

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 21-C-00022

**E/W Green Spine Cycle Track - PH 3B
from 7TH AVE TO 13TH AVE
FPID: 439476-3-58-01**

and

**E/W Green Spine Cycle Track - PH 3C
from 13TH AVE TO 21ST AVE
FPID: 439476-4-58-01**

City Project No. 1001092

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

NOVEMBER 2021

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

BID NOTICE MEMO

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.: 21-C-00022; E/W Green Spine Cycle Track - PH 3B from 7th Ave to 13th Ave and
E/W Green Spine Cycle Track - PH 3C from 13th Ave to 21st Ave

BID OPENING: 1:30PM, Tuesday, December 07, 2021 **ESTIMATE:** \$1,500,000 **SCOPE:** maintenance of traffic, roadway, signing and pavement markings, signalization, utilities adjustments/relocations, landscape, hardscape, possible contamination remediation

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 meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/173279197>

You can also dial in using your phone. (For supported devices, tap a one-touch number below to join instantly.)
United States: +1 (646) 749-3131 - One-touch: tel:+16467493131,,173279197#

Access Code: 173-279-197

Join from a video-conferencing room or system. Dial in or type: 67.217.95.2 or inroomlink.goto.com
Meeting ID: 173 279 197 Or dial directly: 173279197@67.217.95.2 or 67.217.95.2##173279197

New to GoToMeeting? Get the app now and be ready when your first meeting starts:

<https://global.gotomeeting.com/install/173279197>

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/ADARquest>.

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

Email Questions to: contractadministration@tampagov.net.

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NOTICE TO BIDDERS
CITY OF TAMPA, FLORIDA
Contract 21-C-00022; E/W Green Spine Cycle Track - PH 3B from 7th Ave to 13th Ave and
E/W Green Spine Cycle Track - PH 3C from 13th Ave to 21st Ave

Sealed Proposals will be received by the City of Tampa no later than 1:30 P.M., December 07, 2021, in the 4th 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, maintenance of traffic, roadway, signing and pavement markings, signalization, utilities adjustments/relocations, landscape, hardscape, possible contamination remediation with all associated work required for a complete project in accordance with the Contract Documents.

A prime contractor and his team of subcontractors must each be FDOT pre-qualified for their respective specific portion of the work in accordance with Rule Chapter 14-22 on the date of the Bid Opening or provide sufficient evidence of qualifications within ten (10) days thereof. All bidders must provide Certification of Current Capacity and Status of Contracts on Hand on the day of Bid Opening. Work classes applicable to this project include 7 Drainage, 10 Flexible Paving, 38-Roadway Signing, 39 Traffic Signals, Pavement Markings and Sidewalks.

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

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.

Budget: \$1,500,00

INSTRUCTIONS TO BIDDERS
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.01 GENERAL:

The proposed work is the E/W Green Spine Cycle Track - PH 3B from 7th Ave to 13th Ave and E/W Green Spine Cycle Track - PH 3C from 13th Ave to 21st Ave 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. 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 \$1,694 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 2020 Standard Specifications for Road and Bridge Construction

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**
_____% **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 (GFCEP) (MBD Form-50) for specific requirements.

GOOD FAITH EFFORT COMPLIANCE PLAN (GFCEP) REQUIRED (MBD FORM-50). When a Goal has been established, the Bidder **must submit** with its bid a Good Faith Effort Compliance Plan (GFCEP) 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 GFCEP (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 **GFCEP 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 **10.65%** 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.shtml>. 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 MBD compliance software system available at <https://tampa.diversitysoftware.com>

For additional information about the WMBE and SLBE programs contact the Minority and Small Business Development Office at 813-274-5522. (3-18)

INSTRUCTIONS TO BIDDERS
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.11 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-1.12 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-1.13 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 5 – SUBCONTRACTS AND ASSIGNMENTS, Article 5.01, Page A-7, last paragraph:

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

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.

INSTRUCTIONS TO BIDDERS
SECTION 1 - SPECIAL INSTRUCTIONS

SECTION 10 – PAYMENTS, Article 10.05, Page A-10, 1st Paragraph, 1st Sentence:

Change "...fair value of the work done, and may apply for..." to "...fair value of the work done, and shall apply for..."

SECTION 10 – PAYMENTS, Article 10.05, Page A-10, 1st Paragraph, 1st 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, 1st Paragraph, 2nd Sentence:

Delete the 2nd Sentence in its entirety and replace it with the following new 2nd 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 duty to defend exists regardless of any ultimate liability of Contractor, the City, and any City Indemnified Party. The

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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-1.14 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-1.15 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 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-1.16 PAYMENT DISPUTE RESOLUTION

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

I-1.17 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 Petroleum Energy Sector 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-1.18 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.

INSTRUCTIONS TO BIDDERS
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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 CONFLICT OF INTEREST

The Contractor shall comply with the following provision, and shall include, and require its subcontractors to include in each subcontract the following provision: No member, officer or employee of the Recipient or of the locality during his tenure or for 2 years thereafter shall have any interest, direct or indirect, in this contract or the proceeds thereof.

I-1.21 INDEMNIFICATION

To the extent provided by law, the Contractor shall indemnify, defend, and hold harmless the City and the State of Florida, Department of Transportation, including the Department's officers, agents, and employees, against any actions, claims, or damages arising out of, relating to, or resulting from negligent or wrongful act(s) of the Contractor, or any of its officers, agents, or employees, acting within the scope of their office or employment, in connection with the rights granted to or exercised by the Contractor hereunder, to the extent and within the limitations of Section 768.28, Florida Statutes.

The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Florida Statutes, Section 768.28. Nor shall the same be construed to constitute agreement by the Contractor to indemnify the City for the negligent acts or omissions of the City, its officers, agents, or employees, or third parties. Nor shall the same be construed to constitute agreement by the Contractor to indemnify the Department for the negligent acts or omissions of the Department, its officers, agents, or employees, or third parties. This indemnification shall survive the termination of this Agreement.

I-1.22 s.20.055(5) Florida Statutes

It is the duty of every state officer, employee, agency, special district, board, commission, contractor, and subcontractor to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing pursuant to this section.

INSTRUCTIONS TO BIDDERS
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I-1.23 CONTRACT EXCLUSIONS:

Contractor purchased equipment for State of local ownership is expressly excluded from this contract.

Local hiring preference is expressly excluded from this contract.

Owner force account contracting is expressly excluded from this contract.

Public agencies in competition with the private sector are expressly excluded from this contract.

Publicly-owned equipment is expressly excluded from this contract.

Salvage credits are expressly excluded from this contract.

State or local preferences are expressly excluded from this contract.

Nothing in the contract is to be construed as limiting the Proposal to domestic-owned contractors only. The Proposal does not include the Florida orders on business with Syria, Cuba, Iran, and Sudan.

I-1.24 STANDARDIZED CHANGED CONDITIONS:

23 CFR 635.109 is included by reference and is applicable where not already covered by the agreement.

I-1.25 General Provisions, Section 5 Inspection and Testing

G-5.01 General: change the second paragraph to read - "Testing of materials shall be performed by the Contractor unless otherwise specified."

G-5.02 Costs: change the first paragraph to read - "All testing of materials furnished under this Contract will be performed by the Contractor without cost to the City, unless otherwise specified."

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 ¹

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

¹ "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.



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 | Trade/Work Activity | Federal ID | Total Sub Contract Or PO Amount | Amount Paid To Date | Amount To Be Paid For This Period |
|-----------------------|---------------------|------------|---------------------------------|------------------------------------|-----------------------------------|
| []Sub []Supplier | | | | Amount Pending Previously Reported | Sub Pay Period Ending Date |
| | | | | \$ | \$ |
| | | | | | |
| | | | | \$ | \$ |
| | | | | | |
| | | | | \$ | \$ |
| | | | | | |
| | | | | \$ | \$ |
| | | | | | |
| | | | | \$ | \$ |
| | | | | | |
| | | | | \$ | \$ |
| | | | | | |

(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 may 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 Minority Business Development Office at (813) 274-5522.

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: (____) _____

Bidder's own initial application for employment has criminal history screening practices similar in nature to the practices contained in Chapter 12, Article VI, City of Tampa Code (*Responses, whether "Yes" or "No", are for informational purposes only and will not be used as a basis of award or denial, nor as a basis for any protest*): Yes No

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) 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.

200-Roadway

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|---------------|---|------|----------|-------------------------------------|------------|-------------|
| 0101 1 - B | MOBILIZATION | LS | 1 | | | |
| 0102 1 - B | MAINTENANCE OF TRAFFIC | LS | 1 | | | |
| EX-099925 - B | OWNER'S CONTINGENCY | LS | 1 | Forty Thousand Dollars and No Cents | \$40000.00 | \$40,000.00 |
| 0104 18 - B | INLET PROTECTION SYSTEM | EA | 9 | | | |
| 0110 1 1 - B | CLEARING & GRUBBING | LS | 1 | | | |
| 0110 4 10 - B | REMOVAL OF EXISTING CONCRETE | SY | 39 | | | |
| 285701 - B | OPTIONAL BASE, BASE GROUP 01 | SY | 640 | | | |
| 0327 70 6 - B | MILLING EXIST ASPH PAVT, 1 1/2" AVG DEPTH | SY | 6604 | | | |
| 0334 1 53 - B | SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 | TN | 555 | | | |
| 435 100 2 - B | INLET SPECIAL DRAINAGE GRATE | LF | 144 | | | |
| 0520 1 10 - B | CONCRETE CURB & GUTTER, TYPE F | LF | 258 | | | |
| 0520 2 4 - B | CONCRETE CURB, TYPE D | LF | 199 | | | |
| 0520 70 - B | CONCRETE TRAFFIC SEPARATOR, SPECIAL- VARIABLE WIDTH | SY | 568 | | | |
| 0522 1 - B | CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK | SY | 27 | | | |
| 0522 2 - B | CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK | SY | 42 | | | |
| 0527 2 - B | DETECTABLE WARNINGS | SF | 49 | | | |
| 0570 1 2 - B | PERFORMANCE TURF, SOD | SY | 5 | | | |

300-Signing & Pavement Markings

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|---------------|--|------|----------|--------------------|-----------|------------|
| 0523 1 3 - B | PATTERNED PAVEMENT, VEHICULAR AREAS- GREEN BIKE LANE | SY | 150,000 | | | |
| 0700 1 11 - B | SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF | AS | 4 | | | |
| 0700 1 18 - B | SINGLE POST SIGN, F&I GROUND MOUNT, IN-STREET FLEXIBLE POST SIGN | AS | 8 | | | |
| 0700 1 50 - B | SINGLE POST SIGN, RELOCATE | AS | 1 | | | |
| 0700 1 60 - B | SINGLE POST SIGN, REMOVE | AS | 1 | | | |
| 0705 11 3 - B | DELINEATOR, FLEXIBLE HIGH VISIBILITY MEDIAN | EA | 11 | | | |
| 0710 90 - B | PAINTED PAVEMENT MARKINGS, FINAL SURFACE | LS | 1 | | | |
| 0711 1123 - B | THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND | LF | 480 | | | |

| | | | | | |
|----------------|---|----|-------|--|--|
| 0711 11124 - B | THERMOPLASTIC, STANDARD, WHITE, SOLID, 18" FOR DIAGONALS AND | LF | 63 | | |
| 0711 11125 - B | THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND | LF | 101 | | |
| 0711 11141 - B | THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP | GM | 0.252 | | |
| 0711 11160 - B | THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL | EA | 2 | | |
| 0711 11170 - B | THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 23 | | |
| 0711 11224 - B | THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRON | LF | 32 | | |
| 0711 14125 - B | THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK | LF | 340 | | |
| 0711 14160 - B | THERMOPLASTIC, PREFORMED, WHITE, MESSAGE | EA | 18 | | |
| 0711 16101 - B | THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6" | GM | 0.394 | | |
| 0711 16102 - B | THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 8" | GM | 0.032 | | |
| 0711 16201 - B | THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6" | GM | 0.469 | | |
| 0711 16231 - B | THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SKIP, 6" | GM | 0.303 | | |

500-Signalization

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|---------------|--|------|----------|--------------------|-----------|------------|
| 0630 2 11 - B | CONDUIT, FURNISH & INSTALL, OPEN TRENCH | LF | 10 | | | |
| 0630 2 12 - B | CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE | LF | 250 | | | |
| 0632 7 2 - B | SIGNAL CABLE- REPAIR/REPLACE/OTHER, FURNISH & INSTALL | LF | 95 | | | |
| 0635 2 11 - B | PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE | EA | 2 | | | |
| 0646 1 11 - B | ALUMINUM SIGNALS POLE, PEDESTAL | EA | 2 | | | |
| 0650 1 14 - B | VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECT | AS | 4 | | | |
| 0670 5400 - B | TRAFFIC CONTROLLER ASSEMBLY, MODIFY | AS | 1 | | | |

700-Utilities

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|------------------------|---------------------------|------|----------|--------------------|-----------|------------|
| 9910 | ADJUST VALVE BOX (HEIGHT) | EA | 2 | | | |
| 0425 5 | MANHOLE, ADJUST | EA | 4 | | | |
| PHASE 3B TOTAL: | | | | | | |

Contract: 21-C-00022

EW Green Spine Cycle Track - PH 3C from 13TH AVE TO 21ST AVE

FPID: 439476-4-58-01

200-Roadway

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|------------------|--|------|----------|---------------------------------------|------------|------------|
| 0101 1 - C | MOBILIZATION | LS | 1 | | | |
| 0102 1 - C | MAINTENANCE OF TRAFFIC | LS | 1 | | | |
| EX-09925 - C | OWNER'S CONTINGENCY | LS | 1 | Seventy Thousand Dollars and No Cents | \$70000.00 | \$70000.00 |
| 4.07 - C | REMEDIATION CONTINGENCY | LS | 1 | Thirty Thousand Dollars and No Cents | \$30000.00 | \$30000.00 |
| 0104 10 3 - C | SEDIMENT BARRIER | LF | 175 | | | |
| 0104 18 - C | INLET PROTECTION SYSTEM | EA | 13 | | | |
| 0110 1 1 - C | CLEARING & GRUBBING | LS | 1 | | | |
| 0110 4 10 - C | REMOVAL OF EXISTING CONCRETE | SY | 985 | | | |
| 0120 6 - C | EMBANKMENT | CY | 419.0 | | | |
| 0327 70 6 - C | MILLING EXIST ASPH PAVT. 1 1/2" AVG DEPTH | SY | 9288 | | | |
| 0334 1 53 - C | SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C, PG76-22 | TN | 768 | | | |
| 0425 2 43 - C | MANHOLES, P-7, PARTIAL | EA | 3 | | | |
| 430175115 - C | PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 15"/S/CD | LF | 102 | | | |
| 430175118 - C | PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"/S/CD | LF | 63 | | | |
| EX-435 100 2 - C | INLET SPECIAL DRAINAGE GRATE | LF | 181 | | | |
| 0520 1 10 - C | CONCRETE CURB & GUTTER, TYPE F | LF | 325 | | | |
| 0520 2 4 - C | CONCRETE CURB, TYPE D | LF | 2410 | | | |
| 0520 7 1 - C | GRANITE CURB, FURNISH & INSTALL | LF | 193 | | | |
| 0520 7 2 - C | GRANITE CURB, RESET | LF | 235 | | | |
| 0522 1 - C | CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK | SY | 340 | | | |
| 0522 2 - C | CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK | SY | 1696 | | | |
| EX-0527 2 - C | DETECTABLE WARNINGS | SF | 357 | | | |
| EX-0526 1A - C | RED BRICK PAVERS, FURNISH AND INSTALL | SY | 115 | | | |
| 0570 1 2 - C | PERFORMANCE TURF, SOD | SY | 432 | | | |
| COT-002 - C | CITY INLET TYPE 2 | EA | 2 | | | |
| COT-003 - C | CITY INLET TYPE 3 | EA | 3 | | | |

Contract: 21-C-00022

EW Green Spine Cycle Track - PH 3C from 13TH AVE TO 21ST AVE

FPID: 439476-4-58-01

300-Signing & Pavement Markings

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|----------------|---|------|----------|--------------------|-----------|------------|
| 0523 1 3 - C | PATTERNED PAVEMENT, VEHICULAR AREAS- GREEN BIKE LANE | SY | 128 | | | |
| 0654 2 22 - C | RECTANGULAR RAPID FLASHING BEACON, FURNISH & INSTALL- SOLAR POWERED, | AS | 2 | | | |
| 0700 1 11 - C | SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF | AS | 10 | | | |
| 0700 1 12 - C | SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF | AS | 1 | | | |
| 0700 1 18 - C | SINGLE POST SIGN, F&I GROUND MOUNT, IN-STREET FLEXIBLE POST SIGN | AS | 8 | | | |
| 0700 1 50 - C | SINGLE POST SIGN, RELOCATE | AS | 6 | | | |
| 0700 1 60 - C | SINGLE POST SIGN, REMOVE | AS | 8 | | | |
| 0705 11 3 - C | DELINEATOR, FLEXIBLE HIGH VISIBILITY MEDIAN | EA | 15 | | | |
| 0710 90 - C | PAINTED PAVEMENT MARKINGS, FINAL SURFACE | LS | 1 | | | |
| 0711 11123 - C | THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK AND | LF | 752 | | | |
| 0711 11124 - C | THERMOPLASTIC, STANDARD, WHITE, SOLID, 18" FOR DIAGONALS AND CHEVRONS | LF | 307 | | | |
| 0711 11125 - C | THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK | LF | 294 | | | |
| 0711 11141 - C | THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, | GM | 0.255 | | | |
| 0711 11160 - C | THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL | EA | 3 | | | |
| 0711 11170 - C | THERMOPLASTIC, STANDARD, WHITE, ARROW | EA | 21 | | | |
| 0711 11224 - C | THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONAL OR CHEVRON | LF | 468 | | | |
| 0711 14125 - C | THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK | LF | 670 | | | |
| 0711 14160 - C | THERMOPLASTIC, PREFORMED, WHITE, MESSAGE | EA | 17 | | | |
| 0711 16101 - C | THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6" | GM | 0.662 | | | |
| 0711 16102 - C | THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 8" | GM | 0.115 | | | |
| 0711 16131 - C | THERMOPLASTIC, OTHER SURFACES, WHITE, SKIP, 6", 10-30 SKIP OR 3-9 LANE DROP | GM | 0.343 | | | |
| 0711 16201 - C | THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6" | GM | 0.194 | | | |
| 0711 16202 - C | THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 8" | GM | 0.003 | | | |
| 0711 16231 - C | THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SKIP, 6" | GM | 0.122 | | | |

Contract: 21-C-00022

EW Green Spine Cycle Track - PH 3C from 13TH AVE TO 21ST AVE

FPID: 439476-4-58-01

500-Signalization

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|---------------|---|------|----------|--------------------|-----------|------------|
| 0630 2 11 - C | CONDUIT, FURNISH & INSTALL, OPEN TRENCH | LF | 150 | | | |
| 0630 2 12 - C | CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE | LF | 191 | | | |
| 0632 7 2 - C | SIGNAL CABLE- REPAIR/REPLACE/OTHER, FURNISH & INSTALL | LF | 900 | | | |
| 0635 2 11 - C | PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE | EA | 7 | | | |
| 0646 1 11 - C | ALUMINUM SIGNALS POLE, PEDESTAL | EA | 4 | | | |
| 0646 1 40 - C | ALUMINUM SIGNALS POLE, RELOCATE | EA | 4 | | | |
| 0646 1 60 - C | ALUMINUM SIGNALS POLE, REMOVE | EA | 1 | | | |
| 0650 1 14 - C | VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL, ALUMINUM, 3 SECT | AS | 4 | | | |
| 0653 1 11 - C | PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY | AS | 2 | | | |
| 0670 5400 - C | TRAFFIC CONTROLLER ASSEMBLY, MODIFY | AS | 2 | | | |

600-Landscape & Peripherals

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|-----------------|----------------------------------|------|----------|--------------------|-----------|------------|
| EX-0520 2 4 - C | CONCRETE CURB, TYPE D | LF | 160 | | | |
| EX-0580 1 1 - C | LANDSCAPE COMPLETE- SMALL PLANTS | LS | 1 | | | |
| EX-0580 1 2 - C | LANDSCAPE COMPLETE- LARGE PLANTS | LS | 1 | | | |
| EX-0526 1 2 - C | PAVERS, ARCHITECTURAL, SIDEWALK | SY | 87 | | | |
| EX-SP13.01 - C | SPECIAL FURNISHINGS | LS | 1 | | | |
| EX-SP13.02 - C | PRE-EMERGENT HERBICIDE | SY | 142 | | | |

700-Utilities

| PAY ITEM # | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT COST in WORDS | UNIT COST | TOTAL COST |
|---------------|---------------------------|------|----------|--|-----------|------------|
| EX-0425 5 - C | MANHOLE, ADJUST | EA | 8 | | | |
| EX-9910 - C | ADJUST VALVE BOX (HEIGHT) | EA | 15 | | | |
| | | | | PHASE 3C TOTAL: | | |
| | | | | TOTAL COMPUTED PRICE PHASE 3B & PHASE 3C: | | |

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 (Description) | Unit of Measure (LF, SY) | Unit Quantity | Unit Cost | Extended Cost |
|-----------------------|--|-------------------------------------|--------------------------|----------------------|--------------------------|
| A. | _____ | _____ | _____ | _____ | _____ |
| B. | _____ | _____ | _____ | _____ | _____ |
| C. | _____ | _____ | _____ | _____ | _____ |
| Total Cost: \$ | | | | | _____ |

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: _____



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 W=WMBE O = Neither | Company Name Address Phone, Fax, Email | Type of Ownership (F=Female M=Male) BF BM = African Am. HF HM = Hispanic AF AM = Asian Am. NF NM = Native Am. CF CM = Caucasian | Trade or Services NIGP Code (listed above) | Contact Method L=Letter F=Fax E=Email P=Phone | Quote or Response Received 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



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 - Minority and Small Business Development Office 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 W=WMBE O =Neither | Company Name Address Phone, Fax, Email | 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 | Trade, Services, or Materials NIGP Code Listed above | \$ Amount of Quote. Letter of Intent (LOI) if available | Percent of Scope or Contract % |
|----------------------------------|--|---|---|---|--|
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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



**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 - Minority and Small Business Development Office at (813) 274-5522.

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 21-C-00022, E/W Green Spine Cycle Track - PH 3B from 7th Ave to 13th Ave and E/W Green Spine Cycle Track - PH 3C from 13th Ave to 21st Ave.

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.

LAP CERTIFICATION OF CURRENT CAPACITY

CONFIDENTIAL per Ch 337.14(1) F.S.

For bids to be received on _____
(Letting Date)

| |
|--|
| Fill in your FDOT Vendor Number VF _____ (Only applicable to FDOT pre-qualified contractors) |
|--|

CERTIFICATE

I hereby certify that the amount of any proposal submitted by this bidder for the above letting does not exceed the amount of the Firm's CURRENT CAPACITY (maximum capacity rating less total uncompleted work).

The total uncompleted work as shown on the "Status of Contracts on Hand" report (page 2) \$ _____

I further certify that the "Status of Contracts on Hand" report (page 2) was prepared as follows:

1. If the letting is before the 25th day of the month, the certificate and report reflect the uncompleted work as of the 15th day of the month, last preceding the month of the letting.
2. If the letting is after the 25th day of the month, the certificate and report reflects the uncompleted work in progress as of the 15th day of the month of the letting.
3. All new contracts (and subcontracts) awarded earlier than five days before the letting date are included in the report and charged against our total rating.

I certify that the information above is correct.

NAME OF FIRM

Sworn to and subscribed this _____ day
of _____, 20 _____

By: _____

Title

STATUS OF CONTRACTS ON HAND

(Furnish complete information about all your contracts, whether prime or subcontract; whether in progress or awarded, but not yet begun; and regardless of whom contracted with.)

| 1 PROJECTS OWNER, LOCATION AND DESCRIPTION | 2 CONTRACT (OR SUBCONTRACT) AMOUNT | 3 AMOUNT SUBLET TO OTHERS | 4 BALANCE OF CONTRACT AMOUNT | 5 UNCOMPLETED AMOUNT TO BE DONE BY YOU | | 6 |
|--|---|------------------------------------|---------------------------------------|--|---------------------|--------|
| | | | | AS PRIME CONTRACTOR | AS SUBCONTRACTOR | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| TOTALS | | | | | \$0.00 | \$0.00 |
| TOTAL UNCOMPLETED WORK ON HAND TO BE DONE BY YOU (TOTAL COLUMNS 5 AND 6) | | | | | \$0.00 | _____ |

NOTE: Columns 2 and 3 to show total contract (or subcontract) amounts. Column 4 to be difference between columns 2 and 3. Amount in columns 5 or 6 to be uncompleted portion of amount in column 4. All amounts to be shown to nearest \$100. The Contractor may consolidate and list as a single item all contracts which, individually, do not exceed 3% of total, and which, in the aggregate, amount to less than 20% of the total.

**CERTIFICATION
COMPLIANCE WITH EQUAL EMPLOYMENT OPPORTUNITY (EEO)
PROVISIONS ON FEDERAL AID CONTRACTS**

FIN PROJECT I.D. _____

DATE _____
CONTRACT NO. _____

_____, prime contractor
for the above referenced contract, hereby certifies that this company and all of its subcontractors have made every Good Faith Effort to comply with the EEO provisions of FHWA Form-1273 (Section II. Nondiscrimination and Section III. Nonsegregated facilities) on this contract.

Exception:

The following subcontractor(s) have been found to be in noncompliance with the provisions stated above. Attached is notification sent to the respective subcontractor(s) explaining their noncompliance with these provisions.

Subcontractor Name _____

Subcontractor Name _____

Street Address _____

Street Address _____

City/State/Zip _____

City/State/Zip _____

State of Florida
County of _____
Sworn to and subscribed before me this _____ day
of _____, by _____
(Print name of person signing Certification)

A false statement or omission made in connection with this certification is sufficient cause for suspension, revocation, or denial of qualification to bid, and a delimitation of nonresponsibility, and may subject the person and/or entity making the false statement to any and all civil and criminal penalties available pursuant to applicable Federal and State law.

Notary Public _____

Contractor _____

Commission Expires _____

By _____

Personally Known OR Produced Identification

Title _____

Type of Identification Produced _____

Instructions:

1. Attach copy of any notifications of noncompliance sent to each applicable subcontractor
2. List the subcontractors found not in compliance at the time of this certification.
3. A separate certification is required for each contract.
4. To be signed by an officer or director of the Contractor with the authority to bind the Contractor and notarized.
5. To avoid delay in payment, certification must be submitted to the Project Engineer no later than the Friday before the monthly estimate cutoff date (generally the 3rd Sunday of the month).

**CERTIFICATION FOR DISCLOSURE OF LOBBYING ACTIVITIES
ON FEDERAL-AID CONTRACTS
(Compliance with 49CFR, Section 20.100 (b))**

The prospective participant certifies, by signing this certification, that to the best of his or her knowledge and belief:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions. (Standard Form-LLL can be obtained from the Florida Department of Transportation's Professional Services Administrator or Procurement Office.)

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

Name of Consultant:

By: _____ Date: _____ Authorized Signature

Title: _____

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
DISCLOSURE OF LOBBYING ACTIVITIES

375-030-34
 PROCUREMENT
 02/16

Is this form applicable to your firm?
 YES NO
 If *no*, then please complete section 4
 below for "Prime"

| | | |
|--|---|---|
| 1. Type of Federal Action: a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance | 2. Status of Federal Action: a. bid/offer/application b. initial award c. post-award | 3. Report Type: a. initial filing b. material change For Material Change Only: Year: _____ Quarter: _____ Date of last report: _____ (mm/dd/yyyy) |
| 4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, <i>if known</i> : _____ _____ _____ Congressional District, <i>if known</i> : 4c _____ | 5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: _____ _____ _____ Congressional District, <i>if known</i> : _____ | |
| 6. Federal Department/Agency: _____ _____ | 7. Federal Program Name/Description: _____ _____ CFDA Number, <i>if applicable</i> : _____ | |
| 8. Federal Action Number, if known: _____ | 9. Award Amount, if known: \$ _____ | |
| 10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i> _____ _____ _____ | b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i> _____ _____ _____ | |
| 11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. | Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date (mm/dd/yyyy): _____ | |
| Federal Use Only: | | Authorized for Local Reproduction Standard Form LLL (Rev. 7-97) |

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the fullname, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**NON-COLLUSION DECLARATION AND
COMPLIANCE WITH 49 CFR § 29**

575-060-13
RIGHT OF WAY
05/01
Page 1 of 3

ITEM/SEGMENT NO.: _____
F.A.P. NO.: _____
MANAGING DISTRICT: _____
PARCEL NO.: _____
COUNTY OF: _____
BID LETTING OF: _____

I, _____, hereby declare that I am
(NAME)
_____ of _____
(TITLE) (FIRM)
of _____
(CITY AND STATE)

and that I am the person responsible within my firm for the final decision as to the price(s) and amount of this Bid on this State Project.

I further declare that:

1. The prices(s) and amount of this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition with any other contractor, bidder or potential bidder.
2. Neither the price(s) nor the amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder on this project, and will not be so disclosed prior to the bid opening.
3. No attempt has been made or will be made to solicit, cause or induce any other firm or person to refrain from bidding on this project, or to submit a bid higher than the bid of this firm, or any intentionally high or non-competitive bid or other form of complementary bid.
4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary bid.
5. My firm has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any firm or person, or offered, promised or paid cash or anything of value to any firm or person, whether in connection with this or any other project, in consideration for an agreement or promise by any firm or person to refrain from bidding or to submit a complementary bid on this project.
6. My firm has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any firm or person, and has not been promised or paid cash or anything of value by any firm or person, whether in connection with this or any other project, in consideration for my firm's submitting a complementary bid, or agreeing to do so, on this project.
7. I have made a diligent inquiry of all members, officers, employees, and agents of my firm with responsibilities relating to the preparation, approval or submission of my firm's bid on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion, act or other conduct inconsistent with any of the statements and representations made in this Declaration.
8. As required by Section 337.165, Florida Statutes, the firm has fully informed the Department of Transportation in writing of all convictions of the firm, its affiliates (as defined in Section 337.165(1)(a), Florida Statutes), and all directors, officers, and employees of the firm and its affiliates for violation of state or federal antitrust laws with respect to a public contract or for violation of any state or federal law involving fraud, bribery, collusion, conspiracy or material misrepresentation with respect to a public contract. This includes disclosure of the names of current employees of the firm or affiliates who were convicted of contract crimes while in the employ of another company.

9. I certify that, except as noted below, neither my firm nor any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of Federal funds:

- (a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR §29.110(a), by any Federal department or agency;
- (b) has within a three-year period preceding this certification been convicted of or had a civil judgment rendered against him or her for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, State or local government transaction or public contract; violation of Federal or State antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
- (c) is presently indicted for or otherwise criminally or civilly charged by a Federal, State or local governmental entity with commission of any of the offenses enumerated in paragraph 9(b) of this certification; and
- (d) has within a three-year period preceding this certification had one or more Federal, State or local government public transactions terminated for cause or default.

10. I(We), certify that I(We), shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract by any Federal Agency unless authorized by the Department.

Where I am unable to declare or certify as to any of the statements contained in the above stated paragraphs numbered (1) through (10), I have provided an explanation in the "Exceptions" portion below or by attached separate sheet.

EXCEPTIONS:

(Any exception listed above will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate to whom it applies, initiating agency and dates of agency action. Providing false information may result in criminal prosecution and/or administrative sanctions.)

I declare under penalty of perjury that the foregoing is true and correct.

CONTRACTOR: _____ (Seal)

BY: _____
NAME AND TITLE PRINTED

WITNESS: _____

BY: _____
SIGNATURE

WITNESS: _____

Executed on this _____ day of _____, _____

**FAILURE TO FULLY COMPLETE AND EXECUTE THIS DOCUMENT
MAY RESULT IN THE BID BEING DECLARED NONRESPONSIVE**

REQUIRED CONTRACT PROVISIONS

This certification applies to subcontractors, material suppliers, vendors and other lower tier participants.

- Appendix B of 49 CFR Part 29 –

Appendix B—Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions

Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.

5. The prospective lower tier participant agrees by submitting this proposal that it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntary excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION,
INELIGIBILITY AND VOLUNTARY EXCLUSION-
LOWER TIER COVERED TRANSACTIONS FOR FEDERAL AID CONTRACTS
(Compliance with 2 CFR Parts 180 and 1200)**

It is certified that neither the below identified firm nor its principals are presently suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Name of Consultant/Contractor: _____

By: _____

Date: _____

Title: _____

Instructions for Certification

Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
DRUG-FREE WORKPLACE PROGRAM CERTIFICATION

375-040-18
PROCUREMENT
03/17

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

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

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

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

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

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

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

Does the individual responding to this solicitation certify that their firm has implemented a drug-free workplace program in accordance with the provision of Section 287.087, Florida Statutes, as stated above?

YES

NO

NAME OF BUSINESS: _____

**FDOT LAP
CONTRACT FORMS**

6-5 Products and Source of Supply.

6-5.1 Source of Supply–Convict Labor (Federal-Aid Contracts Only): Do not use materials that were produced after July 1, 1991, by convict labor for Federal-aid highway construction projects unless the prison facility has been producing convict-made materials for Federal-aid highway construction projects before July 1, 1987.

Use materials that were produced prior to July 2, 1991, by convicts on Federal-aid highway construction projects free from the restrictions placed on the use of these materials by 23 U.S.C. 114. The Department will limit the use of materials produced by convict labor for use in Federal-aid highway construction projects to:

1. Materials produced by convicts on parole, supervised release, or probation from a prison or,
2. Materials produced in a qualified prison facility.

The amount of such materials produced for Federal-aid highway construction during any 12-month period shall not exceed the amount produced in such facility for use in such construction during the 12-month period ending July 1, 1987.

6-5.2 Source of Supply–Steel: Use steel and iron manufactured in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melting and continuing through the final shaping and coating. If a steel or iron product is taken outside the United States for any manufacturing process, it becomes foreign source material. When using steel or iron materials as a component of any manufactured product (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply. Foreign steel and iron may be used when the total actual cost of such foreign materials does not exceed 0.1% of the total Contract amount or \$2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work, but are not applicable to steel and iron items that the Contractor uses but does not incorporate into the finished work. Submit a certification from the manufacturer of steel or iron, or any product containing steel or iron, stating that all steel or iron furnished or incorporated into the furnished product was produced and manufactured in the United States or a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual cost). Submit each such certification to the Engineer prior to incorporating the material or product into the project. Prior to the use of foreign steel or iron materials on a project, submit invoices to document the actual cost of such material, and obtain the Engineer’s written approval prior to incorporating the material into the project

6-5.1-1

6-5.2-1

7-1.4 Compliance with Federal Endangered Species Act and other Wildlife Regulations:

The Federal Endangered Species Act requires that the Department investigate the potential impact to a threatened or endangered species prior to initiating an activity performed in conjunction with a highway construction project. If the Department's investigation determines that there is a potential impact to a protected, threatened or an endangered species, the Department will conduct an evaluation to determine what measures may be necessary to mitigate such impact. When mitigation measures and/or special conditions are necessary, these measures and conditions will be addressed in the Contract Documents or permits.

In addition, in cases where certain protected, threatened or endangered species are found or appear within close proximity to the project boundaries, the Department has established guidelines that will apply when interaction with certain species occurs, absent of any special mitigation measures or permit conditions otherwise identified for the project.

These guidelines are posted at the following URL address: https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/urlinspecs/files/endangeredwildlifeguidelines.pdf?sfvrsn=e27baf3f_2.

Take responsibility to obtain this information and take all actions and precautions necessary to comply with the conditions of these guidelines during all project activities.

Prior to establishing any off-project activity in conjunction with a project, notify the Engineer of the proposed activity. Covered activities include but are not necessarily limited to borrow pits, concrete or asphalt plant sites, disposal sites, field offices, and material or equipment storage sites. Include in the notification the Financial Project ID, a description of the activity, the location of the site by township, range, section, county, and city, a site location map including the access route, the name of the property owner, and a person to contact to arrange a site inspection. Submit this notification at least 30 days in advance of planned commencement of the off-site activity, to allow for the Department to conduct an investigation without delaying job progress.

Do not perform any off-project activity without obtaining written clearance from the Engineer. In the event the Department's investigation determines a potential impact to a protected, threatened or endangered species and mitigation measures or permits are necessary, coordinate with the appropriate resource agencies for clearance, obtain permits and perform mitigation measures as necessary. Immediately notify the Engineer in writing of the results of this coordination with the appropriate resource agencies. Additional compensation or time will not be allowed for permitting or mitigation, associated with Contractor initiated off-project activities.

7-1.8 Compliance with Section 4(f) of the USDOT Act: Section 4(f) of the USDOT Act prohibits the U. S. Secretary of Transportation from approving a project which requires the use of publicly owned land of a public park, recreation area or a wildlife and waterfowl refuge, or of any historic site of national, state, or local significance unless there is no prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize the harm to the site resulting from the use.

Before undertaking any off-project activity associated with any federally assisted undertaking, ensure that the proposed site does not represent a public park, recreation area, wildlife or waterfowl refuge, or a historic site (according to the results of the Cultural Resources Survey discussed in 120-6.2). If such a site is proposed, notify the Engineer and provide a

description of the proposed off-site activity, the Financial Project ID, the location of the site by township, range, section, a county or city map showing the site location, including the access route and the name of the property. It is the Contractor's responsibility to submit justification for use of Section 4(f) property that is sufficient for the Florida Department of Transportation and the Federal Highway Administration to make a Section 4(f) determination. Submit this notification sufficiently in advance of planned commencement of the off-site activity to allow a reasonable time for the Engineer to conduct an investigation without delaying job progress. Do not begin any off-project activity without obtaining written clearance from the Engineer.

7-24 Disadvantaged Business Enterprise Program.

7-24.2 Required Contract and Subcontract DBE Assurance Language: In accordance with 49 CFR 26.13 (b), the Contract FDOT signs with the Contractor (and each subcontract the prime contractor signs with a subcontractor) must include the following assurance: “The Contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted Contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to,

1. Withholding monthly progress payments;
2. Assessing sanctions;
3. Liquidated damages; and/or
4. Disqualifying the Contractor from future bidding as non-responsible.”

7-24.4 DBE Records and Reports: Submit the following through the Equal Opportunity Compliance System:

1. DBE Commitments - at or before the Pre-Construction Conference.
2. Report monthly, through the Equal Opportunity Compliance System on the Department’s Website, actual payments (including retainage) made to DBEs for work performed with their own workforce and equipment in the area in which they are certified. Report payments made to all DBE and Minority Business Enterprise (MBE) subcontractors and DBE and MBE construction material and major suppliers.

The Equal Opportunity Office will provide instructions on accessing this system. Develop a record keeping system to monitor DBE affirmative action efforts which include the following:

1. the procedures adopted to comply with these Specifications;
 2. the number of subordinated Contracts on Department projects awarded to DBEs;
 3. the dollar value of the Contracts awarded to DBEs;
 4. the percentage of the dollar value of all subordinated Contracts awarded to DBEs as a percentage of the total Contract amount;
 5. a description of the general categories of Contracts awarded to DBEs;
- and
6. the specific efforts employed to identify and award Contracts to DBEs.

Upon request, provide the records to the Department for review.

Maintain all such records for a period of five years following acceptance of final payment and have them available for inspection by the Department and the Federal Highway Administration.

7-24.5 Counting DBE Participation and Commercially Useful Functions: 49 CFR Part 26.55 specifies when DBE credit shall be awarded for work performed by a DBE. DBE credit can only be awarded for work actually performed by DBEs themselves for the types of work for which they are certified. When reporting DBE Commitments, only include the dollars that a DBE is expected to earn for work they perform with their own workforce and equipment. Update DBE Commitments to reflect changes to the initial amount that was previously reported or to add DBEs not initially reported.

When a DBE participates in a contract, the value of the work is determined in accordance with 49 CFR Part 26.55, for example:

1. The Department will count only the value of the work performed by the DBE toward DBE goals. The entire amount of the contract that is performed by the DBE's own forces (including the cost of supplies, equipment and materials obtained by the DBE for the contract work) will be counted as DBE credit.

2. The Department will count the entire amount of fees or commissions charged by the DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services or for providing bonds or insurance specifically required for the performance of a Department-assisted contract, toward DBE goals, provided that the Department determines the fees to be reasonable and not excessive as compared with fees customarily followed for similar services.

3. When the DBE subcontracts part of the work of its contract to another firm, the Department will count the value of the subcontracted work only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

4. When a DBE performs as a participant in a joint venture, the Department will count the portion of the dollar value of the contract equal to the distinct, clearly defined portion of the work the DBE performs with its own forces toward DBE goals.

5. The Contractors shall ensure that only expenditures to DBEs that perform a commercially useful function (CUF) in the work of a contract may be counted toward the voluntary DBE goal.

6. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

7. Contractors wishing to use joint checks involving DBE credit must provide written notice to the District Contract Compliance Office prior to issuance of the joint check. The Contractor must also provide a copy of the notice to the DBE subcontractor and maintain a copy with the project records.

8. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

9. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

10. If a DBE does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own workforce, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the DBE has not performed a commercially useful function.

7-24.6 Prompt Payments: Meet the requirements of 9-5 for payments to all DBE subcontractors.

1. The Department will count only the value of the work performed by the DBE toward DBE goals. The entire amount of the contract that is performed by the DBE's own forces (including the cost of supplies, equipment and materials obtained by the DBE for the contract work) will be counted as DBE credit.

2. The Department will count the entire amount of fees or commissions charged by the DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services or for providing bonds or insurance specifically required for the performance of a Department-assisted contract, toward DBE goals, provided that the Department determines the fees to be reasonable and not excessive as compared with fees customarily followed for similar services.

3. When the DBE subcontracts part of the work of its contract to another firm, the Department will count the value of the subcontracted work only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

4. When a DBE performs as a participant in a joint venture, the Department will count the portion of the dollar value of the contract equal to the distinct, clearly defined portion of the work the DBE performs with its own forces toward DBE goals.

5. The Contractors shall ensure that only expenditures to DBEs that perform a commercially useful function (CUF) in the work of a contract may be counted toward the voluntary DBE goal.

6. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

7. Contractors wishing to use joint checks involving DBE credit must provide written notice to the District Contract Compliance Office prior to issuance of the joint check. The Contractor must also provide a copy of the notice to the DBE subcontractor and maintain a copy with the project records.

8. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

9. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

10. If a DBE does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own workforce, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the DBE has not performed a commercially useful function.

7-24.6 Prompt Payments: Meet the requirements of 9-5 for payments to all DBE subcontractors.

7-29 E-Verify.

The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require any subcontractors performing work or providing services pursuant to the Contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
CONTRACTOR'S PROJECT EEO REPORT

FDOT FORM 275-010-12
Equal Opportunity Office
10/2018

| | | |
|--|----------------------|--|
| 1. Check One ___ Prime ___ Subcontractor | 2. Name and Address | 3. FEID No. OR FDOT Vendor No. |
| 4. County | | 5. Financial Project No. |
| 6. Contractor's Beginning Work Date on Project | 7. FDOT Contract No. | 8. This Report is based on Pay Period ending M/D/Y |

9. FLORIDA CONSTRUCTION EMPLOYMENT

| JOB CATEGORIES | TOTAL EMPLOYEES | | TOTAL MINORITIES | | BLACK (Not of Hispanic Origin) | | HISPANIC | | AMERICAN INDIAN or ALASKAN NATIVE | | ASIAN | | NATIVE HAWAIIAN OR OTHER PACIF ISL | | TWO OR MORE RACES | | WHITE | | On-The-Job Trainees (OJT) | |
|---------------------------|-------------------------|---|------------------|---|-----------------------------------|---|----------|---|--|---|-------|---|---|---|----------------------|---|-------|---|------------------------------|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| | OFFICIALS (MANAGERS) | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | |
| SUPERVISORS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| FOREMEN/WOMEN | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| ADMIN SUPPORT | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| EQUIPMENT OPERATORS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| MECHANICS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| TRUCK DRIVERS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| IRONWORKERS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| CARPENTERS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| CEMENT MASONS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| ELECTRICIANS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| PIPEFITTERS, PLUMBERS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| PAINTERS | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| LABORERS, SEMI-SKILLED | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| LABORERS, UNSKILLED | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| TABLE C | | | | | | | | | | | | | | | | | OJT TOTALS | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|---|--|--|---|---|
| On-The-Job Trainees | | | | | | | | | | | | | | | | | M | F | | | | |
| | | | | | | | | | | | | | | | | | | | | | 0 | 0 |

10. IF ANY EMPLOYEES REPORTED IN 'TABLE A' ARE APPRENTICES, NAME OF THE PROGRAM, JOB CATEGORY, COUNT, RACE & SEX.

11. SUMMARIZE ALL HIRES FOR THE ENTIRE ACTIVE MONTH BY JOB CATEGORY, RACE, SEX (USE ADDITIONAL SHEET IF NEEDED).

| | | | | | |
|--------------|-------------------------|---------------|-------|-----------|------|
| | PRINTED NAME-FIRST/LAST | EMAIL ADDRESS | PHONE | SIGNATURE | DATE |
| 12. PREPARER | | | | | |
| 13. REVIEWER | | | | | |

APPENDICES A and E

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- (1.) **Compliance with Regulations:** The Contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation (hereinafter, "USDOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Agreement.
- (2.) **Nondiscrimination:** The Contractor, with regard to the work performed during the contract, shall not discriminate on the basis of race, color, national origin, sex, age, disability, religion or family status in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3.) **Solicitations for Subcontractors, including Procurements of Materials and Equipment:** In all solicitations made by the Contractor, either by competitive bidding or negotiation for work to be performed under a subcontract, including procurements of materials or leases of equipment; each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the basis of race, color, national origin, sex, age, disability, religion or family status.
- (4.) **Information and Reports:** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the *Florida Department of Transportation, the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, and/or the Federal Motor Carrier Safety Administration* to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the *Florida Department of Transportation, the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, and/or the Federal Motor Carrier Safety Administration* as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5.) **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, the *Florida Department of Transportation* shall impose such contract sanctions as it or the *Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, and/or the Federal Motor Carrier Safety Administration* may determine to be appropriate, including, but not limited to:
 - a. withholding of payments to the Contractor under the contract until the Contractor complies, and/or
 - b. cancellation, termination or suspension of the contract, in whole or in part.
- (6.) **Incorporation of Provisions:** The Contractor shall include the provisions of paragraphs (1) through (7) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the *Florida Department of Transportation, the Federal Highway Administration, Federal Transit*

Administration, Federal Aviation Administration, and/or the Federal Motor Carrier Safety Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. In the event a Contractor becomes involved in, or is threatened with, litigation with a sub-contractor or supplier as a result of such direction, the Contractor may request the *Florida Department of Transportation* to enter into such litigation to protect the interests of the *Florida Department of Transportation*, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

- (7.) **Compliance with Nondiscrimination Statutes and Authorities:** Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21; The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects); Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex); Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27; The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age); Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex); The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not); Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38; The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex); Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations; Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

7-25 On-The-Job Training Requirements.

As part of the Contractor’s equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide On-The-Job Training aimed at developing full journeymen in the type of trade or job classification involved in the work. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Section. Ensure that, when feasible, 25% of trainees in each occupation are in their first year of training. The Contractor shall incorporate the requirements of this Section into such subcontract.

The number of trainees will be estimated on the number of calendar days of the contract, the dollar value, and the scope of work to be performed. The trainee goal will be finalized at a Post-Preconstruction Trainee Evaluation Meeting and the goal will be distributed among the work classifications based on the following criteria:

1. Determine the number of trainees on Federal Aid Contract:

a. No trainees will be required for contracts with a Contract Time allowance of less than 275 calendar days.

b. If the Contract Time allowance is 275 calendar days or more, the number of trainees shall be established in accordance with the following chart:

| Estimated Contract Amount | Trainees Required |
|--|-------------------|
| \$2,000,000 or less | 0 |
| Over \$2,000,000 to \$4,000,000 | 2 |
| Over \$4,000,000 to \$6,000,000 | 3 |
| Over \$6,000,000 to \$12,000,000 | 5 |
| Over \$12,000,000 to \$18,000,000 | 7 |
| Over \$18,000,000 to \$24,000,000 | 9 |
| Over \$24,000,000 to \$31,000,000 | 12 |
| Over \$31,000,000 to \$37,000,000 | 13 |
| Over \$37,000,000 to \$43,000,000 | 14 |
| Over \$43,000,000 to \$49,000,000 | 15 |
| Over \$49,000,000 to \$55,000,000 | 16 |
| Over \$55,000,000 to \$62,000,000 | 17 |
| Over \$62,000,000 to \$68,000,000 | 18 |
| Over \$68,000,000 to \$74,000,000 | 19 |
| Over \$74,000,000 to \$81,000,000 | 20 |
| Over \$81,000,000 to \$87,000,000 | 21 |
| Over \$87,000,000 to \$93,000,000 | 22 |
| Over \$93,000,000 to \$99,000,000 | 23 |
| Over \$99,000,000 to \$105,000,000 | 24 |
| Over \$105,000,000 to \$112,000,000 | 25 |
| Over \$112,000,000 to \$118,000,000 | 26 |
| Over \$118,000,000 to \$124,000,000 | 27 |
| Over \$124,000,000 to \$130,000,000 | 28 |
| Over \$130,000,000 to * | |
| *One additional trainee per \$6,000,000 of estimated Construction Contract amount over \$130,000,000 | |

Further, if the Contractor or subcontractor requests to utilize banked trainees as discussed later in this Section, a Banking Certificate will be validated at this meeting allowing credit to the Contractor for previously banked trainees. Banked credits of prime Contractors working as Subcontractors may be accepted for credit. The Contractor's Project Manager, the Construction Project Engineer and the Department's District Contract Compliance Manager will attend this meeting. Within ten days after the Post-Preconstruction Training Evaluation Meeting, the Contractor shall submit to the Department for approval an On-The-Job Training Schedule indicating the number of trainees to be trained in each selected classification and the portion of the Contract Time during which training of each trainee is to take place. This schedule may be subject to change if any of the following occur:

1. When a start date on the approved On-The-Job Training Schedule has been missed by 14 or more days;
2. When there is a change in previously approved classifications;
3. When replacement trainees are added due to voluntary or involuntary termination

The revised schedule will be resubmitted to and approved by the Department's District Contract Compliance Manager.

The following criteria will be used in determining whether or not the Contractor has complied with this Section as it relates to the number of trainees to be trained:

1. Credit will be allowed for each trainee that is both enrolled and satisfactorily completes training on this Contract. Credit for trainees, over the established number for this Contract, will be carried in a "bank" for the Contractor and credit will be allowed for those surplus trainees in subsequent, applicable projects. A "banked" trainee is described as an employee who has been trained on a project, over and above the established goal, and for which the Contractor desires to preserve credit for utilization on a subsequent project.

2. Credit will be allowed for each trainee that has been previously enrolled in the Department's approved training program on another contract and continues training in the same job classification and completes their training on a different contract.

3. Credit will be allowed for each trainee who, due to the amount of work available in their classification, is given the greatest practical amount of training on the contract regardless of whether or not the trainee completes training.

4. Credit will be allowed for any training position indicated in the approved On-The-Job Training Schedule, if the Contractor can demonstrate that made a good faith effort to provide training in that classification was made.

5. No credit will be allowed for a trainee whose employment by the Contractor is involuntarily terminated unless the Contractor can clearly demonstrate good cause for this action.

Training and upgrading of minorities, women and economically disadvantaged persons toward journeyman status is a primary objective of this Section. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. If a non-minority male is enrolled into the On-The-Job Training Program, the On-The-Job Training Notification of Personnel Action Form notifying the District Contract Compliance Manager of such action shall be accompanied by a disadvantaged certification or a justification for such action acceptable to the Department's District Contract Compliance Manager. The Contractor will be given an opportunity and will be responsible for demonstrating the steps that it has taken

in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Section. This training is not intended, and shall not be used, to discriminate against any applicant for training, whether a minority, woman or disadvantaged person.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman status, or have been employed as a journeyman. The Contractor may satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established at the Post-Preconstruction Trainee Evaluation Meeting and approved by the Department. Graduation to journeyman status will be based upon satisfactory completion of a Proficiency Demonstration set up at the completion of training and established for the specific training classification, completion of the minimum hours in a training classification range, and the employer's satisfaction that the trainee does meet journeyman status in the classification of training. Upon reaching journeyman status, the following documentation must be forwarded to the District Contract Compliance Office:

1. Trainee Enrollment and Personnel Action Form
2. Proficiency Demonstration Verification Form indicating completion of each standard established for the classification signed by representatives of both the Contractor and the Department.

The Department and the Contractor shall establish a program that is tied to the scope of the work in the project and the length of operations providing it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classifications concerned, by at least, the minimum hours prescribed for a training classification. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal Aid highway construction contract. Approval or acceptance of a training schedule shall be obtained from the Department prior to commencing work on the classifications covered by the program.

A voluntary On-The-Job Training Program is available to a Contractor which has been awarded a state funded project. Through this program, the Contractor will have the option to train employees on state funded projects for "banked credit" as discussed previously in this provision, to be utilized on subsequent Federal Aid Projects where training is required. Those Contractors availing themselves of this opportunity to train personnel on state funded projects and bank trainee hours for credit shall comply with all training criteria set forth in this Section for Federal Aid Projects; voluntary banking may be denied by the Department if staff is not available to monitor compliance with the training criteria.

It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial type positions. Training is permissible in lower level management positions such as office engineers, estimators, etc., where the training is oriented toward construction applications. Training in the laborer classifications, except Common/General Laborer, may be permitted provided that significant and meaningful training is provided and approved by the District Contract Compliance Office.

When approved in advance by the District Contract Compliance Manager, credit will be given for training of persons in excess of the number specified herein under the current contract or a Contractor will be allowed to bank trainees who have successfully completed a training program and may apply those trainees to a training requirement in subsequent project(s) upon approval of the Department's District Contract Compliance Manager. This credit will be given even though the Contractor may receive training program funds from other sources, provided such other source do not specifically prohibit the Contractor from receiving other form of compensation. Offsite training is permissible as long as the training is an integral part of an approved training program and does not compromise a significant part of the overall training. Credit for offsite training indicated above may only be made to the Contractor when it does one or more of the following and the trainees are concurrently employed on a Federal Aid Project:

1. Contributes to the cost of the training,
2. Provides the instruction to the trainee,
3. Pays the trainee's wages during the offsite training period.

The Contractor shall compensate the trainee at no less than the laborer rate established in the Contract at the onset of training. The compensation rate will be increased to the journeyman's wage upon graduation from the training program for the remainder of the time the trainee works in the classification in which they were trained.

The Contractor shall furnish the trainee a copy of the program they will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed. The Contractor shall enroll a trainee in one training classification at a time to completion before the trainee can be enrolled in another classification on the same project.

The Contractor shall maintain records to document the actual hours each trainee is engaged in training on work being performed as a part of this Contract.

