirements of the appropriate agencies. Within the City of Tampa, the authorities having jurisdiction (AHJ) over streets and highways are the City of Tampa Mobility Department, Hillsborough County Public Works, and Florida Department of Transportation.

Methods and materials of construction used in restoration within such streets and highways, including pavement, sidewalk, curb, curb and gutter removal and replacement, replacement of storm sewerage facilities,

excavation and backfilling, and the storage of materials and equipment shall conform to the requirements of the respective AHJ and will be subject to the inspection and approval of the AHJ.

#### SP-28 Existing Public Facilities Restoration

Existing public facilities that are removed by construction operations under this contract shall be replaced by the Contractor to City of Tampa specifications. These items shall include all public benches, light poles, shelters, roadway signs, and replacement of these items shall be considered incidental to the cost of construction, and no separate payment will be made therefor.

#### SP-29 City Street Pavement Restoration

City street restoration shall be performed in accordance with the details on the plans, the Technical Specifications and the latest editions of the City of Tampa Pavement Restoration Standards, City of Tampa Pavement Design Standards and the City of Tampa Transportation Technical Manual all maintained and periodically by the Mobility Department, Transportation Engineering Division.

#### SP-30 Replacement of Traffic Markings

The Contractor shall furnish all labor, equipment and materials to replace, test and maintain all traffic markings (temporary and permanent removed or damaged by pipeline construction and appurtenant work as shown on the Plans, specified and directed by the Engineer.

The replacement of traffic markings (temporary and permanent) and all appurtenant work shall be replaced by the Contractor in kind.

It shall be the Contractor's responsibility to field verify before construction begins all markings.

All traffic markings shall conform to the Workmanship and Materials standards set forth in the latest edition of the Florida Department of Transportation Standard and Supplemental Specifications.

Payment for the replacement of temporary and permanent traffic markings and all appurtenant work shall be included in the various Contract Items, or in the total Lump Sum Price, as applicable, and no separate payment shall be made.

#### SP-31 Protection of Existing Utilities

The Contractor shall protect all utilities and other facilities within and adjacent to the construction as covered in Section G-1.03, unless a utility firm has conclusively indicated, or such is shown on the Plans, that the utility has been abandoned or certain adjustment, removal, reconstruction, or protection of the utility's facility will be performed by that respective utility.

The Contractor shall furnish, install, and remove sheeting and shoring, utilize trench boxes or other protective measures as may be necessary to satisfactorily accomplish the construction of the project. The cost of such measures shall be included in the unit prices as bid for the work being installed, and no separate payment shall be made therefor.

#### SP-33 House Services

The Contractor shall maintain all utilities and house service connections on a continual basis. Any required work

to municipal service lines (water and sewer) shall be performed in a manner that will minimize disruption of service to customers, the time of disruption will be subject to the approval of the Engineer. Any public or private utility services damaged by the Contractor will be repaired by the utility having jurisdiction and the cost of such repairs shall be borne by the Contractor.

#### SP-35 Protection of Trees and Shrubs

All trees and shrubs, except where otherwise shown or ordered, shall be adequately protected by barricades, fences as indicated on the Plans, or otherwise carefully supported, as necessary, by the Contractor. Protective barricades shall be placed around all protected trees and grand trees and shall remain in place until all construction activities are completed. Refer to the tree permit issued by the City's Natural Resources Division for inspections after tree protection devices have been installed and prior to construction. No excavated or backfill material shall be placed in a manner which, in the opinion of the Engineer, may result in damage to trees or shrubs. Prior to mobilization, all exposed roots shall be covered with a two (2)-inch layer of mulch. The Contractor shall replace all trees or shrubs which are destroyed or damaged to such extent, in the opinion of the Engineer, to be considered destroyed. Replacement of damaged or destroyed trees or shrubs shall be made with new stock conforming to the requirements of the City's Tree Ordinance at the expense of the Contractor, and no separate payment will be made therefor.

Beneath trees within the limits of the excavation, and where possible, pipelines shall be built in short tunnels, except as otherwise shown or specified. When the tree is outside the limits of the excavation but, where the distance from the centerline of the new pipeline to the trunk of any tree is such that, in the opinion of the Engineer, the excavation would result in serious damage to the tree, the pipeline shall be constructed in short tunnel, as ordered in writing by the Engineer. The Contractor shall be responsible for all damage to trees and shrubs as a result of his operations, whether the pipeline is placed by trenching, tunneling, or other excavation.

The Contractor shall provide the services of an approved licensed tree professional when it is necessary to trim or cut a branch from a tree.

The cost of protection of trees and shrubs, replacement or repair of trees or shrubs destroyed by the Contractor, short tunnels, and cutting or trimming of tree branches shall be included in the various Contract Items for pipelines, or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor.

#### SP-36 Lawn and Landscape Restoration

Where construction activities are conducted in existing grassed areas, the grassed areas shall be restored as specified or directed by sodding or grassing. Such restoration of grassed areas shall conform to the requirements of the Workmanship and Materials section headed "Lawn Replacement."

The Contractor shall replace or repair all ground surfaces damaged during construction. Areas shall be regraded in conformance with the plans or to pre-impacted conditions. Any bushes, flowers, gardens, patios, or other landscaping and irrigation systems disturbed by the construction project shall be repaired or replaced by the Contractor. The cost of such ground surface repair shall be included in the various Contract Items, or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor.

#### SP-37 Existing Sprinkler System

It is required that the Contractor walk the project prior to bid to determine the scope and extent of sprinkler systems that will be impacted by his work method. Existing sprinkler systems for lawns within the City right-of-way shall be protected or, if disturbed, replaced by the Contractor. All sprinkler systems shall be replaced with those of equal or

better quality as approved by the Engineer. The replacement of sprinkler systems shall include all necessary parts, labor, equipment, etc., to complete the existing sprinkler system in operating condition.

The cost of protection and/or replacement of existing sprinkler systems shall be included in the contract unit price as bid for the various items, or in the total Lump Sum Price, as applicable, and no separate payment shall be made therefor.

#### SP-38 Existing Drainage Facilities

The Contractor shall protect all existing drainage facilities within the work zone. When approved by the Engineer, relocation or special maintenance of drainage facilities during construction will be permitted. Disruption of service shall be kept to a minimum.

Facilities which are damaged by the Contractor shall be replaced by the Contractor to such limits as directed by the Engineer. Replacement work shall conform to City Standards. Work done outside the City shall conform to the standards of the AHJ.

The cost of protecting, replacing, relocating and maintaining drainage facilities shall be included in the various Contract Items for pipelines, or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor, unless otherwise specified in other Contract Items.

#### SP-39 Inspection of Reinforced Concrete Pipe

All reinforced concrete pipes, reinforced concrete arch culverts, storm drain, and sewer pipe, and all reinforced concrete elliptical pipe shall be inspected and accepted by a testing laboratory approved by the Engineer. At the completion of the installation of the stormwater system and prior to roadway construction, all pipes and structure will be video inspected per details in SP-57.

Each pipe shall bear the stamp of acceptance of the testing laboratory and the Engineer shall be supplied with a copy of each inspection report, including a certification of "D-load," absorption test, conformance to the dimensional requirements, and all other designations of ASTM specifications. The cost of such inspection services shall be included in the unit prices for the respective pipe items.

Unless specified otherwise on the Plans, or directed by the Engineer, all storm sewer pipes shall be ASTM Class III, B wall thickness.

Prior to the manufacture of any reinforced concrete sewer pipe, details of the steel reinforcing and concrete strength together with proof of the adequacy of the pipe design for each size and class of pipe shall be submitted to the Engineer for approval.

As proof that the design of the pipe meets the 0.01-inch crack and ultimate load strength requirements for this class of pipe, the manufacturer shall submit the results of properly certified three-edge-bearing tests already witnessed and verified by an approved independent testing laboratory on identical pipe of identical design or, if such three-edge-bearing test results are not already available or are not acceptable, shall have one pipe, at least four feet in length, tested in three-edge-bearing and witnessed and verified by an approved independent testing laboratory and shall submit certified test results. All costs associated with proof-of-design tests shall be borne by the Contractor.

Concrete sewer pipe shall be tested in accordance with the applicable provisions of ASTM Des: C 497 as required by the ASTM Specification for the pipe.



The basis of acceptance for reinforced concrete pipe shall be in accordance with Section 5.1.1 of ASTM Des: C 76 (round pipe) or ASTM Des: C 507 (elliptical pipe). During manufacture, at least one pipe section shall be shop tested to destruction in three-edge-bearing in the presence of an approved independent testing laboratory for each 1,000 feet of pipe or fraction thereof made. The test pipe sections shall be a minimum of four feet in length. The manufacturer shall have a pipe casting form, of the same inside diameter as the pipe being manufactured, together with the proper reinforcing steel cages, available at all times during manufacture for the purpose of casting test pipes at the times designated by the Engineer. Test pipe sections shall not be lined with plastic sheet. No pipe shall be tested at an age of less than 12 days, and no pipe shall be delivered to the job site until satisfactory completion of shop tests on representative pipe specimens for each 1,000-foot lot of pipe manufacturer. Proof-of-design tests performed on pipe manufactured for this Contract will be accepted by the City in lieu of shop tests for the first 1,000-foot lot of pipe of each size and class manufactured. This test must be within one (1) year of shipment for each size and class of pipe.

The basis for acceptance of nonreinforced concrete pipe shall be in accordance with Section 4.1 of ASTM Des: C 14.

The Contractor shall obtain, review and submit to the Engineer four (4) copies of certified test reports made by the City's inspection engineer. All costs associated with shop testing shall be borne by the Contractor.

#### SP-40 Elliptical Concrete Pipe and Round Concrete Pipe Joints

All joints in elliptical concrete pipe and round R.C.P. shall be provided with filter fabric or concrete jacket as per D.O.T Standard Index No. 280 and as directed by the Engineer. Filter fabric shall be provided at all joints, except the last two joints not supported by a structure; these joints shall be provided with a concrete collar.

The cost of the filter fabric jackets and concrete collars shall be included in the unit cost of pipe. No extra payment will be paid for such jackets or collars.

#### SP-41 Temporary Pavement Restoration

No portion of the work shall be left more than fourteen (14) days without temporary pavement surface; however, the Engineer may require that temporary pavement surface be installed sooner to ensure that no more than five hundred (500) linear feet of road is inaccessible at one time. Payments on installed pipe of up to fifty percent (50%) of the unit price can be retained by the Engineer until a crushed concrete or limerock base material along with a sand seal temporary pavement surface is provided. The Engineer can restrict further pipe laying if satisfactory and on-going street restoration is not performed by the Contractor. Temporary work shall be maintained in a suitable and safe condition for traffic until the permanent pavement is laid, or until final acceptance of the work.

#### SP-42 Alignment Survey Gravity Storm Sewer Pipe or Force Main Pipe

The Contractor shall employ the services of a Land Surveyor, registered in the State of Florida, to stake out the alignment of the new gravity storm sewer pipe, gravity sanitary sewer pipe, or force main. All manhole locations or horizontal points of intersection, deflection angles, proposed manhole rim elevations, and proposed finished roadway elevations at the manholes shall be noted in the survey with their respective field stations. In the event of discrepancies between the stationing shown on the Plans and that obtained by the actual field survey, the Contractor shall notify the Engineer. The Engineer will advise the Contractor of any appropriate adjustments in alignment of the sewer or force main, or locations of manholes or horizontal points of intersection. The alignment survey must be submitted to the Engineer and approved by him prior to submitting shop drawings on manhole, structures, inlets, etc.

The Land Surveyor shall also establish alignment offset hubs at 100-foot intervals as directed by the Engineer. The Contractor shall protect these hubs from displacement or damage during construction. Any offset hubs damaged or displaced shall be reset by the Land Surveyor to the satisfaction of the Engineer.

The cost of the survey and establishing and resetting offset hubs shall be included in the respective unit price Contract Item, or total Lump Sum Price, as applicable, and no additional payment will be made therefor.

#### SP-43 City Testing

The cost of retesting materials and/or workmanship, which has been initially tested by the City and found to be unacceptable, is to be borne by the Contractor.

#### SP-44 Removal and Abandonment of Existing Sewer Systems within Pipeline Construction Payment Limits

The cost of removal or abandonment of existing sewer systems within pay limits including, but not limited to, pipe, inlets, manholes, manhole frames and covers, catch basins, and any other appurtenances as well as the cost to grout or sand-fill any pipe or manholes, where specified on the Plans, shall be included under the various Contract Items for pipelines, or in the total Lump Sum Price, as applicable, and no separate payment will be made therefor.

Removal or abandonment of existing storm or sanitary sewer systems outside the sewer system pay limits, as shown on the Plans and directed by the Engineer, shall be paid for at the appropriate Contract Unit Price, or in the total Lump Sum Price, as applicable.

#### SP-46 Work Directive Change

A Work Directive Change is a written directive to the Contractor, issued on or after the date of the execution of the Agreement, and signed by the Engineer on behalf of the City, ordering an addition, deletion or revision in the work, or responding to an emergency. A Work Directive Change will not change the contract price or the time for completion, but is evidence that the parties expect that the change directed or documented by an Authorization to Proceed with Extra Work letter will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the contract price or the time for completion.

Without invalidating the Agreement, additions, deletions or revisions in the work may, at any time or from time to time, be authorized by a Change Order or a Work Directive Change. Upon receipt of any such document, the Contractor shall promptly proceed with the work involved.

#### SP-47 Monthly Schedules

In addition to the Progress Schedule required in Article 4.02 of the Agreement, the Contractor shall submit a monthly schedule with each pay estimate. Pay estimates will not be processed unless accompanied by an updated monthly schedule. The schedule shall be broken down into the following components:

1. Well pointing
2. Main line pipe installation
3. Lateral pipe
4. Subgrade and Base work
5. Paving
6. Final Restoration

SP-48 Contingent Items

Contract Items in the Proposal marked with an asterisk (\*) are contingent. These items may or may not be used.

Contingent Contract Items that have an established unit price by the City or a unit bid price established by the Contractor will be the unit price the City will pay the Contractor should it become necessary to use more or less of the stated quantities.

SP-51 Protection of Water Service Lines

The Contractor shall protect all water service lines, including those which are to be replaced, in order to minimize interruption of service to the customer. If the Contractor damages a service line which is shown on the plans, is in line with a meter box, or that has been marked in the field, then he shall immediately replace the service line per Tampa Water Department (T.W.D.). Specifications from main to meter including curb stop, making all connections, and all appurtenant work required to restore service.

The Engineer shall determine which lines, if any, are to be replaced due to damage caused by the Contractor, and no separate payment shall be made therefor.

SP-52 Water Service Line Replacement

Any water service line that is not copper or polyethylene shall be replaced by the Contractor per Tampa Water Department (T.W.D.) Specifications from main to meter including curb stop. The Contractor shall be compensated for this work under the appropriate Contract Item.

All copper service lines, including those having a meter box which will remain in a driveway undisturbed by construction, shall remain in service and be protected in place by the Contractor.

If the Contractor desires to temporarily disconnect the service line due to construction methodology, he must submit a written request to the Engineer at least three (3) working days prior to the proposed disconnect. If approved, the service line shall be removed from main to meter including curb stop. The Contractor shall provide twenty-four (24) hour written notice to the consumer prior to the service interruption.

Some meter boxes may be designated to be relocated outside of a driveway if the driveway is disturbed by construction. If so, a new service line shall be installed per T.W.D. Specifications from main to meter including curb stop. Schedule 40 PVC pipe shall be used to reconnect the consumer at the existing point of connection. The PVC pipe shall be extended from the downstream side of the meter to the consumer's existing point of connection. The old service line shall be cut and plugged at the main.

Service lines falling within four (4) inches of the proposed base or subbase material shall be lowered in place. Couplings shall not be used to achieve sufficient depth. If the required depth cannot be achieved without the use of couplings, a new service line shall be installed by the Contractor from main to meter as specified herein. The Contractor shall be compensated for this work under the appropriate Contract Item.

SP-53 Use of Site for Storage and Field Office

Space, on the site, for storage and field office for the Contractor shall be as directed by the Engineer. Any struc-

tures or facilities needed for storage or field office shall be constructed by the Contractor at his own expense and no separate payment will be made therefor. All security requirements for such facilities shall be provided and maintained by the Contractor.

Upon completion of the work, and as directed, the Contractor shall clean up the areas, remove any temporary facilities and finish grade as necessary, all as approved.

#### SP-55 Temporary Work Stoppages

The Contractor shall temporarily discontinue all construction activities from, and including, Thanksgiving Day through the following Sunday, and December 24 through January 2.

Prior to temporary work stoppages, all streets shall be restored to permit access to all businesses and residences and to allow ingress and egress by local traffic only. The Contractor shall maintain all streets at this condition level for the duration of the shutdown period.

All equipment, except that used for excavation and well pointing, and all materials including, but not limited to, manhole structures, pipe, and stockpiled material shall be removed to either the Contractor's storage lot or to a location outside the project area as approved by the Engineer.

The Contractor will also be required to accommodate the annual Gasparilla Parade and Gasparilla Run by ceasing construction activities and providing ingress and egress to allow local traffic only. The time limits for these requirements shall be from one day before to one day after the Gasparilla Parade and the Gasparilla Run. Accommodation of these events will entail restoration of all streets to at least a sand seal coat of crushed concrete or limerock base. All equipment, except that used for excavation and well pointing, and all materials including, but not limited to, manhole structures, pipe, and stockpiled material shall be removed to either the Contractor's storage lot or to a location outside the project area as approved by the Engineer.

All costs associated with furnishing labor, equipment, temporary pavement restoration, demobilization, mobilization, signage, barricades, clean-up, security, and any other incidentals required to accommodate the Thanksgiving, Christmas and New Years' Holidays and Gasparilla Parade and Race shall be included in the various contract unit prices, and no additional payment shall be made therefor.

#### SP-56 Project Photographs

The Contractor will not be required to furnish photographs of the project; however, the Engineer may or may not take photographs of the area immediately prior to and after completion of the construction for record and information. To assure that there will not be any conflict with this photography, the Contractor shall not perform clearing operations or action which will disturb any street or area within the project until the Engineer has been advised thereof and has had adequate opportunity to perform the desired photography.

#### SP-57 Project Videotaping

Prior to commencing work, the Contractor shall submit to the Engineer for approval, a DVD containing a continuous color video recording including complete coverage of pre-construction conditions of all surface features within the construction's zone of influence, (including detour routes) simultaneously produced audio commentary and electronic display of time and date. The video recording shall be sufficient to fulfill the technical and forensic requirements of the project and provide continuous unedited coverage, establishing locations and viewer orientation

with clear, bright, steady and sharp video images with accurate colors free of distortion or other imperfections. The DVD or digital file must be accompanied by a detailed log of its contents including date, locations, video counter numbers and features. No work shall be allowed until the completed files and log are approved by the Engineer. Video documentation shall be in accordance with the City of Tampa Standard for Workmanship and Materials Section W9600.

The cost of labor and equipment to complete pre-construction site condition documentation shall be included in the unit price Contract Item of Mobilization and no additional payment will be made therefor.

At the conclusion of installation of the stormwater system and before the installation of the sidewalk and roadway, Contractor will conduct a video inspection of the stormwater system and provide a DVD or digital files and written log of the inspection for review and approval of the Engineer. Video inspection shall comply with FDOT specification section 430-4.8.1.

#### SP-58 Protection of Existing Buildings

The Contractor shall protect the existing buildings when and where indicated on the Plans.

The Contractor shall hire a certified testing company to monitor vibration levels at buildings while construction takes place in the vicinity.

All costs associated with protection of the facilities and vibration monitoring services shall be included in the price of the work to which they are incidental.

#### SP-59 Storm Structure Inlet Elevations

For structures installed to match existing conditions, Contractor shall consider manhole top, grate inlet top and curb inlet throat elevations approximate and either verify the elevations before ordering precast structures or order structures at least six (6) inches lower than the grate or throat elevations and cast in place the remaining height to attain required elevations to match existing conditions. No additional payment will be made for this work.

#### SP-61 As-Built Plans

During manufacture and construction, installation and testing, records shall be kept of any changes or adjustments made in the work. All such changes shall be incorporated in the "As-Built" plans, shown in red.

All As-Built information shall be annotated by a Florida Registered Professional Surveyor and Mapper on a separate layer of each AutoCAD drawing file of the construction plans as provided by the City. Annotation of the new drawing files shall be in accordance with City of Tampa Mobility Department drafting standards, as well as the Standards of Practice / Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. Settings shall be as follows: Color: CYAN, Line Type: CONTINUOUS, Font: ROMANS, Layer Name: AS-BUILT, AutoCAD Menu Name: ACAD.MNU, and File Format: AUTOCAD latest version.

All surveys shall be completed and certified by a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Contractor, and shall be in accordance with the Standards of Practice / Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. Survey data shall be submitted as an electronic

data file in AutoCAD latest version. The Contractor shall also include as supporting data the ASCII files of digital raw survey data, closure reports, adjustment reports, and/or copies of any hand written field notes or sketches.

“As-Built”, or “Record”, surveys, as may be required by contract, or agreement, shall consist of survey data collected on all constructed improvements, so they may be compared to and contrasted with the design plans and/or construction drawings. The annotated disk shall delineate all changes and deviations to the planned improvements within the project limits, to include, but not be limited to, pavement, curb & gutter, sidewalk, driveways, inlets, manholes, all piping, inverts, ditches, ponds, valves, hydrants, water meters, signalization, hand holes, signing & pavement marking, landscaping, and irrigation. All changes and deviations shall be delineated by Station-Offset and vertical alignment values (or in the same format as depicted on the construction plans) and shall be clearly shown on the drawing files.

The Contractor shall comply with the above requirements and shall submit two (2) check print sets of the plans at the same scale as the construction plans, and all the supporting survey data files, to the Engineer for review within three weeks of substantial completion of the project. Final payment for the project shall not be made until the As-Built information is received for review, any corrections are made, and approval granted by the Engineer. Upon approval, the Contractor shall provide the final As-Built drawings on the disk, at the same scale as the construction plans. These files shall be AutoCAD Drawings, a copy in Adobe PDF, and two (2) hard copies signed and sealed with the As-Built information in red.

The cost for this work shall be included in the contract price for Mobilization and no separate payment shall be made for meeting the above As-Built requirements.

#### SP-104 Castings Identification

All casting covers, such as for inlets and manholes, shall bear the appropriate City of Tampa identification for storm sewers and for sanitary sewers, as shown on the Standard Drawings and directed by the Engineer.

#### SP-105 Rubble Riprap

Rubble riprap shall be placed against the embankment or other work to be protected in conformity with the specifications, lines, grades, dimensions, and notes shown in the Plans.

Rubble riprap shall consist of broken concrete or of broken stone. The material shall be sound and durable, with specific gravity of at least 1.90. It shall be free of cracks, soft seams, and other structural defects. The pieces shall be roughly angular and shall be reasonably free from thin, flat, or elongated pieces.

Rubble shall be of a graded mixture, with individual pieces weighing, in general, from 20 to 300 pounds each. Not over 25 percent of the total volume shall be composed of pieces weighing less than 50 pounds each and at least 50 percent of the total volume shall be composed of pieces weighing 100 pounds or more.

Riprap depth shall be a minimum of 2-feet on 6-inches of Bedding Stone and Geotextle. Bedding stone and geotextle materials and installation shall be in accordance with FDOT specification 530, current edition.

All costs associated with bedding stone and geotextile shall be incidental to the price of the work for riprap, and no separate payment shall be made therefor.

### SP-116 Tree Removal and/or Replacement

The Contractor shall remove and replace trees as identified on the plans and as directed by the Engineer. All tree removal and replacement activities shall be in compliance with the City of Tampa Municipal Code, Chapter 13, Landscaping, Tree Removal and Site Clearing, as amended, latest edition.

The Contractor shall contact the City's Parks Department and the City's Construction Services Center to coordinate removal and replacement details and inspections. Substandard workmanship will be rejected. The Contractor shall pack, transport, and handle the replacement trees with care to ensure protection against injury. Upon arrival, the Contractor shall protect all trees from drying out by properly protecting the trees with soil, wet peat moss, or in a manner acceptable to the Engineer. No tree shall be bound with rope or wire in a manner that could cause damage.

Trees that are transported or planted improperly shall receive a special review established on a case-by-case basis.

The Contractor shall be responsible for maintaining the trees in a vigorous, healthy condition for a period of 90 days after replacement of all trees has been approved by the Engineer. Tree maintenance shall include, but not necessarily be limited to, watering, fertilizing, pruning, staking, guying, and all measures necessary to successfully maintain the trees to the satisfaction of the Engineer.

### SP-120 Safety

A. Responsibility: Employees shall immediately report any unsafe work practice or unsafe condition to their supervisor(s). The Contractor is solely responsible for the safety of its workers, and shall comply with all applicable requirements [i.e.: 29 CFR 1910 -Occupational Safety and Health Standards, 29 CFR 1926 - Safety and Health Regulations for Construction, etc] and industry safety standards while at the work site. The fact that City personnel may bring un-safe conditions to the attention of any member of the Contractor's work force does not relieve the Contractor of this responsibility.

The Contractor shall have a designated Safety Officer within its organization. At the Pre-Construction meeting, the Contractor shall provide the name and contact information of the Safety Officer to the Engineer.

At the Pre-Construction meeting, the Contractor will be given pertinent safety related information, necessary forms and instructions (i.e.: AWTP Lockout/Tagout Procedures, AWTP Hot Work Permits, etc) that pertain to any work that might be utilized during the contract. The Contractor shall be responsible to disseminate that information to its employees and sub-contractors. Special care shall be taken by the Contractor to ensure that any new employee or sub-contractor to the work site shall be briefed on these safety instructions.

If warranted by the project and directed by the Engineer, the Contractor shall develop and implement a comprehensive health and safety plan for its employees that will cover all aspects of onsite construction operations and activities associated with the Contract. This plan must comply with all applicable health and safety regulations and any project specific requirements specified in the Contract.

B. Incident Reporting: All accidents that result in personal injury, illness or property damage shall be immediately reported and investigated, regardless of the extent of injury, illness or property damage. Employees must report accidents within one hour (or as soon as practical) from the time of occurrence to their immediate supervisor, who in turn will report it to the City's inspector. The City inspector will record the incident in the daily report and report it to the Risk Management Division (274-5708).

C. Air-Borne Debris: All personnel in proximity to drilling, sawing, sanding, scraping, spraying, power-washing or other work being done, either in enclosed spaces or in the open, that creates dust or air-borne debris shall wear eye protection [29 CFR 1910.133] and a respirator [29 CFR 1910.134].

D. Hot Work: All welding, soldering, brazing, acetylene cutting or any other work at the AWTP or any pump station that produces high temperatures shall require a AWTP "Hot Work Permit" and may require one or more fire watches. The number and location of fire watches (if any) shall be a condition of the Hot Work Permit. A current, portable, fully charged fire extinguisher shall be located with each person performing hot work and each fire watch. The Hot Work Permit shall be signed off by the appropriate personnel and maintained in the project file.

E. Confined Spaces: OSHA defines a confined space as having limited or restricted means for entry or exit, and is not designed for continuous employee occupancy. Confined spaces include, but are not limited, to vaults, tanks, manholes, wet-wells, pipelines, utility tunnels, etc.

The Contractor shall take measures [29 CFR 1910.146 (c)(5)] to ensure that atmospheric conditions in confined spaces are not hazardous to occupants. This can be accomplished by forcing a sufficient amount of clean air through the confined space and testing the atmosphere by using a portable certified, calibrated, atmosphere monitor that meets OSHA requirements [29 CFR 1910.146(c)(5)(ii)(C)]. The atmosphere monitor should record oxygen content, flammable gases and vapors and toxic air contaminants, such as the Industrial Scientific TMX-412.

F. Air-Borne Gases: The AWTP is located in an industrial area and, as such, there are several different substances, either on or off site, that can escape and become dangerous fumes, such as chlorine, methanol, anhydrous ammonia, etc. The AWTP currently has nine (9) Shelter In Place (SIP) locations that are designated as safe havens in the event of release of hazardous gases. These SIP's are stocked with necessary instructions and supplies to protect City and any Contractor's personnel.

The first day on site, City personnel will show all the Contractor's personnel present where the several closest SIP's are located, explain the alarm signals and provide the current alarm testing schedule. It shall be the Contractor's responsibility to show any future employee and/or sub-contractor that comes on site the location of the SIP's and explain the alarm signals.

In the event of an alarm, the Contractor's personnel shall immediately and hastily proceed to the nearest SIP along with the City personnel and remain there until further notice, taking guidance from and following the instruction of the senior City employee present.

G. Lockout / Tagout Policy: The AWTP Lockout / Tagout program is designed to set standards to help safeguard all employees from hazardous electrical or mechanical energy while they are performing service or maintenance on machines and equipment at the AWTP or any pump station. This program will also identify the practices and procedures to shut down and Lockout or Tagout machines and equipment. The Contractor shall be given a copy of the AWTP "LOCKOUT / TAGOUT POLICY AND PROCEDURES" instruction and shall make all of his employees and sub-contractors aware of this program.

No padlock (lockout) shall be removed except by the individual that installed it or, if not available, by a City of Tampa AWTP team leader.

No tag (tagout) shall be removed except by the individual who installed it or, if not available, by a City of Tampa AWTP team leader, except in an Emergency when the tag states "Do Not Use Unless in an Emergency". In that event, the Contractor shall notify the City of Tampa AWTP team leader who will prepare the necessary follow up report.



H. Trench Safety: Any excavation deeper than four (4) feet shall adhere to the requirements contained in 29 CFR 1926.650 thru 652 and the Florida Trench Safety Act [Florida Statutes, ss 553.60 - 553.64].

I. Explosives or Open Flames: No explosives or fires shall be allowed. No open flames necessary for any construction activity shall ever be left un-attended. A current, portable, fully charged fire extinguisher shall be located with each activity requiring an open flame.

J. Sparks: Any activity lasting more than 10 continuous minutes that creates sparks, such as grinding or chipping, shall have a dedicated fire watch in attendance. A current, portable, fully charged fire extinguisher shall be located with each activity creating sparks, regardless if a fire watch is required or not.

