



**INVITATION TO BID (ITB)
RE-BID # FY 2016-2017-009-001**

**42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT PROJECT
(CDBG)**

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I - SCOPE OF WORK

**PREPARED BY:
CITY OF HALLANDALE BEACH
DEPARTMENT OF PUBLIC WORKS
PROCUREMENT DEPARTMENT**

42ND YEAR CDBG BLOCK GRANT

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I – SCOPE OF WORK

TABLE OF CONTENT	PAGE NO.
EXHIBIT I SCOPE OF WORK	
COVER PAGE	1
TABLE OF CONTENTS	2-4
SCOPE OF WORK	5-6
BROWARD COUNTY REQUIREMENTS	6-8
ADDITIONAL BACKGROUND INFORMATION	9
MINIMUM QUALIFICATION REQUIREMENTS	9-12
PROJECT DESIGN DRAWINGS – EXHIBIT C	13
MEDIA ADVERTISEMENT	14-15
BID PRICE SHEET	16-17
CONTRACT TERMS	18
CONTRACT TIME	18
INSTRUCTIONS FOR SUBMITTAL OF RESPONSES	19
CONFLICT OF INTEREST	19
REFERENCES	19-20
DEFINITIONS	20-23
SUBMITTAL DUE DATE	24
MANDATORY PRE-BID CONFERENCE	24
LAST DAY FOR QUESTIONS	24
10% BID BOND	25
PERFORMANCE & LABOR MATERIAL PAYMENT BOND	25
QUESTIONS REGARDING BID	25
TENTATIVE SCHEDULE	26
LIST OF ADMINISTRATORS AND DEPARTMENT LIAISONS	27
EXHIBIT II	
GENERAL TERMS AND CONDITIONS	2-15
FORMS	16-31
CONTRACT	32-72

EXHIBIT A	
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS	
1-216	
DIVISIONS 1	GENERAL REQUIREMENTS
01010	SUMMARY OF WORK
01015	GENERAL REQUIREMENTS
01025	MEASUREMENT AND PAYMENT
01030	SPECIAL PROJECT PROCEDURES
01041	PROJECT COORDINATION
01045	CUTTING AND PATCHING
01050	FIELD ENGINEERING AND SURVEYING
01090	REFERENCE
01152	APPLICATION FOR PAYMENT
01200	PROJECT MEETINGS
01310	CONSTRUCTION SCHEDULE
01340	SHOP DRAWINGS, WORKING DRAWINGS, AND SUPPLIES
01370	SCHEDULE OF VALUES
01380	CONSTRUCTION PHOTOGRAPHS
01381	AUDIO/VIDEO PRE-CONSTRUCTION RECORD
01410	MATERIALS AND INSTALLATION TESTING
01505	CONTROL OF WORK
01510	TEMPORARY UTILITIES
01530	EXISTING UTILITIES
01540	SECURITY
01550	SITE ACCESS AND STORAGE
01570	TRAFFIC REGULATION
01600	MATERIAL AND EQUIPMENT
01670	TESTING PIPING SYSTEMS
01700	CONTRACT CLOSE OUT
01710	CLEANING
01720	PROJECT RECORD/AS-BUILT DOCUMENTS
01730	OPERATING AND MAINTENANCE DATA
01740	WARRANTIES AND BONDS

EXHIBIT A	
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS	
1-216	
TECHNICAL SPECIFICATIONS	
DIVISIONS 2	SITE WORK
02100	SITE PREPARATION
02200	EARTHWORK
02205	CLEARING AND GRUBBING
02210	FINISH GRADING
02221	TREACHING, BEDDING AND BACKFILL FOR PIPE
02420	SOIL PREPARATION AND SOIL MIXES
02430	SODDING
02510	WALKWAYS
02513	ASPHALT CONCRETE PAVING
02580	PAVEMENT MARKINGS AND SIGNING
02630	STORM DRAINAGE
02631	HIGH PERFORMANCE POLYPROPYLENE STORM GRAY PIPE (HP STORM GRAY PIPE)
02640	GEOTECHNICAL REPORT
02650	SOFT DIGS REPORT BY US POTHOLING & AIR EXCAVATION
02660	BROWARD COUNTY SURFACE WATER MANAGEMENT GENERAL LICENSE (GL2017-042)
02670	BROWARD COUNTY TRAFFIC ENGINEERING DIVISION REVIEW

EXHIBIT B	
FEDERAL GRANT DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD), A COMMUNITY DEVELOPMENT BLOCK GRANT PROJECT (CDBG) A BOILER PLATE GUIDE	1-45
EXHIBIT C	
DRAWINGS/PLANS	1-11

SCOPE OF WORK:**PURPOSE:**

The City of Hallandale Beach is seeking sealed bids from licensed contractor(s) for the performance of drainage improvements, sidewalk improvements, pavement marking and signage improvements and Americans Disabilities Act (ADA) improvements for specific roadway along SW 8th Street, SW 9th Street and the intersection of SW 8th Street and SW 10th Avenue. All work will be performed within the limits of the City of Hallandale Beach public right-of-way. The respondents shall furnish all labor, materials, equipment, tools, incidentals and transportation which are necessary for the proper layout and completion of the work, as specified in the Bid documents and shown on the approved plans. The work includes, but is not limited to, **Exhibit A – Technical Specifications and General Requirements and Exhibit C - Drawings /Plans.**

This is a **FEDERALLY FUNDED PROJECT UNDER COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)** funding by the Department of Housing and Urban Development (HUD). All HUD Federal rules and regulations pertaining to this project are applicable. Federal Davis-Bacon Wage Rates for work classifications are specified and must be complied with for this Bid. Fringe benefits must be added to the prevailing hourly rates where applicable.

Bidders must comply with Section 3 of the Housing and Urban Development Act of 1968 which requires that economic opportunities to the greatest extent feasible be given to low and very low income persons and to businesses that provide economic opportunities for these persons. The City encourages local Contractors and sign companies who reside and/or do business within the City of Hallandale Beach to participate in the bidding process.

This project consist, of Mobilization, Demobilization, Maintenance of Traffic (MOT); Clearing & Grubbing, Demolition, Removal & Disposal; Stormwater Pollution Prevention and Erosion Control; Pavement Marking & Signage; Earth Work, Excavation & Embankment, Site Grading; Drainage Pipe (15" RCP); Storm Manholes; Storm Inlets, Catch Basins; Exfiltration Trench; Concrete Curbs, Gutter, Curb & Gutter; Swale Restoration, Sod; Concrete Walkways/Sidewalk; Asphalt Driveway Restoration; Asphalt Pavement Milling; Superpave Asphalt Concrete Paving and all else necessary for a complete and functional project as per all Bid documents that meets or exceeds all requirements of the City of Hallandale Beach.

42ND YEAR CDBG BLOCK GRANT

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I – SCOPE OF WORK

Location of Work

All work under this Bid is within the City’s right-of-way. The project improvements are located at the following intersection in the City of Hallandale Beach as follows:

1. SW 8th Street and SW 10th Avenue
2. SW 8th Street and SW 9th Avenue
3. SW 9th Street and SW 10th Avenue
4. SW 9th Street and SW 9th Avenue
5. SW 9th Street and SW 8th Avenue

Bid Documents

The Exhibits named below are found on the City’s website at www.cohb.org/solicitations.

This Bid is composed of the following items and Exhibits which all vendors must review prior to submittal of your firm’s response.

Exhibit I – Scope of Work

Exhibit II – General Terms and Conditions, Forms and Agreement

Exhibit A – Technical Specifications and General Requirements

Exhibit B – Federal Grant Department of Housing and Urban Development (HUD) A Community Development Block Grant Project (CDBG) A Boiler Plate Guide

Exhibit C – Drawings/Plans

BROWARD COUNTY REQUIREMENTS:**County Business Enterprises (CBE) Program:**

Broward County has established a policy relating to County Business Enterprise (“CBE”) program participation in all County contracts. Although this Bid does “NOT” have assigned CBE goals, pursuant to 24 C.F.R. 85.36(e) or 84.44(b), the City shall take affirmative steps to use small firms, minority-owned firms, or labor surplus area firms when possible as the sources of supplies, equipment and services.

Community Development Block Grant (CDBG) Funds and requirements:

This is a federally funded project under Community Development Block Grant (CDBG) funding by the Department of Housing and Urban Development (HUD). All HUD Federal rules and regulations pertaining to this project are applicable. Federal Davis-Bacon Wage Rates for work classifications are specified and must be complied with. Fringe benefits must be added to the prevailing hourly rates where applicable.

Bidders must comply with Section 3 of the Housing and Urban Development Act of 1968 which requires that economic opportunities to the greatest extent feasible be given to low and very low income persons and to businesses that provide economic opportunities for these persons. The City encourages local Contractors and sign companies who reside and/or do business within the City of Hallandale Beach to participate in the bidding process.

See Exhibit B – Federal Grant Department of Housing and Urban Development (HUD) A Community Development Block Grant Project (CDBG) A Boiler Plate Guide.

Federal Davis Bacon Wage Rates Requirements for this Bid:

This Bid contains Federal Wage Rates requirements:

1. The Federal Davis-Bacon Prevailing Wage Rates for each different type of work are specified in the Bid and must be complied with including applicable fringe benefits. The awarded Contractor will be required to provide certified payroll at regular intervals for the duration of the Contract. The Federal Davis-Bacon Prevailing Wage Rates are listed on **Pages 1 of 6, See Exhibit B.**
2. Federal Grant Department of Housing and Urban Development (HUD) A Community Development Block Grant Project (CDBG) A Boiler Plate for Community Development Block Grant Projects of the bid documents must be used for each of the different types of works listed in the Bid documents. The Highway wage rate **FL20150203** listed in the Prevailing Wage Rates of the bid documents applies. The most current Prevailing Wage Rates are to be utilized for the entire duration of the project.

Minimum Qualification Requirements – MQRs:

This Bid contains Minimum Qualification Requirements (MQRs) which the proposing firm **must** meet in order for the firm's response to be considered and to be evaluated.

Please read the MQRs to ensure your firm meets these requirements and thus is able to provide a response to this Bid.

This Bid contains Minimum Qualification Requirements (MQRs) from Broward County and the City. Not providing the forms required for these MQRs will disqualify your firm and your firm's bid response/submittal. Please ensure you read the list of MQRs below, items #1-#4 and ensure you provide with your firm's submittal in order for your bid to be responsive.

Firm(s) that do not comply with the outline below will be determined non-responsive and disqualified from the evaluation/bidding process and not be considered. Ensure the MQRs below are easily found and clearly addressed within your firm's response. The firm awarded the contract will be required to maintain the Minimum Qualification Requirements during the term of the contract and any contract renewals.

Mandatory Pre-Bid Conference:

For this Bid the City is holding a Mandatory Pre-Bid Conference. The Pre-Bid Conference is held to explain in detail Exhibits I-II, A, B and C, which makes up the Bid for this project. Firms interested in proposing and responding to this Bid **must** send the appropriate person from your firm that will be responsible for preparing the response to the Bid. During this meeting, the scope of work will be explained.

The Mandatory Pre-Bid Conference presents the opportunity for firms to clarify anything within the Bid and to ask questions directly to City Staff.

All exhibits for this Bid are found on the City's website at www.cohb.org/solicitations

Bid Award Price:

The award will be to the lowest responsive responsible bidder for the Total Bid Price provided on the Bid Price Sheet.

Working Hours:

Contractor may perform work from 8:00 am through 5:00 pm, Monday through Friday five (5) days a week, excluding the City's observed holidays, within the seventy (70) Calendar days from the Notice to Proceed.

Permits

Pursuant to Florida Statute Section 218.80, the City hereby discloses that the following licenses, permit and fees and their costs are issued by the City for construction. The licenses, permits and fees applicable to this project are within the link found below and must be obtained and/or paid by the awarded Contractor. The successful Contractor is responsible to identify and obtain all applicable licenses, permit and pay all such related fees. The costs of all licenses, permits and their respective fees applicable to this project are to be secured and paid for by the Contractor.

<http://cohb.org/DocumentCenter/View/16031>

ADDITIONAL BACKGROUND INFORMATION:

The City of Hallandale Beach is a City Manager/City Commission form of government. It serves an area of approximately 4.4 square miles with a population of approximately 39,000 off season with an increase in population to approximately 50,000 during season. The City's fiscal year begins October 1st and ends September 30th.

The City provides the following services to its residents:

- Police, Fire and Rescue
- Construction and maintenance of streets, bridges, sidewalks, storm drainage, parks, community and recreational facilities
- City planning, zoning, subdivision and building code regulation and enforcement
- Supervised recreation programs
- Redevelopment of commercial and residential neighborhoods
- Water, Sewer, Sanitation and Municipal Cemetery Services

The City of Hallandale Beach is a Commission-Manager form of government, consisting of five elected officials: a Mayor, a Vice-Mayor and three Commissioners who establish legislative policies; which are then carried out by the City Manager. The Commissioners and Mayor are elected at-large during municipal elections that are held the first Tuesday of November in even numbered years. Commission members select the Vice-Mayor from their own membership following each election.

MINIMUM QUALIFICATION REQUIREMENTS:

All firms responding to this Bid, in order to be eligible to respond to this Bid must demonstrate and submit with firm's response all of the Minimum Qualification Requirements (MQRs) stated below. Ensure you read the MQRs first to ensure your firm meets these requirements and thus is able to provide a response to this Bid.

Proposing firm must meet the (MQRs) stated below in order to be eligible for firm's submittal.

Firm must provide a section with your firm's response labeled "**Minimum Qualification Requirements**" addressing all items stated below by #.

Your firm's non-compliance to the outline below will hinder the ability to find the responses of the MQRs to the Bid and could cost your firm to be determined non-responsive and disqualified from the bidding process and not be considered. Ensure the MQRs below are easily found and clearly addressed within your firm's response.

All firms within your response being proposed to do the work for this project must provide and meet the (MQRs).

Minimum Qualification Requirement # 1: Exhibit B Section 3 CDBG Grant Requirements:

Proposing firm(s) must complete and submit with your response Exhibit B, Broward County Community Development (CDBG) A Boiler Plate Guide. Forms to be submitted are as follows:

- a) Bidder's Initial Section 3 Goals Form Page 12.
- b) Section 3 "Eligible Jobs Availability Form" Page 16 or the Section 3 "Unavailability Certification" Page 17.

NONE OF THE FORMS STIPULATED ABOVE, A AND B, WILL BE ACCEPTED AFTER THE BID DUE TIME. NO EXCEPTIONS.

Minimum Qualification Requirement # 2: Experience:

Firm must provide three (3) similar completed projects of the same size and scope as those requested in this Bid, that have been completed within the past five (5) years; 2012 – 2017.

Make sure your firm's response to the MQR # 2 addresses similar projects related to the scope of work as stated in this Bid that your firm has provided/performed. The City will be looking for the provision of detailed responses to the MQR # 2 addressing your firm's previous similar projects and experience to the scope of work as outlined in this Bid.

Your firm must provide this information on the following tables/chart:

42ND YEAR CDBG BLOCK GRANT

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I – SCOPE OF WORK

Name of the Project # 1	
Date when Project # 1 started	
Date when Project # 1 was completed	
Name of entity for which services were provided to	
Updated contact name, phone and email for Project Manager where services were provided to	
Provide detail information about the scope of work your firm provided during this project. Such must be similar and address the scope of work as required and addressed in MQR # 2, as well as, the scope of work required and addressed in this Bid.	

Name of the Project # 2	
Date when Project # 2 started	
Date when Project # 2 was completed	
Name of entity for which services were provided to	
Updated contact name, phone and email for Project Manager where services were provided to	
Provide detail information about the scope of work your firm provided during this project. Such must be similar and address the scope of work as required and addressed in MQR # 2, as well as, the scope of work required and addressed in this Bid.	

Name of the Project # 3	
Date when Project # 3 started	
Date when Project # 3 was completed	
Name of entity for which services were provided to	
Updated contact name, phone and email for Project Manager where services were provided to	
Provide detail information about the scope of work your firm provided during this project. Such must be similar and address the scope of work as required and addressed in MQR # 2, as well as, the scope of work required and addressed in this Bid.	

Minimum Qualification Requirement # 3: Years' in Business provision of Sunbiz.

Firm must have been incorporated through Sunbiz showing a date filed or incorporation of 2012 or earlier. Firm must provide a copy of their firm's Sunbiz with their response showing a date filed of year of incorporation of 2012 or earlier.

Minimum Qualification Requirement # 4: Licenses

Proposing firm must be licensed as a General Contractor in the State of Florida. Firm must provide copies of all applicable licenses with their response.

All firm(s) named and providing work under your firm's submission must also submit all forms requested in Exhibit II.

All firms that are submitting a response to this Bid, either through Joint Venture, a Joint Collaborative Proposal, etc., must submit a single response proposal.

All proposals must be submitted in accordance with the Bid document which may be obtained online at www.cohb.org/solicitations

42ND YEAR CDBG BLOCK GRANT

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I – SCOPE OF WORK

PROJECT DESIGN DRAWINGS – EXHIBIT C:

Copies of projects drawing are available as PDF files on the City's Website at no charge, see EXHIBIT C.

Project Drawings/Plans can be obtained online at www.cohb.org/solicitations

ADVERTISEMENT – This is a copy of the advertisement for this project

LEGAL CLASSIFIED ADVERTISING
NEWS/SUN-SENTINEL
333 S.W. 12TH AVENUE
DEERFIELD BEACH, FL 33442

Please insert the following Legal Notifications in the **OCTOBER 14, 2017 and OCTOBER 21, 2017** issues of the **NEWS/SUN-SENTINEL**. Send certified copy of insertion to the City of Hallandale Beach, Procurement Department 400 South Federal Highway, Hallandale Beach, FL 33009.

**INVITATION TO BID (ITB)
RE-BID # FY 2016-2017-009-001 42ND YEAR COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT**

SEALED RESPONSES ARE DUE: **DECEMBER 8, 2017 BY NO LATER THAN 11:00 A.M.**
BY THE CITY CLERK'S OFFICE, CITY OF HALLANDALE BEACH, 400 SOUTH FEDERAL HIGHWAY, HALLANDALE BEACH, FL 33009.

LATE SUBMITTALS WILL NOT BE ACCEPTED OR CONSIDERED.

PURPOSE: The City of Hallandale Beach is seeking sealed bids from licensed contractor(s) for performing roadway, drainage, pavement marking and signage, landscaping, Maintenance of Traffic (MOT), Mobilization, Utility Locations to SW 8th Street and SW 9th Street and at the intersection in City of Hallandale Beach as indicated on the design plans.

This Bid/Project contains Minimum Qualification Requirements (MQRs) that vendors must meet in order to respond to this Bid. Please read the MQRs found in Exhibit I.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) FUNDS:

This is a Federally Funded Project under Community Development Block Grant (CDBG) funding by the Department of Housing and Urban Development (HUD). All HUD Federal rules and regulations pertaining to this project are applicable. Federal Davis-Bacon Wage Rates for work classifications are specified and must be complied with. Fringe benefits must be added to the prevailing hourly rates where applicable.

Bidders must comply with Section 3 of the Housing and Urban Development Act of 1968 which requires that economic opportunities to the greatest extent feasible be given to low and very low income persons and to businesses that provide economic opportunities for these persons. The City encourages local Contractors and sign companies who reside and/or do business within the City of Hallandale Beach to participate in the bidding process.

Pursuant to the installation of the Infrastructure Improvements located in the public Right-of-Way, including storm drainage, landscaping, driveways, pavement, sidewalks, swales, and other miscellaneous items, shall be restored to their original condition or better. The contractor shall furnish all labor, equipment, tools, incidentals and transportation which are necessary for the proper layout and completion of the work, as specified herein and shown on the design plans for this solicitation.

TO OBTAIN SPECIFICATIONS: Bids and project drawings are to be obtained through the City of Hallandale Beach Website at www.cohb.org/solicitations and are also available through Demand Star at www.demandardstar.com.

Drawings/Plans: Copies of projects drawing are available as PDF files on the City's website www.cohb.org/solicitations at no charge.

MANDATORY PRE-BID CONFERENCE:

There is a Mandatory Pre-Bid Conference that will be held **October 25, 2017 at 11:00 A.M.**, City Hall, City Commission Chambers, 400 South Federal Highway, Hallandale Beach, FL 33009.

42ND YEAR CDBG BLOCK GRANT

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I – SCOPE OF WORK

A representative from your firm must attend this Mandatory Pre-Bid Conference and sign in on behalf of your firm in order for your firm's response/proposal to be accepted.

Federal Guidelines will be discussed at this Mandatory Pre-Bid meeting.

CONE OF SILENCE:

Code of Ordinances, Chapter 23 Procurement, Section 14, prohibits any communication regarding this solicitation between a potential proposer, offeror, respondent, bidder, lobbyist or consultant and the City Manager, City staff, evaluation committee, and the Mayor and City Commission and their respective staff.

This Cone of Silence is imposed from now and shall remain in effect until an award of the solicitation by the City Commission or the City Commission takes any other action which ends the solicitation.

There is to be no communication between proposing firms and City staff regarding this solicitation.

Should any firm contact you related to this solicitation, please direct the communication to the Procurement Department at (954) 457-1333.

COUNTY BUSINESS ENTERPRISES (CBE) PROGRAM

Broward County has established a policy relating to County Business Enterprise ("CBE") program participation in all County Contracts. Although this agreement does NOT have assigned CBE goals, pursuant to 24 C.F.R. 85.36(e) or 84.44(b), the City shall take affirmative steps to use small firms, minority-owned firms, or labor surplus area firms when possible as the sources of supplies, equipment and services.

10% BID BOND:

As per Procurement Code Section 23-12 (2) Security Bonds: Each proposer must provide with the submission a Proposal Guarantee/Bond in the form of a Certified Check, or Cashier's Check, or Bid Bond in the amount of ten percent (10%) payable to the City of Hallandale Beach. These funds are not cashed. These funds are retained guaranteeing the firm submitting the proposal will not withdraw the proposal for such period of time as the Commission provides a Resolution for award of contract. Per Procurement Code Section 23-3, if firm withdraws the proposal, or awarded firm does not furnish bonds as required, and does not accept a contract that is awarded, the Proposal Guarantee Bond is forfeited.

PERFORMANCE AND LABOR MATERIALS PAYMENT BOND:

A Performance and Labor Materials Payment Bond in an amount equal to one hundred (100%) percent of total Contract amount awarded must be submitted by the Awarded Contractor within fifteen (15) days after receipt of Notification of Award. The Notification of Award is the day Commission meeting is held to award the contract. The Procurement Department will notify the awarded firm of this date via a letter. A Performance and Labor Materials Payment Bond must be provided in an amount equal to 100% of the Contract price issued by a surety company licensed to do business in the State of Florida. (F.S. 255.05). On approval of any Contract change increasing the Contract price, Contractor shall ensure that the performance bond and payment bond are increased so that each reflects the total Contract price as increased.

The City of Hallandale Beach, Florida reserves the right to waive any informality in any response and to reject any or all responses.

END OF ADVERTISEMENT

BID PRICE SHEET

Firms must use this price sheet to submit their firm’s price for this project.

Vendor shall hold the unit bid prices firm throughout the contract period. Vendor guarantees response time necessary to have a crew return to correct unfinished or unsatisfactory services.

The City reserves the right to increase, decrease, and/or choose the items and quantities below for the project to meet its available budget using the unit prices provided below.

Proposing vendor must completely fill out each column below, unit price and total price.

Not applicable or n/a is not acceptable and will cause your firm’s response to be determined non-responsive and not be considered.

An authorized officer of the firm per the vendor’s Sunbiz, must sign the bid price sheet.

The award will be to the lowest responsive responsible bidder for Total Bid.

BID ITEM NO.	DESCRIPTION	QTY.	UNIT	UNIT PRICE	AMOUNT
1.01	General Requirements	1	LS		
1.02	Mobilization/Demobilization (Maximum 5% of total bid base construction price)	1	LS		
1.03	Maintenance of Traffic (Maximum 3% of total bid base construction price)	1	LS		
1.04	Prevention, Control and Abatement of Erosion and Water Pollution	1	LS		
1.05	Clearing & Grubbing, Demolition, Removal & Disposal	1	LS		
1.06	Earthwork, Excavation & Embankment, Site Grading	1	LS		
1.07	Retro-Reflective Pavement Markers	20	EA		
1.08	Thermoplastic, STD, White, Solid, 24"	185	LF		
1.09	Thermoplastic, STD, Yellow, Solid, 6"	350	LF		
1.10	Thermoplastic, STD, White, Solid, 12"	267	LF		
1.11	Thermoplastic, Standard, White , Pavement Message (SCHOOL)	1	EA		
1.12	Thermoplastic Speed Hump Marking	1	EA		
1.13	Single Post Sign, Furnish & Install	1	EA		
1.14	Multi-Post Sign, Furnish & Install	3	EA		

1.15	Detectable Warning Surface (Cast-in-place)	12	EA		
1.16	15" HP Storm Gray Pipe (High Performance Polypropylene Pipe)	405	LF		
1.17	Storm Manhole	2	EA		
1.18	Storm Inlets/Catch Basins	4	EA		
1.19	Exfiltration Trench	25	LF		
1.20	Concrete Curb & Gutter, Type F	20	LF		
1.21	Remove and Reinstall Mail Boxes	3	EA		
1.22	Root Pruning & Root Barrier	30	LF		
1.23	Swale restoration, SOD	350	SY		
1.24	Adjust Sanitary Sewer Lateral	100	LF		
1.25	Adjust Potable Water Services	2	EA		
1.26	Concrete Walkways/Sidewalk (6" Thick)	270	SY		
1.27	Asphalt Driveway Reconstruction	200	SY		
1.28	Milling Existing (Roadway) Asphalt Pave. (1" avg. depth)	921	SY		
1.29	Concrete Apron for Catch Basins	3	EA		
1.30	Asphalt Pavement (Roadway) Resurfacing, FDOT Type SP-9.5 (Traffic C) (1 inch)	51	TN		
TOTAL BID ITEMS 1.01 THROUGH 1:30					

TOTAL BID (1.01 THROUGH 1.30)	\$
--------------------------------------	-----------

I, _____,
 Name of Authorized Officer per Sunbiz Title

of _____
 Name of Firm as it appears on Sunbiz

hereby attest that I have the authority to sign this notarized certification and certify that the above referenced information is true, complete and correct.

 Signature

 Print Name

CONTRACT TERMS:

The submittal responses shall be valid until such time as City Commission awards a contract as a result of this Bid.

The Contract shall remain in effect provided the services rendered by the awarded firm during the contract period are satisfactory and the funding is available as appropriated. City reserves the right, where it may serve the City of Hallandale Beach's best interest, to request additional information or clarification from Proposers.

Notwithstanding anything to the contrary contained herein, the City of Hallandale Beach reserves the right to waive formalities in any Bid and further reserves the right to take any other action that may be necessary in the best interest of the City. The City further reserves the right to reject any or all Bids, with or without cause, to waive technical errors and informalities or to accept the Bid which in its judgment, best serves the City of Hallandale Beach.

CONTRACT TIME:

The work shall be substantially completed within seventy (70) calendar days from the Project initiation specified in the Notice to Proceed, and completed and ready for final payment in accordance with Article 22 within ninety (90) calendar days from Project initiation date specified in the Notice to Proceed.

The City Project Manager will coordinate the contract start time.

The City of Hallandale Beach reserves the right to waive technicalities or irregularities in Bids at its discretion or to reject any or all Bids.

Notwithstanding anything to the contrary contained herein, the City of Hallandale Beach reserves the right to waive formalities in any bid and further reserves the right to take any other action that may be necessary in the best interest of the City. The City further reserves the right to reject any or all Bids, with or without cause, to waive technical errors and informalities or to accept the Bid which in its judgment, best serves the City of Hallandale Beach.

INSTRUCTIONS FOR SUBMITTAL OF RESPONSES:

Firms are to submit responses only on a thumb drive that is searchable in adobe format (.pdf file). No CDs will be accepted. In order to ascertain that the Bid information provided on the thumb drive contains data that allows the reviewer to perform an “edit” “find” search function, your firm must ensure your .pdf files are enabled with this function. **Firms must make sure that the thumb drive is tested for this function before submission.** Do not place a password on the thumb drive.

Provide one (1) thumb drive with your firm’s submittal and one (1) hardcopy (paper) with your firm’s submittal.

CONFLICT OF INTEREST:

If you are an employee, board member, elected official(s) or an immediate family member of any such person, please indicate the relationship in the form provided in the Form’s Section, Exhibit II. Pursuant to the City of Hallandale Beach Standards of Ethics, any potential conflict of interest must be disclosed and if requested, obtain a conflict of interest opinion or waiver from the City Commission prior to entering into a contract with the City of Hallandale Beach.

<http://fiche.hallandalebeach.org/WebLink/0/doc/5274/Page1.aspx>

REFERENCES:

References will be required as a component of due diligence to determine the capability of firms to be able to perform the requirements of the project. Your firm must send the Reference Check Form provided on Pages 26-31 of Exhibit II to the number of references requested and submit with your firm’s response.

Each firm responding to this Bid must provide five (5) verifiable references for project of similar scope as outlined in this Bid. Your firm must send and obtain a completed Reference Check Form as found on pages 26-31 of Exhibit II for each of your firm’s five (5) references. Your firm must include the completed five (5) Reference Check Forms within your firm’s thumb drive.

Do not provide more or less than five (5) references.

The City will send the references provided a request for verification via email within no later than two (2) business days from receipt of bids. If the references is not available or unable to respond within two (2) business days from email request, the reference will not be considered valid.

Please make sure that the references listed in your firm’s Bid are aware they will be receiving a

verification of reference email from the City of Hallandale Beach to confirm the reference which was submitted with the firm's bid.

Each firm must also list the following information for each of the references provided.

1. Name of firm-company for which work was provided.
2. Name of Reference (Project Manager) charged with managing said project.
3. Type of project. Year project started and was completed.
4. Dollar amount of project, including change orders.
5. Phone # for Reference (Project Manager).
6. Updated email address for Project Manager.

DEFINITIONS:

Whenever the following terms or pronouns in place of them appears in the Bid Documents, the intent and meaning shall be interpreted as follows:

- Definitions: Whenever the following terms or pronouns in place of them appears in the Bid Documents, the intent and meaning shall be interpreted as follows:
- As Built: or record drawings are the official graphic representation of the construction project depicting the work as it was constructed.
- Bid Takeoff: The final estimate, tabulation, or worksheet prepared by the Contractor in anticipation of the bid submitted, and which shall reflect the final bid price.
- Bidder: Any individual, firm, qualified joint venture or corporation submitting a bid for this Project, acting directly or through a duly authorized representative.
- Bond: A bid, performance, or payment guarantee issued by and, on the form provided by the CITY (where applicable), written through a reputable and responsible surety bond agency licensed to do business in the State of Florida and with a surety which holds a certificate of authority authorizing it to write surety bonds in Florida, with a rating by AM Best Company of "A" or better, "Class V".
- Change Order: A written document ordering a change in the Contract Price or Contract Time or a Material Change in the Work.
- City: the City of Hallandale Beach or the City Commission, a municipal corporation of the State of Florida.