The Contractor shall submit to the District Contract Compliance Manager a copy of an On-The-Job Training Notification of Personnel Action form no later than seven days after the effective date of the action when the following actions occur: a trainee is transferred on the project, transferred from the project to continue training on another contract, completes training, is upgraded to journeyman status or voluntary terminates or is involuntary terminated from the project.

The Contractor shall furnish to the District Contract Compliance Manager a copy of a Monthly Time Report for each trainee. The Monthly Time Report for each month shall be submitted no later than the tenth day of the subsequent month. The Monthly Time Report shall indicate the phases and sub-phases of the number of hours devoted to each proficiency.

Highway or Bridge Carpenter Helper, Mechanic Helper, Rodman/Chainman, and Timekeeper classifications will not be approved for the On-The-Job Training Program.

The number of trainees may be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

The Contractor will have fulfilled the responsibilities of this Specification when acceptable training has been provided to the trainee as specified above.

7-16 Wage Rates for Federal-Aid Projects.

For this Contract, payment of predetermined minimum wages applies.

The U.S. Department of Labor (USDOL) Wage Rates applicable to this Contract are listed in table below, as modified up through ten days prior to the opening of bids.

| Wage Rate Decision Number | Associated Work |
|------------------------------|-----------------|
| FL20210169 | Highway |
| | |

Obtain the applicable General Decision(s) (Wage Tables) through the Department's Office of Construction website and ensure that employees receive the minimum compensation applicable. Review the General Decisions for all classifications necessary to complete the project. Request additional classifications through the Engineer's office when needed.

"General Decision Number: FL20210169 01/01/2021

Superseded General Decision Number: FL20200169

State: Florida

Construction Type: Highway

County: Hillsborough County in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

0 01/01/2021

* SUFL2013-030 08/19/2013

| | Rates | Fringes |
|-------------------------------------|----------|---------|
| CARPENTER, Includes Form Work..... | \$ 15.08 | 0.00 |
| CEMENT MASON/CONCRETE FINISHER..... | \$ 14.59 | 0.00 |
| ELECTRICIAN..... | \$ 21.80 | 0.00 |
| FENCE ERECTOR..... | \$ 13.58 | 0.00 |
| HIGHWAY/PARKING LOT STRIPING: | | |
| Operator (Striping Machine)..... | \$ 16.69 | 0.00 |
| HIGHWAY/PARKING LOT STRIPING: | | |
| Painter..... | \$ 12.13 | 0.00 |
| INSTALLER - GUARDRAIL..... | \$ 11.39 | 0.00 |
| IRONWORKER, ORNAMENTAL..... | \$ 13.48 | 0.00 |
| IRONWORKER, REINFORCING..... | \$ 17.37 | 0.00 |
| IRONWORKER, STRUCTURAL..... | \$ 16.42 | 0.00 |

| | | |
|--|----------|------|
| LABORER (Traffic Control Specialist)..... | \$ 12.39 | 0.00 |
| LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor..... | \$ 12.64 | 0.00 |
| LABORER: Common or General..... | \$ 11.71 | 0.00 |
| LABORER: Flagger..... | \$ 11.86 | 0.00 |
| LABORER: Grade Checker..... | \$ 13.96 | 0.00 |
| LABORER: Landscape & Irrigation..... | \$ 10.07 | 0.00 |
| LABORER: Mason Tender - Cement/Concrete..... | \$ 12.56 | 0.56 |
| LABORER: Pipelayer..... | \$ 14.29 | 0.00 |
| OPERATOR: | | |
| Backhoe/Excavator/Trackhoe..... | \$ 16.38 | 0.00 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader..... | \$ 12.88 | 0.00 |
| OPERATOR: Boom..... | \$ 13.94 | 1.28 |
| OPERATOR: Broom/Sweeper..... | \$ 13.69 | 0.00 |
| OPERATOR: Bulldozer..... | \$ 18.11 | 0.00 |
| OPERATOR: Concrete Finishing Machine..... | \$ 15.44 | 0.00 |
| OPERATOR: Concrete Pump..... | \$ 19.77 | 0.00 |
| OPERATOR: Concrete Saw..... | \$ 16.57 | 0.00 |
| OPERATOR: Crane..... | \$ 22.33 | 0.00 |
| OPERATOR: Curb Machine..... | \$ 19.67 | 0.00 |
| OPERATOR: Drill..... | \$ 14.78 | 0.00 |
| OPERATOR: Forklift..... | \$ 13.52 | 0.00 |
| OPERATOR: Gradall..... | \$ 14.71 | 0.00 |
| OPERATOR: Grader/Blade..... | \$ 20.71 | 0.00 |
| OPERATOR: Loader..... | \$ 14.99 | 0.00 |
| OPERATOR: Mechanic..... | \$ 17.49 | 0.00 |
| OPERATOR: Milling Machine Groundsman..... | \$ 16.20 | 0.00 |
| OPERATOR: Milling Machine..... | \$ 16.26 | 0.00 |
| OPERATOR: Oiler..... | \$ 17.61 | 0.00 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete).. | \$ 13.51 | 0.00 |

| | | |
|---|----------|------|
| OPERATOR: Piledriver..... | \$ 17.23 | 0.00 |
| OPERATOR: Post Driver (Guardrail/Fences)..... | \$ 19.35 | 0.00 |
| OPERATOR: Roller..... | \$ 14.14 | 0.00 |
| OPERATOR: Scraper..... | \$ 11.74 | 0.00 |
| OPERATOR: Screed..... | \$ 16.67 | 0.00 |
| OPERATOR: Tractor..... | \$ 13.39 | 0.00 |
| OPERATOR: Trencher..... | \$ 13.78 | 0.00 |
| PAINTER: Spray..... | \$ 16.38 | 0.00 |
| TRAFFIC SIGNALIZATION: Traffic Signal Installation..... | \$ 16.54 | 0.00 |
| TRUCK DRIVER: Dump Truck..... | \$ 12.81 | 0.00 |
| TRUCK DRIVER: Flatbed Truck..... | \$ 14.13 | 0.00 |
| TRUCK DRIVER: Lowboy Truck..... | \$ 15.56 | 0.00 |
| TRUCK DRIVER: Slurry Truck..... | \$ 11.96 | 0.00 |
| TRUCK DRIVER: Water Truck..... | \$ 12.88 | 0.00 |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have

responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).

Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

7-26 Cargo Preference Act – Use of United States-Flag Vessels.

Pursuant to Title 46 CFR 381, the Contractor agrees

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this Article to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.

8-10 Liquidated Damages for Failure to Complete the Work.

8-10.2 Amount of Liquidated Damages: Applicable liquidated damages are the amounts established in the following schedule:

| Original Contract Amount | Daily Charge Per Calendar Day |
|--|--|
| \$50,000 and under..... | \$868 |
| Over \$50,000 but less than \$250,000..... | \$882 |
| \$250,000 but less than \$500,000..... | \$1,197 |
| \$500,000 but less than \$2,500,000..... | \$1,694 |
| \$2,500,000 but less than \$5,000,000..... | \$2,592 |
| \$5,000,000 but less than \$10,000,000..... | \$3,786 |
| \$10,000,000 but less than \$15,000,000..... | \$4,769 |
| \$15,000,000 but less than \$20,000,000..... | \$5,855 |
| \$20,000,000 and over..... | \$9,214 plus 0.00005 of any amount over \$20 million (Round to nearest whole dollar) |

The Engineer may approve adjustments to the liquidated damages amounts in accordance with the Construction Project Administration Manual (CPAM) provided all contract work is complete.

14-78.005 Participation by Disadvantaged Business Enterprises.

(1) The major purpose of the Disadvantaged Business Enterprise (DBE) Program is to assure nondiscrimination and DBE utilization in road and bridge construction and maintenance projects. Contractors are required to comply with the following special provision contained in all road and bridge contracts:

Special Provision for DBE Contracts

General. Prior to award of the contract, have an approved DBE Affirmative Action Program Plan filed with the Equal Opportunity Office. Update and resubmit the plan every three years. No contract will be awarded until the Department approves the Plan. The DBE Affirmative Action Program Plan and commitment to carry out the Plan must be incorporated into and become part of the awarded contract. Failure to keep these commitments will be deemed noncompliance with these specifications and a breach of the contract. Take all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises, as defined in 49 C.F.R. Part 26, have the opportunity to participate in, compete for, and perform subcontracts. Do not discriminate on the basis of age, race, color, religion, national origin, sex, or disability in the award and performance of this contract.

Plan Requirements. Include the following in the DBE Affirmative Action Program Plan:

A policy statement, expressing a commitment to use DBEs in all aspects of contracting to the maximum extent feasible. The policy making body must issue a policy statement signed by the chairperson, which expresses its commitment to utilize DBEs, outlines the various levels of responsibility, and states the objectives of the program. Circulate the policy statement throughout the Contractor's organization.

The designation of a Liaison Officer with the contractor's organization, as well as support staff, necessary and proper to administer the program, and a description of the authority, responsibility, and duties of the Liaison Officer and support staff. The Liaison Officer and staff are responsible for developing, managing, and implementing the program on a day-to-day basis for carrying out technical assistance activities for DBEs and for disseminating information on available business opportunities so that the DBEs are provided an equitable opportunity to participate in contracts let by the Department. Use techniques to facilitate DBE participation in contracting activities such as:

1. Soliciting price quotations and arranging a time for the review of plans, quantities, specifications, and delivery schedules, and for the preparation and presentation of quotations.
2. Providing assistance to DBEs in overcoming barriers such as the inability to obtain bonding, financing, or technical assistance.
3. Carrying out information and communication programs or workshops on contracting procedures and specific contracting opportunities in a timely manner, with such programs being bilingual, where appropriate.
4. Encouraging eligible DBEs to apply for certification.
5. Contacting Minority Contractor Associations and city and county agencies with programs for disadvantaged individuals for assistance in recruiting and encouraging eligible DBE contractors to apply for certification.

DBE Records and Reports. Submit the Anticipated DBE Participation Statement at or before the Pre-construction Conference. Report monthly, through the Equal Opportunity Reporting System, manually or on the Department's website, actual payments, retainage, minority status, and work type of all subcontractors and major suppliers. The Equal Opportunity Office will provide instructions on accessing this system. Develop a record keeping system to monitor DBE affirmative action efforts which include the following:

1. The procedures adopted to comply with these specifications;
2. The number of subordinated contracts on Department projects awarded to DBEs;
3. The dollar value of the contracts awarded to DBEs;
4. The percentage of the dollar value of all subordinated contracts awarded to DBEs as a percentage of the total contract amount.
5. A description of the general categories of contracts awarded to DBEs; and
6. The specific efforts employed to identify and award contracts to DBEs.

Upon request, provide the records to the Department for review.

All such records are required to be maintained for a period of five years following acceptance of final payment and available for inspection by the Department and the Federal Highway Administration.

(2) 49 C.F.R. Part 26 (10-1-03 Edition) is incorporated herein by reference and adopted by the Department for participation by disadvantaged business enterprises in the Department's federally funded projects. The provisions of 64 Federal Register No. 21, February 2, 1999, and 68 Federal Register No. 115, June 16, 2003, are available from the Department for informational purposes only. They also can be obtained on the Internet at <http://www.gpoaccess.gov/fr/index.html>.

Specific Authority 337.125, 337.137, 339.0805 FS. Law Implemented 337.125, 337.137, 339.0805 FS. History—New 12-9-81, Amended 5-23-84, Formerly 14-78.05, Amended 9-21-87, 5-4-88, 6-24-91, 12-2-93, 4-30-96, 8-31-04.

DBE Utilization

The Department began its DBE race neutral program January 1, 2000. **Contract specific goals are not placed on Federal/State contracts;** however, the Department has an overall 10.65% DBE goal it must achieve. In order to assist contractors in determining their DBE commitment level, the Department has reviewed the estimates for this letting.

As you prepare your bid, please monitor potential or anticipated DBE utilization for contracts. When the low bidder executes the contract with the Department, information will be requested of the contractor's DBE participation for the project. While the utilization is not mandatory in order to be awarded the project, continuing utilization of DBE firms on contracts supports the success of Florida's DBE Program, and supports contractors' Equal Employment Opportunity and DBE Affirmative Action Programs.

Any project listed as 0% DBE availability does not mean that a DBE may not be used on that project. A 0% DBE availability may have been established due to any of the following reasons: limited identified subcontracting opportunities, minimal contract days, and/or small contract dollar amount. Contractors are encouraged to identify any opportunities to subcontract to DBE's.

Please contact the Equal Opportunity Office at (850) 414-4747 if you have any questions regarding this information.

DBE Reporting

If you are the prime contractor on a project, enter your DBE participation in the Equal Opportunity Compliance system prior to the pre-construction or pre-work conference for all federal and state funded projects. This **will not** become a mandatory part of the contract. It will assist the Department in tracking and reporting planned or estimated DBE utilization. During the contract, the prime contractor is required to report actual payments to DBE and MBE subcontractors through the web-based Equal Opportunity Compliance (EOC) system.

All DBE payments must be reported whether or not you initially planned to utilize the company. In order for our race neutral DBE Program to be successful, your cooperation is imperative. If you have any questions, please contact EOOHelp@dot.state.fl.us.

Bid Opportunity List

The Federal DBE Program requires States to maintain a database of all firms that are participating or attempting to participate on FDOT-assisted contracts. The list must include all firms that bid on prime contracts or bid or quote subcontracts on FDOT-assisted projects, including both **DBE's and non-DBEs**.

Please complete the Bidders Opportunity List through the Equal Opportunity Compliance system within 3 business days of submission of the bid or proposal for ALL subcontractors or sub-consultants who quoted to you for specific project for this letting. The web address to the Equal Opportunity Compliance system is: <https://www.fdot.gov/equalopportunity/eoc.shtm>.

DBE/AA Plans

Contractors bidding on FDOT contracts are to have an approved DBE Affirmative Action Plan (FDOT Form 275-030-11B) on file with the FDOT Equal Opportunity Office before execution of a contract. DBE/AA Plans must be received with the contractors bid or received by the Equal Opportunity Office prior to the award of the contract.

Plans are approved by the Equal Opportunity Office in accordance with Ch. 14-78, Florida Administrative Code. Plans that do not meet these mandatory requirements may not be approved. Approvals are for a (3) three year period and should be updated at anytime there is a change in the company's DBE Liaison Officer and/or President. Contractors may evidence adoption of the DBE/AA Policy and Plan and/or a change in the designated DBE Liaison officer as follows:

- Print the first page of the document on company stationery ("letterhead") that indicates the company's name, mailing address, phone number, etc.
- Print the company's name in the "____" space; next to "Date" print the month/day/year the policy is being signed; record the signature of the company's Chief Executive Officer, President or Chairperson in the space next to "by" and print the full first and last name and position title of the official signing the policy.
- Print the DBE Liaison's full name, email address, business mailing address and phone number the bottom of email.

E-mail the completed and signed DBE AA Plan to: **eeoforms@dot.state.fl.us**.

The Department will review the policy, update department records and issue a notification of approval or disapproval; a copy of the submitted plan will not be returned to the contractor.

PROPRIETARY PRODUCTS REVIEW AND CERTIFICATION

PURPOSE:

This procedure provides the process for the Department to certify local agency and Department project requests for the use of proprietary products or processes under **23 CFR 635.411 Material or Product Selection**. The authority for the Department to assume the responsibility for the approval of patented and proprietary products on the National Highway System (NHS) projects is formalized in the **Florida Federal-aid Partnership Agreement, Topic No. 700-000-005**.

AUTHORITY:

Sections 20.23(4)(a) and 334.048(3), Florida Statutes (F.S.)

SCOPE:

This procedure applies to employees and organizational units in the Department involved in the preparation, design, review and approval of plans.

Definitions:

Agency: Any state, county, district, municipality, department, division, board, bureau, commission, or other separate unit of government created or established by law as defined in **Section 119.011(2), F.S.**

Contracting Agency: An Agency that is requesting the use of a proprietary product in the Contract Package.

Contract Package: The plans and specifications prepared during the design phase and used by construction personnel to build a project.

Department: The Florida Department of Transportation.

EOR: Engineer of Record - The professional engineer who signs, dates, and seals the Contract Package in accordance with **Section 471.025, F.S.** and **Rule 61G15-23, F.A.C.**

Experimental and Research Project: A project incorporating a material, process, method, equipment item, traffic operational device, or other feature that: (1) has not been

sufficiently tested under actual service conditions to merit acceptance without reservation in normal highway construction, or (2) has been accepted but needs to be compared with alternative acceptable features for determining their relative merits and cost effectiveness.

FHWA: Federal Highway Administration

Initiator: The person designated as the submitter of the proprietary product certification form on behalf of an Agency. The EOR may serve as the initiator.

PODI: Projects of Division Interest

Proprietary Product: A sole source or patented product or process. A product or process is also considered proprietary if it is identified by a plan note or specification so narrowly defined that only a sole source or patented product or process can meet the requirements.

Public Interest Finding (PIF): A document that is created by an agency when more than one acceptable product or process available for use and an agency seeks to limit purchase to a specified product. It documents the reasonableness of the agency's minimum needs and the best method to meet these needs consistent with the requirement for the broadest practical competition.

Special Funding/Evaluation Projects: A project that incorporates products or processes that FHWA is promoting through special funding/evaluation programs (e.g. Highways for Life, Innovative Bridge Research and Deployment Program, Innovative Pavement Research and Deployment Program, etc.)

Synchronization: to make things visually or functionally go together or work together.

Unique or No Suitable Alternative: limited to one of a kind, or without equal or equivalent.

1. GENERAL

When a proprietary product is identified in the Contract Package, this **Proprietary Products Certification (Certification)** procedure and form must be used. This certification should be completed by the time the design has reached 60% Plans. A denied request can be resubmitted for reconsideration with supplemental information.

This procedure is not to be used in lieu of Design or Utility Exceptions and Variations but may be required as an additional step. Also, this procedure is not to be used for Experimental, Research, or Special Funding/Evaluation Projects. When more than one

acceptable product or process is available for use and the Department or local agency seeks to limit purchase to a specified product or process, a Public Interest Finding (PIF) must be submitted in lieu of obtaining a certification with this procedure.

2. RESPONSIBILITIES

- 1) The Department assigned Project Manager is responsible for the following activities:
 - a) Communicating with the initiator,
 - b) Ensuring completeness of the documentation,
 - c) Assisting the District Design Engineer or Turnpike Design Engineer in the evaluation of the justification,
 - d) Ensuring all Certification requests are processed in accordance with this procedure.
 - e) Maintaining and archiving all requests, documentation, correspondence, and Certifications for proprietary products with applicable project files,
 - f) Forwarding the package to the FDWA Division Administrator when a project is a PODI.
- 2) The District Design Engineer or Turnpike Design Engineer is responsible for the following:
 - a) Assigning a Project Manager,
 - b) Evaluating and approving Certification requests for projects within their District when documentation is factually and technically supported in accordance with **Section 4**,
 - c) Evaluating and making a recommendation for Certification requests on a PODI project within their District.

3. PROPRIETARY PRODUCT CERTIFICATION PROCEDURE

- 1) When the Initiator submits a Certification request to the Department, the District Design Engineer or Turnpike Design Engineer will assign a Project Manager.
- 2) Each assigned Project Manager shall review request package of information and ensure that it contains the following documentation:
 - a) Cover Letter
The cover letter is the **Proprietary Products Certification Form, Form No. 630-020-07** for the **Certification** procedure. The appropriate certification statement must be marked on the form and the document signed by the initiator.

b) **Justification**

Justifications must contain supporting documentation that provide an understanding of the request and factual and technically support the request in accordance with **Section 4**.

The assigned Project Manager should consult with appropriate technical Department personnel to evaluate the package for **Certification**. The assigned Project Manager may request additional documentation from the initiator to assist with the evaluation and supplement the justification. The assigned Project Manager will make a recommendation regarding the request's approval and then forward the package and the recommendation to the District Design Engineer or Turnpike Design Engineer.

- 3) The District Design Engineer or Turnpike Design Engineer shall evaluate the package for **Certification** and the assigned Project Manger's recommendation and then determine if the request should be approved. When the District Design Engineer or Turnpike Design Engineer makes the decision, the Certification request package will be returned to the assigned Project Manager.
 - 1) If the District Design Engineer or Turnpike Design Engineer determines that the request should be approved, the District Design Engineer or Turnpike Design Engineer shall mark the appropriate certification statement on the form, assign a termination date and sign the document. If the District Design Engineer or Turnpike Design Engineer has identified any limitations regarding the proprietary product use on the project, a description of those limitations shall be included on the completed Certification form.
 - 2) If the District Design Engineer or Turnpike Design Engineer determines that the request should be rejected, the District Design Engineer or Turnpike Design Engineer shall provide an explanation for the rejection.
- 4) The assigned Project Manager shall provide a copy of the **Certification** with the signed certification or a notice and explanation of rejection to the initiator. The District or Turnpike assigned Project Manager shall post the Certification and justification on the Department web site and archive all documentation, correspondence, and certifications for proprietary products with applicable project files.

4. JUSTIFICATION DOCUMENTATION REQUIREMENTS

The District or Turnpike assigned Project Manager and District Design Engineer or Turnpike Design Engineer must evaluate the Certification request justification documentation in accordance with this section. The initiator's justification documentation must factually and technically support why the sole use of the proprietary product is both

reasonable and necessary to fulfill the project need. The assigned Project Manager shall ensure that the documentation includes, but is not limited to, the following information:

- 1) Description of the project need for the proprietary product,
- 2) Factual and technical supporting evidence for Synchronization (see **Section 4.1**) or Unique need (see **Section 4.2**),
- 3) Explanation how the evidence links it to the project need, and
- 4) Factual and technical supporting evidence that no alternatives are available.

The extent of the evaluation and details should be appropriate for the value and complexity of the product. This justification documentation must be used to support the Department's decision to approve the use of a proprietary product.

A case must not be made solely on the basis of:

- Cost saving
- Time saving
- Similarity to other designs.

The initiator may also base the current Certification request on the use of a previously approved Certification. When this occurs, the assigned Project Manager shall ensure the justification includes project specific details and explanations that factually and technically link the use of the proprietary product to the previously approved Certification, and provide documentation that the factors supporting the justification of the previously approved Certification have not changed..

4.1 SYNCHRONIZATION

At least one of the following factors must be used to evaluate the documentation supporting a Certification request based on synchronization:

- Function: the proprietary product is necessary for the satisfactory operation of the existing facility,
- Aesthetics: the proprietary product is necessary to match the visual appearance of existing facilities,
- Logistics: the proprietary product is interchangeable with products in the Contracting Agency's maintenance inventory.

In addition, it is advisable for the initiator to include additional documentation that factually and technically supports the following factors as they relate to synchronization:

- Lifecycle: the relative age of existing systems that will be expanded and the projected life of the proposed proprietary element in relation to the remaining life of the existing elements,
- Size/extent of products and systems to be synchronized to/with, and the relative cost of the proprietary elements compared with replacing the elements requiring synchronization,
- Training costs for staff, such as significant training required to effectively maintain and operate an unfamiliar product.

4.2 UNIQUE OR NO SUITABLE ALTERNATIVE

At least one of the following factors must be used to evaluate the documentation supporting a Certification request based on unique or no suitable alternative:

- How the proprietary product requirement will benefit the public,
- The unique needs that exist and how the proprietary product addresses those needs,
- Why a higher standard for safety or other critical need exists and how the proprietary product addresses that need,
- An evaluation of the pool of potential products and a description of why other products cannot meet the Contracting Agency's needs,
- Cost/Benefit analysis (this factor can only be used to support other factors).

5. TRAINING

<http://www.dot.state.fl.us/specificationsoffice/PackagePreparation/WritingAids/Default.shtm>

<http://www.fhwa.dot.gov/construction/cqit/propriet.cfm>

6. FORMS

Proprietary Products Certification, Form No. 630-020-07

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 21-C-00022 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 21-C-00022; E/W Green Spine Cycle Track - PH 3B from 7th Ave to 13th Ave and E/W Green Spine Cycle Track - PH 3C from 13th Ave to 21st Ave, shall include, but not be limited to, maintenance of traffic, roadway, signing and pavement markings, signalization, utilities adjustments/relocations, landscape, hardscape, possible contamination remediation 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 conditions(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. _____

e/s
Marcella T. Hamilton, Assistant City Attorney

Contractor

By: _____
(SEAL)

Title:

ATTEST:

Witness

TAMPA AGREEMENT (ACKNOWLEDGMENT OF PRINCIPAL)

STATE OF _____)
) SS:
COUNTY OF _____)

For a Corporation:

STATE OF _____
COUNTY OF _____

The forgoing instrument was Sworn to (or affirmed) and subscribed before me by means of physical presence or online notarization, 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 OR Produced Identification. Type of Identification Produced _____.

[NOTARY SEAL]

Notary Public, State of _____
Notary Printed Name: _____
Commission No.: _____
My Commission Expires: _____

For a Firm:

STATE OF _____
COUNTY OF _____

The forgoing instrument was Sworn to (or affirmed) and subscribed before me by means of physical presence or online notarization, 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 OR Produced Identification. Type of Identification Produced _____.

[NOTARY SEAL]

Notary Public, State of _____
Notary Printed Name: _____
Commission No.: _____
My Commission Expires: _____

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 _____ e/s
Marcella T. Hamilton, 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.

CONTRACT ITEMS

CONTRACT ITEM 101 - 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 at the appropriate Contract Lump Sum Price.

CONTRACT ITEM 102 - 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, barricades, lights and flagmen, additional earth excavation, selected fill, temporary wearing surface, temporary bridges, 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.

Payment for Maintenance of Traffic will be made at the appropriate Contract Lump Sum Price.

CONTRACT ITEM 104 - STAKED SILT BARRIER

The Contractor shall furnish all labor, equipment, and materials to install a staked silt barrier as shown on the Plans and directed by the Engineer.

The work includes all filling, shaping, grading, stakes, barrier materials, and all appurtenant work, complete in place.

Payment for Staked Silt Barrier shall be made at the appropriate Contract Item Unit Price per foot of staked silt barrier installed.

CONTRACT ITEM 425 SERIES - 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 junction boxes shall conform to the requirements of the Workmanship and Materials section headed "Stormwater Inlets, Manholes and Junctions Boxes."

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.

Not included in the work are sheeting left in place, additional earth excavation or additional select fill material which, if ordered or specified, will be included for payment under other Contract items.

The number of Inlets, Manholes, and Junction Boxes to be measured for payment will be the actual number of such structures installed in the work.

Payment for Inlets, Manholes, and Junction Boxes will be made at the appropriate Contract Item Unit Price.

CONTRACT ITEM 430 SERIES - 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 requirements of the respective Workmanship and Materials sections.

The work includes all removal of sidewalks, driveways, curbs, curb and gutter, existing storm sewer systems, and permanent pavement; excavation, short tunnels, 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 including maintaining access across driveways along the line of the work, protection, trimming and replacement of trees and shrubs, protection, repair and replacement of existing

culverts and 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 sheeting left in place, rock excavation, manholes, 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 and 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 manholes and inlets, measured from the inside wall to the inside wall of the structure.

The measured length for stormwater force mains will include all fittings and short tunnels with deductions for the laid length of valves.

Payment for Pipe Culverts and Storm Sewers will be made at the appropriate Contract Item Unit Price per linear foot of pipe installed.

CONTRACT ITEM 520 SERIES - PERMANENT CURB AND GUTTER REPLACEMENT

The Contractor shall furnish all labor, equipment, and materials to replace and maintain all permanent concrete, bituminous, and granite curb or curb and gutter, Miami gutter, removed or damaged by pipeline construction and appurtenant work as shown on the drawings, specified, and directed by the Engineer.

Permanent curb or curb and gutter, and Miami gutter replacement shall conform to the requirements of the Workmanship and Materials Section 16 - Restoration of Street Pavements.

All concrete work under this series shall conform to Workmanship and Materials Section 345 - Portland Cement Concrete.

The work includes all excavation, filling, shaping, grading, base material, lawn replacement incidental to curb, or curb and gutter replacement, Miami gutter, and other appurtenant work complete in place.

The length of Permanent Curb and Gutter Replacement to be measured for payment will be the actual length of gutter placed in the work within payment limits for surface restoration shown on the Plans, or ordered by the Engineer.

Payment limits for Permanent Curb and Gutter Replacement along pipelines shall include removal and replacement of gutter incidental to construction of manholes and structures. All curb and gutter removed or damaged and requiring replacement outside payment limits will not be measured for payment and shall be replaced by the Contractor at his own expense.

Payment of Permanent Curb and Gutter Replacement will be made at the Contract Item Unit Price per linear foot of curb and gutter placed.

CONTRACT ITEM 522 SERIES - PERMANENT SIDEWALK/DRIVEWAY REPLACEMENT

The Contractor shall furnish all labor, equipment, and materials to replace and maintain all permanent sidewalks, driveways removed or damaged by pipeline construction and appurtenant work as shown on the Plans, specified, and directed by the Engineer.

Permanent sidewalk/driveway replacement shall conform to the requirements of the Workmanship and Materials Section 16 - Restoration of Street Pavements.

Concrete work under this series shall conform to Workmanship and Materials Section 346 - Portland Cement Concrete.

The work includes all excavation, filling, shaping, grading, temporary limestone surface, base material, paved surface, lawn replacement incidental to sidewalk/driveway, and other appurtenant work complete in place.

The quantity of Permanent Sidewalk/Driveway Replacement to be measured for payment will be the actual area of permanent sidewalk/driveway surface placed in the work within payment limits and ordered by the Engineer.

Payment limits for permanent sidewalk/driveway replacement along pipelines shall include removal and replacement of sidewalk/driveway surface incidental to construction of manholes and structures. All sidewalk/driveway surface removed or damaged outside payment limits will not be measured for payment and shall be replaced by the Contractor at his own expense.

Where the existing sidewalk/driveway surface is a nonpermanent type consisting of shell, gravel, limerock, crushed stone, or other similar material, no payment will be allowed for replacement of permanent sidewalk/driveway surface. Replacement of surface for such nonpermanent sidewalk/driveway surfaces will be included in the various classified unit price Contract Items for pipelines or considered under the provisions for "Extra Work."

Payment for Permanent Sidewalk/Driveway Replacement will be made at the Contract Item Unit Price per square yard of sidewalk/driveway replaced.

CONTRACT ITEM 523-1 - PEDESTRIAN RAMP

The Contractor shall furnish all labor, equipment, and materials to construct, replace, and maintain all permanent concrete pedestrian ramps removed or damaged by pipeline construction and appurtenant work as shown on the drawings, specified, and directed by the Engineer.

Pedestrian Ramps shall conform to the requirements of the Workmanship and Materials Section 16 - Restoration of Street Pavements.

All concrete work under this series shall conform to Workmanship and Materials Section 345 - Portland Cement Concrete.

The work includes all excavation, filling, shaping, grading, base material, lawn replacement incidental to pedestrian ramp construction, and all other appurtenant work complete in place.

The quantity of Pedestrian Ramps to be measured for payment will be the actual number of ramps placed in the work within payment limits for surface restoration shown on the Plans, or ordered by the Engineer.

Payment for Pedestrian Ramps will be made at the Contract Item Unit Price per pedestrian ramp constructed.

September 27, 2021

Prepared by: F. Abdalla, P.E.,
D. Hernández-Cedeño, P.E.



SPECIFICATIONS PACKAGE

Contract Number: 21-C-00022

FINANCIAL PROJECT ID(S): 439476-3-58-01, 439476-3-58-02,
439476-4-58-01 and 439476-4-58-02

FEDERAL FUNDS

DISTRICT SEVEN

HILLSBOROUGH COUNTY

The applicable Articles and Subarticles of the General Requirements & Covenants division (Division I) of the July 2021 edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction are added, and all of the Construction Details and Materials divisions (Division II & III) are revised, as follows:

I hereby certify that this specifications package has been properly prepared by me, or under my responsible charge, in accordance with procedures adopted by the Florida Department of Transportation.

The official record of this package has been electronically signed and sealed using a Digital Signature as required by 61G 15-23.004, F.A.C. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Date: September 27, 2021
State of Florida,
Professional Engineer License No: 63914
Firm Name: Kisinger Campo and Associates, Inc.
Firm Address: 201 North Franklin Street, Suite 400.
City, State, Zip Code: Tampa, Florida 33602

FPID(S) 439476-3-58-01, 439476-3-58-02, 439476-4-58-01 & 439476-4-58-02

LAP SPECIFICATIONS

FPID(S) 439476-3-58-01, 439476-3-58-02, 439476-4-58-01 & 439476-4-58-02

**120 EARTHWORK AND RELATED OPERATIONS FOR LAP (CLASS - D).
(REV 4-20-21) (FA 7-13-21) (1-22)**

SECTION 120 is deleted and the following substituted:

**SECTION 120
EARTHWORK AND RELATED OPERATIONS FOR LAP (CLASS - D)**

120-1 Description.

120-1.1 General: Perform earthwork and related operations based on the type of work specified in the Contract and the Earthwork Categories as defined below. Meet the applicable requirements for materials, equipment and construction as specified.

Earthwork and related operations consist of excavation for the construction of the roadway, excavation for structures and pipe, constructing backfill around structures and pipe, and constructing embankments as required for the roadway, ditches, and channel changes.

120-1.2 Earthwork Categories: Performance of Earthwork Operations will fall into one of the following Earthwork Categories:

120-1.2.1 Earthwork Category 1: Includes the earthwork and related operations associated with the construction of sidewalks and bike paths along with any drainage structures associated with these facilities.

120-1.2.2 Earthwork Category 2: Includes the earthwork and related operations associated with the construction of turn lanes and other non-mainline traffic lanes, widening, roadway shoulders, concrete box culverts, retaining walls, and other drainage structures on the non-mainline pavement.

120-1.2.3 Earthwork Category 3: Includes the earthwork and related operations associated with the construction of new mainline pavement, along with concrete box culverts, retaining walls, and other drainage structures on the mainline pavement.

120-1.3 Unidentified Areas of Contamination: When encountering or exposing any abnormal condition indicating the presence of contaminated materials, cease operations immediately in the vicinity and notify the Engineer. The presence of tanks or barrels; discolored earth, metal, wood, ground water, etc.; visible fumes; abnormal odors; excessively hot earth; smoke; or other conditions that appear abnormal may indicate the presence of contaminated materials and must be treated with extreme caution.

Make every effort to minimize the spread of contamination into uncontaminated areas. 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. Ensure provisions adhere to all applicable laws, rules or regulations covering potentially hazardous conditions and will be in a manner commensurate with the gravity of the conditions.

The Engineer will notify the Department of a contamination assessment/remediation process plan to determine the course of action necessary for site security and the steps necessary under applicable laws, rules, and regulations for additional assessment and/or remediation work to resolve the contamination issue.

120-2 Classifications of Excavation.

120-2.1 General: The Engineer may classify excavation specified under this Section for payment as any of the following: regular excavation, subsoil excavation, lateral ditch excavation, and channel excavation.

If the proposal does not show subsoil excavation or lateral ditch excavation as separate items of payment, include such excavation under the item of regular excavation.

If the proposal shows lateral ditch excavation as a separate item of payment but does not show channel excavation as a separate item of payment, include such excavation under the item of lateral ditch excavation. Otherwise, include channel excavation under the item of regular excavation.

120-2.2 Regular Excavation: Regular excavation includes roadway excavation and borrow excavation, as defined below for each.

120-2.2.1 Roadway Excavation: Roadway excavation consists of the excavation and the utilization or disposal of all materials necessary for the construction of the roadway, ditches, channel changes, etc., except as may be specifically shown to be paid for separately and that portion of the lateral ditches within the limits of the roadway right-of-way as shown in the Plans.

120-2.2.2 Borrow Excavation: Borrow excavation consists of the excavation and utilization of material from authorized borrow pits, including only material that is suitable for the construction of roadway embankments or of other embankments covered by the Contract.

A Cost Savings Initiative Proposal (CSIP) submittal based on using borrow material from within the project limits will not be considered.

120-2.3 Subsoil Excavation: Subsoil excavation consists of the excavation and disposal of muck, clay, rock, or any other material that is unsuitable in its original position and that is excavated below the finished grading template. For pond and ditches that identify the placement of a blanket material, consider the finished grading template as the bottom of the blanket material. Subsoil excavation also consists of the excavation of all suitable material within the above limits as necessary to excavate the unsuitable material. Consider the limits of subsoil excavation indicated in the Plans as being particularly variable, in accordance with the field conditions encountered.

The quantity of material required to replace the excavated material and to raise the elevation of the roadway to the bottom of the template will be paid for under embankment or borrow excavation (Truck Measure).

120-2.4 Lateral Ditch Excavation: Lateral ditch excavation consists of all excavation of inlet and outlet ditches to structures and roadway, changes in channels of streams, and ditches parallel to the roadway right-of-way. Dress lateral ditches to the grade and cross-section shown in the Plans.

120-2.5 Channel Excavation: Channel excavation consists of the excavation and satisfactory disposal of all materials from the limits of the channel as shown in the Plans.

120-2.6 Excavation for Structures and Pipe: Excavation for structures consists of the excavation for bridge foundations, box culverts, pipe culverts, storm sewers and all other pipelines, retaining walls, headwalls for pipe culverts and drains, catch basins, drop inlets, manholes, and similar structures.

120-3 Preliminary Soils Investigations.

When the Plans contain the results of a soil survey, do not assume such data is a guarantee of the depth, extent, or character of material present.

120-4 Excavation Requirements.

120-4.1 Removal of Unsuitable Materials and Existing Roads

120-4.1.1 Subsoil Excavation: Where rock, muck, clay, or other material within the limits of the roadway is unsuitable in its original position, excavate such material to the cross-sections shown in the Plans or indicated by the Engineer, and backfill with suitable material. Shape backfill material to the required cross-sections. Where the removal of plastic soils below the finished earthwork grade is required,

meet a construction tolerance, from the lines shown in the Plans as the removal limits, of ± 0.2 foot in depth and ± 6 inches (each side) in width.

120-4.1.2 Construction over Existing Old Road: Where a new roadway is to be constructed over an old one, completely remove the existing pavement for the entire limits of the width and depth. If the Plans provide that paving materials may be incorporated into the fill, distribute such material in a manner so as not to create voids. Recompact the old road meeting the requirements of 120-10.2.

120-4.2 Lateral Ditch Excavation: Excavate inlet and outlet ditches to structures and roadway, changes in channels of streams and ditches parallel to the roadway. Dress lateral ditches to the grade and cross-section shown in the Plans.

120-4.3 Channel Excavation: Excavate and dispose of all materials from the limits of the channel as shown in the Plans. Excavate for bridge foundations, box culverts, pipe culverts, storm sewers and all other pipelines, retaining walls, headwalls for pipe culverts and drains, catch basins, drop inlets, manholes, and similar structures.

120-4.4 Excavation for Structures and Pipe.

120-4.4.1 Requirements for all Excavation: Perform all excavation to foundation materials, satisfactory to the Engineer, regardless of the elevation shown in the Plans. Remove rock, boulders or other hard lumpy or unyielding material to a depth of 12 inches below the bottom of pipes and box culverts elevations. Remove muck or other soft material to the depth indicated in the Plans or as directed by the Engineer.

120-4.4.2 Earth Excavation:

120-4.4.2.1 Foundation Material other than the Rock: When masonry is to rest on an excavated surface other than rock, take special care to avoid disturbing the bottom of the excavation, and do not remove the final foundation material to grade until just before placing the masonry. In case the foundation material is soft or mucky, the Engineer may require excavation to a greater depth and to backfill to grade with approved material.

120-4.4.2.2 Foundation Piles: Where foundation piles are used, complete the excavation of each pit before driving the piles. After the driving is completed, remove all loose and displaced material, leaving a smooth, solid, and level bed to receive the masonry.

120-4.4.2.3 Removal of Obstructions: Remove boulders, logs, or any unforeseen obstacles encountered in excavating.

120-4.4.3 Rock Excavation: Clean all rock and other hard foundation material, remove all loose material, and cut all rock to a firm surface. Either level, step vertically and horizontally, or serrate the rock, as may be directed by the Engineer. Clean out all seams and fill them with concrete or mortar.

120-4.4.4 Pipe Trench Excavation: Excavate trenches for pipes to the elevation of the bottom of the pipe and to a width sufficient to provide adequate working room. Remove soil not meeting the classification specified as suitable backfill material in 120-8.3.2.2 to a depth of 4 inches below the bottom of the pipe elevation. Remove rock, boulders or other hard lumpy or unyielding material to a depth of 12 inches below the bottom of the pipe elevation. Remove muck or other soft material to a depth necessary to establish a firm foundation. Where the soils permit, ensure that the trench sides are vertical up to at least the mid-point of the pipe.

For pipelines placed above the natural ground line, place and compact the embankment, prior to excavation of the trench, to an elevation at least 2 feet above the top of the pipe and to a width equal to four pipe diameters, and then excavate the trench to the required grade.

For pipe trenches utilizing trench boxes, ensure that the trench box used is of sufficient width to permit thorough tamping of bedding material under and around the pipes as specified in 125-8.1.6.

Do not disturb the installed pipe and its embedment when moving trench boxes. Move the trench box carefully to avoid excavated wall displacement or damage. As the trench box is moved, fill any voids left by the trench box and continuously place and compact the backfill material adjacent to and all along the side of the trench box walls to fill any voids created by the trench box.

120-5 Disposal of Surplus and Unsuitable Material.

120-5.1 Ownership of Excavated Materials: Dispose of surplus and excavated materials as shown in the Plans, or if the Plans do not indicate the method of disposal, then take ownership of the materials and dispose them outside the right-of-way.

120-5.2 Disposal of Muck on Side Slopes: As an exception to the provisions of 120-5.1, when approved by the Engineer, in rural undeveloped areas, the Contractor may place muck (A-8 material) on the slopes, or store it alongside the roadway, provided there is a clear distance of at least 6 feet between the roadway grading limits and the muck, and the Contractor dresses the muck to present a neat appearance. In addition, the Contractor may also dispose of this material by placing it on the slopes in developed areas where, in the opinion of the Engineer, this will result in an aesthetically pleasing appearance and will have no detrimental effect on the adjacent developments. Where the Engineer permits the disposal of muck or other unsuitable material inside the right-of-way limits, do not place such material in a manner which will impede the inflow or outfall of any channel or side ditches. The Engineer will determine the limits adjacent to channels within which such materials may be disposed.

120-5.3 Disposal of Paving Materials: Unless otherwise noted, take ownership of paving materials, such as paving brick, asphalt block, concrete slab, sidewalk, curb and gutter, etc., excavated in the removal of existing pavements, and dispose of them outside the right-of-way. If the materials are to remain the property of the Agency, place them in neat piles as directed. Existing limerock base that is removed may be incorporated in the stabilized portion of the subgrade. If the construction sequence will allow, incorporate all existing limerock base into the project as allowed by the Contract Documents.

120-5.4 Disposal Areas: Where the Contract Documents require disposal of excavated materials outside the right-of-way, and the disposal area is not indicated in the Contract Documents, furnish the disposal area without additional compensation.

Provide areas for disposal of removed paving materials out of sight of the project and at least 300 feet from the nearest roadway right-of-way line of any road. If the materials are buried, disregard the 300-foot limitation.

120-6 Materials for Embankment.

120-6.1 General Requirements for Embankment Materials: Construct embankments using suitable materials excavated from the roadway or delivered to the jobsite from authorized borrow pits. Embankment material shall not contain muck, stumps, roots, brush, vegetable matter, rubbish, reinforcement bar or other material that does not compact into a suitable and enduring roadbed.

Remove all waste material designated as undesirable. Use material in embankment construction in accordance with Plan details or as the Engineer directs.

Construct the embankment using maximum particle sizes as follows:

1. In top 12 inches: 3-1/2 inches (in any dimension).
2. 12 to 24 inches: 6 inches (in any dimension).
3. In the depth below 24 inches: not to exceed 12 inches (in any dimension) or the

compacted thickness of the layer being placed, whichever is less.

Spread all material so that the larger particles are separated from each other to minimize voids between them during compaction. Compact around these rocks in accordance with 120-9.2.

When and where approved by the Engineer, larger rocks (not to exceed 18 inches in any dimension) may be placed outside the one to two slope and at least 4 feet or more below the bottom of the base. Compact around these rocks to a firmness equal to that of the supporting soil. Where constructing embankments adjacent to bridge end bents or abutments, do not place rock larger than 3-½ inches in diameter within 3 feet of the location of any end-bent piling.

120-6.2 Use of Materials Excavated from the Roadway and Appurtenances: Assume responsibility for determining the suitability of excavated material for use on the project in accordance with the applicable Contract Documents. Consider the sequence of work and maintenance of traffic phasing in the determination of the availability of this material.

120-6.3 Authorization for Use of Borrow: Use borrow pit only when sufficient quantities of suitable material are not available from roadway and drainage excavation, to properly construct the embankment, subgrade, and shoulders, and to complete the backfilling of structures and pipe. Do not use borrow material until so ordered by the Engineer, and then only use material from approved borrow pits.

120-6.3.1 Haul Routes for Borrow Pits: Provide and maintain, at no expense to the Agency, all necessary roads for hauling the borrow material. Where borrow area haul roads or trails are used by others, do not cause such roads or trails to deteriorate in condition.

Arrange for the use of all non-public haul routes crossing the property of any railroad. Incur any expense for the use of such haul routes. Establish haul routes which will direct construction vehicles away from developed areas when feasible and keep noise from hauling operations to a minimum. Advise the Engineer in writing of all proposed haul routes.

120-6.3.2 Borrow Material for Shoulder Build-up: When so indicated in the Plans, furnish borrow material with a specific minimum bearing value, for building up of existing shoulders. Blend materials as necessary to achieve this specified minimum bearing value prior to placing the materials on the shoulders. Take samples of this borrow material at the pit or blended stockpile. Include all costs of providing a material with the required bearing value in the Contract unit price for borrow material.

120-6.4 Materials Used at Pipes, Culverts, etc.: Construct embankments over and around pipes, culverts, and bridge foundations with selected materials.

120-7 Embankment Construction.

120-7.1 General: Construct embankments in sections of not less than 300 feet in length or for the full length of the embankment. Do not construct another LOT over an untested LOT without the Engineer's approval in writing.

For construction of mainline pavement lanes, turn lanes, ramps, parking lots, concrete box culverts and retaining wall systems, a LOT is defined as a single lift of finished embankment not to exceed 500 feet.

For construction of shoulder-only areas, shared use paths, and sidewalks areas, a LOT is defined as a single lift of finished embankment not to exceed 2000 feet.

Isolated compaction operations will be considered as separate LOTs. For multiple phase construction, a LOT shall not extend beyond the limits of the phase.

120-7.2 Dry Fill Method:

120-7.2.1 General: Construct embankments to meet compaction requirements in 120-7 and in accordance with the acceptance program requirements in 120-10.

As far as practicable, distribute traffic over the work during the construction of embankments to cover the maximum area of the surface of each layer.

Construct embankment in the dry whenever normal dewatering equipment and methods can accomplish the needed dewatering.

120-7.2.1.1 Maximum Compacted Lift Thickness Requirements: Construct the embankment in successive layers with lifts up to a maximum listed in the table below based on the embankment material classification group.

| Table 120-1 | | | |
|-------------|---------------------------------------|---------------------------------------|--|
| Group | AASHTO Soil Class | Maximum Lift Thickness | Thick Lift Control Test Section Requirements |
| 1 | A-3 | 12 inches | Not Needed |
| | A-2-4 (No. 200 Sieve ≤ 15%) | | |
| 2 | A-1 | 6 inches without Control Test Section | Maximum of 12 inches |
| | A-2-4 (No. 200 Sieve > 15%) | | |
| | A-2-5, A-2-6, A-2-7, A-4, A-5, A-6 | | |
| | A-7 (Liquid Limit < 50) | | |

120-7.2.1.2 Thick Lift Requirements: For embankment materials classified as Group 2 in Table 120-1 above, the option to perform thick lift construction in successive layers of not more than 12 inches compacted thickness may be used after meeting the following requirements:

1. Demonstrate the possession and control of compacting equipment sufficient to achieve density required by 120-10.5 for the full depth of a thicker lift.
2. Construct a test section of the length of one full LOT of not less than 500 feet.
3. Perform five tests at random locations within the test section.
 - a. All five tests must meet the density required by 120-10.5.
 - b. Identify the test section with the compaction effort and soil classification in the project’s records.

4. Obtain Engineer’s approval for the compaction effort after completing a successful test section.

In case of a change in compaction effort or soil classification, failing density test, construct a new test section. The Contractor may elect to place material in 6 inches compacted thickness at any time. Construct all layers approximately parallel to the centerline profile of the road.

The Engineer reserves the right to terminate the Contractor’s use of thick lift construction. Whenever the Engineer determines that the Contractor is not achieving satisfactory results, revert to the 6-inch compacted lifts.

120-7.2.1.3 Equipment and Methods: Provide normal dewatering equipment including, but not limited to, surface pumps, sump pumps and trenching/digging machinery. Provide normal dewatering methods including, but not limited to, constructing shallow surface drainage trenches/ditches, using sand blankets, sumps, and siphons.

When normal dewatering does not adequately remove the water, the Engineer may require the embankment material to be placed in the water or in low swampy ground in accordance with 120-9.2.4.

120-7.2.2 Placing in Unstable Areas: When depositing the material in water, or in low swampy ground that will not support the weight of hauling equipment, construct the embankment by dumping successive loads in a uniformly distributed layer of a thickness not greater than necessary to support the hauling equipment while placing subsequent layers. Once sufficient material has been placed so that the hauling equipment can be supported, construct the remaining portion of the embankment in layers in accordance with the applicable provisions of 120-9.2.3 and 120-9.2.6.

120-7.2.3 Placing on Steep Slopes: When constructing an embankment on a hillside sloping more than 20 degrees from the horizontal, before starting the fill, deeply plow or cut into steps the surface of the original ground on which the embankment is to be placed.

120-7.2.4 Placing Outside Standard Minimum Slope: The standard minimum slope is defined as the plane described by a one (vertical) to two (horizontal) slope downward from the roadway shoulder point or the gutter line, in accordance with Standard Plans, Index 120-001 and 120-002. Where material that is unsuitable for normal embankment construction is to be used in the embankment outside the standard minimum slope, place such material in layers of not more than 18 inches in thickness, measured loose. The Contractor may also place material, which is suitable for normal embankment, outside such standard minimum slope in 18-inch layers. Maintain a constant thickness for suitable material placed within and outside the standard minimum slope, unless placing in a separate operation.

120-7.3 Hydraulic Method:

120-7.3.1 Method of Placing: When the hydraulic method is used, as far as practicable, place all dredged material in its final position in the embankment by such method. Place and compact any dredged material that is reworked or moved and placed in its final position by any other method, as specified in 120-9.2. Baffles or any other form of construction may be used if the slopes of the embankments are not steeper than indicated in the Plans. Remove all timber used for temporary bulkheads or baffles from the embankment and fill and thoroughly compact all voids. When placing fill on submerged land, construct dikes prior to beginning of dredging, and maintain the dikes throughout the dredging operation.

120-7.3.2 Excess Material: Do not use excess material placed outside the prescribed slopes, below the normal high-water level, to raise the fill. Remove only the portion of this material required for dressing the slopes.

120-7.3.3 Protection of Openings in Embankment: Leave openings in the embankments at the bridge sites. Remove any material which invades these openings or existing channels without additional compensation to provide the same depth of channel as existed before the construction of the embankment. Do not excavate or dredge any material within 200 feet of the toe of the proposed embankment.

120-8 Backfilling Around Structures and Pipe.

120-8.1 Requirements for Structures and Pipes:

120-8-1.1 General: Backfill around structures and pipe in the dry whenever normal dewatering equipment and methods can accomplish the needed dewatering. A LOT is defined as one lift of backfill material placement, not to exceed 500 feet in length or a single run of pipe connecting two successive structures, whichever is less. Backfill for structures and pipe compacted in one operation will be considered as one LOT within the cover zone. Backfill around structures compacted separately from the pipe will be considered as separate LOTs. Backfill on each side of the pipe for the first lift will be considered a separate LOT. Backfill on opposite sides of the pipe for the remaining lifts will be considered separate LOTs, unless the same compaction effort is applied. Same compaction effort is defined as the same type of equipment (make and model) making the same number of passes on both sides of the pipe. For multiple phases of backfill, a LOT shall not extend beyond the limits of the phase.

When placing backfill within a trench box, each lift of backfill is considered a LOT. Placement of backfill within a trench box limits will be considered a complete operation before trench box is moved for next backfill operation. When the trench box is moved for next backfill operation this will start new LOTs for each lift. Follow the density testing frequency in 125-9.3.1.

129-8.1.2 Equipment and Methods: Provide normal dewatering equipment including, but not limited to, surface pumps, sump pumps, wellpoints and header pipe and trenching/digging machinery. Provide normal dewatering methods including, but not limited to, constructing shallow surface drainage trenches/ditches, using sand blankets, perforated pipe drains, sumps, and siphons.

120-8.1.3 Backfill Materials: Backfill to the original ground surface or subgrade surface of openings made for structures, with a sufficient allowance for settlement. The Engineer may require that the material used for this backfill be obtained from a source entirely apart from the structure.

Do not allow heavy construction equipment to cross over culvert or storm sewer pipes until placing and compacting backfill material to the finished earthwork grade or to an elevation at least 4 feet above the crown of the pipe.

120-8.1.4 Use of A-7 Material: In the backfilling of trenches, A-7 material may be used from a point 12 inches above the top of the pipe up to the elevation shown in the Standard Plans as the elevation for undercutting of A-7 material.

120-8.1.5 Time of Placing Backfill: Do not place backfill against any masonry or concrete abutment, wingwall, or culvert until the Engineer has given permission to do so, and in no case until the masonry or concrete has been in place seven days or until the specified 28-day compressive strength occurs.

120-8.1.6 Placement and Compaction: Place the material in horizontal layers not exceeding 6 inches compacted thickness in depth above water level, behind abutments, wingwalls and end bents or end rest piers, under the haunches of the pipes, around box culverts, and all structures including pipe culverts. When the backfill material is deposited in water, compact as specified in 125-8.2.5 and 125-8.3.4.