K. First Aid: The Contractor shall furnish appropriate First Aid Kits [29 CFR 1910.151] and shall be responsible to ensure its employees are properly trained to render first aid. If injurious corrosive materials are to be utilized, eye wash and body wash facilities must be provided in the immediate area.

L. Related Costs: All costs associated with these, or any safety measures shall be included in the total lump sum contract price or the various contract item unit prices, as applicable, and no separate payment shall be made therefor.

\* \* \*

**CONTRACT PAY ITEMS**

**C100.1 - CONTINGENCY**

The Contractor shall include a \$200,000 (\$100,000 per site) contingency sum, to be included as part of the total bid amount for this contract. The contingency is for the purpose of compensating the Contractor for any incidental work that may arise as construction operations proceed and was not addressed as part of the original work portrayed in the Plans and Specifications.

The contingency sum is an upset limit. Any amount of the contingency shall be paid only after negotiations.

Contingency funds shall be disbursed at the discretion of the Engineer. No contingency funds shall be disbursed if there are no contingent items.

| <u>Item No.</u> | <u>Description</u>  | <u>Unit</u> |
|-----------------|---------------------|-------------|
| 100.01A         | Contingency, Site 1 | LS          |
| 100.01B         | Contingency, Site 2 | LS          |

**C100.2 - MOBILIZATION**

The Contractor shall furnish all equipment, labor, and materials necessary to mobilize his forces as necessary to perform all the work under this Contract.

Work under this section includes bonding and insurance; transportation, and otherwise movement of all personnel, equipment, supplies, materials and incidentals to the project site; establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities; and all other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, to be constructed under this Contract as shown on the Plans and directed by the Engineer.

Payment for Mobilization will be made not to exceed the lump sum price. Demobilization shall be included in this item, no additional compensation will be provided.

| <u>Item No.</u> | <u>Description</u>   | <u>Unit</u> |
|-----------------|----------------------|-------------|
| 100.02A         | Mobilization, Site 1 | LS          |
| 100.02B         | Mobilization, Site 2 | LS          |

**C100.3- MAINTENANCE OF TRAFFIC**

The Contractor shall furnish all materials, equipment, and labor to establish and maintain all traffic maintenance devices and personnel as shown on the Plans, specified, and directed by the Engineer.

The work includes installation of all signs, video and photographic preconstruction pictures, structural testing, barricades, lights and flagmen, additional earth excavation, selected fill, temporary wearing surface, temporary bridges, temporary ADA paths, roadway closures and requirements, as-built survey and all appurtenant work complete in place as necessary to control traffic and provide for safety to the public, all in compliance with the Manual on Uniform Traffic Control Devices, "MUTCD," with subsequent revisions and additions, and to the satisfaction of the Engineer. MOT direction shall conform to project Plans and Specific Provisions. Contractor shall provide metal walkways for pedestrian access from on-street parking to residential homes during street closures.

The Contractor will be required to have a licensed Professional Engineer sign and seal a Maintenance of Traffic Plan to be submitted to the City’s Right-of-Way Department for permit.

Payment for Maintenance of Traffic will be made at a not to exceed the lump sum price.

| <u>Item No.</u> | <u>Description</u>             | <u>Unit</u> |
|-----------------|--------------------------------|-------------|
| 100.03A         | Maintenance of Traffic, Site 1 | LS          |
| 100.03B         | Maintenance of Traffic, Site 2 | LS          |

**C100.4 –DEWATERING**

The Contractor shall furnish and install all labor, materials, services, permitting, public noticing, equipment and appurtenances necessary to design and provide dewatering system of sufficient size and capacity to prevent ground and surface water flow into the excavation and to allow all Work to be installed in a dry condition.

The work includes the services of a qualified dewatering specialist to prepare a dewatering plan a necessary to complete the Work. Contractor shall be solely responsible for the design, installation, operation, maintenance and any failure of any component of the system. Dewatering discharge from the site shall comply with all NPDES general permit requirement and state water quality standards. Provide all testing and permitting required and comply with all treatment or disposal methods required to meet all local, state and federal requirements. The work shall conform to the City of Tampa Standard Specifications - Workmanship and Materials Section 108- Dewatering.

Payment for Dewatering will be made at a not to exceed the lump sum price.

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|--------------------|-------------|
| 100.004         | Dewatering         | LS          |

**C100.5 –CONSTRUCTION STAKING**

The Contractor shall furnish and set all necessary stakes to establish the lines and grades as shown on the Contract Drawings. All construction staking shall be conducted by or under the supervision of a Florida Registered Professional Surveyor and Mapper. The Contractor shall be responsible for the layout of all such lines and grades, which will be subject to verification by the Owner.

Payment for Construction Staking will be made at a not to exceed the lump sum price.

| <u>Item No.</u> | <u>Description</u>   | <u>Unit</u> |
|-----------------|----------------------|-------------|
| 100.005         | Construction Staking | LS          |

**C100.6 – AS-BUILT PLANS**

The Contractor shall furnish record drawing documentation in accordance with the project special provisions.

Payment for As-Built Plans will be made at a not to exceed the lump sum price.

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|--------------------|-------------|
| 100.006         | As-Built Plans     | LS          |

**C104 – TEMPORARY EROSION CONTROL**

The Contractor shall furnish all materials, labor and equipment for installation, maintenance and removal of temporary erosion control best management practices in accordance with FDOT specification 104, as shown on the plans, or as directed by the Engineer.

Payment will be made at the appropriate Contract Item Unit Price per linear foot (LF) installed and measure in place for rock check structures, silt fence and floating turbidity barrier, and at the appropriate Contract Item Unit Price per each (EA) of inlet protection per location on site.

| <u>Item No.</u> | <u>Description</u>            | <u>Unit</u> |
|-----------------|-------------------------------|-------------|
| 104.643         | Channel Check Structure, Rock | LF          |
| 104.646         | Silt Fence                    | LF          |
| 104.647         | Floating Turbidity Barrier    | LF          |
| 104.648         | Inlet Protection              | EA          |

**C110 – DEMOLITION**

The Contractor shall furnish all labor and equipment for excavation, removal and hauling of areas as shown on the plans. Remove and dispose of all trees, stumps, roots and other such protruding objects, structures, appurtenances, and other facilities necessary to prepare the area for the proposed construction. Unless otherwise designated to be salvaged, Contractor shall take ownership of all other materials removed and dispose of them in accordance with all local, state and federal laws and regulations.

The work shall conform to the following City of Tampa Standard Specifications - Workmanship and Materials: Section 27 - Demolition, Section 105 - Root Prune, Section 110 - Clear and Grubbing, Section 113 - Disposal of Debris, Section 115 - Tree Trimming and Section 116 - Tree Removal.

Payment for Clearing and Grubbing will be made at the appropriate Contract Item Unit Price per acre (AC) of area where site preparation is required.

Payment for Tree Removal at the appropriate Contract Item Unit Price per each (EA) of tree over 4 inches in diameter.

Payment for Guardrail Removal at the appropriate Contract Item Unit Price per linear foot (LF) of measured along the top of rail. The work includes removal of all posts, blocks, end sections, bolts, cables and other appurtenances.

Payment for Concrete Curb Removal shall be made at the appropriate Contract Item Unit Price per linear foot (LF) of measured along the face of curb.

Payment for Concrete Removal of various depths, not to exceed 12-inches shall be made at the appropriate Contract Item Unit Price per square yards (SY) of measured surface area of material removed. Area shall be marked and measured prior to removal if anticipated to be different than what is shown on plans. This work does not include concrete curb removal which will be measured and paid for separately under other contract items.

Payment for Rip Rap Removal shall be made at the appropriate Contract Item Unit Price per square yard (SY) of rubble riprap area removed.

Payment for Fence Removal shall be made at the appropriate Contract Item Unit Price per linear foot (LF) of fence removed. Removal shall include all posts, post foundations, fabric, braces, caps, gates and other accessories.

| <u>Item No.</u> | <u>Description</u>    | <u>Unit</u> |
|-----------------|-----------------------|-------------|
| 110.001         | Clearing and Grubbing | AC          |
| 110.023         | Tree Removal          | EA          |
| 110.086         | Guardrail Removal     | LF          |
| 110.520         | Concrete Curb Removal | LF          |
| 110.525         | Concrete Removal      | SY          |
| 110.530         | Rip Rap Removal       | SY          |
| 110.550         | Fence Removal         | LF          |

**C115 – MODIFICATION OF EXISTING ROOF DRAINS**

The Contractor shall furnish all labor and equipment to complete modification of buried roof drains from adjacent building to provide overland flow. Work shall include trenching, excavation, removal and disposal of buried piping, backfill, surface restoration, modification of drain at structure, installation of down spout bends and splash pads.

Payment for Concrete Roof Drain shall be made at the appropriate Contract Item Unit Price per each (EA) of location from building. Cost shall include all labor, equipment and material required to complete modifications.

| <u>Item No.</u> | <u>Description</u>       | <u>Unit</u> |
|-----------------|--------------------------|-------------|
| 115.001         | Roof Drain Modifications | EA          |

**C125 – EXCAVATION AND BACKFILL FOR STRUCTURES AND PIPE**

The Contractor shall furnish all labor and equipment for excavation, removal, hauling and placement of materials for installation of structures and piping, backfilling and final grading in accordance with the City of Tampa Workmanship and Materials Section 1 - Excavation and Section 2 - Backfill, work as shown on the plans, and as directed by the Engineer.

Payment for earthwork items will be made at the appropriate Contract Item Unit Price per Cubic Yard (CY) of the specified items.

| <u>Item No.</u> | <u>Description</u>               | <u>Unit</u> |
|-----------------|----------------------------------|-------------|
| 125.001         | Excavation, Earth                | CY          |
| 125.002         | Excavation, Unsuitable Materials | CY          |
| 125.003         | Embankment (Backfill)            | CY          |
| 125.104         | Structural Fill                  | CY          |

**C145 – GEOSYNTHETIC REINFORCEMENT**

The Contractor shall furnish all materials, labor and equipment to install geotextile as shown on the Plans, and directed by the Engineer. The work shall conform to the City of Tampa Standard Specifications - Workmanship Section 77 - Non-woven Textile.

Materials shall be Mirafi 140N Geofabric or equal.

Payment for geotextile fabric shall be at the appropriate Contract Item Unit Price per each square foot (SF) of material installed.

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|--------------------|-------------|
| 145.001         | Geotextile Fabric  | SF          |

**C204 – AGGREGATE BASE**

The Contractor shall furnish all materials, labor and equipment to install aggregate base as shown on the Plans, and directed by the Engineer.

Materials shall be washed stone with gradation FDOT No. 57, per Table 901-1 of current specifications. Material shall be from an approved supplier. Contractor shall provide documentation of material supplier, gradation and delivery quantities.

Payment for aggregate base shall be at the appropriate Contract Item Unit Price per each cubic yard (CY) of material installed.

| <u>Item No.</u> | <u>Description</u>              | <u>Unit</u> |
|-----------------|---------------------------------|-------------|
| 204.057         | Aggregate, FDOT No. 57 (Washed) | CY          |

**C327 – MILL AND RESURFACE, ASPHALT**

The Contractor shall furnish all equipment, hauling and labor for the required removal of existing asphalt by milling material shown on the Plans, specified, and directed by the Engineer. The Contractor shall furnish all materials, equipment, and labor for the required installation of asphalt material shown on the Plans, specified, and directed by the Engineer.

Items included in this Contract Item include, but are not limited to equipment and labor necessary to mill roadway material as specified on the Plans and shall conform to the latest version of the FDOT Standard Specifications – Workmanship and Materials Section 327 – Milling. The existing pavement shall be milled two inches unless otherwise specified on the plans or directed by the Engineer.

The Engineer may require re-milling of any area where a surface lamination causes a non-uniform texture to occur.

New asphalt surface shall be placed in area of milling. Items included in this Contract Item include, but are not limited to, the material, equipment and labor necessary to construct a superpave asphalt concrete pavement with the type of mixture specified on the Plans and shall conform to the latest version of the FDOT Standard Specifications – Workmanship and Materials Section 334 – Superpave Asphaltic Concrete.

Restoration of asphalt pavement shall conform to the requirements of the City of Tampa Standard Specifications for Workmanship and Materials Section 16 – Restoration of Street Pavements.

Payment for Milling and Resurface will be made at the appropriate Contract Item Unit Price per Square Yard (SY). Resurfacing with superpave asphaltic concrete, SP12.5 (2”) will not be measured separately but will be based on the same area as milling and included in the appropriate unit price bid.

| <u>Item No.</u> | <u>Description</u>      | <u>Unit</u> |
|-----------------|-------------------------|-------------|
| 327.001         | Mill and Resurface (2”) | SY          |

**C350 – CONCRETE SLOPE PROTECTION**

The Contractor shall furnish all labor, materials and equipment to construct concrete slope protection at the depths and slopes as shown on the Plans, specified, and directed by the Engineer. Work shall include all excavation, formwork, reinforcing, curing materials and testing to construction 6” concrete slabs, top turndown, bottom edge beams and cross struts.

The work shall conform to the City of Tampa Standard Specifications - Workmanship and Materials Section 6 - Reinforced Steel and Section 7 - Expansion Joints Cement.

Payment for Concrete Slope Protection shall be at the appropriate Contract Item Unit Price per each cubic yard (CY) of material installed.

| <u>Item No.</u> | <u>Description</u>                    | <u>Unit</u> |
|-----------------|---------------------------------------|-------------|
| 350.006         | Concrete Slope Protection, Reinforced | CY          |

**C425 – STORMWATER INLETS, MANHOLES, AND JUNCTION BOXES**

The Contractor shall furnish all materials and equipment, test, construct, install, reconstruct, and maintain the stormwater inlets, stormwater manholes and stormwater junction boxes as shown on the Plans, specified, and directed by the Engineer.

Stormwater inlets, manholes, and City Manholes shall conform to the City of Tampa Stormwater Details and Workmanship and Materials Section 425 – Stormwater Inlets, FDOT Specification Section 425 – Inlets, Manholes and Junction Boxes and FDOT Standard Plans, current edition. Manhole frames and covers shall conform to the City of Tampa standards for Workmanship and Materials Section 8 - Metal Castings.

The work includes all testing, excavation, backfilling, limestone screenings, bedding, sheeting, shoring, bracing, dewatering, formwork, castings, brickwork, adjusting structures, removal of pavement, sidewalks, curb and curb gutter, concrete work and reinforcing, all inlet and outlet pipe, making all pipe connections, setting pipe stubs and plugs for future connections, nonpermanent and special temporary pavement replacement, disposal of surplus excavated material, and protection of adjacent facilities, and all appurtenant work, complete and in place.

Payment for inlets and junction boxes will be made at the appropriate Contract Item Unit Price per Each (EA).

| <u>Item No.</u> | <u>Description</u>                          | <u>Unit</u> |
|-----------------|---|-------------|
| 425.001         | Inlet, FDOT 425-052, Type H                 | EA          |
| 425.004         | Junction Box, FDOT 425-010, Type J, 4’ x 4’ | EA          |
| 425.005         | Junction Box, FDOT 425-010, Type J, 6’ x 4’ | EA          |
| 425.006         | Junction Box, FDOT 425-010, Type J, 6’ x 6’ | EA          |

**C430 – PIPE CULVERTS AND STORM SEWERS**

Under the respective Contract Items for pipe culverts and storm sewers, the Contractor shall furnish all materials and equipment, construct, test, and maintain complete all pipe culverts and storm sewers as shown on the Plans, specified, and directed by the Engineer.

All pipe culverts and storm sewers, including fittings, shall be manufactured and installed in accordance with the City of Tampa Standard Specifications – Workmanship and Materials Section 430 – Pipe Culverts and Section 108- Dewatering.

The work includes all removal of existing storm sewer systems, video inspection, excavation, backfill, sheeting, shoring, bracing, dewatering, pipe bedding, pipe fittings, pipe work, making all pipe connections, flared and mitered end sections, standard pipe cradles and encasements shown on the Plans, anchors, sealants, jackets and coupling bands, installation and removal of plugs and bulkheads, testing, special temporary and nonpermanent pavement replacement, protection, repair and replacement of utilities and house services, maintenance of traffic, protection, trimming and replacement of trees and shrubs, protection, repair and replacement of other storm sewerage facilities and all utilities, reconstruction or regrading of road shoulders and ditches, disposal of surplus excavated material, protection of existing structures, making joints in protective plastic lining between pipes and between pipes and manholes or structures and all other work incidental to the installation of all pipe culverts and storm sewers complete in place.

The work does not include rock excavation, inlets, junction chamber, surface restoration comprising lawn or permanent pavement replacement, additional earth excavation or additional selected fill material, short tunnels and driveway, sidewalk and curb and curb gutter replacement. When shown on the Plans or ordered, such work will be paid for under other appropriate Contract Items.

The quantity of storm sewer pipe, in linear feet, to be measured for payment shall be the actual length of new pipelines placed in the work, as shown, specified and directed. Pipelines will be measured along the centerline of the pipe.

Deductions in the measured length of storm sewers will be made for the width of all structures, including inlets and junction structures, measured from the inside wall to the inside wall of the structure.

Payment for pipe culverts and storm sewers will be made at the appropriate Contract Item Unit Price per linear foot (LF) of pipe.

The Contractor shall furnish all labor, materials, services, equipment and appurtenances to demolish and remove the existing culvert pipe, end sections or headwalls structures that are located within the excavation trenched limits of the new pipe and structure areas, as shown on the plans. Payment will not vary based on pipe size.

| <u>Item No.</u> | <u>Description</u>                        | <u>Unit</u> |
|-----------------|---|-------------|
| 430.001         | Demolish and Remove Existing Culvert Pipe | LF          |
| 430.015         | Pipe, RCP Storm Sewer, 15"                | LF          |
| 430.018         | Pipe, RCP Storm Sewer, 18"                | LF          |
| 430.024         | Pipe, RCP Storm Sewer, 24"                | LF          |
| 430.036         | Pipe, RCP Storm Sewer, 36"                | LF          |
| 430.45E         | Pipe, ERCP Storm Sewer, 45"x29"           | LF          |
| 430.60E         | Pipe, ERCP Storm Sewer, 60"x38"           | LF          |

**C440 – UNDERDRAIN PIPING**

The Contractor shall furnish all materials, labor and equipment to install perforated PVC piping beneath concrete slope stabilization areas as shown on the plans or as directed by the engineer. Work shall include all piping, bends, tees, caps, geotextile wrap, rodent screens and other miscellaneous items required to complete underdrain system per FDOT Specification 440.

Payment will be made at the appropriate Contract Item Unit Price per linear foot (LF) of pipe installed.

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|--------------------|-------------|
|-----------------|--------------------|-------------|



440.004 Pipe, Perforated PVC, 4” LF

**C520 – MISCELLANEOUS CONCRETE**

The Contractor shall furnish all materials, labor and equipment to install concrete curb and gutter, Type D and gutter spillways in accordance with FDOT Standard Plans 520.001, as shown on the Plans, and directed by the Engineer. Work shall include all excavation, formwork, concrete, reinforcement, finishing, joint material, curing and other miscellaneous items need to complete the work in place.

Curb shall be construction in place of existing facilities to be demolished. Drainage patterns for asphalt area shall not change and constructed flowline shall match existing grades. Contractor is responsible for survey and documentation of existing grades prior to demolition.

Materials shall be in accordance with FDOT Road and Bridge Specification 520-2, current edition, and project special provisions.

Payment will be made at the appropriate Contract Item Unit Price per linear foot (LF) of curb installed measured along the face of curb, and payment for spillways shall be at the appropriate Contract Item Unit Price per each (EA) location as shown on the plans.

| <u>Item No.</u> | <u>Description</u>    | <u>Unit</u> |
|-----------------|-----------------------|-------------|
| 520.001         | Concrete Curb, Type D | LF          |
| 520.005         | Concrete Spillway     | EA          |

**C530 – REVETMENT SYSTEM**

The Contractor shall furnish all materials, labor and equipment to install riprap or sand-cement structures as shown on the Plans, and directed by the Engineer.

Materials shall be in accordance with FDOT Road and Bridge Specification 530-2, current edition and project special provisions.

This work includes 2-feet of revetment riprap on 6-inches of bedding stone and geotextile. Bedding stone and geotextle materials and installation shall be in accordance with FDOT specification 530, current edition. This work includes material, labor, hauling, excavation, backfill, dressing and shaping, and placement of materials.

Payment will be made at the appropriate Contract Item Unit Price per each (EA) of endwall sections, and payment for riprap shall be at the appropriate Contract Item Unit Price per each square yard (SY) of the type and depth specified.

| <u>Item No.</u> | <u>Description</u>         | <u>Unit</u> |
|-----------------|----------------------------|-------------|
| 530.001         | Endwall, Sand-Cement       | EA          |
| 530.003         | Rip Rap, Rubble, 2 ft deep | SY          |

**C550 – FENCING**

The Contractor shall furnish all materials, labor and equipment to install fencing as shown on the Plans, FDOT Standard Plan 550-002, specified in FDOT specification 550, City of Tampa Workmanship and Materials Section 555 – Chain Link Fencing and as directed by the Engineer.

This work includes all fabric, poles, wires, bands, grouting, caps and other appurtenant materials required to complete installation complete in place.

Payment for fencing will be made at the appropriate Contract Item Unit Price per linear foot (LF) of fence type and height specified and installed, and payment for fence gates will be made at the appropriate Contract Item Unit Price per each (EA). Gate shall match size opening and height of existing, Contractor to field verify.

| <u>Item No.</u> | <u>Description</u>                  | <u>Unit</u> |
|-----------------|-------------------------------------|-------------|
| 550.002         | Fence, Chainlink, FDOT Type B, 6 ft | LF          |
| 550.003         | Fence, Chainlink, Swing Gate        | EA          |

**C570 – SOD**

The Contractor shall furnish all labor, materials, equipment and services to replace and maintain all lawn areas removed or damaged by pipeline and appurtenant work as shown on the Plans, specified, and directed by the Engineer.

Sod replacement by St. Augustine or equal shall conform to the requirements of the Workmanship and Materials City of Tampa Section 17 – Lawn Replacement and Section 2930 - Sod.

This work includes topsoil and water to establish and maintain work until final acceptance.

Sod replacement along pipelines and around structures will be included for payment under this Contract Item.

The quantity of lawn area, in square yards, to be measured for payment will be the actual area of sodded areas, within the payment limits for surface restoration shown on the Plans. Payment limits for lawn replacement along pipelines shall include removal and replacement of lawn area incidental to construction of manholes and structures. All lawn area removed or damaged and requiring replacement outside payment limits will not be measured for payment; however, the type of replacement shall be determined as specified above, and shall be replaced by the Contractor at his own expense.

Payment for sod replacement will be made at the appropriate Contract Item Unit Price per Square Yard (SY) Unit.

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|--------------------|-------------|
| 570.001         | Sod                | SY          |

**C710 – PAVEMENT MARKINGS**

The Contractor shall furnish all materials, labor and equipment to reestablish parking stalls and other pavement markings removed as part of the asphalt milling activities. Work shall be in accordance with the Manual for Uniform Traffic Control Devices, MUTCD, current version and match existing color and locations.

Payment will be made at the appropriate Contract Item Unit Price per linear foot (LF) of pavement markings installed measured in place. It is assumed all markings will be 4-inches wide.

| <u>Item No.</u> | <u>Description</u>          | <u>Unit</u> |
|-----------------|-----------------------------|-------------|
| 710.001         | Pavement Marking, Paint, 4” | LF          |



**Page 1 of 2 –DMI Payment**  
**City of Tampa – DMI Sub-(Contractors/Consultants/Suppliers) Payments**  
**(FORM MBD-30)**

Partial  Final

Contract No.: \_\_\_\_\_ WO#, (if any): \_\_\_\_\_ Contract Name: \_\_\_\_\_

Contractor Name: \_\_\_\_\_ Address: \_\_\_\_\_

Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

GC Pay Period: \_\_\_\_\_ Payment Request/Invoice Number: \_\_\_\_\_ City Department: \_\_\_\_\_

Total Amount Requested for pay period: \$ \_\_\_\_\_ Total Contract Amount (including change orders): \$ \_\_\_\_\_

Type of Ownership - (F=Female M=Male), BF BM = African Am., HF HM = Hispanic Am., AF AM = Asian Am., NF NM = Native Am., CF CM = Caucasian S = SLBE

| Type  | Company Name<br>Address<br>Phone & Fax | Total<br>Sub Contract<br>Or PO<br>Amount | Amount Paid<br>To Date                      | Amount To Be<br>Paid<br>For This Period |
|---|--|--|---|---|
| Trade/Work<br>Activity  |  |  | Amount<br>Pending<br>Previously<br>Reported | Sub Pay Period<br>Ending Date           |
| <input type="checkbox"/> Sub<br><input type="checkbox"/> Supplier |  |  |   |   |
| Federal ID  |  |  |   |   |
|   |  |  | \$  | \$                                      |
|   |  |  |   |   |
|   |  |  | \$  | \$                                      |
|   |  |  |   |   |
|   |  |  | \$  | \$                                      |
|   |  |  |   |   |
|   |  |  | \$  | \$                                      |
|   |  |  |   |   |
|   |  |  | \$  | \$                                      |
|   |  |  |   |   |
|   |  |  | \$  | \$                                      |
|   |  |  |   |   |

**(Modifying This Form or Failure to Complete and Sign May Result in Non-Compliance)**

Certification: I hereby certify that the above information is a true and accurate account of payments to sub – contractors/consultants on this contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_



## Page 2 of 2 – DMI Payment Instructions for completing The DMI Sub-(Contractors/Consultants/ Suppliers) Payment Form (Form MBD-30)

This form must be submitted with all invoicing or payment requests where there has been subcontracting rendered for the pay period. If applicable, after payment has been made to the subcontractor, “Waiver and Release of Lien upon Progress Payment”, “Affidavit of Contractor in Connection with Final Payment”, or an affidavit of payment must be submitted with the amount paid for the pay period. The following will detail what data is required for this form. The instructions that follow correspond to the headings on the form required to be completed. **(Modifying or omitted information from this form my result in non-compliance).**

- **Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.
- **W.O.#** If the report covers a work order number (W.O.#) for the contract, please indicate it in that space.
- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business.
- **Address.** The physical address of your business.
- **Federal ID.** A number assigned to a business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **Pay Period.** Provide start and finish dates for pay period. (e.g. 05/01/13 – 05/31/13)
- **Payment Request/Invoice Number.** Provide sequence number for payment requests. (ex. Payment one, write 1 in space, payment three, write 3 in space provided.)
- **City Department.** The City of Tampa department to which the contract pertains.
- **Total Amount Requested for pay period.** Provide all dollars you are expecting to receive for the pay period.
- **Total Contract Amount (including change orders).** Provide expected total contract amount. This includes any change orders that may increase or decrease the original contract amount.
- **Signed/Name/Title/Date.** This is your certification that the information provided on the form is accurate.
- **See attached documents.** Check if you have provided any additional documentation relating to the payment data. Located at the bottom middle of the form.
- **Partial Payment.** Check if the payment period is a partial payment, not a final payment. Located at the top right of the form.
- **Final Payment.** Check if this period is the final payment period. Located at the top right of the form.

The following instructions are for information of any and all subcontractors used for the pay period.

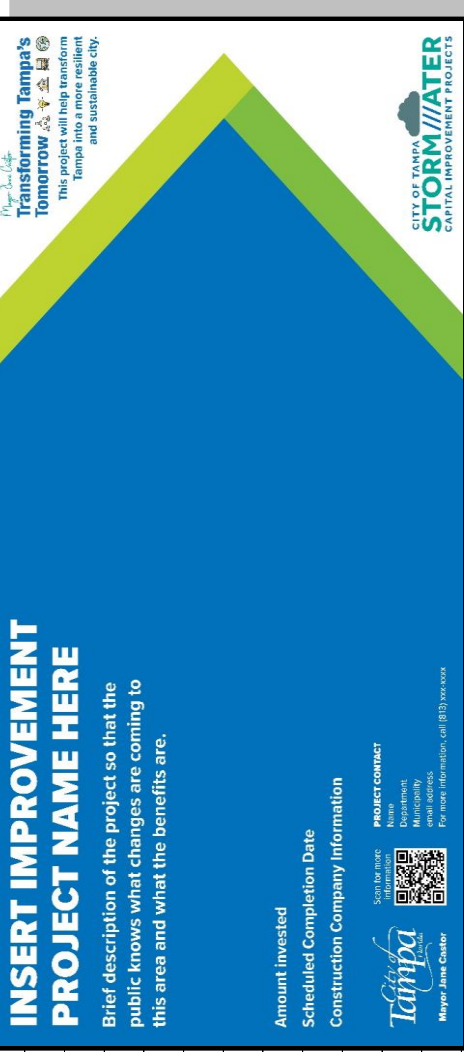
- **(Type) of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business or SLBE.
- **Trade/Work Activity.** Indicate the trade, service, or material provided by the subcontractor.
- **SubContractor/SubConsultant/Supplier.** Please indicate status of firm on this contract.
- **Federal ID.** A number assigned to a business for tax reporting purposes. This information is critical in proper identification of the subcontractor.
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Total Subcontract Amount.** Provide total amount of subcontract for subcontractor including change orders.
- **Amount Paid To Date.** Indicate all dollars paid to date for the subcontractor.
- **Amount Pending, Previously Reported.** Indicate any amount previously reported that payments are pending.
- **Amount To Be Paid for this Period.** Provide dollar amount of dollars requested for the pay period.
- **Sub Pay Period Ending Date.** Provide date for which subcontractor invoiced performed work.

*Forms must be signed and dated or will be considered incomplete. The company authorized representative must sign and certify the information is true and accurate. Failure to sign this document or return the document unsigned can be cause for determining a company is in non-compliance of Ordinance 2008-89.*

If any additional information is required or you have any questions, you may call the Office of Equal Business Opportunity at (813) 274-5522.