- CITY or Owner: City of Hallandale Beach, Florida, a Municipal Corporation which is a party hereto and for which this Contract is to be performed. In all respects hereunder, CITY'S performance is pursuant to CITY'S capacity as the owner of a construction project. (In the event CITY exercises its regulatory authority as a governmental body, the exercise of such regulatory authority and the enforcement of any rules, regulations, laws and ordinances shall be deemed to have occurred pursuant to City's regulatory authority as a governmental body and shall not be attributable in any manner to CITY as a party to this Contract.)
- City Commission: The City Commission of the City of Hallandale Beach, Florida, its successors and assigns.
- City Engineer: The City Engineer or designee employed full time by the City and assigned to specific aspects of the project.
- Claim: Any invoice, statement, request, demand, lawsuit, or action under contract or otherwise, for money, extension of contract time, property, or services made to any employee, officer, or agent of the CITY, or to any Contractor, grantee, or other recipient if any portion of the money, time extension, property, or services requested or demanded was or will be issued from, or was provided by the CITY.
- Consultant: To be determined on a project basis.
- Contract: The part or section of the Contract Documents addressing some of the rights and duties of the parties hereto, including but not limited to contract time and liquidated damages, and the General Conditions of the Contract.
- Contract Administrator: The City Engineer or Designee expressly designated as Contract Administrator in writing by the Director of Public Works, Utilities and Engineering.
- Contract Documents: The Bid Documents including drawings (plans) and specifications, the Notice for Bids, Addenda, if any, to the Bid Project Document, the Bid Tender Form, the record of the award by the City, the Performance Bond and Payment Bond, the Notice of Award, the Notice to Proceed, the Notice to Proceed with the Work, the Purchase Order, Change Orders, Field Orders, Supplemental Instructions, and any additional documents the submission of which is required by this Bid Documents and the Contract are the documents which are collectively referred to as the Contract Documents.
- Contract Price: The original amount established in the bid submittal and award by the City, as may be amended by Change Order.

- Contract Time: The original time between commencement and completion, including any milestone dates thereof, established in Article 2 of the Contract, as may be amended by Change Order.
- Contractor: The person, firm, qualified joint venture, or corporation with whom the City of Hallandale Beach has contracted and who is responsible for the acceptable performance of the Work and for the payment of all legal debts pertaining to the Work. All references in the Contract Documents to third parties under contract or control of CONTRACTOR shall be deemed to be a reference to CONTRACTOR
- Final Completion: The date certified by CITY ENGINEER that any documents and all required by the Contract Documents have been received by CITY ENGINEER; any other documents required to be provided by CONTRACTOR have been received by CITY ENGINEER; and to the best of CITY ENGINEER's knowledge, information and belief the Work defined herein has been fully completed in accordance with the terms and conditions of the Contract Documents.
- Notice to Proceed: Written notice to CONTRACTOR authorizing the commencement of work as provided for by the Contract.
- Plans and/or Drawings: The official graphic representations of this Project, which are a part of the Bid Documents.
- Project: The construction project described in the Contract Documents, including the Work described therein.
- Project Initiation Date: The date upon which the Contract Time commences.
- County Business Enterprise (CBE) Program: COUNTY has been established a policy relating to County Business Enterprise (“CBE”) program participation in all County Contracts. Although this Agreement does NOT have assigned CBE goals, pursuant to 24 C.F.R. 85.36(e) or 84.44(b), CITY shall take affirmative steps to use small firms, minority-owned firms, or labor surplus area firms when possible as the sources of supplies, equipment and services.
- Schedule of Bid Prices: A listing of elements, systems, items, Acceptance Testing and Training, or other subdivisions of the work, establishing a value for each, the total, of which equals the contract sum. The Schedule of Bid Prices establishes the cash flow for the Project.
- Subcontractor: A person, firm, qualified joint venture, or corporation having a direct contract with CONTRACTOR including one who furnishes material systems, or assemblies

worked to a special design according to the Contract Documents, but does not include one who merely furnishes Materials not so worked.

- Substantial Completion: The date certified by CITY ENGINEER when all the Work is sufficiently complete in accordance with the Contract Documents so the Project is available for beneficial occupancy by CITY.
- Surety: The surety company or person which is bound by the performance bond and payment bond with and for CONTRACTOR who is primarily liable, and which surety company or person is responsible for CONTRACTOR's satisfactory performance of the work under the contract and for the payment of all debts pertaining thereto in accordance with Section 255.05, Florida Statutes.
- Work: The construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by CONTRACTOR to fulfill CONTRACTOR's obligations. The Work may constitute the whole or a part of the Project.

SUBMITTAL DUE DATE:

RESPONSES ARE DUE: DECEMBER 8, 2017 BY NO LATER THAN 11:00 A.M.

RESPONSES MUST BE SUBMITTED IN A SEALED ENVELOPE AND MUST BE MAILED OR HAND DELIVERED TO THE ADDRESS IN THE BOX BELOW. SEALED ENVELOPES MUST BE LABELED AS FOLLOWS:

CITY OF HALLANDALE BEACH
Your Firms Name Here
CITY CLERK'S DEPARTMENT – EXECUTIVE OFFICES
400 SOUTH FEDERAL HIGHWAY – 2ND FLOOR
HALLANDALE BEACH, FL 33009
TITLED: RE-BID # FY 2016-2017-009-001
42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PUBLIC WORKS
STORMWATER IMPROVEMENTS PROJECT

LATE PROPOSALS WILL NOT BE ACCEPTED

MANDATORY PRE-BID CONFERENCE:

If your firm is going to provide a response to this Bid your firm must send a representative of your firm to this Mandatory Pre-Bid Conference. A representative from your firm must attend this Pre-Bid Conference and sign in on behalf of your firm. This meeting is held to explain in detail Exhibits I-II and all Exhibits which make up the Bid for this project. Firms interested in proposing and responding to this Bid must send the appropriate person from your firm that will be responsible for preparing the response to the Bid. During this meeting the scope of work will be explained. The Mandatory Pre-Bid Conference presents the opportunity for firms to clarify anything within the Bid and to ask questions directly to City Staff.

Mandatory Pre-Bid Conference is being held **October 25, 2017 at 11:00 A.M.** City Hall, City Commission Chambers at 400 S. Federal Highway, Hallandale Beach, FL 33009.

This meeting will be recorded and available as a public record if requested.

LAST DAY FOR QUESTIONS:

Any questions are to be submitted via email to csmith@cohb.org no later than **November 13, 2017 BY NO LATER THAN 11:00 A.M.**

Answers to questions received before the deadline will be released via addendum.

10% BID BOND:

As per Procurement Code Section 23-12 (2) Security Bonds: Each proposer must provide with the submission a Proposal Guarantee/Bond in the form of a Certified Check, or Cashier's Check, or Bid Bond in the amount of ten percent (10%) payable to the City of Hallandale Beach. These funds are not cashed. These funds are retained guaranteeing the firm submitting the proposal will not withdraw the proposal for such period of time as the Commission provides a Resolution for award of contract. Per Procurement Code Section 23-3, if firm withdraws the proposal, or awarded firm does not furnish bonds as required, and does not accept a contract that is awarded, the Proposal Guarantee Bond is forfeited.

PERFORMANCE AND LABOR MATERIALS PAYMENT BOND:

A Performance and Labor Materials Payment Bond in an amount equal to one hundred (100%) percent of total Contract amount awarded must be submitted by the Awarded Contractor within fifteen (15) days after receipt of Notification of Award. The Notification of Award is the day Commission meeting is held to award the contract. The Procurement Department will notify the awarded firm of this date via a letter. An original Performance and Labor Materials Payment Bond must be provided in an amount equal to 100% of the Contract price issued by a surety company licensed to do business in the State of Florida. (F.S. 255.05). On approval of any Contract change increasing the Contract price, Contractor shall ensure that the performance bond and payment bond are increased so that each reflects the total Contract price as increased. The performance and payment bond must be recorded with Broward County prior to submitting to the City.

QUESTIONS REGARDING BID:

For information pertaining to this Bid, contact Carolyn Allen-Smith at the Procurement Department (954) 457-3073 or via email csmith@cohb.org. Such contact shall be for clarification purposes only. Changes, if any, to the scope of the services or proposal procedures will be transmitted only by written addendum. City's website, www.cohb.org/solicitations.

FIRMS ARE RESPONSIBLE TO CHECK THE CITY'S WEBSITE PRIOR TO SUBMITTING A RESPONSE TO ENSURE THAT THE BIDDER HAS A COMPLETE BID PACKAGE, INCLUDING ANY ADDENDUM.

TENTATIVE SCHEDULE:

THE DATES SHOWN BELOW ARE TENTATIVE AND ARE NOT BINDING AND MAY BE SUBJECT TO CHANGE.

RE-BID DOCUMENT RELEASED	OCTOBER 14, 2017
RE-BID DOCUMENT ADVERTISED	OCTOBER 14, 2017 AND OCTOBER 21, 2017
MANDATORY PRE-BID CONFERENCE	OCTOBER 25, 2017 AT 11AM
QUESTIONS	ALL QUESTIONS MUST BE EMAILED BY NO LATER THAN NOVEMBER 13, 2017 BY NO LATER THAN 11:00 AM
RE-BID DEADLINE FOR RECEIPT OF PROPOSALS	<u>DECEMBER 8, 2017</u> <u>BY NO LATER THAN 11:00 AM</u>
CONTRACT AWARD BY CITY COMMISSION	JANUARY 2018
PROJECT START DATE –NOTICE TO PROCEED	WITHIN 15 CALENDAR DAYS FROM EXECUTION OF CONTRACT

42ND YEAR CDBG BLOCK GRANT

PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT

EXHIBIT I – SCOPE OF WORK

LIST OF ADMINISTRATORS AND DEPARTMENT LIAISONS

1.	CITY MANAGER
	Roger M. Carlton, City Manager
	400 S. Federal Highway
	Hallandale Beach, Florida 33009
	(954) 457-1300
2.	ASSISTANT CITY MANAGER/ PUBLIC WORKS DIRECTOR
	Steven Parkinson,
	630 NW 2 nd Street
	Hallandale Beach, FL 33009
	(954) 457-1611
3.	ASSISTANT DIRECTOR OF PUBLIC WORKS / CITY ENGINEER
	Mariana Pitiriciu,
	630 NW 2 Street
	Hallandale Beach, FL 33009
	(954) 457-3042
4.	PROJECT MANAGER
	Aqeel Abdool-Ghany, Engineer III
	630 NW 2 nd Street
	Hallandale Beach, FL 33009
	954-457-3045
5.	PROCUREMENT DIRECTOR
	Andrea Lues
	400 S. Federal Highway
	Hallandale Beach, Florida 33009
	(954) 457-1332
	CONTRACTS COORDINATOR
6.	Tom Camaj
	400 S. Federal Highway
	Hallandale Beach, Florida 33009
	(954) 457-1374
	PROCUREMENT SPECIALIST
7.	Joann Wiggins
	400 S. Federal Highway
	Hallandale Beach, Florida 33009
	(954) 457-1331
	PROCUREMENT SPECIALIST
8.	Carolyn Allen-Smith
	400 S. Federal Highway
	Hallandale Beach, Florida 33009
	(954) 457-3073



**INVITATION TO BID (ITB)
RE-BID # FY 2016-2017-009-001**

**42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)
PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT**

**EXHIBIT II - TERMS AND CONDITIONS, FORMS AND
AGREEMENT**

**PREPARED BY:
CITY OF HALLANDALE BEACH
DEPARTMENT OF PUBLIC WORKS
PROCUREMENT DEPARTMENT**

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

I. SUBMISSION AND RECEIPT OF PROPOSALS

1. Proposals to receive consideration must be received on or prior to the specified time and date of opening, as designated in the proposal.
2. Unless otherwise specified, firms **MUST** use the proposal form(s) furnished by the City. Failure to do so may be cause for rejection of proposal. Removal of any part of the proposal forms may invalidate proposal.
3. Proposals having any erasure or corrections **MUST** be initialed by the Proposer in **INK**. Proposals shall be signed in INK; all forms shall be typewritten or printed with pen and ink.

II. GENERAL TERMS AND CONDITIONS

These General Terms and Conditions apply to all responses made to the City of Hallandale Beach by all prospective Proposers. The project will be awarded to the lowest, responsive, responsible bidder. The City of Hallandale Beach reserves the right to reject any or all proposals, to waive any informalities or irregularities in any proposals received, and to re-advertise for proposals.

1. CONE OF SILENCE:

- (a) *Purpose.* A cone of silence shall be applicable to all requests for proposal (RFP), invitations to bid (ITB), RFLI, or any other advertised solicitations for the provision of goods and services, professional services, and public works or improvements for amounts greater than fifty thousand (\$50,000) dollars, unless otherwise exempted in this section.
- (b) *Definition.* The term "cone of silence" means a prohibition on:
 - (1) Any communication regarding a particular RFP, RFQ, ITB, RFLI, or any other advertised solicitation between a potential proposer, offeror, respondent, bidder, lobbyist or consultant and the City's staff including, but not limited to, the City Manager and his/her staff;
 - (2) Any communication regarding a particular RFP, RFQ, RFLI, ITB or any other advertised solicitation between a potential proposer, offeror, respondent, bidder, lobbyist, or consultant and any member of the selection/evaluation committee therefor;

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- (3) Any communication regarding a particular RFP, RFQ, RFLI, ITB or any other advertised solicitation between a potential proposer, offeror, respondent, bidder, lobbyist, or consultant and the mayor and city commission and their respective staff.
- (c) *Exemptions.* Notwithstanding the foregoing, the cone of silence shall not apply to:
- (1) Communications between a potential proposer, offeror, respondent, bidder, consultant and City purchasing staff, prior to bid opening date or receipt of proposals, provided the communication is limited strictly to matters of process or procedure already contained in the corresponding solicitation document;
 - (2) Duly noticed pre-bid/proposal conferences and site inspections;
 - (3) Duly noticed site visits to determine the competency of bidders/proposers regarding a particular solicitation during the time period between the opening of bids/receipt of proposals and the time the City Manager presents his/her written recommendation to the city commission;
 - (4) Emergency procurements;
 - (5) Communications with the City Attorney;
 - (6) Sole source procurements;
 - (7) Those purchases that are exempted from competitive requirements in accordance with Code of Ordinances, Section 23-8
 - (8) Bid waivers;
 - (9) Oral presentations before selection/evaluation committees and communications occurring during duly noticed meetings of selection/evaluation committees;
 - (10) Public presentations made to the city commission and communications occurring during any duly noticed public meeting;
 - (11) Communications in connection with the collection of industry comments or the performance of market research regarding a particular RFP, RFQ, RFLI, ITB or any other advertised solicitation by the purchasing staff;
 - (12) Contract negotiations that occur after an award; and
 - (13) Any communication regarding a particular RFP, RFQ, RFLI, ITB or any other advertised solicitation between the City Manager and his/her staff, and the mayor and city commission and their staff.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- (d) Procedure.
- (1) Imposition. A cone of silence shall be imposed upon each RFP, RFQ, RFI, ITB or any other advertised solicitation when the solicitation is advertised. At the time of imposition of the cone of silence, the city manager or his/her designee shall issue a notice thereof to the affected department, the city clerk, mayor and city commission and shall include in any advertised solicitation a statement disclosing that the solicitation is subject to the cone of silence.
 - (2) Termination; city commission awarding authority. Except as otherwise provided herein, the cone of silence shall terminate at the date and time of the city commission meeting where the award will be made; provided, however, that if the city commission defers the matter to a future date, the cone of silence shall be re-imposed until such time as the matter is brought back before the city commission for further deliberation. In the event the city commission decides to reject all bids, then the cone of silence shall be lifted.
 - (3) City Manager awarding authority. Except as otherwise provided herein, the cone of silence shall terminate at the time the originating department issues a written recommendation to the city manager; provided, however, that if the city manager refers the recommendation back for further review, the cone of silence shall be reinstated until such time as the city manager issues a recommendation for award pending the bid protest period.
- (e) Penalties. Violation of the cone of silence by a particular bidder or proposer shall render the award to said bidder or proposer voidable by the city commission. A violation of this section by a particular bidder, proposer, offeror, respondent, lobbyist or consultant shall subject said bidder, proposer, offeror, respondent, lobbyist or consultant to five hundred (\$500.00) dollar fine per violation and debarment.

2. DOMESTIC PARTNER BENEFITS REQUIREMENT:

A requirement for City of Hallandale Beach Contractors to provide equal benefits for domestic partners. Contractors with five (5) or more employees contracting with the City of Hallandale Beach, in an amount valued over \$50,000, must provide benefits to employees' spouses and the children of spouses. All firms must complete and provide with their response the Domestic Partnership Certification Form.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

Equal Benefits Requirements

As part of the competitive solicitation and procurement process a Contractor seeking a Contract shall certify that upon award of a Contract it will provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses. The certification shall be in writing and signed by an authorized officer of the Contractor. Failure to provide such certification shall result in a Contractor being deemed non-responsive.

Contracts

Every Contract, unless otherwise exempt as per the section below, shall contain language that obligates the Contractor to comply with the applicable provisions of this section. The Contract shall include provisions for the following:

- (i) The Contractor certifies and represents that it will comply with this section during the entire term of the Contract.
- (ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.
- (iii) The City may terminate the Contract if the Contractor fails to comply with this section.
- (iv) The City may retain all monies due or to become due until the Contractor complies with this section.

Exception and Waiver

The provision of this section shall not apply where:

- a. The contractor provides benefits neither to employees' spouses nor spouse's dependents.
- b. The contractor is a religious organization, association, society or any non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.
- c. The contractor is a governmental entity.
- d. The contract is for the sale or lease of property.
- e. The covered contract is necessary to respond to an emergency.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- f. The provision of this section would violate grant requirements, the laws, rules or regulations of federal or state law.
- g. The city commission waives compliance of this section in the best interests of the city, including but not limited to, the following circumstances:
 - 1. Where only one (1) solicitation response is received.
 - 2. Where more than one (1) solicitation response is received, but the solicitation demonstrates that none of the proposed solicitations can comply with the requirements of this section.

3. LOBBYIST REGISTRATION:

Annual registration. Every lobbyist shall file a registration form with the City Clerk's Office. The registration form requires the Lobbyist to state under oath the lobbyist's name, business address, the name and business address of each party, person, principal, and/or client represented on city matters, any previous principal, and/or client represented who has, at the time of registration, any pending matters involving the City, and the general and specific areas of lobbyist interest in any City matter, if not previously disclosed. Registration is required annually, along with a payment of an annual registration fee of fifty (\$50.00) Dollars.

4. SCRUTINIZED COMPANIES:

The City, entering into a contract for goods or services of \$1 million or more, entered into or renewed on or after July 1, 2011, can terminate such contract at the option of the City if the firm awarded the contract is found to have submitted a false certification or has been placed on the Scrutinized Companies with Activities in Sudan List or Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

5. PROPOSAL ACCEPTANCE PERIOD:

Proposer warrants by virtue of submitting a proposal that costs, terms and conditions quoted in the Proposal will remain firm for acceptance by City Commission until such time as the City Commission approves award of contract.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

6. PUBLIC RECORDS:

Sealed bids, or replies received by an agency pursuant to a competitive solicitation are exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution until such time as the agency provides notice of an intended decision or until 30 days after opening the bids, proposals, or final replies, whichever is earlier. In the event the City Commission elects to reject all bids and indicates its intent to reissue the solicitation of bids, the submitted proposals remain exempted from s. 119.07(1) and s. 24(a) Art. I of the State Constitution until the City gives notice of its intent to award the contract under the reissued solicitation.

If the bidder/proposer believes any of the information contained in his or her response is exempt from the Public Records Law, then the Proposer, must in his or her response, specifically identify the material which is deemed to be exempt and cite the legal authority for the exemption. City's determination of whether an exemption applies shall be final, and bidder/proposer agrees to hold harmless and releases the City, and to defend, indemnify, by Counsel chosen by the City Attorney, the City and City's officers, employees, and agents against any loss or damages incurred by any person or entity as a result of the City's treatment of records as public records.

7. ADDENDA AND MODIFICATIONS:

All addenda and other modifications to the documents or this BID made prior to the time and date of proposal opening shall be issued as separate documents identified as changes to the proposal project document. The City shall make reasonable efforts to issue addenda within seven days prior to proposal opening.

If any addenda are issued, the City will attempt to notify known prospective Proposers. Addenda to this solicitation will be posted on the City's webpage <http://www.cohb.org/solicitations>.

Firms are solely responsible to check the website or contact the Procurement Department prior to the Proposal submittal deadline to ensure addenda has not been released. All Proposals shall be construed as though all addenda had been received and acknowledged and the submission of his/her Proposal shall constitute acknowledgment of receipt of all addenda, whether or not received by him/her. It is the responsibility of each prospective Proposer to verify that he/she has received all addenda issued before depositing the Proposal with the City.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

8. PERFORMANCE:

It is the intention of the City to obtain the products and services as specified herein from a source of supply that will give prompt and convenient service. The awarded Proposer must be able to perform as required under the Scope of Service. Any failure of Contractor to comply with these conditions may be cause for terminating any resulting contract immediately upon notice by the City. The City reserves the right to obtain these products and services from other sources, when necessary, should Contractor be unable to perform on a timely basis and such delay may cause harm to the using department or City residents.

9. DELIVERY:

Time is of the essence. City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made at the time specified on the proposal form.

10. DEFAULT PROVISION:

In case of default by the successful firm the City may procure the products or services from other sources and hold the firm responsible for any excess cost occasioned or incurred thereby.

11. COPYRIGHTS AND/OR PATENT RIGHTS:

Proposer warrants that there has been no violation of copyrights and/or patent rights in the manufacturing, producing or selling the goods, shipped or ordered, as a result of this proposal and the Proposer agrees to hold the City harmless from any and all liability, loss, or expense occasioned by any such violation.

12. TAXES:

The City is exempt from any taxes imposed by the State of Florida and/or Federal Government. State Sales Tax Exemption Certificate No. 85-8015922477C-2; United States Treasure Department. Exemption Certificates provided on request.

13. FAILURE TO SUBMIT PROPOSAL:

If your firm does not submit a proposal, PLEASE return the form, "**UNABLE TO SUBMIT A PROPOSAL**", stating thereon and request that your name be retained on the City mailing list, otherwise, your firm's name will be removed from the City's bid mailing list.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

14. SIGNED PROPOSAL CONSIDERED AN OFFER:

The signed Proposal shall be considered an offer on the part of the Proposer or firm, which offer shall be deemed accepted upon approval by the City Commission of the City of Hallandale Beach, Florida and in case of default on the part of the successful Proposer or firm, after such acceptance, the City may take such action as it deems appropriate, including legal action, for damages or specific performance.

15. LIABILITY, INSURANCE, LICENSES AND PERMITS:

Where Proposers are required to enter onto City of Hallandale Beach property to deliver materials or perform work or services, as a result of proposal award, the Proposer will assume full duty, obligation and expense of obtaining all necessary licenses, permits, inspections and insurance, as required. The Proposer shall be liable for any damage or loss to the City occasioned by negligence of the Proposer (or agent) or any person the Proposer has designated in the completion of a contract as a result of the proposal.

16. RESERVATION FOR REJECTION AND AWARD:

The City reserves the right to accept or reject any or all proposals, to waive irregularities and technicalities, and to request re-submission of proposals. The City also reserves the right to award the contract on such material the City deems will best serve its interests.

The City also reserves the right to waive minor variations to specifications (interpretation of minor variations will be made by applicable City Procurement personnel). In addition, the City reserves the right to cancel any contract by giving thirty (30) days written notice. **The City reserves the right to negotiate the type and cost of specific types of services to be purchased. These negotiations may be held with one or more proposers, as is deemed in the best interest of the City.**

17. OMISSION OF INFORMATION:

Any omissions of detailed specifications stated herein, that would render the materials/services not suitable for use as specified, will not relieve the Proposer from responsibility.

18. INSPECTION OF FACILITIES / SITE VISIT:

Proposers wishing to inspect facilities where services are to be rendered must make an appointment by calling the City's Procurement Department.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

19. PROPOSER'S COSTS:

The City shall not be liable for any costs incurred by proposers in response to the BID.

20. NONDISCRIMINATION, EQUAL OPPORTUNITY AND AMERICANS WITH DISABILITIES ACT

CONTRACTOR shall not discriminate against any person in its operations and activities in its use or expenditure of funds or any portion of the funds provided by this Agreement and shall affirmatively comply with all applicable provisions of the Americans with Disabilities Act (ADA) in the course of providing any services funded in whole or in part by CITY, including Titles I and II of the ADA (regarding nondiscrimination on the basis of disability), and all applicable regulations, guidelines and standards.

CONTRACTOR's decisions regarding the delivery of services under this Agreement shall be made without regard to or consideration of race, age, religion, color, gender, sexual orientation (Broward County Code, Chapter 16 ½), gender identity, gender expression, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully or appropriately used as a basis for service delivery.

CONTRACTOR shall comply with Title I of the Americans with Disabilities Act regarding nondiscrimination on the basis of disability in employment and further shall not discriminate against any employee or applicant for employment because of race, age, religion, color, gender, sexual orientation, gender identity, gender expression, national origin, marital status, political affiliation, or physical or mental disability. In addition, CONTRACTOR shall take affirmative steps to ensure nondiscrimination in employment against disabled persons. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay, other forms of compensation, terms and conditions or employment, training (including apprenticeship, and accessibility).

CONTRACTOR shall take affirmative action to ensure that applicants are employed and employees are treated without regard to race, age, religion, color, gender, sexual orientation (Broward County Code, Chapter 16 ½), gender identity, gender expression, national origin, marital status, political affiliation, or physical or mental disability during employment. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff; termination, rates of pay, other forms of compensation, terms and conditions of employment, training (including apprenticeship), and accessibility.

CONTRACTOR shall not engage in or commit any discriminatory practice in violation of the Broward County Human Rights Act (Broward County Code, Chapter 16 ½) in performing any services pursuant to this Agreement.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

21. PROTEST PROCEDURES:

Any party may present a written protest about the award of a contract as a result of an RFP, RFQ or Bid to the Director of Procurement. Emergency procurements, purchases for goods, supplies, equipment, and services, the estimated cost of which does not exceed fifty thousand (\$50,000.00) dollars, are not subject to protests.

(1) Time for Protest

The submission of a protest about the award of a contract, as a result of an RFP, RFQ or Bid, to the Director of Procurement must be made no later than ten (10) calendar days of approval of Notice of Award.

(2) Form and Content of Protest

The protest shall be filed in writing with the Director of Procurement and shall state the contested information about the RFP, RFQ or Bid.

The Procurement Director will provide a copy of the written protest to the City Attorney and/or City Attorney and other appropriate City staff.

(3) Protest Filing Fee

The written protest must be accompanied by a filing fee in the form of a money order or cashier's check payable to the City of Hallandale Beach in an amount equal to one (1%) percent of the contract value, which resulted from an RFP, RFQ or Bid, but no greater than five thousand (\$5,000.00) dollars. The filing fee shall guarantee the payment of all costs which may be adjudged against the protestor

in any administrative or court proceeding. If a protest is upheld by the Director of Procurement, the filing fee shall be refunded to the protestor less any costs assessed under section 4. "Costs" below.

(4) Costs

All costs accrued from a protest shall be assumed by the protestor.

(5) Authority to resolve protests

The Procurement Director shall have the authority, subject to the approval of the City Manager Executive Director and the City Attorney, to settle and resolve any written protest within thirty (30) days after receipt of the written protest.

(6) Special Magistrate

In the event the protest is not resolved by the Procurement Director, a hearing shall be scheduled by the City before a special magistrate selected by the City, who shall only determine whether procedural due process has been afforded, whether

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

the essential requirements of law have been observed, and whether the Procurement Director's finding are arbitrary, capricious, or an abuse of discretion. Any hearing shall be limited to two (2) hours per side, unless the special magistrate rules otherwise. This requirement is a jurisdictional prerequisite to the institution of any civil action regarding the same subject matter.

22. QUALIFICATIONS OF PROPOSER:

Proposals shall be considered only from firms normally engaged in performing the type of work specified within the Bid Project Document. The firm proposing must have adequate organization, facilities, equipment, and personnel to ensure prompt and efficient service to the City. In determining a Proposer's responsibility and ability to perform the contract, the City has the right to investigate the financial condition, experience record, personnel, equipment, facilities, and organization of the Proposer. The City has the right to conduct further investigation of the firm's responsibility. The unreasonable failure of Proposer or firm to promptly supply information in connection with an inquiry with respect to responsibility may be grounds for determination of non-responsibility with respect to such Proposer or firm.

23. CONFLICT OF INTEREST:

If you are an employee, board member, elected official(s) or an immediate family member of any such person, please indicate the relationship in the form provided in the Form's Section, Exhibit II. Pursuant to the City of Hallandale Beach Standards of Ethics, any potential conflict of interest must be disclosed and if requested, obtain a conflict of interest opinion or waiver from the City Commission prior to entering into a contract with the City of Hallandale Beach. <http://fiche.hallandalebeach.org/WebLink/0/doc/5274/Page1.aspx>

24. TAX SAVINGS DIRECT PURCHASES (TSDP):

The City of Hallandale Beach is recognized by the State of Florida as being exempt from state sales tax and use tax and is therefore, qualified for an exemption from Florida and all other state sales taxes on the purchase of tangible personal property if certain criteria are met. The City may realize savings of sales tax on selected material and equipment needed for use in public works contracts. Public works contracts are projects for public use or enjoyment, financed and owned by the City, in which private firms install tangible property that becomes part of a City facility. See Rule 12A-1.094 and Section 212.08(6) Florida Statutes. The City will implement the TSDP for projects of \$1 million or above and apply it if applicable to this project.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

25. OCCUPATIONAL HEALTH AND SAFETY:

The Contractor and Subcontractors shall comply with the provisions of the Occupational Safety and Health Standards, promulgated by the Secretary of Labor under the "Occupational Safety and Health Act of 1970".

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

The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. All employees on the work and other persons who may be affected thereby.
2. All the work and all materials or equipment to be incorporated therein, whether in storage on or off the site.
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks pavements roadways, structures and utilities not designated for removal, relocating or replacement in the course of construction.

The Contractor shall designate a responsible member of his or her organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the HBCRA.

Until acceptance of the work by the City/CRA, it shall be under the charge and in care of the Contractor and he shall take every necessary precaution against injury or damage to the work by action of the elements or from the execution or from the non-execution of the work.

The Contractor shall rebuild, restore and make good, at his own expense, all injuries or damages to any portion of the work occasioned by any of the above causes before its completion and acceptance.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

26. RETAINAGE:

Retainage is applicable to Construction Contracts Only. The Contractor agrees that ten percent (10%) of monies earned by Contractor shall be retained by City/CRA until fifty percent (50%) completion of the project.

After 50% completion of the project and prior to Final Payment, City shall retain five percent (5%) of monies earned by Contractor.

The City may retain amounts greater than those set forth above that are the subject of a good faith dispute pursuant to Federal Statute 255.078 (6), the subject of a claim brought pursuant to Section 255.05, Florida Statutes, or otherwise the subject of a claim or demand by the City/CRA or Contractor.