120-8.1.6.1 Thick Lift Requirements: The Contractor may elect to place material in thicker lifts of no more than 12 inches compacted thickness above the Soil Envelope if the embankment material is classified as Group 1 in the table below. If the embankment material is classified as Group 2 in the table below and the Contractor chooses to place material in thicker lifts of no more than 12 inches compacted thickness above the soil envelope, then the Contractor must demonstrate with a successful test section that density can be achieved. Thick lift around structures is only allowed above the soil envelope of the connecting pipe. Notify the Engineer in writing prior to beginning construction of a test section. Construct a test section of the length of one LOT. Perform five quality control tests at random locations within the test section. All five tests must meet the density required by 120-9.2. Identify the test section with the compaction effort and soil classification in the project's records. In case of a change in compaction effort or soil classification, construct a new test section. When a test fails the requirements of 120-9.2, construct a new test section. The Contractor may elect to place material in 6 inches compacted thickness at any time.

| Table 120-2 | | | | | |
|-------------|------------------------------------|---------------------------------------|---------------------|--|---------------------|
| Group | AASHTO Soil Class | Maximum Lift Thickness | | Thick Lift Control Test Section Requirements | |
| | | Within Cover Zone | Above Soil Envelope | Within Cover Zone | Above Soil Envelope |
| 1 | A-3 | 6 inches | 12 inches | N/A | Not Needed |
| | A-2-4 (No. 200 Sieve ≤ 15%) | | | | |
| 2 | A-1 | 6 inches without control test section | N/A | Maximum of 12 inches per 120-7.2.1.2 | |
| | A-2-4 (No. 200 Sieve > 15%) | | | | |
| | A-2-5, A-2-6, A-2-7, A-4, A-5, A-6 | | | | |
| | A-7 (Liquid Limit < 50) | | | | |

120-8.2 Additional Requirements for Structures Other than Pipe:

120-8.2.1 Density: Where the backfill material is deposited in water, obtain a 12 inch layer of comparatively dry material, thoroughly compacted by tamping, before the Engineer verifies layer and density requirements. Meet the requirements of the density Acceptance Criteria.

120-8.2.2 Box Culverts: For box culverts over which pavement is to be constructed, compact around the structure to an elevation not less than 12 inches above the top of the structure, using rapid-striking mechanical tampers.

120-8.2.3 Other Limited Areas: Compact in other limited areas using mechanical tampers or approved hand tampers, until the cover over the structure is at least 12 inches thick. When hand tampers are used, deposit the materials in layers not more than 4 inches thick using hand tampers suitable for this purpose with a face area of not more than 100 in². Take special precautions to prevent any wedging action against the masonry, and step or terrace the slope bounding the excavation for abutments and wingwalls if required by the Engineer.

120-8.2.4 Culverts and Piers: Backfill around culverts and piers on both sides simultaneously to approximately the same elevation.

120-8.2.5 Compaction Under Wet Conditions: Where wet conditions do not permit the use of mechanical tampers, compact using hand tampers. Use only A-3 material for the hand tamped portions of the backfill. When the backfill has reached an elevation and condition such as to make the use of the mechanical tampers practical, perform mechanical tamping in such manner and to such extent as to transfer the compaction force into the sections previously tamped by hand.

120-8.3 Additional Requirements for Pipe Greater than 12 Inches Inside Diameter:

120-8.3.1 General: Trenches for pipe may have up to four zones that must be backfilled.

Lowest Zone: The lowest zone is backfilled for deep undercuts up to within 4 inches of the bottom of the pipe.

Bedding Zone: The zone above the Lowest Zone is the Bedding Zone. Usually, it will be the backfill which is the 4 inches of soil below the bottom of the pipe. When rock or other hard material has been removed to place the pipe, the Bedding Zone will be the 12 inches of soil below the bottom of the pipe.

Cover Zone: The next zone is the backfill that is placed after the pipe has been laid and will be called the Cover Zone. This zone extends to 12 inches above the top of the pipe. The Cover Zone and the Bedding Zone are considered the Soil Envelope for the pipe.

Top Zone: The Top Zone extends from 12 inches above the top of the pipe to the base or final grade.

120-8.3.2 Material:

120-8.3.2.1 Lowest Zone: Backfill areas undercut below the Bedding Zone of a pipe with coarse sand, or other suitable granular material, obtained from the grading operations on the project, or a commercial material if no suitable material is available.

120-8.3.2.2 Soil Envelope: In both the Bedding Zone and the Cover Zone of the pipe, backfill with materials classified as A-1, A-2, or A-3. Material classified as A-4 may be used if the pipe is concrete pipe.

120-8.3.2.3 Top Zone: Backfill the area of the trench above the soil envelope of the pipe with materials allowed on Standard Plans, Index 120-001.

120-8.3.3 Compaction:

120-8.3.3.1 Lowest Zone: Compact the soil in the Lowest Zone to approximately match the density of the soil in which the trench was cut.

120-8.3.3.2 Bedding Zone: If the trench was not undercut below the bottom of the pipe, loosen the soil in the bottom of the trench immediately below the approximate middle third of the outside diameter of the pipe.

If the trench was undercut, place the bedding material and leave it in a loose condition below the middle third of the outside diameter of the pipe. Compact the outer portions to meet the density requirements of the Acceptance Criteria. Place the material in lifts no greater than 6 inches (compacted thickness).

120-8.3.3.3 Cover Zone: Place the material in 6 inches layers (compacted thickness), evenly deposited on both sides of the pipe, and compact with mechanical tampers suitable for this purpose. Hand tamp material below the pipe haunch that cannot be reached by mechanical tampers. Meet the requirements of the density Acceptance Criteria.

120-8.3.3.4 Top Zone: Place the material in layers not to exceed 12 inches in compacted thickness. Meet the requirements of the density acceptance criteria.

120-8.3.4 Backfill Under Wet Conditions: Where wet conditions are such that dewatering by normal pumping methods would not be effective, the procedure outlined below may be used when specifically authorized by the Engineer in writing.

Granular material may be used below the elevation at which mechanical tampers would be effective, but only material classified as A-3. Place and compact the material using timbers or hand tampers until the backfill reaches an elevation such that its moisture content will permit the use of mechanical tampers. When the backfill has reached such elevation, use normally acceptable backfill material. Compact the material using mechanical tampers in such manner and to such extent as to transfer the compacting force into the material previously tamped by hand.

The Engineer may permit the use of coarse aggregate below the elevation at which mechanical tampers would be effective. Use coarse aggregate from approved sources for Aggregate Size Number 89, 8, 78, 7, 68, 6, or 57. Place the coarse aggregate such that it will be stable and firm. Fully wrap the aggregate with an appropriate geosynthetic filter fabric, as specified by the Engineer. Do not place coarse aggregate within 4 feet of the ends of the trench or ditch. Use normally accepted backfill material at the ends.

120-9 Compaction Requirements.

120-9.1 Moisture Content: Compact the materials at a moisture content such that the specified density can be attained. If necessary, add water to the material, or lower the moisture content by manipulating the material or allowing it to dry, as is appropriate, to attain the specified density.

120-9.2 Compaction of Embankments:

120-9.2.1 Earthwork Category 1 and 2 Density Requirements: The Engineer will accept a minimum density of 95% of the maximum density as determined by FM 1-T099 for all earthwork items requiring densities.

120-9.2.2 Earthwork Category 3 Density Requirements: The Engineer will accept a minimum of 100% of the maximum density as determined by FM 1-T099 for all densities required under category 3. Except for embankments constructed by the hydraulic method as specified in 120-7.3, and for the material placed outside the standard minimum slope as specified in 120-7.2.4, and for other areas specifically excluded herein, compact each layer of the material used in the formation of embankments to the required density stated above. Uniformly compact each layer using equipment that will achieve the required density, and as compaction operations progress, shape and manipulate each layer as necessary to ensure uniform density throughout the embankment.

120-9.2.3 Compaction Over Unstable Foundations: Where the embankment material is deposited in water or on low swampy ground, and in a layer thicker than 12 inches (as provided in 120-7.2.2), compact the top 6 inches (compacted thickness) of such layer to the density as specified in 120-10.5.

120-9.2.4 Compaction Where Plastic Material Has Been Removed: Where unsuitable material is removed and the remaining surface is of soil classifications A-4, A-5, A-6, or A-7 per AASHTO M145, as determined by the Engineer, compact the surface of the excavated area by rolling with a sheepsfoot roller exerting a compression of at least 250 psi on the tamper feet, for the full width of the roadbed (subgrade and shoulders). Perform rolling before beginning any backfill and continue until the roller feet do not penetrate the surface more than 1 inch. Do not perform such rolling where the remaining surface is below the normal water table and covered with water. Vary the procedure and equipment required for this operation at the discretion of the Engineer.

120-9.2.5 Compaction for Pipes, Culverts, etc.: Compact the backfill of trenches to the densities specified for embankment or subgrade, as applicable, and in accordance with the requirements of this section.

Thoroughly compact embankments over and around pipes, culverts, and bridges in a manner which will not place undue stress on the structures, and in accordance with the requirements of this section.

120-9.2.6 Compaction of Grassed Shoulder Areas: For the upper 6-inch layer of all shoulders which are to be grassed, since no specific density is required, compact only to the extent directed.

120-9.2.7 Compaction of Grassed Embankment Areas: For the outer layer of all embankments where plant growth will be established, do not compact. Leave this layer in a loose condition to a minimum depth of 6 inches for the subsequent seeding or planting operations.

120-9.3 Compaction of Subgrade: If the plans do not provide for stabilizing, compact the subgrade in both cuts and fills to the density specified in 120-10.5. For cut areas, determine Standard Proctor Maximum Density in accordance with FM 1-T099 at a frequency of one per mile or when there is a change in soil type, whichever occurs first. For undisturbed soils, do not apply density requirements where constructing paved shoulders is 5 feet or less in width.

Where trenches for widening strips are not of sufficient width to permit the use of standard compaction equipment, perform compaction using vibratory rollers, trench rollers, or other type compaction equipment approved by the Engineer.

Maintain the required density until the base or pavement is placed on the subgrade.

120-10 Acceptance Program.

120-10.1 Density over 105%: When a computed dry density results in a value greater than 105% of the applicable Proctor maximum dry density, the Engineer will perform a second density test within 5 feet. If the second density results in a value greater than 105%, investigate the compaction methods, examine the applicable Maximum Density and material description. If necessary, the Engineer will test an additional sample for acceptance in accordance with FM 1-T099.

120-10.2 Maximum Density Determination: The Engineer will determine the maximum density and optimum moisture content by sampling and testing the material in accordance with the specified test method listed in 120-10.3.

120-10.3 Density Testing Requirements: Compliance with the requirements of 120-10.5 will be determined in accordance FM 1-T 238. The in-place moisture content will be determined for each density in accordance with FM 5-507 (Determination of Moisture Content by Means of a Calcium Carbide Gas Pressure Moisture Tester), or ASTM D 4643 (Laboratory Determination of Moisture Content of Granular Soils by Use of a Microwave Oven).

120-10.4 Soil Classification and Organic Content: The Engineer will perform soil classification tests in accordance with AASHTO T88, T89, T90, and FM 1-T267. The Engineer will classify soils in accordance with AASHTO M-145 in order to determine compliance with embankment utilization requirements. The Engineer will verify the organic content test with the criteria specified in Standard Plans, Index 120-001.

120-10.5 Acceptance Criteria: The Engineer will accept a minimum density in accordance with 120-9.2 with the following exceptions:

- 1) embankment constructed by the hydraulic method as specified in 120-7.3;
- 2) material placed outside the standard minimum slope as specified in 120-7.2.4;
- 3) other areas specifically excluded herein.

120-10.6 Frequency: The Engineer will conduct sampling and testing at a minimum frequency listed in the table below.

| Test Name | Frequency |
|---|----------------------------|
| Proctor Maximum Density | One per soil type |
| Density | 1 per LOT (Alternate Lift) |
| Soil Classification and Organic Content | One per Maximum Density |

120-11 Maintenance and Protection of Work.

While construction is in progress, always maintain adequate drainage for the roadbed. Maintain a shoulder at least 3 feet wide adjacent to all pavement or base construction to provide support for the edges.

Maintain and protect all earthwork construction throughout the life of the Contract and take all reasonable precautions to prevent loss of material from the roadway due to the action of wind or water. Repair any slides, washouts, settlement, subsidence, or other mishap which may occur prior to final acceptance of the work. Maintain all channels excavated as a part of the Contract work against natural shoaling or other encroachments to the lines, grades, and cross-sections shown in the plans, until final acceptance of the project.

120-12 Construction.

120-12.1 Construction Tolerances: Shape the surface of the earthwork to conform to the lines, grades, and cross-sections shown in the plans. In final shaping of the surface of earthwork, maintain a tolerance of 0.3 foot above or below the plan cross-section with the following exceptions:

1. Shape the surface of shoulders to within 0.1 foot of the plan cross-section.
2. Shape the earthwork to match adjacent pavement, curb, sidewalk, structures, etc.
3. Shape the bottom of ditches so that the ditch impounds no water.
4. When the work does not include construction of base or pavement, shape the entire roadbed (shoulder point to shoulder point) to within 0.1 foot above or below the plan cross-section.

Ensure that the shoulder lines do not vary horizontally more than 0.3 foot from the true lines shown in the plans.

120-12.2 Operations Adjacent to Pavement: Carefully dress areas adjacent to pavement areas to avoid damage to such pavement. Complete grassing of shoulder areas prior to placing the final wearing course. Do not manipulate any embankment material on a pavement surface.

When shoulder dressing is underway adjacent to a pavement lane being used to maintain traffic, exercise extreme care to avoid interference with the safe movement of traffic.

120-13 Method of Measurement.

120-13.1 Excavation: Excavation will be paid for by volume, in cubic yards, calculated by the method of average end areas, unless the Engineer determines that another method of calculation will provide a more accurate result. The material will be measured in its original position by field survey or by photogrammetric means as designated by the Engineer. Measurement for payment will include the excavation of unsuitable material, lateral ditch excavation, channel excavation, and excavation for structures and pipe. Payment will not be made for excavation or embankment beyond the limits shown in the plans or authorized by the Engineer.

120-13.2 Embankment: Measurement will be made on a loose volume basis, as measured in trucks or other hauling equipment at the point of dumping on the road. Payment will not be made for embankment beyond the limits shown in the plans or authorized by the Engineer.

120-14 Basis of Payment.

120-14.1 General: Prices and payments for the work items included in this Section will be full compensation for all work described herein, including excavating, dredging, hauling, placing, and compacting; dressing the surface of the earthwork; and maintaining and protecting the complete earthwork.

120-14.2 Excavation: The total quantity of all excavation specified under this Section will be paid for at the Contract unit price for Excavation. No payment will be made for the excavation of any materials which are used for purposes other than those shown in the plans or designated by the Engineer. No payment will be made for materials excavated outside the lines and grades given by the Engineer, unless specifically authorized by the Engineer.

120-14.3 Embankment: The total quantity of embankment specified in this Section will be paid for at the Contract unit price for embankment. No payment will be made for materials which are used for purposes other than those shown in the plans or designated by the Engineer. No payment will be made for materials placed outside the lines and grades given by the Engineer.

**334 ASPHALT CONCRETE FOR LAP (CLASS - D).
(REV 6-18-21) (FA 7-2-21) (1-22)**

SECTION 334 is deleted and the following substituted:

**SECTION 334
ASPHALT CONCRETE FOR LAP (OFF-SYSTEM)**

334-1 Description.

334-1.1 General: Construct an Asphalt Concrete 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 an asphalt concrete mix that meets the requirements of this specification.

334-1.2 Asphalt Work Mix Categories: Construction of Asphalt Concrete Pavement will fall into one of the following work categories:

334-1.2.1 Asphalt Work Category 1: Includes the construction of bike paths and miscellaneous asphalt.

334-1.2.2 Asphalt Work Category 2: Includes the construction of new turn lanes, paved shoulders and other non-mainline pavement locations.

334-1.2.3 Asphalt Work Category 3: Includes the construction of new mainline pavement lanes, milling and resurfacing.

334-1.3 Mix Types: Use the appropriate mix type as shown in Table 334-1.

| Table 334-1 Mix Types | | | |
|--------------------------|--|---------------|------------------|
| Asphalt Work Category | Mix Types | Traffic Level | ESALs (millions) |
| 1 | Type SP-9.5 ⁽¹⁾ | A | <0.3 |
| 2 | Structural Mixes: Types SP-9.5 or SP-12.5 ⁽¹⁾ Friction Mixes: Types FC-9.5 or FC-12.5 ⁽¹⁾ | B | 0.3 to <3 |
| 3 | Structural Mixes: Types SP-9.5 or SP-12.5 Friction Mixes: Types FC-9.5 or FC-12.5 | C | ≥3 |

(1) Equivalent mixes may be approved as determined by the Engineer. For example, Marshall S-III mixture type is equivalent to Superpave SP-9.5, Marshall S-I is equivalent to Superpave SP-12.5, and Marshall FC-3 is equivalent to Superpave FC-9.5.

For a Traffic Level A mixture, meet the mix design criteria for a Traffic Level B mixture and for a Traffic Level D mixture meet the mix design criteria for a Traffic Level E mixture.

At no additional cost to the Department, for a Type SP mix the following Traffic Level substitutions are allowed:

- Traffic Level E can be substituted for Traffic Level D.
- Traffic Level D or E can be substituted for Traffic Level C.
- Traffic Level C can be substituted for Traffic Level B.
- Traffic Level B or C can be substituted for Traffic Level A.

334-1.4 Gradation Classification: Asphalt concrete mixtures are classified as fine and are defined in Standard Specification 334-3.2.2.

The equivalent AASHTO nominal maximum aggregate size Superpave mixes are as follows:

- Type SP-9.5, FC-9.5 9.5 mm
- Type SP-12.5, FC-12.5 12.5 mm

334-1.5 Thickness: The total pavement thickness of the asphalt concrete pavement layers will be the plan thickness as shown in the Contract Documents. Before paving, propose a thickness for each individual layer meeting the requirements of this specification, which when combined with other layers (as applicable) will equal the plan thickness. For construction purposes, the plan thickness and individual layer thickness will be converted to spread rate using the following equation:

$$\text{Spread rate (lbs/yd}^2\text{)} = t \times G_{\text{mm}} \times 43.3$$

- where: t = Thickness (in.) (Plan thickness or individual layer thickness)
- G_{mm} = 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 asphalt concrete mixtures are as follows:

- Type SP-9.5, FC-9.5 1 to 1-1/2 inches
- Type SP-12.5 1-1/2 to 3 inches
- Type FC-12.5 1-1/2 to 2-1/2 inches

334-1.5.2 Additional Requirements: The following requirements also apply to asphalt Concrete mixtures:

1. When construction includes the paving of adjacent shoulders (less than or equal to 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 and maximum allowable thicknesses will be as specified below, unless called for differently in the Contract Documents.

- Type SP-9.5 3/8 to 2 inches
- Type SP-12.5 1/2 to 3 inches
- Type SP-19.0 1-1/2 to 4 inches

3. Variable thickness overbuild layers constructed using a Type SP-9.5 or SP-12.5 mixtures may be tapered to zero thickness provided the contract documents require a minimum of 1-1/2 inches of dense-graded mix placed over the variable thickness overbuild layer.

334-1.6 Weight of Mixture: The weight of the mixture shall be determined as provided in 320-3.2 of the Florida Department of Transportation (FDOT) specifications.

334-2 Materials.

334-2.1 Superpave Asphalt Binder: Unless specified elsewhere in the Contract Documents, use an asphalt binder grade as determined from Table 334-2. If the Contract calls for an alternative binder, meet the requirements of FDOT Specification 916.

334-2.2 Aggregate: Use aggregate capable of producing a quality pavement. 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.

For Type FC mixes, use an aggregate blend that consists of approved friction course aggregates that consists of crushed granite, crushed granitic gneiss, crushed limestone, crushed shell rock, or a combination of the above. As an exception, mixes that contain a minimum of 60% of approved friction course aggregates of crushed granite and/or crushed gneiss may either contain: up to 40% fine aggregate from other sources of aggregate not approved for friction courses or a combination of up to 20% RAP and the remaining fine aggregate from other sources of aggregate not approved for friction courses. Mixtures utilizing High Polymer (HP) binder are not allowed to contain RAP.

A list of aggregates approved for use in friction courses may be available on the FDOT’s State Materials Office website. The URL for obtaining this information, if available, is: <https://mac.fdot.gov/>.

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 subject to the following requirements:

1. Limit the amount of RAP material used in the mix to a maximum of 50% by weight of total aggregate.
2. Assume full responsibility for the design, production and construction of asphalt mixes which incorporate RAP as a component material.
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% by weight of total mix. As an exception, when using fractionated RAP, the minimum average asphalt binder content for the coarse portion of the RAP shall be 2.5% by weight of the coarse portion of the RAP. The coarse portion of the RAP shall be the portion of the RAP retained on the No. 4 sieve. The Engineer may sample the stockpile to verify that this requirement is met.
4. When using RAP as a component material, prevent any oversized RAP from being incorporated into the completed mixture by the use of a grizzly or grid over the RAP bin; in-line roller or impact crusher; screen; or other suitable means. If oversized RAP material appears in the completed recycled 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 (G_{sb}) 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

| Table 334-2 Asphalt Binder Grade for Mixes Containing RAP | |
|--|----------------------|
| Percent RAP | Asphalt Binder Grade |
| 0 - 15 | PG 67-22 |
| 16 - 30 | PG 58-22 |
| ≥ 30 | PG 52-28 |

334-3 Composition of Mixture.

334-3.1 General: Compose the asphalt mixture using a combination of aggregate (coarse, fine or mixtures thereof), 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 R 35-17, 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. As an exception to these requirements, use a currently approved FDOT Mix Design.

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/her discretion, the Engineer may no longer allow the use of the mix design.

334-3.2.2 Mixture Gradation Requirements: Combine the coarse and fine aggregate 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 M 323-17, Table 4. 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 M 323-17, Table 4, as well as the Primary Control Sieve (PCS) Control Point from AASHTO M 323-17, Table 5. Fine mixes are defined as having a gradation that passes above the primary control sieve control point and above the maximum density line for all sieve sizes smaller than the primary control sieve and larger than the No. 30 sieve. Use only fine mixes.

334-3.2.3 Gyrotory Compaction: Compact the design mixture in accordance with AASHTO T 312-19, with the following exception: use the number of gyrations at N_{design} as defined in Standard Specification Table 334-4. Measure the inside diameter of gyrotory molds in accordance with AASHTO T 312-19.

334-3.2.4 Design Criteria: Meet the requirements for nominal maximum aggregate size as defined in AASHTO M 323-17, as well as for relative density, VMA, VFA, and dust-to-binder ratio as specified in AASHTO M 323-17, Table 7. N_{initial} and N_{maximum} requirements are not applicable.

334-3.2.5 Moisture Susceptibility:

1. For all traffic levels, use a liquid anti-strip agent listed on the APL at the specified dosage rate. Hydrated lime may be used instead of the liquid anti-strip agent.

2. Provide a mixture having a retained tensile strength ratio of at least 0.80 and a minimum tensile strength (unconditioned) of 100 psi in accordance with FM 1-T 283.

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_{design}).

2. The source and description of the materials to be used.

3. The Department 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_{sb}) value for each individual aggregate and RAP component, as identified in the Department’s aggregate control program.

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%.

8. A target temperature for the mixture at the plant (mixing temperature) and a target temperature for the mixture at the roadway (compaction temperature). Do not exceed a target temperature of 340°F for High Polymer asphalt binders, 330°F for PG 76-22 asphalt binders, and 315°F for unmodified asphalt binders.

9. Provide the physical properties at the optimum asphalt content, which must conform to all specified requirements.

10. The name of the Construction Training Qualification Program (CTQP) mix designer.

11. The ignition oven and maximum specific gravity (G_{mm}) calibration factors.

12. The warm mix technology, if used.

334-4 Producer Process Control (PC).

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 process 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 Paving Operations:

334-5.2.1 General: Place the mixture only when the surface upon which it is to be placed has been previously prepared, is intact, firm, dry, clean, and the tack or prime coat, with acceptable spread rate, is properly broken or cured. Do not place friction course until the adjacent shoulder area has been dressed and grassed.

334-5.2.2 Ambient Air Temperature: Place the mixture only when the air temperature in the shade and away from artificial heat meets the requirements of Table 334-3. The minimum ambient temperature requirement may be reduced by 5°F when using warm mix technology, if mutually agreed to by both the Engineer and the Contractor.

| Table 334-3 Ambient Air Temperature Requirements for Paving | |
|--|--------------------------|
| Layer Thickness or Asphalt Binder Type | Minimum Temperature (°F) |
| ≤ 1 inch | 50 |
| Any mixture > 1 inch containing a PG asphalt binder with a high temperature designation ≥ 76°C | 45 |
| Any mixture > 1 inch containing a PG asphalt binder with a high temperature designation < 76°C | 40 |
| FC-5 ⁽¹⁾ | 65 |

⁽¹⁾ As an exception, place the mixture at temperatures no lower than 60°F, only when approved by the Engineer based on the Contractor's demonstrated ability to achieve a satisfactory surface texture and appearance of the finished surface. For mixtures containing PG 76-22 binder, the minimum ambient temperature may be further reduced to 55°F when using warm mix technology, if agreed to by both the Engineer and the Contractor.

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 plus or minus 30°F from the target temperature as shown on the mix design. Reject all loads outside of this range. Reject any load or portion of a load of asphalt mix at the plant or at the roadway with a temperature outside of its respective master range shown in Table 334-4. Notify the Engineer of the rejection immediately.

| Table 334-4 | |
|--|---|
| Mix Temperature Master Range Tolerance | |
| Location | Acceptable Temperature Tolerance |
| Plant | Mixing Temperature ± 30 F |
| Roadway (mix in truck) | Compaction Temperature $\pm 30^\circ$ F |

334-5.4 Transportation of the Mixture: Transport the mixture in trucks of tight construction, which prevents the loss of material and the excessive loss of heat and 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 a release agent that will contaminate, degrade, or alter the characteristics of the asphalt mix or is hazardous or detrimental to the environment. Petroleum derivatives (such as diesel fuel), solvents, and any product that dissolves asphalt are prohibited. Provide each truck with a tarpaulin or other waterproof cover mounted in such a manner that it can cover the entire load when required. When in place, overlap the waterproof cover on all sides so that it can be tied down. Cover each load during cool and cloudy weather and at any time it appears rain is likely during transit with a tarpaulin or waterproof cover. Cover and tie down all loads of friction course mixtures.

334-5.5 Surface Preparation:

334-5.5.1 Cleaning: Before placing the mixture, clean the surface of the base or underlying pavement 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: As shown in the plans, 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: Use a rate of application as defined in Table 334-5. Control application rate within plus or minus 0.01 gallon per square yard of the target application rate. The target application rate may be adjusted by the Engineer to meet specific field conditions. Determine the rate of application as needed to control the operation. When using PG 52-28, multiply the target rate of application by 0.6.

| Table 334-5 | | |
|-----------------------------|-----------------------------|---|
| Tack Coat Application Rates | | |
| Asphalt Mixture Type | Underlying Pavement Surface | Target Tack Rate (gal/yd ²) |
| | | |

| | | |
|--|---|--------------|
| Base Course, Structural Course, Dense Graded Friction Course | Newly Constructed Asphalt Layers | 0.05 minimum |
| | Milled Surface or Oxidized and Cracked Pavement | 0.07 |
| | Concrete Pavement | 0.09 |
| Open Graded Friction Course | Newly Constructed Asphalt Layers | 0.06 |
| | Milled Surface | 0.08 |

When using a meter to control the tack or prime application rate, manually measure the volume in the tank at the beginning and end of the application area for a specific target application rate. Perform this operation at a minimum frequency of once per production shift. Resolve any differences between the manually measured method and the meter to ensure the target application rate is met in accordance with this Section. Adjust the application rate if the manually measured application rate is greater than plus or minus 0.01 gallons per square yard when compared to the target application rate.

334-5.5.5 Curing and Time of Application: Apply tack coat sufficiently in advance of placing bituminous mix to permit drying, but do not apply tack coat so far in advance that it might lose its adhesiveness as a result of being covered with dust or other foreign material.

334-5.5.6 Protection: Keep the tack coat surface free from traffic until the subsequent layer of bituminous hot mix has been laid.

334-6 Placing Mixture:

334-6.1 Alignment of Edges: Place all asphalt mixtures by the stringline method to obtain an accurate, uniform alignment of the pavement edge. As an exception, pavement edges adjacent to curb and gutter or other true edges do not require a stringline. Control the unsupported pavement edge to ensure that it will not deviate from the stringline more than plus or minus 1.5 inches.

334-6.2 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, standing 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.

334-6.3 Checking Depth of Layer: Check the depth of each layer at frequent intervals to ensure a uniform spread rate that will meet the requirements of the Contract.

334-6.4 Hand Work: In limited areas where the use of the paver is impossible or impracticable, the Contractor may place the mixture by hand.

334-6.5 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.

334-6.6 Thickness Control: Ensure the spread rate is within 5% of the target spread rate, as indicated in the Contract. When determining the spread rate, use, at a minimum, an average of five truckloads of mix and at a maximum, an average of 10 truckloads of mix. When the average spread rate is beyond plus or minus 5% of the target spread rate, monitor the thickness of the pavement layer closely and adjust the construction operations.

When the average spread rate for two consecutive days is beyond plus or minus 5% of the target spread, stop the construction operation at any time until the issue is resolved.

The Engineer will allow a maximum deficiency from the specified spread rate for the total thickness as follows:

1. For pavement of a specified thickness of 2-1/2 inches or more: 50 pounds per square yard.
2. For pavement of a specified thickness of less than 2-1/2 inches: 25 pounds per square yard.

Address the unacceptable pavement in accordance with 334-5.10.4, unless an alternative approach is agreed upon by the Engineer.

334-6.7 Leveling Courses:

334-6.7.1 Patching Depressions: Before spreading any leveling course, fill all depressions in the existing surface as shown in the plans.

334-6.7.2 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.

334-6.7.3 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 pounds per square yard or more than 75 pounds per square yard. 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.

334-6.8 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, select equipment, sequence, and coverages of rolling to meet the specified density requirement. 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.

No vibratory compaction in the vertical direction will be allowed for layers one inch or less in thickness or, if the Engineer or Contract Documents limit compaction to the static mode only. Compact these layers in the static mode only. Other non-vertical vibratory modes of compaction will be allowed, if approved by the Engineer; however, no additional compensation, cost or time, will be made.

When density testing for acceptance is not required, 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.

334-6.9 Joints.

334-6.9.1 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. The Engineer may waive straightedge requirements for transverse joints at the beginning and end of the project, at the beginning and end of bridge structures, at manholes, and at utility structures if the deficiencies are caused by factors beyond the control of the Contractor such as no milling requirement, as determined by the Engineer. When smoothness requirements are waived, construct a reasonably smooth transitional joint.

334-6.9.2 Longitudinal Joints: Place each layer of pavement so all longitudinal construction joints are offset 6 to 12 inches laterally between successive layers. Plan offsets in advance so the longitudinal joints of the friction course are not in wheel path areas. The longitudinal joints for friction course layers should be within 6 inches of the lane edge or at the center of the lane. The Engineer may waive these requirements where offsetting is not feasible due to the sequence of construction.

334-6.10 Surface Requirements: Construct a smooth pavement with good surface texture and the proper cross-slope.

334-6.10.1 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 334-6.10.4.

334-6.10.2 Cross Slope: Construct a pavement surface with cross slopes in compliance with the requirements of the Contract Documents. Furnish a four-foot-long electronic level accurate to 0.1 degree, approved by the Engineer for the control of cross slope. Make this electronic level available at the jobsite at all times during paving operations.

334-6.10.3 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. Obtain a smooth surface on all pavement courses placed, and then straightedge all layers as required by this Specification.

334-6.10.3.1 Straightedge Testing:

334-6.10.3.1.1 Acceptance Testing: Using a rolling straightedge, test the final (top) layer of the pavement. 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.

334-6.10.3.1.2 Final (Top) Pavement Layer: At the completion of all paving operations, straightedge the final (top) layer either behind the final roller of the paving train or as a separate operation. Address all deficiencies in excess of 3/16 inch in accordance with 334-5.10.4, unless waived by the Engineer. Retest all corrected areas.

334-6.10.3.1.3 Straightedge Exceptions: Straightedge testing will not be required in the following areas: shoulders, intersections, tapers, crossovers, sidewalks, bicycle/shared use paths, parking lots and similar areas, or in the following areas when they are less than 250 feet in length: turn lanes, acceleration/deceleration lanes and side streets. The limits of the intersection will be from stop bar to stop bar for both the mainline and side streets.

As an exception, in the event the Engineer identifies an objectional surface irregularity in the above areas, straightedge and address all deficiencies in excess of 3/8 inch in accordance with 334-5.10.4.

334-6.10.4 Correcting Unacceptable Pavement: Correct deficiencies in the pavement layer by removing and replacing the full depth of the layer, extending a minimum of 50 feet on both sides (where possible) of the defective area for the full width of the paving lane, at no additional cost.

334-7 Acceptance of the Mixture.

334-7.1 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 334-7.2.
2. Asphalt Work Category 2 – Certification and process control testing by the Contractor as defined in 334-7.3
3. Asphalt Work Category 3 – Process control testing by the Contractor and acceptance testing by the Engineer as defined in 334-7.4.

334-7.2 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 meets the requirements of the Specifications. The Engineer may run independent tests to determine the acceptability of the material.

334-7.3 Certification and Process 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 meets the requirements of the Specifications, along with supporting test data documenting all process control testing as described in 334-6.3.1. If required by the Contract, utilize an Independent Laboratory as approved by the Engineer for the process 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. Material failing to meet these acceptance criteria will be addressed as directed by the Engineer such as but not limited to acceptance at reduced pay, delineation testing to determine the limits of the questionable material, removal and replacement at no cost to the agency, or performing an Engineering analysis to determine the final disposition of the material.

334-7.3.1 Process Control Sampling and Testing Requirements: Perform process 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). Measure the roadway density with 6 inch diameter roadway cores at a minimum frequency of once per 1,500 feet of pavement with a minimum of three cores per day.

Determine the asphalt binder 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. 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 334-7.4.1. Assure that the asphalt binder content, gradation and density test results meet the criteria in Table 334-6.

| Table 334-6 Process Control and Acceptance Values | |
|--|-----------------------------------|
| Characteristic | Tolerance |
| Asphalt Binder Content (percent) | Target ± 0.55 |
| Passing No. 8 Sieve (percent) | Target ± 6.00 |
| Passing No. 200 Sieve (percent) | Target ± 1.50 |
| Roadway Density (daily average) | Minimum 91.5% of G _{mm} |
| Roadway Density (any single core) | Minimum 88.0 % of G _{mm} |

334-7.4 Process Control Testing by the Contractor and Acceptance Testing by the Engineer: On Asphalt Work Category 3, perform process control testing as described in 334-6.3.1. In addition, the Engineer will accept the mixture at the plant 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 334-7.3.1. 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 334-6. Material failing to meet these acceptance criteria will be addressed as directed by the Engineer such as but not limited to acceptance at reduced pay, delineation testing to determine the limits of the questionable material, removal and replacement at no cost to the agency, or performing an Engineering analysis to determine the final disposition of the material.

334-7.4.1 Acceptance Testing Exceptions: When the total quantity of any mix type in the project is less than 500 tons, 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, open-graded friction courses, variable thickness overbuild courses, leveling courses, any asphalt layer placed on subgrade (regardless of type), miscellaneous asphalt pavement, bike/shared use paths, crossovers, gore areas, or any course with a specified thickness less than 1 inch or a specified spread rate less than 100 lb per square yard. Density testing for acceptance will not be performed on asphalt courses placed on bridge decks or approach slabs; compact these courses in static mode only. In addition, density testing for acceptance will not be performed on the following areas when they are less than 500 feet (continuous) in length: turning lanes, acceleration lanes, deceleration lanes, shoulders, parallel parking lanes, or ramps. Do not perform density testing for acceptance in situations where the area requiring density testing is less than 50 tons. Density testing for acceptance will not be performed in intersections. The limits of the intersection will be from stop bar to stop bar for both the mainline and side streets. A random core location that occurs within the intersection shall be moved forward or backward from the intersection at the direction of the Engineer. 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.

334-8 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 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.

334-9 Basis of Payment.

334-.1 General: Price and payment will be full compensation for all the work specified under this Section.

344 CONCRETE FOR LOCAL AGENCY PROGRAM (LAP) (CLASS - D). (REV 6-9-2021) (FA 7-2-21) (1-22)

SECTION 344 is deleted and the following substituted:

SECTION 344 CONCRETE FOR LAP (OFF-SYSTEM)

344-1 Description.

344-1 General: Construct concrete structures and other concrete members, based on the type of work as described in the Contract Documents and the concrete work categories as defined below.

344-1.2 Work Categories: Construction will fall into one of the following concrete work categories:

344-1.2.1 Concrete Work Category 1: Includes the construction of cast-in-place nonstructural concrete; including sidewalks, curb and gutter, ditch and slope pavement, or other non-reinforced cast-in-place elements.

344-1.2.2 Concrete Work Category 2: Includes the construction of precast and prestressed concrete products.

344-1.2.2.1 Precast Concrete Drainage Structures: Includes but are not limited to reinforced and non-reinforced concrete pipes, french drains, underdrains, inlets, manholes, junction boxes, endwalls, pipe culverts, storm sewers, and box culverts.

344-1.2.2.1 Incidental Precast/Prestressed Concrete Structures: Includes the fabrication, storage, transportation, and erection of prestressed concrete poles, concrete bases for light poles, highway sign foundations, retaining wall systems, traffic separators, sound barriers or other structural precast elements.

344-1.2.3 Concrete Work Category 3: Includes the work associated with the placement and/or construction of structural cast-in-place concrete meeting the requirements of this section.

344-2 Materials.

344-2.1 General: Use concrete composed of a mixture of portland cement, aggregates, and water, with or without chemical or mineral admixtures and supplementary cementitious materials that meet the following requirements:

344-2.1.1 Portland Cement: Portland cements meeting the requirements of AASHTO M 85 or ASTM C150 is required. Different brands of cement, cement of the same brand from different facilities or different types of cement shall be stored separately and shall not be mixed.

344-2.1.2 Coarse and Fine Aggregates: Aggregates shall meet ASTM C33.

344-2.1.3 Water: Water shall meet the requirements of ASTM C 1602.

344-2.1.4 Chemical Admixtures: Use chemical admixtures shall be listed on the FDOT Approved Products List (APL). Admixtures may be added at the dosage rates recommended by the manufacturer.

344-2.1.5 Types of Cement: Unless a specific type of cement is designated in the Contract Documents, use Type I, Type IL, Type IP, Type IS, Type II, Type II (MH) or Type III cement in all classes of concrete. Use Type IL or Type II (MH) for all mass concrete elements.

344-2.1.6 Supplementary Cementitious Materials: Supplementary Cementitious Materials shall meet the requirements of ASTM C618 and ASTM C 989, respectively. Fly ash shall not include the residue resulting from the burning of municipal garbage or any other refuse with coal, or the burning of industrial or municipal garbage in incinerators.

344-3 Production, Mixing and Delivery of Concrete.

344-3.1 Concrete Production Requirements:

344-3.1.1 Category 1: Use a concrete production facility that is certified by the National Ready Mixed Concrete Association (NRMCA) or listed on the FDOT list of non-structural concrete producers. Concrete production facilities listed on the FDOT Producers with Accepted QC Programs list for structural concrete may also be used for Category 1.

344-3.1.2 Category 2: Obtain precast concrete products from plants that are currently on the FDOT's Production Facility Listing for the types of products that they are producing.

344-3.1.3 Category 3: Obtain structural concrete from a plant that is currently on the FDOT's Production Facility Listing for structural concrete.

344-3.2 Classes of Concrete: Meet the requirements of Table 344-1.

| Table 344-1 Master Proportion Table ⁽⁷⁾ | | | | |
|---|--|---|--|--|
| Class of Concrete | 28-day Specified Minimum Compressive Strength (f _c ') (psi) | Maximum Water to Cementitious Materials Ratio (pounds per pounds) | Minimum Total Cementitious Materials Content (lb/yd ³) | Target Slump Value (inches) ⁽³⁾ |
| Category 1 | | | | |
| Class NS | 2,500 | N/A | N/A | N/A |
| Category 3 | | | | |
| I ⁽¹⁾ | 3,000 | 0.53 | 470 | 3 ⁽²⁾ |
| I (Pavement) | 3,000 | 0.50 | 470 | 1.5 or 3 ⁽⁵⁾ |
| II ⁽¹⁾ | 3,400 | 0.53 | 470 | 3 ⁽²⁾ |
| II (Bridge Deck) | 4,500 | 0.44 | 600 ⁽⁸⁾ | 3 ⁽²⁾ |
| III ⁽⁴⁾ | 5,000 | 0.44 | 600 ⁽⁸⁾ | 3 ⁽²⁾ |
| III (Seal) | 3,000 | 0.53 | 600 ⁽⁸⁾ | 8 |
| IV | 5,500 | 0.41 ⁽⁶⁾ | 600 ⁽⁸⁾ | 3 ⁽²⁾ |
| IV (Drilled Shaft) | 4,000 | 0.41 | 600 ⁽⁸⁾ | 8.5 |
| V (Special) | 6,000 | 0.37 ⁽⁶⁾ | 600 ⁽⁸⁾ | 3 ⁽²⁾ |
| V | 6,500 | 0.37 ⁽⁶⁾ | 600 ⁽⁸⁾ | 3 ⁽²⁾ |
| VI | 8,500 | 0.37 ⁽⁶⁾ | 600 ⁽⁸⁾ | 3 ⁽²⁾ |
| VII | 10,000 | 0.37 ⁽⁶⁾ | 600 ⁽⁸⁾ | 3 ⁽²⁾ |

Notes:

- (1) For precast three-sided culverts, box culverts, endwalls, inlets, manholes and junction boxes, the target slump value and air content will not apply. The maximum allowable slump is 6 inches, except as noted in (2). The Contractor is permitted to use concrete meeting the requirements of ASTM C478 (4,000 psi) in lieu of the specified Class I or Class II concrete for precast endwalls, inlets, manholes and junction boxes.
- (2) The Engineer may allow a maximum target slump of 7 inches when a Type F, G, I or II admixture is used. When flowing concrete is used, meet the requirements of Section 8.6 of the FDOT Materials Manual.
- (3) For a reduction in the target slump for slip-form operations, submit a revision to the mix design to the Engineer. The target slump for slip-form mix is 1.50 inches.
- (4) When precast three-sided culverts, box culverts, endwalls, inlets, manholes or junction boxes require a Class III concrete, the minimum cementitious materials content is 470 pounds per cubic yard. Do not apply the air content range and the maximum target slump shall be 6 inches, except as allowed in (2).
- (5) Meet the requirements of Section 350 of FDOT Specifications.
- (6) When silica fume or metakaolin is required, the maximum water to cementitious material ratio will be 0.35. When ultrafine fly ash is used, the maximum water to cementitious material ratio will be 0.30.
- (7) Tolerance for slump is ± 1.5 inches and Air Content range is 0.0% to 6.0%.
- (8) The minimum total amount of cementitious materials content of 600 pounds per cubic yard is required for extremely aggressive environment. For moderately and slightly aggressive environments, the required amounts are 550 lb/yd³ and 510 lb/yd³, respectively.

344-3.3 Contractors Quality Control: For Categories 1 and 2, assume full responsibility for controlling all operations and processes such that the requirements of these Specifications are always met.

For Category 3, furnish a Quality Control (QC) plan to identify to the Engineer how quality will be ensured at the project site. During random inspections, the Engineer will use this document to verify that the construction of the project agrees with the QC plan.

344-3.4 Concrete Mix Design: Before producing any Category 1 or Category 2 concrete, submit the proposed mix designs to the Engineer. For Category 3, submit to the Engineer for approval, FDOT approved mix designs. Do not use concrete mix designs without prior approval of the Engineer.

Materials may be adjusted provided that the theoretical yield requirement of the approved mix design is met. Show all required original approved design mix data and batch adjustments on an Engineer approved concrete delivery ticket.

344-3.5 Delivery: For Category 3, the maximum allowable transit time of concrete is 90 minutes. For critical placements, with the Engineer's approval, the transit time may be extended to the allowable mixing time shown in the mix design.

Furnish a delivery ticket on a form approved by the Engineer with each batch of concrete before unloading at the placement site. Record material quantities incorporated into the mix on the delivery ticket. Ensure that the Batcher responsible for producing the concrete signs the delivery ticket certifying that the batch was produced and delivered in accordance with these requirements. Sign the delivery ticket certifying that the concrete was placed in accordance with these requirements.

344-3.6 Placing Concrete:

344-3.6.1 Concreting in Cold Weather: Do not mix or place concrete when the air temperature at placement is below 40°F.

During the curing period, if the National Oceanic and Atmospheric Administration (NOAA) predicts the ambient temperature to fall below 35°F for 12 hours or more or to fall below 30°F for more than 4 hours, enclose the structure in such a way that the air temperature within the enclosure can be kept above 50°F for a period of 3 days after placing the concrete or until the concrete reaches a minimum compressive strength of 1,500 psi.

Assume all risks connected with the placing and curing of concrete. Although the Engineer may give permission to place concrete, the Contractor is responsible for satisfactory results. If the placed concrete is determined to be unsatisfactory, remove, dispose of, and replace the concrete at no expense to the Agency.

344-3.6.2 Concreting in Hot Weather: For Category 3, hot weather concreting is defined as the production, placing and curing of concrete when the concrete temperature at placing exceeds 86°F but is less than 100°F.

Spray reinforcing bars and metal forms with cool fresh water just prior to placing the concrete in a method approved by the Engineer.

Assume all risks associated with the placing and curing of concrete. Although the Engineer may give permission to place concrete, the Contractor is responsible for satisfactory results. If the placed concrete is determined to be unsatisfactory, remove, dispose of, and replace the concrete at no expense to the Agency.

Unless the specified hot weather concreting measures are in effect, reject concrete exceeding 85°F at the time of placement. Regardless of special measures taken, reject concrete exceeding 100°F. Predict the concrete temperatures at placement time and implement hot weather measures to avoid production shutdown.

344-3.7 Mixers: For Category 3 concrete, do not place concrete from a truck mixer that does not have a current FDOT mixer identification card.

344-3.8 Small Quantities of Concrete: With approval of the Engineer, small quantities of concrete, less than 3 cubic yards placed in one day and less than 0.5 cubic yards placed in a single placement may be accepted using a pre-bagged mixture. The Engineer may verify that the pre-bagged mixture is prepared in accordance with the manufacturer's recommendations and will meet the requirements of this Specification.

344-3.9 Sampling and Testing:

344-3.9.1 Category 1: The Engineer may sample and test the concrete to verify its quality. The minimum 28 day compressive strength requirement for this concrete is 2,500 psi.

344-3.9.2: Category 2: No sampling and testing is required by the Engineer for category 2.

344-3.9.3 Category 3: The Engineer will randomly select a sample from each LOT to determine its plastic properties and to make three 4 x 8 inch cylinders for testing by the Engineer at 28 days to ensure that the design compressive strength has been met for the class of concrete as specified in Table 344-1. A LOT is defined as the concrete placement of 200 cubic yards or one day's production, whichever is less.

344-3.10 Records: Ensure the following records are available for review for at least 3 years after final acceptance of the project:

1. Accepted concrete Plant QC Plan.
2. Approved concrete mix designs.
3. Materials source (delivery tickets, certifications, certified mill test reports).
4. A copy of the scale company or testing agency report showing the signature of the scale company representative, date of inspection, observed deviations from quantities checked during calibration of the scales and meters.
5. A copy of the documentation certifying the admixture weighing/measuring devices.
6. Aggregate moisture control records including date and time of test.
7. Manufacturer's mixer information.
8. Certification documents for admixture weighing and measuring dispensers.

9. A daily record of all concrete batched for delivery to the projects, including respective mix design numbers and quantities of batched concrete.

344-4 Acceptance of the Work.

344-4.1 Category 1 Work: Category 1 work will be accepted based on certification by the batcher and contractor on the delivery ticket.

344-4.2 Category 2 Work: Certify that the precast elements were produced by production facilities that are currently on the FDOT's Production Facility Listing for the types of products that they are producing. In addition, the producer's logo shall be stamped on the element. The producer shall not use the Florida Department of Transportation QC stamp on elements used on this project. Provide a statement of certification from the manufacturer of the precast element that the element meets the requirements of this Specification.

344-4.3 Category 3 Work: Category 3 concrete will be accepted based on the Engineer's test results for plastic properties and compressive strength requirements for the class of concrete as defined in Table 344-2. In addition, a Delivery Ticket as described in 344-3.5 will be required for acceptance of the material at the project site.

344-4.4 Small Quantities of Concrete: Category 3 concrete meeting the definition of 344-3.8 will be accepted in accordance with 344-4.3 based on test results for plastic properties and compressive strength.

344-5 Method of Measurement.

The quantities to be paid for will be the items shown in the plans, completed and accepted.

344-6 Basis of Payment.

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

LANDSCAPE TECHNICAL SPECIAL PROVISION

SECTION 321400 - UNIT PAVING

PART 4 - GENERAL

4.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Related Specifications:
 - 1. FDOT LAP Specification Section 120 – Earthwork and Related Operations
 - 2. FDOT Standard Specification Section 285 – Optional Base Course
 - 3. FDOT LAP Specification Section 344 – Concrete

4.2 SUMMARY

- A. Section Includes:
 - 1. Brick pavers set in aggregate setting beds.
 - 2. Cast-in-place concrete edge restraints.
- B. Related Requirements:
 - 1. FDOT, July 2021 Standard Specifications for Road and Bridge Construction.
 - 2. FDOT, FY 2021-22 Standard Plans for Road and Bridge Construction and applicable Interim Revisions.
 - 3. City of Tampa Transportation and Stormwater Services Department (TSS) standard specifications and details.

4.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at City's direction.

4.4 ACTION SUBMITTALS

- A. Product Data: For materials other than water and aggregates.
- B. Product Data: For the following:
 - 1. Pavers.
- C. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C 136 or FDOT standards.
- D. Samples for Initial Selection: For each type and color of unit paver indicated. Minimum of 6 square feet representative of color range. Samples may be viewed at supplier source or on job site with City approval.

4.5 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For unit pavers. Include statements of material properties indicating compliance with requirements, including compliance with standards. Provide for each type and size of unit.
- B. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for unit pavers, indicating compliance with requirements.

1. For solid interlocking paving units, include test data for freezing and thawing according to ASTM C 67.

4.6 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 1. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

4.7 DELIVERY, STORAGE, AND HANDLING

- A. Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Store liquids in tightly closed containers protected from freezing.
- E. Store asphalt cement and other bituminous materials in tightly closed containers.

4.8 FIELD CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

PART 5 - PRODUCTS

5.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

5.2 BRICK PAVERS

- A. Brick Pavers – Type 1: Heavy vehicular paving brick; ASTM C 1272, Type F, Application PA. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
 1. Source: Clay quarried from North Carolina or surrounding area with similar qualities.
 2. Thickness: 2-3/4 inches
 3. Face Size: 4 by 8 inches
 4. Color: Natural clay with predominantly red hues, full range of color values from firing process
 5. Finish: Square edge, tumbled
 6. Pattern: Running Bond, Perpendicular to Travel or Herringbone per Plan
 7. Joints: No mortar or grout, 1/16" max gap

- B. Brick Pavers – Type 2: Light-traffic paving brick; ASTM C 902, Class SX, Type 1, Application PX. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
1. Source: Clay quarried from North Carolina or surrounding area with similar qualities.
 2. Thickness: 2-1/4 inches
 3. Face Size: 4 by 8 inches
 4. Color: Natural clay with predominantly red hues, full range of color values from firing process
 5. Finish: Square edge, tumbled
 6. Pattern: Running Bond, Perpendicular to Travel
 7. Joints: No mortar or grout, 1/16" max gap
- C. Brick Pavers – Type 3: Light-traffic paving brick; ASTM C 902, Class SX, Type 1, Application PX. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
1. Source: Clay quarried from North Carolina or surrounding area with similar qualities.
 2. Thickness: 2-1/4 inches
 3. Face Size: 4 by 8 inches
 4. Color: Natural clay with predominantly red hues, full range of color values from firing process
 5. Finish: Square edge (not tumbled)
 6. Pattern: 90 degree Herringbone as Shown on Plan
 7. Joints: No mortar or grout, 1/16" max gap
- D. Brick Pavers – Type 4: Detectable warning paving brick; light-traffic clay paver with truncated domes complying with the ADA Accessibility Standards and Florida Building Code, Accessibility Section 705. ASTM C 902, Class SX, Type 1, Application PX. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
1. Source: Clay quarried from North Carolina or surrounding area with similar qualities.
 2. Thickness: 2-1/4 inches
 3. Face Size: 4 by 8 inches
 4. Color: Natural red clay; generally monochromatic, with minimal range of color from clay or firing process.
 5. Finish: Square edge (not tumbled)
 6. Pattern: 90 degree Herringbone
 7. Joints: No mortar or grout, 1/16" max gap

E. Efflorescence: Brick shall be rated "not effloresced" when tested according to ASTM C 67.

5.3 CURBS AND EDGE RESTRAINTS

- A. Job-Built Concrete Edge Restraints: Comply with requirements in Section 033000 "Cast-in-Place Concrete" or FDOT Section 344 for normal-weight, air-entrained, ready-mixed concrete with minimum 28-day compressive strength of 3000 psi (20 MPa).

5.4 AGGREGATE SETTING-BED MATERIALS

- A. Graded Aggregate for Subbase: Per FDOT Standard Specification Section 285 – Optional Base Course or as identified on plans.
- B. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33/C 33M for fine aggregate.

- C. Sand for Joints: Fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 (1.18-
mm) sieve and no more than 10 percent passing No. 200 (0.075-mm) sieve.
- D. Herbicide: Commercial chemical for weed control, registered with the EPA. Provide in granular, liquid, or wettable powder form.

PART 6 - EXECUTION

6.1 EXAMINATION

- A. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

6.2 PREPARATION

- A. Proof-roll prepared subgrade according to identify soft pockets and areas of excess yielding. Proceed with unit paver installation only after deficient subgrades have been corrected and are ready to receive base course for unit pavers.

6.3 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
- D. Handle protective-coated brick pavers to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.
- E. Joint Pattern: See Item 2.2.
- F. Tolerances: Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) or 1/8 inch in 24 inches feet from level, or indicated slope, for finished surface of paving.
- G. Tolerances: Finished paving in pedestrian areas shall meet ADA requirements.
- H. Provide edge restraints as indicated. Install edge restraints before placing unit pavers or coordinated with installation as necessary based on type.
 - 1. Install job-built concrete edge restraints to comply with requirements in FDOT LAP Section 344.
 - 2. Where pavers embedded in concrete are indicated as edge restraints for pavers set in aggregate setting bed, install pavers embedded in concrete and allow concrete to cure before placing aggregate setting bed and remainder of pavers. Hold top of concrete below aggregate setting bed.

6.4 AGGREGATE SETTING-BED APPLICATIONS

- A. Compact soil subgrade uniformly to at least 95 percent of ASTM D 1557 laboratory density.
- B. Proof-roll prepared subgrade to identify soft pockets and areas of excess yielding. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by City Representative, and replace with compacted backfill or fill as directed.

- C. Place aggregate base, compact to 100 percent of ASTM D 1557 maximum laboratory density, and screed to depth indicated.
- D. Place leveling course and screed to a thickness of 1 to 1-1/2 inches, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
- E. Treat leveling course with herbicide to inhibit growth of grass and weeds.
- F. Set pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch, being careful not to disturb leveling base. Use string lines to keep straight lines. Layout sidewalks and edge restraints to conform to unit pavers sizes minimizing gaps; do not install units less than 1/3 of original dimension. Fill gaps by cutting two rows of pavers to create a uniform field.
- G. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf (16- to 22-kN) compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
 - 1. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.
 - 2. Before ending each day's work, compact installed concrete pavers except for 36-inch width of uncompacted pavers adjacent to temporary edges (laying faces).
 - 3. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.
 - 4. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.
- H. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.
- I. Do not allow traffic on installed pavers until sand has been vibrated into joints.
- J. Repeat joint-filling process 30 days later.