# Sign Information

## Transforming Tampa's Tomorrow



**This project will help transform Tampa into a more resilient and sustainable city.**

### Font

Proxima Nova font family  
 If that font is not available, the Calibri font family may be used

### Colors

|         |       |
|---------|-------|
| PANTONE | 285 C |
| PANTONE | 376 C |
| PANTONE | 382 C |

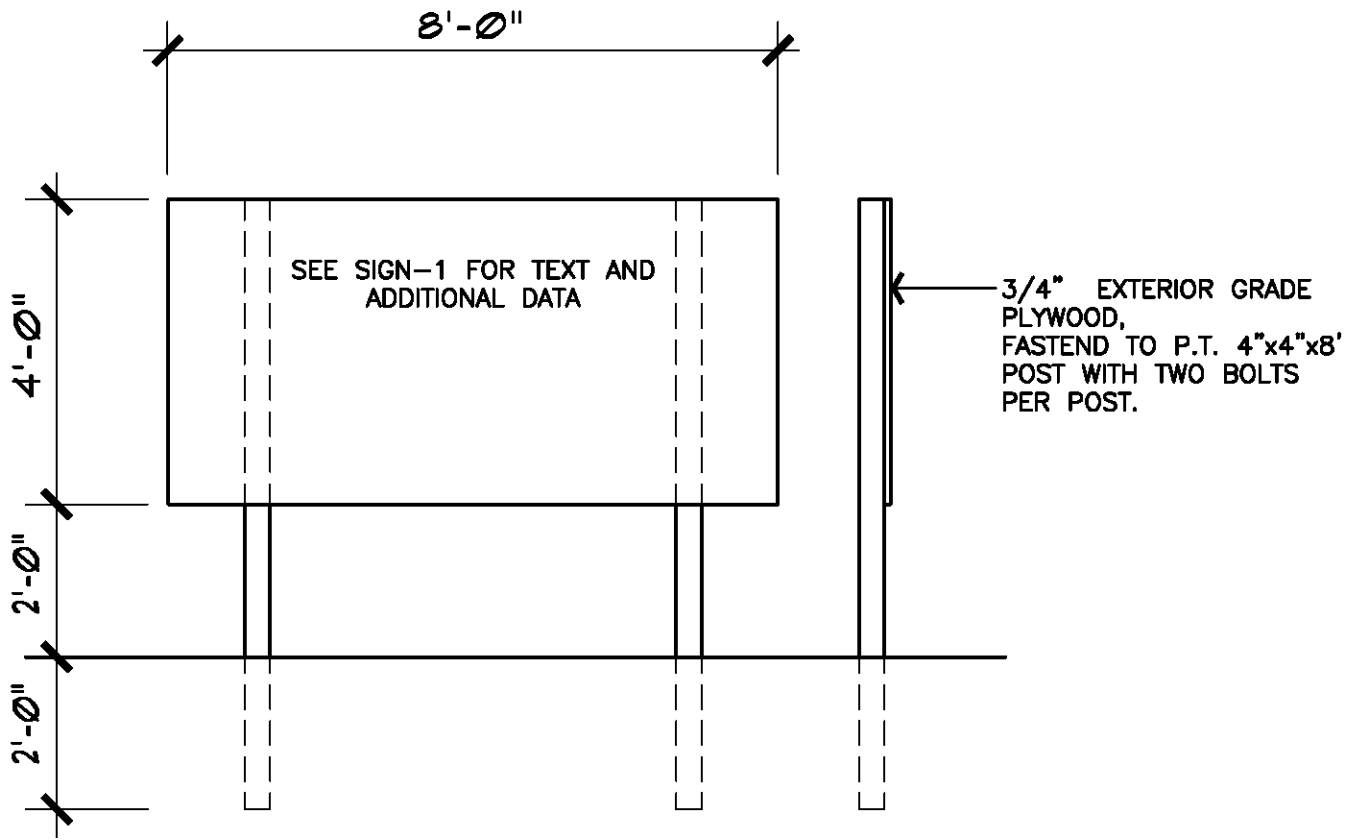
The QR code should be 5.25" wide by 5.25"

Sign should be 48" high by 96" wide

12"

12" scale:

**SIGN EXAMPLE ONLY GRAPHIC TO BE DEVELOPED BY CONTRACTOR**



## SPECIFICATIONS

### WORKMANSHIP AND MATERIALS

#### SECTION 1 - EXCAVATION - EARTH AND ROCK

##### W-1.01 General

Opencut excavations shall be made to the widths and depths necessary for constructing all structures, pipelines and other conduits included in the Contract, according to the Plans, and includes the excavation of any material which, in the opinion of the Engineer, is desirable to be excavated for any purpose pertinent to the construction of the work. Banks more than 5 feet high, where a danger of slides or cave-ins exist, shall be shored or sloped to the angle of repose.

Where excavations are to be made below groundwater, the Contractor shall submit to the Engineer for approval, in detail, his proposed method for control of groundwater, including a description of the equipment he plans to use and the arrangement of such equipment. No such excavation shall be started until approval of the Engineer has been obtained. Dewatering work shall be included in the Contract Items for pipelines, box culverts, inlets, manholes and other structures, and pumping stations, and no separate payment will be made therefor.

##### W-1.02 Clearing

The site of all opencut excavations shall first be cleared of obstructions preparatory to excavation. This includes the removal and disposal of vegetation, trees, stumps, roots and bushes, except as specified under the subsection headed "Trench Excavation."

##### W-1.03 Authorized Additional Excavation

In case the materials encountered at the elevations shown are not suitable, or in case it is found desirable or necessary to go to an additional depth, or to an additional depth and width, the excavation shall be carried to such additional depth and width as the Engineer may direct in writing. The Contractor shall refill such excavated space with either Class I concrete, or select sand or crushed stone fill material, as ordered. Where necessary, fill materials shall be compacted to avoid future settlement. Additional earth excavations so ordered and concrete, or selected sand or crushed stone fill material ordered for filling such additional excavation and compaction of select sand or crushed stone fill material will be paid for under the appropriate Contract Items or where no such items exist, as extra work as specified in Article 7 of the Agreement.

##### W-1.04 Unauthorized Excavation

Wherever the excavation is carried beyond or below the lines and grades shown or given by the Engineer, except as specified in the subsection headed "Authorized Additional Excavation," all such excavated space shall be refilled with such material and in such manner as may be directed in order to ensure the stability of the various structures. Spaces beneath all manholes, structures or pipelines excavated without authority shall be refilled by the Contractor at his own expense, with Class I concrete, or select sand or crushed stone fill material, and properly compacted, as ordered by the Engineer, and no separate payment will be made therefor.

#### W-1.05 Segregation and Disposal of Material

Topsoil suitable for final grading and landscaping and excavated material suitable for backfilling or embankments shall be stockpiled separately on the site in locations approved by the Engineer. Excavated and other material shall not be stored nearer than 4 feet from the edge of any excavation and shall be so stored and retained as to prevent its falling or sliding back into the excavation. Surplus excavated material and excavated material unsuitable for backfilling or embankments shall become the property of the Contractor and shall be transported, as approved by the Engineer, away from the site of the work to the Contractor's own place of disposal.

#### W-1.06 Shoring and Sheeting

All excavations shall be properly shored, sheeted, and braced or cut back at the proper slope to furnish safe working conditions, to prevent shifting of material, to prevent damage to structures or other work, and to avoid delay to the work, all in compliance with the U. S. Department of Labor Safety and Health Regulations for Construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54). The minimum shoring, sheeting and bracing for trench excavations shall meet the general trenching requirements of the safety and health regulations. Before starting excavation for jacking pits and structures, the Contractor shall submit complete design calculations and working drawings of proposed sheeting and bracing arrangements which have been prepared, signed and sealed by a Professional Engineer registered in the State of Florida. Bracing shall be so arranged as not to place any strain on portions of completed work until the general construction has proceeded far enough, in the opinion of the Engineer, to provide ample strength. If the Engineer is of the opinion that at any point the sheeting or supports furnished are inadequate or unsuited for the purpose, he may order additional sheeting or supports to be installed. Whether or not such orders are issued, the sole responsibility for the design, methods of installation, and adequacy of the sheeting and supports shall be and shall remain that of the Contractor.

Tight sheeting shall be used in that portion of the excavation in City collector and arterial streets and in State and County highways below the intersection of a 1 on 1 slope line from the edge of the existing pavement to the nearest face of the excavation.

In general, sheeting for pipelines shall not be driven below the elevation of the top of the pipe. If it is necessary to drive the sheeting below that elevation in order to obtain a dry trench or satisfactory working conditions, the sheeting shall be cut off at the top of the pipe and left in place below the top of the pipe at no additional cost.

The sheeting and bracing shall be removed as the excavation is refilled in such a manner as to avoid the caving in of the bank or disturbance to adjacent areas or structures except as otherwise shown or directed. Voids left by the withdrawal of the sheeting shall be carefully filled by ramming or otherwise as directed.

Permission of the Engineer shall be obtained before the removal of any shoring, sheeting, or bracing. Such permission by the Engineer shall not relieve the Contractor from the responsibility for injury or to other property or persons from failure to leave such sheeting and bracing in place.



#### W-1.07 Sheeting Left in Place

The Engineer may order, in writing, any or all sheeting or bracing to be left in place for the purpose of preventing injury to the structures or to other property or to persons, whether such sheeting or bracing was shown on the Plans or placed at his direction or otherwise. If left in place, such sheeting shall be cut off at the elevation ordered, but, in general, such cutoffs shall be at least 18 inches below the final ground surface. Bracing remaining in place shall be driven up tight.

The right of the Engineer to order sheeting and bracing left in place shall not be construed as creating any obligation on his part to issue such orders.

Sheeting and bracing left in place, by written order of the Engineer, will be paid for under the appropriate Contract Item if included in the Proposal or otherwise by provisions of extra work as specified in Section 7 of the Agreement.

#### W-1.08 Removal of Water

At all times during the excavation period and until completion and acceptance of the work at final inspection, ample means and equipment shall be provided with which to remove promptly and dispose of properly all water entering any excavation or other parts of the work. The excavation shall be kept dry. No water shall be allowed to rise over or come in contact with masonry and concrete until the concrete and mortar have attained a set satisfactory to the Engineer and, in any event, not sooner than 12 hours after placing the masonry or concrete. Water pumped or drained from the work hereunder shall be disposed of in a safe and suitable manner without damage to adjacent property or streets or to other work under construction. Water shall not be discharged onto streets without adequate protection of the surface at the point of discharge. No water shall be discharged into sanitary sewers. No water containing settleable solids shall be discharged into storm sewers. Any and all damage caused by dewatering the work shall be promptly repaired by the Contractor.

#### W-1.09 Structure Excavation

Excavations shall be of sufficient size and only of sufficient size to permit the work to be economically and properly constructed in the manner and of the size specified. The bottom of the excavation in earth and rock shall have the shape and dimensions of the underside of the structure wherever the nature of the ground will permit.

#### W-1.10 Trench Excavation

Before starting trench excavation, all obstructions which are to be removed or relocated shall be cleared away. Trees, shrubs, poles, and other structures which are to be preserved shall be properly braced and protected. All trees and large shrubs shall be preserved with damage to the root structure held to a minimum, unless otherwise shown or specified. Small shrubs may be preserved or replaced with equivalent specimens.

The width of trenches shall be such as to provide adequate space for workmen to place, joint, and backfill the pipe properly, but shall be kept to a minimum. Unless otherwise approved by the Engineer, the clear width of the trench at the level of the top of the pipe shall not exceed the sum

of the outside diameter of the pipe barrel plus 24 inches.

In sheeted trenches, the clear width of the trench at the level of the top of the pipe shall be measured to the inside of the sheeting.

Should the Contractor exceed the maximum trench widths specified above, without written approval of the Engineer, he may be required to provide, at his own expense, concrete cradle or encasement for the pipe as directed by the Engineer, and no separate payment will be made therefor.

The Contractor shall excavate trenches to the respective depths, below the bottom of the pipe, for the various classes of pipe bedding shown on the Plans so that pipe bedding material can be placed in the bottom of the trench and shaped to provide a continuous, firm bearing for the pipe barrel and bells.

If unstable material is exposed at the level of the bottom of the trench excavation, it shall be excavated in accordance with the subsection headed "Authorized Additional Excavation." When in the judgement of the Engineer the unstable material extends to an excessive depth, he may advise the Contractor in writing to stabilize the trench bottom with a crushed stone, sand mat or gravel mat to ensure firm support for the pipe by other suitable methods. Payment for such trench stabilization will be made under the appropriate Contract Items or where no such items exist, as extra work as specified in Section 7 of the Agreement.

The open excavated trench preceding the pipe laying operation and the unfilled trench with pipe in place shall be kept to a minimum length causing the least disturbance to traffic and use of adjacent property. Ladders shall be provided and so located as to provide means of exit from the trench without more than 25 feet of lateral travel.

#### W-1.11 Rock Excavation

The term "rock" as used herein shall include all materials which have compressive strengths in excess of 300 psi in their natural undisturbed state and which, in the opinion of the Engineer, require drilling and blasting, wedging, sledging, barring or breaking with power tools not otherwise required for normal excavating.

Rock shall be excavated, within the boundary lines and grades as shown on the Plans, specified, or given by the Engineer. Rock removed from the excavation shall become the property of the Contractor and shall be removed by him away from the site of the work to his own place of disposal, and no separate payment will be made therefor.

All shattered rock and loose pieces shall be removed.

For trench excavation in which pipelines or other conduits are to be placed, the rock shall be excavated to a minimum depth of 6 inches below the bottom of the pipe and the excavated space refilled with pipe bedding material. Placing, compacting, and shaping pipe bedding material shall be included in the various classified unit price Contract Items for pipelines, and no separate payment will be made therefor.

For manhole excavation, the rock shall be excavated to a minimum depth of 8 inches below

the bottom of the manhole base for pipelines 24 inches in diameter and larger, and 6 inches below the bottom manhole base for pipelines less than 24 inches in diameter and the excavated space refilled with crushed stone. Placing, compacting, and shaping crushed stone for manhole bases shall be included in the appropriate Contract Items for manhole bases, and no separate payment will be made therefor.

For cast-in-place structures, the rock shall be excavated only to the bottom of the structure or foundation slab.

Excavated space in rock below structures, pipelines, and manholes which exceeds the depths specified above shall be refilled with Class I concrete, crushed stone, or other material as directed by the Engineer. Refilling of over-excavated rock in rock shall be included as part of the rock excavation, and no separate payment will be made therefor.

Where applicable, the requirements of the subsections on "Trench Excavation" and "Structure Excavation" shall be followed.

Blasting may be performed only when approved by the Engineer and authorized by the Agency having jurisdiction over the subject location and in accordance with all laws, ordinances, and regulations of the Agency.

#### W-1.12 Excavation for Jacking and Augering

Excavation for jacking or augering shall meet the requirements of the Workmanship and Materials section headed "Jacking and Augering."

\* \* \*

## SECTION 2 - BACKFILLING

### W-2.01 General

All excavation shall be backfilled to the original surface of the ground or to such other grades as may be shown or directed. For areas to be covered by topsoil, backfill shall be left 4 inches below the finished grade or as shown on the Plans. The time elapsing before backfilling is begun shall be subject to the approval of the Engineer. In all backfilling, all compressible and destructible rubbish and refuse which might cause later settlement and all lumber and braces shall be removed from the excavated space before backfilling is started, except that sheeting and bracing shall be left in place or removed as the work progresses.

Construction equipment used to backfill against and over cast-in-place concrete structures shall not be permitted to travel over these structures until the designated concrete strength has been obtained as verified by concrete test cylinders. In special cases where conditions warrant, as determined by the Engineer, the above restriction may be modified if the concrete has gained sufficient strength, as determined from test cylinders, to satisfy design requirements for the removal of forms and the application of load.

### W-2.02 Unsuitable Backfill Material

Before backfilling around structures, all rubbish shall be removed from behind the walls.

When the excavated material contains garbage, cinders, glass, tin cans, wood, or other trash or objectionable organic material, as determined by the Engineer, it shall not be used for backfill but shall be disposed of by the Contractor away from the site of the work to his own place of disposal. The unsuitable materials shall be replaced with backfill material which shall be sand, gravel, sandy loam, or other excavated material free of objectionable organic matter, as approved by the Engineer.

### W-2.03 Select Fill Material - General

Select fill material shall be used for pipe bedding, manhole bedding, trench and structure backfill, and other purposes as shown on the Plans, specified, and ordered in writing by the Engineer.

Select fill material shall be sand, conforming to the requirements of the subsections headed "Select Fill Material - Sand" or crushed stone conforming to the requirements of the subsection headed "Select Fill Material - Crushed Stone."

### W-2.04 Select Fill Material - Sand

Sand used for pipe bedding or as select fill material for trench or structure backfill shall consist of job excavated sand or imported sand which can be readily and thoroughly compacted. Sand shall be reasonably well graded and shall fall within the following gradation limits:

Passing No. 4 sieve - 95 percent (minimum)

Passing No. 200 sieve - 10 percent (maximum)

Sand containing more than 10 percent of material passing the No. 200 sieve or sand which, in the opinion of the Engineer, would have a tendency to flow under pressure when wet will not be acceptable for use as pipe bedding or select fill material for trench or structure backfill

Sand shall not be used for bedding for manholes or other structures.

#### W-2.05 Select Fill Material - Crushed Stone

Crushed stone used for pipe bedding, manhole base bedding, or as select fill material for trench or structure backfill shall consist of clean, durable rock, angular in shape, which can be readily and thoroughly compacted. Crushed stone shall be reasonably well graded and shall be no greater than a No. 57 stone.

#### W-2.06 Pipe and Structure Bedding

All pipelines shall be bedded in well graded, compacted select fill material. Select fill material shall be sand, conforming to the subsection headed "Select Fill Material - Sand" and/or crushed stone, conforming to the subsection headed "Select Fill Material - Crushed Stone," as shown on the Plans, specified or ordered in writing by the Engineer. Pipe bedding shall be constructed in accordance with the details shown on the Plans.

When shown on the Plans or ordered in writing by the Engineer, pipelines (except PVC) shall be laid in Class 1 concrete cradle or encasement.

Precast concrete manhole bases shall be bedded on No. 57 stone, conforming to the subsection headed "Select Fill Material - Crushed Stone," as shown on the Plans.

Cast-in-place manhole bases and other foundations for structures shall be cast against undisturbed earth or compacted fill in clean and dry excavations.

Existing underground structures, tunnels, conduits and pipes crossing the excavation shall be bedded with compacted select fill material. Bedding material shall be placed under and around each existing underground structure, tunnel, conduit or pipe and shall extend underneath and on each side to a distance equal to the depth of the trench below the structure, tunnel, conduit or pipe.

#### W-2.07 Bedding Placement for Pipelines

Select fill material, used as pipe bedding, shall be placed by hand, in uniform layers not greater than 6 inches in loose thickness and thoroughly compacted in place. Select fill material pipe bedding shall extend up around the pipe to one foot over the top of the pipe.

Each layer of select fill shall be thoroughly tamped and compacted in place by hand or with suitable mechanical or pneumatic tools to a dry density not less than 95 percent of the maximum dry density as determined by AASHTO Des: T-180. No large stone fragments shall be placed in the pipe bedding nor closer than two feet to any point on any pipe.

#### W-2.08 Bedding Placement for Precast Concrete Manholes

No. 57 stone used for bedding beneath precast manhole bases shall be placed in uniform layers not greater than 6 inches in loose thickness and thoroughly compacted in place with suitable mechanical or pneumatic tools.

#### W-2.09 Structure Backfill

Backfill around manholes, risers, and structures shall be suitable job excavated material, selected fill material, or other material approved by the Engineer. Such backfill shall extend from the bottom of the excavation or top of structure bedding to the bottom of pavement base course, subgrade for lawn replacement, the top of the existing ground surface, or to such other grades as may be shown or given by the Engineer.

The backfill shall be placed in uniform layers not greater than 12 inches in loose thickness and thoroughly compacted in place with suitable mechanical or pneumatic tools to a dry density of not less than 98 percent of the maximum dry density as determined by AASHTO Des: T-180.

#### W-2.10 Trench Backfill

Trenches shall be backfilled from 1 foot over the top of the pipe to the bottom of pavement base course, subgrade for lawn replacement, to the top of the existing ground surface or to such other grades as may be shown or given by the Engineer. Trench backfill shall be select fill material, suitable job excavated material or other material, as approved by the Engineer.

Except under pavements and railroad tracks, trench backfill shall be placed in uniform layers not greater than 18 inches in loose thickness and thoroughly compacted in place using heavy-duty tampers such as pneumatic jackhammers with tamping foot attachment or vibrating rollers if required. Each layer shall be compacted to a dry density of not less than 95 percent of the maximum dry density as determined by AASHTO Des: T-180.

Where railroad tracks or pavements and appurtenances for streets or highways are to be placed over trenches, the trench backfill shall be placed in uniform layers not greater than 12 inches in loose thickness and thoroughly compacted in place with equipment as specified above. Each layer shall be compacted to a dry density of not less than 98 percent of the maximum dry density as determined by AASHTO Des: T-180. On City of Tampa streets, each layer shall be compacted as specified above to the bottom of the subbase which is defined as 10 inches below the bottom of the base course. The subbase shall be compacted to 98 percent of modified proctor.

Trench backfilling work shall be done in a manner to prevent dropping of material directly on top of any conduit or pipe through any great vertical distance. In no case shall backfilling material from a bucket be allowed to fall directly on a structure or pipe and in all cases, the bucket shall be lowered so that the shock of falling earth will not cause damage.

Lumps shall be broken up and if there are any stones, pieces of crushed rock or lumps which cannot be readily broken up, they shall be distributed throughout the mass so that all interstices are solidly filled with fine material.

#### W-2.11 Backfill for Short Tunnel

Where pipelines are placed in short tunnels, the annular space between the outside of the pipe wall and the tunnel wall shall be completely filled with select fill material or suitable excavated material. Pipelines in short tunnels shall be suitably supported, to permit placing backfill which shall be suitably tamped in place.

#### W-2.12 Finish Grading

Finish grading shall be performed to meet the existing contour elevations and grades shown on the Plans or given by the Engineer and shall be made to blend into adjacent natural ground surfaces. All finished surfaces shall be left smooth and free to drain.

Grading outside of pipelines or structure lines shall be performed in such a manner as to prevent accumulation of water within the area. Where necessary or where shown on the Drawings, finish grading shall be extended to ensure that water will be carried to drainage ditches, and the construction area left smooth and free from depressions holding water.

#### W-2.13 Responsibility for After Settlement

Any depression which may develop in backfilled areas from settlement within one year after the work is fully completed and accepted shall be the responsibility of the Contractor. The Contractor shall, at his own expense, provide as needed additional backfill material, pavement base replacement, permanent pavement sidewalk curb and driveway repair or replacement, and lawn replacement and shall perform the necessary reconditioning and restoration work to bring such depressed areas to proper grade as approved by the Engineer.

#### W-2.14 Inspection and Testing of Backfilling

All backfill shall be subject to test by the Engineer with the assistance of the Contractor.

\* \* \*

## SECTION 6 - REINFORCING STEEL

### W-6.01 Standards

Reinforcing steel bars for concrete reinforcement shall be deformed bars meeting the requirements of ASTM Des: A 615, Grade 60, unless shown or specified otherwise. They shall be free from defects, kinks, and from bends that cannot be readily and fully straightened in the field. Test certificates of the chemical and physical properties covering each shipment shall be submitted for approval.

Reinforcing mesh shall be of the electrically welded type, with wires arranged in rectangular patterns, of the sizes shown or specified and shall meet the requirements of ASTM A 185.

### W-6.02 General

Reinforcing steel bars shall be supplied in lengths which will allow them to be conveniently placed in the work and provide sufficient lap at joints. Dowels of proper lengths, size, and shape shall be provided for tying walls, beams, floors, and the like together when shown, specified, or ordered.

Stirrups and ties shall have a minimum inside radius of bend of 2-1/2 bar diameters. All other bars No. 7 and smaller shall have a minimum inside radius of bend of 3 bar diameters, and No. 8 bars and larger shall have a minimum inside radius of bend of 4 bar diameters.

Splices in all reinforcements shall be lapped as specified hereinafter in "Table 1 - Grade 60 Reinforcing Bar Splice Lapping Lengths" unless shown or specified otherwise. All splices shall be staggered, unless otherwise approved by the Engineer.

TABLE 1 - GRADE 60  
REINFORCING BAR SPLICE LAPPING LENGTHS

| Bar Size         | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
|------------------|----|----|----|----|----|----|----|-----|-----|
| Top Bars - ACI   |    |    |    |    |    |    |    |     |     |
| Class B          | 13 | 17 | 22 | 28 | 38 | 50 | 64 | 81  | 100 |
| Top Bars - ACI   |    |    |    |    |    |    |    |     |     |
| Class C          | 17 | 23 | 29 | 37 | 50 | 66 | 83 | 106 | 130 |
| Other Bars - ACI |    |    |    |    |    |    |    |     |     |
| Class B          | 12 | 12 | 16 | 20 | 27 | 36 | 46 | 58  | 71  |
| Other Bars - ACI |    |    |    |    |    |    |    |     |     |
| Class C          | 12 | 16 | 20 | 26 | 36 | 47 | 60 | 75  | 93  |

### Notes:

1. Splice length given in inches.
2. Top bars are all horizontal reinforcement so placed that more than 12 inches of concrete is



cast in the member below the bar. This includes horizontal wall reinforcement.

3. Where lapping bars of different sizes, use lap required for larger bar.
4. For all bars spaced closer than 6 inches, increase lap length 25 percent.
5. Unless otherwise specified, the length of lap for splices shall be as shown for ACI Class B where no more than 50 percent of the bars are lap spliced, and as shown for ACI Class C where more than 50 percent of the bars are lap spliced.

#### W-6.03 Detailing

The Contractor shall submit detailed placing drawings and bar listed to the Engineer for approval in accordance with the requirements for "Working Drawings" of the General Provisions, except as otherwise specified herein.

All provisions of the latest ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" shall be followed in the preparation of placing drawings and bar lists.

Wall and slab reinforcing shall not be billed in sections. Complete elevations of all walls and complete plans of all slabs must be shown, except that when more than one wall or slab are identical only one such elevation or plan will be required. These plans or elevations need not be true views of the walls or slabs shown. Every reinforcing bar in a slab or a wall shall be billed on either a plan or an elevation. Where necessary, sections shall be taken to clarify the arrangement of the steel reinforcement. All bars shall be identified on such sections, but in no case shall bars be billed on such sections.

For all reinforcing bars, unless the location of a bar is perfectly obvious, the location of such bar or bars shall be given by a dimension to some structural feature which must be readily distinguishable at the time bars are placed.

The set of placing drawings shall be complete in and by themselves to the extent that the bar setters will have no occasion to refer to the design drawings.

Before submittal to the Engineer, every placing drawing and bar list shall be completely checked including the quantity, size, type, length, bend dimensions, and type of support for all bars or mesh, and all other information on the drawing and list. The checking shall be done by a qualified person and all necessary corrections made.

If after placing drawings and bar lists have been submitted to the Engineer for approval, a partial or spot check by the Engineer reveals that the placing drawings obviously have not been checked by a qualified person, they will be returned to the Contractor for such a check and corrections, after which they shall be resubmitted for approval by the Engineer.

#### W-6.04 Delivery

Reinforcing steel shall be delivered to the work in bundles strongly tied, and each group of both bent and straight bars shall be identified with a metal tag giving the identifying number

corresponding to the shop drawings and bar schedules. All bars shall be properly stored in an orderly manner, at least 12 inches off the ground and kept clean and protected from the weather, as directed by the Engineer, after delivery at the site of the work.

#### W-6.05 Protection

Reinforcing steel shall be delivered without rust other than that which may have accumulated during transportation to the work. It shall at all times be fully protected from moisture, grease, dirt, mortar, and concrete. Before being placed in position, it shall be thoroughly cleaned of all loose mill scale and rust and of any dirt, coatings, or other material that might reduce the bond. If there is a delay in depositing concrete, the steel shall be inspected and satisfactorily cleaned immediately before the concrete is placed.

#### W-6.06 Fabrication and Installation - Bars

Bars shall be cut to required length and accurately bent before placing. Bars shall be bent in the shop unless written approval of field bending is obtained from the Engineer. If field bending is permitted, it shall be done only when the air temperature where the bending operation is performed is above 30 degrees F.

The bars shall be placed in the exact positions shown with the required spacing and shall be securely fastened in position at intersections to prevent displacement during the placing of the concrete. The bars shall be fastened with annealed wire of not less than 18 gauge or other approved devices. Spacing chairs of a type approved by the Engineer shall be furnished and properly placed to support and hold reinforcing bars in position in all beams and slabs, including slabs placed directly on the subgrade. Chairs which rest on the forms for slabs, the underside of which will be exposed to view in the finished work, shall have those portions galvanized or plastic coated which come in contact with the forms.

Splices in all reinforcement shall be lapped as specified in "Table 1 - Grade 60 Reinforcing Bar Splice Lapping Lengths" in the subsection headed "General." Splices at points of maximum tensile stress shall be avoided wherever possible. Temperature bars shall have a minimum clear spacing of 2-1/2 diameters. All bar splices shall be staggered where possible.

All welded splices shall be full penetration, butt welds, made by certified welders in accordance with AWS D12.1. Thermite welding or Cadweld type couplers may be used where approved by the Engineer.

On any section of the work where horizontal bars run further than the length of the forms, the form or head against which the work ends shall be perforated at the proper places to allow the bars to project through a distance at least equal to the lap specified. The projecting ends, however, unless otherwise directed by the Engineer, shall be of different lengths so that in no place will laps in adjoining bars in the same place occur opposite each other.

#### W-6.07 Installation - Mesh

Reinforcing mesh shall be placed in the positions shown, specified, or required to fit the work. Suitable spacing chairs or supports as specified for bars shall be furnished and placed to

maintain the mesh in correct location. Where a flat surface of mesh is required, the mesh shall be rolled or otherwise straightened to make a perfectly flat surface before placing. The length of laps not indicated shall be approved by the Engineer.