27. AWARD OF CONTRACT:

The City/CRA exercises the right reserved herein to reject any or all bids. The Contract shall be awarded by the City/CRA to the responsive, responsible Bidder who has submitted either the lowest responsive bid or the lowest responsive bid on the base bid including such alternates as the City/CRA determines to be in its own best interests depending upon whichever is applicable to the particular bid.

28. CONTRACT FOR EXECUTION:

The City/CRA exercises the right reserved herein to reject any or all bids. The Contract shall be awarded by the City/CRA to the responsive, responsible Bidder who has submitted either the lowest responsive bid or the lowest responsive bid

on the base bid including such alternates as the City/CRA determines to be in its own best interests depending upon whichever is applicable to the particular bid.

The City's Form Contract is attached as part of this solicitation. The Vendor's submission of a Bid response without identifying variances expressly acknowledges and formally evidences the Vendor's acceptance of all terms and conditions of the form Contract. Any and all variances must be submitted in writing by the Vendor.

Contractor must be able to abide by and execute the City's Form Agreement, provided as part of this Bid, upon award of the Contract. The legal terms and conditions will bind the awarded Contractor for all of the years under Contract.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

29. BOYCOTT

Procurement Code Chapter 23-6(l) prohibits the City from procuring goods and services from, or otherwise contracting with a business which engages in the boycott of a person or entity based on race, color, religion, gender, national origin, or any other legally protected class. By virtue of response to this formal solicitation, Firm agrees it is and shall remain in full compliance with Section 23-6 (l) of the City of Hallandale Beach City Code.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

FORMS

**ALL FIRMS' MUST COMPLETE, SIGN AND RETURN ALL FORMS WITH
THE FIRM'S SUBMITTAL.**

**ALL FIRMS THAT ARE SUBMITTING A RESPONSE TO THIS BID, EITHER
THROUGH A JOINT VENTURE, A JOINT COLLABORATIVE PROPOSAL,
ETC. MUST SIGN
AND SUBMIT ALL FORMS AS PART OF THE RESPONSE TO THIS BID**

42ND YEAR CDBG BLOCK GRANT PROJECT
 PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
 Exhibit II – TERMS AND CONDITIONS

UNABLE TO SUBMIT A RESPONSE? We sincerely hope this is not the case. If your firm cannot submit a proposal at this time, please provide the information requested in the space provided below and return form to procurement_department@cohb.org.

HAVE RECEIVED THE BID

(COMPANY NAME)

UNABLE TO RESPOND TO THE BID AT THIS TIME DUE TO THE FOLLOWING REASONS:

COMPLETE INFORMATION BELOW:

SIGNATURE:	
TITLE:	
STREET ADDRESS: (OR)	
CITY:	
STATE:	ZIP CODE:
TELEPHONE/AREA CODE: ()	
EMAIL ADDRESS:	
RETURN THIS UNABLE TO SUBMIT FORM ONLY TO EMAIL ABOVE:	
CITY OF HALLANDALE BEACH	
PROCUREMENT DEPARTMENT	
400 SOUTH FEDERAL HIGHWAY, ROOM 242	
HALLANDALE BEACH, FL 33009	
TITLE: RE-BID # FY 2016-2017-009-001 42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT	

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

THIS PROPOSAL SUBMITTED BY:

COMPANY:
ADDRESS:
CITY & STATE:
ZIP CODE:
TELEPHONE:
DATE OF BID:
FACSIMILE NUMBER:
E-MAIL ADDRESS:
FEDERAL ID NUMBER:
NAME & TITLE PRINTED:
SIGNED BY:

WE (I) the above signed hereby agree to furnish the item(s), service(s) and have read all attachments including specifications, terms and conditions and fully understand what is required.

The Invitation to Bid, Specifications, Proposal Forms, and/or any other pertinent document form a part of this proposal and by reference made a part hereof. Signature indicates acceptance of all terms and conditions of the BID.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

LEGAL PROCEEDINGS FORM

Proposing firm must provide items a-d with your firm’s response as an attachment and checking off that documents were provided. Your firm must ensure your response is addressing by title for each item a-d below. If an item(s) is not applicable, your firm must check off as applicable stating “N/A” and authorized officer per Sunbiz to provide signature.

- a. **Arbitrations:** List all arbitration demands filed by or against your firm in the last five (5) years, and identify the nature of the claim, the amount in dispute, the parties and the ultimate resolution of the proceeding.

Check here if provided Check here if Not Applicable (N/A)

- b. **Lawsuits:** List all lawsuits filed by or against, your firm in the last five (5) years, and identify the nature of the claim, the amount in dispute, the parties, and the ultimate resolution of the lawsuit.

Check here if provided Check here if Not Applicable (N/A)

- c. **Other Proceedings:** Identify any lawsuits, administrative proceedings, or hearings initiated by the National Labor Relations Board, Occupational Safety and Health or similar state agencies in the past five (5) years concerning any labor practices or project safety practices by your firm. Identify the nature of any proceeding and its ultimate resolution.

Check here if provided Check here if Not Applicable (N/A)

- d. **Bankruptcies:** Has your firm or its parents or any subsidiaries ever had a Bankruptcy Petition filed in its name, voluntarily or involuntarily? (If yes, specify date, circumstances, and resolution).

Check here if provided Check here if Not Applicable (N/A)

I, _____,
Name of Authorized Officer per Sunbiz Title

of _____
Name of Firm as it appears on Sunbiz

I hereby attest that I have the authority to sign this notarized certification and certify that the above referenced information is true, complete and correct.

Signature of Authorized Officer per SunBiz

Print Name of Person Signing

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

PUBLIC ENTITY CRIME FORM

**SWORN STATEMENT PURSUANT TO SECTION 287.133(2) (a),
FLORIDA STATUTES,
PUBLIC ENTITY CRIME INFORMATION**

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

By: _____

Title: _____

Signed and Sealed _____ day of _____, 2017

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

Domestic Partnership Certification Form
--

This form must be completed and submitted with your firm's submittal.

Equal Benefits Requirements As part of the competitive solicitation and procurement process a Contractor seeking a Contract shall certify that upon award of a Contract it will provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses. Failure to provide such certification shall result in a Contractor being deemed non-responsive.

Domestic Partner Benefits Requirement means a requirement for City Contractors to provide equal benefits for domestic partners. Contractors with five (5) or more employees contracting with City, in an amount valued over \$50,000, provide benefits to employees' spouses and the children of spouses.

The firm providing a response, by virtue of the signature below, certifies that it is aware of the requirements of City of Hallandale Beach Ordinance 2013-03 Domestic Partnership Benefits Requirement, and certifies the following:

Check only one box below:

- 1. The Contractor certifies and represents that it will comply during the entire term of the Contract with the conditions of the Ordinance 2013-03, Section 23-3, Domestic Partner Benefits Requirement of the City of Hallandale Beach, or
- 2. The firm does not need to comply with the conditions of Ordinance 2013-03, Section 23-3, Domestic Partner Benefits Requirement of the City of Hallandale Beach, because of allowable exemption: **(Check only one box below):**
 - The firm's price for the contract term awarded is \$50,000 or less.
 - The firm employs less than five (5) employees.
 - The firm does not provide benefits to employees' spouses nor spouse's dependents.
 - The firm is a religious organization, association, society, or non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.
 - The firm is a government entity.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- The contract is for the sale or lease of property.
- The covered contract is necessary to respond to an emergency.
- The provision of Ordinance 2013-03, Section 23-3 Definition, of the City of Hallandale Beach, would violate grant requirements, the laws, rules or regulations of federal or state law.

I, _____,
Name of Authorized Officer per Sunbiz Title

of _____
Name of Firm as it appears on Sunbiz

hereby attest that I have the authority to sign this notarized certification and certify that the above referenced information is true, complete and correct.

Signature Print Name

STATE OF _____

COUNTY OF _____

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ DAY OF
_____, 20__ BY _____

TO ME PERSONALLY KNOWN OR PRODUCED IDENTIFICATION:

(Type of ID)

Signature of Notary Commission expires

Print Name of Notary Public

Seal Below:

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

CONFLICT OF INTEREST NOTIFICATION REQUIREMENT QUESTIONNAIRE

If you are an employee, board member, elected official(s) or an immediate family member of any such person, please indicate the relationship below. Pursuant to the City of Hallandale Beach Standards of ethics any potential conflict of interest must be disclosed and if requested, obtain a conflict of interest opinion or waiver from the Board of Directors prior to entering into a contract with the City.

1. Name of firm submitting a response to this Bid.

2. Describe each affiliation or business relationship with an employee, board member, elected official(s) or an immediate family member of any such person of the City of Hallandale Beach or Hallandale Beach Community Redevelopment Agency, if none so state.

3. Name of City of Hallandale Beach or Hallandale Beach Community Redevelopment Agency employee, board member, elected official(s) or immediate family member with whom filer/respondent/firm has affiliation or business relationship, if none so state.

4. Describe any other affiliation or business relationship that might cause a conflict of interest, if none so state.

CONFLICT OF INTEREST NOTIFICATION REQUIREMENT QUESTIONNAIRE

5.

Signature of Person/Firm

Date

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

DRUG-FREE WORKPLACE FORM

The undersigned vendor in accordance with Florida Statute 287.087

Hereby certified that _____ does:
(Name of Business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of or plea of guilty or nolo contendere to, any violation of Chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

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

DATE:	BIDDER'S SIGNATURE:
-------	---------------------

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

REFERENCE CHECK FORM

References will be required as a component of due diligence to determine the capability of firms to be able to perform the requirements of the project. **Your firm must send the Reference Check Form provided below to the number of references requested and submit with your firm's response.**

Each firm responding to this Bid must provide five (5) verifiable references for project of similar scope as outlined in this Bid. Your firm must send and obtain a completed Reference Check Form as found below to each of your firm's five (5) references. Your firm must include the completed five (5) Reference Check Forms within your firm's thumb drive.

Do not provide more or less than five (5) references.

The City will send the references provided a request for verification via email within no later than two (2) business days from receipt of proposal. If the references is not available or unable to respond within two (2) business days from email request, the reference shall not be considered valid.

Please make sure that the references listed in your firm's response are aware they will be receiving a verification of reference email from the City of Hallandale Beach to confirm the references which were submitted with the firm's response.

Each firm must also list the following information for each of the references provided.

- Name of firm-company for which work was provided.
- Name of Reference (Project Manager) charged with managing said project.
- Type of project. Year project started and was completed.
- Dollar amount of project, including change orders.
- Phone # for Reference (Project Manager).
- Updated email address for (Project Manager).

42ND YEAR CDBG BLOCK GRANT PROJECT
 PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
 Exhibit II – TERMS AND CONDITIONS

REFERENCE CHECK

RE-BID #FY 2016-2017-009-001 42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT PROJECT (CDBG) PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
PROPOSING FIRM'S NAME:

Name of Person and Title providing reference information:	
Telephone Number of Person providing references:	
E-mail Address	
PLEASE LIST NAME OF PROJECT AND DETAILED SERVICES:	

Please answer the following questions regarding services provided by the bidder.

QUESTIONS:

FIRM MUST EXPLAIN THE FOLLOWING IN THE SPACE PROVIDED:

1. What was the scope of the project completed by the Contractor?

2. What was the total cost of the project?

--

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

REFERENCE CHECK FORM

3. How did the company handle the paperwork, such as payroll and invoicing?

4. Was the project completed on schedule?

5. How did the contractor handle small construction changes in the field?

6. Was the project on budget?

7. If you had a similar project to undertake in the future, would the contractor be considered to perform the work?

YES	NO
-----	----

42ND YEAR CDBG BLOCK GRANT PROJECT
 PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
 Exhibit II – TERMS AND CONDITIONS

REFERENCE CHECK FORM

ITEMS 8 THROUGH 17 BELOW, 1 BEING LOWEST AND 5 BEING HIGHEST, WHAT RATING DO YOU GIVE THIS COMPANY.

8. Rate the level of commitment of the contractor to your project. Did the contractor devote the time and personnel necessary to successfully complete your project?

1 Lowest	2	3	4	5 Highest

9. Rate the competence and accessibility of the personnel directing, supervising and performing the work on your project.

1 Lowest	2	3	4	5 Highest

10. Rate the contractor’s success at keeping you updated and informed about the progression of the project, particularly when special needs or problems arise.

1 Lowest	2	3	4	5 Highest

11. Rate the contractor’s success at minimizing change orders for your project.

1 Lowest	2	3	4	5 Highest

If there were change orders, did your entity/firm request the change?

YES	NO
-----	----

42ND YEAR CDBG BLOCK GRANT PROJECT
 PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
 Exhibit II – TERMS AND CONDITIONS

REFERENCE CHECK FORM

If not, did you feel the change order(s) were a reflection on the contractor’s ability?

YES	NO
-----	----

12. Rate the contractor’s success at completing tasks within the timeline established for completion of your project.

1 Lowest	2	3	4	5 Highest

13. Rate the contractor’s success at completing your project within the contract price.

1 Lowest	2	3	4	5 Highest

14. Rate the contractor’s success at completing your project according to specifications and design standards.

1 Lowest	2	3	4	5 Highest

15. Rate the accessibility of the contractor after completion of your project.

1 Lowest	2	3	4	5 Highest

42ND YEAR CDBG BLOCK GRANT PROJECT
 PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
 Exhibit II – TERMS AND CONDITIONS

REFERENCE CHECK FORM

16. Rate the overall performance of the contractor on your project.

1 Lowest	2	3	4	5 Highest

17. Was the project a grant? If yes, how well did the contractor handle the grant related paperwork and/or requirements.

1 Lowest	2	3	4	5

Additional Comments:

PERSON PROVIDING REFERENCE PLEASE PRINT NAME:	
PLEASE PRINT TITLE:	

SIGNATURE: _____ **Date:** _____

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

PLEASE NOTE:

PAGES 32-72 CONTAIN THE CITY'S AGREEMENT. THIS AGREEMENT IS PROVIDED AS A REFERENCE. PLEASE REVIEW AND UNDERSTAND THE CITY'S EXPECTED TERMS AND CONDITIONS. FINAL AGREEMENT TO BE NEGOTIATED.

The proposing firm must provide and state any and all minor variances to this Bid, specifications, the Terms and Conditions and City Form Agreement found herein Exhibits I and II on the variance form.

After award of Contract through City Commission, via the Resolution, the awarded firm's Variance Form will be reviewed by appropriate City Staff, the City Attorney and the Risk Manager. If the minor variances presented by your firm are acceptable to the City, the Agreement will be routed to the awarded firm for execution by the authorized officer of the firm. The fully executed agreement will be required to be returned to the City of Hallandale Beach Procurement Department, Carolyn Allen-Smith, via email csmith@cohb.org within five (5) business days from receipt of the email from the Procurement Department to the awarded firm's contact. Failure to provide a duly executed agreement by the awarded firm to the City within five (5) business days from receipt may result in loss of award of such contract to your firm. Stringent variances requested to either the Bid, the Terms and Conditions and the City Form Agreement from your firm may result in the City rescinding award of contract to your firm.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

CONSTRUCTION
CONTRACT

00500. CONTRACT FORM

CONTRACT

THIS IS A CONTRACT, made and entered into this _____ day of _____, 20____, by and between The City of Hallandale Beach, hereinafter referred to as CITY and _____, hereinafter referred to as the CONTRACTOR.

WITNESSETH, that the CONTRACTOR and the CITY, for considerations hereinafter name, agree as follows:

ARTICLE 1

SCOPE OF WORK

1.1 The CONTRACTOR hereby agrees to furnish all of the labor, materials, equipment and services necessary to perform all of the work described in the Bid Project including Drawings (Design Plans), Specifications and Addenda thereto for the project entitled:

The work to be provided is outlined and includes to **RE-BID # FY 2016-2017-009-001 42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT PROJECT (CDBG) PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT**, which is hereby incorporated and made part of this Agreement by reference and Proposal submitted by CONTRACTOR, which is hereby incorporated and made part of this Agreement by reference.

At the _____ (date) 201_ City Commission Meeting the City Commission adopted Resolution # _____ awarded through **RE-BID # FY 2016-2017-009-001 42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROJECT PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT.**

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

The Contract value and per such Resolution # ____ shall not exceed \$_____.

- 1.2 The CONTRACTOR and the City's Project Manager will develop a single list of items required to render complete, satisfactory, and acceptable construction services, if applicable.

The City's Project Manager will contact the CONTRACTOR with the list of required items for this project and will provide a timeline for the CONTRACTOR to respond. The delivery of the list of items for the accomplishment of the construction project will be provided by the City's Project Manager to the CONTRACTOR within five (5) days of contract execution.

- a) For contracts less than \$10 million dollars the parties shall, within thirty (30) days of substantial completion, develop and deliver a list required for accomplishment of the Project. If the contract is more than \$10 million dollars the parties shall accomplish same within sixty (60) days.
- b) The final completion date under the Contract shall be extended at least thirty (30) days after the list is delivered in paragraph a above.

ARTICLE 2

CONTRACT TIME

- 2.1 Time is of the essence in this Contract. The work shall be substantial completed within seventy (70) calendar days from the Project Initiation Date specified in the Notice to Proceed, and completed and ready for final payment in accordance with Article 22 within ninety (90) calendar days from the Project Initiation Date specified in the Notice to Proceed.
- 2.2 Upon failure of the CONTRACTOR to substantially complete said Contract within the specified period of time (plus approved extensions, if any) the CONTRACTOR shall pay to CITY the sum of Five Hundred Dollars (\$500.00) for each calendar day after the time specified in paragraph 2.2 above (plus any approved extensions) for substantial completion. After substantial completion if CONTRACTOR shall neglect, refuse or fail to complete the remaining work within the Contract Time or any approved extension thereof, the CONTRACTOR shall pay to the CITY the sum of Five Hundred Dollars (\$500.00) for each calendar day after the time specified in paragraph 2.2. above (plus any approved

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

extensions) for completion and readiness for final payment. These amounts are not penalties but liquidated damages to the CITY. Liquidated damages are hereby fixed and agreed upon between the parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by the CITY as a consequence of such delay, and both parties desiring to obviate any question of dispute concerning the amount of said damages and the cost and effect of the failure of the CONTRACTOR to complete the Contract on time.

- 2.3 The CITY is authorized to deduct liquidated damage amount from the monies due to CONTRACTOR for the work under this Contract, or as much thereof as the CITY may, at its own option, deem just and reasonable.

ARTICLE 3

THE CONTRACT SUM

- 3.1 Payments shall be made at the Contract unit prices or lump sum prices applicable to each integral part of the Contract. These prices shall be full compensation for all costs associated with completion of all work in full conformity with the requirements as stated or shown, or both, in the Bid Project.
- 3.2 The CITY reserves the right to add or delete work items from the project to meets its available budget.
- 3.3 In consideration of the work, labor, services and materials to be furnished by the CONTRACTOR, in accordance with the plans and specifications, the City agrees to pay to the CONTRACTOR, upon the completion and acceptance thereof by the City, or its duly authorized agent, the total Contract price of \$(), in words ().

The Contract price may include a 10% contingency amount for change orders, not to exceed City Commission Resolution # _____ of \$_____ which may be authorized in accordance with applicable policies and procedures.

- 3.4 Sales and Use Taxes. The CITY is exempt from paying sales and use taxes on materials and equipment purchased for, and incorporated into the NAME OF PROJECT. As such, the CITY reserves the right to utilize a tax savings Direct Purchase Program (DPP) for direct purchases where possible and practical for this Project. The CITY shall make direct purchases of all materials and equipment

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

purchased for, or to be incorporated into the Project, as requested by the Contractor and agreed upon by the CITY in the form of a change order. All direct purchases of materials and equipment shall be made by the City with funds specifically allocated for the construction of the Project. The Contractor shall notify the CITY no later than **10 calendar days** after request by City of the requested materials and equipment to be purchased by the CITY for the Project. The standard City of Hallandale Beach Terms and Conditions applicable to this program are included as Attachment A to this section. Each equipment supplier that will supply equipment under the Direct Purchase Program shall be obligated to meet the requirements of the City of Hallandale Beach Terms and Conditions and the Technical Specifications.

The CITY's Project Manager shall manage the sales tax savings earned by the DPP. The credits for the tax savings and payments made directly to the VENDOR under the DPP shall be deducted from the total contract amount awarded, through a deductive change order. The Project Manager shall instruct the Contractor as to the direct purchase process as further described in the special conditions below.

3.4.1 The Contractor shall: (a) compile Contractor's and any Subcontractors' itemized requirement for materials and equipment, including quantities, unit costs, manufacturers' or vendors' catalogue or order numbers, delivery instructions, and other specific terms and information that are required to order the specific materials and equipment, and terms and conditions to be imposed on suppliers regarding delivery and submittal time requirements, and quantities thereof required by Contractor or Subcontractors in accordance with the applicable requirements of the Construction Contract, from time to time, during the construction of the Project, as materials and equipment need to be ordered for the Project, and submit such compilation to the CITY's Construction Project Manager; (b) prepare a requisition for such materials and equipment on the CITY's form of requisition; and (c) deliver any such requisition to the CITY's Project Manager no less than thirty (30) days prior to the date the manufacturer or vendor of the materials or equipment, as the case may be, requires orders for such materials or equipment to be placed to assure delivery of such materials or equipment to the Site in accordance with the Project Schedule (the "Order Date"). The requisition shall identify the Order Date. Upon receipt of any such requisition the CITY's Project Manager shall forward same to the CITY. The CITY shall issue a Purchase Order directly to the vendor of the materials or equipment, prior to the Order Date (a Purchase Order). The CITY shall include with any such Purchase Order, a copy of the CITY's sales and use tax exemption certificate. The CITY shall make direct payment to the vendor from the CITY's account.

3.4.2 The Contractor, upon the delivery of any such materials or equipment, shall verify the conformity of such materials or equipment with the terms of the Purchase Order and the Contract Documents. If the Contractor determines

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

that the materials and equipment are conforming, Contractor shall submit the invoice within twenty-four hours to City's Project Manager for approval. If the delivery of such materials or equipment is approved by the City's Project Manager, the CITY shall take title and possession of such material and equipment before such materials and equipment are incorporated into the Project. If the Contractor determines that the materials and equipment are non-conforming, the Contractor shall immediately notify the CITY in writing and the CITY shall reject such material and equipment.

- 3.4.3 The CITY shall assume all risk of loss on all materials and equipment purchased pursuant to its sales and use tax exemption, subject to the Provisions of Special Condition 3.4.4.
- 3.4.4 The Contractor shall be fully responsible for all matters relating to the receipt of materials and equipment furnished by the CITY in accordance with this Special Condition, including, but not limited to, the responsibility for verifying correct quantities, verifying documents or orders in a timely manner, coordinating purchases, providing and obtaining all warranties and guarantees required by the Contract Documents, inspection and acceptance of the materials and equipment at the time of delivery, and loss or damage to materials and equipment following acceptance of items due to the negligence of such Contractor or any Subcontractors. The Contractor shall coordinate delivery schedules, sequence of delivery, loading orientation, and other arrangements normally required by such Contractor for the particular materials furnished. The Contractor shall provide or arrange for all services required for the unloading, handling and storage of such materials and equipment through installation.
- 3.4.5 The Contractor shall visually inspect all shipments from material and equipment vendors purchased directly by the CITY in accordance with this Special Condition (the "CITY Furnished Materials") and approve the vendors' invoices for materials or equipment delivered, as CITY-Furnished Materials are furnished to the Site in accordance with this Special Condition. The Contractor shall assure that each delivery of CITY Furnished Materials is accomplished by documentation adequate to identify the Purchase Order against which the purchase is made. This documentation may consist of a delivery ticket and an invoice from the vendor conforming to the Purchase Order, together with such additional information as the CITY may require. The Contractor shall deliver to the CITY's Project Manager all invoices for materials and equipment upon verification by such Contractor that the materials and equipment conform exactly to the Contract Documents and the Purchase Order. Upon receipt of any invoice for CITY Furnished Materials, the CITY's Project Manager shall verify the conformity of such City Furnished Materials and if conforming approve such City Furnished

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

Materials. Upon approval the CITY's Project Manager shall deliver such invoice to the City for direct payment to the vendor.

- 3.4.6 The Contractor shall inspect all CITY Furnished Materials to determine that such CITY Furnished Materials conform to the Contract Documents, including the Drawings and the Specifications, and to determine prior to incorporation into the Work whether any such CITY Furnished Materials are patently defective, and whether such CITY Furnished Materials are identical to the materials ordered and match the description of the bill of lading and the Purchase Order. If Contractor discovers defective or non-conforming CITY Furnished Materials upon such visual inspection, Contractor shall: (a) not recommend acceptance of such non-conforming materials and equipment, (b) not utilize such non-conforming or defective materials in the Work; (c) not allow Subcontractor to utilize such non-conforming or defective materials in the Work; and (d) **promptly** notify the CITY's Project Manager, in writing, of the defective or non-conforming condition so that repair or replacement of those CITY Furnished Materials can occur without any undue delay or interruption to the Project. In the event that such Contractor fails to perform such inspection or otherwise incorporates into the Work such defective or non-conforming CITY Furnished Materials, the Contractor shall be responsible for the repair and replacement of defective or non-conforming materials, at its sole cost and expense.
- 3.4.7 The Contractor shall maintain records of all CITY Furnished Materials incorporated into the Work from the stock of CITY Furnished Materials. The Contractor shall account monthly to the CITY's Project Manager and CITY for any CITY Furnished Materials delivered to the Site, indicating which CITY Furnished Materials have been incorporated into the Work.
- 3.4.8 The Contractor shall be responsible for obtaining and managing all warranties and guarantees for all CITY Furnished Materials. All repair, maintenance or damage-repair calls shall be forwarded by the CITY or the Contractor to the Contractor for resolution with the appropriate vendor, or Subcontractor.
- 3.4.9 After the CITY takes possession of the CITY Furnished Materials at the Site, possession of the CITY's Furnished Materials shall immediately and automatically transfer to the Contractor without notice. The transfer of possession of CITY Furnished Materials from the CITY to the Contractor shall constitute a bailment for the mutual benefit of the CITY and such Contractor. The CITY shall be considered the bailor and such Contractor the bailee of the CITY Furnished Materials. CITY Furnished Materials shall be considered returned to the CITY for purposes of their bailment at such time as they are incorporated into the Project or consumed in the process of completing the Project.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- 3.4.10 The Contractor shall purchase and maintain builder's risk insurance, naming the CITY as an additional insured, sufficient to protect against loss of or damage to CITY Furnished Materials. Such insurance shall be in the amount stated elsewhere in the Contract and shall cover the full value of any CITY Furnished Materials between the time the CITY first takes title to and possession of any of such CITY Furnished Materials until final completion of the Work.
- 3.4.11 The CITY shall not be liable for any interruption or delay damages in the Project by virtue of ordering the CITY Furnished Materials, for any defects or other problems with the Project by virtue of ordering the CITY Furnished Materials, or for any extra costs resulting from any delay in the delivery of, or defects in, the CITY Furnished Materials.
- 3.4.12 The Contractor, on a monthly basis, shall review invoices submitted by all vendors of CITY Furnished Materials delivered to the Site during the prior month and either concur or object to the CITY's Issuance of payment to the vendors, based upon such contractor's records of materials delivered to the Site and whether any of the CITY Furnished Materials for which payment has not been made were either non-conforming or defective.
- 3.4.13 In order to arrange for the prompt payment to the vendor, the Contractor shall provide to the CITY's Project Manager a list of the acceptance of the goods or materials within fifteen (15) days of receipt of said goods or materials. Accompanying the list shall be a copy of the applicable Purchase Order, invoices, delivery tickets, written acceptance of the delivered items, and such other documentation as may be reasonably required by the CITY. Upon receipt of the appropriate documentation, the CITY shall prepare a check payable to the vendor based upon the receipt of data provided. This check will be released, delivered and remitted directly to the vendor. The Contractor shall assist the CITY to immediately obtain partial or final release of waivers as appropriate. The CITY shall not make any payment without the appropriate Contractor's concurrence and approval, which shall be delivered to the CITY by the CITY's Project Manager. Furthermore, the CITY shall not make any payment without the appropriate CITY's Project Manager concurrence and approval. There shall be no retention on CITY Furnished Materials against either the vendor, the Contractor(s) or the Subcontractor(s).
- 3.4.14 The Contractor may, in its reasonable discretion, require certain material and equipment vendors to provide a supply bond in the amount of one-hundred percent (100%) of the Purchase Order price. The supply bond, if

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

required, shall be issued by a qualified surety company authorized to do business in the State of Florida and acceptable to the CITY. If the supply bond is required, the costs thereof will be added to the amount of the Purchase Order. The Contractor shall verify that a vendor can furnish a supply bond. All bonds will name the CITY and the Contractor as additional obliges. To the extent that materials and equipment are purchased pursuant to the CITY's sales and use tax exemption, the Contractor shall reduce the Contract Amount for direct purchases by the CITY.

ARTICLE 4

INDEMNIFICATION

- 4.1 CONTRACTOR agrees to indemnify, save harmless and, at the City Attorney's option, defend or pay for an attorney selected by the City Attorney to defend CITY, their officers, agents, servants and employees against any and all claims, losses, liabilities and expenditures of any kind, including attorney's fees, court costs, and other expenses, caused by negligent act or omission of CONTRACTOR, any sub-contractors, their employees, agents, servants, or officers, or accruing, resulting from, or related to the subject matter of this Agreement including, without limitation, any and all claims, demands, or causes of action of any nature, whatsoever, resulting from injuries or damages sustained by any person or property. CONTRACTOR further agrees to indemnify and save harmless the CITY, their officers, agents and employees, for or on account of any injuries or damages received or sustained by any person or persons resulting from any construction defects, including latent defects. Neither the CONTRACTOR nor any of its sub-contractors will be liable under this section for damages arising out of intentional torts of CITY or their officers, agents or employees. In the event that any action or proceeding is brought against CITY by reason of any such claim or demand, CONTRACTOR, upon written notice from CITY, shall defend such action or proceeding.

CONTRACTOR shall require all of the subcontractors working for it to provide the aforementioned indemnification in all contracts and subcontracts entered into and arising out of work performed by CONTRACTOR in connection with the Project.

- 4.2 To the extent considered necessary by the City Attorney, any sums due to CONTRACTOR under this Agreement may be retained by CITY until all of CITY's claims for indemnification pursuant to this Agreement have

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- been settled or otherwise resolved; and any amount withheld shall not be subject to payment of interest by CITY.
- 4.3 In the event that any action or proceeding is brought by CONTRACTOR against CITY, CONTRACTOR hereby waives the right to a jury trial. The provisions of this Article shall survive the expiration or early termination of this Agreement.
- 4.4 Contractor acknowledges that it has received adequate consideration concerning the monetary limitation on the indemnification provided to City, which, shall not be less than \$1 million per occurrence.
- 4.5 To the fullest extent permitted by law, the CONTRACTOR agrees to indemnify and hold-harmless the City, its officers and employees from any claims, liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney fees to the extent caused, in whole or in part, by the professional negligence, error or omission of the CONTRACTOR or persons employed or utilized by the CONTRACTOR in performance of the Agreement.
- 4.6 To the fullest extent permitted by law, the CONTRACTOR agrees to indemnify and hold-harmless the City, its officers and employees from any claims, liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney fees to the extent caused, in whole or in part, by the recklessness or intentionally wrongful conduct, of the CONTRACTOR or persons employed or utilized by the CONTRACTOR in performance of the Agreement.
- 4.7 Nothing in this Agreement is intended to serve as a waiver of sovereign immunity, or of any other immunity, defense, or privilege enjoyed by the City pursuant to Section 768.28 Florida Statutes.