6.5 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

END OF SECTION 321400

SECTION 329300 – TREES, PLANTS AND GROUND COVERS

PART 10 - GENERAL

10.1 RELATED DOCUMENTS

- A. This specification section is supplemental to Landscape Installation (Section 580). Section 580 provides minimum standards and Section 329300 provides additional requirements of the City of Tampa (City).

10.2 DESCRIPTION OF WORK

- A. Furnish all materials, equipment and labor as necessary for preparation of planting areas, soil treatment, planting of shrubs and groundcover, protection of existing plants, maintenance, warranty and replacement of plants, and related items as required to complete the work as indicated on the drawings and specified herein.

10.3 DEFINITIONS:

- A. The following words and terms or pronouns used instead shall wherever they appear in these specifications, be construed as follows, unless a different meaning is clear from the context:
 1. "Final Acceptance" shall mean that point in time when all requirements of project drawings and specifications are completed, including any punchlist items, to the satisfaction of the City Representative. The contractor shall be notified in writing of final acceptance by a City Representative.
 2. "Final Maintenance Inspection" shall occur at the end of the ninety (90) day maintenance period.
 3. "Maintenance Period" shall begin when plant material is installed and continue for ninety (90) days after notification of Final Acceptance
 4. "Warranty Period" shall be a 90 day period beginning at Final Acceptance.

10.4 QUALITY ASSURANCE

- A. The landscape installation shall be by a single firm specializing in landscape work.
- B. Refer to Section 580 for plant nomenclature.
- C. Refer to Section 580 for grade standards and conformity with plant type and species (e.g. Florida No. 1 quality).
- D. Caliper measurement shall be taken 6” above ground level if 4” or less. If greater than 4”, caliper measurement will be taken at 12” above ground level per Florida Grades & Standards.
- E. Do not make substitutions. If specified landscape material is not obtainable, submit to City Representative in writing, proof of non-availability and proposal for use of equivalent material. When authorized, adjustment of contract amount will be made.
- F. Plants may be either nursery grown or collected as indicated on the plans and described in Section 580, which includes container, balled and burlapped, and other root preparation requirements.
- G. Stock furnished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional cost, providing that the larger plants will not be cut back to size indicated or rootbound in pots. Provide plants indicated by two measurements so that only a maximum of 25% are of the minimum size indicated and 75% are of the maximum size indicated. Height and spread specified will prevail over container size specified, for groundcover and shrub material only.
- H. All trees will be inspected and approved by the City Representative at the place of growth, for

compliance with specification requirements for quality, size, and variety. When trees cannot be obtained locally, provide sufficient photographs of the proposed plants for approval.

1. Such approval shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the work.
2. Tag trees at the source of supply prior to inspection by City Representative.

10.5 AWARDEE SUBMITTALS

- A. Make all submittals prior to commencing work with enough time for City review and approval or as specifically required in subsequent items.
- B. Submit planting schedule showing scheduled dates for each type of planting in each area of site two weeks prior to beginning work.
- C. 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 the following material samples:
 1. Mulch
 2. Topsoil with verification of sterilization and source.
 3. One typical sample or photographs of each shrub and groundcover material as specified, prior to planting for approval. Such approval shall not impair the right of inspection and rejection upon delivery at the site or during the progress of the work.
- E. Submit receipts and empty bags/containers of mycorrhizal inoculant product.
- F. Upon final acceptance of plant material, submit two written maintenance instructions recommending procedures for maintenance of plant materials for a one year period.
- G. Provide landscape planting as-built drawings:
 1. Legibly mark drawings to record actual installation.
 2. Identify field changes of dimension and detail and changes made by approving authority.

10.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver fertilizer materials in original, unopened, and undamaged containers showing weight, analysis, and name of manufacturer. Store in manner to prevent wetting and deterioration.
- B. B&B Trees must be held and fully acclimatized over a period not less than eight (8) weeks prior to delivery to site.
- C. Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. The use of “anti-desiccants” may be acceptable based on product and application method; review with City Representative prior to applying products. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates shall be provided per Section 580. Upon arrival the certificate shall be filed with the appropriate City of Tampa Department. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to the City Representative. Water heeled-in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches.
- D. Plant material that is stored improperly shall receive a special review of acceptance/rejection, established on a case by case basis.
- E. Cover plants transported on open vehicles with a protective covering to prevent wind burn.

- F. Topsoil shall be kept dry and loose for planting bed mixes.
- G. Label at least one (1) tree and one (1) shrub of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name.

10.7 JOB CONDITIONS

- A. Work notification: Notify the City Representative at least seven (7) working days prior to installation of plant material. All plant samples to be reviewed for approval prior to notification.
- B. Protect existing utilities, paving, irrigation, landscaping and other facilities from damage caused by landscaping operations. Notify Sunshine One Call a minimum of 72 hours prior to beginning work. Contractor shall verify all underground and above ground utility locations prior to start of work. Notify the City Representative of any unsatisfactory conditions prior to start of work. Start of work will indicate acceptance of conditions and full responsibility for completed work. Awardee is responsible for repairing any damage done by landscape installation process.
- C. A complete list of plants, including a schedule of sizes, quantities, and other requirements are shown on the drawings. In the event that quantity discrepancies or material omission occur in the plant materials list, the planting plans shall govern.
- D. Examine the sub-grade, verify the elevations, observe the conditions under which work is to be performed, and examine unsatisfactory conditions before proceeding with the work. Contractor shall be responsible for the removal of existing vegetation deemed necessary by the City's Representative to carry out scope of project.
 - 1. When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions or obstructions, notify the City Representative before planting to determine alternative action.
- E. Locate, protect, and maintain the existing irrigation system during planting operations. Repair irrigation system components, new and existing, damaged during planting operations with like materials. Test system prior to installation of plant material.

PART 11 - PRODUCTS

11.1 MATERIALS

- A. Plants:
 - 1. Provide plants typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasion of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces.
 - 2. Dig balled and burlapped plants with firm, natural balls of earth of diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Container-grown stock: Grown in container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
 - No plants shall be loose in the container.

- Container stock shall not be pot bound.

3.

4. Florida Grades and Standards for Nursery Plants shall be the reference standard for plant material per Section 580. ANSI Z60.1 will be referenced if Florida Grades and Standards does not address an issue.

All plant material shall be "Florida No.1", or better

5. Plants installed in rows shall be matched in form.
6. Plants larger than those specified in the plant list may be used when acceptable to the City of Tampa representative. If the use of larger plants is acceptable, increase the spread of roots or root ball in proportion to the size of the plant.
7. The height of the trees, measured from the crown of the roots to the average height of the top of the tree, shall not be less than the minimum size designated in the plant list. Container size designated, if any, shall be minimum size required.
8. No pruning wounds shall be present with a diameter of more than one-inch (1") and such wounds must show vigorous bark on all edges.
9. Height and spread requirements of shrub and groundcover material, indicated in the plant list, shall prevail over container size indicated, unless otherwise specified.
10. Shrubs and small plants shall conform to the Florida Grades and Standards for Nursery Plants Any plant material showing signs of shock will be judged on a case by case basis for acceptance or rejection.

11.2 ACCESSORIES

- A. Refer to drawings and other portions of specifications for accessories specifically used on this project.
- B. Finish Soil Layer: 1 part native soil, 1 part topsoil.
1. Native Soil: soil existing on site excluding construction debris, muck, road base, and other non-viable, high pH (>8.0) material. Notify the City if there is inadequate native soil on site. The City will approve the use of additional topsoil or imported silty sand as a component of the Finish Soil Layer.
 2. Topsoil: 55% sand, 25% silt, 10% compost, 5% clay, 5% pine bark fines; free of weeds and viable seedbank.
- C. Mycorrhizal Inoculant: A transplant amendment such as Diehard Transplant (or approved equal product) formulated to inoculated landscape trees and shrubs with live beneficial mycorrhizal fungi. Product shall include endo and ectomycorrhizal inoculants and other additives as necessary to facilitate the growth and viability of the fungi.
- D. Fertilizer: Slow release, non-soluble product with analysis and volume based by soil testing. Phosphorous amendment is not typically necessary in the local soils. Apply per manufacturer instructions and local regulations.
1. The fertilizer shall be neutral and contain the essential micro-nutrients (Chelated Fe, Ca, S, Mg, Mn, Zn, Mo, B, Cu) in sulfates unless otherwise indicated in ppm.
 2. City of Tampa Ordinance No. 2012-48 bans the application of fertilizer containing nitrogen or phosphorous from June 1 through September 30.
- E. Anti-Desiccant: Protective film emulsion providing a protective film over plant surfaces; permeable to permit transpiration. Mixed and applied in accordance with manufacturer's instructions.

- F. Mulch shall be as specified on the plan. Mulch shall be clean, bright and free from weeds, moss, sticks and other debris. Mulch shall be spread at minimum of two (2) inches deep and maximum of four (4) inches deep or as otherwise noted. Mulch all beds as indicated on the plans. Infill beds shall use existing mulch except where new washed medium shell (inorganic mulch) is indicated on the plans on bed edges.
- G.
- H. Water shall be free of substances harmful to plant growth. Water shall contain less than 300 ppm soluble salts and less than 10 ppm chlorine, fluoride and sodium. Hoses or other methods of transportation furnished by Awardee. Awardee shall furnish water supply from an acceptable source. Acceptable sources: deep wells, municipal potable supply and treated wastewater.
- I. Pre-emergent Herbicide: Apply 2: granular "Chipco" Ronstar or approved equal, at a rate recommended by manufacturer. Bio-barrier: Install Typar BIOBARRIER Root Control System 24" depth where indicated on plans.

PART 12 - EXECUTION

12.1 INSPECTION

- A. Awardee shall examine proposed planting areas and conditions for installation. Do not start planting work until unsatisfactory conditions are corrected.

12.2 PREPARATION

- A. Time of planting.
 - 1. Deciduous material: If deciduous trees are planted in-leaf, the City may accept the application of an anti-desiccant spray if warranted by the grower and/or installer. Review with City Representative prior to applying anti-desiccant / anti-transparent products.
- B. Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.
- C. Layout of planting beds shall be performed by the Awardee prior to starting work, and approved by the City of Tampa representative at each site. Give 48 hours notice of need for inspection. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate plant locations have been selected. Verify locations of existing utilities.
- D. Prepare planting areas and pits per Section 580 and the project plans/details.
- E. Incorporate mycorrhizal inoculant product into finished soil layer per manufacturer recommendation, but not less than 12 ounces per tree well.

12.3 INSTALLATION

- A. Install plants per Section 580 and the project plans/details.
- B. Space ground cover plants in accordance with indicated dimensions. Adjust quantities as necessary to fill planting bed with indicated spacing of plants. Plant to within 5' of the trunks of trees and shrubs within planting bed, and to within 1' of edge of bed.
- C. Apply anti-desiccant using power spray to provide adequate film over trunks, branches, stems, twigs and foliage.
- D. Mulch:
 - 1. Apply pre-emergent herbicide over grade prior to mulching, as specified by City of Tampa representative. Use rates recommended for specified product.
 - 2. Mulch tree, shrub planting pits and shrub beds with required mulching material per Section

580 and the project plans/details. Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

- E. Pruning:
 - 1. Prune trees and shrubs per Section 580 and project plans (notes and details) to remove dead/broken branches and provide required clearances.
 - 2. Trees shall only be pruned to promote long term structural integrity or to provide required clearances. Pruning shall not be performed to “compensate” for root loss.
 - 3. Multiple leader plants: Preserve the leader(s) which will best promote the symmetry of the plant. Cut branches at branch collars.
- F. Care of Existing Trees: All existing trees, if any, shall be protected through the duration of this project as outlined in the Tree Protection Standards of the City of Tampa Site Clearing Ordinance. These requirements and those attached at the end of this section are available in the City Hall Annex Building, Duplication office for a fee.
- G. Plant Locations:
 - 1. Coordinate the installation of plants so as to not obscure the site visibility triangle at intersections and the visibility of directional signs or lights.
 - 2. Field adjust plant locations as required to avoid conflict with light poles, sign supports, utility poles, walls and fences, etc.
 - 3. Tree locations shall be approved by the City Representative prior to installation.

12.4 PLANT ESTABLISHMENT PERIOD

- A. Begin maintenance immediately after planting. Maintain all plant material until final acceptance and for an establishment period of ninety days after final acceptance
- B. Maintenance shall include but is not limited to pruning, cultivating, mowing, weeding, fertilizing, watering, and application of appropriate insecticides and fungicides necessary to maintain plants free of insects and disease.
- C. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent material and remove dead material.
- D. Tighten and repair guys and stakes as required.
- E. Correct defective work immediately after deficiencies become apparent and weather permits.
- F. In addition to irrigation system or if no system exists, water trees every other day saturating the soil to depth of 3’ for the first two weeks. If no irrigation system exists, water plant material per the water requirements on plans.
 - 1. Quantity of water applied should be adjusted in accordance to rainfall.
 - 2. Submit weekly report of watering activities to City of Tampa representative.
 - 3. Report shall indicate date of watering activity, location and quantities applied.

12.5 ACCEPTANCE

- A. Inspection to determine acceptance of planted areas will be made by the City of Tampa representative upon Awardee's request. Provide notification at least five working days before requested inspection date.

- B. Planted areas will be accepted provided all requirements, including maintenance, have been complied with and plant materials are alive and in a healthy, vigorous condition.
- C. The City of Tampa representative will prepare a "punch list" of those items which must be corrected before re-inspection for final acceptance. The City of Tampa representative will determine an appropriate time period in which punchlist items must be corrected. Provide 48 hour notification of need for re-inspection.
- D. The City will assume plant maintenance 90 days after final acceptance, at which time, the Awardee shall request a final maintenance inspection for acceptance, where requirements as stated in Section 3.5.1 apply.

12.6 WARRANTY

- A. Warrant plant material to remain alive and be in healthy, vigorous condition for a period of 90 days after completion and final acceptance of entire project.
- B. Replace, in accordance with the drawings and specifications, all plants that are dead or as determined by the City of Tampa representative to be in an unhealthy or unsightly condition, and have lost their natural shape due to contractor's negligence. The cost of such replacement(s) is at Awardee's expense. Warrant all replacement plants for six months after final acceptance.
- C. Warranty shall not include damage or loss of trees, plants, or ground covers caused by fires, floods, rains, lightning storms or winds over 75 miles per hour, winter kill caused by extreme cold and severe winter conditions not typical of planting area; acts of vandalism or negligence on the part of the owner.
- D. Remove and replace immediately all plants found to be dead or in unhealthy condition as determined by City of Tampa representative at any time during warranty period. Make replacements within four weeks of notification. An inspection will be conducted at the end of the warranty period. Awardee will replace any plants found to be dead or in poor condition at this time within four weeks of inspection.
- E. Awardee will also remove any tree bracing or guying determined by the City representative to be unnecessary at this point in the trees development.

12.7 CLEANING

- A. Dispose of surplus material and clean the project area per Section 580.

END OF SECTION 329300

SECTION 580 LANDSCAPE INSTALLATION

580-1 Description.

Plant trees and shrubs of the species, size, and quality indicated in the plans.

The Engineer reserves the right to adjust the number and location of any of the designated types and species to be used at any of the locations shown, in order to provide for any unanticipated effects which might become apparent after the substantial completion of other phases of the project, or for other causes.

580-2 Materials.

580-2.1 Plants:

580-2.1.1 Authority for Nomenclature; Species, etc.: For the designated authority in the identification of all plant material, refer to two publications of L.H. Bailey: "Hortus III" and "Manual of Cultivated Plants," and ensure that all specimens are true to type, name, etc., as described therein. For the standard nomenclature, refer to the publication of the American Joint Committee on Horticultural Nomenclature, "Standardized Plant Names."

580-2.1.2 Grade Standards and Conformity with Type and Species: Only use nursery grown plant material except where specified as Collected Material. Use nursery grown plant material that complies with all required inspection, grading standards, and plant regulations in accordance with the latest edition of the Florida Department of Agriculture's "Grades and Standards for Nursery Plants".

Except where a lesser grade might be specifically specified in the plans, ensure that the minimum grade for all trees and shrubs is Florida No. 1. Ensure that all plants are the proper size and grade at the time of delivery to the site, throughout the project construction period and during any designated plant establishment period.

Ensure that plant materials are true to type and species and that any plant materials not specifically covered in Florida Department of Agriculture's "Grades and Standards for Nursery Plants" conform in type and species with the standards and designations in general acceptance by Florida nurseries.

Ensure that plant materials are shipped with tags stating the botanical and common name of the plant.

580-2.1.3 Inspection and Transporting: Move nursery stock in accordance with all Federal and State regulations therefor, and accompany each shipment with the required inspection certificates for filing with the Engineer.

580-2.2 Water: Water used in landscaping operations may be obtained from any approved source. Ensure that water is free of any substance which might be detrimental to plant growth. The use of effluent water is subject to approval and must meet all Federal, State and Local requirements.

580-3 Specific Requirements for the Various Plant Designations.

580-3.1 Balled-and-Burlapped Plants (B&B), and Wired Balled-and-Burlapped (WB & B):

580-3.1.1 General: Properly protect the root ball of these plants until planting them. The Engineer may reject any plant which shows evidence of having been mishandled.

Set the B&B and WB&B plants then remove the top 2/3 of all wire, rope, and binding surrounding the plant. Remove the burlap from the top 4 inches of the root ball. Do not disturb the root ball in any way. Bare root material is not allowed for substitution.

At least 90 days before digging out B & B and WB & B plants, root-prune those 1 1/2 inches or greater in diameter and certify such fact on accompanying invoices.

580-3.1.2 Provisions for Wiring: For plants grown in soil of a loose texture, which does not readily adhere to the root system (and especially in the case of large plants or trees), the Engineer may require WB & B plants. For WB & B plants, before removing the plant from the excavated hole, place sound hog wire around the burlapped ball, and loop and tension it until the tightened wire netting substantially packages the burlapped ball such as to prevent disturbing of the loose soil around the roots during handling.

580-3.2 Container-Grown Plants (CG): The Engineer will not accept any CG plants with roots which have become pot-bound or for which the top system is too large for the size of the container. Fully cut and open all containers in a manner that will not damage the root system. Do not remove CG plants from the container until immediately before planting to prevent damage to the root system.

580-3.3 Collected Plants (Trees and Shrubs) (C): Use C plants which have a root ball according to “Florida Grades and Standards for Nursery Plants”. Do not plant any C plant before the Engineer’s inspection and acceptance at the planting site.

580-3.4 Collected Plants (Herbaceous) (HC): The root mass and vegetative portions of collected herbaceous plants shall be as large as the specified container-grown equivalent. Do not plant any collected plant before inspection and acceptance by the Engineer.

580-3.5 Specimen Plants (Special Grade): When Specimen (or Special Grade) plants are required, label them as such on the plant list, and tag the plant to be furnished.

580-3.6 Palms: Wrap the roots of all plants of the palm species before transporting, except if they are CG plants and ensure that they have an adequate root ball structure and mass for healthy transplantation as defined in “Florida Grades and Standards for Nursery Plants”.

The Engineer will not require burlapping if the palm is carefully dug from marl or heavy soil that adheres to the roots and retains its shape without crumbling. During transporting and after arrival, carefully protect root balls of palms from wind and exposure to the sun. Muck grown palms are not allowed. After delivery to the job site, if not planting the palm within 24 hours, cover the root ball with a moist material. Plant all palms within 48 hours of delivery to the site.

Move sabal and coconut palms in accordance with the “Florida Grades and Standards for Nursery Plants.”

580-3.7 Substitution of Container-Grown (CG) Plants: With the Engineer’s approval, the Contractor may substitute CG plants for any other root classification types, if he has met all other requirements of the Contract Documents.

580-4 Planting Requirements.

580-4.1 Layout: Prior to any excavation or planting, mark all planting beds and individual locations of palms, trees, large shrubs and proposed art and architectural structures, as shown in the plans, on the ground with a common bright orange colored spray paint, or with other approved methods, within the project limits. Obtain the Engineer’s approval and make necessary utility clearance requests.

580-4.2 Excavation of Plant Holes: Excavate plant holes after an area around the plant three times the size of the root ball has been tilled to a depth of the root ball. Ensure that the plant hole is made in the center of the tilled area only to the depth of the plant root ball.

Where excess material has been excavated from the plant hole, use the excavated material to backfill to proper level.

580-4.3 Setting of Plants: Center plants in the hole. Lower the plant into the hole so that it rests on a prepared hole bottom such that the roots are level with, or slightly above, the level of their previous growth and so oriented such as to present the best appearance.

Backfill with native soil, unless otherwise specified on the plans. Firmly rod and water-in the backfill so that no air pockets remain. Apply a sufficient quantity of water immediately upon planting

to thoroughly moisten all of the backfilled earth. Keep plants in a moistened condition for the duration of the planting period.

When so directed, form a water ring 6 inches in width to make a water collecting basin with an inside diameter equal to the diameter of the excavated hole. Maintain the water ring in an acceptable condition.

580-4.4 Special Bed Preparation: Where multiple or mass plantings are to be made in extended bedding areas, and the plans specify Special Bed Preparation, prepare the planting beds as follows:

Remove all vegetation from within the area of the planting bed and excavate the surface soil to a depth of 6 inches. Backfill the excavated area with peat, sand, finish soil layer material or other material to the elevation of the original surface. Till the entire area to provide a loose, friable mixture to a depth of at least 8 inches. Level the bed only slightly above the adjacent ground level. Then mulch the entire bedding area, in accordance with 580-8.

580-5 Staking and Guying.

580-5.1 General: When specified in the plans, or as directed by the Engineer, stake plants in accordance with the following.

Use wide plastic, rubber or other flexible strapping materials to support the tree to stakes or ground anchors that will give as the tree moves in any direction up to 30 degrees. Do not use rope or wire through a hose. Use guy chords, hose or any other thin bracing or anchorage material which has a minimum 12 inches length of high visibility flagging tape secured to guys, midway between the tree and stakes for safety.

Stake trees larger than 1 inch diameter and smaller than 2 inches diameter with a 2 by 2 inch stake, set at least 2 feet in the ground and extending to the crown of the plant. Firmly fasten the plant to the stake with flexible strapping materials as noted above.

580-5.2 Trees of 2 to 3 1/2 inches [50 to 90 mm] Caliper: Stake all trees, other than palm trees, larger than 2 inches caliper and smaller than 3 1/2 inches caliper with two 2 by 4 inch stakes, 8 feet long, set 2 feet in the ground. Place the tree midway between the stakes and hold it firmly in place by flexible strapping materials as noted above.

580-5.3 Large Trees: Guy all trees, other than palm trees, larger than 3 1/2 inches caliper, from at least three points, with flexible strapping materials as noted above.

Anchor flexible strapping to 2 by 4 by 24 inch stakes, driven into the ground such that the top of the stake is at least 3 inches below the finished ground.

580-5.4 Special Requirements for Palm Trees: Brace palms which are to be staked with three 2 by 4 inch wood braces, toe-nailed to cleats which are securely banded at two points to the palm, at a point one third the height of the trunk. Pad the trunk with five layers of burlap under the cleats. Place braces approximately 120 degrees apart and secure them underground by 2 by 4 by 12 inch stake pads.

580-6 Tree Protection and Root Barriers.

Install tree barricades when called for in the Contract Documents or by the Engineer to protect existing trees from damage during project construction. Place barricades at the drip line of the tree foliage or as far from the base of the tree trunk as possible. Barricades shall be able to withstand bumps by heavy equipment and trucks. Maintain barricades in good condition.

When called for in the Contract Documents, install root barriers or fabrics in accordance with the details shown.

580-7 Pruning.

Prune all broken or damaged roots and limbs in accordance with established arboriculture practices. When pruning is completed ensure that all remaining wood is alive. Do not reduce the size or quality of the plant below the minimum specified.

580-8 Mulching.

Uniformly apply mulch material, consisting of wood chips (no Cypress Mulch is allowed), pine straw, compost, or other suitable material approved by the Engineer, to a minimum loose thickness of 3 inches over the entire area of the backfilled hole or bed within two days after the planting. Maintain the mulch continuously in place until the time of final inspection.

580-9 Disposal of Surplus Materials and Debris.

Dispose of surplus excavated material from plant holes by scattering or otherwise as might be directed so that it is not readily visible or conspicuous to the passing motorist or pedestrian. Remove all debris and other objectionable material from the site and clean up the entire area and leave it in neat condition.

580-10 Contractor's Responsibility for Condition of the Plantings.

Ensure that the plants are kept watered, that the staking and guying is kept adjusted as necessary, that all planting areas and beds are kept free of weeds and undesirable plant growth and that the plants are maintained so that they are healthy, vigorous, and undamaged at the time of acceptance.

580-11 Plant Establishment Period.

If the Contract Documents designate a Plant Establishment Period, assume responsibility for the proper maintenance, survival and condition of all landscape items during such period at no additional cost.

580-12 Method of Measurement.

The quantities to be paid for will be the items shown in the plans, completed and accepted.

580-13 Basis of Payment.

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

SPECIFIC PROVISIONS- TRANSPORTATION

SPECIFIC PROVISIONS- TRANSPORTATION

SP-1.01 MOBILITY DEPARTMENT TRANSPORTATION DIVISION (TSS) TECHNICAL SPECIFICATIONS:

Division II & III of the Florida Department of Transportation Standard Specifications, July 2021 Edition, with revisions provided in the Technical Specification Special Provisions.

The following hierarchy of the contract documents shall apply:

The TSS Technical Specifications shall govern, except as noted herein.

In the case of apparent conflict with the project plans, the Specific Provisions shall govern.

SP-2.01 BID ITEMS:

It is the intent of these Contract Documents that any items of work and all costs for which compensation is not directly provided by a bid item but are incidental to various project items of work, shall be prorated and included in the bid item for which they are required. Failure of the Contractor to follow this procedure shall be basis for rejection of its bid.

SP-2.02 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 a Work Directive Change 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 of completion.

Without invalidating the Agreement, certain 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-2.03 LINES AND GRADES:

The General Provisions Section G-8.01 and G-8.02 are revised to read as follows:

G-8.01 General:

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

The Engineer will establish Bench Marks and baseline controlling points only.

G-8.02 Surveys:

The Contractor shall furnish and maintain, with no additional payment, stakes and other such material as may be required for setting reference marks; and shall, with no additional payment, establish all working or construction lines and grades as required from the reference marks set by a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Engineer, and shall be solely responsible for the accuracy thereof. The Contractor shall, however, be subject to the check and review of a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Engineer the Engineer.

Pay items requiring survey information, such as embankment or excavation, shall be documented by of a Florida Registered Professional Surveyor and Mapper. In addition, plotted cross sections and quantity computations must be supplied and certified. All surveys shall be performed using electronic data collection for data acquisition. All drawings shall be submitted in the most current version of AutoCad being used by the COT department requiring the survey. All surveys must meet the 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. All surveys must also meet any standards or specifications which may be included as part of the scope of contract.

SP-2.04 REQUIREMENTS FOR CONTROL OF THE WORK:

Prior to the start of the work included in this contract, a Preconstruction Conference will be held by the Engineer to be attended by the Contractor and representatives of the various utilities and others for the purpose of establishing a schedule of operations which will coordinate the work to be done under this contract with all related work to be done by others within the limits of the project. The Contractor shall be prepared for this meeting and shall present a comprehensive construction schedule for all items of work to be accomplished, which will be used as the basis for the development of an overall operational schedule and a list of subcontractors and material suppliers to be used on this work.

All items of work in this contract shall be coordinated so that progress on each related work item will be continuous from week to week. The progress of the work will be reviewed by the Engineer at the end of each week, and if the progress on any item of work during that week is found to be unsatisfactory, the Contractor shall be required to adjust the rate of progress on that item or other items as directed by the Engineer.

The Contractor shall conduct operations in such a manner as will result in the minimum of inconvenience to occupants of adjacent homes and business establishments and shall provide temporary access as directed or as conditions in any particular location may require.

Access to adjacent residential, public and commercial properties shall be provided at all times during the contract period.

The Contractor shall restore to its previous condition as directed by the Engineer any private property, City property, or utilities damaged by its construction. No payment shall be made to the Contractor for any required restoration of private property, City property or utilities, unless otherwise noted.

The prime contractor is responsible for organizing the work of and coordination with any and all Utility Agency Owners involved within the project limits. The Utility Relocation Schedules submitted during the design phase have been provided.

SP-2.05 REFERENCE STAKES:

Add the following paragraph to General Provision Section G-8.03:

The Contractor shall, with no additional payment, furnish and install reference stakes at all even and half-stations along the project survey baseline.

These stakes shall be maintained for the duration of construction for the purpose of the Engineer's reference.

SP-2.06 CONTRACTOR'S WEEKLY SCHEDULE:

In order that the Contract Administration personnel may be advised of the work to be performed, the Contractor may be required to submit weekly to the Engineer of its designated representative a schedule indicating the proposed work plan for the forthcoming week. Such shall be delivered to DT&SS not later than Friday preceding the work plan week unless other arrangements have been made for this submittal.

SP-2.07 MONTHLY CONSTRUCTION ESTIMATES AND RELEASE OF LIEN:

The Contractor shall prepare on or about the first day of each month an estimate of the work completed in the preceding month. Said estimate shall be prepared on standard forms provided by the Engineer, and three (3) signed originals shall be provided

by the Contractor. Any disputed quantities shall be adjusted as directed by the Engineer prior to each partial payment, as provided for in Article 10.05 of the Agreement.

Certification that all subcontractors have been paid for the previous month's work shall be submitted with each partial payment request on forms provided by the Engineer.

An update of the overall project schedule shall be submitted with each partial payment request.

SP-2.08 CONTRACTOR'S REPRESENTATIVE:

Add to Article 8.02 of the Agreement:

"The Contractor shall submit in writing to the Construction Engineer the name of its duly authorized representative who will be present on the job during all work activities and is authorized to make decisions for the Contractor. Any change in the contractor's representative shall require written notification to the Construction Engineer prior to such change".

SP-2.09 NOTICE AND SERVICE THEREOF:

All notices, which shall include demands, instruction, requests, approvals, and claims, shall be in writing.

Any notice to or demand upon the Contractor shall be sufficiently given if delivered to the Contractor's representative at the construction site or to the office of the Contractor specified in the bid (or to such other offices as the Contractor may, from time to time, designate to the City in writing), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered, with charges prepaid, to any telegraph company for transmission, in each case addressed to such office.

All notices required to be delivered to the City shall, unless otherwise specified in writing to the Contractor, be delivered to the Engineer, 3806 E. 26th Avenue, Tampa, Florida 33605, and any notice to or demand upon the City shall be sufficiently in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said Engineer or to such other representative of the City or to such other address as the City may subsequently specify in writing to the Contractor or to its representative at the construction site for such purposes.

Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery or (in the case of mailing) when the same should have been received in due course of post or (in the case of telegram) at the time of actual receipt, as the case may be.

SP-2.10 CONTRACTOR'S FIELD OFFICE:

The Contractor will not be required to provide a Contractor's field office.

The Contractor, however, shall have Contract Documents, the latest approved working drawings, standard drawings and a representative of the Contractor available at the site during regular working days.

SP-2.11 ENGINEERING'S FIELD OFFICE:

An Engineering field office shall not be required for this project.

A functional, portable cellular telephone and separate lockable sanitary facilities shall be provided to the Engineer for use throughout the duration of the project.

All costs associated with the cellular telephone (local calls only) and sanitary facilities shall be borne by the Contractor. No separate payment shall be made for these services.

SP-2.12 DAMAGE TO ADJACENT STREETS:

Any streets (including detour routes) consisting of travel lanes, curbs, gutters and shoulders, outside the project area (not designated for construction), which are determined by the Engineer to have been damaged due to negligent construction related operations and/or equipment, shall be restored by the Contractor to its original or better condition without any cost to the City and to the satisfaction of the Engineer.

SP-2.13 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 actions 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-2.14 PRECONSTRUCTION VIDEO:

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.

The costs associated with preparing the project's preconstruction video shall be included in the contract price for Mobilization.

SP-2.15 PROJECT CLEAN-UP:

Clean-up on this project is extremely important and the Contractor will be responsible for keeping the construction site neat and clean with debris being removed regularly as the work progresses.

If project cleanliness and/or dust control reaches an unacceptable level in the opinion of the Engineer, the Engineer will notify the Contractor in writing. If the Contractor does not act to correct the situation within 4 hours in the case of dust control or within 24 hours in the case of general cleanliness, the Engineer may call upon outside forces to provide the appropriate services. Cost of all such activities shall be charged to the Contractor via contract change order.

SP-2.16 CITY PERMITS:

The Contractor shall be responsible for obtaining all applicable City permits for this project. These can include but may not be limited to: Right-of-way permit(s), tree removal/site clearing permit(s), and drainage/earthwork permit(s). The Contractor shall supply any required plans or other information to the issuing department.

The time required to prepare, submit, review, and issue the permits shall be included in the contract time and no payment shall be made for any delay incurred by this process.

Cost for obtaining City permits shall be included in the lump sum cost for mobilization (Item No. 101-1), and no separate payment shall be made. Right-of-way permit fee shall be waived by the City.

All subcontractors working on the project shall obtain their own, separate permits as above.

SP-2.17 AS-BUILT PLANS:

The Contractor shall provide the Engineer with "As-Built" plans, as follows:

1. All As-Built information shall be annotated by a Florida Registered Professional Surveyor and Mapper on a separate layer of each AutoCAD drawing file as provided on a disk by the City. Annotation of the new drawing files shall be in accordance with City of Tampa TSS drafting standards, as well as the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in chapter 5J-17 of the Florida Administrative Code, pursuant to section 472.027 Florida Statutes. Settings shall be as follows: Color: CYAN, Linetype: CONTINUOUS, Font: ROMANS, Layer Name: AS-BUILT, AutoCAD Menu Name: ACAD.MNU, and File Format: AUTOCAD latest version.
2. 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 set forth by the Florida Board of Professional Surveyors and Mappers in chapter 5J-17 of the 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.
3. "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 and shall be clearly shown on the drawing files.
3. The Contractor shall comply with the above requirements and shall submit one check print set 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 or AutoCad Design Web Format and Adobe PDF

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-3.01 STREET CLOSURE AND MAINTENANCE OF TRAFFIC:

A City of Tampa permit for construction and maintenance operations within public Rights of Way will be required for every street, lane, or sidewalk closure within City of Tampa Rights of Way.

These permits will establish the minimum requirements for the closure related to number of lanes and/or time of day lanes or street may be closed above what is show in the plans. The Contractor shall adhere to the requirements as described in the permit(s).

The Contractor shall furnish and maintain all necessary signs, pavement markings, barricades, lights, and flagmen necessary to control all vehicular and pedestrian traffic and provide for safety of the public, all in compliance with the current Florida Department of Transportation Roadway and Traffic Design Standards and the FHWA Manual on Uniform Traffic Control Devices.

The Contractor shall observe traffic movements through the work site and inspect all traffic control devices on a regular basis to ensure that all devices are properly installed and functioning as intended.

In cases of closure for street, lane, or sidewalk on the City of Tampa Functionally Classified Network (collectors, minor arterials, and principal arterials), including all State Roads, the Contractor shall provide a maintenance of traffic plan to the City of Tampa, Transportation Division. This plan shall be provided at least seventy-two hours in advance of the closure (excluding weekends) and shall contain the following:

1. Proposed detour routes.
2. Signing of the complete construction area and detour routes.

Advance notice information signs advising the public of scheduled closure of major roadways and/or information signs advising the public of points of closure and detour routes may be required by the Engineer and will be installed at the Contractor's expense.

Payment shall be full compensation for all work, equipment, materials, tools, labor and any incidentals required to maintain safe traffic routes past the work site.

Payment shall be made under

Item No. 102-1 Maintenance of Traffic L.S.

SP-3.02 TRAFFIC INFORMATION SIGNS:

The Contractor's attention is directed to Section 10 of the General Provisions, PROTECTION OF WORK AND PUBLIC, and to the consideration therein for providing informative signs indicating the street closures. It is the purpose of such requirements to adequately inform residents and the general public of the closure thereby creating better understanding and relations during the construction.

SP-3.03 PROJECT SIGN:

The Contractor shall furnish 2 project sign(s) which shall conform to the general configuration and dimensions per City of Tampa criteria. The sign(s) shall be maintained in good condition until the completion of the project, and shall be located as instructed by the Construction Engineer.

The cost of furnishing and maintaining the signs shall be included in the various contract items and no additional compensation shall be made.

SP-3.04 TEMPORARY SIGNALIZATION: - Not Applicable

SP-3.05 NIGHT WORK:

If the Contractor wishes to perform night work, he shall notify the Engineer 72 hours in advance and all night work shall be performed in accordance with the following requirements:

During active nighttime operations, furnish, place and maintain lighting sufficient to permit proper workmanship and inspection. Use lighting with 5 ft-cd minimum intensity. Arrange the lighting to prevent interference with traffic or produce undue glare to property owners. Operate such lighting only during active nighttime construction activities. Provide a light meter to demonstrate that the minimum light intensity is being maintained.

Lighting may be accomplished by the use of portable floodlights, standard equipment lights, existing street lights, temporary street lights, or other lighting methods approved by the Engineer.

Submit a lighting plan at the Preconstruction Conference for review and acceptance by the Engineer. Submit the plan on standard size plan sheets (not larger than 24 by 36 inch), and on a scale of either 100 or 50 feet to 1 inch. Do not start night work prior to the Engineer's acceptance of the lighting plan.

During active nighttime operations, furnish, place and maintain variable message signs to alert approaching motorists of lighted construction zones ahead. Operate the variable message signs only during active construction activities. Include compensation for lighting for night work in the Contract prices for the various items of the Contract. Take ownership of all lighting equipment for night work.

No additional payment shall be made for night work required by the project plans or specifications.

SP-3.06 TEMPORARY TRAFFIC STRIPING: - Not Applicable

SP-4.01 DENSITY REQUIREMENTS: - Not Applicable

SP-4.02 STABILIZATION: - Not Applicable

SP-4.03 SOIL BORING INFORMATION: - Not Applicable

SP-4.04 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 its own expense present the above letter and a contour plan of the site to the DT&SS Construction Engineer for approval of stockpiling site.
 3. At the conclusion of the stockpiling activity, the Contractor shall obtain a signed letter of release from the property owner that he/she is completely satisfied with the stockpiling operation and with the restoration of their property. A copy of the letter shall be furnished to the Engineer.

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 any agreement between the Contractor and private property owner(s).

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, nuisance and does not interfere with the natural surface runoff in the area.

SP-4.05 DEWATERING:

Any dewatering related to this project will not be a separate bid item. The cost shall be included in the price of the facility being installed at that location and/or any related pay items.

SP-4.06 COMPACTION OF SUITABLE CLAY FILL MATERIAL:

The Contractor shall have equipment available to properly compact any suitable clay fill material at no additional cost to the City.

SP-4.07 IDENTIFIED AREAS OF CONTAMINATION:

Certain areas within the limits of this project have been identified as contaminated and are delineated on the plans. These areas include, but not limited to, the following address: 1502 E. Columbus Drive, Tampa, FL 33605.

The contamination type-petroleum, and levels, when known, are found at <https://prodenv.dep.state.fl.us/DepClnup>

The Contractor shall employ his own firm or subconsultant Contamination Assessment/Remediation Contractor – CAR Contractor to perform contamination assessment and remediation working in the designated contamination areas. Activities may include but not be limited to the following types of work:

- (1) Soil sampling.
- (2) Earthwork.
- (3) Operating scientific field testing equipment.
- (4) Installation and operation of equipment for dewatering.
- (5) Installing sheet pile for cofferdams.
- (6) Treatment of water to remove any contaminants.

A staging area may be required to facilitate the CAR Contractor's operations.

Where contamination assessment or remediation work is done simultaneously with the highway construction Contract, the assessment/remediation work period may or may not begin on the day highway construction begins and may or may not be consecutive working days. A schedule to accomplish the assessment/remediation work expeditiously will be established at the preconstruction conference. The Prime and His CAR Contractor will use this schedule as a basis for planning both work efforts. The Engineer must approve any deviation from this schedule before it occurs. Coordinate schedule changes with the CAR Contractor before approval by the Engineer.

Schedule operations to avoid intrusion into the areas designated on the plans or in specified contaminated areas or staging areas reserved for the CAR Contractor until the established schedule dictate, unless agreed to by the CAR Contractor beforehand. Provide access to the aforementioned sites at all times during the assessment/remediation work phase. Resume normal operations in the designated area once the contamination is removed and notice to proceed is issued by the Engineer.

Contractor to provide all invoicing (testing, permit fees, application for meter, metering by gallon, soil prep etc.). This will be approved by the City Engineer from the contingency allowance, as encountered and needed.

SP-5.01 UTILITY PROTECTION CONSIDERATIONS:

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 certain adjustment, removal, reconstruction, or protection of the utility's facility will be performed by that respective utility.

The Contractor shall make every effort to protect all water mains. If the main is damaged or lost, the Contractor shall replace the affected line in strict accordance with the City of Tampa Water Department Specifications and Construction Standards, latest, edition, at no extra cost to the City, and he shall assure that service is maintained at all times.

The Contractor shall make every effort to protect all sanitary sewer lines. If the main is damaged or lost, the Contractor shall replace the affected line in strict accordance with the City of Tampa Department of Sanitary Sewer Specifications and Construction Standards, latest edition, at no extra cost to the City.

It will be the Contractor's responsibility to preserve all existing sanitary sewer services without interruption during the construction of storm sewers or the repairs or reconstruction of sanitary sewers.

When the construction of storm sewers, repair or reconstruction of sanitary sewers has been completed, all temporary connections shall be removed. Sewers shall be cleaned of all settled solids.

The cost of handling sanitary sewers during construction, including cost of all labor, materials, and equipment or other items incidental to completing the job, shall be included in the contract price as bid for the contract items and no separate payment shall be made.

It will be the Contractors responsibility to preserve all existing ditches, swales, force main, gravity main, laterals, etc., and other stormwater appurtenances and facilities pertaining thereto whether owned or controlled by City, other governmental bodies or privately owned by individuals, firms or corporations.

Any temporary measures constructed shall first be approved by the Engineer. The cost of such temporary measures shall be included in the contract price bid for storm sewer items and no separate payment shall be made.

The Contractor shall furnish, install, and remove sheeting and shoring and other protective measures as may be necessary to satisfactorily accomplish the construction of this project. The cost of such sheeting and shoring and other protective measures shall be included in the unit prices as bid for the storm sewer items and no separate payment shall be made.

Compensation for steel sheeting and shoring furnished, installed and removed shall be paid for as extra work in accordance with Article 7.02, EXTRA WORK, on Page A-18 of the Tampa Agreement when approved for use by the Engineer. Such approval shall be for its use only, and the Contractor shall have full responsibility for the design, installation, and removal of the sheeting and shoring. The Contractor shall obtain the services of a registered Professional Engineer to design and certify the sheeting and shoring plans.

SP-5.02 ADJUSTMENT OF UTILITIES AND PUBLIC SERVICE INSTALLATIONS:

Storm and sanitary sewer manhole covers, valve covers or boxes, water meter boxes, and vaults located within the limits of construction of the pavement or sidewalk area to be constructed, reconstructed or overlaid shall be relocated or adjusted by the Contractor to conform with the new pavement or sidewalk elevation as a part of the work of constructing or reconstructing the pavement or sidewalk and no separate payment will be provided therefor.

Appurtenances of other utilities will be relocated or adjusted by the utility company owning or having jurisdiction over the respective utility.

SP-5.03 REMOVAL OR ADJUSTMENT OF PUBLIC UTILITIES:

The Contractor will make necessary arrangements with public utility owners, including the City of Tampa Water and the City of Tampa Sanitary Sewers, for removal or adjustments of existing utilities, whether shown or not shown on the plans, where such removal or adjustment is determined by the Engineer to be essential to the performance of the required construction, provided normal construction procedures are used by the Contractor.

Relocations or adjustments requested by the Contractor on the basis of the use of a particular method of construction or a particular type of equipment shall not be considered as being essential to the construction of the project if other commonly used methods or equipment could be employed without the necessity of relocating or adjusting the utility. The Engineer will determine the responsibility for any such adjustment of utilities.

Relocations or adjustments requested for the Contractor's convenience or because of delivery of materials to the job site shall be the responsibility of and at the expense of the Contractor.

The Contractor shall be required to coordinate its activities with relocation work by the utilities. A schedule for relocation work will be presented to the Contractor at the pre-construction conference. This schedule may be adjusted to "fit" the Contractor's proposed schedule, but it will include periods during which the Contractor's ability to perform work in the relocation area will be limited, with no additional compensation.

SP-6.01 USE OF CITY WATER SYSTEM:

The Contractor shall be responsible for obtaining and paying for a Tampa Water Department portable meter that shall be utilized when obtaining water from the City system. These costs shall be included in the various contract items and no additional compensation shall be made.

SP-6.02 WATER MAIN CONSTRUCTION AND/OR OFFSET: - Not Applicable

SP-6.03 WATER SERVICE CONNECTIONS: - Not Applicable

SP-7.01 SANITARY SEWER CONSTRUCTION: - Not Applicable

SP-7.02 SANITARY SEWER HOUSE LATERAL EXTENSION: - Not Applicable

SP-8.01 FILLING LOW AREAS WITHIN CITY LIMITS:

The Contractor under Sec. 21-27 (Permit Requirements) of the City of Tampa Code is prohibited from filling any area public or private (except where shown on the construction plans) within the project limits or anywhere within the City limits without a permit.

For filling and/or grading any area, the owner of such area shall obtain a permit from the Stormwater Management Division, Department of Sanitary Sewers, City of Tampa. The owner shall submit existing and proposed contour plans of the area to be filled and the adjacent land for determination if a permit could be issued. Drainage patterns cannot be altered to the detriment of neighboring property owners or public rights-of-way.

Concurrently the permit application will be reviewed by the Parks Department.

The Contractor shall not deposit any fill material within the City limits without an approved permit. A copy of the permit shall be submitted to the Engineer, by the Contractor prior to any filling or grading operation.

SP-8.02 ENVIRONMENTAL PROTECTION:

The Contractor will be held liable for the violation of any and all environmental regulations. Violation citations carry civil penalties and in the event of willful violation, criminal penalties. The fact that the permits are issued to the City does not relieve the Contractor in any way of its environmental obligations and responsibilities.

SP-8.03 CONFLICT STRUCTURE: - Not Applicable

SP-8.04 REINFORCED CONCRETE PIPE/BOX:

All reinforced concrete pipe, reinforced concrete arch culverts, storm drain, and sewer pipe, all reinforced concrete elliptical pipe and all pre-cast reinforced concrete box sections shall be inspected and accepted by a testing laboratory approved by the Engineer.

Each pipe/box 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 and conformance to the dimensional and all other designations of ASTM specifications. The cost of such inspection services shall be included in the unit prices for the respective pipe/box items.

Unless specified otherwise on plans, or directed by the Engineer, all storm sewer and culvert pipes shall be ASTM Class III, B wall thickness. All steel shall be grade 60.

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 Plans Index No. 430-001 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.

All round and elliptical reinforced concrete pipe and all pre-cast concrete box sections shall be manufactured and installed without lift holes. The Contractor shall install the pipe/box with the use of slings, hooks or other methods approved by the Engineer.

All round and elliptical reinforced concrete pipe shall be manufactured without visible corrugations on the internal wall. Any pipe with visible corrugations on the internal wall shall be rejected.

SP-8.05 CONSTRUCTION OF PAVED SUMP BETWEEN INLET AND EDGE OF PAVEMENT:

Whenever the plans indicate construction of a modified inlet, the Contractor shall construct a standard curb inlet with a concrete apron as shown in the details, the addition of the concrete apron being the only distinction between a standard inlet and a modified inlet.

If the edge of the concrete apron will be located immediately adjacent to the edge of existing asphalt pavement, and that pavement is not to be repaired or replaced as part of the construction, the Contractor shall saw cut the asphalt pavement to provide a neat clean edge and the concrete apron shall use that edge as part of the form.

If the edge of the concrete apron does not touch the edge of existing pavement, the Contractor shall construct a transitional apron, with 3:1 mitered edges, to connect the edge of the concrete apron to the edge of pavement. This transitional apron shall be constructed of the same material composition as the existing pavement.

All costs to construct the required concrete apron and any required transitional apron shall be included in the contract bid item of that modified inlet and no additional payment shall be made.

Wherever the plans indicate an inlet, either curb or grating type, to be placed outside the edge of existing pavement or curb limit so as to be in proper position for future street widening, the Contractor will be required to construct a paved sump between the edge of such existing pavement and inlet opening. The type of pavement for such sump areas shall be similar and equal to that of the adjacent roadway to which it is connected. Payment shall be made under the applicable items for street replacement.

SP-8.06 DRAINAGE STRUCTURES:

1. All inlets and manholes 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"+ from top of pipe to bottom of top slab, before "stack" is used.
 - b. The minimum diameter for stacks shall be as follows:

Twenty-four inches (24") for four feet (4') heights, Thirty-six inches (36") for four feet (4') to six feet (6') heights, and Forty-eight inches (48") for heights over six feet (6').

The stacks shall be symmetrical about the openings, five inches (5") minimum wall thickness, reinforced, and keyed (unless constructed of brick) as per the appropriate FDOT standard plans.
 - c. The minimum distance between pipe openings shall be nine inches (9").
 - d. For four-sided structures having openings in one or more corners, 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 rectangular 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 and outside with 1/2" 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 clay.
3. No additional compensation shall be paid for brick structures.
 4. For all types of manholes, the top and bottom slabs shall be as per applicable D.O.T. standard plans, 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 the same thicknesses and reinforcements in any manhole structure.
 - b. The minimum slab thickness and reinforcement shall be: 8" thick and #6 bars at 6" centers both ways.
 - c. 4'x6' or larger manholes including circular manholes with inside diameter of 5.0' or larger shall have 10" thick slabs with #7 bars at 6" centers both ways.
 - d. Unless specified on the plans, four sided structures with both inside dimensions in excess of 8.0' and circular structures with inside diameter in excess of 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. 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.
 9. 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 of D.O.T. Type 5 and 6 curb inlets and vice-versa without additional cost to the

City. P-5 and P-6 inlets shall have 3'-6" x 3'-6" substructures unless oversize pipe is to be accommodated or otherwise directed by the Engineer.

Side openings in curb and grate type inlets may be specified in the plans to meet site conditions. The Contractor shall provide such opening without any additional cost.

10. When precast drainage structures are requested as substitutions for poured in place concrete structures, 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'-0" before extending the structure height by another precast "barrel". The minimum height of the top (extension) precast "barrel" shall be 1'-6". "Barrel" extensions of less than 1'-6" height shall be cast in place with continuous reinforcement.
 - b. Four-side structures may be considered as an alternate to circular structures, but not the reverse.
 - c. For City type curb inlets, unless specified otherwise, directed by the Engineer, or to accommodate larger pipes, the Contractor may use 3'x4' (inside dimensions) substructures. 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 C478, the following limitations will apply:
 - (i) Maximum inside diameter shall not exceed 96".
 - (ii) Minimum wall thickness for 42" and 48" diameter substructures shall be 6"; 7" for 72" diameter, 8" for 84" and 96" diameters.
 - (iii) Vertical reinforcement in walls shall be equal in area to the required circumferential reinforcement area. Reinforcement spacing shall not exceed 12" O.C. in either direction.
 - 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. Contractor shall submit shop drawings only as specified below:
 - (i) One each-typical for different type of structures.
 - (ii) For structures directed by the Engineer, and/or requiring change with respect to design plans, or as otherwise required by these specifications.
 - g. No compensation shall be paid to the Contractor for precast drainage structures which are unusable due to site conditions or changes in plans.
 - h. Provide material testing acceptance reports by a licensed private laboratory verifying:
 - (i) That the structures were constructed in accordance with detail shown on the plans and/or typical Drawings.
 - (ii) Specific reference shall be made to the exact design criteria adhered to; if more than one, identify which criteria applies to which structures.
 - (iii) Identify the project title, project number, file number, date cast, structure, plan sheet number and station.
 - (iv) Reinforcement size, spacing, amount and cover.

- (v) Concrete placement, curing and strength.
- (vi) The testing laboratory stamp shall be placed on each structure prior to shipment.

11. All manhole and inlet structures shall be set on a minimum of a six 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.

Payment for the six inch thick layer of stone shall be included in the price of the structure. Payment for thicker layers of stone shall be from the Selected Bedding Material (Stone) pay item, if available, or as extra work.

12. The Standard Details from the City of Tampa Stormwater Division are herein incorporated into the Contract Documents.

13. Price and payment for City of Tampa Stormwater Inlets will be full compensation for all work specified in this Special Provision and includes all transportation, excavation, material removal and disposal, surface preparation, installation, finishing materials, leveling pad, bracing, equipment, tools, labor and other materials necessary to complete the work as outlined in this Special Provision and the Contract Plans.

Payment will be made under:

| | |
|------------------|-------------------|
| Item No. COT-001 | City Inlet Type 1 |
| Item No. COT-002 | City Inlet Type 2 |
| Item No. COT-003 | City Inlet Type 3 |

14. City of Tampa Stormwater Standard Details can be found here: <https://www.tampa.gov/document/stormwater-standard-details-25946>

SP-8.07 RIP-RAP: - Not Applicable

SP-8.08 STANDARD FOR FILTER FABRIC: - Not Applicable

SP-8.09 CONNECTION TO EXISTING INLET OR MANHOLE: - Not Applicable

SP-8.10 EROSION CONTROL PLAN:

In addition to the requirements of Section 104, the Contractor shall be required to submit an erosion control plan to the Engineer at the time of the preconstruction conference. The erosion control plan shall indicate in detail all measures proposed by the Contractor to meet its erosion control obligations, including all items required to meet permitting conditions for the project. Any phasing of the erosion control plan shall also be shown.

The cost of providing, revising and updating the erosion control plan shall be included in the unit costs of the various contract items and no separate payment shall be made.

SP-8.11 CONCRETE STRUCTURES AND CONCRETE BOX CULVERTS: - Not Applicable

SP-8.12 DRAINAGE STRUCTURE AND PIPE BEDDING: - Not Applicable

SP-9.01 EXISTING SIDEWALKS, DRIVEWAYS AND PARKING AREAS:

The Contractor shall meet existing sidewalks, driveways and parking areas (concrete or asphalt) when possible with the proposed street replacement. At locations where existing sidewalks and driveways are not at the same elevations as the new grades, the Contractor may be required to reconstruct a portion of the sidewalk or driveway as directed by the Engineer. (When existing driveway is of asphalt type, a base of 6" thickness shall be constructed with a 1" thick asphaltic concrete surface course.)