#### W-6.08 Concrete Protection for Reinforcing Steel

Reinforcing steel shall be placed and held in position so that the concrete cover, as measured from the surface of the bar to the surface of the concrete, shall be not less than the following, except as otherwise shown, specified, or directed:

1. General

- a. Concrete deposited directly against soil - 3 inches.
- b. Concrete in contact with soil or exposed to weather or sewage – 2 inches

2. Slabs (See Item 6)

- a. Top all surfaces - 2 inches

3. Beams - Girders - Columns (See Item 6)

- a. To main reinforcement - 2 inches
- b. To ties - 1-1/2 inches

4. Walls (See Item 6)

- a. 12 inches or more thick - 2 inches
- b. Less than 12 inches thick:
  - (1) #6 bars or larger - 2 inches
  - (2) #5 bars or smaller - 1-1/2 inches

5. Footings and Base Slabs

- a. Top face - 3 inches
- b. Sides and ends - 3 inches
- c. Bottom, Concrete deposited
  - directly against ground - 3 inches
  - Concrete deposited directly against lean concrete work mat - 2 inches

6. Add 1/2 inch for surfaces contacting or exposed to water or sewage.

7. Laps - as specified in "Table 1 - Grade 60 Reinforcing Bar Splice Lapping Lengths" in the subsection headed "General."

8. Spacing - clear distance between parallel bars - 2 inches minimum.

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## SECTION 7 - CONSTRUCTION AND EXPANSION JOINTS FOR CONCRETE

### W-7.01 General

Construction and expansion joints shall be placed at all locations shown. No additions, deletions, or changes in location of construction and expansion joints shall be made without the written approval of the Engineer. Construction joints shall include a formed key and shall include a water stop where shown. Expansion joints shall include a joint filler between concrete faces, and shall include a water stop, and sealant with back-up rod where shown.

Water stops in the walls shall be carried into lower slabs and shall join the water stops in the slabs. All water stops shall be continuous. Water stops shall be set accurately to the position and line shown. Edges shall be held and securely fixed in position at intervals of not more than 24 inches so that they will not move during the placing of the concrete. No nails shall be driven through the water stops.

The Contractor shall submit samples and specifications of the materials he proposes to use.

All materials shall be installed or applied in accordance with the manufacturer's recommendations, unless otherwise specified herein.

### W-7.02 Water Stops

Water stops shall be made of extruded polyvinyl chloride. No reclaimed plastic material shall be used in the manufacture of the water stops. Plastic water stops shall meet the requirements of the Corps of Engineer Specification CRD-C572, except as modified herein. The Shore A/10 durometer hardness shall be between 73 and 79, the tensile strength not less than 1,850 psi, and the specific gravity not more than 1.38.

Unless otherwise shown, water stops for construction joints shall be flat, at least 6 inches wide, and not less than 3/8 inch thick at the thinnest section. The water stop shall have ribbed longitudinal strips.

Unless otherwise shown, water stops for expansion joints shall be at least 9 inches wide and not less than 1/4 inch thick at the narrowest point and not less than 3/8 inch thick immediately adjacent to the center of the water stop. The water stop shall have ribbed longitudinal strips with a 3/4-inch inside diameter hollow bulb center. The water stop shall permit a joint movement of 1/4 inch under a tensile force of not more than 500 pounds per lineal inch.

Corners and intersections for all water stops shall be prefabricated so that only butt joints need be made in the field. Field fabrication of corners and intersections requires approval of the Engineer. Corners and intersections shall be mitered and assembled with approved equipment, as described for field joints.

Field joints shall be made by cutting the ends of the sections to be spliced so they will form a smooth even butt joint. The cut ends shall be heated with the splicing tool until the plastic melts. The two ends shall be pressed together until the plastic cools. Splicing shall cause as little damage to the continuity of the ribbed strips as possible.

W-7.03 Joint Filler for Expansion Joints

Joint filler shall be used for all expansion joints. Joint filler shall be closed cell polyethylene Sonoflex F Foam as manufactured by Sonneborn Building Products, or PVC joint filler No. 327, by A. C. Horn, or equal, of the thickness shown.

Joint filler shall be placed against the completed portion of the work before the concrete for the next section is placed. The filler shall be fastened to the hardened concrete with a compatible adhesive in accordance with manufacturer's instructions. The filler shall extend through the thickness of the wall or slab and shall be flush with the finished surface, except where a joint sealant is shown. In joints having a water stop, the filler shall be fitted accurately on each side of the water stop to prevent the intrusion of concrete.

W-7.04 Joint Sealant

Expansion joints shall be finished with a joint sealant where shown or specified.

Joint sealant materials may be either a single component urethane compound meeting the requirements of Fed. Spec. TT-S-00230C, or a two-component urethane compound meeting the requirements of Fed. Spec. TT-S-00227E, except as modified herein.

The urethane sealant shall be 100 percent polymer, nonextended, containing no solvent, lime, or coal tar. Color shall be as selected by the Engineer, but shall not be black. Sealant properties shall conform to the following table:

| <u>Property</u>                  | <u>Value</u> | <u>Test Method</u> |
|----------------------------------|--------------|--------------------|
| Maximum final cure (days)        | 3            |                    |
| Tensile strength (psi)           | 250-400      | ASTM D 412         |
| Minimum elongation (%)           | 400          | ASTM D 412         |
| Modulus at 100% elongation (psi) | 40-60        | Fed. Spec.         |
| Shore A hardness                 | 30-40        | Shore Durometer    |
| Solid content (%)                | 98-100       |                    |
| Peel strength (lb/in.)           | 50-60        | Fed. Spec.         |
| Minimum recovery (%)             | 75-85        | Fed. Spec.         |
| Initial tack-free cure (hrs.)    | 24-48        | Fed. Spec.         |

The two-component sealant shall be mixed using a slotted paddle and slow speed mixer for 5 to 8 minutes, continually working paddle from top to bottom until sealant color is uniform. The side of the container and paddle blade shall be scraped down several times during the mixing operation to ensure uniform mixing.

Joint surfaces shall be properly prepared by removing all foreign matter and concrete

laitance so that concrete surfaces are structurally sound, clean, dry, and free of all oil, grease, wax, waterproofing compounds, or form release materials prior to the application of primer and sealant. All concrete joint surfaces and all surfaces exposed to water shall be primed prior to sealing, with no exceptions. Priming of other surfaces shall be as recommended by the manufacturer of the sealant. The primer shall be as recommended by the manufacturer of the sealant, subject to the approval of the Engineer. Primer shall be applied by either brushing or spraying on the joint surfaces. Sealant shall be installed within 2 to 24 hours after the application of primer.

For horizontal joints, sealant may be installed by pouring directly from a suitable shaped can or by flowing from a bulk-loading gun. Vertical joints shall be filled from a gun, starting from the bottom, to avoid bridging and the formation of air voids. Overhead joints shall be filled from a gun, by laying a bead along each side of the joint and then filling the middle. Immediately after installation, sealant shall be tooled in order to establish firm contact with joint surfaces and to provide a smooth sealant surface. Method of tooling shall be in accordance with manufacturer's instructions.

Joint depth shall be controlled with the use of joint fillers and backup materials. Fillers and backup materials in contact with sealant shall be non-impregnated and free from asphalt, creosote, oil, or extractable plasticizers. Backup material shall be closed cell polyethylene foam rod, such as Sealtight Backer Rod, Sonofoam Backer Rod, or equal, with a diameter 1/4 inch larger than the joint width. Joint widths and sealant depths shall be as shown, except that sealant depth shall not exceed 1/2 inch.

#### W-7.05 Unbonded Horizontal Joints

Unbonded horizontal joints shall be used as shown or required where slabs or beams must be prevented from bonding to footings, walls, columns, or other rigid parts of the structure.

Bonding shall be prevented by use of structural grade neoprene pads meeting the requirements of Section 25, Division 2 of the AASHTO Standard Specifications for Highway Bridges. The pads shall be placed over the bearing surface of the footing, wall, or other supporting part of the structure so as to isolate it from the new concrete being placed. The neoprene pads shall not be thinner than 1/4 inch.

\* \* \*

## SECTION 8 - METAL CASTINGS

### W-8.01 General

Metal castings include all miscellaneous ferrous and nonferrous castings.

Wheel guards, valve boxes, manhole frames and covers, stop log grooves, brackets and supports for piping, gutter inlets, floor, roof and gallery drains, stormwater inlets, beehive grates and frames, cleanout covers, and special malleable iron castings and inserts are included in this classification.

### W-8.02 Materials

Metal castings shall meet the requirements of the following standards, except as otherwise specified herein.

|                  |                          |
|------------------|--------------------------|
| Gray Iron        | ASTM Des: A 48           |
| Malleable Iron   | ASTM Des: A 47           |
| Carbon Steel     | ASTM Des: A 27           |
| Alloy Steel      | ASTM Des: A 148          |
| Aluminum         | ASTM Des: B 26           |
| Aluminum Bronze  | ASTM Des: B 148          |
| Silicon Bronze   | Navy Spec. 46B28         |
| Manganese Bronze | ASTM Des: B 132 or B 147 |
| Ductile Iron     | ASTM Des: A 536          |

### W-8.03 Workmanship

Castings shall be made accurately to approved dimensions and shall be planed or ground where marked or where otherwise necessary to secure perfectly flat and true surfaces. Allowance shall be made in the patterns so that the specified thickness shall not be reduced. Manhole and cleanout frames and covers shall conform to the details shown on the Plans and shall be true and shall seat at all points. No plugging of defective castings will be permitted. All castings shall be erected to accurate grades and alignment, and when placed in concrete, they shall be carefully supported to prevent movement during concreting.

### W-8.04 Weights

No castings weighing less than 95 percent of the theoretical weight, based on required dimensions, will be accepted. The Contractor shall provide facilities for weighing castings in the presence of the Engineer, or shall furnish invoices showing true weights, certified by the supplier.

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SECTION 15 - LAYING AND JOINTING PIPE  
FOR FORCE MAINS AND SEWERS

W-15.01 General

The installation, delivery, transportation, unloading, and stringing of pipes, fittings, and accessories for force mains and sewers shall be done in accordance with AWWA C600 for ductile iron pipe and ASTM Des: C 12 for concrete pipe and ASTM D 2321 and pipe manufacturer's recommendations for PVC pipe, as modified or supplemented by the specifications of this section and by the details shown on the Plans.

Proper and suitable tools and appliances for the safe and convenient cutting, handling, and laying of the pipe and fittings shall be used.

Suitable fittings shall be used where shown and at connections where grade or alignment changes require offsets greater than those recommended by the pipe manufacturer.

Pipes and fittings shall be thoroughly cleaned before they are laid and shall be kept clean until they are accepted in the completed work.

All lines shall be closed off with bulkheads when pipe laying is not in progress.

Before being laid, all pipe and specials shall be thoroughly examined for defects, and no piece shall be installed which is known to be defective. If any defective piece should be discovered after having being installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor at his own expense.

Pipe shall be thoroughly cleaned before it is laid and shall be kept clean until it is accepted in the completed work. Special care shall be exercised to avoid leaving bits of wood, dirt, and other foreign particles in the pipe. If any such particles are discovered before the final acceptance of the work, they shall be removed and the pipe cleaned at the Contractor's expense.

Pipe laying for stormwater or wastewater shall begin at the low end of a run and proceed uphill. Generally, all such pipe shall be laid with bells or grooves pointing uphill. Each pipe shall be carefully placed and checked for line and grade.

Adjustments to bring pipe to line and grade shall be made by scraping away or filling in granular material under the body of the pipe, but in no case by wedging or blocking up the barrel. The faces of the spigot ends and the bells shall be brought into fair contact, and the pipe shall be firmly and completely shoved home. As the work progresses, the interior of the pipelines shall be cleaned of all dirt and superfluous materials of every description. All lines shall be kept absolutely clean during construction. Pipelines shall be laid accurately to line and grade.

Gaskets for pipe joints shall be stored in a cool place and protected from light, sunlight, heat, oil, or grease until installed. Any gaskets showing signs of checking, weathering, or other deterioration will be rejected.



Pipe shall be of the types, sizes, and classes shown on the Plans or as listed in the Contract Items.

Each piece of pipe shall be inspected and cleaned before it is lowered in the trench and any lumps or projections on the face of the spigot or tongue end or the shoulder shall be cut away. No cracked, broken, or defective pieces shall be used in the work.

Concrete pipe manufactured with a plastic sheet liner shall be laid so that the liner is on the crown of the pipe and placed symmetrically about the vertical centerline of the pipe.

Pipe laying will be permitted only in dry trenches having a stable bottom. Where groundwater is encountered, the Contractor shall make every effort to secure an absolutely dry trench bottom.

If, in the opinion of the Engineer, the Contractor has failed to obtain an absolutely dry trench bottom by improper or insufficient use of all known methods of trench dewatering, the Engineer may then order the Contractor to excavate below grade and place sufficient selected fill material, crushed stone, or Class I concrete over the trench bottom at the Contractor's own expense.

If all efforts fail to obtain this condition and the Engineer determines that the trench bottom is unsuitable for pipe foundation, he will order in writing the kind of stabilization to be constructed.

#### W-15.02 Transportation and Delivery

Every precaution shall be taken to prevent injury to the pipe during transportation and delivery to the site. Extreme care must be taken in loading and unloading the pipe and fittings. Such work must be done slowly with skids or suitable power equipment, and the pipe shall be under perfect control at all times. Under no condition shall the pipe be dropped, bumped, dragged, pushed, or moved in any way which will cause damage to the pipe or coating. When handling the pipe with a crane, a suitable pipe hook or sling around the pipe shall be used. Under no condition shall the sling be allowed to pass through the pipe unless adequate measures are taken to prevent damage to the pipe ends.

If in the process of transportation, handling, or laying, any pipe or special is damaged, such pipe or pipes shall be replaced or repaired by the Contractor at his own expense.

The Contractor shall furnish and install suitable blocking and stakes so as to prevent the pipe from rolling. The type of blocking and stakes, and the method of installation, shall be approved by the Engineer.

#### W-15.03 Pipe Laying - Trenches

Pipelines shall be laid in trench excavation on bedding material as specified under the Workmanship and Materials section W-2 headed "Backfilling," Class I concrete cradle or other foundations as shown on the Plans, specified, or ordered in writing by the Engineer. The pipe shall be properly secured against movement and pipe joints shall be made in the excavation as required.

The pipe bedding shall be carefully graded, compacted, and formed to fit the bottom quadrant of the pipe. Bell holes shall be cut out for each joint as required to permit the joint to be properly made and allow the barrel of the pipe to have full bearing throughout its length.

Where pipelines are laid in Class I concrete cradle or encasement, the installation shall conform to the requirements of the Workmanship and Materials section W-14 headed "Pipe Cradles and Encasements."

Pipelines laid on other type foundations shall be installed as specified for such other foundations or as directed in writing by the Engineer.

#### W-15.04 Lateral Detection Tape

Detectable underground marking tape shall be installed over all laterals from the edge of pavement to the property line. The tape shall be Harris Industries, Inc. encased aluminum foil, or equal. The 2-inch wide tape shall be APWA green and reverse printed bearing the identification of the pipe below ("Sewer" or "Storm Drain") it and a warning such as "CAUTION."

The tape shall be buried 4-6 inches. After trench backfilling, the tape shall be placed in the backfill and allowed to settle into place with the backfill.

#### W-15.05 Mechanical Joints for Ductile Iron Pipe

In making up mechanical joints, the spigot shall be centered in the bell. The surface with which the rubber gasket comes in contact shall be cleaned thoroughly and the gasket shall be washed thoroughly with soapy water just prior to assembly of the joint. The gasket and gland shall be placed in position, the bolts inserted, and the nuts tightened fingertight. The nuts then shall be tightened by means of a torque wrench in such a manner that the gland shall be brought up evenly into the joint. The following range of bolt torques shall be applied:

| <u>Bolt Size</u><br><u>Inches</u> | <u>Range of Torque</u><br><u>Foot-Pounds</u> |
|-----------------------------------|--|
| 5/8                               | 45 - 60                                      |
| 3/4                               | 75 - 90                                      |
| 1                                 | 80 - 100                                     |
| 1-1/4                             | 105 - 120                                    |

If effective sealing is not obtained at the maximum torque listed above, the joint shall be disassembled and reassembled after a thorough cleaning.

All bolts and nuts shall be field coated with a bituminous coating after assembly of the joint.

#### W-15.06 Push-on Joints for Ductile Iron Pipe

In making up push-on joints, the gasket seat in the socket shall be cleaned thoroughly and the rubber gasket shall be wiped clean with a cloth. The gasket shall be placed in the socket and a

thin film of lubricant shall then be applied to the inside surface of the gasket that will come in contact with the entering pipe. The plain end of the pipe to be entered shall be cleaned thoroughly and placed in alignment with the bell of the pipe to which it is to be joined. The joint shall be made up by exerting sufficient force on the entering pipe so that its plain end is moved past the gasket until it makes contact with the base of the socket.

#### W-15.07 Joining of PVC Pipe-Gravity

The assembly of gasketed joints shall be performed as recommended by the pipe manufacturer. In all cases clean the gasket and bell, especially the groove area and the spigot area, with a rag, brush or paper towel to remove any dirt or foreign material before the assembly. Lubricant shall be applied as specified by the pipe manufacturer.

Align the spigot to the bell and insert the spigot into the bell until it contacts the gasket uniformly. Apply firm steady pressure either by hand or by bar and block assembly until the spigot easily slips through the gasket.

If undue resistance to insertion of the pipe end is encountered or the reference mark does not position properly, disassemble the joint and check the position of the gasket. If it is twisted or pushed out of its seat ("rolled"), inspect components, repair or replace damaged items, clean the components, and repeat the assembly steps. Be sure both pipe lengths are in concentric alignment. If the gasket was not out of position, verify proper location of the reference mark.

To join field-cut pipe, first square cut the pipe end. Use a factory-finished beveled end as a guide for proper bevel angle and depth of bevel plus the distance to the insertion reference mark. Bevel the end using a pipe beveling tool or a wood rasp which will cut the correct taper. Round off any sharp edges on the leading edge of the bevel.

#### W-15.08 Joining Concrete Pipe

Before joining concrete pipe using flexible rubber gaskets, the joint surfaces of both the bell and spigot (tongue and groove) ends shall be wiped clean. Any lumps, projections, burrs, or chips which would interfere with the proper compression of the gasket shall be repaired. The spigot or tongue end with the gasket in place and with all surfaces lubricated as recommended by the manufacturer, shall be inserted into the bell or groove. Pressure shall be applied to seat the pipe properly in the bell or groove. Voids under the pipe shall be tamped full of granular material to provide full bearing for the pipe.

Curves for reinforced concrete pipe sewers shall be constructed with standard pipe where the opening of the joint on the outside of the curve is less than 1/2 inch. Where greater opening of the joint would be required, the curves shall be constructed using beveled or radius pipe with standard joints.

#### W-15.09 Concrete Pipe Rubber Gasket Joints

Rubber gaskets shall be of the O-ring type or equivalent cross section approved by the Engineer. The composition and properties of the gaskets for gravity flow sewers shall meet the requirements of ASTM Des: C 443.

Composition and properties for concrete pressure pipe gaskets shall meet the requirements of the specifications for the concrete pressure pipe with which the gasket will be used.

In making O-ring rubber gasketed joints, the gasket and the pipe socket shall be lubricated with an approved rubber gasket lubricant, and the gasket shall be stretched over the spigot and placed accurately in position. The tongue or spigot end shall be carefully centered in the socket of the preceding pipe so as to avoid displacement of the gasket, and the pipe shall be drawn home fully compressing the gasket. Adjustments to line and grade shall be made in such a manner that the compressed rubber gasket will not be disturbed. Before proceeding with backfilling, the joint shall be felt completely around to determine whether the gasket is in its proper position. If the gasket can be felt out of place, the pipe shall be withdrawn and the gasket examined for cuts or breaks. If the gasket has been damaged, it shall be replaced with a new one before the pipe is replaced.

Rubber gaskets shall be stored in a cool place and protected from light, sunlight, heat, oil, or grease until installed. Any gaskets showing signs of checking, weathering, or other deterioration will be rejected.

#### W-15.10 Temporary Bulkheads

At the ends of contract sections, where adjoining pipelines have not been completed, and in connections built into pipelines where adjoining pipelines or structures have not been completed and are not ready to be connected, temporary bulkheads, approved by the Engineer, shall be built. Such bulkheads encountered in connecting sewers or structures included in the Contract, or pipelines or structures previously built, shall be removed by the Contractor when the need for them has passed or when ordered by the Engineer.

#### W-15.11 Testing

The testing of pipelines shall be done in accordance with the requirements of the Workmanship and Materials section W-18 headed "Leakage Tests."

#### W-15.12 Joining Clay or PVC Pipe to Ductile Iron Pipe

The joining of clay pipe to ductile iron pipe shall be accomplished with flexible compression couplings. Such couplings shall meet the requirements of ASTM DES: C 425 and shall be Series No. 1002 flexible polyvinyl chloride couplings with stainless steel compression bands as manufactured by Fernco Joint Sealer Co., Ferndale, Michigan; Band-Seal couplings as manufactured by Mission Clay Products Corp., Whittier, California; or approved equal. Installation of flexible couplings shall be done in accordance with the manufacturer's instructions. After the joint has been completed, any voids in the excavation beneath the coupling shall be thoroughly tamped full of granular fill material to provide a full bearing for the pipe and prevent excessive pressure on the bottom of the joint.

The joining of PVC pipe to ductile iron pipe shall be accomplished with rigid PVC C900 x SDR-35 adapter couplings. Such couplings shall be molded of PVC material meeting ASTM D-1784 specifications. Joints shall meet ASTM D-3213 requirements with gaskets conforming to ASTM F-477. The adapter couplings shall be manufactured by Harco, Lynchburg, VA, or equal.

Installation of rigid couplings shall be done in accordance with the manufacturer's instructions. After the joint has been completed, any voids in the excavation beneath the coupling shall be thoroughly tamped full of granular fill material to provide a full bearing for the pipe and prevent excessive pressure on the bottom of the joint.

#### W-15.13 Connection to Manholes

The Contractor will be required to submit a shop drawing, detailing the method of connecting the proposed pipe to the manhole and making it watertight:

1. For connecting vitrified clay or ductile iron pipe, the Contractor shall use nonshrink grout to seal the opening between the pipe O.D. and manufactured opening in the manhole or flexible rubber boot, precast into the manhole. The boot shall have stainless steel bands to compress and seal to the proposed pipe or shall be a compression type, such as A-Lock.
2. For connecting PVC pipe, the Contractor shall use a flexible rubber boot, precast into the manhole. The boot shall have stainless steel bands to compress and seal to the proposed pipe or shall be a compression type, such as A-Lock. Should the flexible rubber boot need to be relocated or when connecting to an existing manhole, the Contractor shall perform the connection by one of two methods. The preferred method is to core the manhole and install a rubber boot. The rubber boot shall be manufactured by Kor-n-Seal, or equal. The boot shall be installed and the PVCP connection shall be in accordance with the manufacturer's instructions. If the manhole cannot be cored or if the manhole is constructed of brick, the connection shall be made with a PVC manhole adapter which has an exterior impregnated silica surface layer. The adapter shall be manufactured by GPK Products, Inc., Fargo, ND, or equal. The adapter shall be installed and grouted into the manhole wall in accordance with the manufacturer's instructions with nonshrink grout. The PVCP shall be inserted through the adapter.

#### W-15.14 Joint Grouting

Joints for concrete pipelines using rubber gaskets and steel end rings shall be grouted on the outside with cement mortar composed of one part Type IA portland cement to one part sand by volume. The materials shall be thoroughly mixed to produce a uniform mortar with all aggregate particles well coated.

The joint grouting shall not advance closer than two pipe lengths to the laying operations. In grouting the joint, a cloth diaper shall be used to encase the outside diameter of the bell of the pipe and adequately straddle the joint recess so as to keep out dirt and to serve as a form for grouting. The joint space shall be filled with cement mortar, just thin enough to run around the joint. The diaper is to be left in place permanently. Before the mortar has taken its initial set, the diaper shall be examined, and if not completely filled, additional mortar shall be forced into the joint.

\* \* \*

## SECTION 16 - RESTORATION OF STREET PAVEMENTS

### W-16.01 General

The various street surfaces disturbed, damaged, or destroyed during the performance of the work under this Contract shall be restored and maintained as shown, specified, and directed. Included in this classification are permanent pavement surfaces of all types, pavement bases, curb, curb and gutter, alleys, driveways, and sidewalks.

The quality of workmanship and materials used in the restoration shall produce a street surface equal to or better than the condition before the work began.

Service boxes, manhole frames and covers, and similar structures not conforming to the new work shall be set to established grade at the Contractor's expense, and no separate payment will be made therefor.

All portland cement and asphaltic concrete pavements shall be removed in rectangular sections with sawed vertical cuts, or to existing joints, as directed by the Engineer. Concrete pavements shall be cut with a concrete saw. Asphaltic concrete pavements one-inch thick or greater shall be cut with a tool having a square neat edge. The edges of adjacent pavement shall be trimmed to straight lines which a roller can follow. Where reinforced concrete pavement is removed, one foot of existing reinforcement on each side of the excavation shall be left exposed and tied to the replaced reinforcing steel.

The equipment necessary for the proper performance of pavement replacement shall be on the site in satisfactory working condition and shall be subject to approval of the Engineer before the work is started.

All replaced concrete pavements shall have a minimum bearing on undisturbed earth outside the line of excavations of at least nine (9) inches.

### W-16.02 Standards

The restoration of street pavement shall be performed in strict conformance with the standards relating to equipment, materials, and methods of construction of the authority having jurisdiction over the pavements, unless otherwise specified herein. Pavements to be restored are under the jurisdiction of the several agencies as follows:

1. State Highways are under the jurisdiction of the State of Florida Department of Transportation. Work on such pavements shall conform to the Department of Transportation Standard Specifications for Road and Bridge Construction.
2. City Streets are under the jurisdiction of the City of Tampa Department Transportation and Stormwater Services. Work on such pavements shall conform to the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, except that densities (including for subgrade) and other testing requirements shall follow current Mobility Department, Transportation

Engineering Division specifications, and except that Sections 330 and 331 shall be modified as shown in this Section. The type and thickness of pavement, base and stabilization shall be as shown, specified, and/or directed by the Engineer.

3. County Roads are under the jurisdiction of the Hillsborough County Engineering Department. Work on such pavements shall conform to County specifications.

All specifications of the several agencies having jurisdiction over pavement restoration work shall be the current issue of such specifications as of the date of the "Notice to Bidders," except as specified otherwise herein.

#### W-16.03 Temporary Restoration

Upon completion of backfilling, the street or sidewalk surface damaged or destroyed shall be promptly placed in condition for safe temporary use. Temporary work shall be maintained in a suitable and safe condition for traffic until the permanent pavement is laid, or until final acceptance of the work.

Where the area over which existing pavement has been disturbed is to be repaved as part of an overall project by the agency having jurisdiction, any special temporary pavement replacement shall be as specified in the "Specific Provisions."

Pavement surfaces shall be temporarily restored by placing thereon, to proper line, grade and transverse profile, a layer or layers of compacted limerock conforming to all requirements regarding configuration, thickness, and density as detailed in the Plans, specified, and directed by the Engineer. When the compacted thickness of the limerock layer is greater than 6 inches, the base shall be constructed in multiple courses. Each course shall not exceed 6 inches in compacted thickness. Where the existing pavement has a permanent wearing surface, the temporary pavement shall be finished with a suitable grade of asphalt and sand to provide a temporary wearing course and to eliminate dust nuisance.

Curbs, where possible, shall be temporarily reset in place, as part of the work of temporary restoration of pavement.

Damaged or destroyed sidewalks shall be temporarily restored, immediately upon placing of the backfill, by placing a compacted layer of fine crushed limestone, choked with limestone screenings, which shall have a minimum thickness of three inches below the existing finished sidewalk grade.

The temporary pavement shall be maintained by the Contractor and all holes and depressions filled to provide for a reasonably smooth driving surface until the permanent pavement is placed.

Crushed concrete, limerock or shell placed in areas where the existing pavement is shell, limerock, crushed stone, or other similar material and is classed as temporary pavement, will not be measured for separate payment. Placement of temporary pavement will be included for payment under the various classified Unit Price Contract Items for pipelines.

Temporary sand and asphalt wearing courses placed on road base on which a permanent pavement surface will be constructed shall be incidental to the permanent pavement base work, and no separate payment will be made therefor.

Asphalt, concrete, or limestone screenings for temporary sidewalk surface shall be incidental to sidewalk replacement, and no separate payment will be made therefor.

Road base placed in areas to receive a permanent pavement surface will be measured for payment under the appropriate Contract Item for permanent pavement base.

#### W-16.04 Preparation of Temporary Pavement for Permanent Pavement Replacement

After due notice and within the time specified, the temporary road base shall be prepared as the permanent base to receive the new permanent asphalt or concrete pavement.

Prior to construction of the pavement base, the City will furnish the Contractor with the preconstruction survey notes for the streets disturbed by construction. The Contractor shall use these notes in bringing the base installed to grade allowing for the permanent pavement surface to be constructed.

The preparation of the base shall consist of bringing the area to be replaced to a grade conforming to the required grade and cross section, of uniform density, ready to receive the permanent asphalt or concrete pavement. This is to be accomplished by excavating or backfilling as needed, shaping, watering as required, or permitting to dry to proper consistency, and rolling the entire area with an approved self-propelled roller weighing not less than eight tons. Shaping and rolling shall be continued until the base has been properly prepared and shows that no further compaction of any practical benefit would result from continued rolling. The base shall be tested as to cross section, crown, longitudinal profile, and elevation. After being properly prepared, it shall be so maintained until the permanent pavement is constructed. Any part of the base area not accessible to the roller shall be thoroughly compacted by hand or by mechanical compaction in a manner acceptable to the Engineer. Preparation shall include sawing, cutting, and trimming edges of existing pavements to provide a neat, uniform edge to abut the new pavement.