ARTICLE 5

INSURANCE REQUIREMENTS

The Contractor that will submit a response to the bid will be required to obtain and maintain the following insurance requirements for the life of the contract. The Certificate of Insurance will be required to be provided within the time specified in the notification provided by the Procurement Department after award of contract by the Commission.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

Contractor agrees to maintain, on a primary basis and at its sole expense, at all times during the life of any resulting contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Contractor is not intended to and shall not in any manner limit or qualify the liabilities or obligations *assumed* by Contractor under any resulting contract.

Commercial General Liability. Contractor agrees to maintain Commercial General Liability at a limit of liability not less than **\$1,000,000** Each Occurrence **\$2,000,000** Annual Aggregate. Contractor agrees it's coverage will not contain any restrictive endorsement(s) excluding or limiting Product/Completed Operations, Independent Contractors, Broad Form Property Damage, X-C-U Coverage, Contractual Liability or Cross Liability. The Operator agrees any Self-Insured-Retention or deductible shall not exceed \$25,000.

Business Automobile Liability. Contractor agrees to maintain Business Automobile Liability at a limit of liability not less than \$1,000,000 Each Occurrence. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event Operator does not own automobiles, Operator agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Contractor's Pollution Legal Liability. Contractor agrees to maintain Contractor's Pollution Legal Liability at a limit of liability not less than \$1,000,000 Each Occurrence \$2,000,000 Annual Aggregate. The CONTRACTOR agrees the policy shall include a minimum three (3) year Discovery (tail) reporting period, and a Retroactive Date that equals or precedes the effective date of the Contract, or the performance of Work hereunder. The Contractor agrees the Self-Insured-Retention shall not exceed \$25,000. This coverage may be provided on a Per-Project Basis.

Worker's Compensation & Employer's Liability. The Contractor agrees to maintain its own Worker's Compensation & Employers Liability Insurance. (NOTE: Elective exemptions or coverage through an employee leasing arrangement will NOT satisfy this requirement). _

Additional Insured Endorsements. The Contractor agrees to endorse the City as an Additional Insured on the Commercial General Liability with a CG 2010 10 01 Additional Insured - Owners, Lessees, or Contractors, or similar endorsement providing equal or broader Additional Insured coverage. If a CG2010 07 04 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization endorsement is provided by the Operator's Commercial General Liability, then the additional endorsement of GC2037 10 01 Additional Insured – Owners, Lessees, or Contractors – Completed Operations shall be required to provide back coverage for the contractor's "your work" as defined in the policy and liability arising out of the products-completed operations

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

hazard.. **(Attach an actual copy of the endorsement(s)...contact your insurance agent).**

The name of the organization endorsed as Additional Insured for all endorsement shall read "City of Hallandale Beach".

Deductibles, Coinsurance Penalties & Self-Insured Retention. Contractor agrees to be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, coinsurance penalty, self-insured retention, or coverage exclusion or limitation. For deductible amounts that exceed the amounts stated herein that are acceptable to City, the Contractor agrees, when requested by City, to maintain a Commercial Surety Bond in an amount equal to said deductible amount.

Waiver of Subrogation. Contractor agrees by entering into this written Contract to a Waiver of Subrogation in favor of the City, Contractor, sub-Contractor, architects, or engineers for each required policy providing coverage during the life of this Contract. When required by the insurer, or should a policy condition not permit the Operator to enter into a pre-loss agreement to waive subrogation without an endorsement, the Operator agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or an equivalent endorsement. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition that specifically prohibits such an endorsement, or voids coverage should the Operator enter into such an agreement on a pre-loss basis.

Right to Revise or Reject. Contractor agrees the City reserves the right, but not the obligation, to review or revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work / specifications affecting the applicability of coverage. Additionally, the City reserves the right, but not the obligation,

to review and reject any insurance policies failing to meet the criteria stated herein, or any insurer(s) providing coverage due of its poor financial condition or failure to operating legally in the State of Florida. In such events, City shall provide Operator written notice of such revisions or rejections.

No Representation of Coverage Adequacy. The coverages, limits or endorsements required herein protect the primary interests of the City, and the Contractor agrees in no way should these coverages, limits or endorsements required be relied upon when assessing the extent or determining appropriate types and limits of coverage to protect the Contractor against any loss exposures, whether as a result of the Project or otherwise.

Certificate of Insurance. Contractor agrees to provide City a Certificate of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect, and Certificates of Insurance shall provide a minimum thirty (30) day endeavor to notify, when available by Contractor's insurer. If the Contractor

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify the City by fax within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. When notified by City, the Contractor agrees not continue work pursuant to this Contract, unless all required insurance remains in effect.

The City shall have the right, but not the obligation, of prohibiting Contractor from entering the Work site until a new Certificate of Insurance is provided to the City evidencing the replacement coverage. The Contractor agrees the City reserves the right to withhold payment to Contractor until evidence of reinstated or replacement coverage is provided to the City. If the Contractor fails to maintain the insurance as set forth herein, the Contractor agrees the City shall have the right, but not the obligation, to purchase replacement insurance, which the Contractor agrees to reimburse any premiums or expenses incurred by the City.

The Contractor agrees the Certificate(s) of Insurance shall:

1. Clearly indicate the City has been endorsed on the Commercial General Liability with a CG 2010 10 01 Additional Insured - Owners, Lessees, or Contractors – Schedule Person or Organization, or similar endorsement providing equal or greater Additional Insured coverage, or collectively the CG2010 07 04 Additional Insured – Owners, Lessees, or Contractors – Scheduled Person or Organization and GC2037 10 01 Additional Insured – Owners, Lessees, or Contractors – Completed Operations, if applicable. **(Attach an actual copy of the endorsement...contact your insurance agent).**
2. Clearly indicate the project name and project number.
3. Clearly identify each policy's limits, flat & percentage deductibles, sub-limits, or self-insured retentions, which exceed the amounts or percentages set forth herein.
4. Clearly indicated Certificate Holder(s) as follows:

City of Hallandale Beach
400 South Federal Highway
Hallandale Beach, Florida 33009
5. Clearly indicate the City is endorsed as an Additional Insured on the Commercial Umbrella/Excess Liability.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

6. Clearly indicate the project name and project number.

ARTICLE 6

WEATHER

- 6.1 No extension of time shall be granted for delays resulting from normal weather conditions prevailing in the area as defined by the average of the last ten years of weather data as recorded by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration at the Fort Lauderdale Weather Station.
- 6.2 No more than one day of time extension shall be granted for each day the precipitation, in inches exceeds one (1) inch at the Weather Station, and only when fifty percent or more of the scheduled construction work force cannot work due occurrence of such precipitation on the day claimed.

ARTICLE 7

HURRICANE PRECAUTIONS

- 7.1 During such periods of time as are designated by the United States Weather Bureau as being a hurricane warning or alert, the CONTRACTOR, at no cost to the CITY, shall take all precautions necessary to secure the Project site in response to all threatened storm events, regardless of whether the CITY or CITY ENGINEER has given notice of same.
- 7.2 Compliance with any specific hurricane warning or alert precautions will not constitute additional work.
- 7.3 The contractor acknowledges that threatened tropical storm activity is normal in Broward County and the mere possibility that a warning or watch might be declared is not a basis for compensable or non-compensable extension of time. Tropical Storm Watches and Warnings will not automatically result in a compensable extension of time.

ARTICLE 8

PERMITS, LICENSES AND IMPACT FEES

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- 8.1 Except as otherwise provided within the Supplemental Conditions, all permits and licenses required by federal, state, local or county laws, rules and regulations necessary for the execution of the work undertaken by the CONTRACTOR pursuant to this Contract shall be secured and paid by the CONTRACTOR. It is the CONTRACTOR'S responsibility to determine that all zoning requirements have been met prior to obtaining any permits or licenses. It is the CONTRACTOR'S responsibility to have and maintain appropriate Certificate(s) of Competency, valid for the type of work to be performed and for the jurisdiction in which the work is to be completed.
- 8.2. Impact fees levied by any municipality shall be paid by the CONTRACTOR. CONTRACTOR shall be reimbursed only for the actual amount of the impact fee levied by the municipality as evidenced by an invoice or other acceptable documentation issued by the municipality. Reimbursement to the CONTRACTOR in no event shall include profit or overhead of the CONTRACTOR.
- 8.3 Necessity of complying with permit requirements. CONTRACTOR and the City agree that the failure of the Agreement to address a particular permit, condition, fee, term or restriction, shall not relieve CONTRACTOR of the necessity of complying with the law governing said permitting requirements, conditions, fee, terms and restrictions.

ARTICLE 9

DESIGN PLANS AND WORKING DRAWINGS

- 9.1 The Bid Project includes drawings (design plans) and specifications. The CITY, through the CITY ENGINEER, shall have the right to modify the details of these drawings (design plans) and specifications, to supplement said design plans and additional design plans, drawings or additional information as the work proceeds, all of which shall be considered as part of the Bid Project. In case of disagreement between the written and graphic portions of the Bid Project, the written portion shall govern.

ARTICLE 10

"OR EQUAL" CLAUSE:

- 10.1 Whenever a material, article or piece of equipment is identified in the Bid Project including drawings (design plans) and specifications by reference to manufacturers' or vendors' names, trade names, catalog numbers, or

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

otherwise, it is intended merely to establish a standard; and, unless it is followed by words indicating that no substitution is permitted because of form fit function and quality. Any material, article, or equipment of other manufacturers and vendors which will perform or serve the requirements of the general design will be considered equally acceptable provided the materials, article or equipment so proposed is, in the opinion of the CITY, equal in substance, quality and function.

- 10.2 The CITY ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or used without the CITY ENGINEER'S prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. CITY may require CONTRACTOR to furnish at CONTRACTOR'S expense a special performance bond or other Surety with respect to any substitute.

ARTICLE 11

DEFECTIVE WORK

- 11.1 The CITY ENGINEER shall have the authority to reject or disapprove work which he finds to be defective. The CONTRACTOR shall promptly either, as directed, correct all defective work or remove it from the site

and replace it with nondefective work. CONTRACTOR shall bear all direct, indirect and consequential costs of such removal or corrections including cost of testing laboratories and personnel.

- 11.2 If, within one year after substantial completion or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the CONTRACTOR shall correct it promptly without cost to the CITY, after receipt of written notice from the CITY to do so. Nothing contained herein shall be construed to establish a period of limitation with respect to any other obligation which the CONTRACTOR might have under the Contract Documents.

- 11.3 Should the CONTRACTOR fail or refuse to remove or correct any defective work performed or to make any necessary repairs in an acceptable manner, and in accordance with the requirements of the Contract with the time indicated in writing, the CITY shall have the authority to cause the unacceptable or defective work to be removed or

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

renewed, or make such repairs as may be necessary to be made at the CONTRACTOR'S expense. Any expense incurred by the CITY in which the CONTRACTOR has failed or refused to make shall be paid for out of any monies due or which may become due to the CONTRACTOR, or may be charged against the Performance and Payment Bond. Continue failure or refusal on the part of the CONTRACTOR to make any or all necessary repairs promptly, fully, and to declare the Contract forfeited, in which case the CITY at its option, may purchase materials, tools, and equipment and employ labor or may contract with other individual, firm or corporation, or may proceed with its own forces to perform the work. All costs and expenses incurred thereby shall be charged against the defaulting CONTRACTOR and the amount thereof deducted from any monies due, or which may become due to him, or shall be charged against the Performance and Payment Bond. Any special work performed, as described herein, shall not relieve the CONTRACTOR in any way from his responsibility for the work performed by him.

- 11.4 Failure to reject any defective work or material shall not in any way prevent later rejection when such defect is discovered, or obligate the CITY to final acceptance.

ARTICLE 12

SUBCONTRACTS

- 12.1 The CONTRACTOR shall, within 15 calendar days after the signing of the Contract, notify the CITY in writing of the names of Subcontractors proposed for the work. Such Subcontractor must be in compliance with the provisions of Chapter 9 of the Broward County Code of Ordinances and/or state law as it relates to Certificates of Competency. The CONTRACTOR shall have a continuing obligation to notify the CITY of any change in Subcontractors.
- 12.2 CONTRACTOR shall not employ any Subcontractor against whom CITY may have a reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor against whom CONTRACTOR has a reasonable objection.
- 12.3 The CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractors and of persons directly or indirectly employed by his Subcontractors and of persons for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between any subcontractor and the CITY or any obligation on the part of the CITY to pay or to see the

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

payment of any monies due any Subcontractor. The CITY may furnish to any Subcontractor evidence of amounts paid to the CONTRACTOR on account of specific work performed.

- 12.4 The CONTRACTOR agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the CITY.

ARTICLE 13

SEPARATE CONTRACTS

- 13.1 The CITY reserves the right to let other Contracts in connection with this work. The CONTRACTOR shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate this work with theirs.
- 13.2 If any part of the CONTRACTOR'S work depends for proper execution or results upon the work of any other contractor, the CONTRACTOR shall inspect and promptly report to the CITY ENGINEER any defects in such work that render it unsuitable for such proper execution and results. CONTRACTOR'S failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in other contractor's work after the execution of his work.
- 13.3 The CONTRACTOR shall conduct his operations so as to create no interference or impact on any other contractor on the site. Should such interference or impact occur, the CONTRACTOR shall be liable to the affected contractor for the cost of such interference or impact.
- 13.4 To ensure the proper execution of his subsequent work, the CONTRACTOR shall inspect the work already in place and shall at once report to the CITY ENGINEER any discrepancy between the executed work and the requirements of the Bid Project.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

ARTICLE 14

DAMAGE TO EXISTING FACILITIES, EQUIPMENT OR UTILITIES

- 14.1 CONTRACTOR shall have full responsibility for reviewing and checking such information and data, for locating all underground facilities shown or indicated in the Contract Documents, for coordination of the work with the owners of such underground facilities during construction, for the safety and protection thereof and for repairing any damage thereto resulting from the work, the cost of all of which will be considered as having been included in the Contract price.
- 14.2 During construction of buildings and/or during improvements, CONTRACTOR covenants and agrees that it shall safely maintain the site of construction activities and protect against damage to persons and property by reason of construction activities and will provide adequate security during non-construction periods. In the case of damage or loss to the building and/or improvements constructed on the property by CONTRACTOR in accordance with this Agreement, CONTRACTOR shall, as soon as possible after the occurrence of such loss or damage, repair or rebuild the buildings and/or improvements in such manner that the buildings and/or improvements after such repairing or rebuilding shall be of the same general character as set forth in this Agreement and the approved Scope of Work and at least equal in value to the buildings and improvements prior to such loss or damage. Such repairs shall begin within ninety (90) calendar days after such occurrence or if rebuilding is required, such rebuilding shall be begun within one hundred eighty (180) calendar days after such occurrence and in either case shall be completed in a reasonable time, subject to extension for Permitted Delays; provided insurance funds are made available to CONTRACTOR for such repair or rebuilding, in which event CONTRACTOR shall commence repairs or rebuilding within one hundred eighty (180) days from the date of occurrence. CONTRACTOR shall have the reasonable right to extend the time period for rebuilding in the event of a major catastrophic event (similar in scope and widespread damage to Hurricane Andrew) which would reasonably affect the ability to secure insurance proceeds, labor, public services, and other required elements to reasonably begin said rebuilding. CONTRACTOR shall pay for all such repairing and rebuilding so that the property and the buildings and improvements shall be free and clear of all liens of mechanics and materials and similar liens arising out of such repair, rebuilding or reconstruction of the buildings and improvements.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

ARTICLE 15

MONITORING REPORTS

- 15.1 CONTRACTOR shall provide the City, in a format reasonably acceptable to the City and CONTRACTOR, information, data and reports to be used by the City in monitoring CONTRACTOR'S performance in carrying out the Project.

ARTICLE 16

CHANGE OF CONTRACT TIME

- 16.1 The "Contract Time" may only be changed by a Change Order. Any claim for an extension of the "Contract Time" shall be based on written notice delivered by the party making the claim to the CITY ENGINEER and the City's Project Manager within 7 calendar days of the beginning of the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within 15 days after the end of such occurrence (unless the CITY allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to

which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the "Contract Time" shall be determined by the CITY ENGINEER in accordance with paragraph 16.2, if CITY and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the "Contract Time" will be valid if not submitted in accordance with the requirements of this paragraph.

- 16.2 The CITY ENGINEER and/or City's Project Manager must submit the request of an extension of the "Contract Time" with the written information provided by the CONTRACTOR and with a written explanation as to why the extension shall be allowed to the City Manager for approval.

If the City Manager approves the request, the "Contract Time" will be extended in an amount equal to time lost due to delays beyond the control of and through no fault or negligence of the CONTRACTOR. Such delays shall include, but not limited to, acts or neglect by CITY or the CITY ENGINEER, or by any employee of either, or any separate contractor employed by the CITY, fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

16.3 No Damages for Delay:

Except as provided in Article 1.2(a) and (b) NO CLAIM FOR DAMAGES OR ANY CLAIM OTHER THAN FOR AN EXTENSION OF TIME SHALL BE MADE OR ASSERTED AGAINST THE CITY BY REASON OF ANY DELAYS. The CONTRACTOR shall not be entitled to an increase in the Contract Sum or payment or compensation of any kind from the CITY for direct, indirect, consequential, impact or other costs, expenses or damages, including but not limited to costs of acceleration or inefficiency, arising because of delay, disruption, interference or hindrance from any cause whatsoever, whether such delay, disruption, interference or unforeseeable, or avoidable or unavoidable; provided, however, that this provision shall not preclude recovery of damages by the CONTRACTOR for hindrances or delays due solely to fraud, bad faith or active interference on the part of the CITY or its agents. Otherwise, the CONTRACTOR shall be entitled only to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above.

16.4 Changes in the Work or Terms of Contract Documents:

16.4.1 Without invalidating the Contract and without notice to any surety, CITY reserves and shall have the right, from time to time to make such increases, decreases or other changes in the character or quantity of the Work as may be considered necessary or desirable to complete fully and acceptably the proposed construction in a satisfactory manner. Any extra or additional work within the scope of this Project must be accomplished by means of appropriate Field Orders and Supplemental Instructions or Change Orders. Surety waives its right to notice of changes in the Contract Terms and/or Contract Price.

16.4.2 Any changes to the terms of the Contract Documents must be contained in a written document, executed by the parties hereto, with the same formality and of equal dignity prior to the initiation of any work reflecting such change, except as provided for in Subparagraph 16.4.1, above. This section shall not prohibit the issuance of Change Orders executed only by the City Manager_as hereinafter provided.

16.5 Field Orders and Supplemental Instructions:

The CITY ENGINEER and the City's Project Manager, shall have the right to approve and issue Field Orders setting forth written interpretations of the intent of the Contract Documents and ordering minor changes in Work

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

execution, providing the Field Order involves no change in the Contract Price or the Contract Time. CITY ENGINEER shall have the right to approve and issue Supplemental Instructions setting forth written orders, instructions, or interpretations concerning the Contract Documents or its performance, provided such Supplemental Instructions involve no change in the Contract Price or the Contract Time.

ARTICLE 17

CHANGE ORDERS

- 17.1 Changes in the quantity or character of the Work within the scope of the Project which are not properly the subject of Field Orders or Supplemental Instructions, including all changes resulting in changes in the Contract Price, or the Contract Time, shall be authorized only by Change Orders approved in advance by the City Manager.
- 17.2 CONTRACTOR shall not start work on any changes requiring an increase in the Contract Price or the Contract Time until a Change Order setting forth the adjustments is approved by the City Manager. Upon receipt of a Change Order, CONTRACTOR shall promptly proceed with the work set forth within the document.
- 17.3 In the event satisfactory adjustment cannot be reached for any item requiring a change in the Contract Price or Contract Time, and a Change Order has not been issued, CITY reserves the right at its sole option to either terminate the Contract as it applies to the items in question and make such arrangements as may be deemed necessary to complete the disputed work; to remove the disputed work from the scope of work and to process a unilateral change order reducing the contract price; or submit the matter in dispute to CITY ENGINEER. During the pendency of the dispute, and upon receipt of a Change Order approved by the City Manager, CONTRACTOR shall promptly proceed with the change in the Work involved and advise the CITY ENGINEER and City's Project Manager in writing within seven (7) calendar days of CONTRACTOR's agreement or disagreement with the method, if any, provided in the Change Order for determining the proposed adjustment in the Contract Price or Contract Time.
- 17.4 Under circumstances determined necessary by CITY, Change Orders may be issued unilaterally by the City Manager without consent of Surety.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

ARTICLE 18

VALUE OF CHANGE ORDER WORK

18.1 The value of any work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

18.1.1. By mutual acceptance of a lump sum which CONTRACTOR and the City Manager acknowledge contains a component for overhead and profit.

18.1.2. On the basis of the "cost of work," determined as provided in Sections 18.2 and 18.3, plus a CONTRACTOR's fee for overhead and profit that is determined as provided in Section 18.4.

18.2 The term "cost of work" means the sum of all direct costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work described in the Change Order. Except as otherwise may be agreed to in writing and approved by the City Manager, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in Section 18.3.

18.2.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the work described in the Change Order under schedules of job classifications agreed upon by CITY and approved by the City Manager and CONTRACTOR. Payroll costs for employees not employed full time on the work covered by the Change Order shall be apportioned on the basis of their time spent on the work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay application thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing the work after regular working hours, on Sunday or legal holidays shall be included in the above to the extent authorized by the City Manager.

18.2.2. Cost of all materials and equipment furnished and incorporated in the work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless CITY deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to CITY. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

CITY and CONTRACTOR shall make provisions so that they may be obtained. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by CITY ENGINEER and the costs of transportation, loading, unloading, installation, dismantling and removal thereof, all in accordance with the terms of said agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the work.

18.2.3. Payments made by CONTRACTOR to Subcontractors for work performed by Subcontractors. If required by CITY, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to CITY ENGINEER who will then determine which bids will be accepted. If the Subcontract provides that the Subcontractor is to be paid on the basis of cost of the work plus a fee, the Subcontractor's cost of the work shall be determined in the same manner as CONTRACTOR'S cost of the work. All Subcontractors shall be subject to the other provisions of the Contract Documents insofar as applicable, including but not limited to the CITY'S False Claims Ordinance.

18.2.4. Cost of special engineers, including, but not limited to, engineers, architects, testing laboratories, and surveyors employed for services specifically related to the performance of the work described in the Change Order.

18.2.5. Supplemental costs including the following:

8.2.5.1 The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the work except for local travel to and from the site of the work or to Contractor's home office or branch office.

18.2.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the work, and cost less market value of such items used but not consumed which remains the property of CONTRACTOR.

18.2.5.3. Sales, use, or similar taxes related to the work, and for which CONTRACTOR is liable, imposed by any governmental authority, provided however, that the Contractor shall not be paid or, or reimbursed, the cost of fines and penalties levied by entities other than the City of Hallandale Beach.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

18.2.5.4. Deposits lost for causes other than CONTRACTOR's negligence; royalty payments and fees for permits and licenses.

18.2.5.5. The cost of utilities, fuel and sanitary facilities at the site.

18.2.5.6. Receipted minor expenses such as telegrams, long distance telephone calls (except to Contractor's home office or branch offices), telephone service at the site, expressage and similar petty cash items in connection with the work.

18.2.5.7. Cost of premiums for additional bonds and insurance required because of changes in the work or default by the Contractor.

18.3 The term "cost of the work" shall not include any of the following:

18.3.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, lawyers, scheduling consultants, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed or retained by CONTRACTOR or surety, whether at the site or in its principal or a branch office for general administration of the work and not specifically included in the agreed-upon schedule of job classifications referred to in Section 18.2.1., all of which are to be considered administrative costs covered by CONTRACTOR's fee.

18.3.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

18.3.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the work and charges against CONTRACTOR for delinquent payments.

18.3.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same, except for additional bonds and insurance required because of cardinal changes in the work.

18.3.5. Costs due to the negligence or neglect of CONTRACTOR, any Subcontractors, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

18.3.6. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in Section 18.2.

18.4 CONTRACTOR's fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

18.4.1. A mutually acceptable fixed fee or,

18.4.2. If none can be agreed upon, a fee based on the following percentages of the various portions of the cost of the work:

18.4.2.1. For costs incurred under Sections 18.2.1 and 18.2.2, CONTRACTOR's fee shall not exceed ten percent (10%).

18.4.2.2. For costs incurred under Section 18.2.3, CONTRACTOR's fee shall not exceed seven and one half percent (7.5%); and if a subcontract is on the basis of cost of the work plus a fee, the maximum allowable to the Subcontractor as a fee for overhead and profit shall not exceed ten percent (10%); and

18.4.2.3. No fee shall be payable on the basis of costs itemized under Sections 18.2.4 and 18.2.5, (except Section 18.2.5.3), and Section 18.3.

18.5 The amount of credit to be allowed by CONTRACTOR to CITY for any such change, which results in a net decrease in cost, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the combined overhead and profit, if otherwise allowed, shall be figured on the basis of the net increase or decrease, if any, however, CONTRACTOR shall not be entitled to claim lost profits for any Work not performed.

18.6 Whenever the cost of any work is to be determined pursuant to Sections 18.2 and 18.3, CONTRACTOR will submit in a form acceptable to CITY ENGINEER an itemized cost breakdown together with the supporting data.

18.7 Where the quantity of any item of the Work that is covered by a unit price is increased or decreased by more than twenty percent (20%) from the quantity of such work indicated in the Contract Documents, an appropriate Change Order shall be issued to adjust the unit price, if warranted.

18.8 Whenever a change in the Work is to be based on mutual acceptance of a lump sum, whether the amount is an addition, credit or no change-in-cost, CONTRACTOR shall submit an initial cost estimate acceptable to CITY ENGINEER and the City's Project Manager.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

18.8.1. Breakdown shall list the quantities and unit prices for materials, labor, equipment and other items of cost.

18.8.2. Whenever a change involves CONTRACTOR and one or more Subcontractors and the change is an increase in the Contract Price, overhead and profit percentage for CONTRACTOR and each Subcontractor shall be itemized separately.

18.9 Each Change Order must state within the body of the Change Order whether it is based upon unit price, negotiated lump sum, or "cost of the work."

ARTICLE 19

TERMINATION FOR CONVENIENCE

- 19.1 The CITY may terminate the Contract for its convenience, at any time, with or without cause, upon thirty (30) days written notice to CONTRACTOR.
- 19.2 Upon such notice of termination, CONTRACTOR will immediately terminate its performance and turn over all of its work product (e.g. plans to the CITY).
- 19.3 CONTRACTOR will then submit a final statement to the CITY for all services performed (based on percentage of project completion) ten days after the date on the notice of termination for convenience.
- 19.4 The CONTRACTOR is precluded from recovering damages for loss of anticipated, but unearned profit on the Contract, as well as consequential damages.

ARTICLE 20

SHOP DRAWINGS

- 20.1 The CONTRACTOR shall submit Shop Drawings for all equipment, apparatus, machinery, fixtures, piping, wiring, fabricated structures and manufactured articles. The purpose of the Shop Drawings is to show the suitability, efficiency, technique of manufacture, installation requirements, details of the item and evidence of its compliance or noncompliance with the Bid Project.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- 20.2 The CONTRACTOR shall thoroughly review and check the Shop Drawings and each and every copy shall show this approval thereon.
- 20.3 If the Shop Drawings show or indicate departures from the Contract requirements, the CONTRACTOR shall make specific mention thereof in his letter of transmittal. Failure to point out such departures shall not relieve the CONTRACTOR from his responsibility to comply with the Bid Project.
- 20.4 The CITY ENGINEER'S approval of the Shop 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 Shop Drawings shall be performed until the said Drawings have been approved by the CITY ENGINEER. Approval shall not relieve the CONTRACTOR from responsibility for errors or omissions of any sort on the Shop Drawings.
- 20.5 The CONTRACTOR shall keep one set of Shop Drawings marked with the CITY ENGINEER'S approval at the job site at all times.

ARTICLE 21

PROGRESS PAYMENTS

All invoices and/or bills and/or requests for payments and/or application for payment are to be sent to the City Engineer and the City's Project Manager.

- 21.1 The CONTRACTOR may request payments for work completed at intervals of not more than once a month. The CONTRACTOR'S requisition shall show a complete breakdown of the project components, the quantities completed and the amount due, together with such supporting evidence as may be required by the CITY ENGINEER. Each requisition shall be submitted in triplicate to the CITY ENGINEER for approval. CITY shall make payment to the CONTRACTOR within 25 days after approval by the CITY ENGINEER of CONTRACTOR'S requisition for payment.
- a) Overdue notice. The CONTRACTOR may send the City an overdue notice if the invoice is not paid or rejected within the time frame in Section 21.1, and four (4) business days following the delivery of overdue notice the payment required by the City shall be accepted, rejected or rejected in part.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- 21.2 Retainage: The CONTRACTOR agrees that ten percent (10%) of monies earned by CONTRACTOR shall be retained by CITY until fifty percent (50%) completion of the project. After 50% completion of the project and prior to Final Payment, the Contractor may request a reduction of retainage to five percent (5%) of monies earned by CONTRACTOR. The CITY may retain amounts greater than those set forth above that are the subject of a good faith dispute pursuant to Federal Statute 255.078 (6), the subject of a claim brought pursuant to Section 255.05, Florida Statutes, or otherwise the subject of a claim or demand by the CITY or CONTRACTOR.
- 21.3 The CITY may withhold in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
- 21.3.1. Defective work not remedied.
- 21.3.2. Claims filed or reasonable evidence indicating probable filing of claims by other parties against the CONTRACTOR.
- 21.3.3. Failure of the CONTRACTOR to make payments properly to Subcontractors or for material or labor.
- 21.3.4. Damage to another Contractor not remedied.

When the above grounds are removed or resolved or the CONTRACTOR provides a surety bond or a consent of Surety, satisfactory to the CITY which will protect the CITY in the amount withheld, payment may be made in whole or in part.