Payment will be as per the applicable contract unit bid prices for concrete sidewalk 4", concrete driveway 6", 6" base, and asphaltic surface course. There will be no payment if existing sidewalks or driveways must be reconstructed due to negligence of the Contractor.

SP-9.02 PRIME/TACK COAT: - Not Applicable

SP-9.03 PAVEMENT REPLACEMENT AND TOTAL RESTORATION: - Not Applicable

SP-9.04 CONCRETE CURB OR CURB-AND-GUTTER:

Expansion joints in concrete curb or curb-and-gutter shall be placed at all inlets, radius points, horizontal and vertical points of intersection (P.I.'s), and as otherwise directed by the Engineer. They shall be located at intervals of 100 feet between other expansion joints or ends of a run.

SP-9.05 ASPHALT LEVELING COURSE: - Not Applicable

SP-9.06 PAVEMENT MIX DESIGNS: - Not Applicable

SP-9.07 USE OF RECLAIMED ASPHALT: - Not Applicable

SP-9.09 PEDESTRIAN RAMPS WITH DETECTABLE WARNINGS

All pedestrian ramps constructed in new sidewalk under Section 522 of the FDOT Technical Specifications shall comply with F.D.O.T. Standard Plans No. 522-002 and 522-001, except that Detectable Warning Strips, a.k.a., domes, for District Seven Construction and Maintenance should be per the FDOT Approved Product List, Specification Number 527 and attached to the concrete with bolt/screw. For detectable warnings, use contrasting color, red only. Payment for pedestrian ramps shall be included in the sidewalk concrete pay item. Detectable warnings have a separate pay item.

SP-10.01 GRASSING AND/OR SODDING:

Lawn road shoulders, and all areas that do not have well established grass at the time of construction and are disturbed during construction may be grassed, as directed by the Engineer. All areas shall be properly prepared by removal of construction debris and rocks, and soil preparation and fertilization or placement of topsoil as directed by the Engineer. Lawn, road shoulders, and other locations where construction shall occur that are well maintained and show healthy grass at the time of construction, or where otherwise directed by the Engineer, shall be sodded with either Pensacola or Argentine Bahia Type or St. Augustine type sod as applicable.

SP-10.02 TREE REMOVAL: - Not Applicable

SP-10.03 LIVE OAK TREES: - Not Applicable

SP-10.04 ROOT PRUNING: - Not Applicable

SP-10.05 TRANSPLANTING TREES: - Not Applicable

SP-10.06 RESTORATION OF LANDSCAPING WITHIN RIGHT-OF-WAY:

The Contractor shall remove any shrubbery, trees less than 5 inches in diameter, other landscaping, walkways, planters, other landscaping, and irrigation systems which are in conflict with the proposed construction. These items shall be restored, relocated, and/or reconstructed as shown in the plans or as directed by the Engineer.

Cost of removing, restoring, relocating, and reconstructing the above items shall be included in the lump sum price for Clearing and Grubbing, and no separate payment shall be made.

SP-10.07 TREE PROTECTION:

Tree barricades shall be constructed and maintained at trees indicated on the plans as "to be protected" and/or as directed by the Engineer. Generally, barricades are to be placed ten (10) feet from the trunk of each protected tree.

Barricades shall be constructed of commercially available pine lumber, as follows: Vertical members shall be 2" x 2" or larger, generally spaced twelve (12) feet apart. Horizontal members shall consist of one (1) 1" x 2" board.

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.

Payment for tree protection and tree cutting or trimming shall be included in the lump sum price bid for mobilization and/or clearing and grubbing and no separate payment shall be made.

SP-10.09 TREE TRIMMING:

In addition to Tree Trimming required in the FDOT Standard Specification Section 110, the Contractor shall trim tree limbs and shrubbery to a height of 8 feet above sidewalks and to the right-of-way in the project area, and as directed by the Engineer.

Cost of trimming and disposal of these items shall be included in the lump sum price for Clearing and Grubbing, and no separate payment shall be made.

SP-11.02 USE OF EXPLOSIVES: - Not Applicable

SP-11.03 EXISTING PUBLIC FACILITIES:

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, etc., and replacement of these items shall be considered incidental to the cost of construction and no separate payment will be made.

SP-11.04 METAL PRODUCTS: - Not Applicable

SP-11.05 WATER FOR DUST CONTROL: - Not Applicable

SP-11.09 CONCRETE BLOCK RETAINING WALLS WITH CONCRETE FOOTING: - Not Applicable

SP-11.10 MAILBOX RELOCATION:

All mailboxes within the limits of construction shall be removed and reset or relocated to allow access for mail delivery as directed by the Engineer. Cost of this activity shall be included in the cost of the various contract items and no separate payment shall be made.

SP-11.11 SIGNALIZATION CONDUIT:

Payment for "Conduit Under Pavement" shall be made for any conduit placed in an area outside the limits of clearing and grubbing and which requires pavement removal and restoration, whether the pavement is flexible (asphalt) or rigid (concrete). Payment for backfill, compaction and pavement restoration shall be included in the unit price for Conduit Under Pavement, and no separate payment shall be made.

Payment for "Conduit Underground" shall be made for any conduit placed in an area which does not require pavement restoration, or which is within the limits of clearing and grubbing. Payment for backfill, compaction, and non-pavement surface restoration shall be included in the unit price for Conduit Directional Bore, and no separate payment shall be made.

Any conduit described as "Additional Conduit" shall refer to conduit placed in the same trench as other conduit,

whether it is "Under Pavement" or "Underground".

SP-11.12 RESTORATION OF MONUMENTATION:

The Contractor shall, with no additional payment, re-establish any permanent survey or mapping monumentation which is disturbed or destroyed in the course of the construction project.

SP-11.13 INSTALLATION OF SIGNALIZATION POLES AND MAST ARMS: - Not Applicable

SP-11.14 SIGNALIZATION CONTROLLER AND CABINET:

Existing controller cabinets are to remain.

The Contractor shall connect all external signalization wiring to the controller for operation.

Payment shall be full compensation for all work, equipment, tools, labor and any incidentals required to modify the controller and cabinet.

SP-11.15 VEHICULAR TRAFFIC SIGNAL ASSEMBLIES:

All LED's incorporated in signal displays shall be manufactured with "Al InGap" technology.

SP-11.16 CONTINGENCY ALLOWANCE:

Payment from the City Contingency Allowance shall be made only at the direction of the Engineer under:

Item No. 0999 25 Contingency Allowance L.S.

SP-12.01 WATER CONTRACT PAY ITEMS:

General

It is the intent of these contract documents that any cost for which compensation is not directly provided by a bid item shall be prorated and included in the bid item for which they are required.

The prices stated in the Proposal include all costs and expenses for taxes, labor, equipment, commissions, transportation charges and expenses, patent fees and royalties, labor for handling material during inspection together with any and all other costs and expenses for performing and completing the work as shown on the plans and specified herein. The basis of payment for any water item at the unit price shown in the Proposal shall be in accordance with the description of that item in this Section.

No separate payment will be made for the following items; the cost of such work if required shall be included in the applicable contract pay items of work:

1. Notification to customers in advance of shut-downs, in conformance with Contract Documents;
2. Clearing and grubbing;
3. Excavation, including necessary pavement/slab removal;
4. Shoring and sheeting as required by OSHA trench excavation safety standards unless specifically provided for in a pay item;
5. Dewatering and proper disposal of all water unless specifically provided for in a pay item;
6. Backfill and proper compaction, including suitable fill;
7. Grading;
8. Temporary facilities and controls during construction such as water/sanitary facilities, traffic control, informational signs and environmental protection, unless specifically provided for in a pay item;
9. Removing and legally disposing of waste material due to construction, including but not limited to valve boxes that need to be removed from abandoned water mains;

10. Cleanup and restoring the job site to its original condition, which includes but is not necessarily limited to restoring the ground surface to its original grade;
11. Testing and placing system in operation;
12. Any material and equipment required to be installed and used for tests;
13. Maintaining the existing quality of service during construction;
14. Repair of sanitary sewer house laterals that were properly marked;
15. Repair of water services damaged during construction;
16. Adjusting existing water meter boxes to grade which are affected by construction;
17. Appurtenant work as required for a complete and operable system;
18. Coordination with all Federal, State and Local agencies and utilities;
19. Cutting of existing or new pipe for purposes of abandonment or installation of new pipe, valves or fittings;
20. Verification of pipe elevation;
21. Repair of private irrigation systems damaged during construction;
22. Furnishing and installing suitable temporary fences, as directed by the Engineer, to adequately secure areas protected by a permanent fence when that permanent fence must be removed. The temporary fence shall remain in place until the permanent fence is replaced;
23. Maintaining red-line drawings of changes to construction plans; and
24. Furnishing and installing polyethylene encasement per Standard Detail 2.05 for all buried ductile iron pipe & all fittings.

The Contractor's attention is again called to the fact that the quotations for the various items of work are intended to establish a total price for completing the work in its entirety. Should the Contractor feel that the cost for any item of work has not been established by the Proposal or Contract Pay Items, s/he shall include the cost for that work in some other applicable bid item, so that his proposal for the project does reflect his total price for completing the water work in its entirety.

The quantities for payment under this Agreement shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the City, in accordance with the applicable method of measurement therefore contained herein. A representative of the Contractor shall witness all field measurements.

All work shall be in accordance with the Technical Specifications and Standard Details herein. All materials shall be in accordance with the Material Specifications herein. Any specifications or materials required that are not addressed in this document shall be in accordance with current City Water Department standards.

Meter Services Two- inch and Less

The Contractor shall provide all labor, materials and equipment for the height adjustment of existing water meter boxes, as directed in the plans. Meter box adjustment shall include, but may not be limited to:

1. All necessary excavation;
2. Raising or lowering existing water meter box to match proposed finish grade or elevation;
3. Backfilling and compacting of all excavations;
4. Cleaning up/restoring the job site to its original condition which includes but is not limited to restoring the elevation of surface to its original grade.

Payment shall be made for each meter box adjusted and accepted by the Engineer.

Payment shall be made under:

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|------------------------|-------------|
| 8100W | Adjust water meter box | EA |

Valve Box –Adjust Existing

In locations where the surface elevation adjacent to an “existing” water valve box will be modified due to the proposed sidewalk construction, the Contractor shall provide all labor and equipment (including any required valve box risers) as required to adjust the tops of existing valve boxes to the new grade. The valve box adjustment shall include, but may not be limited to:

1. Excavating the trench;
2. Maintaining the trench which shall include dewatering and bracing and sheeting where required or as directed by the Engineer;
3. Adjusting the valve box to the appropriate elevation;
4. Backfilling and compacting the trench;
5. Furnishing, forming and pouring a 6-inch thick concrete pad around each valve box not located in sidewalk or roadway;
6. Furnishing approved paint and painting valve cover;
7. Cleaning up and restoring the job site which shall include re-grading the terrain; and
8. Removal and disposal of all waste materials.

Payment shall be made for the number of valve boxes adjusted and accepted by the Engineer.

Payment shall be made under:

| <u>Item No.</u> | <u>Description</u> | <u>Unit</u> |
|-----------------|---------------------------|-------------|
| EX-9910 | Adjust Valve Box (Height) | EA |

SP-12.02 WATER TECHNICAL SPECIFICATIONS:

GENERAL REQUIREMENTS

Summary of Work

The Contractor shall have access to and inspect the project area prior to beginning construction and ascertain existing conditions.

The work will include the furnishing of all services, labor, equipment and certain materials necessary for a complete installation of water lines and performed in a thorough and workmanlike manner. All items implied, usually included, or required for the construction of a complete operating system shall be installed whether or not shown on the plans or specified herein. In general, pipe shall be provided with a minimum of 36 inches of cover.

Water work as noted on construction plans shall include, but may not be limited to:

1. Adjustment of Valve Box Tops to match proposed roadway and sidewalk elevation; and
2. Adjustment of incidental Meter Boxes(heights) to match proposed roadway and sidewalk elevation

Coordination

The Contractor shall provide for the complete coordination of the construction effort including the work of subcontractors, the effort of independent testing agencies and the interrelated work with the City where tie-ins to existing facilities are required.

All water lines, storm drains, sanitary sewers, gas or other pipe, telephone or power cables or conduits, all individual service connections and all other obstructions, whether or not shown on the plans, shall be supported where adjacent to or crossing the new utility line excavation in a manner acceptable to the Department and the respective utility owner. Wherever existing utility structures or branch connections leading to sanitary sewers or to storm drains, or other conduits, ducts, pipes, or structures present obstructions to the grade and alignment of the pipe, they shall be permanently supported, removed, relocated, or reconstructed by the Contractor through cooperation with the owner of the respective utility, structure, or obstruction involved. In those instances where their relocation or reconstruction is impractical, a deviation from line and grade will be authorized and the changes shall be made in the manner directed by the Engineer.

Working adjacent to (and crossing) other utilities can be expected to be commonplace on this project. The Contractor shall coordinate his construction schedule with the various utility companies as well as affected local agencies involved prior to starting the project along with a minimum of 48 hours of notice to when construction will commence in an area, in order to permit field location of utility lines prior to construction. A toll free number (811) is available to assist in such coordination efforts. This number is for the utility notification center, a program known as Sunshine State One Call of Florida, but may not totally represent all utilities involved in the construction area. The Contractor is responsible for contacting the utility notification center and to immediately notify the Contract Administration Department (635-3432) of the "Location Request Number" obtained.

The various agencies or utilities possibly affected by the work include but are not necessarily limited to the following:

City of Tampa
Wastewater Department
306 E. Jackson St. (390A6N)
Tampa, FL 33602

Florida Dept. of Transportation
2820 Leslie Rd
Tampa, FL 33619

DPW Traffic Transportation
306 E. Jackson St., (290A4E)
Tampa, FL 33602

Hillsborough County
Planning & Development Mgmt. Dept.
P.O. Box 1110
Tampa, FL 33601

Hillsborough County Right of Way Management office
5701 East Hillsborough Avenue
Suite 1222
Tampa, Florida 33610

All utilities shall be kept in operation except with the express written consent of the utility owner. It will be the Contractor's responsibility to preserve existing utilities. Any and all damage to existing utilities as a result of the Contractor's actions shall be repaired to the satisfaction of the utility owner and the City at the Contractor's expense.

Where connections are made to existing mains or other shutdowns are necessary, permission must be obtained and arrangements must be made with the Water Department for removing from service those mains that will be affected. Shutdowns must be held to a minimum in both number and duration, and accomplished at times acceptable to the Water Department. No valve or other control device on the existing system shall be operated by the Contractor. The Contractor shall provide a minimum of 3-working days notice of when valve operation or other control device operation is needed. Additionally, any service meter that is temporarily removed, after being approved by the Water Department, shall be returned to the original service address from which it was removed.

Field Engineering

Each element of the work is subject to review by the Engineer, prior to proceeding with the next element; however, this shall not relieve the Contractor of the responsibility for delivering to the City a project completed in conformance with the contract plans and specifications and guaranteed as stipulated.

Abbreviations and Symbols

Various abbreviations and symbols may be used or referenced in these specifications and contract plans. Symbols are generally explained on the sheet of the plans entitled "Location Map, Legend and General Notes". Abbreviations commonly used, along with their full reference, are as follows:

- Cu.Yds. (CY) - Cubic Yards
- CIP - Cast Iron Pipe
- DIP - Ductile Iron Pipe
- DIPRA - Ductile Iron Pipe Research Association (formerly CIPRA)
- EA - Each
- ED - Each Day
- FDEP - Florida Department of Environmental Protection

| | | |
|-----------------|---|---|
| • FDOT | - | Florida Department of Transportation |
| • FL | - | Flanged Joint |
| • HDD | - | Horizontal Directional Drilling |
| • HDPEP | - | High Density Polyethylene Pipe |
| • Lin. Ft. (LF) | - | Lineal Foot |
| • LS | - | Lump Sum |
| • mg/l | - | Milligrams per Liter |
| • MJ | - | Mechanical Joint |
| • MH | - | Man Hours |
| • NSF | - | National Science Foundation |
| • OSHA | - | Occupational Safety and Health Administration |
| • ppm | - | Parts per Million |
| • psi | - | Pounds per Square Inch |
| • PVC | - | Polyvinyl Chloride Pipe |
| • RPR | - | Resident Project Representative |
| • S.P. | - | Steam Pressure |
| • Sq. Ft. (SF) | - | Square Feet |
| • Sq. Yds. (SY) | - | Square Yards |
| • TN | - | Ton |
| • W.O.G. | - | Water, Oil, Gas |
| • NAVD88 | - | North American Vertical Datum 1988 |

Submittals, Shop Drawings, Product Data and Samples

The Contractor shall submit 4 copies of shop drawings, plus those copies necessary for his own requirements. The shop drawings shall have been checked and stamped approved by the Contractor and identified as the Engineer may require.

This data shown in the shop drawings shall be complete with respect to dimensions, design criteria, materials of construction, and the like, to enable the Engineer to review the information required. The data shown on the shop drawings shall include reference to specification section, drawing number, item identification on catalog cuts and like information to expedite review. Incomplete submissions will be returned without action.

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.

Items that are on the Water Department's pre-approved material list will not be required to go through the shop drawing submittal process, provided that the list of materials is submitted to and approved by the Engineer in advance of the start of construction.

The Engineer's review of a shop drawing is only for general conformance with the design concept of the project, and shall not relieve the Contractor from his responsibility for and deviation from the requirements of the contract documents or technical specifications, unless the Contractor has, in writing, called the Engineer's attention to such deviation at the time of the shop drawing submission and the Engineer has given written approval to the specific deviation. Any review by the Engineer shall not relieve the Contractor from his responsibility for errors or omissions in the shop drawings. One complete set of reviewed shop drawings, product data and samples shall be kept at the site at all times. During the work specified as shown on the shop drawings, the Contractor shall make no deviations from the reviewed drawings, and the changes made thereon by the Engineer, if any.

When required by the Engineer, shop drawings or product data shall be submitted for, but shall not be necessarily be limited to, the following:

- Ductile iron pipe and MJ fittings (Bends, restrained joint, solid sleeves, etc.)
- Gate Valves and Valve Boxes

- Polyethylene encasement

Whenever a standard of quality is established by a reference specification, the Contractor shall submit a certificate by the manufacturer that the material supplied meets the requirements of both these technical specifications and the referenced specifications and standards.

Quality Control

In addition to the inspection and testing outlined in the General Provisions, compaction/density tests also shall be required.

The contractor is responsible and will perform all necessary material and quality control (QC) testing/retesting to meet the FDOT requirements per the Florida Department of Transportation, JULY 2021 Standard Specifications for Road and Bridge Construction. The contractor is to employ and fund the services for any required testing. Testing costs are to be included in the appropriate pay items and no separate payment will be made for testing services. The City will provide all Quality Assurance (QA) testing & documentation to meet the FDOT requirements.

The material and quality control (QC) testing firm will perform inspections, tests, and other services specified individual specification Sections and as required by the Engineer. Reports will be submitted by the material and QC testing firm to the Engineer, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents. The Contractor shall cooperate with the material and QC testing firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested; notify Engineer and independent firm a minimum of 24 hours prior to expected time for operations requiring services; and make arrangements with the material and QC testing firm and pay for additional samples and tests required for Contractor's use. Retesting required due to non-conformance with specified requirements shall be performed by the same material and QC testing firm at the direction of the Engineer. Payment for retesting will be charged to the Contractor by deducting inspection or testing charges from the Contractor's payment.

Materials and Equipment

A) General

Materials and equipment incorporated into the work shall meet the requirements of the General Provisions and these specifications. The Contractor shall furnish satisfactory evidence of the quality and kind of materials and equipment as well as guarantees or warranties provided by the manufacturer. It will be necessary to submit a copy of all delivery tickets for materials used on the project, regardless of the basis of payment.

All materials and equipment shall be applied, installed, connected, erected, used, cleaned, finished and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processor except as otherwise provided in the Contract Documents.

B) Quality Standards

If a standard of quality for items of equipment is established by reference on the plans or in the specifications to specific manufacturer's products, materials or construction and/or fabrication, items of equipment shall equal or exceed the standard of the referenced product as outlined in the General Provisions.

The Engineer shall be the sole judge of material or equipment equality. The burden of proof of equality rests with the Contractor. Qualities described and shown refer to minimum criteria the Engineer will use in considering equipment proposed for the project.

It is not the intent of the Contract Documents to function as proprietary specifications. Where a particular manufacturer make and model are cited and specifically required for interchangeability of parts and to match existing equipment, this has been stated in the specifications.

C) Transportation and Handling

Materials and equipment shall be loaded and unloaded by methods affording adequate protection against damage. Every precaution shall be taken to prevent injury to the material or equipment during transportation and handling. Suitable power equipment will be used and the material or equipment shall be under control at all times. Under no condition shall the material or equipment be dropped, bumped or dragged. When a crane is used, a suitable lift sling shall be used.

The crane shall be placed so that all lifting is done in a vertical plane. Materials or equipment skid loaded, palletized or handled on skidways shall not be skidded or rolled against material or equipment already unloaded.

Materials and equipment shall be delivered to the job site by means that will adequately support it and not subject it to undue stresses. Material and equipment damaged or injured in the process of transportation, unloading or handling shall be rejected and immediately removed from the site. They shall be replaced with materials that meet all requirements of the contract documents and are suitable to the Engineer.

D) Storage and Protection

Materials and equipment shall be stored in a manner and at a location acceptable to the Engineer to insure the preservation of their quality and fitness for the work and which precludes damage or injury and affords protection against weather staining, corrosion or vandalism. Skidded or palletized materials or equipment shall not be stacked. Electrical equipment shall be stored indoors or under cover. Sheet materials shall be stored in a manner that affords free drainage with no ponding of water. All equipment shall be stored in a secure area.

Replacement of materials or equipment damaged, destroyed or lost through improper, inadequate or careless storage shall be the Contractor's responsibility.

Stored materials and equipment shall be readily and easily accessible to facilitate inspection.

CONSTRUCTION OF WATER MAINS AND APPURTENANCES

Subsurface Investigation

The Contractor shall be responsible for having determined to his satisfaction, the nature and location of the work, and the ground conformation, the character and quality of the substrata, the types and quantity of materials to be encountered, the nature of the groundwater conditions, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions and all other matters which can, in any way affect the work under this Agreement. The prices established for the work to be done will reflect all costs pertaining to that work.

The Contractor will notify the Engineer promptly in writing of any subsurface or adverse physical conditions at the site which differ materially from those that may be indicated by the Contract Documents or earlier subsurface information in accordance with Section I-2.01 of the Instructions to Bidders and Section G-2.04 of the General Provisions. The Engineer will promptly investigate the conditions and advise the Contractor in writing if further surveys or subsurface tests are necessary. If necessary, the Department will promptly obtain the necessary additional surveys and tests and furnish copies to the Contractor.

Site Preparation

The construction site shall be cleared of all obstructions, stumps roots, and vegetation within the limits required for proper execution of the work in accordance with Section 110, FDOT Standard Specifications, latest edition, to a minimum depth of 12 inches.

Shrubbery, trees and plants shall be protected as required by the City of Tampa Parks Department ("Parks Department") or the agency having jurisdiction, as shown on the plans, or as directed by the Engineer. Where necessary to remove plantings in order to accomplish the work, such plantings shall be replaced. Trees will be transplanted when feasible, and when a successful transplant is probable. Plantings and trees shall be replaced before the work is accepted.

Trees, stumps, and large roots within the construction area shall be removed, unless otherwise directed. Topsoil shall be stockpiled for future use. Unsuitable materials shall be removed from the site and properly disposed of by the Contractor. All

trees shall be preserved in their natural state unless their removal is directed by the Department. Trees within 20 feet of the construction line shall be protected as indicated on the plans or as directed by the Engineer. Trees with trunk diameters in excess of five inches (measured circumference three feet above ground level and divided by 3.14) shall be preserved unless:

- A. their removal is directed;
- B. they are located within areas scheduled to be paved; or
- C. they interfere with utility or pipe trench alignment.

All trenching performed adjacent to tree trunks shall be accomplished in such a manner as to maintain a minimum clearance of at least 10 feet between the pipe and the base of the tree trunks for trees 5 inches in diameter and larger. A minimum of 20 feet clearance shall be maintained for tree trunks classified a grand tree by the Parks Department. When trenching is to be performed closer than the above minimums, root pruning or other protective measures as directed by the Engineer may be required. Tree trimming and root pruning shall be performed by a competent tree specialist who carries proper insurance and is licensed by the City of Tampa.

Dewatering

If subsurface water is encountered in trenching or structural excavation work, the Contractor shall adequately dewater the excavation at his expense. No additional payment shall be made for dewatering operations. The contractor will be required to do any and all sampling that may be required to be in conformance with the NPDES discharge permit requirements, at no expense to the city.

Subsurface water shall be kept 2 feet or more below the working area until there is no danger of displacement of pipes or structures. All water collected and pumped shall be disposed of in a manner which will cause no health hazard, flooding or nuisance to the surrounding area and in a manner so as not to degrade the water quality of surrounding water or violate any environmental ordinances or requirements. Water containing debris, sand or heavy sediment shall not be discharged into the storm water system. All permits for the discharge of this water shall be obtained by the Contractor from the appropriate regulatory agency.

Trenching, Backfilling and Compacting

Trenching shall be conducted to the limits and grades shown on the plans or as directed by the Department. The Contractor performing trench excavation on this Contract shall comply with the Occupational Safety and Health Administration's (OSHA) trench excavation safety standards, 29 C.F.R., s.1926.650, Subpart P, including all subsequent revisions or updates to these standards as adopted by the Department of Labor and Employment Security (DLES) as well as The Florida Trench Safety Act as delineated in Florida Statute Chapter 553, Part III.

By submission of his bid and subsequent execution of this Contract, the Contractor certifies that all trench excavation done within his control shall be accomplished in strict adherence with OSHA trench safety standards, including all revisions and updates to these standards as adopted by the Department of Labor and Employment Security, as well as to The Florida Trench Safety Act as delineated in Florida Statute Chapter 553, Part III.

The Contractor also agrees that he has obtained or will obtain identical certification from his proposed subcontractors that will perform trench excavation prior to award of the subcontracts and that he will retain such certifications in his files for a period of not less than three years following final acceptance.

The Contractor shall consider all available geotechnical information in his design of the trench excavation safety system. Dewatering operations shall be maintained until pipe laying is complete and the trench backfilled sufficiently to prevent movement or flotation of the pipe.

The use of trench-digging machinery will be permitted except in places where its operation will cause damage to other utilities, trees, buildings, or existing structures above or below ground; in which case hand methods will be employed.

The trench width and trenching method may vary with, and depend upon the depth of the trench and the nature of the excavated material encountered; but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill

to be placed and compacted properly. The minimum width of unsheeted trench, at the bottom where the pipe is to be laid, shall be one foot greater than the nominal diameter of the pipe, except by consent of the Department. The maximum clear width of trench and the trench support system shall be in accordance with OSHA requirements. Where sheeting and bracing are used, the trench width shall be increased accordingly. Trench sheeting shall be cut off at a level of at least 1 foot above the top of the installed pipe and shall be left in place until the pipe has been laid, tested for defects, repaired if necessary, and until the earth around the pipe has been compacted to a depth of 2 feet over the top of pipe.

Unless otherwise specified, the trench shall be AWWA C600 Type 2 as shown on the Standard Details "Typical Trench, Bedding and Backfill Detail". The trench shall have a flat bottom conforming to the depth to which the pipe is to be laid. The pipe shall be laid upon sound soil, cut true and even, so that the barrel of the pipe will have equal bearing for its full length. Bell depressions of ample dimensions shall be dug at each joint to permit proper pipe jointing.

In the event the Contractor excavates below the elevation required without approval from the Department, he shall refill with approved material and thoroughly consolidate. If, in the opinion of the Engineer, the trench bottom cannot support the pipe, a further depth and/or width shall be excavated and refilled to pipe foundation grade or other approved means shall be adopted to assure a firm foundation for the pipe.

All excavated material shall be piled in a manner that will not endanger the work and that will avoid obstructing sidewalks and driveways. Gutters shall be kept clear or other satisfactory provisions made for street drainage. All material removed from the trench on an improved area shall be removed from the site by the Contractor at the Contractor's expense.

Material removed from an unimproved area may be reused if, in the opinion of the Engineer, it is suitable and if local conditions permit reuse. All materials suitable for reuse must be stored separate from the general excavated material. All backfill material must be approved by Engineer prior to placement. If replacement backfill is required, the Contractor must supply the material at his expense.

Backfill material shall be free from cinders, ashes, refuse, organic matter, boulders, rocks or stones, or other material that in the opinion of the Engineer is unsuitable. Rocks up to 6-inches in their greatest dimension may be used for backfill from 1 foot above the top of the pipe up to the subgrade of the pavement unless otherwise specified by the Engineer.

All trenches shall be backfilled by hand, from the bottom of the trench to the centerline of the pipe in layers of 6 inches. Compaction shall be performed by tamping. Backfill material shall be deposited in the trench for the full width on each side of the pipe. From the centerline of the pipe to the specified grade, the pipe shall be backfilled by hand or by approved mechanical methods. Compaction and consolidation shall be done in accordance with the requirements of the agency having jurisdiction. Unless requirements of the agency having jurisdiction are more stringent, all compaction shall conform to the following:

A. Impervious (paved) Surface Areas:

The space between the pipe and the trench sides shall be packed full by hand-shoveled earth, free from lumps, carefully deposited in layers not exceeding 6-inches in depth. Such material shall be placed equally on each side of the pipe, and at the same time tamped in a manner acceptable to the Department, until enough fill has been so placed and compacted to the centerline of the pipe. From this point to 12 inches above the pipe, backfill shall be placed and compacted in uniform loose lifts no greater than 6 inches to a density that is at least 98% of the maximum modified proctor density (as determined by the Modified Proctor Density Test Method (ASTM D-1557)). The balance of the soils backfilled from this point to the top of the trench shall be placed and compacted in loose lifts not to exceed 12 inches to a density at least 98% of the maximum modified proctor density.

B. Pervious (non-paved) Surface Areas:

The space between the pipe and the trench sides shall be packed full by hand-shoveled earth, free from lumps, carefully deposited in layers not exceeding 6-inches in depth. Such material shall be placed equally on each side of the pipe, and at the same time tamped in a manner acceptable to the Department, until fill has been placed and compacted from the bottom of the trench to the centerline of the pipe. From this point up to grade, backfilled soils shall be placed and compacted in uniform loose lifts no greater than 12 inches, to a density that is at least 95% of the maximum density as determined by the Modified Proctor Density Test (ASTM D-1557).

SP-12.03 WATER MATERIAL SPECIFICATIONS:

All materials shall be in accordance with these Material Specifications and shall, in no event, be less than that necessary to conform to the requirements of any applicable law, ordinances and codes. All materials or products that will be in contact with potable water shall be listed by the National Science Foundation (NSF-61 listed) or by an approved certifying agency as conforming to the requirements of ANSI/NSF-61.

Items designated to be “domestically manufactured” shall be manufactured, assembled and tested in their entirety within the United States of America or its territories. Items designated to be “domestically assembled” may be foreign manufactured but shall be assembled and tested in their entirety within the United States of America or its territories. Items requiring a “domestic presence” may be foreign-manufactured and/or assembled and/or tested, but the manufacturer shall have a designated representative or agent located within the United States of America, and that representative or agent shall be available to provide on-site service if required by the City of Tampa Water Department.

All materials shall be new, unused, and correctly designed. They shall be of standard first grade quality, produced by expert workmen, and intended for the use for which they are offered. Materials or equipment which, in the opinion of the Department, are inferior or are lower grade than indicated, specified or required, shall not be accepted. All materials used in this contract must be approved in advance by the Engineer. In conformance with section G-4.02 of these contract documents, any two items of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer. Unless approved in advance by the engineer, only one manufacturer may be used for each item under this contract.

SP-12.04 WATER DEPARTMENT STANDARD CONSTRUCTION DETAILS LIST:

The following details from the City of Tampa Water Department are herein incorporated into the Contract Documents

| STD. DETAIL # | DESCRIPTION |
|----------------------|--|
| 3.05 | VALVE BOX ADJUSTMENTS FOR GRADE CHANGE |

SP-12.05 WATER DEPARTMENT STANDARD CONSTRUCTION DETAILS LIST:

It is the intent of these Specifications that all newly constructed sewers and appurtenant facilities be placed in service as rapidly as an integrated portion of the facilities can be constructed, inspected and accepted by the Engineer. Acceptance or use by the City of any portion of the facilities prior to final acceptance shall not relieve the Contractor of any responsibilities, regarding such facilities, included in the Contract.

SP-12.06 DATA TO BE SUBMITTED ON PIPE

Within ten days after the date the Contractor is issued the Notice of Award and prior to his entering into any subcontract for the manufacture or purchase of any pipe, the Contractor shall submit to the Engineer, in an amount equal to four (2) sets to be retained by the City plus the number of sets desired by the Contractor, the following information:

1. The name and address of the pipe manufacturer and the location of the plant at which the pipe will be manufactured.
2. A general description of and specifications for the pipe and pipe joints proposed.
3. Notarized certificates of manufacture for VCP, PVC, HDPE, and DIP stating conformance to applicable standards and specifications.
4. Any additional information that the Engineer may deem necessary in order to evaluate the qualifications of the manufacturer and to determine the suitability of the proposed pipe to meet the requirements of the Contract Documents.

The Contractor shall not enter into any subcontract for the furnishing of pipe until he has received the Engineer's approval, in writing, of the proposed manufacturer and pipe. All pipe of specified classes and materials shall be of one kind and shall be produced by a single manufacturer.

SP-13.01 SITE AND STREET FURNISHINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following site and street furnishings:
 - 1. Benches.
 - 2. Trash receptacles.
 - 3. Bike racks.
 - 4. Bike Maintenance Station

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, field-assembly requirements, and installation details.
- B. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
 - 1. Full Size: Bench, Trash receptacle, bike rack and bike maintenance station.
 - 2. Provide physical material samples for each powdercoat finish and each concrete finish prior to ordering. Color to be approved by Landscape Architect.
- C. Product Schedule: For site and street furnishings. Use same designations indicated on Drawings.
- D. Maintenance Data: For site and street furnishings to include in maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type of site and street furnishings through one source from a single manufacturer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Benches:
 - a. Victor Stanley – PO Drawer 330, Dunkirk, MD 20754. Phone – (800)-368-2573. Model: CR-138, 6' Classic Series with intermediate armrests (center armrests). Powdercoat color: Black

2. Trash Receptacles:
 - a. Victor Stanley – PO Drawer 330, Dunkirk, MD 20754. Phone – (800)-368-2573. Model:SD-42, Ironsites Series 36-gallon with side door opening litter receptacle and rain bonnet lid. Powdercoat color: Black
3. Bike Rack:
 - a. Tournesol – 2930 Faber Street, Union City, CA 94587. Phone – (800)-542-2282. Model: B-1520 FairWeather 36” Bike Bollard, Embed. Powdercoat color: Black
4. Bike Maintenance Station:
 - a. The Park Catalog – sales@theparkcatalog.com. Phone – (866)-293-8528. Model: 509-2001-134. Powdercoat Color: Black

2.2 MATERIALS

- A. Stainless Steel: See Manufacturers Specifications
- B. Anchors, Fasteners, Fittings, and Hardware: Stainless steel; commercial quality; tamperproof, vandal and theft resistant; concealed, recessed, and capped or plugged. Provide as required for site and street furnishings' assembly, mounting, and secure attachment. Follow Manufacturers Specifications.
- C. Anchoring Epoxy: Strong-Tie SET-3G22-N
- D. Sealant: Single Component, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C920, Type S, Grade P, Class 25, for Use T.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 2. W. R. Meadows

2.3 FABRICATION

- A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.
- B. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- C. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- D. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces.
- E. Exposed Surfaces: Polished, sanded, or otherwise finished; smooth all surfaces, free from burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- F. Factory Assembly: Assemble components in the factory to the greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

2.4 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions, unless more stringent requirements are indicated. Complete field assembly of site and street furnishings, where required.
- B. Unless otherwise indicated, install site and street furnishings after landscaping and paving have been completed.
- C. Install site and street furnishings level, plumb, true, and securely anchored at locations indicated on Drawings.

3.3 CLEANING

- A. After completing site and street furnishing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component.

3.4 BASIS OF PAYMENT

- A. Price and payment will be full compensation for all work specified in this Special Provision and includes all equipment, tools, labor and materials necessary to complete the work as outlined in this Special Provision and the Contract Plans. Payment will be made under:

Item No. SP13.01 Special Furnishings – lump sum.

SP-13.02 TREES, PLANTS AND GROUNDCOVERS

PART 1 - PRODUCTS

2.1 MATERIALS

- A. Mulch shall be as specified in plan, clean, bright and free from weeds, moss, sticks and other debris. Mulch shall be spread at minimum of two (2) inches deep and maximum of four (4) inches deep or as otherwise noted. Mulch all beds as indicated on the plans. Infill beds shall use existing mulch except where new washed medium shell (inorganic mulch) is indicated on the plans on bed edges.

- B. Water shall be free of substances harmful to plant growth. Water shall contain less than 300 ppm soluble salts and less than 10 ppm chlorine, fluoride and sodium. Hoses or other methods of transportation furnished by Awardee. Awardee shall furnish water supply from an acceptable source. Acceptable sources: deep wells, municipal potable supply and treated wastewater.
- C. Pre-emergent weed killer: Apply 2: granular "Chipco" Ronstar or approved equal, at a rate recommended by manufacturer.
- D. Bio-barrier: Install Typar BIOBARRIER Root Control System 24" depth where indicated on plans.

SP-14.01 INLET SPECIAL DRAINAGE GRATE

Description:

Construct reinforced, concrete drainage channel with ADA/heel compliant grates (grate) and perform all operations required to construct concrete channel, install grate including sidewalk and inlet top preparation, transporting, excavating and trenching operations, and backfilling and compaction, and constructing associated reinforced concrete elements.

Materials:

Grate shall have a nominal width, length, and height as indicated in the Contract Plans. Grate shall be ductile iron with black powder coat and prepared finish with slip-resistant treatment to meet ADA standards, 0.80 minimum coefficient of friction for ramps. Openings in grate shall be no greater than 1/4 inch. Grate shall be secure, bolted or locked, with chain and eyehook or hinged. Grate shall be constructed to withstand AASHTO H-20 loading.

Doweling:

Dowel hole diameter shall meet the adhesive bonding material system manufacturer requirements. If existing reinforcement is encountered, shift dowel holes to clear. Provide and install the adhesive bonding material system per manufacturer's specifications. Provide a minimum of 2" concrete cover over all rebars and dowels.

Responsibility:

Submit shop drawings in accordance with Section 5 of FDOT Specifications. For alternate designs, submit complete design details which include: plan view, elevation view, and details in accordance with the Contract Documents. Shop drawings shall include manufacturer's recommended anchoring and supporting details.

Aligning Adjacent Grate Panels:

All grate panel butt joints shall be clean and neat with a maximum gap of 1/8 inch. All exposed surfaces of the grate panels shall be flush and even with the adjacent piece with a maximum deviation of 1/8 inch. The ridge line formed by the meeting of the top and face surfaces of grates shall be straight and true with a maximum deviation of 1/8 inch.

Method of Measurement:

The quantity to be paid will be measured along the face of the completed and accepted furnished and installed grate.

Basis of Payment:

Price and payment will be full compensation for all work specified in this Special Provision and includes all transportation, excavation, material removal and disposal, surface preparation, installation, finishing materials, frame, anchoring, concrete work, leveling pad, bracing, equipment, tools, labor and other materials necessary to complete the work as outlined in this Special Provision and the Contract Plans.

Payment will be made under:

Item No. 435- 100- 2 Inlet Special Drainage Grate – per linear foot.

SP-14.02 GRANITE CURB

Description:

General: Construct granite curb and perform all operations required to install granite curb block including granite block preparation, transporting, excavating and trenching operations, installation of leveling pad, granite curb and bracing, and backfilling and compaction operations.

Furnish and Install Granite Curb: Supply granite curb block or obtain granite curb block from designated City of Tampa stock piles. Coordinate with City of Tampa Construction Project Manager after receiving Notice to Proceed to secure granite curb block from City Stockpiles. It is possible that at time of construction the City of Tampa may not have granite curb block available. If there are no available granite curbs from the City's stockyard complete the following prior to purchasing new granite curb blocks:

- Obtain samples of granite curbs
- Provide samples of granite curbs to the City of Tampa Transportation Department for their approval as part of the shop drawing review process
- After the City of Tampa Transportation Department approves the granite curb samples, proceed with purchase of new granite curb blocks.

Clean and transport granite curb block to project site and install at locations specified in the Contract Plans.

Reset Granite Curb: Granite curb block specified to be reset shall include removal and transport of existing granite curb block, cleaning, and resetting and installing at locations specified in the Contract Plans.

Materials:

Granite Curb: Granite curb block shall have a nominal width of 4 inches and nominal depth of 18 inches along the entire length of the granite curb block. Granite curb block obtained from designated stock piles shall not be less than 3 feet in length and new granite curb block shall not be less than 6 feet in length unless used to achieve exact dimensions at joint locations, transitions, curb returns, driveway, bulb-outs, curb drops, and alley entrances. Front and back faces of the granite curb shall be split face. Top face surface shall be pointed or peen hammered. End and bottom faces shall be saw cut. Granite color and grain size shall be as specified in the Contract Plans or as approved by the Engineer. Granite curb block selected from stockpiles shall be approved by the Engineer.

Leveling Pad: Leveling Pad shall consist of compacted #57 Stone or equivalent material approved by the Engineer.

Bracing: Bracing shall consist of compacted #57 stone or equivalent material approved by the Engineer.

Removal of Existing Granite Curb:

Excavate material from back of the granite curb and expose the back face of granite curb. Remove the granite curb in existing lengths without chipping, breaking or damaging in any manner. Any sections broken shall be replaced and no additional compensation shall be granted. Granite curb block less than 3 feet in length shall be delivered to the City of Tampa as indicated in the Contract Plans.

Cleaning of Granite Curb:

Remove substances such as dust, grime, dirt, curing compounds, form oil, debris, etc. When using cleaning methods other than water blasting, wash the cleaned surfaces with water meeting the requirements of Section 923 of the FDOT Specifications, as a final cleaning operation.

Excavation:

Excavate to the required depth, line and grade, and compact the subgrade as specified in Section 120-9 of the FDOT Specifications. Disposal of materials shall be as specified in Section 120-5 of the FDOT Specifications.

Leveling Pad:

Construct 4 inch thick by 18 inch wide leveling pad utilizing compacted #57 stone or equivalent material approved by the Engineer, directly on top of compacted subgrade in accordance with FDOT Specification 200-6. Leveling pad shall be placed to grade to achieve the proposed curb reveal height specified in the Contract Plans. Curb reveal less than 3" must be approved by the Engineer.

Placing Granite Curb:

Place the granite curb directly on top of the leveling pad. Utilize #57 stone or equivalent material approved by the Engineer to fill any voids between the bottom of the granite curb block and the leveling pad. Provide a volume of #57 stone according to the Contract Plans in front of and behind the granite curb block for bracing. Alternate granite curb block lengths so that no two consecutive pieces of granite curb are less than 3 feet in length. At least two lengths of granite curb 5 feet in length or greater must be placed between 3 foot lengths of granite curb block. Any sections broken during installation shall be replaced and no additional compensation shall be granted.

Aligning Adjacent Granite Curb blocks: All granite curb butt joints shall be clean and neat with a maximum gap of 1/8 inch. All exposed surfaces of the granite curb shall be flush and even with the adjacent piece with a maximum deviation of 1/8 inch. The ridge line formed by the meeting of the top and face surfaces of granite curb shall be straight and true with a maximum deviation of 1/8 inch.

Transition of Granite Curb to Concrete Curb: Saw cut granite curb panels to fit gaps where granite curb transitions to concrete curb at corner radii. No section of granite curb shall be set with a length of less than 3 feet. Determine in advance the number of granite curb pieces and lengths that must be saw cut in order to fit in the transition area.

Finishing:

Fill minor defects with mortar composed of one part Portland cement and two parts fine aggregate. The Engineer will not allow plastering on the face of the granite curb. Remove and replace any rejected granite curb, without additional compensation. Ensure that the exposed face of curb is free from defects and stains. Water blasting is acceptable for removing stains.

Backfilling and Compaction:

After the granite curb has been placed and braced, fill the area between the front face of the granite curb and the roadway pavement with non-shrink grout listed on the APL and according to the Contract Plans; behind the curb, backfill with suitable material to the required elevation. Backfill as specified in Section 125 of the FDOT Specifications, meeting the specific requirements for backfilling and compaction around structures detailed in 125-8.1 and 125-8.2 of the FDOT Specifications. Layers of material shall be placed alternately in front of and behind the granite curb block to maintain a true vertical position.

Surface Requirements:

Test the granite curb section with a 10-foot straightedge laid parallel to the centerline of the roadway. Perform straight edging along the top and face of the granite curb or along other lines on the granite curb section, as directed by the Engineer. Immediately correct irregularities in excess of 1/8 inch.

Method of Measurement:

For furnish and install granite curb, the quantity to be paid will be measured along the face of the completed and accepted furnished and installed granite curb.

For resetting granite curb, the quantity to be paid will be in linear feet measured along the face of the completed and accepted reset granite curb.

Basis of Payment:

Price and payment will be full compensation for all work specified in this Special Provision and includes all transportation, excavation, material removal and disposal, surface preparation, installation, finishing materials, leveling pad, bracing, equipment, tools, labor and other materials necessary to complete the work as outlined in this Special Provision and the Contract Plans.

Payment will be made under:

Item No. 520- 7- 1 Granite Curb, Furnish & Install – per linear foot.
Item No. 520- 7- 2 Granite Curb, Reset – per linear foot.

SP-14.03 ARCHITECTURAL PAVERS

The following articles and subarticles from the Florida Department of Transportation Standard Specifications, July 2021 Edition are edited as noted.

ARTICLE 526-1 is deleted and the following substituted:

526-1 Description.

Furnish and install, or reset architectural pavers in accordance with this Section. The term brick and architectural paver is used interchangeably.

SUBARTICLE 526-2.2 is deleted and the following substituted:

526-2.2 Architectural Pavers - Roadway: For installations on roadways and commercial driveways, provide architectural pavers having a minimum thickness of 3-1/8 inch.

526-2.2.1 Reset Brick: Existing bricks less than 2 ½ inches shall be palletized and delivered to the City of Tampa’s stockyard location as noted in the plans. Brick specified to be reset shall include removal, cleaning, and resetting and installing at locations specified in the Contract Plans.

SUBARTICLE 526-2.3 is deleted and the following substituted:

526-2.3 Architectural Pavers - Sidewalk: For installations of new brick on sidewalks and residential driveways, provide architectural pavers having a minimum thickness of 2-3/8 inch.

Contact the City of Tampa Transportation Department to coordinate use of brick pavers available within the City’s stockyard. If there are no available brick pavers from the City’s stockyard complete the following prior to purchasing new brick pavers:

- Obtain samples of brick pavers
- Provide samples of brick pavers to the City of Tampa Transportation Department for their approval as part of the shop drawing review process
- After the City of Tampa Transportation Department approves the brick paver samples, proceed with purchase of new pavers.

SUBARTICLE 526-2.4 is expanded by the following:

526.2.4.1: For Brick C installations, use fine aggregate for bedding and joint sand meeting the requirements as shown in the Plans.

SUBARTICLE 526-2.5 is expanded by:

526.2.5.1: For Brick D installations match the existing grout color as approved by the Engineer.

526.2.5.2: For Landscape Plans Paver Applications use the following products:

1. Setting bed sand: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33/C 33M for fine aggregate.
2. Sand for joints: Gator Maxx G2 Polymeric Sand by Alliance Designer Products
 - Color: Beige
3. Graded Aggregate for Base: Sound, crushed stone or gravel complying with ASTM D448 for Size No. 8.
4. Graded Aggregate for Subbase: Sound, crushed stone or gravel complying with ASTM D448 for Size No. 57.
5. Mortar setting bed: Laticrete 253R Gold Rapid or equal
6. Geogrid: Miragrid 3XT
7. Architectural Pavers – Sidewalk: Obtain the brick from designated stockpiles specified in the Contract Plans. If existing brick material is not available from the City of Tampa, provide new concrete pavers as follows:
 - Belgard 4 x 8 x 2-3/8" Guilford

SUBARTICLE 526-3.1 is expanded by the following:

526-3.1.4 Remove and Clean Reset Brick: Remove brick without chipping, breaking, or damaging in any manner. Replace any damaged bricks at no additional cost to the Department. Remove substances such as dust, grime, dirt, curing compounds, form oil, debris, etc. Wash the cleaned surfaces with water meeting the requirements of Section 923, as a final cleaning operation.

SUBARTICLE 526-3.2 is deleted and following is substituted:

526-3.2 Installation: Install the architectural pavers in the following manner:

1. Spread the bedding material evenly over the base course and screed to plan thickness, not to exceed a thickness of 1-1/2 inch. Do not disturb the screeded bedding material. Ensure placement of sufficient bedding material to stay ahead of the laid architectural pavers. Do not use the bedding material to fill depressions in the base course.
1. Lay architectural pavers in the pattern(s) shown in the Plans and maintain straight pattern lines.
2. Joints between the architectural pavers, on average, will be between 1/16 to 3/16 inch wide. Joints between the Brick C shall be 1/2 inch wide as shown in the Plans.
3. Fill gaps at the edges of the paved area with cut or edge architectural pavers.
4. When utilizing bedding and joint sand:
 - a. Use a low amplitude vibrator capable of 5,000 foot-pounds with 7-100 Hz frequencies to vibrate and compact architectural pavers into bedding sand.
 - b. Vibrate the architectural pavers, sweeping dry joint sand into the joints and vibrating, until the joints are full. Do not vibrate within 3 feet of the unrestrained edges of the architectural pavers.

- c. At the end of each day, all work within 3 feet of laying face must be left fully compacted, with sand-filled joints.
- d. Sweep off the excess sand.
5. Leave a final surface elevation of architectural pavers of 1/8 to 1/4 inch above adjacent drainage inlets, concrete collars or channels.
6. Do not permit the final surface elevations of the pavers to deviate more than 3/8 inch under a 10 foot long straightedge, or more than 1/8 inch between adjacent pavers.

SP-15 SPECIAL EVENTS

We want to eliminate potential impacts that actual construction and associated equipment could have on parade staging, so that the contractor can coordinate/arrange to have any equipment/barricades that could be in place removed for the dates of the Special Events. Within 30 days of the Notice to Proceed, the Contractor shall coordinate with the City of Tampa Mobility Department to obtain a detailed list of dates and time frames of Special Events for the duration of the Construction Contract.

This is the list of currently known Special Events and dates.

2022

Feb 11, 2022 - Knight Parade
Feb 12, 2022 - Knight Parade
March 11, 2022 - St. Pat's Parade
March 12, 2022 - St. Pat's Parade
March 12, 2022 - The Rough Riders
March 25, 2022 – Tampa Pride Parade
March 26, 2022 – Tampa Pride Parade

2023

Feb 10, 2023 - Knight Parade
Feb 11, 2023 - Knight Parade
March 10, 2023 - St. Pat's Parade
March 11, 2023 - St. Pat's Parade
March 11, 2023 - The Rough Riders
March 24, 2023 – Tampa Pride Parade
March 25, 2023 – Tampa Pride Parade

2024

Feb 9, 2024 - Knight Parade
Feb 10, 2024 - Knight Parade
March 15, 2024 - St. Pat's Parade
March 16, 2024 - St. Pat's Parade
March 16, 2024 - The Rough Riders
March 29, 2024 – Tampa Pride Parade
March 30, 2024 – Tampa Pride Parade

2025

Feb 7, 2025 - Knight Parade
Feb 8, 2025 - Knight Parade
March 14, 2025 - St. Pat's Parade
March 15, 2025 - St. Pat's Parade
March 15, 2025 - The Rough Riders
March 28, 2025 – Tampa Pride Parade
March 29, 2025 – Tampa Pride Parade

Plus all years:

- Race for Sight – Always on a Friday evening in April
- Ryan's Run – Always a Saturday morning in April
- Pediatric Burn Run – Typically the first Saturday morning in May
- Richard's Run – Always the first Friday evening in November

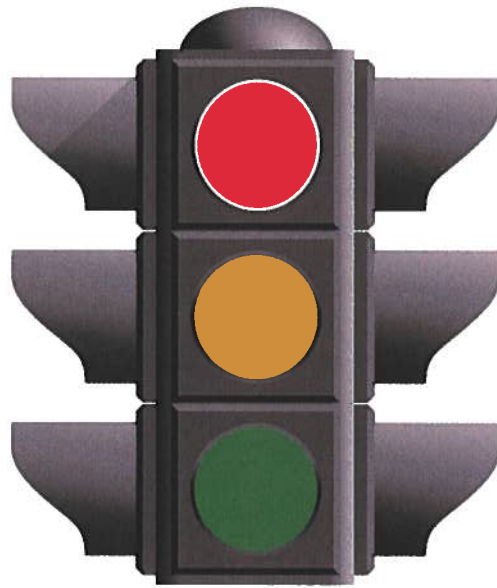
Not all parades set up the Friday before but it may not be a bad idea to include all Fridays just in case. Also, Visit Tampa Bay usually tries to secure contracts for the Shriners to hold their conventions in Tampa. The conventions always include a parade. Dates are random.



CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS



NOTE: The following Information is provided to contractors as an overview of the City of Tampa Signal Shop Construction standards. It is the contractors responsibility to obtain a current revision of this information package before the start of each project.



CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

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CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

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SECTION #6

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CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

SECTION #1

Procedure for Installing or Removing Power Service

Standard Power Service Equipment

UPS



CITY OF TAMPA

Department of Transportation and Stormwater Services

PROCEDURES FOR INSTALLING OR REMOVING A POWER SERVICE

Note: The following instructions are provided to familiarize contractors with sequence of steps involved in establishing a new power service and the removal of the old existing service.