After completion of the base, the Contractor shall furnish the Engineer with survey notes verifying the base has been constructed to line and grade. Upon approval, payment will be made for permanent pavement base.

#### W-16.05 Certification for Pavement Base

The Contractor shall furnish notarized certifications from all suppliers of base material stating that all material supplied for use as pavement base conforms to the requirements of the applicable sections of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

#### W-16.06 Permanent Pavement Base Densities

Permanent base material shall be installed and compacted to the required densities (98% modified proctor) in layers not exceeding six inches.



#### W-16.07 Permanent Pavement Surface Restoration

Permanent restoration of pavement shall be of the type and thickness detailed in the Plans, Specific Provisions, or as directed by the Engineer.

If the existing type of pavement is classified as temporary pavement, the temporary restoration shall be reworked and completed and left in a condition at least equivalent to the existing temporary pavement.

#### W-16.08 Replacement of Curb, Curb and Gutter, Sidewalk and Driveways

All permanent restoration of street curb or curb and gutter shall be of the same type and thickness as the curb or curb gutter which abuts unless otherwise indicated. The grade of the restored curb and curb and gutter shall conform with the grade of the existing adjacent curb or curb and gutter in order to maintain existing drainage patterns and avoid ponding.

Except as otherwise specified herein or detailed in the Plans, all permanent restoration of driveways and sidewalks shall conform to the manner of construction as originally placed and to the lines and grades as given by the Engineer. No patching of concrete driveway areas will be allowed between joints or dummy joints.

Where sidewalks are replaced, the replacement shall be the full width of the walk and minimum lengths shall be 60 inches. Restoration of adjacent lawn is incidental to sidewalk replacement, and no separate payment will be made therefor.

#### W-16.09 Replacement of Traffic Markings and Signalization Loops

The Contractor shall furnish all labor, equipment and materials to replace, test and maintain all traffic markings (temporary and permanent) and signalization loops removed or damaged by pipeline construction and appurtenance work as shown on the Plans, specified and directed by the Engineer.

The replacement of traffic markings (temporary and permanent), signalization loops and all appurtenant work shall be replaced by the Contractor in kind.

It shall be the Contractor's responsibility to field verify before construction begins all markings and signalization loops to be replaced.

All traffic markings and signalization loops shall conform to the Workmanship and Materials standards set forth in the latest edition of the Florida Department of Transportation Standard and Supplemental Specifications.

Payment for the replacement of temporary and permanent traffic markings, signalization loops and all appurtenant work shall be included in the unit bid price for Permanent Pavement Surface Replacement, Asphaltic Concrete, and no separate payment shall be made therefor.

#### W-16.10 Hot Bituminous Mixtures (Section 330) Type S Asphaltic Concrete (Section 331)

**This Subsection shall Replace and/or Modify Portions of F.D.O.T. Standard Specifications for Road and Bridge Construction (2007) Sections 330, 331 and 334.**

SECTION 330 HOT BITUMINOUS MIXTURES

All references to the CITY OF TAMPA shall mean the local agency. All references to the Engineer shall mean the designated Engineer of the local agency. Any incorrect references to FDOT specifications, test methods, or standards should be brought to the attention of the Engineer for clarification.

330-1 Description. Construct plant-mixed hot bituminous pavements and bases. Establish and maintain a quality control system that provides assurance that all materials, products and completed construction submitted for acceptance meet Contract requirements.

330-1.1 General: Meet the requirements of Section 320 for plant and equipment, and meet the general construction requirements of Section 330. The Engineer will accept the work based on one of the following methods as described in 334-5 and 334-6:

- 1) Asphalt Work Category 1,
- 2) Asphalt Work Category 2,
- 3) Asphalt Work Category 3

330-1.2 Quality Control/Acceptance Testing: The contractor's submittal of documentation for quality control testing may be waived by the Engineer; however, the contractor shall not be exempt from implementing quality control procedures regarding material and workmanship. The local agency shall perform the quality acceptance testing, or utilize a licensed private testing laboratory of the Engineer's choice.

SECTION 331 TYPE S ASPHALTIC CONCRETE

331-1 Description.

331-1.1 General: Construct a Type S Hot Mix Asphalt (HMA) pavement course as specified by the Contract. The general composition and physical test properties for all mixes shall be met per F.D.O.T Standard Specifications for Road and Bridge Construction. Meet the applicable requirements for plants, equipment, and construction requirements.

Where Type S Asphalt Concrete is specified in the Contract, if approved by the Engineer, the equivalent fine Type SP Asphalt Concrete mixture (Traffic Level C) meeting the requirements of Section 334 may be selected as an alternate at no additional cost to the Department. The equivalent mixes are as follows:

- Type S-I.....Type SP-12.5
- Type S-II.....Type SP-19.0
- Type S-III..... Type SP-9.5

Meet the requirements for plant and equipment specified in Section 320. Meet the general construction requirements specified in Section 330.

331-1.2 Layer Thicknesses:

331-1.2.1 Structural Layers: The allowable layer thicknesses for Type S Asphalt Concrete mixtures used in structural and overbuild applications is as follows:

|                 |                                   |
|-----------------|-----------------------------------|
| Type S-III..... | 3/4 – 1 1/4 inches [20 – 30 mm]   |
| Type S-I.....   | 1 1/4 – 2 1/2 inches [30 – 60 mm] |
| Type S-II.....  | 2 – 2 3/4 inches [50 – 70 mm]     |

In addition to the minimum and maximum thickness requirements, the following restrictions are placed on Type S mixtures when used as a structural course:

Type S-III – Limited to the final (top) structural layer, one layer only.

Type S-I – May not be used in the first layer of courses over 3 1/2 inches [90 mm] thick, nor in the first layer of courses over 2 3/4 inches [70 mm] thick on limited access facilities.

Type S-II – May not be used in the final (top) structural layer.

331-1.2.2 Additional Requirements: The following requirements also apply to Type S Asphalt Concrete mixtures:

1. A minimum 1 1/2 inch [40 mm] initial lift is required over an Asphalt Rubber Membrane Interlayer (ARMI).

2. When construction includes the paving of adjacent shoulders (#5 feet [#1.5 m] wide), the layer thickness for the upper pavement layer and shoulder shall be the same and paved in a single pass, unless shown differently in the plans.

3. All overbuild layers shall be Type S asphalt concrete. Use the minimum and maximum layer thicknesses as specified in 331-1.2.1 unless shown differently in the plans. On variable thickness overbuild layers, the minimum allowable thickness may be **reduced by 1/2 inch (13 mm), and the maximum allowable thickness may be increased 1/2 inch (13 mm)**, unless shown differently in the plans. Other variations from these thicknesses must be approved by the Engineer.

331-4 General Composition of Mixture.

331-4.3 Mix Design: Prior to the production of any asphalt mixture, obtain the Engineer's conditional approval of the mix design. If required by the Engineer, send representative samples of all component materials, including asphalt binder to a laboratory designated by the Engineer for verification. The Engineer will consider any marked variations from original test data for a mix design or any evidence of inadequate field performance of a mix design as sufficient evidence that the properties of the mix design have changed, and at his discretion, the Engineer may no longer allow the use of the mix design. Furnish the following information:

1. The specific project on which the mixture will be used.
2. The source and description of the materials to be used.
3. The gradation and approximate proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use.
4. A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly No. 200 [75 µm]) should be accounted for and identified for the applicable sieves.

5. A single percentage of asphalt by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1%. For structural mixes (S-I, S-II and S-III) establish the optimum asphalt content at a level corresponding to a minimum of 4.5% air voids. For FC-3 mixes, establish optimum asphalt content at a level corresponding to a minimum of 5.0% air voids.

6. A single temperature at which the mixture is intended to be discharged from the plant.

7. The laboratory density of the asphalt mixture for all mixes except Open-Graded Friction Courses.

8. Evidence that the completed mixture will meet all specified physical requirements.

9. The name signature dated of the individual responsible for the Quality Control of the mixture during production.

331-4.4 Contractor Quality Control: Assume full responsibility for controlling all operations and processes such that the requirements of these Specifications are met at all times. Perform any tests necessary at the plant and roadway for quality control purposes.

331-5 Acceptance Procedures:

331-5.1 General Construction Requirements: shall meet same requirements as 334-5 General Construction Requirements (with exception to requirements regarding SP spread rates, unless specified by the Engineer).

331-6 Acceptance of the Mixture: shall meet same requirements as 334-6 Acceptance of the Mixture (with exception to Table 334-3 to be replaced with Table 331-6).

| <b>Table 331-6<br/>Tolerances for Acceptance Tests</b> |           |
|--|-----------|
| Characteristic   | Tolerance |
| Asphalt Binder Content                                 | ±0.55%    |
| Passing No. 4 [4.75 mm] sieve                          | ±7.00%    |
| Passing No. 10 [2.00 mm] sieve                         | ±5.50%    |
| Passing No. 40 [425 µm] sieve*                         | ±4.50%    |
| Passing No. 200 [75 µm] sieve                          | ±2.00%    |
| *Applies only to Types S-I, S-II, S-III, and FC-3.     |           |

331-7 Acceptance of the Mixture at the Roadway: shall meet same requirements as 334-6 Acceptance of the Mixture (with exception to Table 334-3 shall be replaced with Table 331-6).

| <b>Table 334-7<br/>Roadway Density Acceptance Values</b> |                                      |
|--|--------------------------------------|
| Characteristic   | Tolerance                            |
| Roadway Density (average of three cores)                 | 92.0% $G_{mm}$ (proposed mix design) |
| Roadway Density (avg. of 5 tests nuclear method)         | 95.0% $G_{sb}$ (proposed mix design) |
| Roadway Density (avg. of 5 tests nuclear method)         | 96.0 % $G_{sb}$ (lab density)        |

SECTION 334 SUPERPAVE ASPHALT CONCRETE

334-1 Description.

334-1.1 General: Construct a Type SP Hot Mix Asphalt (HMA) pavement based on the type of work specified in the Contract and the Asphalt Work Categories as defined below. Meet the applicable requirements for plants, equipment, and construction requirements as defined below. Use a HMA mix that meets the requirements of this specification.

334-1.2 Asphalt Work Mix Categories: Construction of Hot Mix Asphalt Pavement will fall into one of the following work categories:

334-1.2.1 Asphalt Work Category 1: Includes the construction of bike paths.

334-1.2.2 Asphalt Work Category 2: Includes the construction of new HMA turn lanes, paved shoulders and other non-mainline pavement locations.

334-1.2.3 Asphalt Work Category 3: Includes the construction of new mainline HMA pavement lanes, milling and resurfacing.

334-1.3 Mix Types: Use the appropriate HMA mix as shown in Table 334-1.

| <b>Table 334-1<br/>HMA Mix Types</b> |   |               |
|--------------------------------------|---|---------------|
| Asphalt Work Category                | Mix Types   | Traffic Level |
| 1                                    | Type SP-9.5 , or equivalent as determined by the Engineer         | A             |
| 2                                    | Type SP-9.5, SP-12.5, or equivalent as determined by the Engineer | B or C        |
| 3                                    | Type SP-9.5, SP-12.5  | C             |

A Type SP mix one traffic level higher than the traffic level specified in the Contract may be substituted, at no additional cost (i.e. Traffic Level B may be substituted for Traffic Level A, etc.).

334-1.4 Gradation Classification: HMA mixes are classified as either coarse or fine, depending on the overall gradation of the mixture. Coarse and fine mixes are defined in 334 3.2.2. Use only fine mixes.

The equivalent AASHTO nominal maximum aggregate size Superpave mixes are as follows:

Type SP-9.5..... 9.5 mm  
 Type SP-12.5..... 12.5 mm

334-1.5 Thickness: The total pavement thickness of the HMA Pavement will be based on a specified spread rate or plan thickness as shown in the Contract Documents. Before paving, propose a spread rate or thickness for each individual layer meeting the requirements of this specification, which when combined with other layers (as applicable) will equal the plan spread rate or thickness. When the total pavement thickness is specified as plan thickness, the plan thickness and individual layer thickness will be converted to spread rate using the following equation:

$$\text{Spread rate (lbs/yd}^2\text{)} = t \times G_{mm} \times 43.3$$

where: t = Thickness (in.) (Plan thickness or individual layer thickness)  
 G<sub>mm</sub> = Maximum specific gravity from the mix design

For target purposes only, spread rate calculations shall be rounded to the nearest whole number.

334-1.5.1 Layer Thicknesses: Unless otherwise called for in the Contract Documents, the allowable layer thicknesses for HMA mixtures are as follows:

|                   |                      |
|-------------------|----------------------|
| Type SP-9.5.....  | 3/4 - 1 1/2 inches   |
| Type SP-12.5..... | 1 1/2 - 2 1/2 inches |

334-1.5.2 Additional Requirements: The following requirements also apply to HMA mixtures:

1. When construction includes the paving of adjacent shoulders ( $\leq 5$  feet wide), the layer thickness for the upper pavement layer and shoulder shall be the same and paved in a single pass, unless otherwise called for in the Contract Documents.

2. For overbuild layers, use the minimum and maximum layer thicknesses as specified above unless called for differently in the Contract Documents. On variable thickness overbuild layers, the minimum allowable thickness may be reduced by 1/2 inch, and the maximum allowable thickness may be increased by 1/2 inch, unless called for differently in the Contract Documents.

334-1.6 Weight of Mixture: The weight of the mixture shall be determined as provided in 320 2.2 of the Florida Department of Transportation (FDOT) specifications.

### 334-2 Materials.

334-2.1 Superpave Asphalt Binder: Unless specified elsewhere in the Contract or in 334-2.3.3, use a PG 67 22 asphalt binder from the FDOT Qualified Products List (QPL).

334-2.2 Aggregate: Use aggregate capable of producing a quality pavement. For Category 2 and 3 projects, require the aggregate supplier to certify that the material meets FDOT requirements.

### 334-2.3 Reclaimed Asphalt Pavement (RAP) Material:

334-2.3.1 General requirements: RAP may be used as a component of the asphalt mixture if approved by the Engineer. Usage of RAP is subject to the following requirements:

1. Limit the amount of RAP material used in the mix to a maximum of 50 percent by weight of total aggregate.
2. Do not use RAP material in any friction course mixes.
3. Provide stockpiled RAP material that is reasonably consistent in characteristics and contains no aggregate particles which are soft or conglomerates of fines.
4. Provide RAP material having a minimum average asphalt content of 4.0 percent by weight of total mix. The Engineer may sample the stockpile to verify that this requirement is met.
5. Use a grizzly or grid over the RAP cold bin, in-line roller crusher, screen, or other suitable means to prevent oversized RAP material from showing up in the completed recycle mixture. If oversized RAP material appears in the completed recycle mix, take the appropriate corrective action immediately. If the appropriate corrective actions are not immediately taken, stop plant operations.

334-2.3.2 Material Characterization: Assume responsibility for establishing the asphalt binder content, gradation, viscosity and bulk specific gravity (Gsb) of the RAP material based on a representative sampling of the material.

334-2.3.3 Asphalt Binder for Mixes with RAP: Select the appropriate asphalt binder grade based on Table 334 2. Maintain the viscosity of the recycled mixture within the range of 4,000 to 12,000 poises.

| <b>Table 334-2</b>                                   |                      |
|--|----------------------|
| <b>Asphalt Binder Grade for Mixes Containing RAP</b> |                      |
| Percent RAP  | Asphalt Binder Grade |
| <20  | PG 67-22             |
| 20 – 29  | PG 64-22             |
| ≥ 30   | Recycling Agent      |

### 334-3 Composition of Mixture.

334-3.1 General: Compose the asphalt mixture using a combination of aggregates, mineral filler, if required, and asphalt binder material. Size, grade and combine the aggregate fractions to meet the grading and physical properties of the mix design. Aggregates from various sources may be combined.

#### 334-3.2 Mix Design:

334-3.2.1 General: Design the asphalt mixture in accordance with AASHTO R35 04, except as noted herein. Submit the proposed mix design with supporting test data indicating compliance with all mix design criteria to the Engineer. Prior to the production of any asphalt mixture, obtain the Engineer’s conditional approval of the mix design. If required by the Engineer, send representative samples of all component materials, including asphalt binder to a laboratory designated by the Engineer for verification. The Engineer will consider any marked variations from original test data for a mix design or any evidence of inadequate field performance of a mix design as sufficient evidence that the properties of the mix design have changed, and at his discretion, the Engineer may no longer allow the use of the mix design.

334-3.2.2 Mixture Gradation Requirements: Combine the aggregates in proportions that will produce an asphalt mixture meeting all of the requirements defined in this specification and conform to the gradation requirements at design as defined in AASHTO M323 04, Table 3. Aggregates from various sources may be combined.

334-3.2.2.1 Mixture Gradation Classification: Plot the combined mixture gradation on an FHWA 0.45 Power Gradation Chart. Include the Control Points from AASHTO M323 04, Table 3, as well as the Primary Control Sieve (PCS) Control Point from AASHTO M323 04, Table 4. Fine mixes are defined as having a gradation that passes above or through the primary control sieve control point. Use only fine mixes

334-3.2.3 Gyratory Compaction: Compact the design mixture in accordance with AASHTO T312 04. Use the number of gyrations as defined in AASHTO R35 04, Table 1.

334-3.2.4 Design Criteria: Meet the requirements for nominal maximum aggregate size as defined in AASHTO M323 04, as well as for relative density, VMA, VFA, and dust-to-binder ratio as specified in AASHTO M323 04, Table 6.

334-3.2.5 Moisture Susceptibility: Test 4 inch specimens in accordance with

FM 1 T 283. Provide a mixture having a retained tensile strength ratio of at least 0.80 and a minimum tensile strength (unconditioned) of 100 psi. If necessary, add a liquid anti-stripping agent from the FDOT's Qualified Products List, or hydrated lime in order to meet these criteria.

In lieu of moisture susceptibility testing, add a liquid anti-stripping agent from the FDOT Qualified Products List. Add 0.5% liquid anti-stripping agent by weight of binder.

334-3.2.6 Additional Information: In addition to the requirements listed above, provide the following information on each mix design:

1. The design traffic level and the design number of gyrations ( $N_{\text{design}}$ ).
2. The source and description of the materials to be used.
3. The FDOT source number and the FDOT product code of the aggregate components furnished from an FDOT approved source (if required).
4. The gradation and proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use. Compensate for any change in aggregate gradation caused by handling and processing as necessary.
5. A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly material passing the No. 200 sieve) should be accounted for and identified.
6. The bulk specific gravity ( $G_{\text{sb}}$ ) value for each individual aggregate and .
7. A single percentage of asphalt binder by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1 percent.
8. A target temperature at which the mixture is to be discharged from the plant and a target roadway temperature. Do not exceed a target temperature of 330°F for modified asphalts and 315°F for unmodified asphalts.
9. Provide the physical properties achieved at four different asphalt binder contents. One shall be at the optimum asphalt content, and must conform to all specified physical requirements.
10. The name of the Mix Designer.
11. The ignition oven calibration factor.

#### 334-4 Contractor Quality Control.

Assume full responsibility for controlling all operations and processes such that the requirements of these Specifications are met at all times. Perform any tests necessary at the plant and roadway for quality control purposes.

#### 334-5 General Construction Requirements.

334-5.1 Weather Limitations: Do not transport asphalt mix from the plant to the roadway unless all weather conditions are suitable for the laying operations.

##### 334-5.2 Limitations of Laying Operations:

334-5.2.1 General: Spread the mixture only when the surface upon which it is to be placed has been previously prepared, is intact, firm, and properly cured, and is dry.

334-5.2.2 Air Temperature: Spread the mixture only when the air temperature in the shade and away from artificial heat is at least 40°F for layers greater than 1 inch (100 lb/yd<sup>2</sup>) in thickness and at least 45°F for layers 1 inch (100 lb/yd<sup>2</sup>) or less in thickness (this includes leveling courses). The minimum temperature requirement for leveling courses with a spread rate of 50 lb/yd<sup>2</sup> or less is 50°F.



334-5.3 Mix Temperature: Heat and combine the ingredients of the mix in such a manner as to produce a mixture with a temperature at the plant and at the roadway, within a range of  $\pm 30^{\circ}\text{F}$  from the target temperature as shown on the mix design. Reject all loads outside of this range.

334-5.4 Transportation of the Mixture: Transport the mixture in vehicles previously cleaned of all foreign material. After cleaning, thinly coat the inside surface of the truck bodies with soapy water or an asphalt release agent as needed to prevent the mixture from adhering to the beds. Do not allow excess liquid to pond in the truck body. Do not use diesel fuel or any other hazardous or environmentally detrimental material as a coating for the inside surface of the truck body. Cover each load at all times.

334-5.5 Preparation of Surfaces Prior to Paving:

334-5.5.1 Cleaning: Clean the surface of all loose and deleterious material by the use of power brooms or blowers, supplemented by hand brooming where necessary.

334-5.5.2 Patching and Leveling Courses: Where the HMA is to be placed on an existing pavement which is irregular, wherever the plans indicate, or if directed by the Engineer, bring the existing surface to proper grade and cross-section by the application of patching or leveling courses.

334-5.5.3 Application over Surface Treatment: Where an asphalt mix is to be placed over a surface treatment, sweep and dispose of all loose material from the paving area.

334-5.5.4 Tack Coat: Apply a tack coat on existing pavement structures that are to be overlaid with an asphalt mix and between successive layers of all asphalt mixes, unless directed otherwise by the Engineer. Use a tack coat product meeting FDOT specifications. Use an emulsified tack coat spread rate of 0.02 to 0.08 gal/sy or as specified by the Engineer.

334-5.6 Paving:

334-5.6.1 Alignment of Edges: With the exception of pavements placed adjacent to curb and gutter or other true edges, place all pavements by the stringline method to obtain an accurate, uniform alignment of the pavement edge. Control the unsupported pavement edge to ensure that it will not deviate more than  $\pm 1.5$  inches from the stringline.

334-5.6.2 Rain and Surface Conditions: Immediately cease transportation of asphalt mixtures from the plant when rain begins at the roadway. Do not place asphalt mixtures while rain is falling, or when there is water on the surface to be covered. Once the rain has stopped and water has been removed from the tacked surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as specified in 334-5.3, the Contractor may then place the mixture caught in transit.

334-5.6.3 Checking Depth of Layer: Check the depth of each layer at frequent intervals, and make adjustments when the thickness exceeds the allowable tolerance. When making an adjustment, allow the paving machine to travel a minimum distance of 32 feet to stabilize before the second check is made to determine the effects of the adjustment.

334-5.6.4 Hand Spreading: In limited areas where the use of the spreader is impossible or impracticable, spread and finish the mixture by hand.

334-5.6.5 Spreading and Finishing: Upon arrival, dump the mixture in the approved paver, and immediately spread and strike-off the mixture to the full width required, and to such loose depth for each course that, when the work is completed, the required weight of mixture per square yard, or the specified thickness, is secured. Carry a uniform amount of mixture ahead of the screed at all times.

334-5.6.6 Thickness of Layers: Construct each course of Type SP mixtures in layers

of the thickness shown in 334-1.5.1.

#### 334-5.7 Leveling Courses:

334-5.7.1 Patching Depressions: Before spreading any leveling course, fill all mixture, and compact thoroughly.

334-5.7.2 Spreading Leveling Courses: Place all courses of leveling with an asphalt paver or by the use of two motor graders, one being equipped with a spreader box. Other types of leveling devices may be used upon approval by the Engineer.

334-5.7.3 Rate of Application: When using Type SP-9.5 (fine graded) for leveling, do not allow the average spread of a layer to be less than 50 lb/yd<sup>2</sup> or more than 75 lb/yd<sup>2</sup>. The quantity of mix for leveling shown in the plans represents the average for the entire project; however, the Contractor may vary the rate of application throughout the project as directed by the Engineer. When leveling in connection with base widening, the Engineer may require placing all the leveling mix prior to the widening operation.

334-5.8 Compaction: For each paving or leveling train in operation, furnish a separate set of rollers, with their operators.

When density testing for acceptance is required (Asphalt Work Category 3) to meet the specified density requirement, select equipment, sequence, and coverage of rolling. Regardless of the rolling procedure used, complete the final rolling before the surface temperature of the pavement drops to the extent that effective compaction may not be achieved or the rollers begin to damage the pavement.

When density testing for acceptance is not required (Asphalt Work Categories 1 and 2), use a rolling pattern approved by the Engineer.

Use hand tamps or other satisfactory means to compact areas which are inaccessible to a roller, such as areas adjacent to curbs, headers, gutters, bridges, manholes, etc.

#### 334-5.9 Joints.

334-5.9.1 Transverse Joints: Construct smooth transverse joints, which are within 3/16 inch of a true longitudinal profile when measured with a 15 foot manual straightedge.

334-5.9.2 Longitudinal Joints: For all layers of pavement except the leveling course, place each layer so that longitudinal construction joints are offset 6 to 12 inches laterally between successive layers. Do not construct longitudinal joints in the wheelpaths. The Engineer may waive these requirement where offsetting is not feasible due to the sequence of construction.

334-5.10 Surface Requirements: Construct a smooth pavement with good surface texture and the proper cross-slope.

334-5.10.1 Texture of the Finished Surface of Paving Layers: Produce a finished surface of uniform texture and compaction with no pulled, torn, raveled, crushed or loosened portions and free of segregation, bleeding, flushing, sand streaks, sand spots, or ripples. Correct any area of the surface that does not meet the foregoing requirements in accordance with 334-5.10.4.

334-5.10.2 Cross Slope: Construct a pavement surface with cross slopes in compliance with the requirements of the Contract Documents.

334-5.10.3 Pavement Smoothness: Construct a smooth pavement meeting the requirements of this Specification. Furnish a 15 foot manual and a 15 foot rolling straightedge meeting the requirements of FM 5-509. Make them available at the job site at

all times during paving operations for Asphalt Work Category 3 and make them available upon request of the Engineer for Asphalt Work Categories 1 and 2.

334-5.10.3.1 Asphalt Work Category 3:

334-5.10.3.1.1 Acceptance Testing: Straightedge the final Type SP structural layer and friction course layer with a rolling straightedge. Test all pavement lanes where the width is constant using a rolling straightedge and document all deficiencies on a form approved by the Engineer. Notify the Engineer of the location and time of all straightedge testing a minimum of 48 hours before beginning testing.

334-5.10.3.1.2 Rolling Straightedge Exceptions: Testing with the rolling straightedge will not be required in the following areas: intersections, tapers, crossovers, parking lots and similar areas. In addition, testing with the rolling straightedge will not be performed on the following areas when they are less than 50 feet in length: turn lanes, acceleration/deceleration lanes and side streets. However, correct any individual surface irregularity in these areas that deviates from the plan grade in excess of 3/8 inch as determined by a 15 foot manual straightedge, and that the Engineer deems to be objectionable, in accordance with 334-5.10.4. The Engineer may waive or modify straightedging requirements if no milling, leveling, overbuild or underlying structural layer was placed on the project and the underlying layer was determined to be exceptionally irregular.

334-5.10.3.1.3 Final Type SP Structural Layer: Straightedge the final Type SP structural layer with a rolling straightedge behind the final roller of the paving train. Correct all deficiencies in excess of 3/16 inch in accordance with 334-5.10.4.2, and retest the corrected areas.

334-5.10.3.1.4 Friction Course Layer: At the completion of all paving operations, straightedge the friction course. Correct all deficiencies in excess of 3/16 inch in accordance with 334-5.10.4.3. Retest all corrected areas.

334-5.10.3.2 Asphalt Work Categories 1 and 2: If required by the Engineer, straightedge the final structural layer with a rolling straightedge, either behind the final roller of the paving train or as a separate operation. Correct all deficiencies in excess of 5/16 inch in accordance with 334-5.10.4.2. Retest all corrected areas. If the Engineer determines that the deficiencies on a bicycle path are due to field geometrical conditions, the Engineer will waive corrections with no deduction to the pay item quantity.

334-5.10.4 Correcting Unacceptable Pavement:

334-5.10.4.1 General: Correct all areas of unacceptable pavement at no additional cost.

334-5.10.4.2 Structural Layers: Correct deficiencies in the Type SP structural layer by one of the following methods:

a. Remove and replace the full depth of the layer, extending a minimum of 50 feet on either side of the defective area for the full width of the paving lane.

b. Mill the pavement surface to a depth and width that is adequate to remove the deficiency. (This option only applies if the structural layer is not the final surface layer.)

334-5.10.4.3 Friction Course: Correct deficiencies in the friction course layer by removing and replacing the full depth of the layer, extending a minimum of 50 feet on either side of the defective area for the full width of the paving lane.

Corrections may be waived if approved by the Engineer.

### 334-6 Acceptance of the Mixture.

334-6.1 General: The asphalt mixture will be accepted based on the Asphalt Work Category as defined below:

- 1) Asphalt Work Category 1 – Certification by the Contractor as defined in 334-6.2.
- 2) Asphalt Work Category 2 – Certification and quality control testing by the Contractor as defined in 334-6.3
- 3) Asphalt Work Category 3 – Quality control testing by the Contractor and acceptance testing by the Engineer as defined in 334-6.4.

334-6.2 Certification by the Contractor: On Asphalt Work Category 1 construction, the Engineer will accept the mix on the basis of visual inspection. Submit a Notarized Certification of Specification Compliance letter on company letterhead to the Engineer stating that all material produced and placed on the project was in substantial compliance with the Specifications. The Engineer may run independent tests to determine the acceptability of the material.

334-6.3 Certification and Quality Control Testing by the Contractor: On Asphalt Work Category 2 construction, submit a Notarized Certification of Specification Compliance letter on company letterhead to the Engineer stating that all material produced and placed on the project was in substantial compliance with the Specifications, along with supporting test data documenting all quality control testing as described in 334-6.3.1. If so required by the Contract, utilize an Independent Laboratory as approved by the Engineer for the quality control testing. The mix will also require visual acceptance by the Engineer. In addition, the Engineer may run independent tests to determine the acceptability of the material.