ARTICLE 22

ACCEPTANCE AND FINAL PAYMENT

- 22.1 Upon receipt of written notice from the CONTRACTOR that the work is ready for final inspection and acceptance, the CITY shall within ten days make an inspection thereof. If the CITY finds the work acceptable under the Contract and the Contract work has been fully performed, payment shall be issued by the CITY, stating that the work required by the Contract has been completed and is accepted under the terms and conditions thereof.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

- 22.2 Before issuance of the Final Certificate for Payment, the CONTRACTOR shall deliver to the CITY a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and an Affidavit certifying that all suppliers and Subcontractors have been paid in full and that all other indebtedness connected with the work has been paid, and a consent of the Surety of Final Payment. The CITY may withhold final payment under the same terms and conditions as set forth in Section 21.3 above.
- 22.3 If, after the work has been substantially completed, full completion thereof is materially delayed through no fault of the CONTRACTOR, the CITY shall, without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute waiver of claims.
- 22.4 The making and acceptance of the final payment shall constitute a waiver of all claims by the CITY, other than those arising from faulty or defective work, failure of the work to comply with requirements of the Contract Documents or terms of any special warranties required by the Contract Documents. It shall also constitute a waiver of all claims by the CONTRACTOR, except those previously made in writing and identified by the CONTRACTOR as unsettled at the time of the application for final payment.

ARTICLE 23

CITY'S RIGHT TO TERMINATE CONTRACT

- 23.1 If CONTRACTOR fails to begin the Work within fifteen (15) calendar days after the Project Initiation Date, or fails to perform the Work with sufficient workers and equipment or with sufficient materials to insure the prompt completion of the Work, or shall perform the Work unsuitably, or cause it to be rejected as defective and unsuitable, or shall discontinue the prosecution of the Work pursuant to the accepted schedule or if CONTRACTOR shall fail to perform any material term set forth in the Contract Documents or if CONTRACTOR shall become insolvent or be declared bankrupt, or commit any act of bankruptcy or insolvency, or shall make an assignment for the benefit of creditors, or for any other cause whatsoever shall not carry on the Work in an acceptable manner, CITY may give notice in writing to CONTRACTOR and its Surety of such delay, neglect or default, specifying the same. Nevertheless, Surety waives its right to notice pursuant to this paragraph. If CONTRACTOR, within a period of ten (10) calendar days after such notice, shall not proceed in accordance therewith, then CITY may neglect or default the CONTRACTOR and CONTRACTOR's failure to comply

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

with such notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Project site and take the prosecution of the Work out of the hands of CONTRACTOR, and appropriate or use any or all materials and equipment on the Project site as may be suitable and acceptable. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Project is completed. In addition CITY may enter into an agreement for the completion of the Project according to the terms and provisions of the Contract Documents, or use such other methods as in City's sole opinion shall be required for the completion of the Project according to the terms and provisions of the Contract Documents, or use such other methods as in City's sole opinion shall be required for the completion of the Project in an acceptable manner. All damages, costs and charges incurred by CITY, together with the costs of completing the Project and any fines or levies that may be assessed against the City by any governmental entity or by Broward County as a result of late completion of the Project, shall be deducted from any monies due or which may become due to CONTRACTOR. In case the damages and expenses so incurred by CITY shall exceed the unpaid balance, then CONTRACTOR shall be liable and shall pay to CITY the amount of said excess.

- 23.2 If after notice of termination of CONTRACTOR's right to proceed, it is determined for any reason that CONTRACTOR was not in default, the rights and obligations of CITY and CONTRACTOR shall be the same as if the notice of termination had been issued pursuant to the Termination for Convenience clause as set forth in Article 19.

ARTICLE 24

CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If CITY ENGINEER received CONTRACTOR's proper invoice and/or bill and/or request for payment and/or application for payment, and should CITY ENGINEER fail to review and approve or state in writing reasons for not approving, or for rejecting, of the Application for Payment within twenty-five (25) business days after it is presented, then CONTRACTOR shall provide CITY with written notice of same, and if CITY fails either to pay CONTRACTOR within four (4) business days after CITY receives CONTRACTOR's notice, CITY shall notify CONTRACTOR in writing of any objection to the Application for Payment, then CONTRACTOR shall, give a second written notice to CITY of such delay, neglect or default, specifying the same and if CITY, within a period of ten (10) calendar days after such second notice shall not remedy the delay, neglect, or default upon which the notice is based, then CONTRACTOR may stop work or terminate this Contract and recover from CITY payment for all work executed and reasonable expenses

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

sustained therein plus reasonable termination expenses. In such event, the contract shall be deemed terminated for convenience, and CONTRACTOR shall be paid for all work executed and expenses incurred prior to termination in addition to termination settlement costs reasonably incurred by CONTRACTOR relating to commitments, which had become firm prior to the termination. Payment shall include reasonable profit for work/services performed. No payment shall be made for profit for work or services that have not been performed or for consequential damages.

ARTICLE 25

DIFFERING SITE CONDITIONS

In the event that during the course of the Work CONTRACTOR encounters subsurface or concealed conditions at the Project site which differ materially from those shown on the Contract Documents and from those ordinarily encountered and generally recognized as inherent in work of the character called for in the Contract Documents and Supplementary Conditions; or unknown physical conditions of the Project site, of an unusual nature, which differ materially from that ordinarily encountered and generally recognized as inherent in work of the character called for in the Contract Documents in the locales such as that where the work is to be done, CONTRACTOR shall, within twenty-four (24) hours of their discovery, notify CITY in writing of the existence of the aforesaid conditions. CITY shall, within two (2) business days after receipt of CONTRACTOR's written notice, investigate the site conditions identified by CONTRACTOR. If, in the sole opinion of CITY ENGINEER with the consent of City's Project Manager, the conditions do materially so differ and cause an increase or decrease in CONTRACTOR's cost of, or the time required for, the performance of any part of the Work, CITY ENGINEER shall recommend an equitable adjustment to the Contract Price, or the Contract Time, or both. If CITY and CONTRACTOR cannot agree on an adjustment in the Contract Price or Contract Time, the adjustment shall be referred to CITY ENGINEER for determination in accordance with the provision for resolving disputes. Should CITY ENGINEER determine that the conditions of the Project site are not so materially different to justify a change in the terms of the Contract, CITY ENGINEER shall so notify CONTRACTOR in writing, stating the reasons, and such determination shall be final and binding upon the parties hereto.

No request for an equitable adjustment or change to the Contract Price or Contract Time for differing site conditions shall be allowed if made after the date certified by CITY ENGINEER as the date of substantial completion.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

ARTICLE 26

RESOLUTION OF DISPUTES

- 26.1 To prevent all disputes and litigation, it is agreed by the parties hereto that the CITY ENGINEER shall decide all questions, claims, difficulties and disputes of whatever nature which may arise relative to the technical interpretation of the Contract Documents and fulfillment of this Contract as to the character, quality, amount and value of any work done and materials furnished, or proposed to be done or furnished under or, by reason of, the Contract Documents and CITY ENGINEER's estimates and decisions upon all claims, questions, difficulties and disputes shall be final and binding to the extent provided in Section 26.2. Any claim, question, difficulty or dispute which cannot be resolved by mutual agreement of CITY and CONTRACTOR shall be submitted to CITY ENGINEER in writing within twenty-one (21) calendar days. Unless a different period of time is set forth herein, CITY ENGINEER shall notify CONTRACTOR in writing of CITY ENGINEER's decision within twenty-one (21) calendar days from the date of the submission of the claim, question, difficulty or dispute, unless CITY ENGINEER requires additional time to gather information or allow the parties to provide additional information. All non-technical administrative disputes shall be determined by the CITY ENGINEER and the City's Contract Manager pursuant to the time periods provided herein. During the pendency of any dispute and after a determination thereof, CONTRACTOR and CITY shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction.
- 26.2 In the event the determination of a dispute under this Article is unacceptable to either party hereto, the party objecting to the determination must notify the other party in writing within ten (10) days of receipt of the written determination. The notice must state the basis of the objection and must be accompanied by a statement that any Contract Price adjustment claimed is the entire adjustment to which the objecting party has reason to believe it is entitled to as a result of the determination. Within sixty (60) days after a disputed invoice or during Final Completion of the Work, the parties shall participate in settlement discussions to address all objections to any determinations hereunder and to attempt to prevent litigation. Should any objection not be resolved, the parties retain all their legal rights and remedies provided under State law. This article shall not limit the CITY'S rights under the CITY'S False Claims Ordinance.

ARTICLE 27

APPLICABLE LAW AND VENUE

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

The parties expressly agree that this Contract shall be construed and interpreted in accordance with the laws of the State of Florida. Venue for adjudication of disputes and litigation concerning this CONTRACT shall be in Broward County, Florida.

BY ENTERING INTO THIS AGREEMENT, CONTRACTOR AND CITY HEREBY EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT.

Nothing in this Agreement is intended to serve as a waiver of sovereign immunity, or of any other immunity, defense, or privilege enjoyed by the City pursuant to Section 768.28 Florida Statutes.

ARTICLE 28

CONTRACT DOCUMENTS

- 28.1 This Contract incorporates by reference the following documents: the Bid Project including drawings (design plans) and specifications, the Notice for Bids, the Addenda to the Bid Project, the Bid Tender Form, the record of Contract awarded by the City of Hallandale Beach, the Contract, the Performance and Payment Bond, any additional documents the submission of which is required by this Bid Project, the Notice of Award, the Notice to Proceed, and the Purchase Order.
- 28.2 Where there is a conflict between any provision set forth within the General Conditions and a more stringent state or federal provision which is applicable to this Project, the more stringent state or federal provision shall prevail.
- 28.3 This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, or understandings applicable to the matters contained herein and the parties agree that there are not commitments, agreements, or understandings concerning the subject matter of these Contract Documents that are not contained herein. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written.
- 28.4 By execution of this Agreement, CONTRACTOR does certify that CONTRACTOR has been duly authorized by delivery of this Agreement and all other documents, certificates, agreements, consents and

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

receipts, and to take any and all other actions of any kind whatsoever in order to accomplish the purposes and undertakings of this Agreement

ARTICLE 29

NONDISCRIMINATION, EQUAL OPPORTUNITY

AND AMERICANS WITH DISABILITIES ACT

- 29.1 CONTRACTOR shall not unlawfully discriminate against any person in its operations and activities in its use or expenditure of funds or any portion of the funds provided by this Agreement and shall affirmatively comply with all applicable provisions of the Americans with Disabilities Act (ADA) in the course of providing any services funded in whole or in part by CITY, including Titles I and II of the ADA (regarding nondiscrimination on the basis of disability), and all applicable regulations, guidelines and standards.

CONTRACTOR's decisions regarding the delivery of services under this Agreement shall be made without regard to or consideration of race, age, religion, color, gender, sexual orientation (Broward County Code, Chapter 16 ½), gender identity, gender expression, national origin, marital status, physical or mental disability, political affiliation, or any other factor which cannot be lawfully or appropriately used as a basis for service delivery.

CONTRACTOR shall comply with Title I of the Americans with Disabilities Act regarding nondiscrimination on the basis of disability in employment and further shall not discriminate against any employee or applicant for employment because of race, age, religion, color, gender, sexual orientation, gender identity, gender expression, national origin, marital status, political affiliation, or physical or mental disability. In addition, CONTRACTOR shall take affirmative steps to ensure nondiscrimination in employment against disabled persons. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay, other forms of compensation, terms and conditions of employment, training (including apprenticeship, and accessibility).

CONTRACTOR shall take affirmative action to ensure that applicants are employed and employees are treated without regard to race, age, religion, color, gender, sexual orientation (Broward County Code, Chapter 16 ½), gender identity, gender expression, national origin, marital status, political affiliation, or physical or mental disability during employment. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff;

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

termination, rates of pay, other forms of compensation, terms and conditions of employment, training (including apprenticeship), and accessibility.

CONTRACTOR shall not engage in or commit any discriminatory practice in violation of the Broward County Human Rights Act (Broward County Code, Chapter 16 ½) in performing any services pursuant to this Agreement.

29.2 DOMESTIC PARTNER BENEFITS REQUIREMENT

CONTRACTOR certifies, and has provided the Domestic Partnership Certification Form, that it would provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses.

CONTRACTOR shall comply with the applicable provisions of this section.

- (i) The Contractor certifies and represents that it will comply with this section during the entire term of the Contract.
- (ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.
- (iii) The City may terminate the Contract if the Contractor fails to comply with this section.
- (iv) The City may retain all monies due or to become due until the Contractor complies with this section.

30. PUBLIC ENTITY CRIME ACT

CONTRACTOR represents that the execution of this Agreement will not violate the Public Entity Crime Act, Section 287.133, Florida Statutes, as may be amended from time to time, which essentially provides that a person or affiliate who is a contractor, or other provider and 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 CITY, may not submit a bid on a contract with CITY for the construction or repair of a public building or public work, may not submit bids on leases of real property to CITY, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with CITY, and may not transact any business with CITY in excess of the threshold amount provided in Section 287.017, Florida Statutes, as may be amended from time to time, for category two purchases for a period of 36 months from the date of being placed on the convicted vendor list. Violation of this section shall result in termination of this Agreement and recovery of all monies paid by CITY

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

pursuant to this Agreement, and may result in debarment from CITY's competitive procurement activities.

In addition to the foregoing, CONTRACTOR further represents that there has been no determination, based on an audit, that it committed an act defined by Section 287.133, Florida Statutes, as a "public entity crime" and that it has not been formally charged with committing an act defined as a "public entity crime" regardless of the amount of money involved or whether CONTRACTOR has been placed on the convicted vendor list.

30. RIGHTS IN DOCUMENTS AND WORK

Any and all reports, photographs, surveys, and other data and documents provided or created in connection with this Agreement are and shall remain the property of CITY; and, if a copyright is claimed, CONTRACTOR grants to CITY a non-exclusive license to use the copyrighted item(s) indefinitely, to prepare derivative works, and to make and distribute copies to the public. In the event of termination of this Agreement, any reports, photographs, surveys, and other data and documents prepared by CONTRACTOR, whether finished or unfinished, shall become the property of CITY and shall be delivered by CONTRACTOR to the City's Contract Administrator within seven (7) days of termination of this Agreement by either party. Any compensation due to CONTRACTOR shall be withheld until all documents are received as provided herein.

31. AUDIT RIGHT AND RETENTION OF RECORDS

CITY shall have the right to audit the books, records, and accounts of CONTRACTOR and its subcontractors that are related to this Project. CONTRACTOR and its subcontractors shall keep such books, records, and accounts as may be necessary in order to record complete and correct entries related to the Project. All books, records, and accounts of CONTRACTOR and its subcontractors shall be kept in written form, or in a form capable of conversion into written form within a reasonable time, and upon request to do so, CONTRACTOR or its subcontractor, as applicable, shall make same available at no cost to CITY in written form.

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

CONTRACTOR and its subcontractors shall preserve and make available, at reasonable times for examination and audit by CITY, all financial records, supporting documents, statistical records, and any other documents pertinent to this Agreement for the required retention period of the Florida Public Records Act, Chapter 119, Florida Statutes, as may be amended from time to time, if applicable, or, if the Florida Public Records Act is not applicable, for a minimum period of three (3) years after termination of this Agreement. If any audit has been initiated and audit findings have not been resolved at the end of the retention period or three (3) years, whichever is longer, the books, records, and accounts shall be retained until resolution of the audit findings. If the Florida Public Records Act is determined by CITY to be applicable to CONTRACTOR's and its subcontractors' records, CONTRACTOR and its subcontractors shall comply with all requirements thereof; however, no confidentiality or non-disclosure requirement of either federal or state law shall be violated by CONTRACTOR or its subcontractors. Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for CITY's disallowance and recovery of any payment upon such entry.

CONTRACTOR shall, by written contract, require its subcontractors to agree to the requirements and obligations of this Section.

If the CONTRACTOR has questions regarding the application of Chapter 119, Florida Statutes, to the CONTRACTOR'S duty to provide public records relating to the Agreement, contact the custodian of public records at City_Clerk_Office@hallandalebeachfl.gov; City of Hallandale Beach, City Hall, 400 South Federal Highway, Hallandale Beach, FL 33009, 954-457-1340.

32. NOTICES

Whenever either party desires or is required to provide notice to the other as addressed in this contract, such notice must be in writing, sent by certified United States Mail, postage prepaid, return receipt requested, or sent by commercial express carrier with acknowledgement of delivery, or by hand delivery with a request for a written receipt of

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

acknowledgment of delivery, or by email provided that the notice is also sent by one of the foregoing methods, and addressed to the party for whom it is intended at the place last specified. The place for giving notice shall remain the same as set forth herein until changed in writing in the manner provided in this section. For the present, the parties designate the following:

City of Hallandale Beach

Roger M. Carlton, City Manager
400 South Federal Highway
Hallandale Beach, FL 33009

With Copy to:

MANAGING DEPARTMENT

And:

Jennifer Merino, City Attorney
400 South Federal Highway
Hallandale Beach, FL 33009

And:

Procurement Department
400 South Federal Highway
Hallandale Beach, FL 33009

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

Contractor:

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: CITY OF HALLANDALE BEACH through its authorization to execute same by COMMISSION action on the _____ day of _____, 20_____, signing by and through its City Manager, duly authorized to execute same, and

_____, signing by and
(name of contractor)

through its _____ duly authorized to execute same.
(title of authorized officer)

CITY

ATTEST:

CITY OF HALLANDALE BEACH

City Clerk

By _____
Roger M. Carlton, City Manager

_____ day of _____, 20_____.

Approved as to form by
City Attorney

By _____
Jennifer Merino, City Attorney

42ND YEAR CDBG BLOCK GRANT PROJECT
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT
Exhibit II – TERMS AND CONDITIONS

CONTRACTOR MUST EXECUTE THIS CONTRACT AS INDICATED BELOW.
USE CORPORATION OR NONCORPORATION FORMAT, AS APPLICABLE.

(If incorporated sign below).

CONTRACTOR

ATTEST:

(Name of Corporation)

(Secretary)

By _____
(Signature and Title)

(Corporate Seal)

(Type Name and Title Signed Above)

____ day of _____, 20____.

(If not incorporated sign below).

CONTRACTOR

WITNESSES:

(Name)

By _____
(Signature)

(Typed Name Signed Above)

____ day of _____, 20____.



Hallandale Beach
PROGRESS. INNOVATION. OPPORTUNITY.

**INVITATION TO BID (ITB)
RE-BID # FY 2016-2017-009-001**

**42ND YEAR COMMUNITY DEVELOPMENT BLOCK GRANT
PROJECT (CDBG)
PUBLIC WORKS STORMWATER IMPROVEMENTS PROJECT**

**EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS**

**PREPARED BY:
CALVIN GIORDANO & ASSOCIATES, INC.
CITY OF HALLANDALE BEACH
DEPARTMENT OF PUBLIC WORKS
PROCUREMENT DEPARTMENT**

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT



HALLANDALE BEACH STORMWATER 42 YEAR CDBG

City Bid No. FY 20162017009001

AUGUST 2017

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

TABLE OF CONTENTS

CITY OF HALLANDALE BEACH

HALLANDALE BEACH STORMWATER 42 YEAR CDBG

CGA Project No. 16-9047

TECHNICAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

- 01010 SUMMARY OF WORK
- 01015 GENERAL REQUIREMENTS
- 01025 MEASUREMENT AND PAYMENT
- 01030 SPECIAL PROJECT PROCEDURES
- 01041 PROJECT COORDINATION
- 01045 CUTTING AND PATCHING
- 01050 FIELD ENGINEERING AND SURVEYING
- 01090 REFERENCES
- 01152 APPLICATIONS FOR PAYMENT
- 01200 PROJECT MEETINGS
- 01310 CONSTRUCTION SCHEDULES
- 01340 SHOP DRAWINGS, WORKING DRAWINGS, AND SAMPLES
- 01370 SCHEDULE OF VALUES
- 01380 CONSTRUCTION PHOTOGRAPHS
- 01381 AUDIO/VIDEO PRE-CONSTRUCTION RECORD
- 01410 MATERIALS AND INSTALLATION TESTING
- 01505 CONTROL OF WORK
- 01510 TEMPORARY UTILITIES
- 01530 EXISTING UTILITIES
- 01540 SECURITY
- 01550 SITE ACCESS AND STORAGE
- 01570 TRAFFIC REGULATION
- 01600 MATERIAL AND EQUIPMENT
- 01670 TESTING PIPING SYSTEMS
- 01700 CONTRACT CLOSEOUT
- 01710 CLEANING
- 01720 PROJECT RECORD/AS-BUILT DOCUMENTS
- 01730 OPERATING AND MAINTENANCE DATA
- 01740 WARRANTIES AND BONDS

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

DIVISION 2 – SITE WORK

- 02100 SITE PREPARATION
- 02200 EARTHWORK
- 02205 CLEARING AND GRUBBING
- 02210 FINISH GRADING
- 02221 TRENCHING, BEDDING AND BACKFILL FOR PIPE
- 02420 SOIL PREPARATION AND SOIL MIXES
- 02430 SODDING
- 02510 WALKWAYS
- 02513 ASPHALT CONCRETE PAVING
- 02580 PAVEMENT MARKINGS AND SIGNING
- 02630 STORM DRAINAGE
- 02631 HIGH PERFORMANCE POLYPROPYLENE STORM GRAY PIPE
(HP STORM GRAY PIPE)
- 02640 GEOTECHNICAL REPORT
- 02650 SOFT DIGS REPORT BY US POTHOLING & AIR EXCAVATION
- 02660 BROWARD COUNTY SURFACE WATER MANAGEMENT GENERAL
LICENSE (GL2017-042)
- 02670 BROWARD COUNTY TRAFFIC ENGINEERING DIVISION REVIEW

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This section includes general descriptions of the Contractor use of site, location of work, description of work, work sequence, owner occupancy and work by others.

1.02 RELATED SECTIONS

- A. Section 01015 – General Requirements
- B. Section 01025 – Measurement and Payment
- C. Section 01030 – Special Project Procedures
- D. Section 01505 – Control of Work
- E. Other Sections as applicable.

1.03 REFERENCES (NOT USED)

1.04 CONTRACTOR USE OF SITE

- A. The Contractor shall limit his area of work to remain within those properties and easements as depicted in the Drawings or as approved in writing by the Owner.
- B. Contractor's use of lands other than those depicted in the Drawings shall require written approval from the land owner and be at the Contractors risk and cost.

1.05 LOCATION OF WORK

- A. The work is generally located along SW 8th Street, SW 9th Street and at the following intersections in City of Hallandale Beach:
 - 1. SW 8th Street and SW 10th Avenue
 - 2. SW 8th Street and SW 9th Avenue
 - 3. SW 9th Street and SW 10th Avenue
 - 4. SW 9th Street and SW 9th Avenue
 - 5. SW 9th Street and SW 8th Avenue

1.06 DESCRIPTION OF WORK

The following is a general list of the work included. It is not intended to be complete. Consult the contract drawings and specifications for all contract requirements.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1. Mobilization
2. Maintenance of Traffic (MOT)
3. Storm Water Pollution Prevention and Erosion Control
4. Clearing/Grubbing, Demolition, Removal & Disposal
5. Pavement Marking & Signing
6. Earthwork, Excavation & Embankment, Site Grading
7. Drainage pipe
8. Storm manholes
9. Storm Inlets, Catch Basins
10. Exfiltration Trench
11. Concrete curbs, gutter, curb & gutter
12. Swale restoration, Sod Restoration
13. Concrete Walkways/Sidewalk
14. Asphalt Driveway Restoration
15. Asphalt Pavement milling
16. Asphalt Pavement Resurfacing
17. Site Restoration

1.07 WORK SEQUENCE (NOT USED)

1.08 OWNER OCCUPANCY

- A. Cooperate with Owner to minimize conflict, and to facilitate Residences and Owner's operations.
- B. Schedule the Work to accommodate this requirement.

1.09 WORK BY OTHERS

- A. The Contractor is advised that work by others may take place during the duration of the contract time. It shall be the Contractor's responsibility to coordinate and schedule all Work as not to delay or hinder his work or the work by others.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01015

GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section provides for miscellaneous provisions applicable to the Work.
- B. All work specified in this Section will not be paid for directly, but will be considered as incidental work.

1.02 RELATED SECTIONS

- A. Section 01030 – Special Project Procedures
- B. Section 01310 – Construction Schedules
- C. Section 01340 – Shop Drawings, Working Drawings and Samples
- D. Section 01720 – Project Record/As-built Documents
- E. Other Sections as applicable.

1.03 REFERENCES

- A. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

1.04 SAFETY

- A. All work shall be done in a safe manner and in strict compliance with all requirements of the Federal Occupational Safety and Health Act (OSHA), The Florida Trench Safety Act and all other State and local safety and health regulations.

1.05 APPLICABLE CODES

- A. The Contractor shall comply with the applicable standards codes and specifications governing the Contract Documents whether City, County, State or Federal. The Contractor is obligated to notify the Owner and Engineer of any deficiency contained in the Contract Documents immediately upon discovery. Where conflicts exist in such, the more stringent shall govern.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.06 APPLICABLE PERMITS AND LICENSES

- A. The Contractor shall abide by all permit conditions, whether, general, specific, limited or otherwise. A copy of all applicable permits and licenses, with the exception of City permits obtained by the Contractor, are attached hereto and made a part of the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 PRE-CONSTRUCTION RESPONSIBILITIES

- A. Upon receipt of the Notice To Proceed, the Contractor shall arrange for a Pre-Construction meeting. The meeting shall be held with a minimum of one weeks' notice and shall include the Engineer, the Owner and Representatives for all affected utility companies.

3.02 TEMPORARY UTILITIES

- A. The Contractor shall be responsible to arrange for and supply all temporary utilities including, but not limited to, water, sewer and electricity.
- B. The cost of temporary utilities will be considered incidental to the cost of the Work. The work specified in this Section will not be paid for directly, but will be considered as incidental work.

3.03 UNDERGROUND LOCATING SERVICE

- A. Prior to underground construction, the Contractor is required by the Underground Facility Damage Prevention and Safety Act, Chapter 556 FS to contact Sunshine 811, for the location of underground utilities.

3.04 ADVANCE INVESTIGATIONS

- A. The Contractor shall be responsible for uncovering and exposing existing utilities sufficiently in advance of pipe laying operations to confirm elevation, size, material and clearance separation(s). If, upon excavation, an existing utility is found to be in conflict with the proposed construction or be of a size or material different from what is shown on the plans, the Contractor shall immediately notify the Engineer, who will in turn prepare a recommendation. Failure of the Contractor to perform advance investigations shall not relieve it of any claims for delay or damages.

3.05 PRESERVATION AND RESTORATION

- A. Contractor shall be responsible for the preservation and protection of property adjacent to the work site against damage or injury as a result of his operations under this project. Any damage or injury occurring on account of any act, omission or neglect on the part of the Contractor shall be restored in a proper and satisfactory

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

manner or replaced by and at the expense of the Contractor to an equal or superior condition than previously existed.

3.06 CONTRACTOR USE OF PREMISES

- A. Contractor shall have limited use of the premises for construction operations, including limited use of the site. The Contractor's use of the premises is further limited to the Owner's right to perform construction operations with its own forces or to employ separate contractors on portions of the project.
- B. The Contractor shall be responsible for coordinating his daily activities in conjunction with any Contractors presently working within the vicinity of this project.
- C. Confine operations to areas within project areas shown on plans and easements.
- D. Keep existing driveways and entrances serving the premises clear and available to the Owner, Residents and the Owner's employees at all times.
 - 1. Do not use these areas for parking or storage of materials.
 - 2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

3.07 DISPOSAL

- A. Do not dispose of any unsuitable fill, hazardous or organic material onsite. All such material shall be disposed of in a legal manner by the Contractor, the cost of which shall be included in the Bid.

3.08 ENVIRONMENTAL PROTECTION

- A. Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result.

3.09 MATERIAL AND EQUIPMENT

- A. Substitutions: After Bidding period, up to 30 days after date of Notice to Proceed, the Engineer will consider written requests from Contractor for proposed substitutions of products. Subsequent requests will be considered only in case of product unavailability or other condition beyond control of the Contractor.
 - 1. Do not order or install substitute products without written acceptance from the Engineer of Record.
 - 2. Do not imply or indicate substitutions on shop drawings or product data submittals without a separate formal request.
 - 3. Engineer will determine acceptability of substitution in accordance with plans and specifications.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

4. Only one request for substitution for each product will be considered. If not accepted, Contractor shall provide specified product.
- B. Product selection is governed by the Contract Documents and governing regulations, not by previous project experience.
1. Where a single or multiple products or manufacturers are named, provide one of the products indicated or submit a request for substitution for any product or manufacturer not named unless no substitution is permitted.
 2. Where the Specifications only require compliance with performance requirements, an imposed code, standard or regulation, select a product that complies with the requirements, standards, codes or regulations specified.
 3. Manufacturers named in a Specification section are those manufacturers considered capable of manufacturing products conforming to the specified requirements. The naming of a particular manufacturer does not imply acceptance or approval of just any standard product of that manufacturer.

3.10 ADJUSTMENT OF EXISTING UTILITIES

- A. The Contractor shall raise or lower all manholes, valve boxes, etc. to finished grade. The cost of these adjustments will be considered incidental to the cost of the Work. The work specified in this Section will not be paid for directly, but will be considered as incidental work.

3.11 TREES AND LANDSCAPING WITHIN PROJECT LIMITS

- A. General: The CONTRACTOR shall exercise all necessary precautions so as not to damage or destroy any trees or landscaping on the project site, and shall not trim or remove any trees or landscaping unless such trees or landscaping have been approved for trimming or removal by the jurisdictional agency or owner. All existing trees or landscaping which are damaged during construction shall be replaced by the CONTRACTOR or a certified tree/landscaping company to the satisfaction of the owner.
- B. Replacement: The CONTRACTOR shall immediately notify the jurisdictional agency or owner if any tree or landscaping is damaged by the CONTRACTOR's operations. If, in the opinion of the jurisdictional agency or owner, the damage is such that replacement is necessary, the CONTRACTOR shall replace the tree or landscaping at its own expense. The tree or landscaping shall be of a like size and variety as the tree or landscaping damaged, or, if of a smaller size, the CONTRACTOR shall pay any compensatory payment.

3.12 EXISTING IRRIGATION

- A. All existing irrigation systems (if not shown on irrigation plans) within the area of the Work shall be restored to original condition or better and adjusted to finished grade. The cost of repairs and/or adjustment to existing irrigation will be considered incidental to the cost of the Work. The work specified in this Section will not be paid for directly, but will be considered as incidental work.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.13 DEWATERING

- A. In accordance with SFWMD criteria contained in 40E-2.061 F.A.C., a dewatering permit is not required provided the following provisions are met:
1. Maximum daily pumpage is less than 5 million gallons (MG) and a maximum total project pumpage of less than 100 MG over a one year period;
 2. All discharge shall remain on the project site;
 3. No dewatering shall occur to a depth below elevation 0.0 feet NGVD within 1,000 feet of saline water, except when dewatering water with a chloride concentration of greater than 1,000 milligrams per liter;
 4. No dewatering shall occur within 100 feet of a wastewater treatment plant rapid-rate land application system permitted under Part IV of Chapter 62-610, F.A.C.;
 5. No dewatering shall occur within 1,000 feet of a known landfill or contamination; and,
 6. No dewatering shall occur within 1,000 feet of a freshwater wetland unless dewatering activities are completed within 60 days.
 7. All dewatering operations are subject to the Permit Conditions in Section 5.0 of the SFWMD APPLICANT'S HANDBOOK FOR WATER USE PERMIT APPLICATIONS (07-16-2014), including responsibility for mitigating any harm that may occur as a result of the dewatering to existing legal uses, off-site land uses, or natural resources.
- B. The Contractor shall apply for a dewatering permit through the SFWMD if any of the above conditions cannot be met.
- C. The cost of dewatering permit and dewatering work will be considered incidental to the cost of the Work. The work specified in this Section will not be paid for directly, but will be considered as incidental work.