INSTALLING A NEW SERVICE

- 1) Contact the City of Tampa Signal Shop for an address for the new service at all projects FDOT, County and City. Phone: 813-951-2915
Email: scott.keith@tampagov.net.
- 2) Contractor shall contract TECO for a new construction to obtain a Layout Number for all projects FDOT, County and City.
At www.tampaelectric.com/business/newconstruction.
- 3) Notify City of Tampa Signal Shop of assigned TECO Layout Number (Signal Shop submits paperwork to have TECO establish an account for the new service. Account will normally be setup within 1 week).
- 4) Contractor must pay any applicable TECO connection fees before TECO will complete installation of hand hole. (TECO will normally complete work within 30 days of receiving payment)
- 5) After construction of new service is complete and TECO has completed the installation of their hand hole, contact the Signal Shop to request an inspection of the installation. (Inspection will normally take place within 1 week)
- 6) Upon passing inspection the Signal Shop will submit a "Release of Service" letter to TECO. TECO will then schedule the installation of a meter in the new service and connection to power. (TECO will normally complete within 2 weeks)

REQUEST FOR INSPECTIONS: Contractors shall submit a request to the Traffic Signal Shop to schedule final/maintenance inspections at least 10 business days in advance. The time of inspection shall be as the signal shop work load permits.
Contact: Scott Keith, Signal Shop Supervisor
Email Scott.Keith@tampagov.net



CITY OF TAMPA

Department of Transportation and Stormwater Services

REMOVING OLD SERVICE

- 1) Once the new power service is in use to power the signals or street lights, contact the Signal Shop to process paperwork to have the old service unhooked and the meter removed. (Normally completed within 1 week)

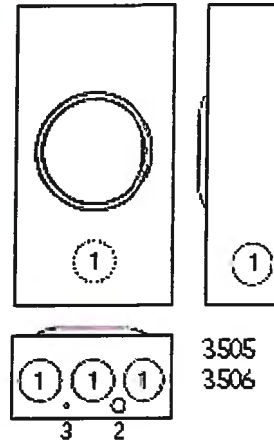
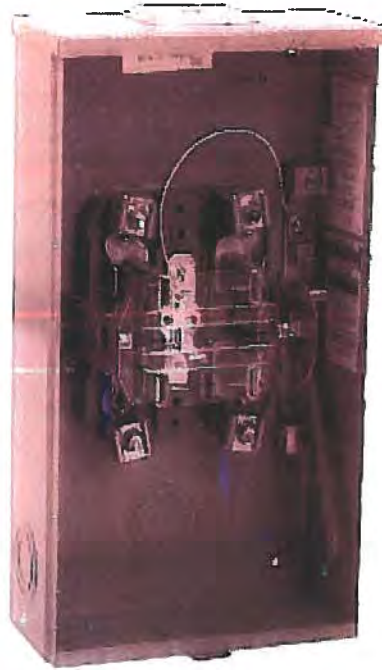
- 2) TECO will disconnect power and pull the old meter once authorization has been received from the City of Tampa. (Normally completed within 2 weeks of receiving authorization from City of Tampa)

1 □

125 AMP
LEVER
BYPASS
SOCKETS

Lever Bypass Single Position

125 Amp | 5 & 7 Terminals | Ringless | 600 VAC



U3505-XL-TG-HSP

125 Amp | Ringless | Lever Bypass | Single Position

| Catalog Number | Material | Terminals | Service | Hub | Connectors: CU/AL | | Bypass | Dimensions | | | Knockouts | | |
|------------------------------|---------------------|--------------|------------------|-----------------|-------------------|-------------------|------------------|------------------|---------------|-------------------|--------------|---------------------|----------------|
| | | | | | Line | Load | | D" | W" | H" | 1 | 2 | 3 |
| U3505-XL-TG-HSP | Steel | 5 | OH/UG | C.P. | #6-2/0 | #6-2/0 | Lever | 4 3/4 | 10 | 18 1/2 | 2 | 1/4, 1/2 | 1/4 |
| UAP3505-XL-TG-HSP | Aluminum | 5 | OH/UG | C.P. | #6-2/0 | #6-2/0 | Lever | 4 3/4 | 10 | 18 1/2 | 2 | 1/4, 1/2 | 1/4 |
| U3506-XL-TG-HSP | Steel | 7 | OH/UG | C.P. | #6-2/0 | #6-2/0 | Lever | 4 3/4 | 10 | 18 1/2 | 2 | 1/4, 1/2 | 1/4 |
| UAP3506-XL-TG-HSP | Aluminum | 7 | OH/UG | C.P. | #6-2/0 | #6-2/0 | Lever | 4 3/4 | 10 | 18 1/2 | 2 | 1/4, 1/2 | 1/4 |

Notes

- Hubs: For proper hub selection, see the hub suffix chart on the accessories page.
- Lever Bypass: The lever supplies clamping action and operates bypass device.
- Connectors: Extruded aluminum connectors are tin plated.



MEG
APPROVED

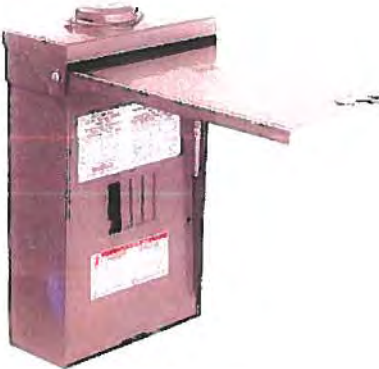
Utility requirements for this equipment may vary. Always consult the serving utility for their requirements prior to ordering or installing this equipment. This product must be installed by a licensed electrician. Installation of this equipment may require local electrical inspector approval.

Milbank Manufacturing | 4301 Berens Ave., Pikesville, MD 21110 | 877-433-5344 | milbankwds.com

Product availability : Stock - Normally stocked in distribution facility



Signalization with Street Lighting



Main

| | |
|-----------------------------------|--------------|
| Product or component type | Load Center |
| Range of product | QO |
| Load center type | Main lugs |
| Line Rated Current | 125 A |
| Number of spaces | 4 |
| Short-circuit current | 10 kA |
| Number of circuits | 8 |
| Number of tandem circuit breakers | 4 |
| Phase | 1 phase |
| System Voltage | 120/240 V AC |

Complementary

| | |
|---------------------------|---|
| AWG gauge | AWG 14...AWG 2/0 (copper) AWG 12...AWG 2/0 (aluminium) |
| NEMA degree of protection | NEMA 3R outdoor |
| Cover type | Surface cover |
| Electrical connection | Lugs |
| Device composition | Grounding bar included (not installed) |
| Electrical connection | Lugs |
| Wiring configuration | 3-wire |
| Material | Tin plated copper busbar |
| Enclosure material | Welded galvanized steel |
| Surface finish | Baked enamel grey |
| Box number | 15R |
| Product certifications | UL listed |
| Height | 376 mm |
| Width | 8.9 in (226 mm) |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Product availability : Stock - Normally stocked in distribution facility



Signalization



Main

| | |
|-----------------------------------|--------------|
| Product or component type | Load Center |
| Range of product | QO |
| Load center type | Main lugs |
| Line Rated Current | 70 A |
| Number of spaces | 2 |
| Short-circuit current | 65 kA |
| Number of circuits | 4 |
| Number of tandem circuit breakers | 2 |
| Phase | 1 phase |
| System Voltage | 120/240 V AC |

Complementary

| | |
|---------------------------|---|
| AWG gauge | AWG 12...AWG 3 (aluminium) AWG 14...AWG 4 (copper) |
| NEMA degree of protection | NEMA 3R outdoor |
| Cover type | Surface cover |
| Electrical connection | Lugs |
| Device composition | Grounding bar (ordered separately) |
| Electrical connection | Lugs |
| Wiring configuration | 3-wire |
| Material | Tin plated aluminium busbar |
| Enclosure material | Welded galvanized steel |
| Surface finish | Baked enamel grey |
| Box number | 1R |
| Product certifications | UL listed |
| Height | 9.37 in (238 mm) |
| Width | 4.88 in (124 mm) |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

QO150

QO Mini CB, 50A, 1P, 120/240V, 10kA, Plug-in Mount

Product availability : Stock - Normally stocked in distribution facility



Service Breaker

Main

| | |
|-----------------------------|-------------------------------------|
| Product or component type | Miniature circuit-breaker |
| Range of product | QO |
| Line Rated Current | 50 A |
| System Voltage | 120 V AC 120/240 V AC 48 V DC |
| Mounting mode | Plug-in |
| Poles description | 1P |
| Circuit breaker type | Standard |
| Circuit breaker application | HACR rated |
| Electrical connection | Box lugs |

Complementary

| | |
|---------------------------|--|
| Breaking capacity | 10 kA at: 120/240 V AC 5 kA at: 48 V DC 10 kA at: 120 V AC |
| Number of spaces required | 1 |
| AWG gauge | AWG 8...AWG 2 (copper or aluminium) |
| Height | 3.12 in |
| Depth | 2.91 in |
| Width | 0.75 in |

Environment

| | |
|---------------------------------------|------------------|
| Product certifications | CSA UL listed |
| Ambient air temperature for operation | 104 °F (40 °C) |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

FXM 1100

Rugged UPS Module



Your Power Solutions Partner

- > 1100W/VA UPS designed to operate in extreme environments and provide maximum flexibility while ensuring critical loads remain protected and running during power outages and other power disturbances
- > Wide range Automatic Voltage Regulation (AVR) lengthens battery life by providing protection without transferring to backup mode during voltage surges or sags
- > Independently programmable control and reporting dry contacts allow monitoring and controlling of key functions
- > Temperature compensated battery charging protects batteries from overcharging or undercharging at extreme temperatures, extending the life of the battery
- > Local and remote monitoring and control via RS232 port and Ethernet SNMP interface*
- > UPS panels can be rotated, improving flexibility and viewing convenience



Alpha FXM is a line of rugged UPS power modules used worldwide where clean backup power is needed. Designed to perform in the most extreme demanding environments, Alpha FXM units ensure equipment in security, communications, traffic, industrial environments, and many other critical applications remains safe and protected from power disturbances. Thanks to its powerful programmable battery charger, the FXM is capable of providing the runtime you need. All FXM models are available in 120Vac and 230Vac.

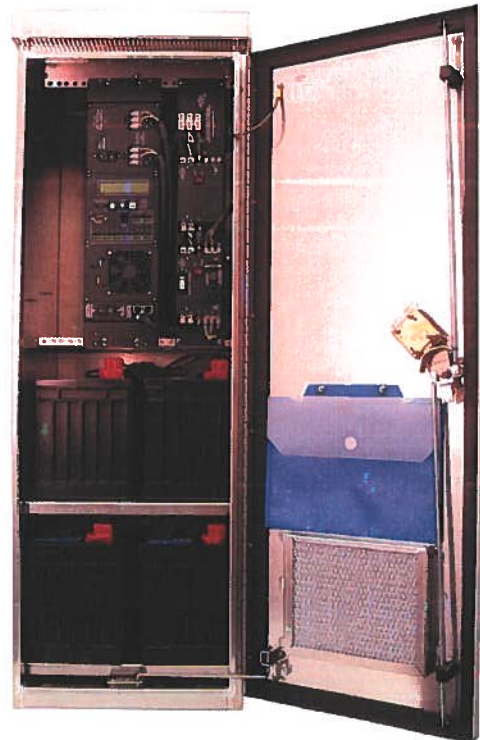
*Ethernet SNMP card is standard on the 120Vac model and optional on the 230Vac model



Power

Alpha Outdoor Enclosure Side Mount 6

- Traffic grade aluminum enclosure protects battery backup power systems from outdoor elements
- Large sun shield, thermostatically controlled fan, and louvered vents ensure reliable operation in high temperatures
- 180° stainless steel piano hinged door with two locking open positions making installation and maintenance easy and convenient
- Three-point latching mechanism with Corbin Type 2 lock or optional Best lock for maximum security



** Shown with Alpha UPS module, transfer switches, and AlphaCell batteries.*

The Alpha Outdoor Enclosure Side Mount 6 is designed to protect traffic industry battery backup power system components from harsh outdoor elements. The ruggedized enclosure is made of 0.125" aluminum and designed to easily accommodate an Alpha uninterruptible power supply (UPS) module, Alpha transfer switches, and four AlphaCell™ 210 GXL or 215GHP batteries with room for additional components that may be required for your application. The Side Mount 6 is an outdoor rated (NEMA 3R) enclosure. This new and improved Alpha enclosure replaces the Alpha S4 and features a number of improvements over the S4 including: stainless steel door handle, integrated lock and latch, an integrated document holder, and angled generator plug with water tight generator door (generator plug option). Additional options and accessories are available (see listing on next page).



Alpha Outdoor Enclosure Side Mount 6

Mechanical Specifications

- Dimensions (cm): 122H x 42W x 42D
(in): 48.1H x 16.5W x 16.5D
- Weight (enclosure only)
no options (kg/lb) 75/34
- Mounting: Side mount (standard)
Stand alone
(optional ground mount pedestal)
- Construction NEMA 3R Rated, 0.125" aluminum
(5052-H32) enclosure - meets the harsh
outdoor demands of the traffic industry.

Environmental Specifications

- Cooling: Field replaceable thermostatically
controlled fan, louvered vents, washable filters
to keep dust and other particles out

Agency Compliance

- Agency Certification: UL50/CSA

Standard Features

- Designed to mount to the side of most traffic enclosure cabinets
- Stainless Steel handle for extended life and improved look
- Three point latching mechanism with Corbin Type 2 lock or optional Best lock for maximum security
- 180° stainless steel piano hinged door with 2 position prop makes maintenance access easy * Shown with optional locking generator access door
- Removable bottom shell for easy wiring access
- Bug screen protected top vent
- 10 year warranty (subject to terms and conditions)
- Two extra large shelves each capable of holding two Alpha 210 GXL or 215 GHP batteries

Options

- Generator support: locking generator access door and L5-30 F1 plug
- Universal Generator Transfer switch
- Universal Automatic Transfer switch
- AlphaGuard battery balancer
- Battery heater mats
- Surge suppression device
- "On Battery" indicator light
- Door activated interior light
- Tilt switch
- Tamper switch
- Ground mount kit



For more information visit: www.alpha.com/traffic

Alpha Technologies Toll free: 1 800 667 8743 Direct: 604 430 1476

#048-003-00 (05/09)

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CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

SECTION #2

Traffic Signal Wiring Standard and Color Code

NEC – Max Usable Area of Conduit



CITY OF TAMPA

Department of Transportation and Stormwater Services

City of Tampa Traffic Signal Wiring Standard

All Signal Installations

- 1) **Signal Cable Specifications – IMSA 19-1 or 19-2, AWG 14, Stranded Conductors**
- 2) **A minimum of 3 spare conductors required in all signal cables from controller cabinet to: disconnect (Standard Spans), mast arm pole terminal block or pedestrian signal pole.**
- 3) **Spicing signal cable to jump from pole to pole is NOT ALLOWED.**
- 4) **All cables in cabinet must be labeled with a durable tag noting phase and location cable feeds.**

Mast Arm Mounted Signals

- 1) **A minimum of 3 spare conductors in cable from each individual signal to the terminal block in mast arm pole base or controller cabinet.**

Single Point Attachment Spans

- 1) **Each phase or overlap shall be fed from controller cabinet with a cable having a minimum of 3 spare conductors. Signals may be jumped from signal to signal within the same phase or overlap.**

Contact Information

Please contact the City of Tampa Signal Shop if you require further information.

Contact Name: Scott Keith
Phone: 813-951-2915
Scott.keith@tampagov.net



CITY OF TAMPA

Department of Transportation and Stormwater Services

CITY OF TAMPA SIGNAL WIRING COLOR CODE

* DISCONNECT WIRING*

Standard Spans with Centenary and Messenger Spans

Notes:

- 1) 12 Terminal Disconnect Hanger must be used. PELCO P/N SP-1021-FL
- 2) Connect wires from signal directly to terminal block. DO NOT use Jones Plugs
- 3) All spares need to be grounded at controller cabinet and disconnects.

“ONE WAY SIGNAL” DISCONNECT

(3 Section Head)

| TERM. | INDICATION | TERM. | INDICATION |
|--------------|--------------------------|---------------|--------------------------|
| Terminal # 1 | - Green Ball or Arrow | Terminal # 7 | - Cable splice thru only |
| Terminal # 2 | - Yellow Ball or Arrow | Terminal # 8 | - Cable splice thru only |
| Terminal # 3 | - Red Ball or Arrow | Terminal # 9 | - Cable splice thru only |
| Terminal # 4 | - Cable splice thru only | Terminal # 10 | - Cable splice thru only |
| Terminal # 5 | - Cable splice thru only | Terminal # 11 | - Cable splice thru only |
| Terminal # 6 | - Cable splice thru only | Terminal # 12 | - Neutral (Ground) |

(4 Section Head)

| | | | |
|--------------|---------------------------|---------------|--------------------------|
| Terminal # 1 | - Green Arrow | Terminal # 7 | - Cable splice thru only |
| Terminal # 2 | - “Steady” Yellow Arrow | Terminal # 8 | - Cable splice thru only |
| Terminal # 3 | - “Flashing” Yellow Arrow | Terminal # 9 | - Cable splice thru only |
| Terminal # 4 | - Red Arrow | Terminal # 10 | - Cable splice thru only |
| Terminal # 5 | - Cable splice thru only | Terminal # 11 | - Cable splice thru only |
| Terminal # 6 | - Cable splice thru only | Terminal # 12 | - Neutral (Ground) |

(5 Section Head)

| TERM. | INDICATION | TERM. | INDICATION |
|--------------|--------------------------|---------------|--------------------------|
| Terminal # 1 | - Green Ball | Terminal # 7 | - Cable splice thru only |
| Terminal # 2 | - Yellow Ball | Terminal # 8 | - Cable splice thru only |
| Terminal # 3 | - Red Ball | Terminal # 9 | - Cable splice thru only |
| Terminal # 4 | - Green Arrow | Terminal # 10 | - Cable splice thru only |
| Terminal # 5 | - Yellow Arrow | Terminal # 11 | - Cable splice thru only |
| Terminal # 6 | - Cable splice thru only | Terminal # 12 | - Neutral (Ground) |

“TWO WAY SIGNAL” DISCONNECT

| TERM. | INDICATION | TERM. | INDICATION |
|--------------|----------------------------------|---------------|--------------------------|
| Terminal # 1 | - Green Ball or Arrow (Main St) | Terminal # 7 | - Cable splice thru only |
| Terminal # 2 | - Yellow Ball or Arrow (Main St) | Terminal # 8 | - Cable splice thru only |
| Terminal # 3 | - Red Ball or Arrow (Main St) | Terminal # 9 | - Cable splice thru only |
| Terminal # 4 | - Green Ball or Arrow (Side St) | Terminal # 10 | - Cable splice thru only |
| Terminal # 5 | - Yellow Ball or Arrow (Side St) | Terminal # 11 | - Cable splice thru only |
| Terminal # 6 | - Red Ball or Arrow (Side St) | Terminal # 12 | - Neutral (Ground) |

“Single Point Attachment Spans” with Pipe Style Hangers (No Messenger Span)

| TERM. | INDICATION | TERM. | INDICATION |
|--------------|---------------------------------|---------------|--------------------|
| Terminal # 1 | - Green Ball or Arrow | Terminal # 7 | - N/A |
| Terminal # 2 | - Yellow Ball or Arrow | Terminal # 8 | - N/A |
| Terminal # 3 | - Red Ball or Arrow | Terminal # 9 | - N/A |
| Terminal # 4 | - Green Arrow (5 Section Head) | Terminal # 10 | - N/A |
| Terminal # 5 | - Yellow Arrow (5 Section Head) | Terminal # 11 | - N/A |
| Terminal # 6 | - N/A | Terminal # 12 | - Neutral (Ground) |

(4 Section Heads)

| | | | |
|--------------|---------------------------|---------------|--------------------|
| Terminal # 1 | - Green Arrow | Terminal # 7 | - N/A |
| Terminal # 2 | - “Steady” Yellow Arrow | Terminal # 8 | - N/A |
| Terminal # 3 | - “Flashing” Yellow Arrow | Terminal # 9 | - N/A |
| Terminal # 4 | - Red Arrow | Terminal # 10 | - N/A |
| Terminal # 5 | - N/A | Terminal # 11 | - N/A |
| Terminal # 6 | - N/A | Terminal # 12 | - Neutral (Ground) |

MAST ARM POLE MOUNTED SIGNALS

Notes:

- 1) Each individual signal shall have its own cable routed to a terminal block mounted in the hand hole located in the base of the pole or routed to the Controller Cabinet.
- 2) Each Signal Cable shall have a minimum of 2 spare conductors to each mast arm mounted Signals.

3 Section Head

**Green Ball or Arrow – Green Wire
Yellow Ball or Arrow – Orange Wire
Red Ball or Arrow – Red Wire
Neutral – White Wire**

4 Section Head

**Green Arrow – Green Wire
“Flashing” Yellow Arrow – Black Wire
“Steady” Yellow Arrow – Orange Wire
Red Arrow – Red Wire
Neutral – White Wire**

5 Section Head

**Green Ball – Green Wire
Yellow Ball – Orange Wire
Red Ball – Red Wire
Green Arrow – Blue Wire
Yellow Arrow – Black
Neutral – White Wire**

SIGNAL CABLE CONDUCTORS – COLOR DESIGNATIONS

7 CONDUCTOR SIGNAL CABLE (USED AT PED SIGNALS ONLY)

(For Single Phase)

**Black – Spare
White – Neutral
Red – Red Indication (Ball or Arrow)
Green – Green Indication (Ball or Arrow)
Orange – Yellow Arrow (Ball or Arrow)
Blue – Spare
White/Blk - Spare**

10 CONDUCTOR SIGNAL CABLE

(For Single Phase with 5 Section Signal)

**Black – 5 Section Head Yellow Arrow
White – Neutral
Red – Red Indication (Ball or Arrow)
Green – Green Indication (Ball or Arrow)
Orange – Yellow Arrow (Ball or Arrow)
Blue – 5 Section Head Green Arrow
White/Blk – Spare

Red/Blk - Spare
Green/Blk – Spare
Orange/Blk – Spare**

(For Single Phase with 4 Section Signal)

**Black - “Flashing” Yellow Arrow
White - Neutral
Red – Red Arrow
Green – Green Arrow
Orange – “Steady” Yellow Arrow
Blue - Spare
Wht/Blk - Spare

Red/Blk - Spare
Green/Blk – Spare
Orange/Blk - Spare**

12 CONDUCTOR SIGNAL CABLE (SPARE ASSEMBLY ONLY)

Black – 5 Section Head Yellow Arrow
White – Neutral
Red – “Main St” Red (Ball or Arrow)
Green – “Main St” Green (Ball or Arrow)
Orange – “Main St” Yellow (Ball or Arrow)

Blue – 5 Section Head Green Arrow
White/Black - Spare
Red/Blk – “Side St” Red (Ball or Arrow)
Green/Blk – “Side St” Green (Ball or Arrow)
Orange/Blk – “Side St” Yellow (Ball or Arrow)
Blue/Blk – Spare
Black/Wht - Spare

15 CONDUCTOR SIGNAL CABLE

Black – 5 Section Head Yellow Arrow
White – Neutral
Red – “Main St” Red (Ball or Arrow)
Green – “Main St” Green (Ball or Arrow)
Orange – “Main St” Yellow (Ball or Arrow)

Blue – 5 Section Head Green Arrow
White/Black - Spare
Red/Blk – “Side St” Red (Ball or Arrow)
Green/Blk – “Side St” Green (Ball or Arrow)
Orange/Blk – “Side St” Yellow (Ball or Arrow)
Red/Wht – Spare
Green/Wht – Spare
Blue/Wht – Spare

PEDESTRIAN SIGNALS

Note: Pedestrian Push Buttons shall be wired directly from the Controller Cabinet using IMSA 50-2 cable.

*** One Pedestrian Signal Mounted on a T-Base Pole or Mast Arm Pole***

Walk – Green Wire
Don’t Walk – Red Wire
Neutral – White Wire
Orange – Spare
Black – Spare

*** Two Pedestrian Signals Mounted on the same T-Base Pole or Mast Arm Pole ***

Main St Walk – Green Wire
Main St Don’t Walk – Red Wire
Side St Walk – Green/Black Wire
Side St Don’t Walk – Red/Black Wire
Neutral – White Wire
Orange – Spare
Black – Spare

THE NATIONAL ELECTRICAL CODE AND THE NATIONAL ELECTRICAL SAFETY CODE

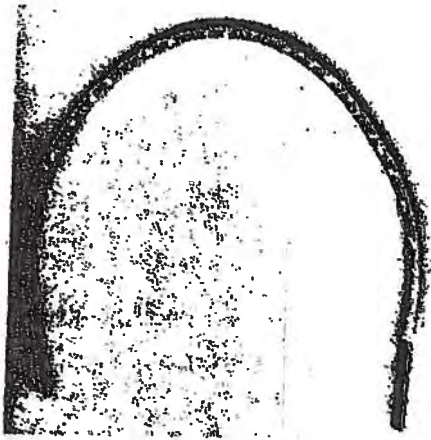


FIGURE 10.32

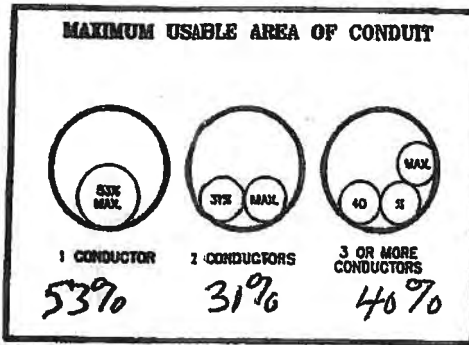


FIGURE 10.33



FIGURE 10.34

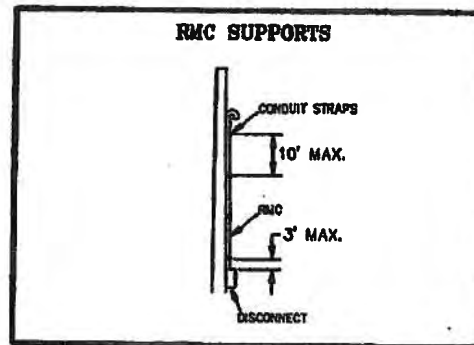


FIGURE 10.34.1



CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

SECTION #3

Specs for Com, Loop/PPB and Signal Cable



C.O.T. LOOP FEEDER / PPB FEEDER CABLE

**C.O.T. STANDARD
14 AWG**

IMSA Spec Cable - Loop

Traffic Signal Loop Detector

IMSA Spec 50-2
Lead-In (Feeder) Cable - Two Conductor Shielded,
PE Insulation and Jacket, 600V



| AWG | Insulation Thick. (in) | Nom. Jacket Thick. (in) | Outside Dia. (in) | Approx. Cable Weight (lbs/M-ft) |
|-----|------------------------|-------------------------|-------------------|---------------------------------|
| 14 | .03 | .03 | .330 | 60 |

IMSA Spec 51-5
Loop Wire - Single Conductor
PVC/Nylon with PVC or PE Tube Jacket, 600V



| AWG | Insulation Thick. (in) | Outside Diameter (in) | Approx. Cable Weight (lbs/M-ft) |
|-----|------------------------|-----------------------|---------------------------------|
| 12 | .015 | .25 | 45 |
| 14 | .015 | .25 | 38 |

Tube = .03"

IMSA Spec 51-1
Loop Wire - Single Conductor PVC/Nylon, 600V



| AWG | Insulation Thick. (in) | Nom. Jacket Thick. (in) | Outside Dia. (in) | Approx. Cable Weight (lbs/M-ft) |
|-----|------------------------|-------------------------|-------------------|---------------------------------|
| 8 | .030 | .005 | .29 | 45 |
| 10 | .020 | .004 | .17 | 39 |
| 12 | .015 | .004 | .14 | 24 |
| 14 | .015 | .004 | .11 | 17 |
| 16 | .015 | .004 | .11 | 11 |
| 18 | .015 | .004 | .09 | 8 |

IMSA Spec 51-7
Loop Wire - Single Conductor
Cross-Linked PE with PVC or PE Tube Jacket, 600V



| AWG | Insulation Thick. (in) | Outside Diameter (in) | Approx. Cable Weight (lbs/M-ft) |
|-----|------------------------|-----------------------|---------------------------------|
| 14 | .03 | .26 | 42 |

Tube = .03"

IMSA Spec 51-3
Loop Wire - Single Conductor Cross-Linked PE, 600V



| AWG | Insulation Thick. (in) | Outside Diameter (in) | Approx. Cable Weight (lbs/M-ft) |
|-----|------------------------|-----------------------|---------------------------------|
| 8 | .045 | .25 | 65 |
| 10 | .030 | .19 | 39 |
| 12 | .030 | .15 | 25 |
| 14 | .030 | .14 | 18 |

Power & Tel is the largest stocking distributor of IMSA cables in the U.S. Please call for price and availability. Non-stocked items are subject to factory lead times and manufacturer minimums.

For loop sealants and related supplies, see page I-1 in the Safety & Speciality Supplies section.

Signal Cable, Aerial and Duct, 600V IMSA Spec 19-1 and 20-1

Specifications

| | |
|-------------------------|--|
| Conductors | Solid bare copper (customer may specify otherwise) |
| Insulation | PE, 600V |
| Color Code | Per Table 5.1 (see page 1 in this section) |
| Conductor Configuration | Straight lay, not twisted pairs |
| Shield | None |
| Jacket | IMSA 19-1 PVC IMSA 20-1 PE |



| No. Conductors | Conductor Availability | Nominal Outside Dia. (in) | Approx. Cable Area (in ²) | Nominal Jacket Thickness (in) | Approximate Cable Weight (lbs/1000 ft) |
|-------------------|---------------------------|---------------------------|---------------------------------------|-------------------------------|--|
| 2 | Stranded | .480 | .18 | .045 | 90 |
| 8 AWG | 2 | .450 | .16 | .045 | 104 |
| 10 AWG | 2 | .425 | .16 | .040 | 120 |
| 12 AWG | 2 | .405 | .13 | .045 | 90 |
| 3 | Solid/Stranded | .425 | .14 | .045 | 115 |
| 4 | Stranded | .400 | .16 | .045 | 151 |
| 6 | Solid/Stranded | .505 | .20 | .045 | 170 |
| 7 | Solid/Stranded | .575 | .28 | .080 | 240 |
| 9 | Solid/Stranded | .725 | .41 | .080 | 300 |
| 12 | Solid/Stranded | .745 | .44 | .080 | 400 |
| 16 | Solid/Stranded | .875 | .60 | .080 | 490 |
| 14 AWG | 2 | .345 | .10 | .045 | 70 |
| 3 | Stranded | .365 | .11 | .045 | 85 |
| 4 | Stranded | .395 | .13 | .045 | 100 |
| 5 | Stranded | .425 | .14 | .045 | 120 |
| 7 | Stranded | .465 | .17 | .045 | 160 |
| 9 | Stranded | .615 | .29 | .060 | 200 |
| 10 | Stranded | .615 | .29 | .060 | 230 |
| 12 | Stranded | .635 | .33 | .080 | 270 |
| 16 | Stranded | .685 | .38 | .080 | 310 |
| 18 | Stranded | .715 | .41 | .060 | 330 |
| 20 | Stranded | .735 | .44 | .060 | 40 |
| 24 | Stranded | .750 | .44 | .060 | 440 |
| 28 | Stranded | .835 | .64 | .080 | 600 |
| 30 | Stranded | .895 | .64 | .080 | 520 |
| 37 | Stranded | .935 | .71 | .080 | 650 |
| 37 | Stranded | 1.045 | .87 | .080 | 880 |

C.O.T. STANDARD -
14 AWG STRANDED

Power & Tel is the largest stocking distributor of IMSA cables in the U.S. Please call for price and availability. Non-stocked items are subject to factory lead times and manufacturer minimums.



CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

SECTION #4

Standard Disconnect, Span Hardware and Mounting Method

NOTE: All back plates shall have yellow reflective borders

Signal disconnect doors shall be oriented to open towards technician when facing signal indications.

12 Circuit Disconnect Hanger Assemblies

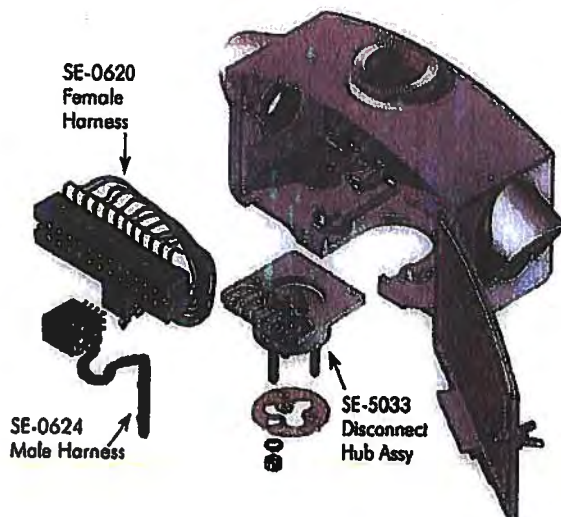
Pel
1-

C.O.T. STANDARD DISCONNECT - PELCO P/N SP-1021-FL (P/N IS SPECIFIC TO THE STATE OF FLORIDA)

it with
hubs.



Disconnect Hanger, 12-Circuit 2" Slip Top & Tri-Stud Bottom Hub w/ 4' Harness



C.O.T. STANDARD - USE
PELCO P/N SP-1021-FL

- Note: 1. All harnesses come with 18 AWG wire pre-tinned and numbered on 3" centers.
2. All assemblies are supplied standard with stainless steel fasteners.
3. See Reference Section for available paint colors.

18 Circuit Disconnect Hanger Assemblies

Pelco's Disconnect Hangers are available in 12-circuit and 18-circuit with 1-1/2" threaded or slip top and 1-1/2" threaded or tri-stud bottom hubs.



Disconnect Hanger, 18-Circuit 2" Slip Top & Tri-Stud Bottom Hub w/ 4' Harness, Alum

SE-0621
Female
Harness



SE-0625
Male Harness



SE-5032
Disconnect
Hub Assy

SE-5032 - Coating

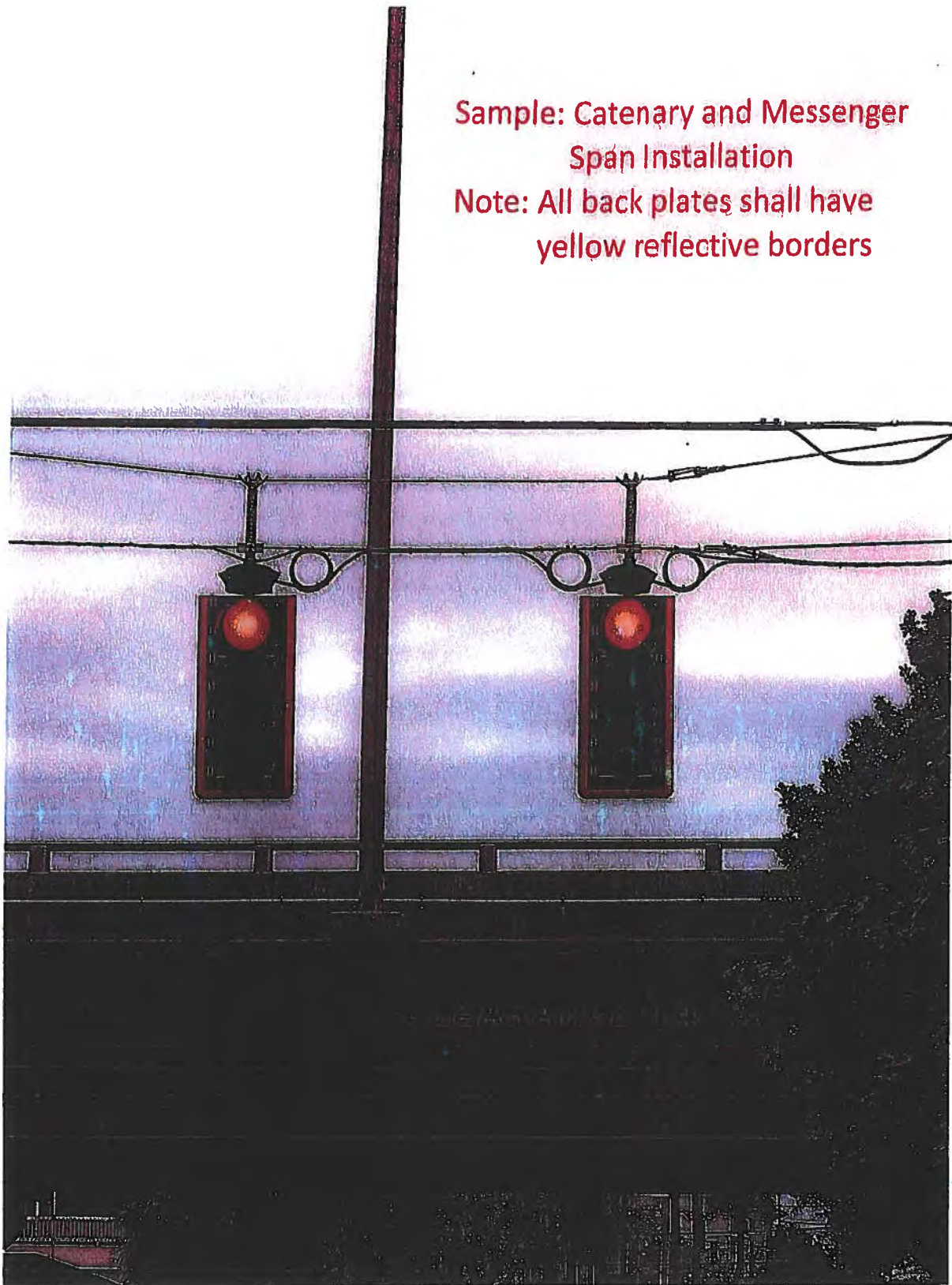
RNC=Process No Color
P__=Paint

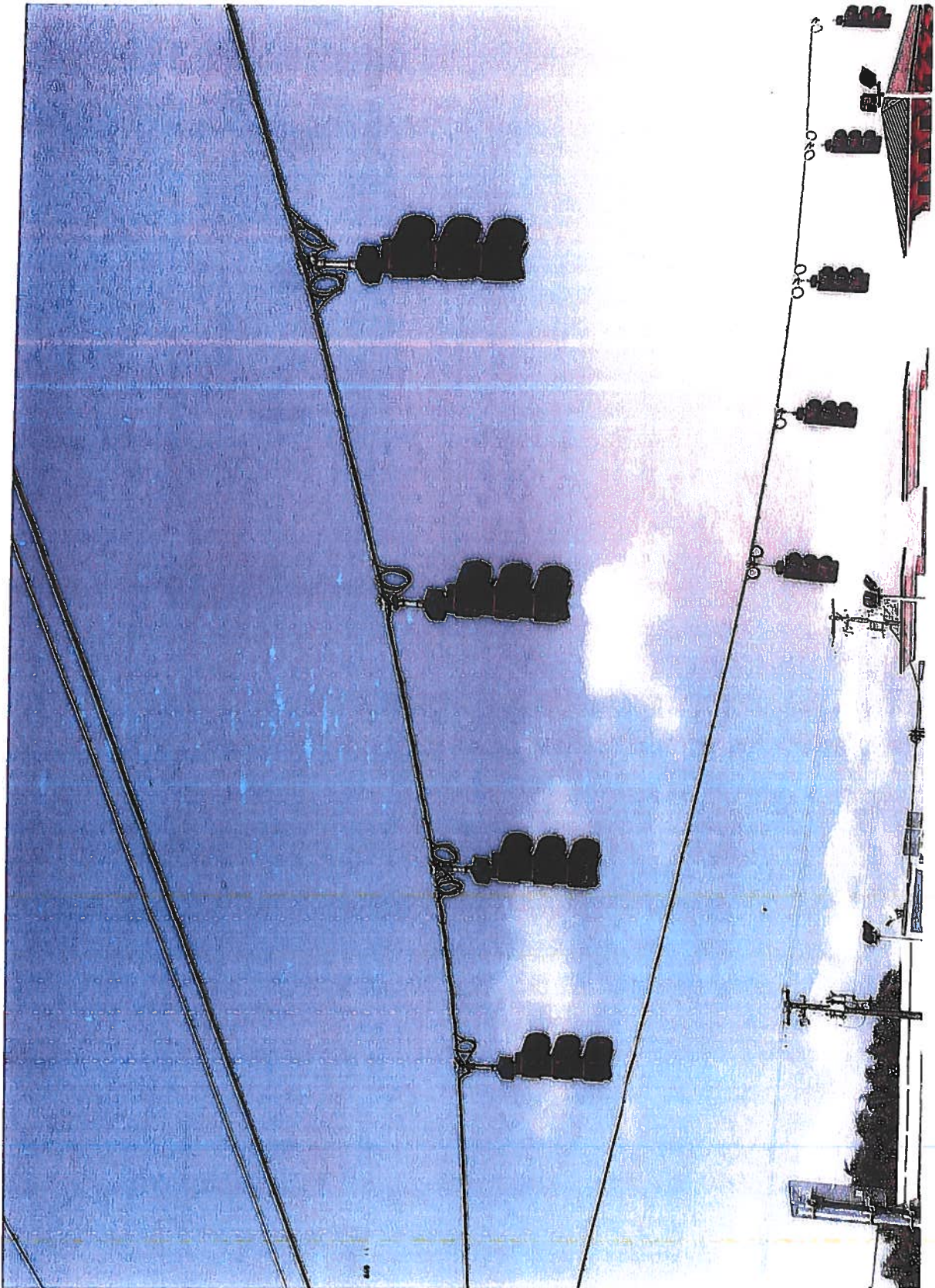
Do not use Male nor Female Harness. Signal Wires and Signal Cable are to be wired directly to the Terminal Block.

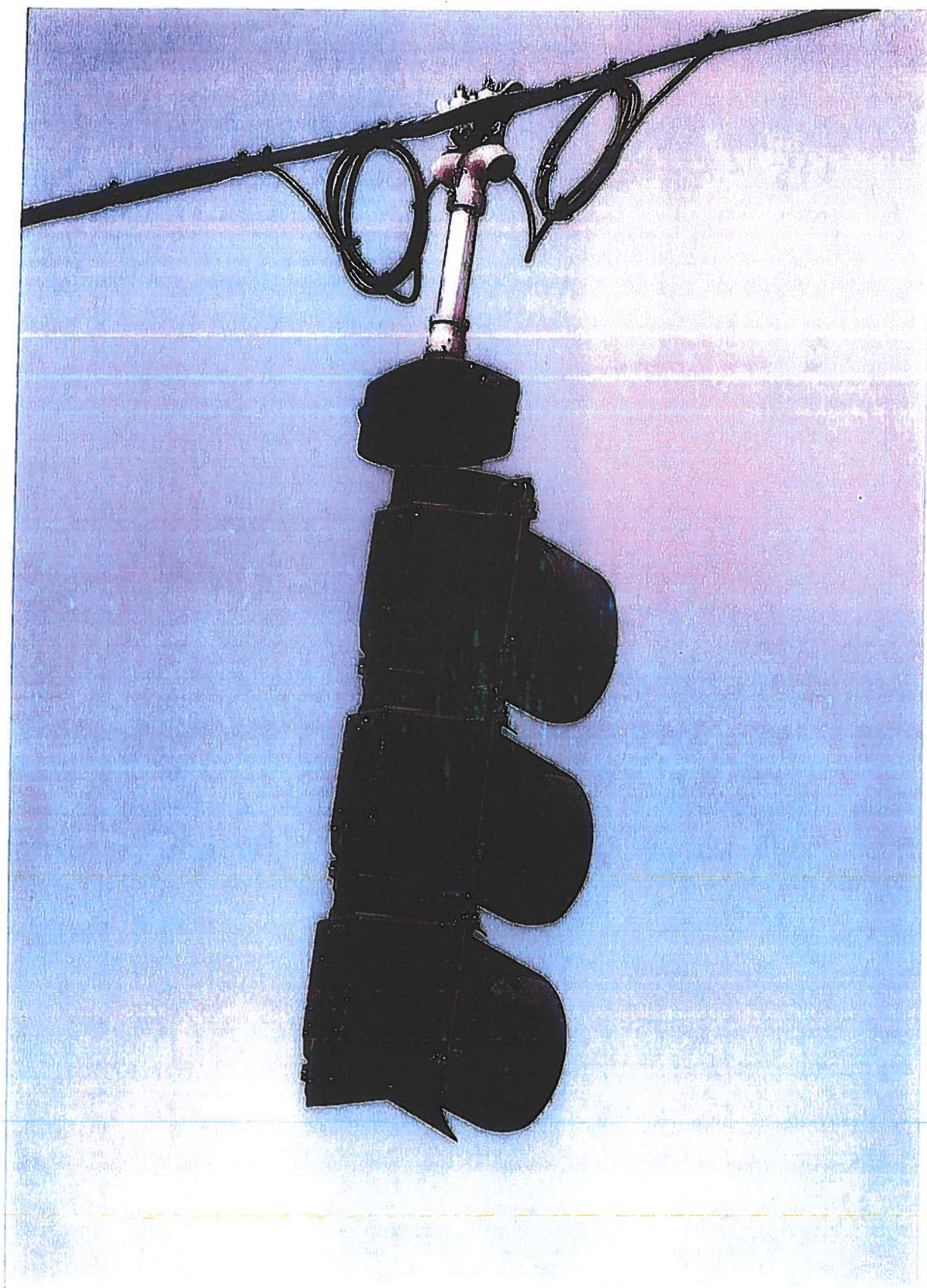
- Note:**
1. All harnesses come with 18 AWG wire pre-tinned and numbered on 3" centers.
 2. All assemblies are supplied standard with stainless steel fasteners.
 3. See Reference Section for available paint colors.

**Sample: Catenary and Messenger
Span Installation**

**Note: All back plates shall have
yellow reflective borders**









www.pelcoinc.com
 EDMOND, OK 73013
 405-340-3434
 FAX: 405-340-3435

This drawing is for reference only. It is the property of Pelco and is not to be used in whole or in part without Pelco's permission.

ASSEMBLY SHEET

REF:

TITLE:

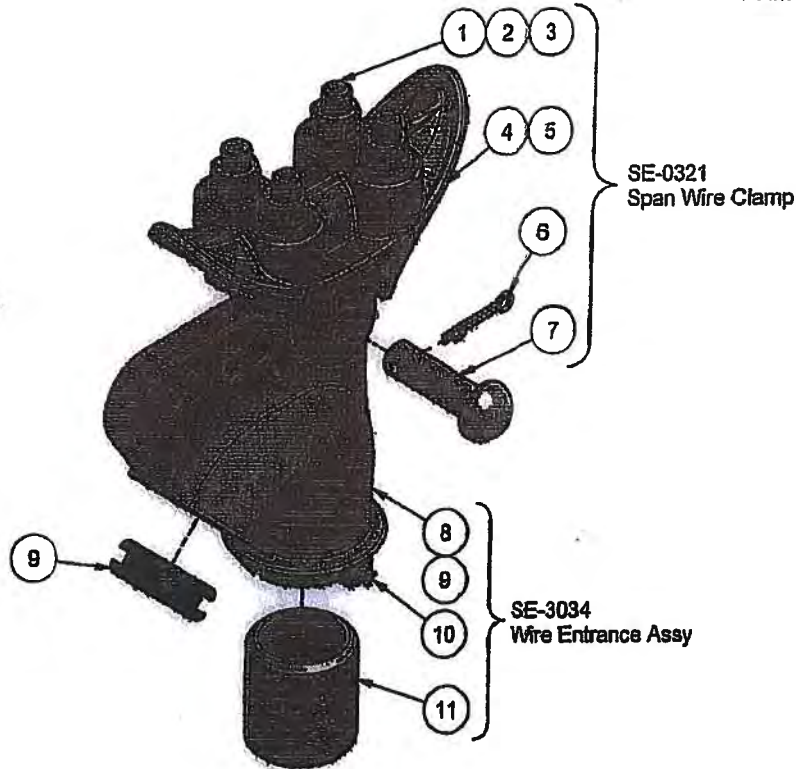
Span Wire Clamp, 3/4" Wide Slot, U-Bolts, Alum

PART NO.:

SE-3019

Part No
SE-3019-PNC

Process No Color=PNC
 Paint=PXX



Options
 Paint

| ITEM | PART NUMBER | DESCRIPTION | QTY |
|------|--------------|---|-----|
| 1 | FS-2507-GLV | U-Bolt, 1/2"-13 x 2-1/8" x 49/64" x 1-3/8", Galv | 2 |
| 2 | FS-1005-GLV | Nut, Hex 1/2"-13, Gr 2H/DH Galv | 4 |
| 3 | FS-4202-GLV | Lock Washer, Split, 1/2", Galv | 4 |
| 4 | SE-0321-M1 | Body, Span Wire Clamp, 3/4", Alum | 1 |
| 5 | SE-4055-GLV | Cable Bar, Span Wire Clamp, Hot Dip Galv, Ductile Iron | 1 |
| 6 | FS-6100-SS | Pin, Cotter, Humped, 5/32" X 1.775", 304 Stainless | 1 |
| 7 | FS-6001-GLV | Pin, Clevis, 5/8" x 2" Galv | 1 |
| 8 | SE-4117-M1 | Wire Outlet Body, 3/4", Alum | 1 |
| 9 | SE-0449 | Grommet, 1-1/2", w/ Diaphragm | 1 |
| 10 | FS-3205-SS | Set Screw, Square Hd, Cup Point, 1/4"-20 x 5/8", Type 304 Stainless | 1 |
| 11 | SE-0309-2.13 | Nipple, All Thread 1-1/2" NPS x 2-1/8" Alum | 1 |

DRWGR: LACORD DATE: 6/19/1992 CHKD: R WOODS DATE: 10/12/2007 REV: G-823/10 TH REV: KAK DATE: 8/3/2010 SHEET 1 OF 1

Collars & Adapters

Pole and base collar assemblies, for both square and octagonal bases, are available in highwind areas to add strength and help prevent loosening of connection.



Pole & Base Collar Assembly, Alum Square Base

PB-5325 -

Coating

PNC=Process No Color

P__=Paint



Pole & Base Collar Assembly, Alum Octagonal Base

PB-5326 -

Coating

PNC=Process No Color

P__=Paint



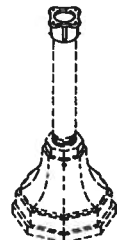
Pedestal Adapter, 4" (4-1/2" OD Pole), Alum 6-1/2" Bolt Circle

SE-3104 -

Coating

PNC=Process No Color

P__=Paint



- Note: 1. All assemblies are supplied standard with stainless steel fasteners.
 2. Specify options when ordering.
 3. See Reference Section for available paint colors.



Collars & Adapters

Pole and base collar assemblies, for both square and octagonal bases, are available in highwind areas to add strength and help prevent loosening of connection.



Slip Fitter Assy, 1-Way for 4-1/2" OD Pole Tri-Stud

SE-5016 - Coating
 PNC=Process No Color
 P__=Paint

Square Base Assembly, Alum w/ Alum Door



PB-5334 - - - -
 Door Set Screws in Collar Grounding Lug Coating
 NL=No Logo 1S=1 Hex Bolt GI=Ground Lug PNC=Process No Color
 Blank=Pelco Logo 3S=3 Set Screws Blank=None P__=Paint
 Blank=None

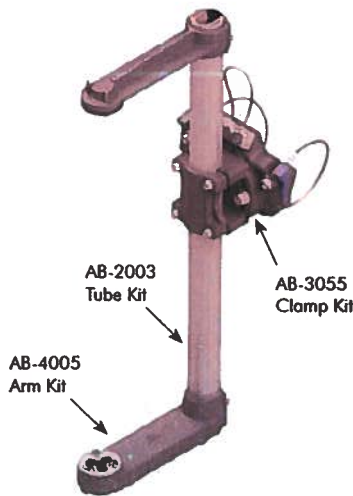
Square Base Assembly, Alum w/ Plastic Door

PB-5335 - - - - PNC
 Door Set Screws in Collar Grounding Lug
 NL=No Logo 1S=1 Hex Bolt GI=Ground Lug
 Blank=Pelco Logo 3S=3 Set Screws Blank=None
 Blank=None

Installation: The collar shall be clamped around the top of a pedestal base by the use of two (2) 5/16" Socket Head Bolts. Each segment shall have a 5/16" pilot hole for drilling through base a 5/16" x 3/4" Roll Pin shall be driven through the collar into the base until flush to prevent the collar from walking up the base.

1-Way Assemblies

Designed to accommodate all traffic signals, with the exception of optically programmed (see pages T1-18 through T1-21). The Galaxy and Stellar Astro-Brac series feature all-axis adjustability and are designed to facilitate the mounting of any size signal to any shape mast arm or pole.

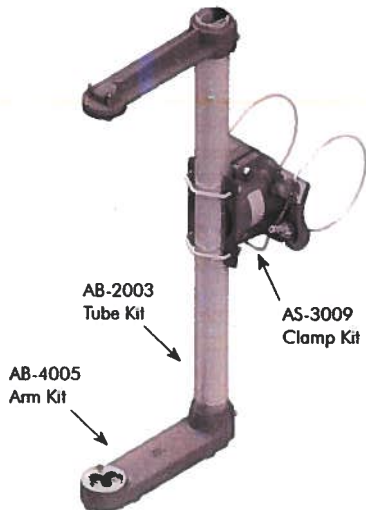


Astro-Brac Galaxy Assy, 1-Way Cable Mount

| | | | | | | | | |
|---------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| AG-0125 | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> |
| | | Signal Section | | Cable Length | | Cable | | Coating |
| | | 1=1 Sec | | See Note | | Blank=Galv | | PNC=Process No Color |
| | | 2=2 Sec | | | | SS=Stainless | | P__=Paint |
| | | 3=3 Sec | | | | | | |
| | | 4=4 Sec | | | | | | |
| | | 5=5 Sec | | | | | | |



Note:
Cable Length: 62", 84", 96", 110", 120", 132", 144", 220", or 280".



Astro-Brac Stellar Assy, 1-Way Cable Mount

| | | | | | | | | |
|---------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| AS-0125 | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> |
| | | Signal Section | | Cable Length | | Cable | | Coating |
| | | 1=1 Sec | | See Note | | Blank=Galv | | PNC=Process No Color |
| | | 2=2 Sec | | | | SS=Stainless | | P__=Paint |
| | | 3=3 Sec | | | | | | |
| | | 4=4 Sec | | | | | | |
| | | 5=5 Sec | | | | | | |



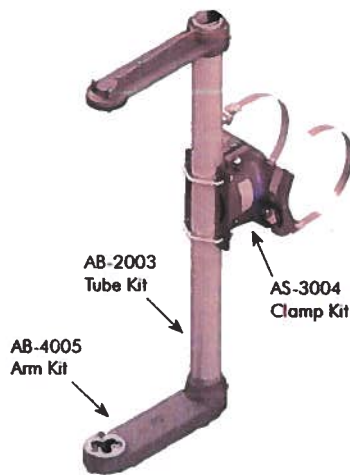
Note:
Cable Length: 62", 84", 96", 110", 120", 132", 144", 220", or 280".

- Note: 1. All assemblies are supplied standard with stainless steel slotted washers and fasteners.
2. See Reference Section page iv for cable and band clamp kit pole diameters.
3. See Reference Section for available paint colors.



1-Way Assemblies

Designed to accommodate all traffic signals, with the exception of optically programmed featured on pages T1-18 and T1-21. The Galaxy and Stellar Astro-Brac series feature all-axis adjustability and are designed to facilitate the mounting of any size signal to any shape mast arm or pole.