334-6.3.1 Quality Control Sampling and Testing Requirements: Perform quality control testing at a frequency of once per day. Obtain the samples in accordance with FDOT Method FM 1 T 168. Test the mixture at the plant for gradation (P-8 and P-200) and asphalt binder content ( $P_b$ ). Test the mixture on the roadway for density using six-inch diameter roadway cores obtained at a frequency of three cores per day or by Nuclear Density Method if approved by Engineer.

Determine the asphalt content of the mixture in accordance with FM 5 563. Determine the gradation of the recovered aggregate in accordance with FM 1 T 030. Determine the roadway density in accordance with FM 1 T 166 or with FM 1-T 238. The minimum roadway density will be based on the percent of the maximum specific gravity ( $G_{mm}$ ) from the approved mix design. If the Contractor or Engineer suspects that the mix design  $G_{mm}$  is no longer representative of the asphalt mixture being produced, then a new  $G_{mm}$  value will be determined from plant-produced mix with the approval of the Engineer. Roadway density testing will not be required in certain situations as described in 334-6.4.1. Assure that the asphalt content, gradation and density test results meet the criteria in Table 334-3.

| Characteristic                   | Tolerance         |
|----------------------------------|-------------------|
| Asphalt Binder Content (percent) | Target $\pm$ 0.55 |
| Passing No. 8 Sieve (percent)    | Target $\pm$ 6.00 |
| Passing No. 200 Sieve (percent)  | Target $\pm$ 2.00 |

|  |                 |
|--|-----------------|
| Roadway Density (average of three cores)                                 | 91.5% $G_{mm}$  |
| Roadway Density (any single core)  | 90.0 % $G_{mm}$ |
| Roadway Density (any single core)  | 90.0 % $G_{mm}$ |
| Roadway Density (avg. of 5 tests nuclear method if approved by Engineer) | 91.5% $G_{mm}$  |

334-6.4 Quality Control Testing by the Contractor and Acceptance Testing by the Engineer: On Asphalt Work Category 3, perform quality control testing as described in 334-6.3.1. In addition, the Engineer will accept the mixture at the plant or at the site with respect to gradation (P-8 and P-200) and asphalt binder content ( $P_b$ ). The mixture will be accepted on the roadway with respect to density. The Engineer will sample and test the material as described in 334-6.3.1. The Engineer will randomly obtain at least one set of samples per day. Assure that the asphalt content, gradation and density test results meet the criteria in Table 334-3. Material failing to meet these acceptance criteria will be addressed as directed by the Engineer.

334-6.4.1 Acceptance Testing Exceptions: When the total quantity of any mix type in the Project is less than 200 tons, or on Asphalt Work Category 1 construction, the Engineer will accept the mix on the basis of visual inspection. The Engineer may run independent tests to determine the acceptability of the material.

Density testing for acceptance will not be performed on widening strips or shoulders with a width of 5 feet or less, variable thickness overbuild courses, leveling courses, first lift of asphalt base course placed on subgrade, miscellaneous asphalt pavement, or any course with a specified thickness less than 1 inch or a specified spread rate less than 100 lbs/sy. In addition, density testing for acceptance may not be performed on the following areas when they are less than 100 feet in length: crossovers, intersections, turning lanes, acceleration lanes, deceleration lanes, or ramps. Compact these courses in accordance with a standard rolling procedure approved by the Engineer. In the event that the rolling procedure deviates from the approved procedure, placement of the mix will be stopped.

#### 334-7 Method of Measurement.

For the work specified under this Section, the quantity to be paid for will be the weight of the mixture, in tons.

The bid price for the asphalt mix will include the cost of the liquid asphalt or the asphalt recycling agent and the tack coat application as specified in 334-5.5.4. There will be no separate payment or unit price adjustment for the asphalt binder material in the asphalt mix.

#### 334-8 Basis of Payment.

334-8.1 General: Price and payment will be full compensation for all the work specified under this Section.

## SECTION 17 - LAWN REPLACEMENT

### W-17.01 General

The Contractor shall replace all lawn areas which have been removed or damaged due to construction. Lawn replacement includes fine grading the areas to be restored and furnishing and placing topsoil, fertilizer, sod, sprigs, seeding, and maintaining all areas. Grassing and mulching or sodding lawn areas will be required as directed. Grassing shall be accomplished by seeding.

Sod shall be Argentine Bahia, St. Augustine, or other approved native grass sod matching existing, and shall be well matted with grass roots. It shall be sufficiently thick to secure a dense stand of live grass, with a minimum thickness of 2 inches. The sod shall be live, fresh and uninjured, and shall contain sufficient moisture at the time of planting to induce growth. The type and quality of sod shall be approved by the Engineer before placing.

Grass seed shall be Argentine Bahia, 60 #/acre from March 1 to November 1; 50 #/acre with 20 #/acre of rye grass seed from November 1 to March 1. Argentine Bahia seed shall be a scarified seed having a minimum active germination of 40% and total of 85%.

Mulch material shall be free of weeds and shall be oat straw or rye, Pangola, peanut, Coastal Bermuda or Bahia grass hay.

### W-17.02 Topsoil

Where areas are to be restored by sodding, topsoil shall be placed to a minimum compacted depth of 2 inches over the subgrade. Where areas are to be restored by grassing, topsoil shall be placed to a minimum compacted depth of 4 inches over the subgrade. All topsoil shall be suitable excavated topsoil which has been segregated or other topsoil material approved by the Engineer. Topsoil shall be free from stones, roots, sticks, or other foreign substances.

### W-17.03 Water

The Contractor shall furnish at his own expense all water required for lawn replacement and maintenance of the work until final acceptance.

### W-17.04 Construction Methods

Prior to sodding or grassing, the Contractor shall fine grade the subgrade to 4 inches below finished grade. Topsoil shall be spread over the subgrade to a uniform depth and density. Topsoil shall be uniformly compacted by a light hand roller weighing between 250 and 750 pounds to the specified depths for sodding or grassing.

Immediately before sodding, 14-4-14 or 15-0-15 fertilizer shall be applied at the rate of approximately 600 pounds per acre, either in the furrows or by broadcasting and raking, into the planting area. After the surface has been properly prepared, the sod shall be placed and firmly embedded by light tamping. Additionally, dolomite (lime) shall be applied at a rate of 2 tons per acre.

Immediately after the sod has been planted, if the soil does not contain sufficient moisture to ensure growth, water shall be applied twice daily for the first week, once in the morning or late evening and once at approximately 2:00 P.M. Water shall then be applied once a day over the next 2 weeks and alternating days for an additional 2 weeks. If rooting has not taken place by the end of the third week, 1 daily watering shall continue until sod is firmly rooted.

One week after the sod has been planted, a complete fertilizer with minor elements shall be applied weekly at the rate of 1# nitrogen per 1,000 square foot in a 2-1-2 or 4-1-2 formula for a period of 4 weeks, and thereafter every 2

weeks for an additional 30 days. The ground shall not be wet when the fertilizer is applied but will be immediately watered after application of the fertilizer to remove it from the leaf area.

Prior to grassing, 14-4-14 or 15-0-15 fertilizer shall be applied to the soil at the rate of approximately 300 pounds per acre. Grass seed at the specified rate per acre shall then be raked into the soil and covered with mulching material. The area shall then be thoroughly rolled with approved equipment.

After the grass has been planted, if the soil does not contain sufficient moisture to ensure growth, water shall be applied as directed by the Engineer. After the grass has started growing, fertilizer shall be applied uniformly over the area weekly, at a rate of 0.5# nitrogen and potash per 1,000 square feet, until turf cover the area. The fertilizer shall not be applied unless the surface of the ground or sod is sufficiently moist to quickly dissolve the fertilizer.

#### W-17.05 Lawn Maintenance

The Contractor during construction and until sod is established, shall keep all replaced lawn areas in good, healthy, insect free, moist condition by watering, replanting or resodding, weeding, fertilizing, and cutting as specified, and directed by the Engineer.

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## SECTION 21 - CONCRETE SEWER PIPE

### W-21.01 General

All concrete pipe 12 inches in diameter and larger shall be reinforced concrete pipe. Concrete pipe less than 12 inches in diameter, and in other sizes when specifically called for, shall be nonreinforced concrete pipe.

### W-21.02 Standards

Concrete pipe shall be precast or machine made and shall be the product of a concern that can demonstrate by tests and installation records satisfactory experience in manufacturing concrete pipe of the quality and type specified.

Reinforced concrete pipe operating without internal hydrostatic pressure shall meet the requirements of ASTM Des: C 76 except that elliptical reinforcing cages shall not be used.

Nonreinforced concrete pipe operating without internal hydrostatic pressure shall meet the requirements of ASTM Des: C 14 or Class 3 Nonreinforced Concrete Pipe.

The classes of concrete pipe for the various pipelines are shown on the Plans or listed in the Contract Items.

### W-21.03 Reinforced Concrete Pipe

All reinforced concrete pipe shall be manufactured in lengths of not more than 16 feet and not less than 7-1/2 feet, except where shorter lengths are required for construction of curves in lines or at junctions with structures that cannot be adjusted in located.

Suitable fittings shall be used where shown and where grade or alignment changes require offsets greater than those recommended by the pipe manufacturer.

All pipe shall be straight, true in form, and of full diameter throughout.

Where house connections are to be made to concrete pipe sewers, special pipes shall be manufactured that will provide for the connection where indicated on the Plans. These special pipes shall be completed in the manufacturer's plant by the addition of vitrified clay bells for the reception of the spigot ends of the pipe for the house connections. The method of manufacturing all special pipes shall be approved by the Engineer.

Where openings are provided for future house connections at locations shown on the Plans or specified, the pipe manufacturer shall supply a suitable plug to be securely fastened in the opening to prevent leakage or infiltration.



#### W-21.04 Plastic Sheet lining

Deleted

#### W-21.05 Joints

All reinforced concrete pipe for nonpressure service 24 inches in diameter and larger shall be manufactured with tongue and groove ends designed for the use of a rubber gasket or with steel joint rings for use with a rubber gasket, unless otherwise specified or directed for special conditions.

All reinforced concrete pipe for nonpressure service 12 to 21 inches in diameter, inclusive, shall be manufactured with ends as specified for the larger sizes, or at the Contractor's option, with bell and spigot ends for use with a rubber gasket joint.

Nonreinforced concrete pipe shall be manufactured with bell and spigot ends suitable for use with a rubber gasket joint.

Pipe ends for use with rubber gaskets shall be suitable reinforced or of sufficient thickness to withstand the stresses caused by the compression of the gasket without cracking or fracturing, and surfaces shall be smooth and free from spalls, cracks, fractures, and imperfections that would adversely affect the performance of the joint. Inside surfaces of the groove and outside surfaces of the tongue shall be parallel with each other within 1 degree and, unless otherwise permitted, shall have an angle of not more than 2 degrees with the longitudinal axis of the pipe. Slopes greater than 2 degrees will be approved only if the Contractor can show by plant or field tests that the adjacent pipes can be properly joined and that the joint will remain tight under a deflection sufficient to open one side of the joint 1/2 inch wider than the fully compressed position. In no case will slopes of greater than 5 degrees be approved. The tongue shall be provided with a preformed groove of sufficient depth to hold the gasket securely in place and produce the proper compression in the gasket.

Rubber gaskets shall be of the O-ring type. The composition and physical requirements of the gasket for joints not normally subjected to internal pressure shall meet the requirements of ASTM Des: C 443. The gasket shall not be stretched more than 20 percent when placed on the tongue or spigot of the pipe. The gasket shall be of such size that when the joint is off center sufficiently to cause the outer surface of the tongue end of the pipe and the inner surface of the groove end of the adjacent pipe to come into contact at some portion of their periphery, the deformation of the stretched rubber gasket shall not exceed 50 percent at the point of contact nor be less than 20 percent at any point of the normal diameter or thickness of the gasket before deformation. The gasket shall be the sole element depended upon to make the joint watertight.

#### W-21.06 Proof of Design

Prior to the manufacture of any reinforced concrete sewer pipe, details of the steel reinforcing and concrete strength together with proof of the adequacy of the pipe design for each size and class of pipe shall be submitted to the Engineer for approval.

As proof that the design of the pipe meets the 0.01-inch crack and ultimate load strength requirements for this class of pipe, the manufacturer shall submit the results of properly certified three-edge-bearing tests already witnessed and verified by an approved independent testing laboratory on identical pipe of identical design or if such three-edge-bearing test results are not already available or are not acceptable, shall have one pipe, at least four feet in length, tested in three-edge-bearing and witnessed and verified by an approved independent testing laboratory and shall submit certified test results. All costs associated with proof-of-design tests shall be borne by the Contractor.

#### W-21.07 Shop Testing

Concrete sewer pipe shall be tested in accordance with the applicable provisions of ASTM Des: C 497 as required by the ASTM Specification for the pipe.

The basis of acceptance for reinforced concrete pipe shall be in accordance with Section 5.1.1 of ASTM Des: C 76. During manufacture, at least one pipe section shall be shop tested to destruction in three-edge-bearing in the presence of the City's authorized inspection engineers for each 1,000 feet of pipe or fraction thereof made. The test pipe sections shall be a minimum of four feet in length. The manufacturer shall have a pipe casting form, of the same inside diameter as the pipe being manufactured, together with the proper reinforcing steel cages, available at all times during manufacture for the purpose of casting test pipes at the times designated by the Engineer. Test pipe sections shall not be lined with plastic sheet. No pipe shall be tested at an age of less than 12 days, and no pipe shall be delivered to the job site until satisfactory completion of shop tests on representative pipe specimens for each 1,000-foot lot of pipe manufactured. Proof-of-design tests performed on pipe manufactured for this Contract will be accepted by the City in lieu of shop tests for the first 1,000-foot lot of pipe of each size and class manufactured.

The basis for acceptance of nonreinforced concrete pipe shall be in accordance with Section 4.1 of ASTM Des: C 14.

The Contractor shall obtain, review, and submit to the Engineer four copies of certified test reports made by the City's inspection engineers. All costs associated with shop testing shall be borne by the Contractor.

#### W-21.08 Transportation and Delivery

Every precaution shall be taken to prevent injury to the pipe during the transportation and unloading of the pipe at the site of the work. The pipe shall be unloaded using skids or suitable power equipment if necessary, and the pipe shall be under perfect control at all times. Under no conditions shall the pipe be dropped, dumped, or dragged.

A suitable pipe hook or rope sling around the pipe shall be used when handling the pipe with a crane. The crane shall be placed so that all the lifting is done in a vertical plane. Under no

condition will the sling be allowed to pass through the pipe unless adequate measures are taken to prevent damage to the pipe ends. Interior hooks or slings shall not be used to handle concrete pipe with an interior lining or coating. Lifting holes in the pipe will not be permitted.

If any pipe or special is damaged in the process of transportation and handling, such pipe or pipes shall be rejected and immediately removed from the site and replaced at the Contractor's expense.

The Contractor shall schedule the shipments of pipe to conform to his progress schedule for laying the pipe and shall provide all storage space to meet his requirements.

#### W-21.09 Laying and Jointing Pipe

Concrete pipe shall be installed in accordance with requirements of the Workmanship and Materials section headed "Laying and Jointing Pipe for Force Mains and Sewers."

#### W-21.10 Leakage Tests

After completion, concrete pipelines shall be tested for leakage in accordance with the Workmanship and Materials section headed "Leakage Tests."

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## SECTION 27 - DEMOLITION

### W-27.01 General

Demolition includes all work necessary for the removal and disposal of masonry, steel, reinforced concrete, sheet metal fencing/retaining wall, riprap retaining wall, granite curb retaining wall, plain concrete, wastewater equipment, piping, electrical facilities, and any other material or equipment shown or specified to be removed. Dust control shall be provided and provision made for safety.

Demolition shall be carried out in such a manner that adjacent structures, which are to remain, shall not be endangered. The work shall be scheduled so as not to interfere with the day to day operation of the existing facilities, all in accordance with the Sequence of Operations specified in the Specific Provisions. Doorways or passageways in existing facilities shall not be blocked.

Care shall be taken to assure that concrete shall be broken and removed in reasonably small masses. Where only parts of a structure are to be removed, the concrete shall be cut along limiting lines with a specially designed saw so that damage to the remaining structure is held to a minimum.

Where appropriate, the existing granite curb retaining wall, riprap retaining wall, and any and all other concrete structures and/or materials within the existing project area should be demolished, retained on site, crushed on site, and used as material for the stone within the Gabion Basket Retaining Walls and Reno Mats lining the ditch bottom.

### W-27.02 Requirements Prior to Demolition

The Contractor shall visit the site and inspect all existing structures. Special care shall be taken to observe and record any defects, which may exist in buildings or structures adjacent to but not directly affected by the demolition work. Prior to commencing the demolition, the Contractor shall provide the Engineer with a copy of this inspection.

Drawings of existing structures and equipment will be available for inspection by the Contractor at the office of the Engineer and Owner.

Warning signs, protection barriers and red warning lights shall be provided as necessary adjacent to the work as approved by the Engineer and shall be maintained during the demolition period.

Demolition work shall not be undertaken until all mechanical and electrical services affected by the work have been properly disconnected. Interconnecting piping or electrical services that are to remain in service either permanently or temporarily shall be capped, rerouted or reconnected in a manner that will not interfere with the operation of the remaining facilities.

Where the presence of hazardous chemicals, gases, flammable materials or other dangerous substances is apparent or suspected, testing and purging shall be performed and the hazard eliminated before demolition is started.

### W-27.03 Requirements During Demolition

The use of explosives will not be permitted.

All mechanical and electrical equipment shall be carefully protected against dust and debris.

All debris shall be removed from the structures during demolition and not allowed to accumulate in piles.

Safe access to and egress from all working areas shall be provided at all times with adequate protection from

falling material.

Adequate scaffolding, shoring, bracing and protective covering shall be provided during demolition to protect personnel and equipment against injury or damage. Floor openings not used for material drops shall be covered with material substantial enough to support any loads placed on it. The covers shall be properly secured to prevent accidental movement.

Adequate lighting shall be provided at all times during demolition.

Areas below demolition work shall be closed to workmen while removal is in progress.

No material shall be dropped to any point lying outside the exterior walls of the structure unless the area is effectively protected.

No workmen shall stand on any wall to remove material except when adequate staging or scaffold protection is provided at a distance not exceeding 12 feet below the top of such walls and other reasonable precautions are taken. Whenever a workman is required to work at a height of more than 12 feet above a floor, platform, scaffold or the ground, he shall be equipped with a safety belt with a life line attached.

#### W-27.04 Disposal of Materials

All debris, rubbish, scrap pieces, equipment, and materials resulting from the demolition shall become the property of the Contractor and shall be removed from the site, except for the items designated by the Engineer to be salvaged.

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## SECTION 77 - NON-WOVEN GEOTEXTILE

### W-77.01 General

The Contractor shall furnish all labor, materials, and equipment required to install a non-woven geotextile product on the areas including but not limited to behind the interlocking block wall, behind the gabian wall, underneath the reno mats, and underneath the enviromat fabric formed concrete.

### W-77.02 Scope of Work

The Contractor shall place the specified non-woven geotextile fabric in the areas as specified in the Construction Plans.

### W-77.03 Submittals

General: Submit listed submittals in accordance with the General Conditions of the Contract and as specified and directed by the Engineer.

Product Data: Submit product data, including manufacturer's SPEC-DATA product sheet, for specified products.

Samples: Submit selection and verification samples for finishes, colors, and textures.

Quality Assurance Submittals: Submit the following:

1. Certificates: Product certificates signed by the manufacturer certifying materials comply with specified physical requirements.
2. Manufacturer's Instructions: Manufacturer's installation instructions.

Closeout Submittals: Submit Warranty documents.

### W-77.04 Delivery, Storage, and Handling

The Contractor shall comply with the manufacturer's ordering instructions and lead time requirements to avoid construction delays. Materials shall be delivered in accordance with ASTM D4873 in the manufacturer's original, unopened, undamaged containers with identification labels intact. The Contractor shall store materials in such manner as to be protected from exposure to harmful weather conditions and at the temperature conditions recommended by the manufacturer as stated in ASTM D4873.

### W-77.05 Warranty

The Contractor shall submit, for the City's acceptance, the manufacturer's standard warranty document executed by the authorized company official. The manufacturer's warranty is in addition to, and not a limitation of, other rights the City may have under the Contract documents.

#### W-77.06 Manufacturer

Non-woven geotextile shall be Mirafi 1120N, or equal, and shall comply with manufacturer's product data, including product technical bulletins and product catalog installation instructions.

#### W-77.07 Site Verification of Conditions

The Contractor shall verify that substrate conditions are acceptable for product installation in accordance with the manufacturer's instructions.

#### W-77.08 Installation

The Contractor shall install geosynthetics in accordance with the Plans or as directed by the Engineer. Adjacent rows of geotextiles shall be overlapped to form a monolithic sheet without gaps to provide a minimum 24-inch wide overlap. The overlapped areas shall be pinned with u-shaped plastic or non-corrosive metallic material. The outer edge of the geotextile shall be buried a minimum of twelve (12) inches below finished subgrade and anchored with Manta Ray MR-88 anchors (or equal) at 6' on center throughout the entire perimeter of the area in order to prevent the uncontrolled flow of surface runoff below the geotextile.

#### W-77.09 Protection

The Contractor shall protect the installed product from damage during construction in accordance with ASTM D4873.

\* \* \*

## SECTION 105 - ROOT PRUNING

### W-105.01 General

The Contractor shall make provisions for tree protection to the satisfaction of the Engineer prior to any excavation. All applicable site inspections and permits, shall be obtained from the City of Tampa Planning and Development Department, Natural Resources prior to commencing work.

The Contractor shall provide root pruning services as directed by the Engineer and Natural Resources.

### W-105.02 Performance of Work

All root pruning shall be performed by a qualified, licensed tree professional under the direction of a certified arborist as approved by the Engineer.

All roots designated to be removed shall be severed leaving a smooth, uniform section at the remaining root end to prevent root damage.

Root pruning shall be performed with a chain saw, Dosko root pruner, or equal, as approved by Natural Resources.

Root pruning shall not occur within 6 feet of the base of the tree without guidance from Natural Resources staff, and no excavation shall occur inside the circumference of the root-pruned area.

\* \* \*



## SECTION 108

### DEWATERING

#### 108.1 General.

108.1.1 Dewatering Performance: Design, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.

1. Delegated Design: Design dewatering system, including comprehensive engineering analysis by a qualified, Florida-licensed professional engineer, using performance requirements and design criteria indicated.
2. Continuously monitor and maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, that excavation does not flood, and that damage to subgrades and permanent structures is prevented.
3. Prevent surface water from entering excavations by grading, dikes, or other means.
4. Accomplish dewatering without damaging existing buildings, structures, and site improvements adjacent to excavation.
5. Remove dewatering system when no longer required for construction.

#### 108.1.2 Submittals:

108.1.2.1 Shop Drawings (for dewatering system): Show arrangement, locations, and details of wells and well points; locations of risers, headers, filters, pumps, power units, and discharge lines; and means of discharge, control of sediment, and disposal of water.

1. Include layouts of piezometers and flow-measuring devices for monitoring performance of dewatering system.
2. Include a written plan for dewatering operations including control procedures to be adopted if dewatering problems arise.

108.1.2.2 Delegated-Design Submittal: For dewatering system indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

108.1.2.3 Qualification Data: For qualified installer and professional engineer.

#### 108.1.2.4 Field Quality-Control Reports

108.1.2.5 Videotape: Show existing conditions (prior to, during, and after construction) of adjoining construction and site improvements that might be misconstrued as damage caused by dewatering operations.

#### 108.1.3 Quality Assurance:

108.1.3.1 Installer Qualifications: An experienced installer that has specialized in dewatering work.

108.1.3.2 Regulatory Requirements: Comply with governing EPA notification regulations before beginning dewatering. Comply with hauling and disposal regulations of authorities having jurisdiction.

108.1.3.3 Preinstallation Conference: Conduct conference at the project site. Review methods and procedures related to dewatering including, but not limited to, the following:

1. Inspection and discussion of condition of site to be dewatered including coordination with temporary erosion control measures and temporary controls and protections.
2. Geotechnical report.
3. Proposed site clearing and excavations.
4. Existing utilities and subsurface conditions.
5. Coordination for interruption, shutoff, capping, and continuation of utility services.
6. Construction schedule. Verify availability of installer's personnel, equipment, and facilities needed to make progress and avoid delays.
7. Testing and monitoring of dewatering system.

#### 108.1.4 Project Conditions:

108.1.4.1 Interruption of Existing Utilities: Do not interrupt any utility serving facilities occupied by the City or others unless permitted under the following conditions and then only after arranging to provide temporary utility according to requirements indicated:

1. Notify the City and the utility owner no fewer than two (2) days in advance of proposed interruption of utility.
2. Do not proceed with interruption of utility without City's and utility owner's written permission.

108.1.4.2 Project Site Information: A geotechnical report has been prepared for this Project and is available for information only. The opinions expressed in this report are those of the geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by the geotechnical engineer. The City will not be responsible for interpretations or conclusions drawn from this data. Make additional test borings and conduct other exploratory operations necessary for dewatering.

108.1.4.3 Survey Work: Engage a qualified, Florida-licensed land surveyor to survey adjacent existing buildings, structures, and site improvements, establishing exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations. During dewatering, regularly resurvey benchmarks, maintaining an accurate log of surveyed elevations for comparison with original elevations. Promptly notify City if changes in elevations occur or if cracks, sags, or other damage is evident in adjacent construction.

#### 108.2 Execution.

##### 108.2.1 Preparation:

108.2.1.1 Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by dewatering operations.

1. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding site and surrounding area.
2. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.

108.2.1.2 Install dewatering system to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the City and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

108.2.1.3 Provide temporary grading to facilitate dewatering and control of surface water.

108.2.1.4 Monitor dewatering system continuously.

108.2.1.5 Promptly repair damages to adjacent facilities caused by dewatering.

108.2.1.6 Protect and maintain temporary erosion and sedimentation controls during dewatering operations.

#### 108.2.2 Installation:

108.2.2.1 Install dewatering system utilizing wells, well points, or similar methods complete with pump equipment, standby power and pumps, filter material gradation, valves, appurtenances, water disposal and surface water controls. Space well points or wells at intervals required to provide sufficient dewatering. Use filters or other means to prevent pumping of fine sands or silts from the subsurface.

108.2.2.2 Before excavating below ground-water level, place system into operation to lower water to specified levels. Operate system continuously until drains, sewers, and structures have been constructed and fill materials have been placed or until dewatering is no longer required.

108.2.2.3 Provide an adequate system to lower and control ground water to permit excavation, construction of structures, and placement of fill materials on dry subgrades. Install sufficient dewatering equipment to drain water-bearing strata above and below bottom off foundations, drains, sewers, and other excavations. Do not permit open-sump pumping that leads to loss of fines, soil piping, subgrade softening, and slope instability.

108.2.2.4 Reduce hydrostatic head in water-bearing strata below subgrade elevations of foundations, drains, sewers, and other excavations. Maintain piezometric water level a minimum of 24 inches below surface of excavation.

108.2.2.5 Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others. Provide sumps, sedimentation tanks, and other flow-control devices as required by authorities having jurisdiction.

108.2.2.6 Provide standby equipment on site, installed and available for immediate operation, to maintain dewatering on continuous basis if any part of system becomes inadequate or fails. If dewatering requirements are not satisfied due to inadequacy or failure of dewatering system, restore damaged structures and foundation soils at no additional expense to the City. Remove dewatering system from project site on completion of dewatering. Plug or fill well holes with sand or cut off and cap wells a minimum of 36 inches below overlying construction.

108.2.2.7 Damages: Promptly repair damages to adjacent facilities caused by dewatering operations.

#### 108.2.3 Field Quality Control

108.2.3.1 Observation Wells: Provide, take measurements, and maintain at least the minimum number of observation wells or piezometers indicated in the dewatering plan; additional observation wells may be required by authorities having jurisdiction.

1. Observe and record daily elevations of ground water and piezometric water levels in observation wells.
2. Repair or replace, within 24 hours, observation wells that become inactive, damaged, or destroyed. In areas where observation wells are not functioning properly, suspend construction activities until reliable observations can be made. Add or remove water from observation well risers to demonstrate that observation wells are functioning properly.
3. Fill observation wells, remove piezometers, and fill holes when dewatering is completed.

108.2.3.2 Provide continual observation to ensure that subsurface soils are not being removed by the dewatering operation.

END OF SECTION 108

**SECTION 110  
CLEARING AND GRUBBING  
AND  
WELL ABANDONMENT**

**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.

Remove or cut off all stumps, roots, etc., below the surface of the completed excavation in borrow pits, material pits, and lateral ditches.

In borrow and material pits, do not perform any clearing or grubbing within 3 feet inside the right-of-way line.

Within all other areas where Standard Clearing and Grubbing is to be performed remove roots and other debris projecting through or appearing on the surface of the original ground to a depth of 12 inches below the surface, but do not plow or harrow these areas.

**110-2.3 Trees to Remain:** As an exception to the above provisions, where so directed by the Engineer, trim, protect, and leave standing desirable trees within the roadway area. Trim branches of trees extending over the area occupied by the roadway as directed, to give a clear height of 16 feet above the roadway.

**110-2.4 Boulders:** Remove any boulders encountered in the roadway excavation (other than as permitted under the provisions of 120-7.2) or found on the surface of the ground. When approved by the Engineer place boulders in neat piles inside the right of way. The Contractor may stockpile boulders encountered in Department-furnished borrow areas, which are not suitable for use in the embankment construction, within the borrow area.

110-3 Selective Clearing and Grubbing.

The Contractor shall remove and dispose of all vegetation, obstructions, etc., as provided above except that, where so elected, the Contractor may cut roots, etc., flush with the ground surface. Completely remove and dispose of stumps. Entirely remove undergrowth except in specific areas designated by the Engineer to remain for aesthetic purposes. Trim, protect, and leave standing desirable trees, with the exception of such trees as the Engineer may designate to be removed in order to facilitate right-of-way maintenance. Remove undesirable or damaged trees as so designated by the Engineer. Perform Selective Clearing and Grubbing only in areas so designated in the plans.