3.14 DEMOLITION

- A. Limits of demolition which may be shown in the Contract Documents are general in nature. Actual limits of demolition shall be as determined by the field conditions in conformance with the requirements of the Work.
- B. All sidewalks within the limits of construction which are not ADA compliant (cross-slopes which exceed 2% and/or running slopes which exceed 5% and/or changes in level of ¼" or greater) shall be demolished and reconstructed to meet these requirements.
- C. When sidewalk tie-ins exist outside the limits of construction which are not ADA compliant, the contractor shall replace those sections as directed by the Owner.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section includes administrative and procedural requirements for determining Work completed under the unit price contract.
- B. Any items that are not assigned specific bid item number or not listed in Bid Form or Bid Schedule but are required to complete the project scope of work per plans, details and specifications will be considered incidental to the contract and no additional payment will be made for such items.

1.02 RELATED SECTIONS

- A. Bid Form or Bid Schedule
- B. Section 01030 – Special Project Procedures
- C. Section 01152 – Applications for Payment
- D. Section 01370 – Schedule of Values
- E. Other Sections as applicable.

1.03 REFERENCE STANDARDS

- A. Manual of Uniform Traffic Control Devices (MUTCD)
- B. FDOT Standard Specification for Road and Bridge Construction (Standard Specifications)
- C. FDOT Design Standards for Design, Construction, Maintenance and Utility Operations in the State Highway System (Standard Indexes)
- D. Broward County Public Works and Transportation Department, Highway Construction and Engineering Division Minimum Standards

1.04 GENERAL REQUIREMENTS

- A. Prices shall include all costs required for the completed, in-place construction of the specified unit of work. This may include but not be limited to, materials and delivery; cost of installation; incidentals; labor including social security, insurance, and other required fringe benefits; workman's compensation insurance; bond premiums; rental of equipment and machinery; taxes; testing; surveys; incidental expenses; and supervision.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Installation, acceptance and payment shall be in accordance with the REFERENCE STANDARDS.
- C. The Owner reserves the right to reject the Contractor's measurement of completed work that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.
- D. Contract Sum adjustments will be by Change Order on basis of net accumulative change for each unit price category.
 - 1. Except as otherwise specified, unit prices shall apply to both deductive and additive variations of quantities.
 - 2. Lump sum and unit prices in the Agreement shall remain in effect until date of final completion of the entire Work.
- E. Partial payment for material and equipment properly stored and protected will be made in accordance with requirements of the General Conditions.
- F. No separate payment will be made for Record Drawings or As-built Drawings.
- G. Abbreviations:
 - 1. Acre - AC
 - 2. Allowance - AL
 - 3. Cubic Yard - CY
 - 4. Each - EA
 - 5. Furnish and Install - F & I
 - 6. Gallons - GA
 - 7. Gross Mile - GM
 - 8. Linear Feet - LF
 - 9. Lump Sum - LS
 - 10. Million Gallons - MG
 - 11. Net Mile - NM
 - 12. Square Foot - SF
 - 13. Square Yard - SY
 - 14. Ton - TN

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS - BID ITEM NO. 1.01

- A. Payment shall be made as a percentage of the Lump Sum Price.
- B. The Lump Sum Price shall include the cost of bonds, insurance, licenses and all administrative costs not specifically identified in other bid items.
- C. The Lump Sum Price shall exclude the cost of construction material and installation.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.02 MOBILIZATION AND DEMOBILIZATION - BID ITEM NO. 1.02

- A. Payment shall be made as a percentage of the Lump Sum Price.
- B. The Lump Sum Price shall include compensation for all labor, materials, equipment and all other incidentals required for all temporary facilities, transportation, communications, office, maintenance, project signs, and any other pre- or post-construction expenses necessary for the start or cessation of the Work, not specifically identified in the costs of the work.
- C. The Lump Sum Price shall exclude the cost of construction material and installation.
- D. No further payment shall be made for remobilization unless all of the work is suspended by the Engineer for a period in excess of three months and through no fault to the Contractor.
- E. The Lump Sum Price shall not exceed five percent (5%) of the contract price.

3.03 MAINTENANCE OF TRAFFIC - BID ITEM NO. 1.03

- A. Payment shall be made as a percentage of the Lump Sum Price.
- B. The Lump Sum Price shall include compensation for required labor, materials, all necessary temporary pavement markings and signing for vehicles and pedestrians, temporary pavement, temporary business signage, professional fees, and equipment necessary to provide traffic control for two way traffic at all times in accordance with the plans and specifications.
- C. MOT permits and approvals from the applicable regulatory agencies, including but not limited to FDOT, Broward County Highway Construction and Engineering Division, and the City of Hallandale Beach, are the responsibility of the contractor. All MOT plans are to be sealed by a Florida Registered Engineer holding a current FDOT MOT certificate.
- D. MOT shall include both vehicular and pedestrian requirements.
- E. Temporary pavement markings and signage shall be provided wherever existing has been damaged, removed, or is no longer visible. The temporary markings shall be maintained until final markings are installed after asphalt resurfacing.
- F. Payment item for Maintenance of Traffic shall not exceed four percent (5%) of the contract price.

3.04 PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION - BID ITEM NO. 1.04

- A. Payment shall be made as a percentage of the Lump Sum Price.
- B. The Lump Sum Price shall include full compensation for all equipment, materials, supplies, and labor necessary to prepare, obtain permit approvals from governing agencies, and implement the prevention, control, and abatement of erosion and water pollution. Work shall include but not be limited to mulching, sand bagging,

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

slope drains, sediment basins, berms, baled hay or straw, inlet protection, silt fences and staked turbidity barriers, floating turbidity barrier, rock bags, artificial coverings and other items relating to the construction/removal and routine maintenance, including mowing, or the prevention, control and abatement of erosion and water pollution plan.

3.05 CLEARING & GRUBBING, DEMOLITION, REMOVAL & DISPOSAL – BID ITEM NO. 1.05

- A. Payment shall be made as a percentage of the Lump Sum Price.
- B. The Lump Sum Price shall include full compensation for all equipment, materials, supplies, and labor necessary to perform clearing & grubbing, demolition, stripping, and other items described in plans, details, and specifications, and disposal of such materials and debris.
- C. This bid item includes, but not limited to, removal and disposal of existing sidewalk, removal and disposal of existing driveway material, removal and disposal of existing curb & gutter, removal and disposal of existing pavement markings and RPMs, removal & disposal of existing signs & sign posts, removal and disposal of existing drainage structures, removal and disposal of existing drainage structures and pipes, removal and disposal of unsuitable or excess material, etc.
- D. All materials from clearing & Grubbing, demolition, and removal actions shall be legally disposed of off-site as determined by the Contractor. All disposal costs shall be included in the Bid Item.

3.06 EARTH WORK, EXCAVATION & EMBANKMENT, SITE GRADING – BID ITEM NO. 1.06

- A. Payment shall be made as a percentage of the Lump Sum Price.
- B. The Lump Sum Price shall include full compensation for all equipment, materials, supplies, and labor necessary to complete earth work, excavation & embankment, site grading as required to complete the project scope of work per plans, details and specifications. This bid item includes all required testing and inspections.

3.07 PAVEMENT MARKINGS AND SIGNAGE – BID NO. 1.07 THRU 1.14

- A. Payment for this item shall be made at the contractor's Unit Price. The Contractor's Unit Price shall include full compensation for all supervision, labor, equipment, and materials required to complete the work in accordance with the plans and specifications. The price also includes temporary paint for all thermoplastic markings.
- B. The Contractor's Unit Price shall include full compensation for all supervision, labor, equipment, and materials required to complete the work in accordance with the plans and specifications. This includes Retro-Reflective Pavement Markers; Thermoplastic, Standard, White, Solid, 24"; Thermoplastic, Standard, White, Solid, 12"; Thermoplastic, Standard, White, Messages; Thermoplastic, Standard, Yellow, Solid, 6"; temporary paint; Thermoplastic, Standard, White, Speed Hump; Single Post Sign (F&I), Multi-Post Sign (F&I),

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.08 DETECTABLE WARNING SURFACE (CAST-IN-PLACE) – BID ITEM NO. 1.15

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and install cast-in-place detectable warning surface for sidewalk and curb ramps per plans, details and specifications.

3.09 15" HP STORM GRAY PIPE (HIGH PERFORMANCE POLYPROPYLENE PIPE) – BID ITEM NO. 1.16

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and install complete drainage pipe and end sections at the locations called for in the plans.
- B. The contractor shall furnish and construct joints and connections to existing pipes, catch basins, inlets, manholes, end caps etc. as may be required to complete the work per plans, details and specifications. All cost shall be included in the Bid Item.
- C. This bid item includes all required testing and inspections, restoration of trenches, sheeting or shoring, utility conflict coordination/resolution, asphalt pavement restoration, base, sub-base restoration for required pipe trenches. The Contractor's Unit Price shall also include the complete restoration of the surface disturbed by the construction, including but not limited to limerock base restoration, pavement restoration, sidewalk restoration, curb restoration, pavement marking and signage restoration, swale restoration, landscape restoration, etc. The contractor shall perform utility conflict coordination/resolution/adjustment at no additional cost to the owner.

3.10 STORM MANHOLE - BID ITEM NO. 1.17

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of storm manholes as shown on the plans, details and specifications. The contractor shall furnish and install necessary metal frames, covers, brick masonry, mortar, Pollution Retardant Baffle or PRB etc. as indicated on the plans. All cost shall be included in the Bid Item.
- B. This bid item includes any required testing and inspections, restoration of trenches, sheeting or shoring, utility conflict coordination/resolution, adjustment of Rim and Invert elevations.

3.11 STORM INLETS, CATCH BASINS - BID ITEM NO. 1.18

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of storm inlets, catch basins as shown on the plans, details and specifications. The contractor shall furnish and install necessary metal frames, gratings, brick masonry, mortar, pollution retardant baffle or PRB etc. as indicated on the plans. All cost shall be included in the Bid Item.
- B. This bid item includes any required testing and inspections, restoration of trenches, sheeting or shoring, utility conflict coordination/resolution, adjustment of Rim and Invert elevations.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.12 EXFILTRATION TRENCH - BID ITEM NO. 1.19

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of exfiltration trench as shown on the plans, details and specifications.
- B. The Contractor shall furnish and install necessary filter fabric, ballast rock/coarse aggregate, perforated HP Storm pipe or approved equal, pipe connections. The bid item includes all required work, material, excavation, sheeting or shoring, disposal of surplus material, pavement restoration including asphaltic concrete, backfilling and tamping, End Cap, Masonry Plug, filter fabric, etc. This bid item includes any required testing and inspections. The contractor shall perform utility conflict coordination/resolution/adjustment. All cost shall be included in the Bid Item.

3.13 CONCRETE CURB & GUTTER, TYPE F - BID ITEM NO. 1.20

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of curb and gutter, base, sub-base, curb pad as indicated on the plans, details and specifications.

3.14 REMOVE AND REINSTALL MAIL BOXES - BID ITEM NO. 1.21

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to remove, relocate and reinstall mail boxes as indicated on the plans.

3.15 ROOT PRUNING & ROOT BARRIER - BID ITEM NO. 1.22

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of root pruning and root barrier as indicated on the plans, and specifications.
- B. The contractor shall perform root pruning as directed by a certified licensed arborist. The cost of obtaining services from a certified licensed arborist and any required permitting shall be included in this bid item.
- C. The root barrier shall be 18" Universal Guide by DeepRoot or approved equal.

3.16 SWALE RESTORATION, SOD - BID ITEM NO. 1.23

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to complete earth work, site grading, top soil, sodding and complete restoration of site as indicated on the plans, details and specifications. This bid item includes all required testing and inspections.

3.17 ADJUST SANITARY SEWER LATERALS - BID ITEM NO. 1.24

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to complete replacement of sewer laterals.
- B. Payment for adjusting sewer laterals will be made at the unit price, LF, which shall constitute full compensation for the complete replacement of lateral at full trench width; including Fernco Flexible Couplings, fittings, wyes, clean-outs, connections to

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

exiting lateral, connection to man, trench restoration, pavement restoration, sidewalk restoration, swale/Sod restoration, and all else necessary for a complete and functional installation.

3.18 ADJUST POTABLE WATER SERVICES – BID ITEM NO. 1.25

- A. Measurement for payment for adjusting potable water services within the ROW will be based upon the actual number, each, of such replacements installed all in accordance with the Contract Documents.
- B. Payment for adjusting potable water services will be made at the unit price, each, named in the Proposal which price shall constitute full compensation for the complete replacement of service pipe at full trench width; including Ford Meter Box Couplings, fittings, bends, connections to the existing main, connection to existing service pipe, trench restoration, pavement restoration, swale/sod restoration, sidewalk restoration, and all else necessary for a complete and functional installation.

3.19 CONCRETE WALKWAYS/ SIDEWALK (6" THICK) - BID ITEM NO. 1.26

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of concrete walkways/sidewalk, sidewalk with edge beam, curb ramps, sidewalk curbs, sidewalk landings, base, sub-base as indicated on the plans, details and specifications.

3.20 ASPHALT DRIVEWAY RECONSTRUCTION - BID ITEM NO. 1.27

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of asphalt driveway, paved swale, limerock base, subgrade, and complete reconstruction of asphalt pavement as indicated in the plans, details, and specifications. This bid item includes, but not limited to, liquid asphalt, prime coat, tack coat, asphalt binder material, aggregates, mix-design, all required testing and inspections.

3.21 MILLING EXISTING (ROADWAY) ASPHALT PAVEMENT, 1" AVG DEPTH - BID ITEM NO. 1.28

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to complete milling of asphalt pavement including hauling off, stockpiling or otherwise disposing of the milled material.

3.22 CONCRETE APRON FOR CATCH BASINS - BID ITEM NO. 1.29

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to furnish and complete installation of concrete apron for catch basins or drainage structures as indicated on the plans, details and specifications.

3.23 ASPHALT PAVEMENT (ROADWAY) RESURFACING, FDOT TYPE SP 9.5, TRAFFIC LEVEL C, 1 INCH – BID ITEM NO. 1.30

- A. The Contractor's Unit Price shall include compensation for all labor, equipment, and materials to complete resurfacing, overbuild, speed hump restoration, and complete restoration of asphalt pavement as indicated in the plans, details, and specifications.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

This bid item includes, but not limited to, liquid asphalt, prime coat, tack coat, asphalt binder material, aggregates, mix-design, all required testing and inspections. The contractor shall restore disturbed limerock base. All cost shall be included in the Bid Item.

3.24 MEASUREMENT AND PAYMENT

- A. Payment shall constitute full compensation and will be made as indicated in the RELATED SECTIONS.
- B. The Contractor shall submit a Schedule of Values for Engineer approval in accordance with Section 01370 prior to the first Application for Payment.
- C. The quantity approved for payment shall be either:
 - 1. Percentage of the Lump Sum price - A percentage of the lump sum price equivalent to the percentage of the project completion as determined by the Engineer as of the date of the pay request submitted. The percent completion of the project shall be based on the percent of the total project actually constructed and not on the percent of the Contract price completed.
 - 2. Measured Quantities - The actual quantities in-place and accepted as measured by the Engineer on the date of the pay request submitted in the units specified in the bid form or schedule of values.

3.25 PROTECTION

- A. Where pavement, pipes, valves, appurtenances, trees, shrubbery, fences, other property or structures are in proximity to the WORK, adequate protection shall be provided. Such protection is considered incidental to construction and shall not be assigned to any pay item.

3.26 RESTORATION

- A. Where pavement, pipes, valves, structures, appurtenances, trees, shrubbery, fences, other property or structures not designated as pay items, have been damaged, removed or disturbed by the Contractor, whether deliberately or through failure to carry out the requirements of the Contract Documents, state laws, municipal ordinances or the specific direction of the Engineer, or through failure to employ usual and reasonable safeguards, such property and surface structures shall be replaced or repaired at the expense of the Contractor to a condition equal to that before work began within a time frame approved by the Engineer. Such restoration is considered incidental to construction and shall not be assigned to any pay item or bid item.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01030

SPECIAL PROJECT PROCEDURES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section provides for provisions which are specific to the Work.

1.02 RELATED SECTIONS

- A. Section 01015 – General Requirements
- B. Other Sections as applicable.

1.03 OBSTRUCTIONS

- A. The attention of the Contractor is drawn to the fact that during digging at the Project site, the possibility exists of the Contractor encountering water, sewer, petroleum, gas, telephone, electrical, or other utility lines not shown on the Drawings. The Contractor is responsible for obtaining utility locations from the utility owners or utility locate company. The Contractor shall exercise extreme care before and during digging to locate and flag these lines so as to avoid damage to the existing lines. Should damage occur to an existing line, The Contractor shall repair the line at the no cost to the Owner.
- B. The Contractor shall be responsible for uncovering and exposing existing utilities sufficiently in advance of pipe laying operations to confirm elevation, size, material and clearance separation(s). If, upon excavation, an existing utility is found to be in conflict with the proposed construction or be of a size or material different from what is shown on the plans, the Contractor shall immediately notify the Engineer, who will in turn prepare a recommendation. Failure of the Contractor to perform the advance investigation shall not relieve it of any claims for delay or damages.

1.04 PROVISIONS FOR THE CONTROL OF DUST

- A. Sufficient precautions shall be taken during construction to minimize the amount of dust created. Appropriate precaution may include wetting down the site or other action as directed by the Engineer to prevent dust as a result of vehicular traffic.

1.05 SALVAGE

- A. Any existing equipment or material, including but not limited to, motors, electrical components or controls,, pipes, fittings, couplings, etc., which is removed or replaced as a result of construction under this project may be designated as salvage by the Engineer or Owner, and, if so, shall be removed or excavated, if necessary, and delivered to the Owner at a location directed by the Owner. Any equipment or material not worthy of salvaging, as directed by the Owner, shall be disposed of by the Contractor at a suitable location.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.06 MAINTENANCE OF EXISTING WATER, WASTEWATER, DRAINAGE FACILITIES OPERATION

- A. The Contractor shall take notice that existing sanitary sewer pump station is operated in the construction area. It is the responsibility of the Contractor to contact the Owner's utility operator and ascertain the extent of any specific service area.
- B. The Contractor shall fully cooperate at all times with the Owner in order to maintain the operation of the existing facilities with the least amount of interference and interruption possible. Continuous service, public health, and safety considerations shall exceed all others and the Contractor's schedule, plans, and work shall at all times be subject to alteration and revision, if necessary, for the above considerations.
- C. The Engineer and Owner reserve the right to require the Contractor to work 24 hours per day in all cases where, in their opinion, interference with operation of the system may result.
- D. In no case will the Contractor be permitted to interfere with the existing system until all materials, supplies, equipment, tools, and incidentals necessary to complete the interfering portion of the work are on the site, or a temporary bypass system is effectively in place. All existing utilities shall be pothole located prior to construction of conflicting piping.
- E. The Contractor shall provide emergency sanitary sewer pumping if required.

1.07 UTILITY CROSSINGS

- A. It is intended that wherever existing utilities such as water, chemical, electrical, or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the Drawings. However, when, in the opinion of the Owner or Engineer, this procedure is not feasible the Engineer may direct the use of fittings for a utility crossing as detailed on the Drawings. All existing utilities shall be pothole located prior to construction of conflicting piping.

1.08 CONNECTIONS TO EXISTING SYSTEMS

- A. The Contractor shall perform all work necessary to locate, excavate, and prepare for connections to the terminus of the existing mains all as shown on the Drawings or where directed by the Owner. The cost of this work and the cost for the actual connection to the existing mains shall be included in the bid price and shall not result in any additional cost to the Owner.

1.09 RELOCATIONS

- A. The Contractor shall be responsible for the relocation of structures, including but not limited to, light poles, signs, sign poles, fences, piping, irrigation conduits, and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid for the project and shall not result in any additional cost to the Owner.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.10 WARRANTIES

- A. All warranties shall be in accordance with Section 01740.
- B. All warranties and bonds shall be submitted prior to the issuance of final payment.

1.11 HURRICANE PREPAREDNESS PLAN

- A. Within thirty days of the date of Notice to Proceed, the Contractor shall submit to the Engineer and Owner a Hurricane Preparedness Plan. The plan should outline the necessary measures that the Contractor proposes to perform at no additional cost to the Owner in case of a hurricane warning. The plan shall detail these measures with specific action items defining responsible personnel.
- B. In the event of inclement weather, or whenever Engineer shall direct; Contractor will cause Subcontractors to protect carefully the Work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any portion of Work or materials shall have been damaged or injured by reason of failure on the part of Contractor or any Subcontractor to so protect the Work, such Work and materials shall be removed and replaced at the expense of the Contractor.

1.12 EQUIPMENT, TESTING & INSPECTION

- A. Regardless of the number of days specified in the individual sections for the manufacturer's representative to be present on the site for inspection and testing, if the equipment fails to perform as specified, then the representative shall remain on site until the malfunction is corrected.
- B. The cost for the additional days shall not be added to the cost for the Owner, but shall be to the account of the Contractor.

1.13 ADJACENT PROPERTY OWNER NOTIFICATION

- A. The Contractor shall prepare a written notice to property owners adjacent to the project work site notifying them of the schedule of work affecting them and anticipated inconveniences they may expect. The notice shall meet the approval of the Engineer and be delivered to property owners at least 72 hours prior to construction adjacent to their property. This notice shall indicate the work to be performed, the time it will take to perform the work, and the time when the water service to the property owner will be disrupted.

1.14 RIGHT-OF-WAY'S

- A. The Contractor shall not do any work that would affect any oil, gas, sewer, or water pipeline; any telephone, telegraph, or electric transmission line; any fence; or any other structure, nor shall the Contractor enter upon the rights-of-way involved until notified by the Engineer that the Owner has secured authority therefore from the proper party. After authority has been obtained, the Contractor shall give said party due notice of its intention to begin work, if required by said party, and shall remove, shore, support, or otherwise protect such pipeline, transmission line, ditch, fence, or structure or replace the same. When two or more contracts are being executed at one time on the same or adjacent land in such manner that work on one contract

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

may interfere with that on another, the Owner shall determine the sequence and order of the work. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may be granted by the Owner to the Contractor so desiring, to the extent and amount, and in the manner and at the times permitted. No such decision as to the method or time of conducting the work or the use of territory shall be made the basis of any claim for delay or damage.

1.15 PROTECTION OF STREET OR ROADWAY MARKERS

- A. The Contractor shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced for easy and accurate restoration. It shall be the Contractor's responsibility to notify the proper representatives of the Owner of the time and location that work will be done. Such notification shall be sufficiently in advance of construction so that there will be no delay due to waiting for survey points to be satisfactorily referenced for restoration. All survey markers or points disturbed by the Contractor without proper authorization by the Engineer will be accurately restored by the Owner at the Contractor's expense after all street or roadway resurfacing has been completed.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01041

PROJECT COORDINATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. ENGINEER will coordinate the work between CONTRACTOR and the OWNER.
- B. The CONTRACTOR shall:
 - 1. Coordinate work of his employees and subcontractors.
 - 2. Expedite his work to assure compliance with schedules.
 - 3. Comply with orders and instructions of ENGINEER.

1.02 RELATED SECTIONS

- A. Section 01010 – Summary of Work
- B. Section 01200 – Project Meetings
- C. Section 01310 – Construction Schedules
- D. Section 01340 – Shop Drawings, Working Drawings, and Samples

1.03 CONSTRUCTION ORGANIZATION AND START-UP

ENGINEER shall establish on-site lines of authority and communications

- A. Schedule and conduct preconstruction meetings and progress meeting as specified in section 01200.
- B. Establish intra-project communications procedures for
 - 1. Submittals
 - 2. Reports and records
 - 3. Recommendations
 - 4. Coordination of drawings
 - 5. Schedules
 - 6. Resolution of conflicts
- C. Interpret Contract Documents: Transmit written interpretations of CONTRACTOR and to other concerned parties.
- D. Assist in obtaining permits and approvals: verify that CONTRACTOR and Contractors have obtained inspections for work and for temporary facilities.
- E. Control the use of Site: Through coordination with the OWNER, allocate space for CONTRACTOR's use for field offices, sheds, and work and storage areas.
- F. Inspection and Testing:
 - 1. Inspect work to assure performance in accordance with requirements of Contract Documents.
 - 2. Administer special testing and inspections of suspect work.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3. Reject work which does not comply with requirements of Contract Documents.
4. Coordinate Testing Laboratory Services:
 - a. Verify that required laboratory personnel are present.
 - b. Verify that tests are made in accordance with specified standards.
 - c. Review test reports for compliance with specified criteria.
 - d. Recommend and administer any required re-testing.

1.04 CONTRACTOR'S DUTIES

- A. Construction Schedules:
 1. Prepare a detailed schedule of basic operations.
 2. Monitor schedules as work progresses:
 - a. Identify potential variances between scheduled and probable completion dates for each phase.
 - b. Recommend to OWNER adjustments in schedule to meet required completion dates.
 - c. Document changes in schedule, submit to OWNER, ENGINEER and to involved subcontractors.
 3. Observe work of each subcontractor to monitor compliance with schedule.
 - a. Verify that labor and equipment are adequate for the work and the schedule.
 - b. Verify that product procurement schedules are adequate.
 - c. Verify that product deliveries are adequate to maintain schedule.
 - d. Report noncompliance to ENGINEER, with recommendation for changes.
- B. Process Shop Drawings, Product Data and Samples: Prior to submittal to ENGINEER, review for compliance with Contract Documents:
 1. Field dimensions and clearance dimensions.
 2. Relation to available space
 3. Effect of any changes on the work of any subcontractor.
- C. Review Drawings prepared by subcontractors: Prior to submittal to ENGINEER, review for compliance with Contract Documents.
- D. Prepare Coordination Drawings as required to resolve conflicts and to assure coordination of the work of, or affected by, mechanical, electrical, etc., trades, or by special equipment requirements.
 1. Submit to ENGINEER.
 2. Reproduce and distribute copies to concerned parties after ENGINEER review.
- E. Maintain Report and Records at Job Site, available to ENGINEER and OWNER.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1. Daily log of progress of work.
2. Records
 - a. Contracts
 - b. Purchase orders
 - c. Materials and equipment records
 - d. Applicable handbooks, codes and standards
3. Maintain file of record documents

1.05 CONTRACTOR'S CLOSE-OUT DUTIES

- A. Mechanical and Electrical equipment start up:
 1. Coordinate check-out of utilities, operational systems and equipment.
 2. Organize initial start-up and testing.
 3. Record dates of start of operation of systems and equipment.
 4. Submit to OWNER written notice of beginning of warranty period for equipment put into service.
- B. At completion of work, conduct an inspection to assure that:
 1. Specified cleaning has been accomplished.
 2. Temporary facilities have been removed from site.
- C. Substantial Completion:
 1. Conduct an inspection to develop a list of work to be completed or corrected.
 2. Assist ENGINEER in inspection.
 3. Supervise correction and completion of work of subContractors.
 4. CONTRACTOR to provide the OWNER a letter stating that all shop drawings, Requests for Information and Change Orders submitted have been responded and closed out.
 5. CONTRACTOR is required to finalize all outstanding Tax Saver Credit prior to receiving his final payment.
 6. CONTRACTOR must submit prior to Substantial Completion of final Tax Saver executed vendor list.
 7. After substantial completion walk-through has been completed, OWNER will coordinate a meeting between the Public Work Department of the Owner and the CONTRACTOR for on-site training dealing with the building and its equipment including mechanical and electrical systems. Contractor is to submit three copies to the Public Works Department of any/all manuals and warranties three weeks prior to the training.
 8. As-builts, specification corrections, other manuals not dealing with training, and ay/all testing work will be sent to Calvin, Giordano & Associates, Inc. no later than thirty days after substantial completion walk-through but prior to the final payment. Final payment will not be received until all submittals have been received.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

9. CONTRACTOR will provide copies of all approved inspections as part of the walk-through.

1.06 ENGINEER'S CLOSE-OUT DUTIES

- A. Final Completion: When CONTRACTOR determines that work is finally complete, conduct an inspection to verify completion of work.
- B. Administration of Contract closeout:
 1. Receive and review CONTRACTOR's final submittals.
 2. Transmit to OWNER with recommendations for action.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01045

CUTTING AND PATCHING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Contractor shall be responsible for all cutting, fitting and patching required to complete the work or to:
 - 1. Make its several parts fit together properly.
 - 2. Uncover portions of the Work to provide for installation of ill-timed work.
 - 3. Remove and replace defective work.
 - 4. Remove and replace work not conforming to requirements of Contract Documents.
 - 5. Remove samples of installed work as specified for testing.
 - 6. Investigate subsurface conditions or utilities.

1.02 RELATED SECTIONS

- A. Section 01010 - Summary of Work
- B. Other Sections as applicable.

1.03 SUBMITTALS

- A. Submit a written request to the Engineer in advance of executing any cutting or alteration which affects:
 - 1. Work of the Owner or any separate contractor.
 - 2. Structural value or integrity of any element of the Project.
 - 3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
 - 4. Efficiency, operational life, maintenance or safety of operational elements.
 - 5. Visual qualities of sight-exposed elements.
- B. Request shall include:
 - 1. Identification of the Project.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2. Description of affected work.
 3. The necessity for cutting, alteration or excavation.
 4. Effect on work of Owner or any separate contractor, or on structural or weatherproof integrity of Project.
 5. Description of proposed work:
 - a. Scope of cutting, patching, alteration, or excavation.
 - b. Trades who will execute the work.
 - c. Products proposed to be used.
 - d. Extent of refinishing to be redone.
 6. Alternatives to cutting and patching.
 7. Cost proposal, when applicable.
 8. Written permission of any separate contractor whose work will be affected.
- C. Submit written notice to the Engineer designating the date and the time work will be uncovered.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Comply with specifications and standards for each specific project involved.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions of Project, including elements subject to damage or to movement during cutting or patching.
- B. After uncovering work, inspect conditions affecting installation of Products, or performance of work.
- C. Report unsatisfactory or questionable conditions to the Engineer in writing; do not proceed with work until the Engineer has provided further instructions.

3.02 PREPARATION

- A. Provide adequate temporary support as necessary to assure structural value or integrity of affected portion of Work.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Provide devices and methods to protect other portions of Project from damage.
- C. Provide protection from elements for that portion of the Project which may be exposed by cutting and patching work, and maintain excavations free from water.