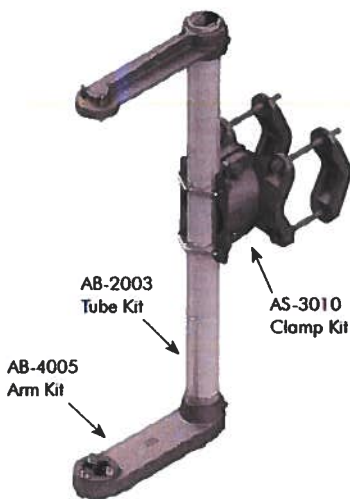


Astro-Brac Stellar Assy, 1-Way Band Mount

| | | | | | | | | |
|---------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| AS-0116 | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> | - | <input type="text"/> |
| | | Signal Section | | Band Length | | Clamp Screw | | Coating |
| | | 1=1 Sec | | See Note | | Blank=Galv | | PNC=Process No Color |
| | | 2=2 Sec | | | | SS=Stainless | | P__=Paint |
| | | 3=3 Sec | | | | | | |
| | | 4=4 Sec | | | | | | |
| | | 5=5 Sec | | | | | | |



Note:
Band Length: 29", 36", 42", 48", 56", 72", 84", 96", or 114".



Astro-Brac Stellar Assy, 1-Way Tenon Mount

| | | | | |
|---------|---|----------------------|---|----------------------|
| AS-0137 | - | <input type="text"/> | - | <input type="text"/> |
| | | Signal Section | | Coating |
| | | 1=1 Sec | | PNC=Process No Color |
| | | 2=2 Sec | | P__=Paint |
| | | 3=3 Sec | | |
| | | 4=4 Sec | | |
| | | 5=5 Sec | | |



Note:
Fits 1.9" to 4.5" diameter.

- Note: 1. All assemblies are supplied standard with stainless steel slotted washers and fasteners.
2. See Reference Section page iv for cable and band clamp kit pole diameters.
3. See Reference Section for available paint colors.





CITY OF TAMPA

Department of Transportation and Stormwater Services

GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

SECTION #5

**Standard Controller Cabinet, Controller, MMU, Detection
Standard PPB Sign, Cabinet Foundation and Ped Signal**



CITY OF TAMPA

Department of Transportation and Stormwater Services

City of Tampa Standards for Preferred Controller Cabinet, Controller, MMU, Detection

| Item Type | Manufacturer | Model |
|--------------------------------|----------------|--------------------|
| Controller Cabinet | Econolite/Peek | TS2 Type 1 |
| Controller | Econolite | Cobalt |
| MMU | EDI | MMU2-16LE ip |
| Fisheye Camera Video Detection | Gridsmart | (GS-3CAM) |
| Radar Detection | Wavetronix | SmartSensor Matrix |

Uninterruptible Power Source: DO NOT PIGGY BACK UPS WITHOUT PRIOR APPROVAL BY THE C.O.T. -

Alpha FXM 1100 UPS w/SNMP, (4) 195 GXL batteries, battery cable kit. Alpha FL08 aluminum enclosure w/out generator compartment. Includes universal automatic transfer switch, interior lamp, external on-battery LED with 5 year warranty on the batteries
FDOT 63910402712013 Item # 123

Complete Controller Cabinet Assembly:

CONTROLLER - ECONOLITE ASC/3-2100 TS 2 TYPE 1, MONITOR - MMU2-16LE
CABINET: SIZE P-44, TS 2 TYPE 1, 26"D X 44" W X 54"H (NO PAINT OUTSIDE, WHITE PAINT INSIDE), WIRE FOR SOP 10 WITH 16 POSITION LOAD BAY, GPS CLOCK SYNC, 2X QUAD POWER OUTLETS (EXCLUDING GFI), WALL-MOUNT PATCH PANEL (12X SINGLE MODE SC- CONNECTOR), COMMUNICATIONS: SM FIBER, RUGGEDCOM RS 900 FIBER SWITCH (100 MBPS WITH LC CONNECTORS), CENTRAL CONTROL SOFTWARE: ECONOLITE CENTRACS

GRIDSMART.

► APPLICATIONS

Single camera vehicle detection and counting, highway counting and monitoring

► CAMERA

5MP CMOS
Power over Ethernet

► CONNECTIVITY

Single Cat5e cable for power and data

► DIMENSIONS

9.9" diameter x 7.9"
(25 X 20.1 cm)

► ENVIRONMENTAL

-29°F to +165°F
(-34°C to +74°C)
0 to 95% non-condensing

► POWER

5W nominal
50W with heaters on

► REGULATORY

FCC Class A

► VIDEO OUTPUT

MJPEG

► VIEW

Horizon to horizon, including the center of the intersection

GRIDSMART's iconic Bell Camera delivers the industry's only horizon to horizon view that includes the center of the intersection, where vehicles, bicycles, and pedestrians actually cross paths. GRIDSMART uses vision-based tracking with a fisheye camera, allowing the system to track vehicles into and out of the intersection. This capability allows the system to provide true turning movement counts. The system also provides a virtual pan-tilt-zoom, allowing you to customize up to four different views of the intersection, changing anytime you wish.

The GRIDSMART Bell Camera is rugged and tough, milled out of 1/4 inch thick aluminum protecting the downward facing optics from the elements. The single wire system is installed in three hours or less.



RESOLUTION

2560 x 1920 pixels

FEATURES

Rugged,
environmentally-sealed,
No aim-No focus

LENS

180° Fisheye

WARRANTY

3-year hardware warranty

HOUSING

1/4 inch milled
aluminum, IP68

WEIGHT

7 pounds
(3.2 kilograms)

► **APPLICATIONS**

Vehicle tracking and counting
Intersection actuation

► **CAMERA**

Supports two fisheye cameras,
or one fisheye and four traditional
cameras, or eight traditional cameras

► **COMMUNICATIONS**

TCP/IP

► **CONNECTIVITY**

Wide Area Network (WAN) port for
remote connectivity

► **CONSUMPTION**

35watts nominal, 85watts
with active camera heaters

► **DETECTOR I/O**

Twenty-four (24) optically isolated I/O,
SDLC interface, or ITS interface

► **DIMENSIONS**

8.5 x 11.5 x 1.75 inches (1U height)
(20.6 x 29 x 4.5 cm)

► **ENVIRONMENTAL**

NEMA TS2, -29°F to +165°F (-34°C to
+74°C) 0-95% non-condensing

► **MAINTENANCE**

Field repairable

► **MECHANICAL**

Multiple position options:
horizontally on a shelf, vertically
with an optional foot stand, and
mounted in a 19-inch rack

► **OUTPUTS**

24 optically isolated outputs, SDLC
interface conforming to TS2 specs,
Programmable up to 64 detectors

► **POWER**

120/240 VAC 50/60 Hz

► **REGULATORY**

FCC Class A

► **CONFIGURATION**

Windows XP or greater running
GRIDSMART Client application

► **STANDARDS**

NEMA TS2

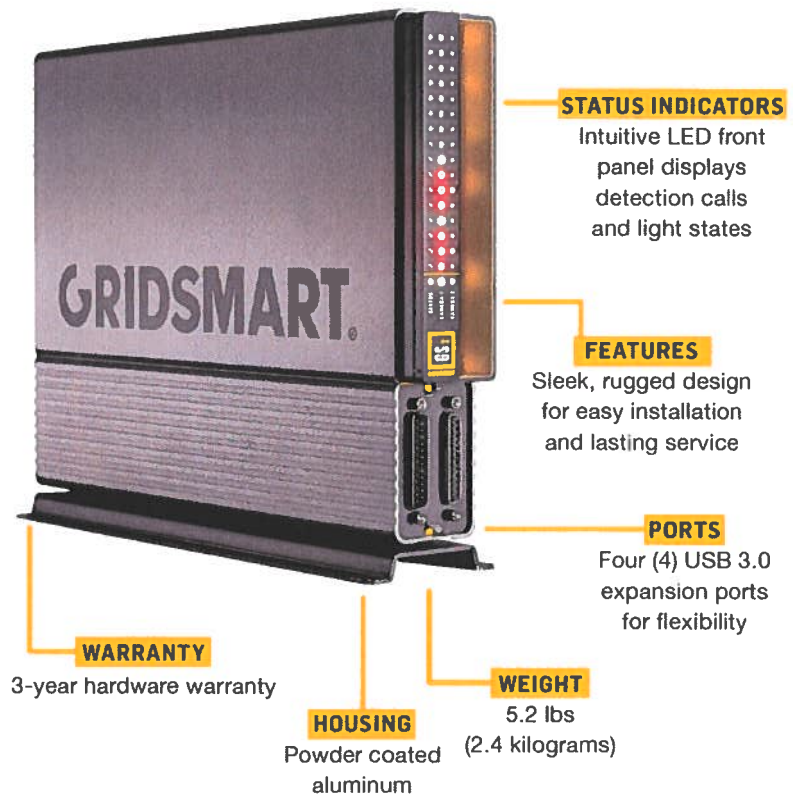
► **VIDEO OUTPUT**

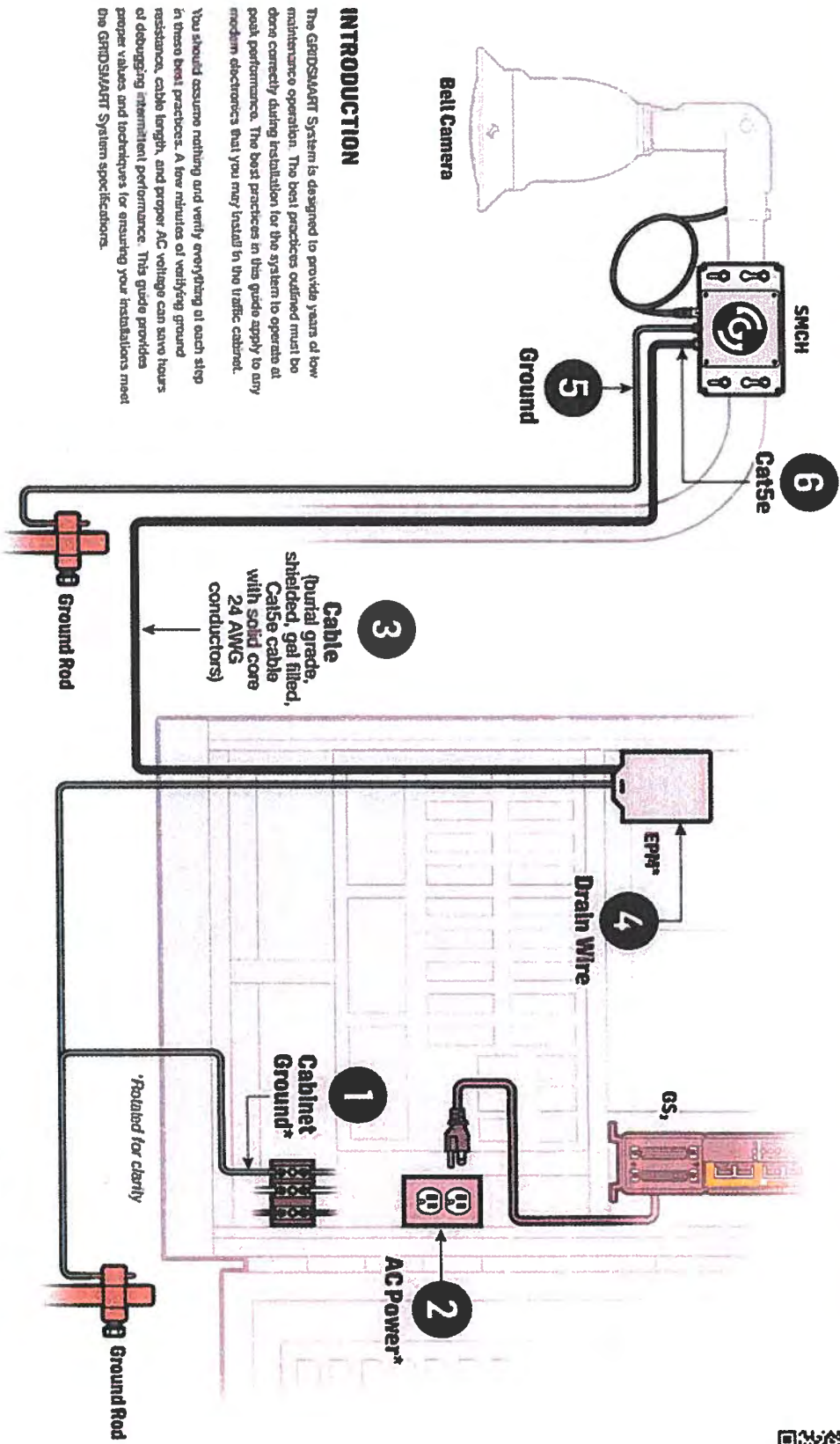
MJPEG

GRIDSMART®

GS2 works with the GRIDSMART Cameras to actuate intersections and gather important traffic data that can be utilized to adjust signal timing and traffic flow strategies in real time.

GS2 is housed in an artisan-forged, single-piece, GRIDSMART-tough enclosure. Built with flexibility in mind, the 1U-high Processor can be rack-mounted, lie horizontally, or stand vertically. The GS2 front panel shows phases, calls, and status with bright, multi-color LEDs. GS2 has an Ethernet connection so the system can be attached to your network. Due to its modular design, GS2 is field repairable.





INTRODUCTION

The GRIDSMART System is designed to provide years of low maintenance operation. The best practices outlined must be done correctly during installation for the system to operate at peak performance. The best practices in this guide apply to any medium electronics that you may install in the traffic cabinet.

You should assume nothing and verify everything at each step in these best practices. A few minutes of verifying ground resistance, cable length, and proper AC voltage can save hours of debugging intermittent performance. This guide provides proper values and techniques for ensuring your installations meet the GRIDSMART System specifications.

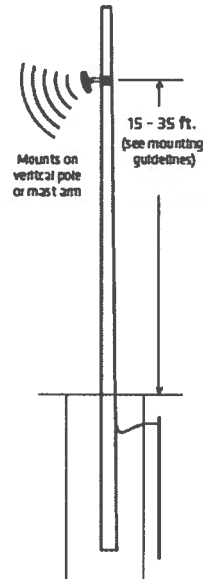
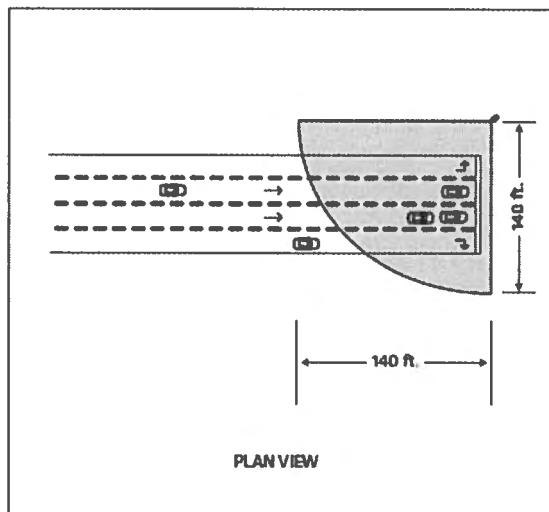
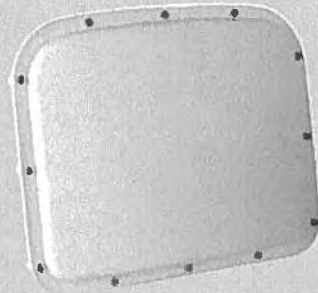
© 2018 GRIDSMART Technologies, Inc. 12540 Ketchikan Valley Road, Ketchikan, AK 99901 USA

SmartSensor Matrix

The SmartSensor™ Matrix is a first-of-its-kind stop bar presence detector designed for use at signalized intersections to detect vehicles with the reliability of radar and with all the advantages of non-intrusive detection.

Features

- Matrix of 16 radars for two-dimensional coverage
- Tracks vehicles through a 90 degree field of view that extends out 140 ft. (42.7 m)
- Includes Radar Vision™ technology to detect and track in two dimensions
- Reports real-time presence of both moving and stopped vehicles
- Standard detector-rack contact-closure interface
- Easy to install and operate
- Supports curved and angled lanes
- Includes preassembled cabinet back-plate, reducing the need to fieldwire
- Automated manufacturing process
- Patented auto-configuration process
- Patented Digital Wave Radar II™ technology
- Remote accessible for traffic monitoring and sensor management
- Flash upgradable
- Robust to changing temperature, light and weather conditions

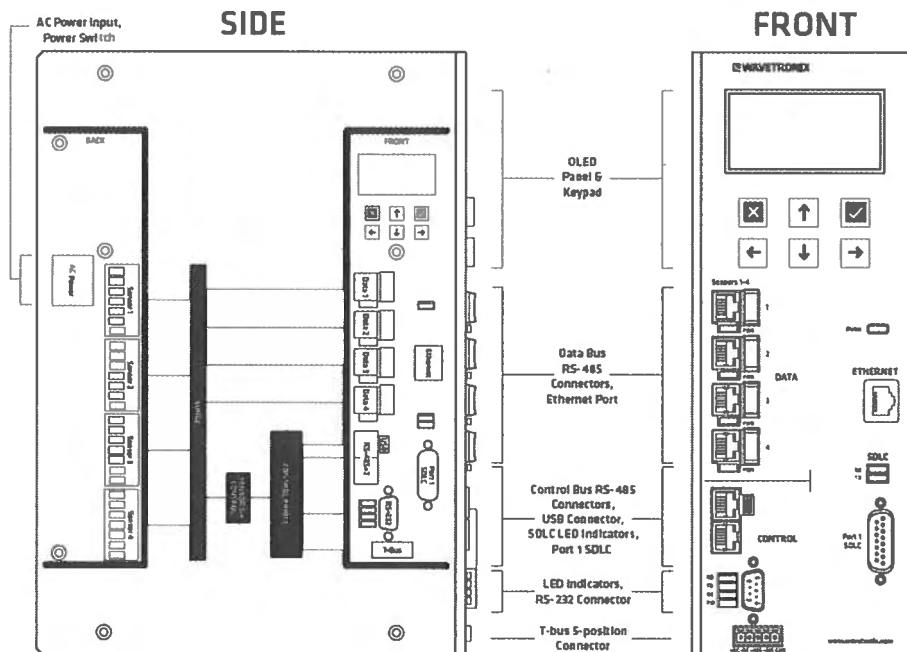


Cabinet Interface Device

The Click 650 provides streamlined communication for SmartSensor Matrix and Advance to traffic controllers in one compact case. This module communicates directly to the controller through SDLC, and supports contact closure devices as well. It also provides power, surge protection and Ethernet connectivity for all sensors.

Features

- Provides sensor detection data directly to controller through SDLC port
- Provides up to 64 detector channels
- Provides an Ethernet port for network connectivity.
- Can be used in place of intersection Preassembled Backplates
- Provides DC power for up to 4 sensors
- Protects the sensor from surges
- Forwards detection data collected from the sensors to contact closure devices (not included)
- Has a power switch for each sensor, allowing you to turn sensors on and off individually
- Has multiple configuration connections for communicating from your computer to the connected sensors:
 - USB
 - RJ-11 jacks for RS-485
 - DB-9 connector for RS-232
 - T-bus port
- Can be used on a shelf or affixed to the cabinet wall





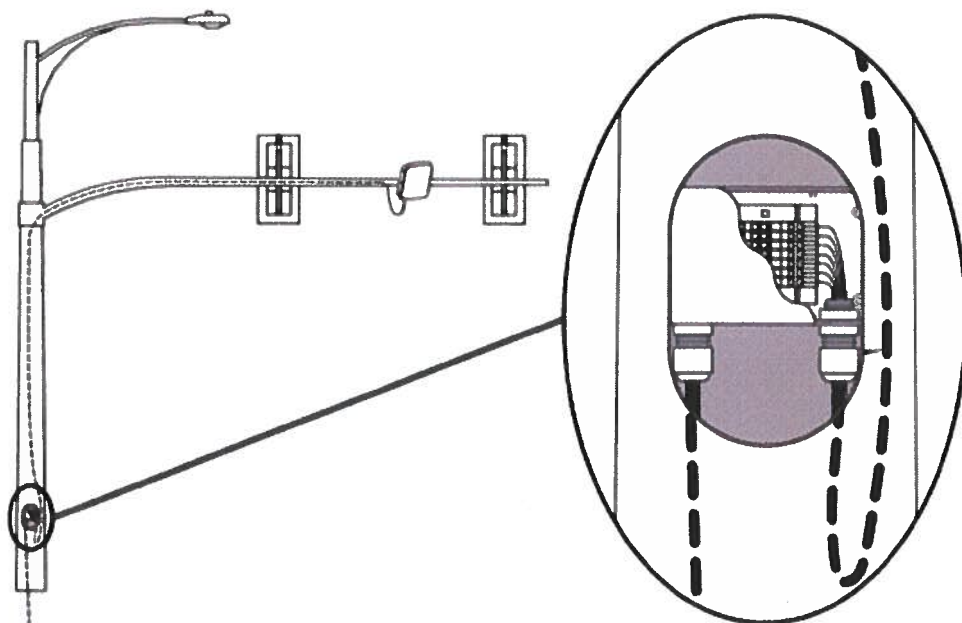
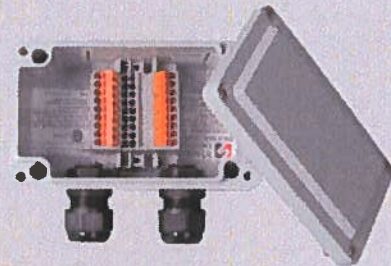
Sensor Cable Junction Box

The sensor cable junction box provides connection between the sensor's pigtail cable and the homerun cable to the cabinet. This box's nine terminal blocks eliminate the need to pull a connectorized cable from the sensor to the cabinet. Its small size allows for an in-line connection that will fit in a hand hole.

Features

- Type 4, 4x enclosure
- Insulation displacement terminal blocks for quick wiring
- Small form factor for placement in traffic pole hand hole
- Cable grips for water resistance
- Same-side cable entry prevents cable path water trails from pooling on cable grip
- Nine terminal blocks means that the box can be used with cables with nine or fewer conductors and drains, namely

the Wavetronix SmartSensor™ 6-conductor cable and the 8-conductor cable



Junction box needs to be added in all installations. This box has been approved for external use and must be mounted to the back of the Mast Arm closest to the Mast Pole.



cobalt

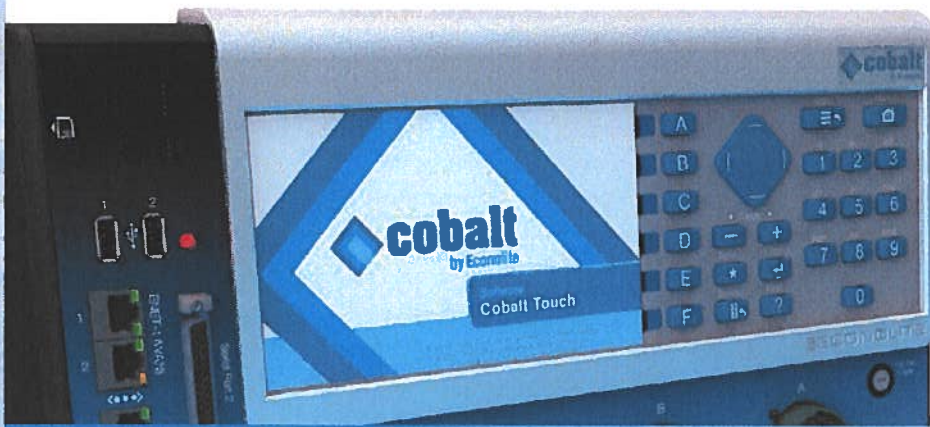
by Econolite



Product Details

ISO
9001
REGISTERED

 **ECONOLITE**
www.econolite.com



Description

The traffic signal controller represents one of the most important intelligent technology and communication components of a signalized intersection. As such, today's advanced traffic signal controller must integrate leading edge electronics, while supporting industry standards and specifications. Econolite continues its tradition of offering the most advanced and innovative technologies with the Cobalt™ family of Advanced Transportation Controllers (ATC). Fully meeting the industry's ATC standard 5.2b and proposed standard 6.10, Cobalt is designed to provide an unmatched combination of ATC controller open architecture functionality with the latest handheld technology and applications. Cobalt also features a breakthrough hardened seven-inch touchscreen user interface matched with a Linux-based operating system, making programming and access to functions easiest in the industry.

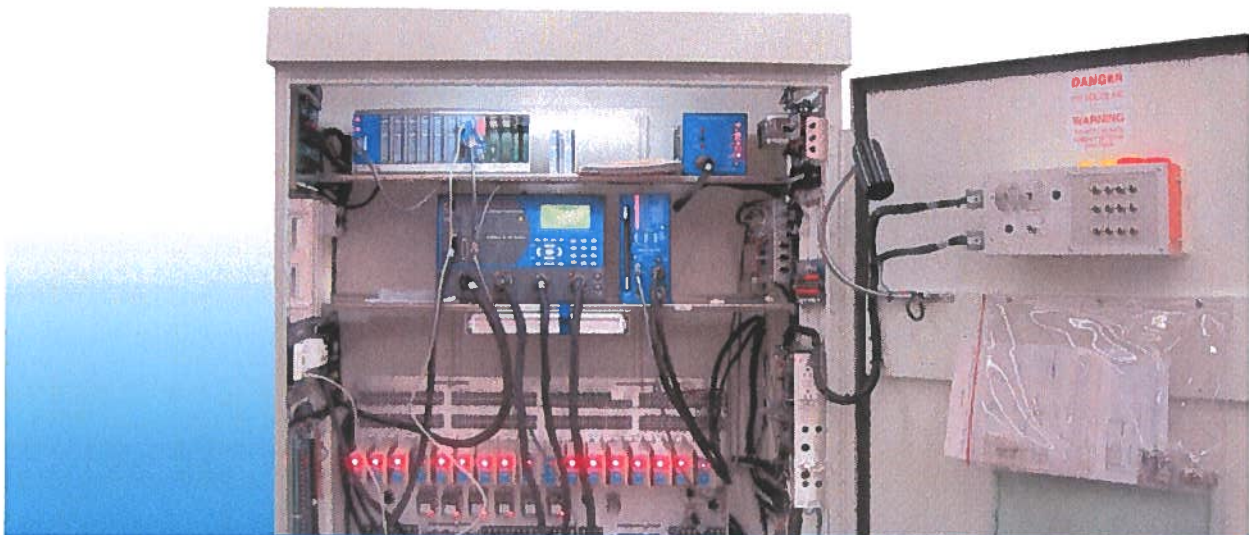
Cobalt ATC controllers may be configured with Econolite's robust Cobalt Touch or Cobalt ASC application software package, or other Linux application software meeting current ATC standards.

Cobalt includes a high-power, Linux-based Engine Board that is compliant with the ATC 5.2b and proposed 6.10 standard for a NEMA standard TS2 Type-1 or Type-2 I/O connectors: four Ethernet ports, two USB ports, an SD Card slot, a seven-inch color TFT LCD module with touch screen capabilities and a custom elastomeric keypad.

Features

- Revolutionary, large seven-inch color TFT LCD display
- Touch-screen display for intuitive, graphical programming
- High brightness and contrast display for better outdoor readability than any other controller on the market
- Linux, open architecture real-time multi-tasking operating system
- Alternative Web browser-based user interface allows remote programming and status observation (with appropriate network connection)
- 233MHz PowerQUICC II Pro-processor that provides 10 times more processing power than previous generation controller processor
- Two integral Ethernet Switches provide four 10/100Mbit Ethernet front panel ports
- Two USB 2.0 ports
- Easy OS software upgrades via USB memory stick, SD card, or Ethernet via Econolite's Windows software installation application
- Communications slot for optional ATC communications modules
- Sleek modern styling

Plug-N-Go™ Modular Cabinet NEMA TS1/TS2 Modular Cabinet



►► The Econolite Plug-N-Go cabinet provides ease of assembly, installation, and troubleshooting

About the Plug-N-Go Cabinet

The Econolite Plug-N-Go cabinet assembly provides simplified integration between the major components of our TS1/TS2 cabinet allowing for ease of assembly, installation, and troubleshooting. This next-generation cabinet utilizes a modular assembly and plug-in cabling to allow the replacement of all major components with virtually no rewiring. Service technicians can now perform field diagnostics by troubleshooting specific modules. The Plug-N-Go assemblies are available in both TS2 Type-1 & Type-2 and TS1 configurations.

The Plug-N-Go cabinet introduces a unique feature called the "Power Bus." This assembly centralizes all of the cabinet power terminations using highly reliable plug-in connectors for major cabinet components. The Power Bus provides six universal power connectors along with two terminal strips to allow for future expansion.

At A Glance

- Enhanced power distribution
- Field-replaceable modular components
- TS2 Type-1 main panel size reduced
- Increased reliability
- Reduces maintenance time
- Simplifies troubleshooting and diagnostics
- Improved safety
- Modular component design

Modular Component Design

The design features of the modular components allow for the standardization of cabinet wiring interconnection.

Enhanced Power Distribution

The Power Bus assembly reduces the chance of wiring errors and problems associated with electrical connections. All cabinet equipment that requires filtered power to operate is connected to the Power Bus assembly with highly reliable Plug-N-Go connectors.

Improved Safety

Utilization of a 24-volt disconnect relay provides additional isolation during flash conditions.

Field Replaceable Modular Components

The modular cabinet components are easily removed or replaced with the use of simple hand tools.

TS2 Type-1 Main Panel Size Reduced

Reducing the size of the TS2 Type-1 main panel eliminates the need for removal of any equipment when lowering the panel.

Interface Cables with Connectors Simplifies Point-to-Point Wiring

Utilizing connectors in lieu of point-to-point manual wiring provides greater flexibility for installation and wiring changes.

Options

- ▶ Plug-N-Go TS2 Type 1
- ▶ Plug-N-Go TS2 Type 2
- ▶ Plug-N-Go Lite TS2 Type 1

Increased Reliability

Connectors utilized in all modular cabinet assemblies have been field-tested in both military and medical applications.

Reduces Maintenance Time

Easily replaceable modular components allow the service technicians to restore the system with minimum downtime.

Simplifies Troubleshooting & Diagnostics

Common cabinet modules provide easy isolation and eliminate the need for extensive troubleshooting and diagnostics.

Available with NEMA TS2 Type-1 and Type-2 Terminals & Facilities

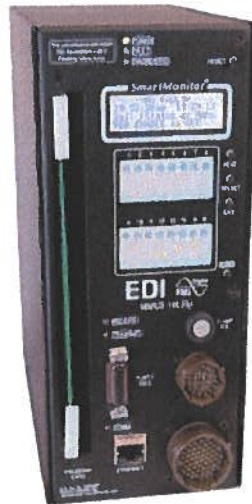
- All modular cabinet components are designed to be used with both TS2 Type-1 and Type-2 main panels.
- Also available with NEMA TS1 is a 16-position horizontal loadbay.

All base mounted cabinets require anchor bolts to properly secure the cabinet to its base. The cabinet flange for securing the anchor bolts shall not protrude outward from the bottom of the cabinet. When a size 3, 4, or 5 cabinet is base mounted, two anchor bolts shall be required for proper installation. Size 6 and 7 cabinets, four anchor bolts shall be required for proper installation.

Each cabinet shall be of sufficient size to accommodate all equipment. At a minimum, the minimal cabinet sizes are as follows:

- Size 3 cabinets – 40” H x 24” W x 15” D
- Size 4 cabinets – 46” H x 24” W x 16” D
- Size 5 cabinets – 48” H x 30” W x 16” D
- Size 6 cabinets – 52” H x 44” W x 24” D
- Size 7 cabinets – 72” H x 44” W x 24” D

MMU2-16LE(ip) SmartMonitor



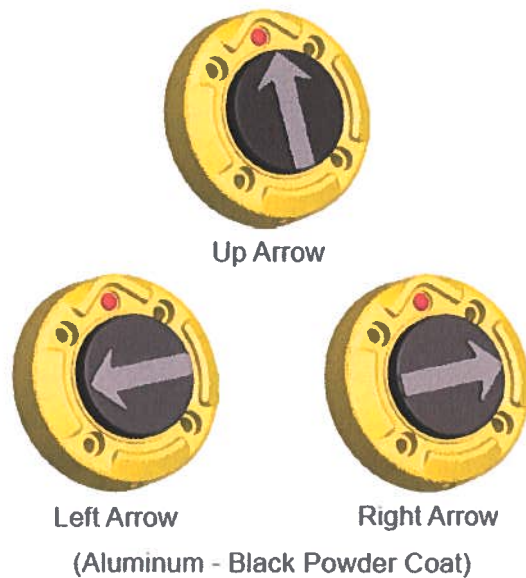
The MMU2-16LE *SmartMonitor*[®] series Malfunction Management Unit (MMU) exceeds all the requirements set forth in the NEMA Standard TS2-2016, including **NEMA Amendment #4-2012 for Flashing Yellow Arrow (MMU2)**. The MMU2-16LE series includes two large area Liquid Crystal Displays (LCD) for a continuous Full Intersection display. A separate graphical LCD provides a menu driven interface to status, signal voltages, configuration, event logs, and the integrated context sensitive Help System.

The built-in **Setup Wizard** ensures that the enhanced monitor programming is done quickly and accurately, even by a novice. The industry first patented **Diagnostic Wizard** automatically pinpoints malfunctioning signals and offers trouble shooting advice.

An Ethernet or EIA-232 port port is used to communicate with a Personal Computer or Traffic Management Center using field proven EDI ECom software. Monitor status, event logs, and Signal Sequence History logs are stored in nonvolatile memory for diagnostic and archival purposes.

- **MMU2-16LEip** *SmartMonitor* 12/16 channel LCD Series with Ethernet Port
- **MMU2-16LE** *SmartMonitor* 12/16 channel LCD Series with EIA-232 Port

Additional Documentation

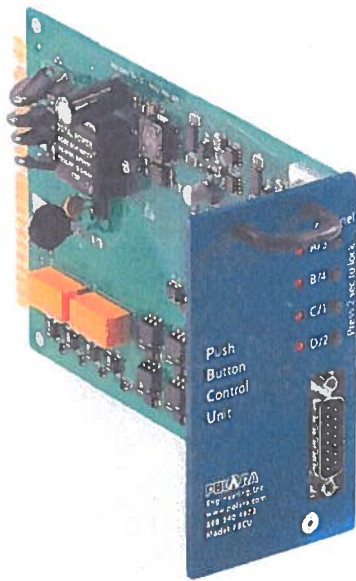


Design Compliance

| Test Type | Compliance |
|--------------------------------|--|
| Activation Force | MUTCD 2009 - 4E |
| Temperature and Humidity | NEMA TS 2 |
| Transient Voltage Protection | NEMA TS 2 |
| Transient Suppression | IEC 61000-4-4, IEC 61000-4-5 |
| Lightning and Power Protection | GR-1089-CORE, Extended to 6000V-400A, 25 reps, 120VAC-15 mins. |
| Electronic Noise | FCC Title 47, Part 15, Class A |
| Mechanical Shock and Vibration | NEMA TS 2 |
| Ingress of Water | NEMA 250 - 6P, Rain, Snow, etc... |
| Ingress of Water | NEMA 250 - 6P, Submersion |
| Salt Spray and Corrosion | NEMA 250 - 6P |
| Ingress of Foreign Objects | NEMA 250 - 6P |
| Electrical Reliability | NEMA TS 4 |

Note: Applicable sections only of reference standards.
All specifications are subject to change without notice.

PBCU-DC: PUSH BUTTON CONTROL UNIT FOR BULLDOG BUTTONS



The Polara Push Button Control Unit (PBCU-DC) is an interface device for Polara Bulldog pedestrian push buttons, designed especially for the BDL3 which can operate in either momentary or latching LED mode. It also powers down all BDL3 buttons when an intersection is in flash so buttons do not provide any indication when pushed. It is designed as a double width plug-in module that supports 4 PED PHASES and up to 4 buttons per phase. It is typically installed in a standard detector input in a NEMA style cabinet. It is intended only for use with Polara Bulldog buttons. The PBCU-DC is fully compliant with MUTCD 2009 Section 4E.08 for latching Push Buttons. See Installation and Operation Manual for detailed list of features, functions and specifications.

SPECIFICATIONS:

Mechanical

Height: 4.50 inches
 Width: 2.34 inches
 Length: 7.00 inches excluding pull handle

Electrical

DC Power Input: 24 volts nominal (10 to 28)
 AC Walk / Don't Walk Inputs: 80 to 150 volts AC
 Logic Inputs: Low (true) less than 8 volts DC; High (false) greater than 12 volts DC
 Voltage supplied to field buttons: 18 volts DC regulated

Environmental

Specified operation from -34°C to 74°C
 Operation from 0% RH to 95% RH non-condensing
 Operation to 10,000 ft. altitude

Hardware Kit

PBCUHK Standard 6 Foot Cables included with each PBCUHK
 PBCUHK-15 15 Foot Cables can be ordered instead of 6 Foot Cables at an extra charge.



carmanah[®]
we put solar to work

MODEL

R920 SERIES

RECTANGULAR RAPID FLASHING BEACON

Pedestrian-actuated warning system for uncontrolled marked crosswalks

RRFBs have been found to provide vehicle yielding rates between 72 and 96 percent for crosswalk applications, including 4 lane roadways with average daily traffic (ADT) exceeding 12,000*.

Superior Design and Technology

The R920 utilizes a self-contained solar engine integrating the energy management system with an on-board user interface, housed in a compact enclosure together with the batteries and solar panel. In low light conditions, the ambient auto-adjust option provides over-lighting protection and system efficiency, while still meeting MUTCD light intensity requirements.

Easy Installation

With its highly efficient and compact design, installation is quick and uncomplicated, dramatically reducing installation costs. Retro-fitting can be done where existing sign bases are used to enhance existing marked crosswalks in minutes, and new installations can be completed without the cost of larger poles and bases.

Advanced User-Interface

The R920 is the first RRFB with an on-board user interface and display for quick configuration and status monitoring. It allows for simple in-the-field set-up adjustment to flash duration, ambient settings, and night intensity. Settings are broadcasted automatically to all units in the system.

Reliable

Designed with Carmanah's industry leading solar modeling tools to provide dependable year-after-year operation.

Trusted

With thousands of installations in the field, Carmanah solar beacons and solar LED lights have become the benchmark in traffic applications and other transportation applications worldwide.

The R920 is the benchmark for Rectangular Rapid Flashing Beacons (RRFBs):

- Ultra-efficient optical and Energy Management System (EMS)
- Compact design to simplify installation
- Proven technology platform
- Exceeds FHWA standards



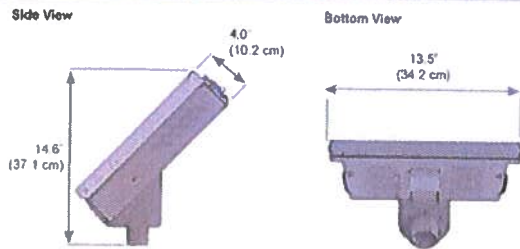
push button actuated

REPRESENTED IN YOUR REGION BY:



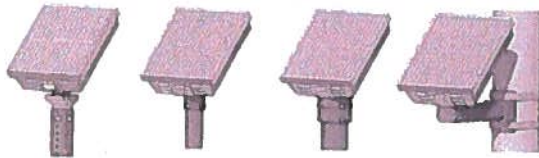
* U.S. Department of Transportation Federal Highway Administration Publication No. FHWA-HRT-10-043 - Effects of Yellow Rectangular Rapid-Flashing Beacons on Yielding at Multilane Uncontrolled Crosswalks

DIMENSIONS



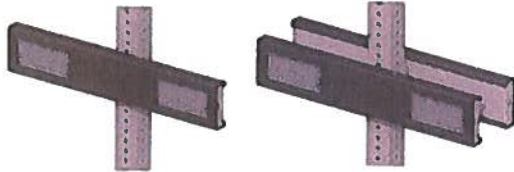
MOUNTING OPTIONS

2.0" - 2.5" Perforated Square Post Mount 2.38" - 2.88" Diameter Round Post Mount 4.0" - 4.5" Diameter Round Post Mount Side Post Mount

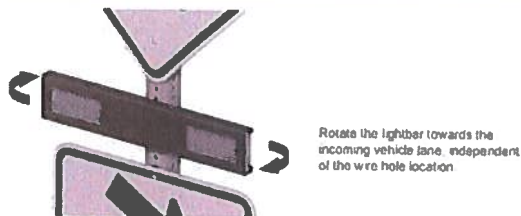


SYSTEM CONFIGURATION

Uni-directional Configuration Bi-directional Configuration



IN THE FIELD AIMING



RRFB CAPACITY CALCULATOR

Calculate the performance of our Rectangular Rapid Flashing Beacon in your location with our RRFB Capacity Calculator.



carmanah.com/RRFB-calculator



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

US Patent No 6 573 659 Other patents pending Carmanah and Carmanah logo are trademarks of Carmanah Technologies Corp

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Document SPC_TRAF_R920_REVO

MODEL

R920 SERIES

RECTANGULAR RAPID FLASHING BEACON

| | |
|-------------------------------|--|
| On-Board User Interface (OBU) | Adjustable, auto-scrolling LED display |
| | Field-configurable flash duration to one second increment |
| | Ambient auto-adjust configuration |
| | Night dimming configuration |
| Optical | Wireless update of configurable settings from any unit to all systems |
| | Channel selection |
| | System test, status and fault detection |
| | Activation data reporting |
| Energy Collection | MUTCD IA-11 compliant flash pattern |
| | 3' x 7' amber LED indications |
| | Side emitting pedestrian confirmation lights |
| | Exceeds SAE J595 class 1 Intensity |
| Energy Storage | Meets SAE J578 chromaticity |
| | High-power LEDs meets 80% lumen maintenance (L80) based on IES LM-80 |
| | 10 watt high-efficiency photovoltaic cell with blocking diodes |
| | Maximum power point tracking with temperature compensation (MPPT-TC) for optimal energy collection in all solar conditions |
| Solar Engine Construction | Replaceable, recyclable best-in-class 12V dual battery system (sealed, maintenance-free) |
| | Designed for minimum 5 year battery life |
| | Lightweight for ease of handling |
| | Quick connect terminals and strapping for efficient installation |
| Lightbar Construction | Weatherproof, vented solar engine enclosure for ambient air transfer (NEMA 3R) |
| | Hinged access lid for access to on-board user interface and batteries |
| | Compact, lightweight aluminum housing |
| | Top of pole mounting to standard 2" sign posts and 4" poles, side of pole mounting to standard 4" poles |
| Operating Performance | Pre-wired assembly designed to minimize installation time |
| | Weight 19.8 lb (9 kg) including batteries, excluding light bars and push button |
| | Premium, UV-resistant polycarbonate lens |
| | Two-piece mounting bracket to facilitate mounting back-to-back lightbars |
| Warranty | Horizontal rotation adjustment for in-the-field aiming of lightbar |
| | Dimensions 24" L x 1.5" W x 4.5" H (61.0 cm L x 3.8 cm W x 11.4 cm H) |
| | Rated for 300, 20 second activations per day year-round operation with a minimum of 0.94 sun hours |
| | Wireless activation within 150 mS |
| | Wireless range of 500 ft (152 m) |
| | 3-year limited warranty |



CITY OF TAMPA

Department of Transportation and Stormwater Services

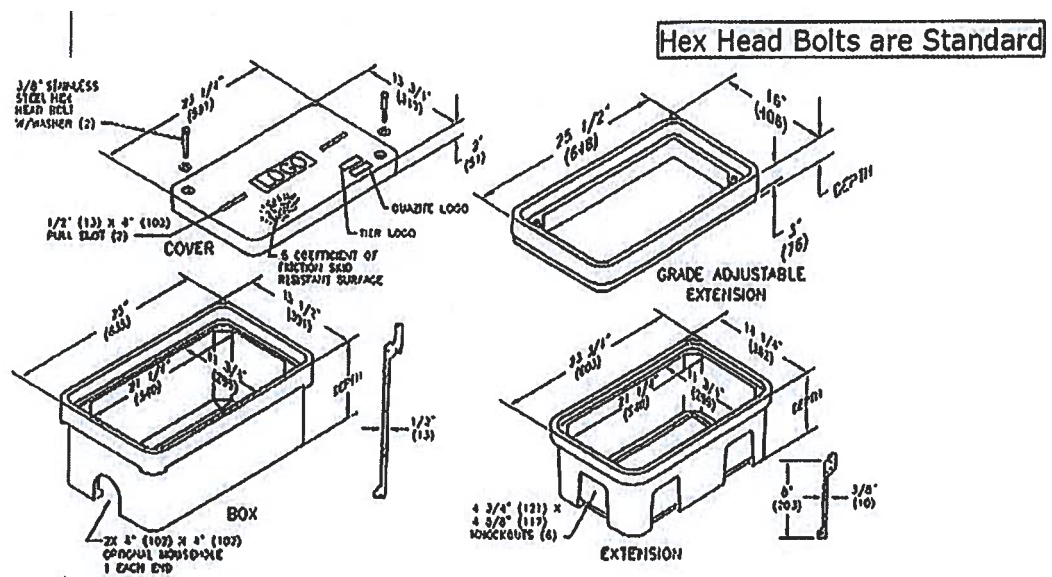
GENERAL INFORMATION PACKAGE FOR TRAFFIC SIGNAL CONTRACTORS

SECTION #6

Standard Pull Boxes

QUAZITE PULL BOXES

COVER SIZE 13" x 24"



Covers

| DESCRIPTION | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|-------------|------|-------------------|----------|------------|--------------|
| Ⓛ W/2 Bolts | 8 | 8,000 / 12,000 | 33 | 30 | PG1324CA00** |
| Ⓛ W/2 Bolts | 15 | 15,000 / 22,500 | 51 | 30 | PG1324HA00** |
| Ⓛ W/2 Bolts | 22 | 22,500 / 33,750 | 54 | 30 | PG1324HH00** |
| Ⓛ No Bolts | 8 | 8,000 / 12,000 | 33 | 30 | PG1324WA00** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code ([Click Here](#))

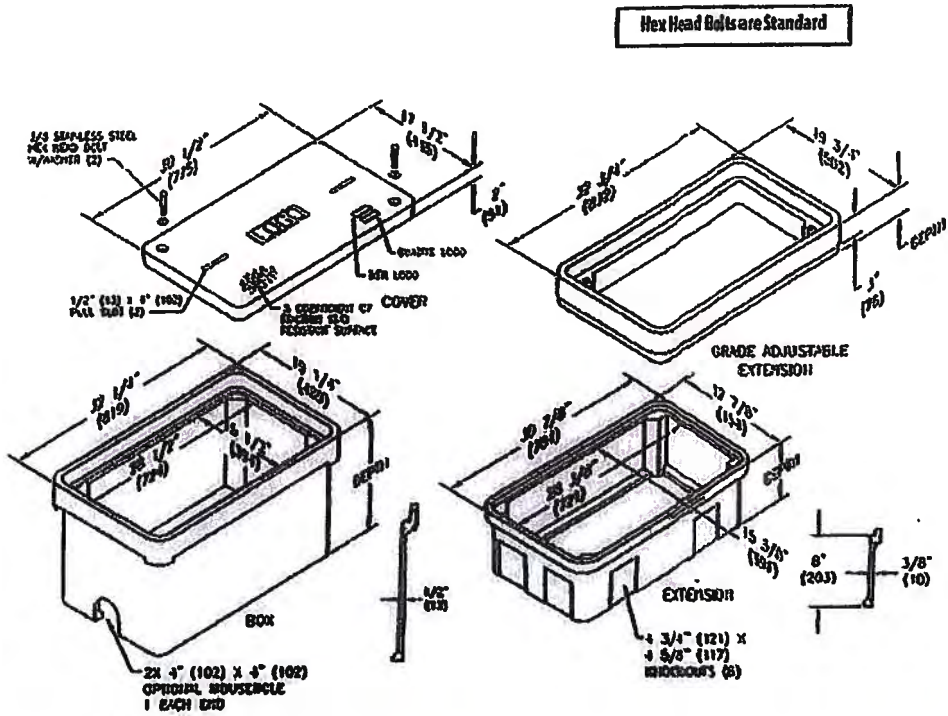
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

APL Certification Number: 635-001-025

| DESCRIPTION | DEPTH | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|------------------------|-------|------|-------------------|----------|------------|------------|
| Ⓛ Standard Open Bottom | 12" | 22 | 22,500 / 33,700 | 53 | 20 | PG1324BA12 |
| | 18" | | 22,500 / 33,700 | 72 | 16 | PG1324BA18 |

COVER SIZE 17" x 30"



Covers

| DESCRIPTION | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|-------------|------|-------------------|----------|------------|--------------|
| Ⓜ W/2 Bolts | 8 | 8,000 / 12,000 | 52 | 20 | PG1730CA00** |
| Ⓜ W/2 Bolts | 15 | 15,000 / 22,500 | 83 | 20 | PG1730HA00** |
| Ⓜ W/2 Bolts | 22 | 22,500 / 33,750 | 83 | 20 | PG1730HH00** |
| Ⓜ No Bolts | 8 | 8,000 / 12,000 | 52 | 20 | PG1730WA00** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code ([Click Here](#))

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

APL Certification Number:

Boxes (Box depths 22" thru 30" must be used as bottom of any stack) 635-001-014

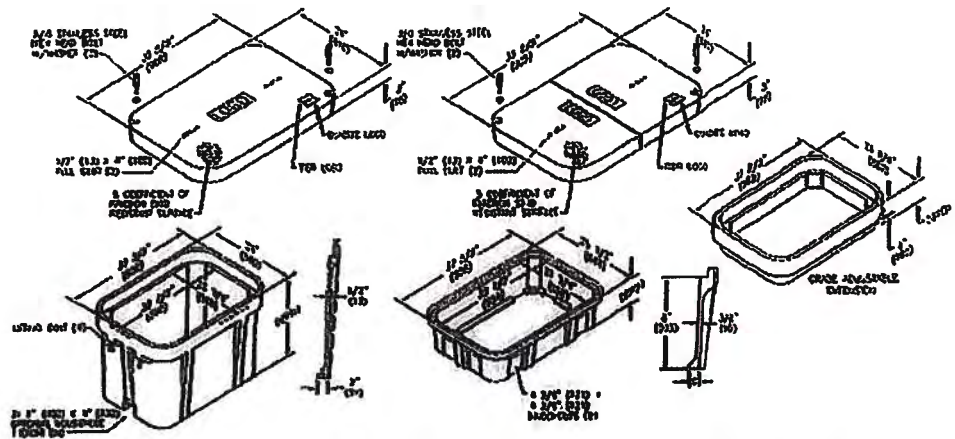
| DESCRIPTION | DEPTH | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|------------------------|-------|------|-------------------|----------|------------|------------|
| Ⓜ Standard Open Bottom | 12" | 22 | 22,500 / 33,750 | 67 | 10 | PG1730BA12 |
| | 18" | | 22,500 / 33,750 | 94 | 8 | PG1730BA18 |

Ⓜ Standard Open Bottom

22

COVER SIZE 24" x 36"

Hex Head Bolts are Standard



Covers

| DESCRIPTION | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|---------------------|------|-------------------|----------|------------|--------------|
| ⓐ w/ 2 Bolts | 8 | 8,000 / 12,000 | 100 | 10 | PG2436CA00** |
| 2 piece w/2 Bolts | 8 | 8,000 / 12,000 | 122 | 10 | PG2436CS00** |
| ⓑ w/ 2 Bolts | 15 | 15,000 / 22,500 | 115 | 10 | PG2436HA00** |
| ⓑ 2 piece w/2 Bolts | 15 | 15,000 / 22,500 | 122 | 10 | PG2436HS00** |
| ⓐ w/ 2 Bolts | 22 | 22,500 / 33,750 | 122 | 10 | PG2436HH00** |
| ⓐ No Bolts | 8 | 8,000 / 12,000 | 100 | 10 | PG2436WA00** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code ([Click Here](#))

NOTE: Gasketed covers and lock grammets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

APL Certification Number:
635-001-012

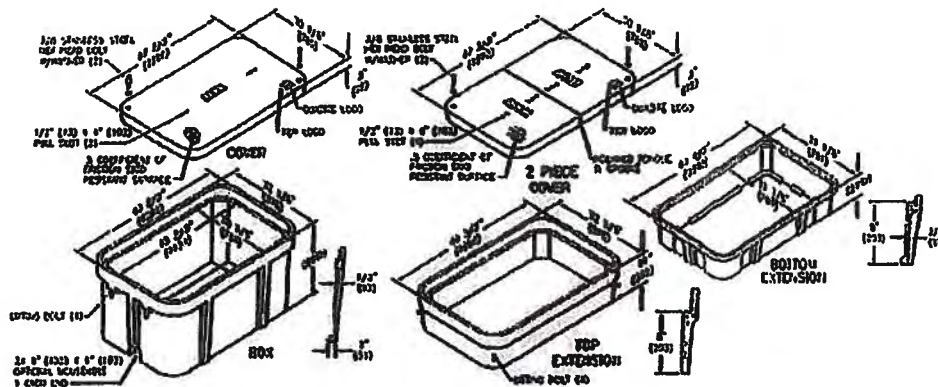
Boxes (Box depths 24" thru 42" must be used as bottom of any stack)

| DESCRIPTION | DEPTH | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|------------------------|-------|------|-------------------|----------|------------|------------|
| ⓐ Standard Open Bottom | 18" | | 22,500 / 33,750 | 141 | 4 | PG2436BA18 |
| | 24" | | 22,500 / 33,750 | 180 | 3 | PG2436BA24 |

ⓐ Standard Open Bottom

COVER SIZE 30" X 48"

Hex Head Bolts are Standard



Covers

| DESCRIPTION | TIER | DESIGN/TEST LOADS | WEIGHT # | PALLET QTY | PART NO. |
|---------------------|------|-------------------|----------|------------|--------------|
| Ⓜ w/2 Bolts | 8 | 8,000 / 12,000 | 159 | 10 | PG3048CA00** |
| 2 piece w/2 Bolts | 8 | 8,000 / 12,000 | 181 | 10 | PG3048CS00** |
| Ⓜ w/2 Bolts | 15 | 15,000 / 22,500 | 205 | 10 | PG3048HA00** |
| Ⓜ 2 piece w/2 Bolts | 15 | 15,000 / 22,500 | 206 | 10 | PG3048HS00** |
| Ⓜ w/ 2 Bolts | 22 | 22,500 / 33,750 | 220 | 10 | PG3048HA00** |
| Ⓜ No Bolts | 8 | 8,000 / 12,000 | 159 | 10 | PG3048WA00** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code (Click Here)

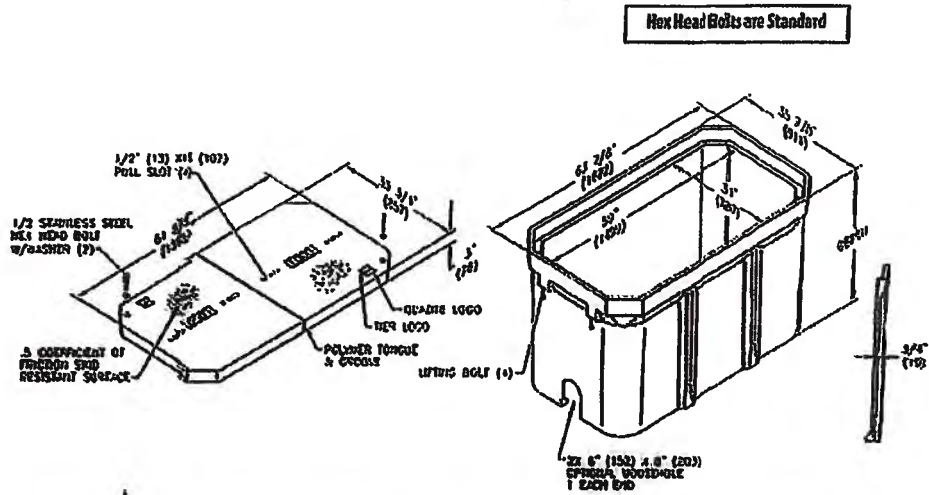
NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

API Certification Number:

Boxes (Box depths 24" thru 48" must be used as bottom of any stack) 635-001-061

| DESCRIPTION | DEPTH | TIER | DESIGN/TEST LOADS | WEIGHT # | PALLET QTY | PART NO. |
|------------------------|-------|------|-------------------|----------|------------|------------|
| Ⓜ Standard Open Bottom | 18" | 22 | 22,500 / 33,750 | 185 | 4 | PG3048BA18 |
| | 24" | | 22,500 / 33,750 | 236 | 3 | PG3048BA24 |
| | 36" | | 22,500 / 33,750 | 247 | 2 | PG3048BA36 |

COVER SIZE 30" x 60"



Covers

| DESCRIPTION | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|----------------------|------|-------------------|----------|------------|--------------|
| Lightweight 2 Bolts | 57 | 5,000 / 7,500 | 228 | 10 | LG3060CND0** |
| W/ 2 Bolts | 18 | 15,000 / 22,500 | 346 | 10 | PG3060HND0** |
| W/ 2 Bolts | 12 | 22,500 / 33,750 | 368 | 10 | PG3060HND0** |
| Lightweight No Bolts | 33 | 5,000 / 7,500 | 228 | 10 | LG3060WND0** |

Replace ** with a logo code (Click here)

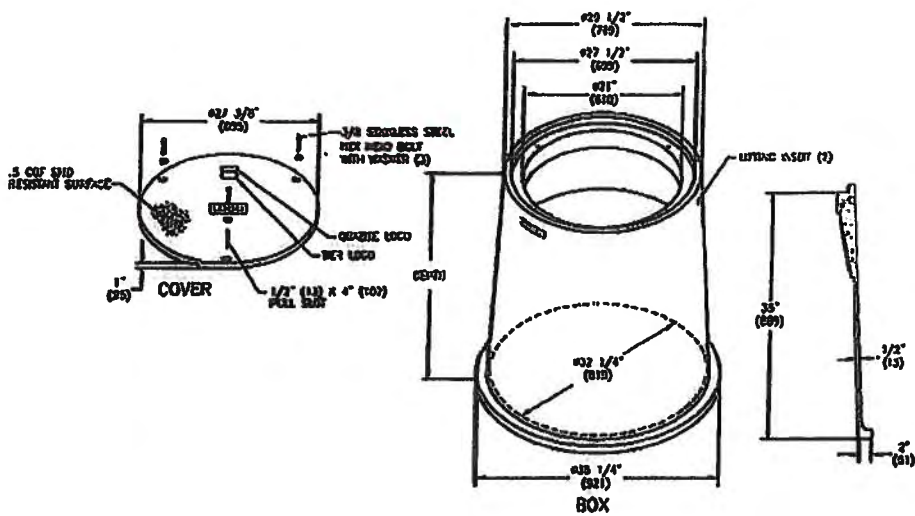
APL Certification Number:
635-001-060

Boxes (Box depths 30" and 36" must be used as bottom of any stack)

| DESCRIPTION | DEPTH | TIER | DESIGN/TEST LOAD# | WEIGHT # | PALLET QTY | PART NO. |
|----------------------|-------|------|-------------------|----------|------------|------------|
| Standard Open Bottom | 24" | 22 | 15,000 / 22,500 | 390 | 4 | PG3060BA21 |
| | 30" | | 22,500 / 33,750 | 492 | 3 | PG3060BA22 |
| | 36" | | 22,500 / 33,750 | 585 | 2 | PG3060BA35 |

COVER SIZE 27" DIA.