110-4 Protection of Property Remaining in Place.

Protect and do not displace property obstructions which are to remain in place, such as buildings, sewers, drains, water or gas pipes, conduits, poles, walls, posts, bridges, etc.

110-5 Removal of Buildings.

**110-5.1 Parts to be Removed:** Completely remove all parts of the buildings, including utilities, plumbing, foundations, floors, basements, steps, connecting concrete sidewalks or other pavement, septic tanks, and any other appurtenances, by any practical manner which is not detrimental to other property and improvements. Remove utilities to the point of connection to the utility authority's cut-in. After removing the sewer connections to the point of cut-in, construct a concrete plug at the cut-in point, as directed by the Engineer, except where the utility owners may elect to perform their own plugging. Contact the appropriate utility companies prior to removal of any part of the building to ensure disconnection of services.

**110-5.2 Removal by Others:** Where buildings within the area to be cleared and grubbed are so specified to be removed by others, remove and dispose of any foundations, curtain walls,

concrete floors, basements or other foundation parts which might be left in place after such removal of buildings by others.

## **110-6 Removal of Existing Structures.**

**110-6.1 Structures to be Removed:** Remove and dispose of the materials from existing structures. Remove the following: (1) those structures, or portions of structures, shown in the plans to be removed; (2) those structures, or portions of structures, found within the limits of the area to be cleared and grubbed, and directed by the Engineer to be removed; (3) those structures, or portion of structures, which are necessary to be removed in order to construct new structures; and (4) other appurtenances or obstructions which may be designated in the Contract Documents as to be included in an item of payment for the work under this Article.

Notify the Florida Department of Environmental Protection (DEP) using DEP Form 62-257.900(1) "Notice of Asbestos Renovation or Demolition" at least 10 working days prior to the demolition or renovation of any structures, even if asbestos is not found on the project. Provide a copy of this notice to the Engineer.

### **110-6.2 Method of Removal:**

**110-6.2.1 General:** Remove the structures in such a way so as to leave no obstructions to any proposed new structures or to any waterways. Pull, cut off, or break off pilings to the requirements of the permit or other Contract Documents, whichever requires the deepest removal, but not less than 2 feet below the finish ground line. In the event that the plans indicate channel excavation to be done by others, consider the finish ground line as the limits of such excavation. For materials which are to remain the property of the Department or are to be salvaged for use in temporary structures, avoid damage to such materials, and entirely remove all bolts, nails, etc. from timbers to be so salvaged. Mark structural steel members for identification as directed.

**110-6.2.2 Removal of Steel Members With Hazardous Coatings:** Provide to the Engineer for approval, a copy of the "Contractor's Lead in Construction Compliance Program" from the firm actually removing and disposing of these steel members before any members are disturbed.

Vacuum power tool clean any coated steel member to bare metal as defined by SSPC-SP11 a minimum of 4 inches either side of any area to be heated (torch cutting, sawing, grinding, etc.) in accordance with 29 CFR 1926.354. Abrasive blasting is prohibited.

Provide air supplied respirators in accordance with 29 CFR 1926.62 and 29 CFR 1910.134.

**110-6.3 Partial Removal of Bridges:** On concrete bridges to be partially removed and widened, remove concrete by manually or mechanically operated pavement breakers, by concrete saws, by chipping hammers, or by hydro-demolition methods. Do not use explosives. Where concrete is to be removed to neat lines, use concrete saws or hydro-demolition methods capable of providing a reasonably uniform cleavage face. If the equipment used will not provide a uniform cut without surface spalling, first score the outlines of the work with small trenches or grooves. For all demolition methods, submit for review and approval of the Engineer, a demolition plan that describes the method of removal, equipment to be used, types of rebar splices or couplers, and method of straightening or cutting rebars. In addition, for hydro-demolition, describe the method

for control of water or slurry runoff and measures for safe containment of concrete fragments that are thrown out by the hydro-demolition machine.

**110-6.4 Authority of U.S. Coast Guard:** For structures in navigable waters, when constructing the project under authority of a U.S. Coast Guard permit, the U.S. Coast Guard may inspect and approve the work to remove any existing structures involved therein, prior to acceptance by the Department.

**110-6.5 Asbestos Containing Materials (ACM) Not Identified Prior to the Work:** When encountering or exposing any condition indicating the presence of asbestos, cease operations immediately in the vicinity and notify the Engineer.

Make every effort to minimize the disturbance of the ACM. Immediately provide for the health and safety of all workers at the job site and make provisions necessary for the health and safety of the public that may be exposed to any potentially hazardous conditions. Provisions shall meet all applicable laws, rules or regulations covering hazardous conditions and will be in a manner commensurate with the gravity of the conditions.

The Engineer will notify the District Contamination Assessment Coordinator who will coordinate selecting and tasking the Department's Asbestos Contractor or Contamination Assessment/Remediation Contractor (CAR). Provide access to the potential contamination area. Preliminary investigation by the Asbestos/CAR Contractor will determine the course of action necessary for site security and the steps necessary to resolve the contamination issue.

The Asbestos/CAR Contractor will delineate the contamination area(s), any staging or holding area required. Coordinate with the Asbestos/CAR Contractor and the Engineer to develop a work plan that will provide the Asbestos/CAR Contractor's operations schedule with projected completion dates for the final resolution of the contamination issue.

The Asbestos/CAR Contractor will maintain jurisdiction over activities inside any outlined contaminated areas and any associated staging holding areas. The Asbestos/CAR Contractor will be responsible for the health and safety of workers within the delineated areas. Provide continuous access to these areas for the Asbestos/CAR Contractor and representatives of regulatory or enforcement agencies having jurisdiction.

Both Contractors will use the schedule as a basis for planning the completion of both work efforts. The Engineer may grant the Contract Time extensions according to the provisions of 8-7.3.2.

Cooperate with the Asbestos/CAR Contractor to expedite integration of the Asbestos/CAR Contractor's operations into the construction project. The Prime Contractor is not expected to engage in routine construction activities involving asbestos containing materials. Adjustments to quantities or to Contract unit prices will be made according to work additions or reductions on the part of the Prime Contractor in accordance with 4-3.

The Engineer will direct the Prime Contractor when operations may resume in the affected area.  
110-7 Removal of Existing Pavement.

Remove and dispose of existing rigid portland cement concrete pavement, sidewalk, slope pavement, ditch pavement, curb, and curb and gutter etc., where shown in the plans or ordered by the Engineer to be removed or where required because of the construction operations. Retaining walls, drainage structures and flexible asphalt pavement are not included in the work under this Article.

## **110-8 Ownership of Materials.**

Except as may be otherwise specified in the Contract Documents, the Contractor shall take ownership of all buildings, structures, appurtenances, and other materials removed by him and shall dispose of them in accordance with 110-9.

## **110-9 Disposal of Materials.**

**110-9.1 General:** Either stack materials designated to remain the property of the Department in neat piles within the right-of-way or load onto the Department's vehicles.

Dispose of timber, stumps, brush, roots, rubbish, and other objectionable material resulting from clearing and grubbing in areas and by methods meeting the applicable requirements of all Local, State and Federal regulations. Do not block waterways by the disposal of debris.

**110-9.2 Burning Debris:** Where burning of such materials is permitted, perform all such burning in accordance with the applicable laws, ordinances, and regulations. Perform all burning at locations where trees and shrubs adjacent to the cleared area will not be harmed.

**110-9.3 Timber and Crops:** The Contractor may sell any merchantable timber, fruit trees, and crops that are cleared under the operations of clearing and grubbing for his own benefit, subject to the provisions of 7-1.2, which may require that the timber, fruit trees, or crops be burned at or near the site of their removal, as directed by the Engineer. The Contractor is liable for any claims which may arise pursuant to the provisions of this Subarticle.

**110-9.4 Disposal of Treated Wood:** Treated wood, including that which comes from bridge channel fender systems, must be handled and disposed of properly during removal. Treated wood should not be cut or otherwise mechanically altered in a manner that would generate dust or particles without proper respiratory and dermal protection. The treated wood must be disposed of in at least a lined solid waste facility or through recycling/reuse. Treated wood shall not be disposed by burning or placement in a construction and demolition (C&D) debris landfill. All compensation for the cost of removal and disposal of treated wood will be included in the Cost of Removal of Existing Structures.

**110-9.5 Hazardous Materials/Waste:** Handle, transport and dispose of hazardous materials in accordance with all Local, State and Federal requirements including the following:

- a. SSPC Guide 7
- b. Federal Water Pollution Control Act, and
- c. Resource Conservation and Recover Act (RCRA).

Accept responsibility for the collection, sampling, classification, packaging, labeling, accumulation time, storage, manifesting, transportation, treatment and disposal of hazardous waste, both solid and liquid. Separate all solid and liquid waste and collect all liquids used at hygiene stations and handle as hazardous materials/waste. Obtain written approval from the Engineer for all hazardous materials/waste stabilization methods before implementation.

Obtain an EPA/FDEP Hazardous Waste Identification Number (EPA/FDEP ID Number) before transporting and/or disposal of any hazardous materials/waste.

List the Department as the generator of all hazardous materials/waste.



Submit the following for the Engineers' approval before transporting, treatment or disposal of any hazardous materials/waste:

- a. Name, address and qualifications of the transporter,
- b. Name, address and qualifications of the treatment facility,
- c. Proposed treatment and/or disposal of all Hazardous Materials/Waste.

Transport all hazardous materials/waste in accordance with applicable 40 CFR 263 Standards. Provide a copy of all completed Hazardous Materials/Waste manifest/bills of lading to the Engineer within 21 days of each shipment.

**110-9.5.1 Steel Members With Hazardous Coating:** Dispose of steel members with hazardous coating in one of the following manners:

- (a) Deliver the steel members and other hazardous waste to a licensed recycling or treatment facility capable of processing steel members with hazardous coating.

Deliver the steel members with hazardous coating to a site designated by the Engineer for use as an offshore artificial reef. Deliver any other hazardous materials/waste to a licensed hazardous materials/waste recycling treatment facility.

Dismantle and/or cut steel members to meet the required dimensions of the recycling facility, treatment facility or offshore artificial reef agency.

All compensation for the cost of removal and disposal of hazardous materials/waste will be included in the Cost of Removal of Existing Structures.

**110-9.5.2 Certification of Compliance:** Furnish two copies of Certification of Compliance from the firm actually removing and disposing of the hazardous materials/waste stipulating, the hazardous materials/waste has been handled, transported and disposed of in accordance with this Specification. The Certification of Compliance shall be attested to by a person having legal authority to bind the company.

Maintain all records required by this Specification and ensure these records are available to the Department upon request.

## **110-10 Miscellaneous Operations.**

**110-10.1 Water Wells Required to be Plugged:** Fill or plug all water wells within the right-of-way, including areas of borrow pits and lateral ditches, that are not to remain in service, in accordance with applicable Water Management District rules or the Department of Environmental Protection regulations.

Cut off the casing of cased wells at least 12 inches below the ground line or 12 inches below the elevation of the finished excavation surface, whichever is lower. Water wells, as referred to herein, are defined either as artesian or non-artesian, as follows:

- (a) An artesian well is an artificial hole in the ground from which water supplies may be obtained and which penetrates any water-bearing rock, the water in which is raised to the surface by natural flow or which rises to an elevation above the top of the water-bearing bed. Artesian wells are further defined to include all holes drilled as a source of water that penetrate any water-bearing beds that are a part of the artesian water

system of Florida, as determined by representatives of the applicable Water Management District.

A non-artesian (water-table) well is a well in which the source of water is an unconfined aquifer. The water in a non-artesian well does not rise above the source bed.

When the plans do not indicate whether a non-flowing well is artesian or non-artesian, obtain this information from the Engineer.

**110-10.2 Landscape Areas:** When certain areas of the right-of-way, outside of the limits of construction, are shown in the plans or designated by the Engineer to be landscaped, either under the construction Contract or at a later time, remove undesirable trees, stumps, undergrowth, and vegetation, as directed, and preserve and trim natural growth and trees as directed by the Engineer.

**110-10.3 Leveling Terrain:** Within the areas between the limits of construction and the outer limits of clearing and grubbing, fill all holes and other depressions, and cut down all mounds and ridges. Make the area of a sufficient uniform contour so that the Department's subsequent mowing and cutting operations are not hindered by irregularity of terrain. Perform this work regardless of whether the irregularities were the result of construction operations or existed originally.

**110-10.4 Mailboxes:** When the Contract Documents require furnishing and installing mailboxes, permit each owner to remove the existing mailbox. Work with the Local Postmaster to develop a method of temporary mail service for the period between removal and installation of the new mailboxes. Install the mailboxes in accordance with the Design Standards.

### **110-11 Method of Measurement.**

**110-11.1 Clearing and Grubbing:** When direct payment is provided in the Contract, the quantity to be paid for will be the lump sum quantity.

**110-11.2 Removal of Existing Structures:** When direct payment is provided in the Contract, the quantity to be paid for will be the lump sum quantity or quantities for the specific structures removed, as designated.

**110-11.3 Removal of Existing Pavement:** Payment for removal of flexible asphalt pavement is included in the Lump Sum price for Clearing and Grubbing. When a separate item for Removal of Existing Pavement is provided, the quantity to be paid for will be the number of square yards of existing pavement of the types listed in 110-7, acceptably removed and disposed of, as specified. The quantity will be determined by actual measurement along the surface of the pavement before its removal. Measurements for appurtenances which have irregular surface configurations, such as curb and gutter, steps, and ditch pavement, will be the area as projected to an approximate horizontal plane. Where the removal of pavement areas is necessary only for the construction of box culverts, pipe culverts, storm sewers, inlets, manholes, etc., these areas will not be included in the measurements.

**110-11.4 Plugging Water Wells:** When direct payment is provided in the Contract, the quantity to be paid for will be the Contract Item Lump Sum price.

**110-11.5 Delivery of Salvageable Material to the Department** When direct payment is provided in the Contract, the quantity to be paid for will be the Lump Sum quantity for delivery of salvageable materials to the Department as indicated in the plans.

**110-11.6 General:** In each case, except as provided below, where no item of separate payment for such work is included in the proposal, all costs of such work will be included in the various scheduled items in the Contract, or under specific items as specified herein below or elsewhere in the Contract.

## SECTION 113 – DISPOAL OF DEBRIS

### W-113.01 General

The Contractor shall furnish all labor, materials and equipment required to transport and dispose of debris removed from all pipelines and structures to an approved facility at the Contractor's expense. Any permits required for the hauling and disposing of materials shall be obtained by the Contractor at their expense.

### W-113.02 Scope of Work

The Contractor will have the following responsibilities:

- a. Be solely responsible to handle, transport, test, permit and dispose of debris in accordance with all applicable regulatory requirements.
- b. For transportation between project site and disposal site.
- c. To apply for, pay fees and obtain all required environmental or transportation permits prior to handling debris. Permitting agencies include, but are not limited to, EPA, DER, DOT, Hillsborough County, City of Tampa and Expressway Authority.
- d. To perform all necessary tests as required by permit and all applicable regulatory requirements.
- e. To select a disposal site and acquire approval from the disposal site owner for disposal of debris. The Contractor is responsible to pay all applicable disposal fees.

## SECTION 115 - TREE PRUNING

### W-115.01 General

This section covers pruning of excess growth, diseased, dead and weakened portions from trees in right-of-ways, alleyways, and other selected areas in order to allow access to facilities by maintenance personnel and provide safe working conditions.

### W-115.02 Permits

The Contractor is responsible for obtaining all pruning permits. Permits must be obtained by the Contractor prior to conducting work for all branches four (4) inches in diameter and over. Permit applications are available at the permit counter, 1st Floor, City Hall Annex. (See procedures outlined in the City's Tree and Landscape Ordinance.)

Permit fees will be waived for all work performed on City property and rights-of-way.

### W-115.03 Utilities

Where trees are in proximity to power lines, the Contractor is responsible for coordinating work through Tampa Electric Company. The Contractor must comply with ANSI standards and maintain a minimum of ten (10) feet from electrical conductors.

### W-115.04 Work Orders

The Contractor will prune trees at various locations within the City as identified by Work Orders. The work program is generally non-systematic.

The work must be performed in accordance with industry standard arboricultural practices in compliance with ANSI standards and National Arborist Association (NAA) standards for pruning shade trees which will be inspected when completed, prior to payment.

The Contractor is responsible for all damage to other trees, homes and structures, utilities, sidewalks, streets and any other damages caused as a result of the tree pruning activity at the work site.

The Contractor is responsible for damages to trees due to improper pruning techniques. The cost of damages will be assessed according to the International Society of Arboriculture's (ISA)

Guide for Establishing Value of Trees and Other Plants, 6th Edition  
and deducted from the invoiced amount for the month in which the  
damage occurred.

W-115.05 Response Time

The Contractor must be available to service emergency calls  
(e.g., trees down in street, etc.) seven (7) days a week, twenty-  
four (24) hours a day. The response time for emergencies must be  
within one (1) hour.

Mandatory Contractor response and completion time will be  
seventy-two (72) hours per standard work order and twenty-four (24)  
hours (fully completed work) per emergency. A contact person and  
phone number must be identified at all times.

W-115.06 Equipment

The Contractor must own or have means to rent heavy equipment  
necessary in conducting described tree activities (e.g., crane,  
bucket trucks, dump trucks, etc.). Proof of credit line or other  
financial means may be required. Fleet size and availability shall  
be as approved by the Engineer.

All tools must be sterilized prior to beginning work on each  
tree serviced.

\* \* \*

## **SECTION 116 - TREE REMOVAL**

### W-116.01 General

This section covers removal of diseased, dead, or dangerous trees, frequently requiring a crane or rope assistance in lowering of sections, in right-of-ways, alleyways, and other selected areas in order to allow access to facilities and provide safe working conditions.

A tree will be removed where indicated in the plans or whenever it is suffering degradation from disease or damage which makes it dangerous or unsightly or when conditions exist which pose a present or probable danger to vehicles, homes and structures, or pedestrians. Trees will also be removed when they obstruct access or operations. Protected tree species will only be removed when necessary and after approval from the City Arborist having jurisdiction or his representative. Permit acquisition is mandatory.

Safety standards and work procedures shall be in accordance with ANSI Z133.1-1988.

### W-116.02 Work Orders

The Contractor will remove trees at various locations within the project area as indicated on the plans.

The work must be performed in accordance with industry standard arboricultural practices in compliance with ANSI and will be inspected by City of Tampa staff when completed, prior to payment.

The Contractor is responsible for cost of damages caused by unauthorized tree removal. Cost of damages will be assessed according to International Society of Arboriculture standards (ISA), Guide for Establishing Value of Trees and Other Plants, 6th Edition.

### W-116.03 Permits

The Contractor is responsible for obtaining all removal permits. Permit fees will be waived by the City. Permits must be obtained by the Contractor prior to conducting work. Permit applications are to be submitted through the City's Accela portal.

Where trees are in proximity to power lines, the Contractor is responsible for coordinating work through Tampa Electric Company. The Contractor must comply with ANSI standards and maintain a minimum of ten (10) feet from electrical conductors.

### W-116.04 Procedures

The Contractor shall be responsible to erect, place, and maintain barricades and warning signs, and clear the area of pedestrians and vehicles to ensure public safety and avoid property damage.

Small and medium sized branches shall be trimmed to thin the tree. Lower laterals shall then be trimmed and lowered. The main trunk shall be removed leaving a stump not more than six inches above grade. The stump shall then either be completely excavated and removed or ground down to 6" below finished grade. The work site shall then be cleaned of all debris including mulch from stump grinding operation.

\* \* \*



## SECTION 327 - MILLING OF EXISTING ASPHALT PAVEMENT

### W-327.01 General

The work specified in this section consists of removing existing asphaltic concrete pavement by milling to improve the rideability of the finished pavement, to lower the finished grade adjacent to existing curb prior to resurfacing, or to completely remove existing pavement.

When milling to improve rideability, an average depth of cut will be specified in the plans.

Unless otherwise specified, the milled material becomes the property of the Contractor.

### W-327.02 Equipment

The milling machine shall be capable of maintaining a depth of cut and cross slope that will achieve the results specified in the plans and specifications. The overall length of the machine (out to out measurement excluding the conveyor) shall be a minimum of 18 feet. The minimum cutting width shall be six feet.

The milling machine shall be equipped with a built-in automatic grade control system that can control the transverse slope and the longitudinal profile to produce the specified results.

Any commercially manufactured milling machine meeting the above requirements will be approved to start the project. If it becomes evident after milling has started that the milling machine cannot consistently produce the specified results, the milling machine will be rejected for further use.

When milling to lower the grade adjacent to existing curb or other areas where it is impractical to use the above described equipment, the use of a smaller milling machine will be permitted.

The milling machine shall be equipped with means to effectively limit the amount of dust escaping the removal operation.

For complete pavement removal, the use of alternate removal and crushing equipment, in lieu of the equipment specified above, may be approved by the Engineer.

### W-327.03 Construction

When milling to improve rideability, the existing pavement shall be removed to the average depth specified in the plans, in a manner that will restore the pavement surface to a uniform cross section and longitudinal profile. The Project Engineer may require the use of a stringline to ensure maintaining the proper alignment.

The longitudinal profile of the milled surface shall be established on the side of the cut nearest the centerline of the road. The cross slope of the milled surface shall be established by a second sensing device near the outside edge of the cut or by an automatic cross slope control mechanism. The plans may waive the requirement for automatic grade or cross slope controls where the situation warrants such action.

The Contractor may elect to make multiple cuts to achieve the required pavement configuration or depth of cut.

The milling machine shall be operated to effectively minimize the amount of dust being emitted from the machine. Prewetting of the pavement may be required.

If traffic is to be maintained on the milled surface prior to the placement of the new asphaltic concrete, the pattern of striations shall be such as to produce an acceptable riding surface. The Project Engineer will control the traveling speed of the milling machine to produce a texture that will provide an acceptable riding surface.

Prior to opening an area which has been milled to traffic, the pavement shall be thoroughly swept with a power broom or other approved equipment to remove to the greatest extent practicable, fine material which will duct under traffic. This operation shall be conducted in a manner so as to minimize the potential for creation of a traffic hazard and to minimize air pollution.

Sweeping of the milled surface with a power broom will be required prior to placing asphaltic concrete.

In urban and other sensitive areas where dust would cause a serious problem, the Contractor shall use a street sweeper (using water) or other equipment capable of removing and controlling dust. Approval of the use of such equipment is contingent upon its demonstrated ability to do the work.

To prevent, to the greatest extent practicable, the infiltration of milled material into the storm sewer system when the milling operation is within the limits of, and adjacent to a municipal curb and gutter or a closed drainage system, the sweeping operation shall be performed immediately after the milling operations or as directed by the Engineer.

This operation shall also include the thorough removal of all milled material from the gutter in such a manner as to protect the curb from damage and to prevent the material being swept into the inlet openings or inlet grates. The equipment and methods utilized to sweep the gutter shall be approved prior to beginning and may be changed or revised to achieve the desired results as directed by the Engineer.

#### W-327.04 Milled Surface

The milled surface shall have a reasonably uniform texture and shall be within 1/4 inch of a true profile grade and shall have no deviation in excess of 1/4 inch from a straight edge applied to the pavement perpendicular to the centerline. The variation of the longitudinal joint between multiple cut areas shall not exceed 1/4 inch. Areas varying from a true surface in excess of the above stated tolerance may be accepted without correction if the Engineer determines that they were caused by a pre-existing condition which could not have reasonably been corrected by the milling operations. Any unsuitable texture or profile, as determined by the Engineer, shall be corrected by the Contractor at no additional compensation.

The Engineer may required remilling of any area where a surface lamination causes a non-uniform texture to occur.

\* \* \*

## SECTION 425 - STORMWATER INLETS, MANHOLES AND JUNCTION BOXES

### W-425.01 General

The work specified in this section consists of the construction of inlets, manholes, junction boxes, shoulder gutter inlets, and yard drains. These structures shall be of reinforced concrete or may be of brick masonry if circular and constructed in place and shall include the necessary metal frames and gratings. The work under this section shall also include the adjustment of those structures shown in the plans to be adjusted or which are required to be adjusted for the satisfactory completion of the work. The new structures shall be constructed in conformity with the plans and in accordance with these specifications.

In general, curb and grate inlets shall be constructed in accordance with the Stormwater Engineering Division Standard Details and manholes and junction boxes shall be constructed in accordance with FDOT Standard Plans.

### W-425.02 Composition and Proportioning

**Concrete:** Unless otherwise shown in the plans, all concrete for these structures shall be Class II as specified in FDOT Standard Specification 346 – Portland Cement Concrete.

**Mortar:** The mortar for brick masonry shall be of portland cement and sand, mixed in the proportions of one part cement to two parts of sand. Miami Oolitic rock screenings may be substituted for the sand upon prior approval of the Engineer. All the materials shall pass the No. 8 Sieve, and be uniformly graded from coarse to fine. At the option of the Contractor, hydrated lime, in an amount not to exceed ten percent of the amount of cement used, may be added to the mortar.

As an alternate to the above, masonry cement may be used in lieu of the above-specified mortar provided that it is delivered in packages properly identified by brand name of manufacturer, net weight of package, and whether it is Type 1 or Type 2, and further provided that it has not been in storage for a period greater than six months. Hydrated lime shall not be used with masonry cement.

The sand and cement shall be thoroughly mixed dry in proper boxes or mortar mixers and such quantity of clean fresh water added as will provide a stiff mortar of the proper consistency. The whole mass shall be thoroughly mixed until used. Any mortar that has set shall not be retempered in any way, and no mortar shall be used more than one and one-half (1-1/2) hours after mixing.

### W-425.03 Gratings, Covers and Frames

Use gratings and frames fabricated from structural steel or cast iron. Gratings and frames fabricated from structural steel shall be galvanized in accordance with the requirements of ASTM A123 or shall be painted with two coats of prime meeting the requirements of Section 971-8 of the Standard F.D.O.T. Specifications for Road and Bridge Construction, followed by one coat of

material meeting the requirements of Federal Specification TT-E-489, Class A Black. All paint may be applied in the shop, by dipping, provided that each coat is thoroughly dry before the succeeding coat is applied. These requirements do not apply when A-588 steel is used.

Use rigid frames and covers either 24-inches or 36 inches, as indicated on the plans.

When Alternate "G" grates are specified, the chain, bolt, nuts, and cold shuts shall be galvanized after fabrication in accordance with the requirements of ASTM A 123.

#### W-425.04 Forms

Forms shall be of wood or metal, so designed and constructed that they may be removed without injury to the concrete. They shall be built true to line and grade and braced in a substantial and unyielding manner, and shall be approved by the Engineer before being filled with concrete.

#### W-425.05 Precast Inlets, Manholes, and Junction Boxes

Careful attention shall be given to the proper construction or reconstruction of the pavement adjacent to the gutters and at street intersections to obtain satisfactory drainage to the inlets from the intersecting streets.

The Contractor may request to substitute precast inlets, manholes, and junction boxes in lieu of cast-in-place units unless otherwise shown in the plans or directed by the Engineer. At locations not so restricted, the Contractor shall carefully examine the plan details at each structure to determine if use of a precast unit is feasible. The design and fabrication of precast units shall be in accordance with the Stormwater Engineering Division Standard Details and/or FDOT Standard Plans, as appropriate.

Smooth welded wire fabric may be substituted for deformed re-bar or welded deformed wire reinforcement in non-circular precast drainage structures provided the following requirements are met:

1. The smooth welded wire fabric shall comply with ASTM A-185.
2. Substitution of equal areas of smooth wire fabric for the reinforcing steel and provided the width and length of the unit is four times the width of the spacing of the cross wires.
3. Wire shall be continuous around the box and spliced at a quarter point of one side with an overlap of not less than the spacing of the cross wires plus two inches.

#### W-425.06 Construction Methods

**Excavation:** Excavation shall comply with the requirements specified in Section 1.

**Placing and Curing Concrete:** The concrete shall be placed in the forms, to the depth shown in the plans and thoroughly vibrated. After the concrete has hardened sufficiently, it shall be covered with suitable material approved by the Engineer, and kept moist for a period of three days.

**Setting Manhole Castings:** After the concrete has been cured as specified above, the frame of the casting shall be set in a full mortar bed composed of one part portland cement to two parts of fine aggregate.

**Reinforcing Steel:** The construction methods for the steel reinforcement shall be as specified in Section 6.

**Laying Brick:** All brick shall be saturated with water before being laid. The brick shall be laid by the shovejoint method so as to bond them thoroughly into the mortar. Headers and stretchers shall be so arranged as to bond the mass thoroughly. Joints shall be finished properly as the work progresses and shall be not less than 1/4 inch or more than 3/4 inch in thickness. No spalls or bats shall be used except for shaping around irregular openings or when unavoidable at corners.

The inside of the brick masonry walls shall be plastered uniformly with cement mortar one-half (1/2) inch in thickness mixed in proportions of one part of cement and two parts of clean, sharp sand.

**Placing Pipe:** Inlet and outlet pipes shall be of the same size and kind as the connecting pipe shown in the plans. They shall extend through the walls for a distance beyond the outside surface sufficient for the intended connections, and the concrete shall be constructed around them neatly so as to prevent leakage along their outer surface. The inlet and outlet pipes shall be flush with the inside of the wall.

**Backfilling:** Backfilling shall conform with the requirements specified in Section 2.

**Adjusting Existing Structures:** Existing manholes, catch basins, inlets, valve boxes, monument boxes, etc., within the limits of the proposed work, that do not conform to the finished grade of the proposed pavement, or to the finished grade designated on the plans for such structures, shall be cut down or extended, and made to conform to the grade of the new pavement, or to the designated grade of the structure if outside of the proposed pavement area. The materials and construction methods for this work shall conform to the requirements specified above.

Where manholes are to be raised, the adjustment may, at the Contractor's option, be made by the use of adjustable extension rings of the type which do not require the removal of the existing manhole frame. The extension device shall provide positive locking action and shall permit adjustment in height as well as diameter. The particular type of device used shall meet the approval of the Engineer.