3.03 PERFORMANCE

- A. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs.
- B. Execute cutting methods which will prevent settlement or damage to other work.
- C. Employ original Installer or Fabricator to perform cutting and patching for:
 - 1. Weather-exposed or moisture-resistant surfaces.
 - 2. Sight-exposed finished surfaces.
- D. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances and finishes.
- E. Restore work which has been cut or removed; install new products to provide completed Work in accord with requirements of Contract Documents.
- F. Fit work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- G. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:
 - 1. For continuous surfaces, refinish to nearest intersection.
 - 2. For an assembly, refinish entire unit.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01050

FIELD ENGINEERING AND SURVEYING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide and pay for field engineering and surveying services required for Project as follows:
 - 1. Surveying work required for the lay-out and execution of Work.
 - 2. Surveying work required to identify and maintain existing control points, bench marks and property line corners.
 - 3. Surveying work required to verify existing utility locations.
 - 4. Surveying work as required to create Project Record/As-built Documents.
 - 5. Civil, structural, or other professional engineering services specified, or required to execute the Contractor's construction methods.
 - 6. Testing, sampling, calibrating and training services specified, or required to execute the Contractor's construction methods including soils, concrete, material, etc.
- B. The work specified in this Section will not be paid for directly, but will be considered as incidental work. The contractor shall perform field engineering and surveying services at no additional cost to the owner.

1.02 RELATED SECTIONS

- A. Section 01410 – Materials and Installation Testing
- B. Section 01720 - Project Record/As-built Documents
- C. Other Sections as applicable.

1.03 QUALIFICATIONS OF PROFESSIONAL

- A. Florida Registered Professional Surveyor and Mapper, acceptable to the Owner and the Engineer.
- B. Florida Registered Professional Engineer(s) of the specialty required for on the Project, acceptable to the Owner and the Engineer.

1.04 SURVEY REFERENCE POINTS

- A. Horizontal and vertical control points for the Project are to be established by the Engineer and provided to the Contractor.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Locate and protect control points prior to starting work, and preserve all permanent reference points during construction.
 - 1. Make no changes or relocations without prior written notice to the Engineer.
 - 2. Report to the Engineer when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
 - 3. Require surveyor to replace project control points which may be lost or destroyed.
 - a. Establish replacements based on original survey control.

1.05 PROJECT SURVEY REQUIREMENTS

- A. Establish a minimum of two temporary bench marks on site, referenced to data by survey control points.
 - 1. Record locations, with horizontal and vertical data, on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means:
 - 1. Site Improvements
 - a. Line and grade of pipe and structure installation; top of pipe, invert, slope, etc.
 - b. Grading for fill and topsoil placement, roadway sub-base and base installation.
 - 2. Controlling lines and levels required for all trades.
- C. From time to time, verify layouts by same methods.

1.06 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses in accordance with Section 01720.

1.07 SUBMITTALS

- A. Submit name and address of Professional Surveyor and Mapper or Professional Engineer to the Engineer.
- B. On request of the Engineer, submit documentation to verify accuracy of field engineering work.
- C. Submit certificate signed by registered surveyor certifying that elevations and locations of improvements are in conformance, or non-conformance, with Contract Documents.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- D. Submit Project Record Documents for pay applications, and As-built drawings for contract closeout in accordance with Section 01720.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 ADVANCE INVESTIGATIONS

- A. The Contractor shall be responsible for uncovering and exposing existing utilities sufficiently in advance of pipe laying operations to confirm elevation, size, material and clearance separation(s). If, upon excavation, an existing utility is found to be in conflict with the proposed construction or be of a size or material different from what is shown on the plans, the Contractor shall immediately notify the Engineer, who will in turn prepare a recommendation. Failure of the Contractor to perform the advance investigation shall not relieve it of any claims for delay or damages.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01090

REFERENCES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Applicable Publications: Whenever in these specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the WORK is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- B. Specialists, Assignments: In certain instances, specification text requires (or implies) that specific work is to be assigned to specialists or expert entities, who must be engaged for the performance of that work. Such assignments shall be recognized as special requirements over which the CONTRACTOR has no choice or option. These assignments shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the WORK; also they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of work is recognized as "expert" for the indicated construction processes or operations. The final responsibility for fulfillment of the entire set of contract requirements remains with the CONTRACTOR.

1.02 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

- A. Without limiting the generality of other requirements of the specifications, all work specified herein shall conform to or exceed the requirements of the following documents to the extent that the provisions of such documents are not in conflict with the requirements of these Specifications nor the applicable codes.
- B. References herein to "Building Code" or "Code" shall mean the Florida Building Code. The latest edition of the code as approved and used at the local agency having jurisdiction, shall apply to the WORK herein, including, all addenda, modifications, amendments, or other lawful changes thereto.
- C. In case of conflicts between codes, reference standards, drawings and other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the ENGINEER for clarifications and directions prior to ordering or providing any materials or labor. The CONTRACTOR shall bid the most stringent requirements.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- D. Applicable Standard Specifications: The CONTRACTOR shall construct the WORK specified herein in accordance with the requirements of the Contract Documents and the referenced portion of those referenced codes, standards, and specifications listed herein; except, that wherever references to "Standard Specifications" are made, the provisions therein for measurement and payment shall not apply.
- E. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations, including all changes and amendments thereto.
- F. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

1.03 TRADE NAMES AND ALTERNATIVES

- A. For convenience in designation in the Contract Documents, materials to be incorporated in the WORK may be designated under a trade name or the name of a manufacturer and its catalog information. The use of alternative material which is equal in quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:
 - 1. The burden of proof as to the quality and suitability of such alternative equipment, products, or other materials shall be upon the CONTRACTOR.
 - 2. The ENGINEER will be the sole judge as to the comparative quality and suitability of such alternative equipment, products, or other materials and its decisions shall be final.
 - 3. Base Bid requirements outlined in the Supplement to Bid Form, shall supersede any language contained hereinafter.
- B. Whenever in the Contract Documents the name or the name and address of the manufacturer or distributor is given for a product or other material, or if any other source of a product or material is indicated therefore, such information is given for the convenience of the CONTRACTOR only, and no limit, restriction, or direction is indicated or intended thereby, nor is the accuracy or reliability of such information guaranteed. It shall be the responsibility of the CONTRACTOR to determine the accurate identity and location of any such manufacturer, distributor, or other source of any product or material called for in the Contract Documents.
- C. The CONTRACTOR may offer any material, process, or equipment which it considers equivalent to that indicated. Unless otherwise authorized in writing by the ENGINEER, the substantiation of offers of equivalency must be submitted within 30 days after execution of the Agreement. The CONTRACTOR, at its sole expense, shall furnish data concerning items it has offered as equivalent to those specified. The CONTRACTOR shall have the material as required by the ENGINEER to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the items will fulfill its intended function. Installation and use of a substitute item shall not be made until accepted by the ENGINEER. If a substitute offered by the

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

CONTRACTOR is found to be not equal to the specified material, the CONTRACTOR shall furnish and install the specified material.

- D. The CONTRACTOR'S attention is further directed to the requirement that failure to submit data substantiating a request for the substitution of an "or equal" item within said 30-day period after the execution of the Agreement, shall be deemed to mean that the CONTRACTOR intends to furnish one of the specific brand-named products named in the specification, and the CONTRACTOR does hereby waive all rights to offer or use substitute products in each such case. Wherever a proposed substitute product has not been submitted within said 30-day period, or wherever the submission of a proposed substitute product fails to meet the requirements of the specifications and an acceptable resubmittal is not received by the ENGINEER within said 30-day period, the CONTRACTOR shall furnish only one of the products originally-named in the Contract Documents.

1.04 ABBREVIATION

- A. Wherever in these specifications references are made to the standards, specifications, or other published data of the various national, regional, or local organizations, such organizations may be referred to by their acronyms or abbreviation only. As a guide to the user of these specifications, the following acronyms and abbreviations which may appear in these specifications shall have the meanings indicated herein.

1.05 ABBREVIATIONS AND ACRONYMS

- A. Abbreviations and acronyms contained in the Contract Documents may include, but not be limited to, the following:

AAMA	Architectural Aluminum Manufacturer's Association
AAR	Association of American Railroads
AASHTO	American Association of the State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
ACPPA	American Concrete Pressure Pipe Association
AFBMA	Anti-Friction Bearing Manufacturer's Association, Inc.
AGA	American Gas Association
AGC	Associated General Contractors
AGMA	American Gear Manufacturer's Association
AHAM	Association of Home Appliance Manufacturers
AI	The Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Movement and Control Association
ANS	American Nuclear Society
ANSI	American National Standards Institute, Inc.
APA	American Plywood Association

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

API	American Petroleum Institute
APWA	American Public Works Association
AREA	American Railway Engineering Association
ASA	Acoustical Society of America
ASAE	American Society of Agricultural Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
ASLE	American Society of Lubricating Engineers
ASME	American Society of Mechanical Engineers
ASPE	American Society of Plumbing Engineers
ASQC	American Society for Quality Control
ASSE	American Society of Sanitary Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BBC	Basic Building Code, Building Officials and Code Administrators International
BHMA	Builders Hardware Manufacturers Association
CBM	Certified Ballast Manufacturers
CEMA	Conveyors Equipment Manufacturers Association
CGA	Compressed Gas Association
CLPCA	California Lathing and Plastering Contractors Association
CLFMI	Chain Link Fence Manufacturers Institute
CMA	Concrete Masonry Association
CRSI	Concrete Reinforcing Steel Institute
CSI	Construction Specifications Institute
DCDMA	Diamond Core Drill Manufacturers Association
DIPRA	Ductile Iron Pipe Research Association
EIA	Electronic Industries Association
ETL	Electrical Test Laboratories
HI	Hydraulic Institute
ICBO	International Conference of Building Officials
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
IME	Institute of Makers of Explosives
IP	Institute of Petroleum (London)
IPC	Institute of Printed Circuits
IPCEA	Insulated Power Cable Engineers Association
ISA	Instrument Society of America
ISO	International Organization for Standardization
ITE	Institute of Traffic Engineers
MBMA	Metal Building Manufacturers Association
MPTA	Mechanical Power Transmission Association
MTI	Marine Testing Institute
NAAM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

NCCLS	National Committee for Clinical Laboratory Standards
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NGLI	National Grease Lubricating Institute
NMA	National Microfilm Association
NRCA	National Roofing Contractors Association
NWMA	National Woodwork Manufacturers Association
NWWA	National Water Well Association
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Precast Concrete Institute
PDI	Plumbing and Drainage Institute
RIS	Redwood Inspection Service
RVIA	Recreational Vehicle Industry Association
RWMA	Resistance Welder Manufacturers Association
SAE	Society of Automotive Engineers
SAMA	Scientific Apparatus Makers Association
SBC	Southern Building Code Congress International, Inc. (SBCCI)
SIS	Swedish Standards Association
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACCNA	Sheet Metal and Air Conditioning Contractors National Association
SPR	Simplified Practice Recommendation
SSBC	Southern Standard Building Code, Southern Building Code Congress
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Construction
TAPPI	Technical Association of the Pulp and Paper Industry
TFI	The Fertilizer Institute
UBC	Uniform Building Code
UL	Underwriters Laboratories, Inc.
USGS	United States Geological Survey
WCLIB	West Coast Lumber Inspection Bureau
WCRSI	Western Concrete Reinforcing Steel Institute
WIC	Woodwork Institute of California
WPCF	Water Pollution Control Federation
WRI	Wire Reinforcement Institute, Inc.
WWPA	Western Wood Products Association

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01152

APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Submit Applications for Payment to the Engineer in accordance with the schedule established by Conditions of the Agreement between Owner and Contractor and the Contract Documents.

PART 2 - RELATED SECTIONS

- A. Section 01050 - Field Engineering and Surveying
- B. Section 01310 - Construction Schedules
- C. Section 01370 - Schedule of Values
- D. Section 01380 - Construction Photographs
- E. Section 01700 - Contract Close Out
- F. Section 01720 - Project Record/As-built Documents

2.02 FORMAT AND DATA REQUIRED

- A. Submit applications typed on forms provided by the Owner (or forms provided by Contractor and agreed to by Owner), Application for Payment, with itemized data typed on 8 1/2 inch x 14 inch white paper and continuation sheets.
- B. Payment forms shall show significant detail to substantiate request. Additional detail may be required by the Engineer.

2.03 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
 - 2. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
 - 3. Execute certification with signature of a responsible officer of Contract firm.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

B. Continuation Sheets:

1. Fill in total list of scheduled component items of work, with item number and scheduled dollar value for each item.
2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored.
 - a. Round off values to nearest dollar, or as specified.
3. List each Change Order Number, and description, as for an original component item or work.

2.04 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

A. When the Owner or the Engineer requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying:

1. Project
2. Application number and date
3. Detailed list of enclosures
4. For stored products:
 - a. Item number and identification as shown on application.
 - b. Description of specific material.
 - c. Copy of material invoice.
 - d. Address of location where item is stored
 - e. Photographs of item (if requested)

B. Submit one copy of data cover letter for each copy of application.

C. As a prerequisite for payment, Contractor is to submit the following:

1. A "Surety Acknowledgment of Payment Request" letter showing amount of progress payment which the Contractor is requesting,
2. Updated record drawings for review by the Engineer,
3. Updated construction schedule for review by the Engineer,
4. Construction photographs.

2.05 PREPARATION OF APPLICATION FOR FINAL PAYMENT

A. Fill in Application form as specified for progress payments.

B. Provide FINAL COMPLETION documentation for the final statement of accounting as specified in Section 01700 - Contract Closeout.

C. Submit final record drawings.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2.06 SUBMITTAL PROCEDURE

- A. Submit Applications for Payment to the Engineer at the times stipulated in the Agreement.
- B. Number: Five copies of each Application.
- C. When the Engineer finds Application properly completed and correct, he will transmit certificate of payment to Owner, with copy to Contractor.

PART 3 - PRODUCTS (NOT USED)

PART 4 - EXECUTION (NOT USED)

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01200

PROJECT MEETINGS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Engineer or Owner's Representative shall schedule and administer preconstruction meetings, periodic progress meetings, and specially called meetings throughout the progress of work. The Engineer shall:
 - 1. Prepare agenda for meetings.
 - 2. Make physical arrangements for meetings.
 - 3. Preside at meetings.
 - 4. Record in writing the minutes; include significant proceedings and decisions.
 - 5. Record the meeting with an audio recording device.
 - 6. Reproduce and distribute copies of minutes within five working days after each meeting:
 - a. To participants in the meeting.
 - b. To parties affected by decisions made at the meeting.
- B. Representatives of contractors, subcontractors and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. The Contractor shall attend meetings to ascertain that work is executed consistent with Contract Documents and construction schedules.

1.02 RELATED SECTIONS

- A. Section 01310 - Construction Schedules.
- B. Section 01340 - Shop Drawings, Working Drawings, and Samples.
- C. Section 01720 - Project Record Documents.
- D. Other Sections as applicable.

1.03 PRECONSTRUCTION MEETING

- A. Schedule a preconstruction meeting no later than 15 days after date of Notice to Proceed.
- B. Location: A central site, convenient for all parties designated by the Owner.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS
PROJECT

C. Attendance:

1. Owner's Representative.
2. Engineer and his Professional Consultants.
3. Resident Project Representative.
4. Contractor's Superintendent.
5. Major Subcontractors.
6. Major Suppliers.
7. Utilities.
8. Others as appropriate.

D. Suggested Agenda:

1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers.
 - b. Projected Construction Schedule.
2. Critical work sequencing/critical path scheduling.
3. Major equipment deliveries and priorities.
4. Project Coordination.
 - a. Designation of responsible personnel.
5. Procedures and processing of:
 - a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. Change Orders.
 - e. Applications for Payments.
6. Adequacy of Distribution of Contract Documents.
7. Procedures for maintaining Record Documents.
8. Use of Premises:
 - a. Office, Work and Storage Areas.
 - b. Owner's Requirements.
9. Construction facilities, controls and construction aids.
10. Temporary Utilities.

1.04 PROGRESS MEETINGS

- A. Schedule regular bi-weekly meetings. The progress meetings will be held as required by progress of the work.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Hold called meetings as required by progress of the work.
- C. Location of the meetings: Project field office of the Contractor or Engineer.
- D. Attendance:
 - 1. Engineer, and his professional consultants as needed.
 - 2. Subcontractors as appropriate to the agenda.
 - 3. Suppliers as appropriate to the agenda.
 - 4. Others as appropriate.
- E. Suggested Agenda:
 - 1. Review, approval of minutes of previous meeting.
 - 2. Review of work progress since previous meeting.
 - 3. Field observations, problems and conflicts.
 - 4. Problems which impede Construction Schedule.
 - 5. Review of off site fabrication, delivery schedule.
 - 6. Corrective measures and procedures to regain projected schedule.
 - 7. Revisions to Construction Schedule.
 - 8. Progress, schedule, during succeeding work period.
 - 9. Coordination of schedules.
 - 10. Review submittal schedules; expedite as required.
 - 11. Maintenance of quality standards.
 - 12. Pending changes and substitutions.
 - 13. Review proposed changes for:
 - a. Effect on Construction Schedule and on a completion date.
 - b. Effect on other contracts of the Project.
 - 14. Other business.
 - 15. Construction schedule.
 - 16. Critical/long lead items.
- F. The Contractor is to attend progress meetings and is to study previous meeting minutes and current agenda items, in order to be prepared to discuss pertinent topics such as deliveries of materials and equipment, progress of work, etc.
- G. The Contractor is to provide a current submittal log at each progress meeting in accordance with Section 01340.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01310

CONSTRUCTION SCHEDULES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Promptly after Award of the Contract and within ten days after the effective date of the Agreement, prepare and submit to the Engineer an estimated construction progress schedules for the work, with sub-schedules of related activities which are essential to its progress.
- B. Submit revised progress schedules on a monthly basis.
- C. No partial payments shall be approved by the Engineer until there is an approved up to date construction progress schedule on hand.
- D. The Contractor shall designate an authorized representative of his firm who shall be responsible for development and maintenance of the schedule and of progress and payment reports. This representative of the Contractor shall have direct project control and complete authority to act on behalf of the Contractor's schedule.

1.02 RELATED SECTIONS

- A. Section 01010 - Summary of Work
- B. Section 01152 - Applications for Payment
- C. Section 01200 - Project Meetings
- D. Section 01340 - Shop Drawings, Working Drawings and Samples
- E. Other Sections as applicable.

1.03 FORM OF SCHEDULES

- A. Prepare schedules for submittal each month with pay request. The form of the schedule is to be Microsoft Project or approved equal. The Schedule is to indicate work completed to date and additions to or deletions from the schedule.
 - 1. Provide separate horizontal bar for each trade or operation within each structure or item.
 - 2. Horizontal time scale: In weeks from start of construction and identify the first work day of each month.
 - 3. Scale and spacing: To allow space for notations and future revisions.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Format of listings: The chronological order of the start of each item of work for each structure.
- C. Identification of listings: By major specification section numbers as applicable and structure.

1.04 CONTENT OF SCHEDULES

- A. Construction Progress Schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning of, and completion of, each major element of construction in no more than a two week increment scale. Specifically list, but not limited to:
 - a. Receiving Materials
 - b. Construction Activity
 - c. Testing
 - d. Restoration
 - e. Startup
 - f. Record Drawings
 - g. Permit Close-out
 - h. Punch List
 - i. Owner Activities, Including Inspections
 - 3. Show projected percentage of completion for each item, as of the first of each month.
 - 4. Show projected dollar cash flow requirements for each month of construction.
 - 5. Use of float suppression techniques such as preferential sequencing or logic, special lead/lag logic restraints, and extended activity times are prohibited, and use of float time disclosed or implied by use of alternate float-suppression techniques shall be shared to proportionate benefit of the Owner and Contractor.
 - 6. Pursuant to above float-sharing requirement, no time extensions will be granted nor delay damages paid until a delay occurs which (i) impacts Project's critical path, (ii) consumes available float or contingency time, and (iii) extends work beyond contract completion date.
 - 7. If the Contractor provides an accepted schedule with an early completion date, the Owner reserves the right to reduce the duration of the work to match the early completion date by issuing a deductive Change Order at no change in Contract Price.
- B. Submittal Schedule for Shop Drawings and Samples in accordance with Section 01340. Must show:

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1. The dates for Contractor's submittals.
 2. The dates submittals will be required for owner furnished products, if applicable.
 3. The dates approved submittals will be required from the Engineer.
- C. A list of all long lead items (equipment, materials, etc).

1.05 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
1. Major changes in scope.
 2. Activities modified since previous submission.
 3. Revised projections of progress and completion.
 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
1. Problem areas, anticipated delays, and the impact on the schedule.
 2. Corrective action recommended, and its effect.
 3. The effect of changes on schedules of other prime contractors.

1.06 SUBMISSIONS

- A. Submit initial schedules to the Engineer within 10 days after the effective date of the Agreement.
1. The Engineer will review schedules and return review copy within 21 days after receipt.
 2. If required, resubmit within 7 days after return of review copy.
- B. Submit a minimum of five (5) copies of revised monthly progress schedules with that month's application for payment.

1.07 DISTRIBUTION

- A. Distribute copies of reviewed schedules to:
1. Owner (Two copies)
 2. Engineer (Two copies)
 3. Job Site File (One copy)
 4. Subcontractors (As needed)
 5. Other Concerned Parties (As needed)
- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projections shown in the schedule.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01340

SHOP DRAWINGS, WORKING DRAWINGS AND SAMPLES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The contractor shall submit to the Engineer for review, such working drawings, shop drawings, test reports and data on materials and equipment (hereinafter in this article called data), and material samples (hereinafter in this article called samples) as are required for the proper control of work, including but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. The Contractor shall submit five (5) copies of shop drawings or other data to the Engineer.
- C. Within thirty (30) calendar days after the effective date of the Agreement, the Contractor shall submit to the Engineer a complete list of preliminary data for which Shop Drawings are to be submitted. Included in this list shall be the names of all proposed manufacturers furnishing specific items. Review of this list by the Engineer shall in no way expressed or implied relieve the Contractor from submitting complete Shop Drawings and providing materials, equipment, etc., fully in accordance with the Specifications. This procedure is required in order to expedite final review of Shop Drawings.
- D. The contractor is to maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the Owner and Engineer. This log should include the following items:
 - 1. Submittal-Description and Number assigned.
 - 2. Date to Engineer.
 - 3. Date returned to Contractor (from Engineer).
 - 4. Status of Submittal (Approved/Resubmit/Rejected).
 - 5. Date of Resubmittal and Return (as applicable).
 - 6. Date material released (for fabrication).
 - 7. Projected date of fabrication.
 - 8. Projected date of delivery to site.
 - 9. Status of O & M submittal.

1.02 RELATED SECTIONS

- A. Section 01310 - Construction Schedules

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Section 01720 - Project Record Documents
- C. Section 01730 - Operating and Maintenance Data
- D. Other Sections as applicable.

1.03 CONTRACTOR'S RESPONSIBILITY

- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the Drawings and data shall bear Contractor's stamp will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents.
- B. Determine and verify:
 - 1. Field measurements
 - 2. Field construction criteria
 - 3. Catalog numbers and similar data
 - 4. Conformance and Specifications
- C. The Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
- D. Designate in the construction schedule, or in a separate coordinated schedule, the dates for submission and the dates that reviewed Shop Drawings, Working Drawings and Samples will be needed.
- E. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him, approved by the Engineer.
- F. The Contractor shall submit to the Engineer all shop drawings, working drawings and samples sufficiently in advance of construction requirements and shall account for Engineers Shop Drawing review time accordingly.
- G. The Contractor shall submit two (2) copies of descriptive or product data submittals to complement shop drawings for the Engineer plus the number of copies which the Contractor requires. The Engineer will retain two (2) sets. All blueprint shop drawings shall be submitted with one (1) set of reproducible and four (4) sets of print. The Engineer will review the drawings and return to the Contractor the set of marked-up drawings with appropriate review comments.
- H. The Contractor shall be responsible for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of work prior to the review and Approval by Engineer of the necessary Shop Drawings.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.04 ENGINEER'S REVIEW OF SHOP DRAWINGS

- A. The Engineer's review of drawings, data and samples submitted by the Contractor will cover only general conformity to the Specifications, external connections, and dimensions which affect the installation. The Engineer's review and exception if any, will not constitute an approval of dimensions, quantities, and details of the material, equipment, device, or item shown.
- B. The review of drawings and schedules will be general, and shall not be construed:
 - 1. As permitting any departure from the Contract requirements;
 - 2. As relieving the Contractor of responsibility for any errors, including details, dimensions, and materials;
 - 3. As approving departures from details furnished by the Engineer, except as otherwise provided herein.
- C. If the drawings or schedule as submitted describe variations and/or show a departure from the Contract requirements which Engineers finds to be in the interest of the Owner and to be minor as not to involve a change in the Contract Price or time for performance, the Engineer may return the reviewed drawings without noting an exception.
- D. When reviewed by the Engineer, each of the Shop Drawings will be identified as having received such review being so stamped and dated. Shop Drawings stamped "REJECTED" and with required corrections shown will be returned to the Contractor for correction and resubmittal.
- E. Resubmittals will be handled in the same manner as the first submittals. On resubmittals, the Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, to revisions other than the corrections requested by the Engineer on previous submissions. The Contractor shall make any corrections required by the Engineer.
- F. If the Contractor considers any correction indicated on the drawings to constitute a change to the Contract Drawings or Specifications, the Contractor shall give written notice thereof to the Engineer.
- G. The Engineer will review one submittal and one re-submittal after which cost of review will be borne by the Contractor. The cost of engineering shall be equal to the Engineer's charges to the Owner under the terms of the Engineer's agreement with the Owner.
- H. When the Shop Drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.
- I. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor, and will not be considered "Rejected" until resubmitted.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS
PROJECT

- J. The Engineer shall return Shop Drawing submittals to the Contractor within five (5) calendar days from the date the Engineer receives them.

1.05 SHOP DRAWINGS

- A. When used in the Contract Documents, the term "Shop Drawings" shall be considered to mean Contractor's plans for material and equipment which become an integral part of the Project. These drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance and test data, shall be considered only as supportive to required Shop Drawings as defined above.
- B. Drawings and schedules shall be checked and coordinated with work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.
- C. Each Shop Drawing, shall have a blank area 3 1/2 inches by 3 1/2 inches, located adjacent to the title block. The title block shall display the following:
1. Number and title of the drawing.
 2. Date of drawing or revision.
 3. Name of project building or facility.
 4. Name of contractor and subcontractor submitting drawing.
 5. Clear identification of contents and location of work.
 6. Specification title and number.
- D. If drawings show variations from Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. If the Contractor fails to describe such variations he shall not be relieved of the responsibility for executing the work in accordance with the Contract, even though such drawings have been reviewed.
- E. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.
- F. For all mechanical and electrical equipment furnished, the Contractor shall provide a list including the equipment name, address and telephone number of the manufacturer's representative and service company so that service and spare parts can be readily obtained. In addition, a maintenance and lubrication schedule for each piece of equipment shall be submitted along with each shop drawing submittal.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- G. All manufacturers or equipment supplier who proposes to furnish equipment or products under Divisions 11, 12, 13, 14, 15 and 16 shall submit an installation list to the Engineer along with the required shop drawings. The installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least five (5) years.
- H. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.
- I. Before final payment is made, the Contractor shall furnish to Engineer two (2) sets of record shop drawings all clearly revised, complete and up to date showing the permanent construction as actually made for all reinforcing and structural steel, miscellaneous metals, process and mechanical equipment, piping, electrical system and instrumentation system.

1.06 WORKING DRAWINGS

- A. When used in the Contract Documents, the term "working drawings" shall be considered to mean the Contractor's plans for temporary structures such as temporary bulkheads, support of open cut excavation, support of utilities, ground water control systems, forming and false-work; for underpinning; and for such other work as may be required for construction, but does not become an integral part of the project.
- B. Copies of working drawings as noted in subparagraph 1.06A above, shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.
- C. Working drawings shall be signed by a Registered Professional Engineer, currently licensed to practice in the State of Florida and shall convey, or be accompanied by, calculation or other sufficient information to completely explain the structure, machine, or system described and its intended manner of use. Prior to commencing such work, working drawings must have been reviewed without specific exceptions by the Engineer, which review will be for general conformance and will not relieve the Contractor in any way from his responsibility with regard to the fulfillment of the terms of the Contract. The Contractor assumes all risks of error; the Owner and Engineer shall have no responsibility therefore.

1.07 SAMPLES

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

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2. Full range of color, texture and pattern.
 3. A minimum of two samples of each item shall be submitted.
- C. Each sample shall have a label indicating
1. Name of Project
 2. Name of Contractor and Subcontractor
 3. Material or Equipment Represented
 4. Place of Origin
 5. Name of Producer and Brand (if any)
 6. Location in Project
- (Samples of finished materials shall have additional marking that will identify them under the finished schedules.)
- D. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required in subparagraph 1.07B above. He shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use named in such approval and shall not be construed to change or modify any Contract requirements.
- E. Approved samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples. Samples which failed testing or were not approved will be returned to the Contractor at his expense, if so requested at time of submission.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
DOCUMENT 01370
SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Submit to the Engineer a Schedule of Values allocated to the various portions of the Work, within 10 days after the effective date of the Agreement.
- B. Upon request of the Engineer, support the values with data which will substantiate their correctness.
- C. The Schedule of Values shall be used as the basis for the Contractor's Applications for Payment.

1.02 RELATED SECTIONS

- A. Section 01152 - Applications for Payment
- B. Other Sections as applicable.

1.03 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Present schedule on an 8-1/2 inch x 11 inch white paper; Contractor's standard forms and automated printout will be considered for approval by the Engineer upon Contractor's request. Identify schedule with:
 - 1. Title of Project and location
 - 2. Engineer and Project number
 - 3. Name and Address of Contractor
 - 4. Contract designation
 - 5. Date of submission
- B. Schedule shall list the installed value of the component parts to include individual equipment, piping, electrical, construction items, paving, of the Work (as required) in sufficient detail to serve as a basis for computing values for progress payments during construction and for additions and deletions to the Work.
- C. For the various portions of the Work:
 - 1. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
- D. The sum of all values listed in the schedule shall equal the total Contract Sum.
- E. Schedules are subject to Engineer's approval wherein additional line item detail may be required.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

PART 2 - PRODUCTS (NOT USED)

PART 3 - PRODUCTS (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01380

CONSTRUCTION PHOTOGRAPHS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Employ competent photographer to take construction record photographs for preconstruction conditions, periodically during course of Work, and post-construction.

1.02 RELATED SECTIONS

- A. Section 01152 - Application for Payment
- B. Section 01720 - Project Record/As-built Documents
- C. Other Sections as applicable.

1.03 PHOTOGRAPHY REQUIRED

- A. Provide photographs taken on cutoff date for each scheduled Application for Payment.
- B. View and Quantities Required:
 - 1. Take a minimum of 24 exposures of the site and adjacent property at preconstruction, monthly, and post-construction.
 - 2. Aerial photography shall be acceptable in addition to ground level exposures for items out of sight of aerial photography.
- C. Negatives:
 - 1. Remain property of photographer
 - 2. Require that photographer maintain negatives for a period of two years from Date of Completion of entire project.
 - 3. Photographer shall agree to furnish additional prints to Owner and the Engineer at commercial rates applicable at time of purchase.