Hex Head Bolts are Standard



Covers

| DESCRIPTION | TIER | DESIGN / TEST LOAD # | WEIGHT # | PALLET QTY | PART NO. |
|-------------|------|----------------------|----------|------------|--------------|
| W/ 3 Bolts | 8 | 8,000 / 12,000 | 53 | 10 | FR2700CA00** |
| W/ 3 Bolts | 15 | 15,000 / 22,500 | 75 | 10 | FR2700HA00** |
| W/ 3 Bolts | 22 | 22,500 / 33,750 | 75 | 10 | FR2700H100** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code (Click Here)

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

| DESCRIPTION | DEPTH | TIER | DESIGN / TEST LOAD # | WEIGHT # | PALLET QTY | PART NO. |
|----------------------|-------|------|----------------------|----------|------------|------------|
| Standard Open Bottom | 36" | 22 | 22,500 / 33,750 | 278 | 3 | FR2732BA36 |

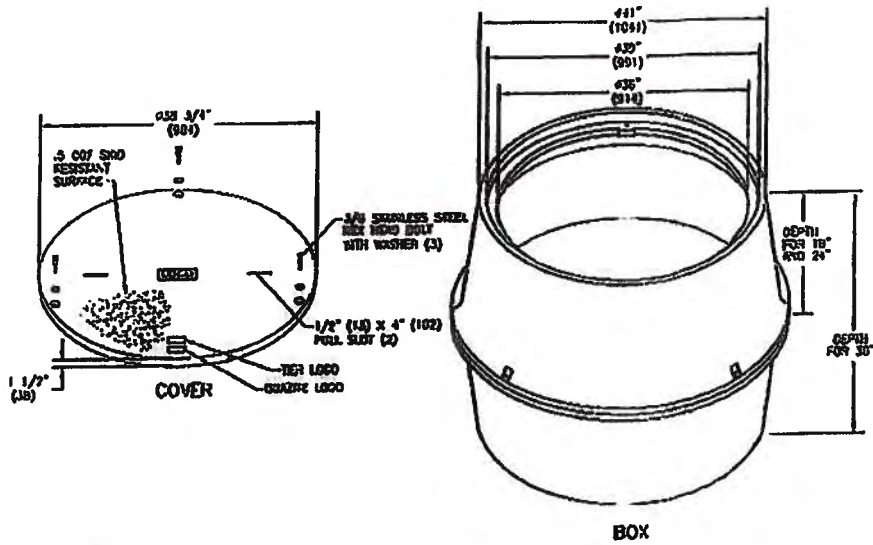
APL Certification Number:
635-001-065

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

COVER SIZE 39" DIA.

Hex Head Bolts are Standard



Covers

| DESCRIPTION | TIER | DESIGN / TEST LOAD # | WEIGHT # | PALLET QTY | PART NO. |
|-------------|------|----------------------|----------|------------|--------------|
| W/ 3 Bolts | 8 | 8,000 / 12,000 | 141 | 10 | FR3900CA00** |
| W/ 3 Bolts | 15 | 15,000 / 22,500 | 180 | 10 | FR3900HA00** |
| W/ 3 Bolts | 22 | 22,500 / 33,750 | 180 | 10 | FR3900HH00** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code (Click Here)

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

| DESCRIPTION | DEPTH | TIER | DESIGN / TEST LOAD # | WEIGHT # | PALLET QTY | PART NO. |
|----------------------|-------|------|----------------------|----------|------------|------------|
| Standard Open Bottom | 16" | 22 | 22,500 / 33,750 | 180 | 10 | FR3944BA24 |
| | 24" | 22 | 22,500 / 33,750 | 326 | 2 | FR3944BA24 |
| | 36" | 22 | 22,500 / 33,750 | 180 | 10 | FR3944BA24 |

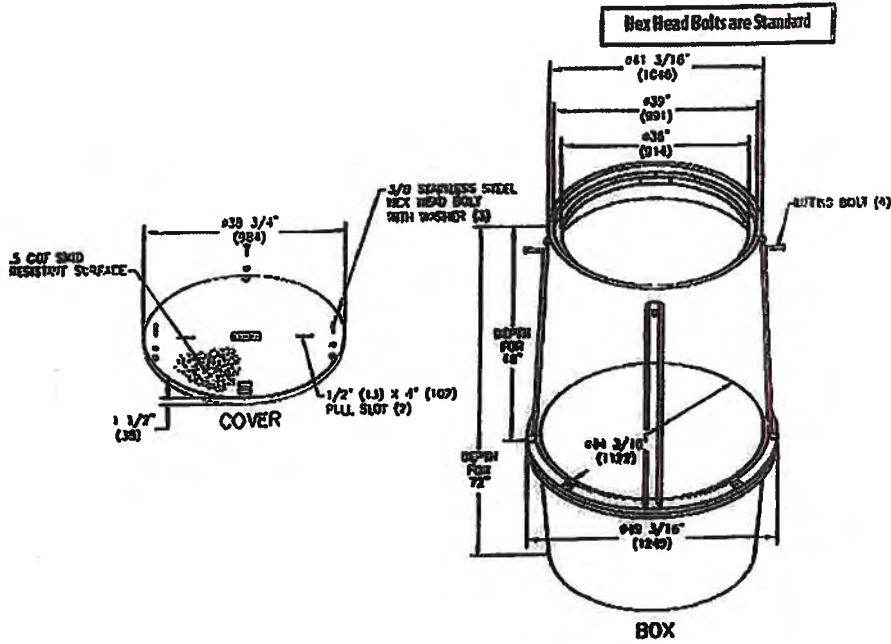
To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: 36" depth created by bolting 2-18" deep boxes bottom to bottom.

APL Certification Number:
635-001-063

COVER SIZE 39" DIA.



Covers

| DESCRIPTION | TIER | DESIGN / TEST LOAD # | WEIGHT # | PALLET QTY | PART NO. |
|-------------|------|----------------------|----------|------------|--------------|
| W/ 3 Bolts | 8 | 8,000 / 12,000 | 141 | 10 | PR3900CA00** |
| W/ 3 Bolts | 15 | 15,000 / 22,500 | 180 | 10 | PR3900HA00** |
| W/ 3 Bolts | 22 | 22,500 / 33,750 | 180 | 10 | PR3900HD00** |

To order gasketed covers, replace the letter "A" with the letter "G".

Replace ** with a logo code (Click Here)

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

Boxes

| DESCRIPTION | DEPTH | TIER | DESIGN / TEST LOAD # | WEIGHT # | PALLET QTY | PART NO. |
|----------------------|-------|------|----------------------|----------|------------|------------|
| Standard Open Bottom | 48" | 22 | 22,500 / 33,750 | 377 | 2 | PR3944BA48 |
| | 72" | 22 | 22,500 / 33,750 | 202 | 4 | PR3944BA72 |

APL Certification Number:
635-001-063

To order gasketed boxes, replace the letter "A" with the letter "G".

NOTE: Gasketed covers and bolt grommets must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

NOTE: 72" depth created by bolting 1-48" & 1-24" deep box bottom to bottom.



An Equal
Opportunity
Employer

Southwest Florida Water Management District

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

Tampa Service Office
7601 Highway 301 North
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

2379 Broad Street, Brooksville, Florida 34604-6899

(352) 796-7211 or 1-800-423-1476 (FL only)

TDD only: 1-800-231-6103 (FL only)

On the Internet at WaterMatters.org

July 02, 2019

City of Tampa
Attn: Monica Ammann, Real Estate Manager
306 East Jackson Street,
Tampa, FL 33602

Subject: **Project Evaluation - Project Exempt**
Project Name: City of Tampa Green Spine Cycle Track
File Number: 785609
County: Hillsborough
Sec/Twp/Rge: S18/T29S/R19E

Reference: Rule 62-330, Florida Administrative Code (F.A.C.)

Dear Ms. Ammann:

The District has reviewed the information you submitted for the project referenced above and has determined that an Environmental Resource Permit (ERP) **will not be required** for the proposed construction of multiple bicycle paths within existing rights-of-way, as shown on the construction plans provided. [Rule 62-330.051(10), F.A.C.]

The information received by the District will be kept on file to support the District's determination regarding your application. This information is available for viewing or downloading through the District's Application and Permit Search Tools located at www.WaterMatters.org/permits.

The District's determination that your project does not require an ERP is only applicable pursuant to the statutes and rules in effect at the time the information was submitted and may not be valid in the event subsequent changes occur in the applicable rules and statutes. Additionally, this notification does not mean that the District has determined that your project is permanently exempt from permitting requirements. Any subsequent change you make in the project's operation may necessitate further evaluation or permitting by the District. Therefore, you are advised to contact the District before beginning the project and before beginning any activity which is not specifically described in your submittal. Your timely pursuit of this activity is encouraged to avoid any potential rule changes that could affect your request.

This letter constitutes notice of Intended Agency Action of the project referenced above. The District's action in this matter only becomes closed to future legal challenges from members of the public if such persons have been properly notified of the District's action and no person objects to the District's action within the prescribed period of time following the notification. The District does not publish notices of agency action. If you wish to limit the time within which a person who does not receive actual written notice from the District may request an administrative hearing regarding this action, you are strongly encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Publishing notice of agency action will close the window for filing a petition for hearing. Legal requirements and instructions for publishing notice of agency action, as well as a noticing form that can be used is available from the District's website at www.WaterMatters.org/permits/noticing. If you publish notice of agency

action, a copy of the affidavit of publishing provided by the newspaper should be sent to the Regulation Division at the District Service Office that services this permit or other agency action, for retention in the File of Record for this agency action.

If you have questions regarding this matter, please contact Brett Bjornberg in the Tampa Service Office, extension 2247. Please reference the Project Name and Inquiry/Permit Number in future communications concerning this project.

Sincerely,

Michelle K. Hopkins, P.E.
Bureau Chief
Environmental Resource Permit Bureau
Regulation Division

Enclosures: Notice of Rights
Robert Whitman
Curt Sprunger, P.E.
Mark Easley
cc: Kisinger Campo & Associates, Corp.
Alfredo Cely, P.E.
Nina Mabileau, E.I.
Calvin Hardie, P.E.

Notice of Rights

Administrative Hearing

1. You or any person whose substantial interests are or may be affected by the District's intended or proposed action may request an administrative hearing on that action by filing a written petition in accordance with Sections 120.569 and 120.57, Florida Statutes (F.S.), Uniform Rules of Procedure Chapter 28-106, Florida Administrative Code (F.A.C.) and District Rule 40D-1.1010, F.A.C. Unless otherwise provided by law, a petition for administrative hearing must be filed with (received by) the District within 21 days of receipt of written notice of agency action. "Written notice" means either actual written notice, or newspaper publication of notice, that the District has taken or intends to take agency action. "Receipt of written notice" is deemed to be the fifth day after the date on which actual notice is deposited in the United States mail, if notice is mailed to you, or the date that actual notice is issued, if sent to you by electronic mail or delivered to you, or the date that notice is published in a newspaper, for those persons to whom the District does not provide actual notice.
2. Pursuant to Subsection 373.427(2)(c), F.S., for notices of intended or proposed agency action on a consolidated application for an environmental resource permit and use of sovereignty submerged lands concurrently reviewed by the District, a petition for administrative hearing must be filed with (received by) the District within 14 days of receipt of written notice.
3. Pursuant to Rule 62-532.430, F.A.C., for notices of intent to deny a well construction permit, a petition for administrative hearing must be filed with (received by) the District within 30 days of receipt of written notice of intent to deny.
4. Any person who receives written notice of an agency decision and who fails to file a written request for a hearing within 21 days of receipt or other period as required by law waives the right to request a hearing on such matters.
5. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding District intended or proposed action is not available prior to the filing of a petition for hearing.
6. A request or petition for administrative hearing must comply with the requirements set forth in Chapter 28-106, F.A.C. A petition for a hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's intended action or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no material facts in dispute, and (3) otherwise comply with Rules 28-106.201 and 28-106.301, F.A.C. Chapter 28-106, F.A.C., can be viewed at www.flrules.org or at the District's website at www.WaterMatters.org/permits/rules.
7. A petition for administrative hearing is deemed filed upon receipt of the complete petition by the District Agency Clerk at the District's Tampa Service Office during normal business hours, which are 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding District holidays. Filings with the District Agency Clerk may be made by mail, hand-delivery or facsimile transfer (fax). The District does not accept petitions for administrative hearing by electronic mail. Mailed filings must be addressed to, and hand-delivered filings must be delivered to, the Agency Clerk, Southwest Florida Water Management District, 7601 US Hwy 301, Tampa, FL 33637-6759. Faxed filings must be transmitted to the District Agency Clerk at (813) 367-9776. Any petition not received during normal business hours shall be filed as of 8:00 a.m. on the next business day. The District's acceptance of faxed petitions for filing is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation, available for viewing at www.WaterMatters.org/about.

Judicial Review

1. Pursuant to Sections 120.60(3) and 120.68, F.S., a party who is adversely affected by District action may seek judicial review of the District's action. Judicial review shall be sought in the Fifth District Court of Appeal or in the appellate district where a party resides or as otherwise provided by law.
2. All proceedings shall be instituted by filing an original notice of appeal with the District Agency Clerk within 30 days after the rendition of the order being appealed, and a copy of the notice of appeal, accompanied by any filing fees prescribed by law, with the clerk of the court, in accordance with Rules 9.110 and 9.190 of the Florida Rules of Appellate Procedure (Fla. R. App. P.). Pursuant to Fla. R. App. P. 9.020(h), an order is rendered when a signed written order is filed with the clerk of the lower tribunal.

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|--|-----------------------------|----------------------|---------------------|---------------------------|--------|
| | | | | Prior | During |
| 2-1.25" Conduits/STA 120+33 / 85' LT to 121+10 / 30' RT | Proposed to be installed | N/A | Phase II | 0 | 0 |
| 2-1.25" Conduits/STA 147+40 / 110' LT to 80' RT | To Remain | N/A | Phase II | 0 | 0 |
| 3-1.25" Conduits/STA 232+80 / 45' RT to 239+99 / 63' LT varying offset | To Remain | N/A | Phase II | 0 | 0 |

UTILITY RELOCATION SCHEDULE

| | | |
|----------------|--------------------------------|--------------------|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |

THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS

Agency/Owner: TECO Peoples Gas

Facilities Involved (Detail as to type and location of adjustments and relocations):

TECO PEOPLES GAS HAS ACTIVE, OUT OF SERVICE & PROPOSED FACILITIES WITHIN PROJECT LIMITS.

Anticipated Construction Relocation Schedule

(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

| | <i>*Working Days Estimated</i> |
|---|------------------------------------|
| <i>Phase 1 (a)</i> | |
| N/A | |
| <i>Total Phase 1</i> | 0 |
| <i>Phase 2 (a)</i> | |
| TECO Peoples Gas ACTIVE, OUT OF SERVICE AND PROPOSED FACILITIES FROM STA 100+20 TO 179+94 & 211+5 to 256+85 | |
| <i>Total Phase 2</i> | 0 |
| <i>Phase 3 (a)</i> | |
| N/A | |
| <i>Total Phase 3</i> | 0 |
| <i>Phase 4 (a)</i> | |
| N/A | |
| <i>Total Phase 4</i> | 0 |
| <i>Total Construction Working Days</i> | 0 |

Preconstruction Items

(Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

Permitting through City of Tampa

Install 2" GM extension between STA 100+95 and 102+20 / 25' RT

Offset 2" GM to remove conflict with S-106 at STA 245+50 / 29' LT

Total Preconstruction Days 90

**Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.*

The above date is based on construction plans DATED August 6, 2019.

This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:

Mark Byrd

Telephone Number: 813-275-3788

SUBMITTED FOR THE AGENCY BY: _____ *Date* _____

APPROVAL BY: _____ *Date* _____

Engineer of Record

City Project Manager

Date _____

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|--|-------------------------------|----------------------|---------------------|---------------------------|--------|
| | | | | Prior | During |
| 8" CIP GM/Retired STA 100+58 / 65' LT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 4" BS GM/Retired STA 100+70 / 16' RT to 113+67 / 14' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PVC GM/Proposed STA 100+95 / 25' RT to 102+20 / 25' RT | Install 2" PE GM at 36" cover | N/A | Phase 2 | 2 | 0 |
| 2" PVC GM STA 102+20 / 25' RT to 113+80 / 25' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 4" BS GM/Retired STA 107+30 / 7' RT to 85' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PVC GM STA 106+99 / 85' RT to 85' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE/Service Line STA 104+8 / 45' RT to 40' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 1-1 1/4" PE/Service Line STA 108+32 / 24' RT to 36' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 3/4" PE/Service Line STA 111+30 / 24' RT to 36' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 16" BS GM/Retired STA 113+80 / 100' RT to 100' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE & 4" BS STA 114+00 / 23' RT to 123+60 / 24' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 1-1/4" CS/Service Line STA 116+73 / 22' RT to 40' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 3/4" PE/Service Line STA 117+45 / 22' RT to 40' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 8" CS HP GM STA 148+00 / 100' LT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| | | | | | |

UTILITY RELOCATION SCHEDULE

| | | | | | |
|--|-------------------------------------|-----|---------|---|---|
| 4" CS GM/Retired STA 212+86 / 3' LT to 219+40 | To Remain | N/A | Phase 2 | 0 | 0 |
| 6" CS GM /Retired STA 218+42 / 100' RT to 218+70 / 100' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 224+54 / 140' LT to 224+70 / 40' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 6" CS GM / Retired STA 224+35 / 150' LT to 60' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 224+80 / 31' RT to 232+50 / 45' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 4" CIP GM / Retired STA 240+12 / 60' LT to 240+25 / 60' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 240+36 / 60' LT to 60' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 240+42 / 25' LT to 245+20 / 22' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 245+50 / 29' LT | Offset GM to make room for S-106 | N/A | Phase 2 | 5 | 0 |
| ¾" PE Service Line STA 240+36 /35' LT to 241+70 / 35 LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 245+20 / 22' LT to 245+60 / 85' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 249+88 / 100' RT to 255+97 / 85' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" BS GM/Retired STA 250+17 / 18' RT 256+85 / 18' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" BS GM STA 256+70 / 85' LT to 256+85 / 18' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 2" PE GM STA 256+77 to STA 256+85 / 14' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| | | | | | |

UTILITY RELOCATION SCHEDULE

1. TECO/PEOPLES GAS REQUEST A COPY OF THE CONTRACTOR'S APPROVED CPM SCHEDULE WITHIN 5 DAYS OF APPROVAL.
2. THE TECO PEOPLES GAS 24-HOUR EMERGENCY NUMBER IS 1-877 TECO PGS (1-877-832-6747).
3. TECO PEOPLES GAS CREW AVAILABILITY MAY BE AFFECTED OR LIMITED DUE TO OUR REQUIRED RESPONSE TO EMERGENCY CONDITIONS ELSEWHERE. THIS LIMITATION WILL BE DEPENDENT UPON THE SEVERITY AND LOCATION OF THE EMERGENCY.
4. TECO PEOPLES GAS MAY GROUT FILL AND RETIRE OUT OF SERVICE GAS MAINS THAT ARE UNDER PAVED ROADWAY AND DRIVEWAYS AS AN ALTERNATIVE TO REMOVING THEM.
5. TECO PEOPLES GAS SUBCONTRACTORS NORMAL WORK SCHEDULE IS MONDAY THROUGH FRIDAY FROM 8 A.M TO 5 P.M, EXCLUDING TECO PEOPLES GAS OBSERVED HOLIDAY'S (NEW YEARS DAY, GOOD FRIDAY, MEMORIAL DAY, JULY 4TH, LABOR DAY, THANKSGIVING DAY, THE FRIDAY AFTER THANKSGIVING DAY, CHRISTMAS EVE AND CHRISTMAS DAY). ANY TECO PEOPLES GAS ASSISTANCE REQUESTED FROM THE FDOT, THEIR CONTRACTOR OR SUBCONTRACTOR OUTSIDE OF THESE NORMAL WORKING HOURS MUST BE SCHEDULED 48 HOURS IN ADVANCE. TECO PEOPLES REQUIRES VERIFICATION THAT THE CREWS ARE STILL NEEDED ON THE ACTUAL WORKDAY (MONDAY THROUGH FRIDAY) THAT HAD PREVIOUSLY BEEN REQUESTED OR THE LAST BUSINESS DAY BEFORE THE REQUESTED WEEKEND OR HOLIDAY.

UTILITY RELOCATION SCHEDULE

| | | |
|----------------|--------------------------------|--------------------|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |

THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS

Agency/Owner: Tampa Electric Company

Facilities Involved (Detail as to type and location of adjustments and relocations):

Existing overhead & buried electric from STA 100+26 to STA 167+21

Existing overhead & buried electric from STA 211+6 to STA 256+85

Anticipated Construction Relocation Schedule

(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

| | <i>*Working Days Estimated</i> |
|--|------------------------------------|
| Phase 1 (a) | |
| _____ | |
| _____ | |
| Total Phase 1 | |
| Phase 2 (a) | |
| Existing pole @ STA 114+08, 21' LT to be relocated to 114+08,29LT | |
| Existing electric manhole to be adjusted in place @ STA 164+60, 25' RT | |
| Existing pole @ STA 115+79,20' LT to be relocated to 115+79,24LT | |
| Total Phase 2 | 5 |
| Phase 3 (a) | |
| _____ | |
| _____ | |
| Total Phase 3 | |
| Phase 4 (a) | |
| _____ | |
| _____ | |
| Total Phase 4 | |
| Total Construction Working Days | |

Preconstruction Items

(Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

Total Preconstruction Days _____

**Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.*

The above date is based on construction plans DATED August 6, 2019.

This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:

KELSEY RAMNAUTH - PIKE ENG Telephone Number: 813-929-8226

SUBMITTED FOR THE AGENCY BY: _____ Date 10.31.19

APPROVAL BY: _____ Date _____

Engineer of Record

City Project Manager

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|--|--------------------------------------|--|---------------------|---------------------------|--------|
| | | | | Prior | During |
| OE 13.2 Kv existing poles, conductors & street crossings from STA 100+26, 34' LT to STA 114+08, 21' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing pole # (2453641463) and appurtenances STA 114+08, 21' LT | TO BE RELOCATED TO STA 114+08,29' LT | CONFLICT WITH ROADWAY CONSTRUCTION | PHASE 2 | 0 | 2 |
| Existing pole # (2455341462) and appurtenances STA 115+79, 20' LT | TO BE RELOCATED TO STA 115+79-24LT | CONFLICT WITH ROADWAY CONSTRUCTION | PHASE 2 | 0 | 2 |
| | | | | | |
| OE 13.2 Kv existing poles, conductors & street crossings from STA 114+08, 21' LT to STA 119+20, 23' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing poles & conductors from STA 120+34, 76' LT to STA 121+89, 22' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing poles & conductors from STA 120+31, 29' RT to STA 120+76, 32' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing poles, conductors & street crossings from STA 147+67, 53' RT to STA 158+24, 28' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing poles & conductors from STA 162+28, 24' LT to STA 163+28, 29' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing BE 120V conductor from STA 163+28, 29' RT to STA 167+21, 22' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing Electric Manhole @ STA 164+60, 25' RT | TO BE ADJUSTED IN PLACE | CONTRACTOR TO CONTACT TEC MINIMUM OF 21 DAYS IN ADVANCE TO COORDINATE ACTIVITY | PHASE 2 | 0 | 1 |


UTILITY RELOCATION SCHEDULE

| | | | | | |
|---|-----------|-----|---------|---|---|
| Existing Guy Pole STA 211+20, 57' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing OE 120V from STA 211+6, 30' RT to STA 211+47, 25' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing poles & conductors from STA 213+06, 49' RT to STA 216+48, 10' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing Transmission pole & OE 69Kv Conductor @ STA 218+79, 87' RT to 90' LT | TO REMAIN | NA | PHASE 2 | 0 | 0 |
| Existing poles, conductors & street crossings from STA 219+24, 39' RT to STA 228+89, 7' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing Guy poles & conductors from STA 228+76, 37' RT to STA 229+01, 79' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing pole & conductors @ STA 234+05, 93' LT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing pole & conductors @ STA 232+64, 27' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing Guy pole & conductors @ STA 233+51, 42' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing BE 120V conductor from STA 237+51, 97' RT to STA 239+05, 25' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| Existing poles, conductors & street crossings from STA 237+86, 25' RT to STA 256+83, 15' RT | TO REMAIN | N/A | PHASE 2 | 0 | 0 |
| | | | | | |

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|---|-----------------------------|----------------------|---------------------|---------------------------|--------|
| | | | | Prior | During |
| 4" PVC FOC / STA 211+5 / 40' LT to 217+95 / 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| | | | | | |

UTILITY RELOCATION SCHEDULE

| | | |
|---|---|--|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |
| THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS | | |
| <i>Agency/Owner:</i> <u>City of Tampa Water Department</u> | | |
| <i>Facilities Involved (Detail as to type and location of adjustments and relocations):</i> | | |
| <i>Anticipated Construction Relocation Schedule</i> (Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.): | | |
| <i>Phase 1 (a)</i> | | <i>*Working Days Estimated</i> |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 1</i> | | 0 |
| <i>Phase 2 (a)</i> | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 2</i> | | 0 |
| <i>Phase 3 (a)</i> | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 3</i> | | 0 |
| <i>Phase 4 (a)</i> | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 4</i> | | 0 |
| <i>Total Construction Working Days</i> | | 0 |
| <i>Preconstruction Items</i> (Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.) | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Preconstruction Days</i> | | 0 |
| *Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference. | | |
| The above date is based on construction plans DATED <u>August 6, 2019</u> . | | |
| This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at: | | |
| <u>Rynaldo Deshauteurs (09/30/2019)</u> |  | <i>Telephone Number:</i> <u>(813) 247-7391</u> |
| <i>SUBMITTED FOR THE AGENCY BY:</i> | _____ | <i>Date</i> _____ |
| <i>APPROVAL BY:</i> | _____ | <i>Date</i> _____ |
| _____ | _____ | _____ |
| <i>Engineer of Record</i> | | <i>Date</i> |
| _____ | | _____ |
| <i>City Project Manager</i> | | |

UTILITY RELOCATION SCHEDULE

| Item # | From Station | To Station | Description | Action | Sheet # |
|--------|---------------|---------------|-------------------------------|-----------------|---------|
| 1 | 100+22 RT 104 | 100+22 LT 100 | 12" Cast Iron WM | Remain in Place | 1 |
| 2 | 100+22 LT 12 | 123+60 LT 11 | 8" Cast Iron WM | Remain in Place | 1,2 |
| 3 | 107+38 LT 12 | 107+38 LT 88 | 6" Cast Iron WM | Remain in Place | 1 |
| 4 | 113+98 RT 102 | 113+98 LT 103 | 8" Cast Iron WM | Remain in Place | 2 |
| 5 | 120+38 LT 12 | 120+60 LT 89 | 8" Cast Iron WM | Remain in Place | 2 |
| 6 | 147+20 RT 09 | 148+00 LT 106 | 12" Cast Iron WM | Remain in Place | 3 |
| 7 | 151+80 RT 109 | 151+85 LT 55 | 12" Cast Iron WM | Remain in Place | 3 |
| 8 | 164+38 RT 49 | 164+38 LT 103 | 8" Cast Iron Abandoned WM | Remain in Place | 4 |
| 9 | 164+38 LT 03 | 167+38 LT 09 | 8" Cast Iron Abandoned WM | Remain in Place | 4 |
| 10 | 164+63 RT 10 | 167+38 RT 12 | 8" DIP WM | Remain in Place | 4 |
| 11 | 164+70 RT 48 | 164+57 LT 53 | 8" DIP WM | Remain in Place | 4 |
| 12 | 166+08 RT 11 | 166+08 LT 23 | 8" Cast Iron WM | Remain in Place | 4 |
| 13 | 166+73 RT 11 | 166+73 LT 25 | 6" DIP WM | Remain in Place | 4 |
| 14 | 166+80 RT 11 | 166+80 LT 26 | 6" DIP WM | Remain in Place | 4 |
| 15 | 211+05 LT 47 | 217+98 LT 50 | 8" Cast Iron WM | Remain in Place | 7,8 |
| 16 | 211+05 LT 19 | 220+60 LT 60 | 42" DIP WM | Remain in Place | 7,8 |
| 17 | 212+15 RT 30 | 212+15 LT 48 | 6" Cast Iron WM | Remain in Place | 7 |
| 18 | 211+70 RT 30 | 212+15 RT 30 | DDCVA 6" Line | Remain in Place | 7 |
| 19 | 212+21 LT 48 | 212+21 RT 30 | 8" Cast Iron WM | Remain in Place | 7 |
| 20 | 212+21 RT 30 | 217+98 RT 28 | 8" Cast Iron WM | Remain in Place | 7,8 |
| 21 | 213+38 RT 30 | 213+38 RT 108 | 12" Cast Iron WM | Remain in Place | 7 |
| 22 | 217+98 RT 103 | 217+98 LT 104 | 8" Cast Iron WM | Remain in Place | 8 |
| 23 | 218+63 RT 82 | 218+63 LT 100 | 8" Cast Iron WM | Remain in Place | 8 |
| 24 | 218+63 RT 28 | 219+80 RT 24 | 8" Cast Iron WM | Remain in Place | 8 |
| 25 | 218+63 LT 52 | 220+80 LT 44 | 12" Cast Iron WM | Remain in Place | 8 |
| 26 | 222+00 LT 45 | 228+40 LT 103 | 12" Cast Iron WM | Remain in Place | 8,9 |
| 27 | 222+90 LT 25 | 225+00 RT 71 | 8" Cast Iron Abandoned WM | Remain in Place | 8,9 |
| 28 | 224+60 RT 40 | 224+92 LT 105 | 20" DIP WM | Remain in Place | 8,9 |
| 29 | 224+98 LT 44 | 225+00 LT 104 | 6" WM | Remain in Place | 9 |
| 30 | 226+78 LT 103 | 227+70 LT 55 | 6" Cast Iron WM | Remain in Place | 9 |
| 31 | 228+30 RT 50 | 228+60 LT 104 | 12" Cast Iron Abandoned WM | Remain in Place | 9 |
| 32 | 228+60 LT 72 | 230+80 LT 30 | 6" Cast iron Abandoned WM | Remain in Place | 9 |
| 33 | 227+80 LT 56 | 228+40 RT 48 | 12" Cast Iron WM | Remain in Place | 9 |
| 34 | 233+20 RT 54 | 235+20 RT 30 | 8" Cast Iron WM | Remain in Place | 9 |
| 35 | 234+21 RT 20 | 234+21 RT 30 | 6" Cast Iron WM | Remain in Place | 9 |
| 36 | 235+10 RT 30 | 235+30 LT 23 | 6" Cast Iron WM | Remain in Place | 9 |
| 36 | 235+30 LT 23 | 243+57 LT 13 | 6" Cast Iron WM | Remain in Place | 9,10 |
| 37 | 237+30 LT 10 | 237+30 LT 103 | 20" Cast Iron WM | Remain in Place | 10 |
| 38 | 237+30 LT 10 | 256+85 LT 10 | 20" Cast Iron WM | Remain in Place | 10,11 |
| 39 | 238+20 LT 10 | 238+20 RT 20 | 2" HDPE Service Line | Remain in Place | 10 |

UTILITY RELOCATION SCHEDULE

| <i>Item #</i> | <i>From Station</i> | <i>To Station</i> | <i>Description</i> | <i>Action</i> | <i>Sheet #</i> |
|---------------|---------------------|-------------------|--------------------|-----------------|----------------|
| 40 | 240+17 LT 14 | 240+20 LT 74 | 2" Cast Iron WM | Remain in Place | 10 |
| 41 | 240+17 LT 14 | 240+15 RT 118 | 6" Cast Iron WM | Remain in Place | 10 |
| 42 | 243+15 RT 88 | 243+15 LT 86 | 10" Cast Iron WM | Remain in Place | 10 |
| 43 | 246+16 LT 13 | 246+17 RT 70 | 6" Cast Iron WM | Remain in Place | 10 |
| 44 | 248+50 LT 12 | 248+50 RT 103 | 6" Cast Iron WM | Remain in Place | 11 |
| 45 | 248+69 RT 28 | 248+69 RT 104 | 42" DIP WM | Remain in Place | 11 |
| 46 | 248+69 RT 28 | 249+20 LT 103 | 42" DIP WM | Remain In Place | 11 |
| 47 | 250+10 LT 10 | 250+10 RT 102 | 2" Cast Iron WM | Remain in Place | 11 |
| 48 | 256+60 LT 10 | 256+40 RT 87 | 8" Cast Iron WM | Remain In Place | 11 |
| 49 | 256+60 LT 10 | 256+60 LT 88 | 16" Cast Iron WM | Remain In Place | 11 |
| 50 | 100+80 LT 13 | | 8" Gate Valve | To Be Adjusted | 1 |
| 51 | 114+20 LT 12 | | 8" Gate Valve | To Be Adjusted | 2 |
| 52 | 120+22 LT 10 | | 8" Gate Valve | To Be Adjusted | 2 |
| 53 | 120+70 LT 10 | | 8" Gate Valve | To Be Adjusted | 2 |
| 54 | 165+55 RT 10 | | 8" Gate Valve | To Be Adjusted | 4 |
| 55 | 166+10 LT 25 | | 8" Gate Valve | To Be Adjusted | 4 |
| 56 | 166+70 RT 10 | | 6" Gate valve | To Be Adjusted | 4 |
| 57 | 166+80 RT 10 | | 6" Gate Valve | To Be Adjusted | 4 |
| 58 | 217+90 RT 44 | | 8" Gate valve | To Be Adjusted | 8 |
| 59 | 218+65 RT 12 | | 8" Gate Valve | To Be Adjusted | 8 |
| 60 | 218+70 RT 28 | | 8" Gate Valve | To Be Adjusted | 8 |
| 61 | 240+13 RT 30 | | 6" Gate Valve | To Be Adjusted | 10 |
| 62 | 241+50 RT 07 | | 20" Gate Valve | To Be Adjusted | 10 |
| 63 | 243+00 LT 10 | | 20" Gate Valve | To Be Adjusted | 10 |
| 64 | 243+00 LT 20 | | 6" Gate Valve | To Be Adjusted | 10 |
| 65 | 243+30 LT 20 | | 6" Gate Valve | To Be Adjusted | 10 |
| 66 | 246+13 LT 08 | | 6" Gate Valve | To Be Adjusted | 10 |
| 67 | 247+15 LT 13 | | 20" Gate Valve | To Be Adjusted | 10 |
| 68 | 247+95 LT 13 | | 20" Gate valve | To Be Adjusted | 11 |
| 69 | 248+50 LT 08 | | 6" Gate Valve | To Be Adjusted | 11 |
| 70 | 249+12 LT 13 | | 20" Gate Valve | To Be Adjusted | 11 |
| 71 | 250+20 LT 13 | | 20" Gate Valve | To Be Adjusted | 11 |

UTILITY RELOCATION SCHEDULE

Special Conditions

1. City of Tampa Water must receive (via e-mail to WaterUtilityCoordination@TampaGOV.net) COT Transportation Department approved contractor proposed construction project schedule dated on or after the COT official approval/acceptance.

2. In the event of a general water emergency, contact the City of Tampa Water Department's 24-hour emergency number at 813-274-7400.

3. Adjustments to valve boxes, required due to resurfaced roadway adjacent to those boxes, will be made as follows:

a) Valve boxes within roadway will be adjusted by City of Tampa Transportation contractor.

Material Lead Time: The City or a City representative must contact (or notify) City of Tampa Water 1.5 weeks (8 working days) PRIOR to work on water meter boxes, valve boxes, tops, and or risers. Such notification may occur during the project construction meetings, but all requests must be presented in writing for record keeping purposes (e-mail to WaterUtilityCoordination@TampaGOV.net is preferred).

b) Once City of Tampa Water is provided the request and the Material Lead Time (above) to procure materials, the City will provide the required meter or valve boxes, tops and risers needed to elevate to proposed grade levels. All such materials will be made available to City Transportation contractor to pick-up at: **3901 E. 26th Ave, Tampa Florida 33605**

****A specific DATE for material pick-up MUST be provided. COT does not have storage space.****
Missing the specified date may require rescheduling of a subsequent date causing delays.

c) All material acquisition requests for the COT Water originating from the City Transportation contractor will be directed to the City of Tampa Water Department Field contact. When different, the UAO Project Rep will be carbon copied (CC) on all project related correspondence.

d) After resurfacing operations have been completed, the City or the City Contractor will ensure all Water valve boxes, meter box lids, hydrants, and all other City of Tampa maintained appurtenances are left in a condition allowing easy operation and access for maintenance. City of Tampa appurtenances will not be paved over, unadjusted, or left in any state where maintenance would be considered unduly difficult or hampered.

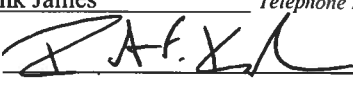
e) For the sake of coordination with the City of Tampa Water (and project progression in a reasonable manner) to perform any adjustment to City of Tampa Water infrastructure, the Contractor must stake the final concrete elevation per each relocation instance. The City of Tampa will be notified 5 work days beforehand notified when such work is necessary via e-mail, or following the weekly construction meeting.

4. "Stations" and "offsets" provided in Section C will be understood to be referenced from the project COT Transportation surveyed construction baseline (Baseline of Construction), as identified in the associated dated COT project plans.

5. City of Tampa Black-out Dates: Wherever applicable, dates the City of Tampa cannot perform water shutdowns and work is limited:

[11/14/2019 to 11/26/2019] AND [12/19/2019 to 01/20/2020]

UTILITY RELOCATION SCHEDULE

| | | |
|--|---|--------------------------------|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |
| THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS | | |
| <i>Agency/Owner:</i> <u>City of Tampa Wastewater</u> | | |
| <i>Facilities Involved (Detail as to type and location of adjustments and relocations):</i> <u>Wastewater/Sanitary Sewer lines in project scope to remain.</u> | | |
| <i>Anticipated Construction Relocation Schedule</i> <i>(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):</i> | | |
| <i>Phase 1 (a)</i> | | <i>*Working Days Estimated</i> |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 1</i> | | 0 |
| <i>Phase 2 (a)</i> | | |
| <u>STA 100+72 to 179+94 no conflict/to remain</u> | | TBD |
| <u>STA 211+5 to 256+85 no conflict/to remain</u> | | by Project Contractor |
| <u>(13)Lid adjustments (Performed by Project Contractor, see details below)</u> | | |
| <i>Total Phase 2</i> | | |
| <i>Phase 3 (a)</i> | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 3</i> | | 0 |
| <i>Phase 4 (a)</i> | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Phase 4</i> | | 0 |
| <i>Total Construction Working Days</i> | | <u>TBD</u> |
| <i>Preconstruction Items</i> <i>(Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)</i> | | |
| _____ | | |
| _____ | | |
| _____ | | |
| <i>Total Preconstruction Days</i> | | 0 |
| <small>*Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.</small> | | |
| <small>The above date is based on construction plans DATED August 6, 2019.</small> | | |
| <small>This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:</small> | | |
| <u>Frank James</u> | <i>Telephone Number:</i> | <u>813.898.1374</u> |
| <i>SUBMITTED FOR THE AGENCY BY:</i> |  | <i>Date</i> <u>12-4-2019</u> |
| <i>APPROVAL BY:</i> | _____ | <i>Date</i> _____ |
| | <i>Engineer of Record</i> | |
| | _____ | <i>Date</i> _____ |
| | <i>City Project Manager</i> | |


UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|---|-----------------------------|----------------------|---------------------|---------------------------|--------|
| | | | | Prior | During |
| 8" PVC / 100+32 100' RT to 100' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 24" Clay / 113+86 100' RT to 100' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 60" RCP / 154+90 90' RT to 155+54 / 85' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid / STA 155+53 / 4' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| 60" Abandoned RCP 156+51 80' RT to 90' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 12" Clay / 211+5 / 7' LT to 218+45 / 5' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 8" NA / 212+5 / 5' LT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 8" NA / 213+25 / 50' LT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 6" PVC / 215+86 / 50' LT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid / 215+86 / 5' LT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| Sewer Lid / 217+75 / 5' LT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| 12" Clay / 217+75 / 5' LT to 50' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid / 218+45 / 5' LT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| 12" Clay / 218+75 / 100' LT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 10" NA / 221+90 / 40' LT to 224+54 / 50' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid / 224+54 / 20' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| 10' Clay / 232+80 / 45' RT to 240+20 / 10' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid 237+23 / 7' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| Sewer Lid / 237+65 / 7' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| Sewer Lid / 240+20 / 10' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| | | | | | |

UTILITY RELOCATION SCHEDULE

| | | | | | |
|---|----------------|--------------------|---------|---|---|
| 10' Clay / 237+23 / 7' RT to 100' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| 10" Clay / 240+20 / 10' RT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 243+20 / 85' RT to 85' LT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid / 243+20 / 14' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| Sewer Lid / 246+00 / 3' LT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| 8" Clay / 246+00 / 5' LT to 85' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| 8" CIP 246+00 / 5' LT to 256+82 / 8' RT (Offset Varies) | To Remain | N/A | Phase 2 | 0 | 0 |
| 8" Clay 248+60 / 3' RT to 100' RT | To Remain | N/A | Phase 2 | 0 | 0 |
| Sewer Lid / 248+60 / 3' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| Sewer Lid / 252+79 / 13' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |
| Sewer Lid / 256+76 / 8' RT | To Be Adjusted | Mill & Resurfacing | Phase 2 | 0 | 1 |

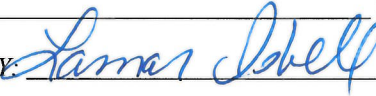
UTILITY RELOCATION SCHEDULE

| | | |
|--|---|--------------------------------|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |
| THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS | | |
| <i>Agency/Owner:</i> Charter Communications/Spectrum | | |
| <i>Facilities Involved (Detail as to type and location of adjustments and relocations):</i> O/H & BFOC/Coaxial cables located within project limits. To Remain- No Conflict | | |
| <i>Anticipated Construction Relocation Schedule</i> (Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.): | | |
| | | <i>*Working Days Estimated</i> |
| <i>Phase 1 (a)</i> | N/A | |
| | | |
| | <i>Total Phase 1</i> | 0 |
| <i>Phase 2 (a)</i> | Overhead & Buried facilities to remain | |
| | O/H CATV from STA 100+72 to 179+94 – no conflict/to remain | |
| | O/H & U/G BFOC from STA 211+5 to 256+85 – no conflict/to remain | |
| | | |
| | <i>Total Phase 2</i> | 0 |
| <i>Phase 3 (a)</i> | N/A | |
| | | |
| | <i>Total Phase 3</i> | 0 |
| <i>Phase 4 (a)</i> | N/A | |
| | | |
| | <i>Total Phase 4</i> | 0 |
| | <i>Total Construction Working Days</i> | 0 |
| <i>Preconstruction Items</i> (Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.) | | |
| | | |
| | | |
| | <i>Total Preconstruction Days</i> | 0 |
| <p><i>*Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.</i></p> <p><i>The above date is based on construction plans DATED August 6, 2019.</i></p> <p><i>This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:</i></p> | | |
| | Mark Giurbino | Telephone Number: 813-436-2118 |
| <i>SUBMITTED FOR THE AGENCY BY:</i>  | | Date 9/17/19 |
| <i>APPROVAL BY:</i> _____ | | Date _____ |
| | Engineer of Record | |
| | | Date _____ |
| | City Project Manager | |

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|--|-----------------------------|----------------------|---------------------|---------------------------|--------|
| | | | | Prior | During |
| O/H CATV / 100+72 / 100' RT to 100' LT | TO REMAIN | N/A | PHASE II | 0 | 0 |
| O/H CATV / 100+72 / 26' LT to 106+20 / 30' RT | TO REMAIN | N/A | PHASE II | 0 | 0 |
| O/H CATV / 114+7 / 100' RT to 100' LT | TO REMAIN | N/A | PHASE II | 0 | 0 |
| O/H CATV / 211+5 / 43' LT to 230+50 / 50' LT (Offset Varies | TO REMAIN | N/A | PHASE II | 0 | 0 |
| O/H CATV / 237+50 / 25' LT to 100' LT | TO REMAIN | N/A | PHASE II | 0 | 0 |
| O/H CATV / 239+25 / 25' RT to 256+82.60 / 20' RT (OFFSET VARIES) | TO REMAIN | N/A | PHASE II | 0 | 0 |

UTILITY RELOCATION SCHEDULE

| | | |
|--|---|---------------------------------------|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |
| THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS | | |
| <i>Agency/Owner:</i> <u>CenturyLink</u> | | |
| <i>Facilities Involved (Detail as to type and location of adjustments and relocations):</i> | | |
| <u>Buried FOC on north/west side of Nuccio Pkwy in HDPE duct</u> | | |
| <i>Anticipated Construction Relocation Schedule</i> (Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.): | | |
| | | <i>*Working Days Estimated</i> |
| <i>Phase 1 (a)</i> | | |
| | | |
| | | |
| | <i>Total Phase 1</i> | <u>0</u> |
| <i>Phase 2 (a)</i> | | |
| | <u>Buried facilities (3) X 1.25" duct from Duct from STA 211+5 to STA 218+00</u> | |
| | <u>NOT IN CONFLICT</u> | |
| | | |
| | <i>Total Phase 2</i> | <u>0</u> |
| <i>Phase 3 (a)</i> | | |
| | | |
| | | |
| | <i>Total Phase 3</i> | <u>0</u> |
| <i>Phase 4 (a)</i> | | |
| | | |
| | | |
| | <i>Total Phase 4</i> | <u>0</u> |
| | <i>Total Construction Working Days</i> | <u>0</u> |
| <i>Preconstruction Items</i> (Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.) | | |
| | | |
| | | |
| | | |
| | <i>Total Preconstruction Days</i> | <u>0</u> |
| <small>*Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.</small> | | |
| <small>The above date is based on construction plans DATED August 6, 2019.</small> | | |
| <small>This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:</small> | | |
| | <u>Lamar Isbell</u> | <u>Telephone Number: 813-787-3913</u> |
| <i>SUBMITTED FOR THE AGENCY BY:</i> |  | <u>Date 20 Sept 2019</u> |
| <i>APPROVAL BY:</i> | | <u>Date</u> |
| | <u>Engineer of Record</u> | <u>Date</u> |
| | | <u>Date</u> |
| | <u>City Project Manager</u> | |

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER |
|--|-----------------------------------|-------------------------|---------------------------|
| 3 x 1.25 HDPE / 211+5 / 40' LT to 218+00 / 100' RT | TO REMAIN | N/A | PHASE 2 |

UTILITY RELOCATION SCHEDULE

| | | |
|----------------|--------------------------------|--------------------|
| CIP NO. | PROJECT NAME | PROJECT NO. |
| | GREEN SPINE CYCLE TRACK | 17-D-00022 |

THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS

Agency/Owner: Frontier Florida LLC

Facilities Involved (Detail as to type and location of adjustments and relocations):

Buried FOC in conduit within the project limits.

Anticipated Construction Relocation Schedule

(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

| | <i>*Working Days Estimated</i> |
|---|------------------------------------|
| <i>Phase 1 (a)</i> | |
| N/A | |
| <i>Total Phase 1</i> | 0 |
| <i>Phase 2 (a)</i> | |
| Buried Frontier facilities from STA 100+72 to 179+94 no conflict | |
| Buried Frontier facilities from STA 211+5 to 256+85 no conflict | |
| 5 manhole adjustments details below, conduit under sidewalk no conflict | |
| <i>Total Phase 2</i> | 4 |
| <i>Phase 3 (a)</i> | |
| N/A | |
| <i>Total Phase 3</i> | 0 |
| <i>Phase 4 (a)</i> | |
| N/A | |
| <i>Total Phase 4</i> | 0 |
| <i>Total Construction Working Days</i> | 4 |

Preconstruction Items

(Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

| | |
|--|----------|
| | |
| <i>Total Preconstruction Days</i> | 0 |

**Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.*

The above date is based on construction plans DATED August 6, 2019.

This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:

PAUL LINEBERRY Telephone Number: **813-838-8867**

SUBMITTED FOR THE AGENCY BY *Randy Jones* Date 9-25-2019

APPROVAL BY: _____ Date _____

Engineer of Record

Date _____

City Project Manager

UTILITY RELOCATION SCHEDULE

| TYPE / SIZE / MATERIAL / OFFSET TO BASELINE FROM STA TO STA | DESCRIPTION OF UTILITY WORK | DEPENDENT ACTIVITIES | M.O.T. PHASE NUMBER | CONSECUTIVE CALENDAR DAYS | |
|--|-----------------------------|----------------------|---------------------|---------------------------|--------|
| | | | | Prior | During |
| 1 1/4" Conduit WFOC / 100+77 / 35' RT to 121+10 / 28' RT (offset varies) | To Remain | N/A | Phase II | 0 | 0 |
| 1 1/4" Conduit WFOC / 113+68 / 100' LT to 100' RT | To Remain | N/A | Phase II | 0 | 0 |
| 1 1/4" Conduit WFOC / 114+8 / 100' LT to 100' RT | To Remain | N/A | Phase II | 0 | 0 |
| 12-4" & 6-4" Conduits 147+20 / 1' LT to 157+20 / 40' LT | To Remain | N/A | Phase II | 0 | 0 |
| (2) Manholes / 148+70 to 148+90 / 30' LT | To Be Adjusted | Mill & Resurfacing | Phase II | 0 | 1 |
| 10-4" & 20-4" Conduits / 162+29 / 25' LT to 167+31 / 24' LT | To Remain | N/A | Phase II | 0 | 0 |
| Manhole / 163+95 / 10' LT | To Be Adjusted | Road Reconstruction | Phase II | 0 | 1 |
| 10-4" Conduits / 163+95 / 10' LT to 110' LT | To Remain | N/A | Phase II | 0 | 0 |
| 20-4" Conduits / 166+24 / 30' LT to 167+31 / 40' RT | To Remain | N/A | Phase II | 0 | 0 |
| 1 1/4" Conduit WFOC 211+5 / 45' RT to 212+95 to 105' RT | To Remain | N/A | Phase II | 0 | 0 |
| 2-4" Conduits / 218+75 / 100' LT to 224+56 / 60' LT | To Remain | N/A | Phase II | 0 | 0 |
| 2-4" Conduits / 224+80 / 33' RT to 228+80 / 70' RT | To Remain | N/A | Phase II | 0 | 0 |
| 1 1/4" Conduit / 240+44 / 100' RT to 70' LT | To Remain | N/A | Phase II | 0 | 0 |
| BT / 243+7 / 85' RT to 85' LT | To Remain | N/A | Phase II | 0 | 0 |
| | | | | | |
| | | | | | |

UTILITY RELOCATION SCHEDULE

| | | | | | |
|---|----------------|-----------------------|----------|---|---|
| 6-4" Conduits / 249+92 /85' RT to 256+85 / 20' LT | To Remain | N/A | Phase II | 0 | 0 |
| Manhole / 249+92 / 20' LT | To Be Adjusted | Sidewalk Construction | Phase II | 0 | 1 |
| Manhole / 254+73 / 20' LT | To Be Adjusted | Mill & Resurfacing | Phase II | 0 | 1 |