**Adjusting Structures:** When an item of payment for adjusting manholes, valve boxes, inlets, or monument boxes is provided in the proposal, the number of such structures designated to be paid for under separate items, and which are satisfactorily adjusted, shall be paid for at the contract units prices each for Adjusting Inlets, Adjusting Manholes, Adjusting Valve Boxes, and Adjusting Monument Boxes.

For any of such types of these structures required to be adjusted but for which no separate item of payment is shown in the proposal for the specific type, payment shall be made under the item of Adjusting Miscellaneous Structures.

1. All inlets, manholes, and junction boxes shall, unless otherwise directed by the Engineer, be constructed as per design plans and applicable design standards. All manholes shall be Traffic Bearing type. It shall be the responsibility of the Contractor to assure that the designated sizes of the drainage structures meet the following criteria:

- a. The minimum distance from the top of the opening for the highest pipe to the bottom of the top slab shall be ten inches (10"); 12 inches from top of pipe to bottom of top slab, before "stack" is used.
- b. The minimum diameter for stack heights shall be thirty-six (36) inches.
- c. The minimum distance between pipe openings shall be nine (9) inches.
- d. For four-sided structures having openings in more than one corner, individual shop drawings must be submitted for prior approval.

2. If warranted by field conditions and directed by the Engineer, the Contractor shall, at such locations, construct brick drainage structures (in place of concrete drainage structures), according to the standards specified below:

Brick construction shall be as follows:

- a. Wall thickness minimum eight inches (8") up to eight feet (8') height, unless specified otherwise.
- b. Wall thickness minimum twelve inches (12") up to twelve feet (12') height, unless specified otherwise.
- c. Brick shall be laid in 1:2 (Portland cement-sand) mortar.
- d. Before laying the bricks in mortar, the bricks shall be thoroughly sprinkled with clean water (not to saturation extent).
- e. Brick for manhole and inlet structures shall be laid in stretcher courses, with every sixth course a header course.
- f. All brick structures shall be plastered smooth inside also with 1/2-inch thick, 1:2 (Portland cement-sand) mortar.
- g. No "unsound" brick shall be used. As a test, if a light hammer blow, with the brick held lightly in hand, does not produce a uniform crisp ringing sound, the brick shall be construed to have crack(s), or otherwise unsound and shall be rejected.
- h. All bricks shall be solid.

3. No additional compensation shall be paid for brick structures. Brick and concrete shall not be used simultaneously in drainage structure walls. Walls of round structures shall be constructed of concrete only.

4. For all types of manholes, the top and bottom slab shall be as per applicable D.O.T. standards, even if brick is allowed to be used in the manhole walls. The following criteria shall apply to slab thicknesses and steel reinforcements:

a. Top and bottom slabs shall have same thicknesses and reinforcements in any manhole structure.

b. The minimum slab thickness and reinforcement shall be 8 inches thick and #6 bars at 6-inch centers both ways.

c. 4-foot by 6-foot (4' x 6') or larger manholes, including circular manholes with inside diameter of 5-feet (5.0') or larger, shall have 10-inch thick slabs with #7 bars at 6-inch centers both ways.

d. Unless specified on the Plans, four-sided structures with both inside dimensions in excess of eight feet (8.0') and circular structures with inside diameter in excess of eight feet (8.0') shall not be covered by D.O.T. and the above criteria.

5. All grate inlets shall conform to the City of Tampa design standards.

6. Grates on inlets, as well as all other structures, shall be Traffic Bearing Type, unless specified otherwise, and subject to approval of the Engineer. All grate inlets shall be fitted with an approved metal frame at the top to seat the grates.

7. All Type-P manholes shall be bid at one average unit price regardless of size and shape. Similarly, all Type-J manholes will be bid at one average unit price regardless of size and shape unless indicated otherwise in the proposal.

8. The reinforcements and shapes for all drainage structures, unless directed by the Engineer otherwise, shall conform to the Plans and applicable design standards.

9. Vertical support columns (one in case of Type 5 inlet) shall be constructed by the Contractor, as a part of the D.O.T. Type 5 and 6 curb inlets, where and as directed by the Engineer.

10. The Contractor, if so directed by the Engineer in order to better meet site requirements, shall construct B-S-1, B-R-2, B-V-1, or B-R-1 type curb inlets in lieu D.O.T. Type 5 and 6 inlets and vice-versa without additional cost to the City. P-5 and P-6 inlets shall have 3-1/2-foot by 3-1/2-foot substructures unless oversize pipe is to be accommodated or otherwise directed by the Engineer. Legible, detailed plans of each inlet type shall be provided to the Contractor.

Side openings in curb and grate type inlets may be specified in the Plans or by the Construction Engineer to meet site conditions. The Contractor shall provide such openings without any additional cost.

11. When precast drainage structures are requested as substitutions for poured in place concrete structures, the Contractor shall meet the following additional requirements:

- a. Minimum height of the base structure (manhole or inlet barrel), unless restricted by design, shall be 5 feet 0 inches before extending the structure height by another precast "barrel." The minimum height of the top (extension) precast "barrel" shall be 1 foot 6 inches. "Barrel" extensions of less than 1-foot 6-inch height shall be cast in place with continuous reinforcement.
- b. Four-sided structures may be considered as an alternate to circular structures, but not the reverse.
- c. For substructures for the City-type curb inlets, unless specified otherwise, directed by the Engineer, or to accommodate larger pipes, the Contractor may use a 3-foot by 4-foot (inside dimensions) structure. This structure shall have same slab and wall thicknesses and steel reinforcing as specified for "Type E" grate inlet.
- d. When circular structures are precast in accordance with ASTM C-478, minimum wall thickness shall be six inches (6") thick or as specified in ASTM C-478 for larger diameter structures.
- e. The location of the pipe holes and adequate basic substructures height, unless directed otherwise by the Engineer, shall be the responsibility of the Contractor.
- f. The Contractor shall submit shop drawings only as specified below:
  - (1) One each-typical for different type of structures.
  - (2) For structures directed by the Engineer, and/or requiring change with respect to design plans, or as otherwise required by these specifications.
- g. Provide schedule of manufacture of the structures. No compensation shall be paid to the Contractor for unusable precast drainage structures.
- h. Provide material testing acceptance reports by a licensed private laboratory verifying:
  - (1) that the structures were constructed in accordance with details shown on the Plans and/or Shop Drawings;
  - (2) the exact design criteria adhered to; if more than one, identify which criteria applies to which structures;
  - (3) the project title, project number, file number, date cast, structure, plan sheet number and station;
  - (4) reinforcement size, spacing and amount;
  - (5) concrete placement, curing and strength, and verification of concrete



cover on reinforcement; and

(6) that the testing laboratory stamp is placed on each structure prior to shipment.

i. Cooperate with Department personnel regarding periodic inspection of the precast units and the precast operations.

12. All manhole and inlet structures shall be set on a minimum 6-inch thick layer of compacted number 57 size coarse aggregate unless noted otherwise in the Plans or Specifications, or unless the Engineer determines a thicker layer is required due to soil and/or water conditions. All such coarse aggregate shall be completely enveloped in non-woven filter fabric as directed by the Engineer.

Payment for the 6-inch thick layer of stone shall be included in the price of the structure. Payment for thicker layers of stone shall be made from the select bedding material (stone) pay item, if available, or as extra work.

13. All casting covers for inlets and manholes shall bear the appropriate City of Tampa identification for storm sewers and for sanitary sewers, as shown on the Plans, Standard Details and directed by the Engineer.

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## SECTION 430 - PIPE CULVERTS AND STORM SEWERS

### W-430.01 General

The work specified in this section consists of furnishing and installing storm sewer pipe and end sections of the particular types, sizes, and dimensions shown in the plans and in conformity with the lines and grades given, and the furnishing and construction of such joints and connections to existing pipes, catch basins, inlets, manholes, walls, etc., as may be required to complete the work as indicated in the plans.

### W-430.02 Laying Pipe

**General:** Each section of pipe shall be inspected for defects before being lowered into the trench. All pipe shall be carefully laid, true to line and grade, with bells upgradient and tongue end fully inserted into the bell of the downgradient pipe. When pipe with quadrant reinforcement, or circular pipe with elliptical reinforcement, is used, the pipe shall be installed in a position such that the manufacturer's marks designating "top" and "bottom" of the pipe shall not be more than five degrees from the vertical plane through the longitudinal axis of the pipe. Do not allow departure from and return to plan alignment and grade to exceed 1/16 inch per foot of nominal pipe length, with a total of not more than 1 inch departure from theoretical line and grade. Take up and relay any pipe that is not in true alignment or which shows any settlement after laying without additional compensation.

Do not use concrete pipe with lift holes except round pipe which has an inside diameter in excess of 54 inches or any elliptical pipe.

Repair lift holes, if present, with hand-placed, stiff, non-shrink, 1-to-1 mortar of cement and fine sand, after first washing out the hole with water. Completely fill the void created by the lift hole with mortar. Cover the repaired area with a 24 inch by 24 inch piece of filter fabric secured to the pipe.

**Trench Excavation:** The excavation of the trench for pipe culverts and storm sewers shall be as specified in Section 1.

**Foundation:** Where the foundation material is of inadequate supporting value, a suitable foundation shall be provided, as directed by the Engineer, by the removal of unsuitable material and replacing with suitable material as specified in Section 2. Where in the Engineer's opinion, the removal and replacement of unsuitable material is not practicable, he may direct alternates in the design of the pipeline, as required to provide adequate support. Minor changes in the grade or alignment will not be considered as an adequate basis for extra compensation.

Pipe shall not be laid on blocks or timbers, or on other unyielding material, except where the use of such devices is called for in the plans.

**Backfilling:** The backfilling around the pipe shall be as specified in Section 2.

**Plugging Pipe:** When so shown in the plans, the ends of the pipe culverts shall be sealed with a masonry plug a minimum of eight (8) inches in thickness unless otherwise shown in the plans.

**End Treatment:** The end treatment required at each cross drain, side drain, or storm sewer pipe end is shown in the plans. Alternate types are permitted only when shown. Details for each type of end treatment are contained in the FDOT Standard Plans.

**Metal pipe Protection:** To protect corrugated steel or aluminum pipe embedded in a concrete structure, such as an inlet, manhole, junction box, endwall, or concrete jacket, a bituminous coating shall be applied to the surface area of the pipe within and 12 inches beyond the concrete or mortar seal prior to sealing.

The surface preparation, application methods (dry film thickness and conditions during application), and equipment used shall be in accordance with the coating manufacturer's published specifications.

All coating products used must be approved by the Engineer.

#### W-430.03 Removing and Relaying Existing Pipe

**Removal:** If the plans indicate that existing pipe is to remain the property of the City, all existing pipe or pipe arch so indicated in the plans to be removed or that does not conform to the lines and grades of the proposed work and that is not to be relaid, shall be taken up and stacked neatly along the right of way, as directed by the Engineer. Due care shall be exercised to prevent damage to salvageable pipe during removal and stacking operations.

**Relaying:** Where so shown in the plans, existing culvert pipe shall be taken up and cleaned and shall be relaid in the same manner as specified for new culvert pipe. Where necessary, existing metal pipe or pipe arch shall be straightened before it is relaid.

#### W-430.04 Placing Pipe Under Railroad

**General:** Pipe culverts to be constructed under railroad tracks shall be constructed in accordance with the requirements of the railroad company either listed in the Specific Provisions or as stated in the permit or approval conditions.

#### W-430.05 Specific Requirements for Concrete Pipe

##### **Sealing Joints:**

(1) Round Concrete Pipe: For all round concrete pipe, the pipe joints shall be sealed by the use of round rubber gaskets. When rubber gaskets are used, the pipe joints shall meet the requirements specified in Section W-941.05. The gasket and the surface of the pipe joint, including the gasket recess, shall be clean and free from grit, dirt, and other foreign matter at the time the joints are made. In order to facilitate closure of the joint, application of an approved vegetable soap lubricant immediately prior to closing of the joint will be permitted.

**Laying Requirements for Concrete Pipe with Rubber Gasket Joints:** For concrete pipe laid with rubber gasket joints, any deviation from true alignment or grade which would result in a displacement from the normal position of the gasket of as much as 1/4 inch, or which would produce a gap exceeding 1/2 inch between sections of pipe for more than 1/3 of the circumference of the inside of the pipe, will not be acceptable and where such occurs the pipe shall be relaid

without additional compensation. Where minor imperfections in the manufacture of the pipe cause a gap greater than 1/2 inch between pipe sections, the joint will be acceptable provided the gap does not extend more than 1/3 the circumference of the inside of the pipe. No mortar, joint compound, or other filler which would tend to restrict the flexibility of the gasket joint shall be applied to the gap.

**Field Joints for Elliptical Concrete Pipe:** Field joints for elliptical concrete pipe will be detailed in the plans or may be made with a preformed plastic gasket material. Pipe to be laid with joints made from preformed plastic material shall be subject to the following requirements:

- (1) General: Installation shall be in accordance with the manufacturer's instructions and these specifications. The Contractor shall be responsible for obtaining a permanent watertight joint.
- (2) Material: The preformed gasket material shall conform to the requirements of Section W-942.02.
- (3) Joint Design: The pipe manufacturer shall furnish the Engineer with details in regard to configuration of the joint and the amount of gasket material required to effect a satisfactory seal. Joint surfaces which are to be in contact with the gasket material shall not be brushed or wiped with a cement slurry. Minor voids may be filled with cement slurry provided that all excess cement slurry is removed from the joint surface at the point of manufacture.
- (4) Primer: Prior to application of the gasket material, a primer of the type recommended by the manufacturer of the gasket material shall be applied to all joint surfaces which are to be in contact with the gasket material. The surface to be primed shall be thoroughly cleaned and dry when the primer is applied.
- (5) Application of Gasket: Prior to placing a section of pipe in the trench, gasket material shall be applied to form a continuous gasket around the entire circumference of the leading edge of the tongue and the groove joint in accordance with the detail entitled "Detail for Application of Gasket Material (Before Joint Pull-Up)." The paper wrapper on the exterior surface of the gasket material shall be left in place until immediately prior to joining of sections. The gasket material shall be checked to assure that it is bonded to the joint surface, immediately prior to placing a joint in the trench. Plastic gasket material shall be applied only to surfaces which are dry. A hand heating device shall be kept at the job site to dry joint surfaces immediately before application of the plastic gasket material. When the atmospheric temperature is below 60 degrees F., plastic joint seal gaskets shall either be stored in an area warm to above 70 degrees F., or artificially warmed to this temperature in a manner satisfactory to the Engineer.
- (6) Installation of Pipe: Handling of a section of pipe after the gasket material has been affixed shall be carefully controlled to avoid displacement of gaskets or contamination of gasket material with dirt or other foreign material. Any gasket displaced or contaminated in handling of the pipe shall be removed and repositioned or replaced as directed. The pipe shall be installed in a dry trench. The bottom of the trench shall be carefully shaped so as to minimize the need for realignment of sections of pipe after they are placed in the trench. Care shall be taken to properly align each section of pipe prior to the gaskets coming into contact. Realignment of a joint after the gaskets come into contact tends to reduce the

effectiveness of the seal and shall be held to a minimum. When the pipes are joined, the entire joint shall be filled with gasket material and there shall be evidence of squeeze-out of gasket material for the entire internal and external circumference of the joint. Excess material on the interior of the pipe shall be trimmed to provide a smooth interior surface. After the pipe is in its final position, the joint shall be carefully examined to determine that the gasket material is satisfactorily adhering to all surfaces of the joint and that the entire joint is filled with gasket material. If a joint is defective, the leading section of pipe shall be removed and the joint resealed.

#### W-430.06 Field Joints for Aluminum Pipe

**General:** Field joints for aluminum pipe shall be made with bands fabricated of the same alloy as the culvert sheeting and shall meet the requirements of AASHTO M 196.

**Aluminum Cross Drains, Storm Sewers, and Gutter Drains:** The provisions specified above for corrugated steel pipe for these installations shall apply also to aluminum pipe (for circular and helical corrugations) except that the material used in the bands and band connections for the alternate combination of joint materials shall be fabricated of the same alloy as the culvert sheeting.

#### W-430.07 Final Pipe Inspection

Upon placement of the roadway base material, but prior to placement of the asphalt or concrete pavement, Contractor shall dewater the installed pipe and provide the Engineer with a video recording of the system. For all pipes regardless of size and length, Contractor shall provide the Engineer a video DVD and report. Contractor shall allow sufficient time for the pipe video inspection and submittal of the reports to the Engineer for review prior to continuation of pavement.

Video report shall consist of a high quality DVD in a MPEG2 format video with a standard resolution of 720 x 480. Use a camera with lighting suitable to allow a clear picture of the entire periphery of the pipe. Center the camera in the pipe both vertically and horizontally and be able to pan and tilt to a 90 degree angle with the axis of the pipe and rotating 360 degrees. Use equipment to move the camera through the pipe that will not obstruct the camera's view or interfere with proper documentation of the pipe's condition.

The video image shall be clear, focused, and relatively free from roll, static, or other image distortion qualities that would prevent the reviewer from evaluating the condition of the pipe. The video will include identification before each section of pipe filmed. The identification will include the project number, the structure number corresponding to the structure number on the set of plans for the project, size of pipe, the date and time, and indicate which pipe is being filmed if multiple pipes are connected to the structure. Notes should be taken during the video recording process. Provide the Engineer with copies of these notes along with the video.

Move the camera through the pipe at a speed not greater than 30 feet per minute. Mark the video with the distance down the pipe. The distance shall have an accuracy of one foot per 100 feet. Film the entire circumference at each joint. Stop the camera and pan when necessary to document defects.

\* \* \*

## SECTION 555 - CHAIN LINK FENCING

### W-555.01 General

The work specified in this section consists of furnishing and erecting Type B metal fencing at the locations shown on the Plans and as directed by the Engineer.

Posts, fabric, and all other accessories shall conform to the requirements of Section 550 of the FDOT Standard Specifications for Road and Bridge Construction, latest edition.

### W-555.02 Installation

The fence installation shall be in accordance with FDOT Standard Drawing Index No. 802 FENCE TYPE B (three sheets), these specifications, and as directed by the Engineer.

### W-555.03 Spacing of Posts

Posts shall be spaced as shown on the Standard Drawings, within a tolerance of 12 inches, except where definite spotting of corner or gate posts is required. In any line of fence, however, the over-spacings and the under-spacings shall approximately compensate. Additional line posts shall be set at abrupt changes in grade.

### W-555.04 Construction Over Irregular Terrain and Other Obstructions

The bottom of the fence shall, in general, follow the contour of the ground. The fence is detailed on the Standard Drawings at approximately 3 inches above ground line. Over irregular ground, however, a minimum clearance of 1 inch and a maximum of 6 inches will be permitted for a length not to exceed 8 feet. At locations where these clearances cannot be met, the Engineer may require that posts of additional length be set and that the opening at the bottom be closed by barbed wire, stretched taut between poles, with no vertical distance between wires greater than 3 inches.

### W-555.05 Setting Posts

All posts shall be set in a concrete base as shown in the FDOT Standard Drawing or on a base plate if the post is to be mounted on an existing concrete endwall or retaining wall, or in grout.

If rock occurs within the required depth of the post hole, or pavement which is to remain exists at the location of a post, a hole a diameter slightly larger than the greatest dimension of the post shall be drilled and the post grouted in.

### W-555.06 Top Rail

A top rail shall be required in lieu of a top tension wire for all fencing.

### W-555.07 Placing Fabric

Fence fabric shall not be placed until the posts have been permanently positioned and

concrete foundations have attained adequate strength. The fabric shall be placed by securing one end and applying sufficient tension to remove all slack before making permanent attachments at intermediate points. The fabric shall be fastened to all end, corner, and pull posts by approved stretcher bar assemblies. Fastening shall be done by use of tools designed for the purpose, in accordance with the manufacturer's recommendations. The tension for stretching shall be applied by mechanical fence stretchers designed for the purpose.

All splices in the fabric shall be securely and neatly made.

#### W-555.08 Electrical Grounds

Whenever a power line passes over the fence, a ground shall be installed directly below the point of crossing. The ground rod shall consist of an aluminum or galvanized rod, with connection of similar metal if required, or of other appropriate material, 8 feet in length and at least 5/8 inch in diameter. The rod shall be driven vertically until the top of the rod is approximately 6 inches below the ground surface. A No. 6 conductor shall be used to connect the rod and all fence elements. The conductor shall be connected to each fence element and the ground rod by means of electrical-type clamps which will prevent corrosion.

#### W-555.09 Gates

All gates specified shall be 12-foot wide double-swing gates. Each gate shall be constructed of three horizontal pipes, one each at the top, mid-height and bottom; two vertical pipes, one at each side. All pipe joints shall be welded. The fabric shall be stretched taut and fastened with either stretcher bars or ties at 12-inch centers to all pipes of the frame. Posts to which the gate hinges are attached shall be 6¼ inches in diameter and provided with an appropriate cap.

#### W-555.10 Extra Length Posts

Extra length posts may be ordered by the Engineer in locations where the fence crosses depressions where the specified ground clearance cannot be met or where it crosses muck or other areas of inadequate support for a post of standard length.

For all such posts, the concrete base shall be extended downward to the bottom of the extra length post.

\* \* \*

**SECTION 2930  
SODDING**

**PART 1 - GENERAL**

1.1 DESCRIPTION OF WORK

A. Provide sodded lawns as shown and specified. The work includes:

1. Soil preparation.
2. Sodding lawns, and other indicated or disturbed areas.
3. Maintenance.

B. Related Work:

1. Section 2900: Trees, Plants & Groundcover

1.2 QUALITY ASSURANCE

A. Sod: Comply with American Sod Producers Association (ASPA) classes of sod materials.

B. Provide and pay for materials testing. Testing agency shall be acceptable to the City. Provide the following date:

1. Test representative materials samples proposed for use.
2. Soil analysis of existing conditions.
  - a. Soil pH and recommendations for correction. Ideal pH for Bahia is 5.0 - 6.5.
  - b. Nematode infestation check and recommendation for eradication.
  - c. Organic matter check and recommendation.
  - d. Starter fertilizer check and recommendations.

1.3 SUBMITTALS

A. Submit sod growers certification of grass species. Identify source location.

B. Submit the following material samples:

1. Topsoil.



- C. Submit the following material certification:
  - 1. Submit certificates of inspection as required by governmental authorities and manufacturers or vendors certified analysis for soil amendments, herbicides, insecticides and fertilizer materials; submit other data substantiating that materials comply with specified requirements.
- D. Submit soil analysis report.

#### 1.04 DELIVERY, STORAGE AND HANDLING

- A. Cut, deliver and install sod within a 24-hour period.
  - 1. Do not harvest or transport sod when moisture content may adversely affect Sod survival.
  - 2. Protect sod from sun, wind, and dehydration prior to installation.
  - 3. Do not tear, stretch, or drop sod during handling and installation.

#### 1.05 PROJECT CONDITIONS

- A. Work notification: Notify City of Tampa representative at least 7 working days prior to start of sodding operations.
- B. Protect existing utilities, paving and other facilities from damage caused by sodding operations.
- C. Perform sodding work only after planting and other work affecting ground surface has been completed.
- D. Existing soil to be amended as determined necessary from soil analysis, including: soil pH, nematode infestation, organic matter check and starter fertilizer check.
- E. Restrict traffic from sodded areas until grass is established.
- F. Provide grass watering equipment as required.
- G. The irrigation system will be installed prior to sodding, if included. Locate, protect and maintain the irrigation system during sodding operations. Repair new and existing irrigation system components damaged during sodding operations at this contractor's expense.

#### 1.06 WARRANTY

- A. Provide a uniform stand of grass by watering, mowing and maintaining lawn areas until final acceptance and for a period of 90 days after acceptance. Resod

areas, with specified materials, which fail to provide a uniform stand of grass until all affected areas are accepted by the City of Tampa representative.

## **PART 2: PRODUCTS**

### **2.01 MATERIALS**

- A. Sod: Provide an “approved” nursery grown sod composed of sod species indicated in the plans or as needed to match existing or adjacent lawn areas. Otherwise, provide Argentine Bahia (*Paspalum notatum* “Argentine”).
1. Provide well-rooted, healthy sod, free of diseases, nematodes and soil borne insects. Provide sod uniform in color, leaf texture, density, and free of weeds, undesirable grasses, stones, roots, thatch, and extraneous material; viable and capable of growth and development when planted.
  2. Furnish sod machine stripped and of supplier’s standard width, length, and Thickness: Uniformly 1” to 1-1/2” thick with clean cut edges. Mow sod before stripping.
- B. Fertilizer:
1. Granular, non-burning product composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer.
    - a. Type A: Starter fertilizer containing 16% nitrogen, 4% phosphoric acid, and 8% potash by weight or similar approved composition.
    - b. Type B: Top dressing fertilizer containing 31% nitrogen, 3% phosphoric acid, and 10% potash by weight or similar approved composition.
    - c. Ground Limestone: Containing not less than 85% of total carbonates and Ground to such fineness that 50% will pass through a 100 mesh sieve and 90% will pass through a 20 mesh sieve.
- C. Stakes
1. Steel, tee shaped pins, 4” head x 8” leg.
- D. Water: Free of substance harmful to sod growth. Hoses or other methods of Transportation furnished by contractor.
- E. Topsoil: Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, reasonably free from clay lumps, coarse sand stones, plants, roots and other foreign materials with an acidity level as specified by type of sod.

1. Identify source location of topsoil.
2. Topsoil shall be fertilized.

### **PART 3 - EXECUTION**

#### **3.1 INSPECTION**

- A. Examine finish surfaces, grades, topsoil quality, and depth.  
Do not start sodding work until unsatisfactory conditions are corrected.

#### **3.2 PREPARATION**

- A. If area to be sodded has existing grass or vegetative cover, apply a non-selective Herbicide (Round-up) to area. Wait ten (10) days before continuing with prep work.
- B. Loosen topsoil of lawn areas to minimum depth of 8". Remove stones over 1" in any dimension and sticks, roots, rubbish, and extraneous matter.
- C. Add 2" topsoil or organic material as required from organic matter check. Till into top 8" of existing soil.
- D. Grade lawn areas to smooth, free drainage and even surface with a loose, uniformly fine texture. Roll and rake, remove ridges and fill depressions as required to drain.
- E. Apply limestone at rate determined by the soil test, to adjust pH of topsoil as specified in sod type. Distribute evenly by machine and incorporate thoroughly into topsoil.
- F. Apply "Type A" fertilizer as specified by manufacturer. Apply fertilizer by mechanical rotary or drop type distributor, thoroughly and evenly incorporated with the soil to a depth of 3" by discing or other approved methods. Fertilize areas inaccessible to power equipment with hand tools and incorporate it into soil.
- G. Dampen dry soil prior to sodding.
- H. Restore prepared areas to specified condition if eroded, settled or otherwise Distributed after fine grading and prior to sodding.

#### **3.3 INSTALLATION**

- A. Lay sod to form a solid mass with tightly-fitted joints. Butt ends and sides of sod Strips. Do not overlay edges. Stagger strips to offset joints in adjacent courses. Remove excess sod to avoid smothering of adjacent grass. Provide sod pad top flush with adjacent curbs, sidewalks, drains and seed areas.

- B. Do not lay dormant sod or install sod on saturated soil.
- C. Install initial row of sod in a straight line, beginning at bottom of slopes, perpendicular to direction of the sloped area. Place subsequent rows parallel to and lightly against previously installed row.
- D. Peg sod on slopes greater than 3 to 1 to prevent slippage at a rate of 2 stakes per yd. of sod.
- E. Water sod thoroughly with a fine spray immediately after laying.
- F. Roll with light lawn roller to ensure contact with subgrade.
- G. Sod indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
- H. Top dress all seams of sodded area with specified topsoil.**

#### 3.4 MAINTENANCE

- A. Maintain sodded lawns for a period of at least 90 days after completion and acceptance of sodding operations.
- B. Maintain sodded lawn areas, including watering, spot weeding, mowing, Application of herbicides, fungicides, insecticides and resodding until a full, uniform stand of grass free of weed, undesirable grass species, disease, and insects is achieved and accepted by the City of Tampa representative.
  1. Water sod thoroughly every 2 to 3 days, as required to establish proper rooting.
  2. Repair, rework, and resod all areas that have washed out or are eroded. Replace undesirable or dead areas with new sod.
  3. Mow lawn areas as soon as top growth reaches a 3" height. Cut back to 2" height. Repeat mowing as required to maintain specified height. Not more than 40% of grass leaf shall be removed at any single mowing.
  4. Apply "Type B" fertilizer to lawns approximately 30 days after sodding at a rate specified by the manufacturer. Apply with a mechanical rotary or drop type distributor. Thoroughly water into soil.
  5. Apply herbicides as required to control weed growth or undesirable grass species.
  6. Apply fungicides and insecticides as required to control disease and insects.

### 3.5 ACCEPTANCE

- A. Inspection to determine acceptance of sodded lawns will be made by the City Inspector, upon contractor's request.
  - 1. Sodded areas will be acceptable provided all requirements, including maintenance, have been complied with, and a healthy, even colored viable lawn is established, free of weeds, undesirable grass species, disease, and insects.
- B. Upon acceptance contractor shall maintain area for 90 days. At the end of this period contractor shall request a final maintenance inspection for acceptance.

### 3.6 CLEANING

- A. Perform cleaning during installation of the work and upon completion of the Work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from sodding operations.

## SECTION 9600 – VIDEO RECORDING

### W-9600.01 Video Recording

Prior to commencing work, the Contractor shall submit to the Engineer for approval, a DVD containing a continuous color video recording including complete coverage of pre-construction conditions of all surface features within the construction's zone of influence, (including detour routes) simultaneously produced audio commentary and electronic display of time and date. The video recording shall be sufficient to fulfill the technical and forensic requirements of the project and provide continuous unedited coverage, establishing locations and viewer orientation with clear, bright, steady and sharp video images with accurate colors free of distortion or other imperfections. The DVD must be accompanied by a detailed log of its contents including date, locations, video counter numbers and features. No work shall be allowed until the completed DVD and log are approved by the Engineer.

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