1.04 COSTS OF PHOTOGRAPHER

- A. Contractor shall pay costs for specified photography and prints. Such cost shall be considered incidental to the contract and no additional payment will be made by the owner.
 - 1. Parties requiring additional photography or prints will pay photographer directly.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
PART 2 - PRODUCTS

2.01 PRINTS

A. Color:

1. Paper: Single weight, color print paper
2. Finish: Smooth surface, glossy
3. Size: 8 inch x 10 inch

B. Identify each print on back, listing:

1. Name of Project
2. Orientation of View
3. Date and time of exposure
4. Name and address of photographer
5. Photographer's numbered identification of exposure.

PART 3 - PRODUCTS

3.01 TECHNIQUE

A. Factual presentation

B. Correct exposure and focus

1. High resolution and sharpness
2. Maximum depth-of-field
3. Minimum distortion

3.02 VIEWS REQUIRED

A. Photograph from locations to adequately illustrate condition of construction and state of progress.

1. At successive periods of photography, take at least one photograph from the same overall view as previously.
2. Consult with the Engineer at each period of photography for instructions concerning views required.

3.03 DELIVERY OF PRINTS

A. Deliver **3** sets of prints to the Engineer to accompany each Application for payment.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
PART 4 - EXECUTION (NOT USED)

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01381

AUDIO/VIDEO PRE-CONSTRUCTION RECORD

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall provide a continuous color audio/video CD of the entire length of the proposed project prior to construction. The Contractor shall furnish to the Engineer and the Owner two (2) copies each of the CD, which becomes a project record document. The audio/video pre-construction record shall be considered incidental to the contract and no additional payment will be made.

1.02 RELATED SECTIONS

- A. As applicable.

1.03 SCHEDULE REQUIRED

- A. Video recordings shall not be made more than 30 days prior to construction. No construction shall begin prior to review and approval of the CD's by the Engineer and the Owner. CD's not conforming to the Specifications shall be resubmitted at no additional charge.

1.04 PROFESSIONAL VIDEOGRAPHERS

- A. The Contractor shall engage the services of a professional videographer. The color audio-visual tapes shall be prepared by a responsible commercial firm known to be skilled and regularly engaged in the business of pre-construction color audio-visual documentation.

PART 2 - PRODUCTS

- A. The finished product shall be a bright, sharp, clear picture free of distortion and show in sufficient detail acceptable to the Engineer.
- B. The video shall be of the CD format. CD's shall be color and compatible with any standard compact disc player.

PART 3 - EXECUTION

- A. The video recording shall show all surface features located within the construction zone. These features shall include, but not be limited to, roadways, sidewalks, outside of houses (front and sides), driveways, culverts, walls, fences and landscaping.
- B. CD's shall be labeled and identified by project title and project number.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Where station numbering is used, coverage shall begin at the lowest station number and be continuous until the highest station number is reached. Otherwise, the entire length of the project shall be documented including each plan sheet.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01410

MATERIALS AND INSTALLATION TESTING

PART 1 - GENERAL

1.01 DISCRIPTION

- A. Contractor shall employ and pay for the services of an independent testing laboratory to perform materials and installation testing of the type and frequency specified in the Contract Documents including, but not limited to, Geotechnical Testing Services and concrete testing.
- B. Geotechnical Testing Services shall include, but not be limited to, periodic site inspections, soil proctor tests, soil classification tests and soil densities or compaction tests.
- C. The engineer may, at any time, elect to have materials and equipment tested for conformity with the Contract Documents.
- D. Contractor shall include cost of testing in the Contract Price.
- E. Piping pressure test and bacteriological testing shall be in accordance with the applicable Section.

1.02 RELATED SECTIONS

- A. Section 01050 – Field Engineering and Surveying
- B. Section 02200 – Earthwork
- C. Other Sections as applicable.

1.03 REFERENCES

- A. FDOT Design Standards.
- B. FDOT Standard Specifications for Road and Bridge Construction.
- C. Broward County Traffic Engineering Division (BCTED) Minimum Standards and the BCTED Pavement Markings & Signs Detail Sheet.

1.04 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

- A. Laboratory is not authorized to:
 - 1. Release, revoke, alter or enlarge on requirements of Contract Documents
 - 2. Approve or accept any portion of the Work
 - 3. Perform any duties of the Contractor

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 CONTRACTOR'S RESPONSIBILITIES

- A. Provide all testing required by the Contract Documents as well as laws, ordinances, rules, regulations, orders, or approvals of public authorities.
- B. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the Work of the Contract.
- C. Cooperate with laboratory personnel, and provide access to Work and to Manufacturer's operations.
- D. Secure and deliver to the laboratory adequate quantities of representational samples of materials proposed to be used and which require testing.
- E. Provide to the laboratory the preliminary design mix proposed to be used for concrete and other materials mixes which require control by the testing laboratory.
- F. Materials and equipment used in the performance of work under this Contract are subject to inspection and testing at the point of manufacture or fabrication. Standard specifications for quality and workmanship are indicated in the Contract Documents. The Engineer may require the Contractor to provide statements or certificates from the manufacturers and fabricators that the materials and equipment provided by them are manufactured or fabricated in full accordance with the standard specifications for quality and workmanship indicated in the Contractor Documents. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor, and no extra charge to the Owner shall be allowed on account of such testing and certification.
- G. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested
 - 2. To obtain and handle samples at the Project site or at the source of the product to be tested
 - 3. To facilitate inspections and tests
 - 4. For storage and curing of test samples
- H. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.
 - 1. When tests or inspections cannot be performed after such notice, reimburse Owner for laboratory personnel and travel expenses incurred due to Contractor's negligence.
- I. Employ and pay for the services of the same or a separate, equally qualified independent testing laboratory to perform additional inspections, sampling, and testing required for the Contractor's convenience.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- J. If the Owner requests tests in addition to those specified in the contract, and if the test results indicate the material or equipment complies with the Contract Documents, the Owner shall pay for the cost of the testing laboratory. If the tests and any subsequent retests indicate the materials and equipment fail to meet the requirements of the Contract Documents, the Contractor may pay for the laboratory costs directly to the testing firm or the total of such costs shall be deducted from any payments due the Contractor.
- K. The Contractor shall pay costs for additional trips to the project by the agency when scheduled times for tests and inspections are canceled and agency is not notified sufficiently in advance of cancellation to avoid the trip.

3.02 TESTING

- A. The Contractor shall obtain the services of a professional testing laboratory approved by the Engineer to perform the following type of tests and test frequencies. Copies of all reports are to be sent to the Engineer as soon as possible.
- B. Density tests for trench backfill at a minimum rate of three (3) tests per lift in 1,000 feet of trench, but not less than two (2) tests per lift if less than 500 feet of trench, at Engineer's discretion based on field observation.
- C. Density tests for subgrade compaction at a minimum rate of three (3) tests in 1,000 feet of roadway, but not less than two (2) tests, at Engineer's discretion based on field observation.
- D. Density tests for limerock base at a minimum rate of three (3) tests per day on each course of completed compacted base, but not less than two (2), at Engineer's discretion based on field observation.
- E. Density tests for roadway crossings at the rate of one test per lane per lift of compacted material, beginning one foot above the normal water table.
- F. If in the opinion of the Engineer, suitable compaction has not been achieved around structures, density tests may be required.
- G. Concrete compressive strength at the rate of three (3) cylinders per the lesser of 50 cubic yards or per day.
- H. Should the above test results indicate deficiencies, the Engineer may order additional tests at the Contractor's expense, and all reworked areas shall be retested at the Contractor's expense.
- I. Testing in the County right-of-way shall meet the requirements of the Florida Department of Transportation.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01505

CONTROL OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall furnish personnel and equipment which will be efficient, appropriate and a quantity large enough to secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time stipulated in the Proposal. If at any time such personnel appear to the Engineer to be inefficient, inappropriate or insufficient for securing the quality of work required or for producing the rate of progress aforesaid, he may order the Contractor to increase the efficiency, change the character or increase the personnel and equipment, and the Contractor shall conform to such order. Failure of the Engineer to give such order shall in no way relieve the Contractor of his obligations to secure the quality of the work and rate of progress required.

1.02 RELATED SECTIONS

- A. Section 01010 – Summary of Work
- B. Section 01015 – General Requirements
- C. Section 01030 – Special Project Procedures
- D. Other Sections as applicable.

1.03 PIPE LOCATIONS

- A. Pipeline shall be located substantially as indicated on the Drawings, but the Engineer reserves the right to make such modifications in locations as may be found desirable to avoid interference with existing structures or for other reasons.

1.04 OBSTRUCTIONS

- A. The attention of the Contractor is drawn to the fact that during digging at the Project site, the possibility exists of the Contractor encountering various water, sewer, gas, telephone, electrical, or other lines not shown on the Drawings. The Contractor shall exercise extreme care before and during digging to locate and flag these lines so as to avoid damage to the existing lines. Should damage occur to an existing line, The Contractor shall repair the line at no cost to the Owner.
- B. The Contractor shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, all in accordance with requirements of the Contract Documents.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. The Contractor shall verify the exact locations and depths of all utilities shown and the Contractor shall make exploratory excavations of all utilities that may interfere with the work. All such exploratory excavations shall be performed as soon a practicable after award of the contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contractor's work. When such exploratory excavations show the utility location as shown to be in error, the Contractor shall so notify the Engineer.
- D. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility. Test pits shall be dug at the Contractor's expense, as directed.
- E. The Contractor shall protect all Underground Utilities and other improvements which may be impaired during construction operations. It shall be the Contractor's responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in its construction operations, and to see that such utilities or other improvements are adequately protected from damage due to such operations. The Contractor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.
- F. In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon request of the Contractor, be notified by the Owner to move such property within a specified reasonable time. When utility lines that are to be removed are encountered within the area of operations, the Contractor shall notify the Engineer a sufficient time in advance for the necessary measures to be taken to prevent interruption of service.
- G. Where the proper completion of the work requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is indicated, the Contractor shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the Engineer and the owner of the facility. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the Contractor in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.
- H. Existing utility lines that are indicated or the locations of which are made known to the Contractor prior to excavation and that are to be retained, and all utility lines that are constructed during excavation operations shall be protected from damage during excavation and backfilling and, if damaged, shall be immediately repaired or replaced by the Contractor at the Contractor's expense. Sewer laterals are included.
- I. All repairs to a damaged utility or improvement are subject to inspection and approval by an authorized representative of the utility or improvement owner before being concealed by backfill or other work.
- J. All power, telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and any other cables encountered along the line of the work

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the Engineer are made with the owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The Contractor shall be responsible for and shall repair all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

1.05 OPEN EXCAVATIONS

- A. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons, and damage to property. The Contractor shall, at his own expense, provide suitable and safe bridges and other crossings for accommodating travel by pedestrians and workmen. Bridges provided for access to private property during construction shall be removed when no longer required. The length of open trench will be controlled by the particular surrounding conditions, but shall always be confined to the limits prescribed by the Engineer. If the excavation becomes a hazard, or if it excessively restricts traffic at any point, the Engineer may require special construction procedures such as limiting the length of open trench or prohibiting stacking excavated material in the street, and requiring that the trenches shall not remain open overnight.
- B. The Contractor shall take precautions to prevent injury to the public due to open trenches. All trenches, excavated material, equipment, or other obstacles which could be dangerous to the public shall be well lighted at night.

1.06 TEST PITS

- A. Test pits for the purpose of locating underground pipeline or structures in advance of the construction shall be excavated and backfilled by the Contractor at his cost at the direction of the Consultant. Test pits shall be backfilled immediately after their purpose has been satisfied and the surface restored and maintained in a manner satisfactory to the Consultants.

1.07 UTILITY CROSSINGS

- A. It is intended that wherever existing utilities such as service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the Drawings. However, when in the opinion of the City or Consultant this procedure is not feasible he may direct the use of fittings.

1.08 SITE CLEANLINESS

- A. Dust Abatement - The Contractor shall furnish all labor, equipment, and means required and shall carry out effective measures wherever and as often as necessary to prevent its operation from producing dust in amounts damaging to property, cultivated vegetation, or domestic animals, or causing a nuisance to persons living in or occupying buildings in the vicinity. The Contractor shall be responsible for any damage resulting from any dust originating from its operations. The dust

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

abatement measures shall be continued until the Contractor is relieved of further responsibility by the Engineer.

- B. Rubbish Control - During the progress of the work, the Contractor shall keep the site of the work and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish. The Contractor shall dispose of all rubbish and waste materials of any nature occurring at the work site, and shall establish regular intervals of collection and disposal of such materials and waste. The Contractor shall also keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Disposal of all rubbish and surplus materials shall be off the site of construction in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and to the particular requirements of Part 1926 of the OSHA Safety and Health Standards for Construction.

- C. Sanitation
 - 1. Toilet Facilities - Fixed or portable chemical toilets shall be provided wherever needed for the use of employees. Toilets at construction job sites shall conform to the requirements of Part 1926 of the OSHA Standards for Construction.

 - 2. Sanitary and Other Organic Wastes - The Contractor shall establish a regular daily collection of all sanitary and organic wastes. All wastes and refuse from sanitary facilities provided by the Contractor or organic material wastes from any other source related to the Contractor's operations shall be disposed of away from the site in a manner satisfactory to the Engineer and in accordance with all laws and regulations pertaining thereto.

1.09 RELOCATIONS

- A. The Contractor shall be responsible for the relocation of structures, including but not limited to light poles, signs, sign poles, fences, piping, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such relocations shall be included in the bid for the project and shall not result in any additional cost to the Owner.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 COOPERATION WITHIN THIS CONTRACT

- A. All firms or persons authorized to perform any work under this Contract shall cooperate with the General Contractor and his subcontractors or trades, and shall assist in incorporating the work of other trades where necessary or required.

- B. Cutting and patching, drilling and fitting shall be carried out where required by the trade or subcontractor having jurisdiction, unless otherwise indicated herein or directed by the Engineer.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.02 PROTECTION OF CONSTRUCTION AND EQUIPMENT

- A. All newly constructed work shall be carefully protected from injury in any way. No wheeling or walking or placing of heavy loads on it shall be allowed and all portions injured shall be reconstructed by the Contractor at his own expense.
- B. Further, the Contractor shall take all necessary precaution to prevent damage to any structure due to water pressure during and after construction and until such structure is accepted and taken over by the Owner.

3.03 PRIVATE LAND

- A. The Contractor shall not enter or occupy private land outside of easements, except by written permission of the land owner and the City.

3.04 RESTORATION

- A. Temporary restoration shall be completed within five days of pipe installation. Temporary restoration shall include all driveways, sidewalks and roadways. They shall be swept clean and be maintained free of dirt and dust. All areas disturbed by the construction activities shall be restored to proper grade, cleaned up, including the removal of debris, trash, and deleterious materials. All construction materials, supplies, or equipment, including piles of debris shall be removed from the area. All temporarily restored areas shall be maintained by the Contractor. These areas shall be kept clean and neat, free of dust and dirt, until final restoration operations are completed. The Contractor is responsible to utilize dust abatement operations in the temporarily restored areas as required, to the satisfaction of the Consultant.
- B. Wherever sidewalks or private roads have been removed for purposes of construction, the Contractor shall place suitable temporary sidewalks or roadways promptly after backfilling and shall maintain them in satisfactory condition for the period of time fixed by the authorities having jurisdiction over the affected portions before proceeding with the final restoration or, if no such period of times is so fixed, the Contractor shall maintain said temporary sidewalks or roadways until the final restoration thereof has been made.
- C. Final restoration shall be completed within thirty days of pipe acceptance. Final restoration shall include the completion of all required pavement replacement of roadways, driveways, curbs, gutters, sidewalks and other existing improvements disturbed by the construction; final grading, placement of sod, pavement marking, etc., all complete and finished, acceptable to the Consultant.

In order to obtain a satisfactory junction with adjacent surfaces, the Contractor shall saw cut back and trim the edge so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with the adjacent undisturbed pavement.

- D. The Contractor shall test an installed section of pipeline within five calendar days from completion of the pipeline. A section of pipe is defined as a pipe section which can be isolated by valves for appurtenances is satisfactorily completed, the

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Contractor shall provide the Consultant with a "Schedule of Existing Facilities Restoration" which will be reviewed and be acceptable to the Consultant. The schedule shall show the existing facilities to be restored and schedule of beginning and completion dates for each item of restoration. The work for completing the final restoration of existing facilities for a tested section of work shall be completed within 30 days of acceptance of the pipeline testing.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01510

TEMPORARY UTILITIES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Furnish, install and maintain temporary utilities required for construction, remove on completion of work.
- B. Pay all fees associated with temporary utilities including water consumption charges.

1.02 RELATED SECTIONS

- A. Section 01010 - Summary of Work
- B. Other Sections as applicable.

1.03 REQUIREMENTS OF REGULATORY AGENCIES

- A. Comply with National Electric Code.
- B. Comply with Federal, State and Local codes and regulations and with utility company requirements.
- C. Comply with County Health Department and Environmental Regulations.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

2.02 TEMPORARY ELECTRICITY AND LIGHTING

- A. Arrange with utility company, provide service required for power and lighting, and pay all costs for service and for power used in the construction, testing and trial operation prior to final acceptance of the work by the Owner.
- B. Install circuit and branch wiring, with the area distribution boxes located so that power and lighting is available throughout the construction by the use of construction type power cords.
- C. Provide adequate artificial lighting for all areas of work when natural light is not adequate to work, and all areas accessible to the public.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2.03 TEMPORARY WATER

- A. Arrange with the CITY to provide water for construction purposes.
- B. Install branch piping with taps located so that water is available throughout the construction by the use of hoses.
- C. Install at each and every connection to the Owner water supply a backflow preventer meeting the requirements of ANSI A40.6 and AWWA C511. Contractor shall be required to meter and pay for all water used.

2.04 TEMPORARY SANITARY FACILITIES

- A. Provide sanitary facilities in compliance with laws and regulations.
- B. Service, clean and maintain facilities and enclosures.

PART 3 - EXECUTION

3.01 GENERAL

- A. Maintain and operate systems to assure continuous service.
- B. Modify and extend systems as work progress requires.

3.02 REMOVAL

- A. Completely remove temporary materials and equipment when their use is no longer required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities.
- C. Restore permanent facilities used for temporary services to specified condition.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01530

EXISTING UTILITIES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section provides for specifications related to construction in the vicinity of existing utilities.

1.01 RELATED SECTIONS

- A. Section 01010 – Summary of Work
- B. Section 01015 – General Requirements
- C. Section 01030 – Special Project Procedures
- D. Other Sections as applicable.

1.02 CONTRACTOR RESPONSIBILITIES

- A. The term existing utilities shall be deemed to refer to both publicly-owned and privately-owned utilities including, but not limited to, electric power and lighting, telephone, water, gas, storm drains, process lines, sanitary sewers and all appurtenant structures.
- B. Prior to underground construction, the Contractor is required by the Underground Facility Damage Prevention and Safety Act, Chapter 556 FS to contact Sunshine 811, for the location of underground utilities.
- C. Where existing utilities and structures are indicated in the Contract Documents, it shall be understood that all of the existing utilities and structures affecting the work may not be shown and that the locations of those shown are approximate only. It shall be the responsibility of the Contractor to ascertain the actual extent and exact location of existing utilities and structures. In every instance, the Contractor shall notify the proper authority having jurisdiction and obtain all necessary directions and approvals before performing any work in the vicinity of existing utilities.
- D. The Contractor shall be responsible for uncovering and exposing existing utilities sufficiently in advance of pipe laying operations to confirm elevation, size, material, and clearance separation(s). If, upon excavation, an existing utility is found to be in conflict with the proposed construction or be of a size or material different from what is shown on the plans, the Contractor shall immediately notify the Engineer, who will in turn prepare a recommendation. Failure of the Contractor to perform advance investigations shall not relieve it of any claims for delay or damages.
- E. The work shall be carried out in a manner to prevent disruption of existing services and to avoid damage to the existing utilities. Temporary connections shall be provided, as

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

required, to insure uninterrupted of existing services. Any damage resulting from the work of this Contract shall be promptly repaired by the Contractor at his own expense in a manner approved by the Engineer and further subject to the requirements of any authority having jurisdiction. Where it is required by the authority having jurisdiction that they perform their own repairs or have them done by others, the Contractor shall be responsible for all costs thereof.

- F. Where excavations by the Contractor require any utility lines or appurtenant structures to be temporarily supported and otherwise protected during the construction work, such support and protection shall be provided by the Contractor. All such work shall be performed in a manner satisfactory to the end the respective authority having jurisdiction over such work.

1.03 NOTIFICATION BY THE CONTRACTOR

- A. Prior to any excavation in the vicinity of any existing underground facilities, including all water, sewer, storm drain, gas, petroleum products, or other pipelines; all buried electric power, communications, or television cables; all traffic signal and street lighting facilities; and all roadway and state highway rights-of-way the CONTRACTOR shall notify the respective authorities representing the owners or agencies responsible for such facilities not less than three days nor more than seven days prior to excavation so that a representative may be present during such excavation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 RESTORATION OF PAVEMENT

- A. General: All paved areas including concrete, asphaltic concrete, berms cut or damaged during construction shall be replaced with similar materials and of equal thickness to match the existing adjacent undisturbed areas, except where specific resurfacing requirements have been called for in the Contract Documents. All pavements which are subject to partial removal shall be neatly saw-cut in straight lines.
- B. Temporary Resurfacing: Wherever required by the public authorities having jurisdiction, the CONTRACTOR shall place temporary surfacing promptly after backfilling and shall maintain such surfacing for the period of time fixed by said authorities before proceeding with the final restoration of improvements.
- C. Permanent Resurfacing: In order to obtain a satisfactory junction with adjacent surfaces, the CONTRACTOR shall saw-cut back and trim the edge so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with adjacent undisturbed pavement.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01540

SECURITY

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section provides for requirements of security, entry control, personnel identification and miscellaneous restrictions.

1.02 RELATED SECTIONS

- A. Section 01010 - Summary of Work
- B. Other Sections as applicable.

1.03 SECURITY PROGRAM

- A. Protect Work, existing premises and Owner's operations from theft, vandalism and unauthorized entry.
- B. Initiate program in coordination with Owner's existing security system at job mobilization.
- C. Maintain program throughout construction period until Owner occupancy as directed by Engineer.

1.04 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.
- C. Maintain log of workmen and visitors, make available to Owner on request.
- D. Coordinate access of Owner's personnel to site in coordination with Owner's security forces.

1.05 PERSONNEL IDENTIFICATION

- A. Become familiar with Owner and Engineer representatives.
- B. Restrict access to job site to these representatives.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01550

SITE ACCESS AND STORAGE

PART 1 - GENERAL

1.01 GENERAL

- A. This section provides general specifications for the contractors' access to the site and limitations on storage or lay-down area.

1.02 RELATED SECTIONS

- A. Section 01015 – General Requirements
- B. Section 01030 – Special Project Procedures
- C. Section 01505 – Control of Work
- D. Other Sections as applicable.

1.03 HIGHWAY LIMITATIONS

- A. The Contractor shall make his own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress to the site of the work.

1.04 TEMPORARY ACCESS RESTORATION

- A. All areas disturbed by the construction activities shall be restored to proper grade, cleaned up, including the removal of debris, trash, and deleterious materials.
- B. Temporary restoration shall include all driveways, sidewalks and roadways. They shall be swept clean and be maintained free of dirt and dust
- C. All construction materials, supplies, or equipment, including piles of debris shall be removed from the area.
- D. All temporarily restored areas shall be maintained by the Contractor. These areas shall be kept clean and neat, free of dust and dirt, until final restoration operations are completed.
- E. Temporary restoration shall be completed within five days of pipe installation or as specified in other Sections or as required by the owner.
- F. The Contractor is responsible to utilize dust abatement operations in the temporarily restored areas as required, to the satisfaction of the Engineer.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- G. Final restoration shall include the completion of all required pavement replacement of roadways, driveways, curbs, gutters, sidewalks and other existing improvements disturbed by the construction; final grading, placement of sod, pavement marking, etc., all complete and finished, acceptable to the Engineer.
- H. In order to obtain a satisfactory junction with adjacent surfaces, the Contractor shall saw cut back and trim the edge so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with the adjacent undisturbed pavement.

1.05 CONTRACTOR'S WORK AND STORAGE AREA

- A. Contractors on-site work and storage area plan shall be submitted for Owners approval no later than 30 days after NTP.
 - 1. Owner approval of the work are and storage plan is required prior to commencement.
- B. The Contractor shall make his own arrangements for any necessary off-site storage or shop areas necessary for the proper execution of the work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01570

TRAFFIC REGULATION

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Work to be performed under this section shall include furnishing all materials and labor necessary to regulate vehicular and pedestrian traffic.
- B. Provide, operate and maintain equipment, services and personnel, with traffic control and protective devices, as required to expedite vehicular traffic flow around the construction area.
- C. Remove temporary equipment and facilities when no longer required, restore grounds to original, or to specified conditions.

1.02 REFERENCES

- A. The Work under this Contract shall be in strict accordance with the following codes and standards.
 - 1. The applicable municipality
 - 2. Broward County Traffic Engineering Division
 - 3. Florida Department of Transportation Design Standards and Specifications
 - 4. OSHA Safety and Health Standards for Construction.
 - 5. Federal Highway Administration Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)
 - 6. Federal Highway Administration Traffic Controls for Street and Highway Construction and Maintenance Operations

1.03 RELATED SECTIONS

- A. Section 01015 – General Requirements
- B. Section 01030 – Special Project Procedures
- C. Section 01505 – Control of Work
- D. Other Sections as applicable.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 MAINTENANCE OF TRAFFIC

- A. For the maintenance and protection of vehicular and pedestrian traffic in public or private streets and ways, the Contractor shall provide, place, and maintain all necessary barricades, traffic cones, warning signs, lights and other safety devices in accordance with the requirements of the "Manual of Uniform Traffic Control Devices, Part VI - Traffic Controls for Street and Highway Construction and Maintenance Operations," published by U.S. Department of Transportation, Federal Highway Administration (ANSI D6.1).
- B. The Contractor shall provide a Maintenance of Traffic Plan, sealed by a Professional Engineer registered in the State of Florida. The plan, and subsequent revisions, must be approved by the Broward County or the Florida Department of Transportation and the applicable local municipality.
- C. The Contractor shall take all necessary precautions for the protection of the work and the safety of the public. All barricades and obstructions shall be illuminated at night, and all lights shall be kept burning from sunset until sunrise. The Contractor shall station such guards or flaggers and shall conform to such special safety regulations relating to traffic control as may be required by the public authorities within their respective jurisdictions. All signs, signals, and barricades shall conform to the requirements of OSHA and Subpart G, Part 1926, of the OSHA Safety and Health Standards for Construction.
- D. The Contractor shall remove traffic control devices when no longer needed, shall repair all damage caused by installation of the devices, and shall remove post settings and backfill the resulting holes to match grade.

3.02 CORRECTIONS

- A. Upon notification by the owner either verbally or in writing, the contractor shall correct any noted deficiencies within one hour.
- B. Inspection of all traffic control items shall be accomplished at least twice per day. One of these inspections shall be at the end of the work day or at night.

3.03 TRAFFIC AND VEHICULAR ACCESS:

- A. Emergency Vehicles: No single family residence, multi-family residence, apartment, commercial building or place of employment shall be without access to emergency vehicles for a period longer than three hours. The Contractor shall notify in writing the Engineer, the police, fire and other emergency departments and agencies when and where work is to be accomplished that will affect their operations at least two days in advance of such work.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Commercial Properties: Access to commercial property shall not be blocked for a period of more than 30 minutes during the time such properties are open for business.
- C. Residential Property: Access to residential property shall not be blocked for a period of more than 4 hours.

3.04 ROAD CLOSURE

- A. No roads shall be blocked to traffic without adequate detour facilities for a period of more than 30 minutes or as directed by the governing authority.
- B. At least seven days prior to a proposed road closure, the contractor shall submit to the City Engineer a complete traffic control plan. This plan shall include the following minimum information:
 - 1. Sketch of work site and all area roads, streets and mark driveways.
 - 2. Proposed detour route.
 - 3. All necessary traffic control devices to be used.
 - 4. Emergency contractor contact person name and phone to be available 24 hours a day.
 - 5. Estimated times/dates of road closure.

3.05 CONSTRUCTION IN OTHER THAN STATE HIGHWAY RIGHT-OF-WAY:

- A. Construction within right-of-way other than State highway shall be made in full compliance with all requirements of the Florida Department of Transportation and to the satisfaction of the local governing bodies. All necessary barricades, detours, lights and other protective measures shall be provided for the protection of both pedestrian and vehicular traffic.
- B. The Contractor shall provide and maintain such other warning signs and barricades in areas of and around their respective work as may be required for the safety of all those employed in the work or those visiting the site.

3.06 FLAGMEN

- A. Provide qualified and suitably equipped flagmen when construction operations encroach on traffic lanes, as required for regulation of traffic.

3.07 FLARES AND LIGHTS

- A. Provide lights as required to clearly delineate traffic lanes and to guide traffic as required.
- B. Provide lights for use by flagmen in directing traffic.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Provide illumination of critical traffic and parking areas as required.

3.08 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, Owner's operations, or construction operations.
- B. Monitor parking of construction personnel's private vehicles.
- C. Maintain free vehicular access to and through parking areas and driveways.
- D. Prohibit parking on or adjacent to access roads, or in non-designated areas.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01600

MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Material and equipment incorporated into the Work.
 - 1. Conform to applicable specifications and standards.
 - 2. Comply with size, make, and type and qualify specified, or as specifically approved in writing by the Engineer.
 - 3. Manufactured and Fabricated Products.
 - a. Design, fabricate, and assemble in accord with the best engineering and shop practices.
 - b. Manufacture like part of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service conditions.
 - e. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
 - 4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

1.02 RELATED SECTIONS

- A. Section 01030 - Special Project Procedures
- B. Section 01340 - Shop Drawings, Product Data, and Samples
- C. Section 01720 - Project Record/As-built Documents
- D. Other Sections as applicable.

1.03 APPROVAL OF MATERIALS

- A. Only new materials and equipment shall be incorporated in the work. All materials and equipment furnished by the Contractor shall be subject to the inspection and approval of the Engineer. No material shall be delivered to the work without prior approval of the Engineer.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Within 30 days after the effective date of the Agreement, the Contractor shall submit to the Engineer, data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable the Engineer to identify the particular product and to form an opinion as to its conformity to the specifications. The data shall comply with Paragraph 1.07 of this Section.
- C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the Contractor. If the Engineer requires, either prior to beginning or during progress of the work, the Contractor shall submit samples of materials for such special tests as may be necessary to demonstrate that they conform to the specifications. Such samples shall be furnished, stored, packed, and shipped as directed at the Contractor's expense. Except as otherwise noted, the Owner will make arrangements for and pay for the tests.
- D. The Contractor shall submit data and samples sufficiently early to permit work. Any delay of approval resulting from the Contractor's failure to submit samples or data promptly shall not be used as a basis of claim against the Owner or the Engineer.
- E. In order to demonstrate the proficiency of workmen or to facilitate the choice among several textures, types, finishes, and surfaces, the Contractor shall provide such samples of workmanship or finish as may be required.
- F. The materials and equipment used on the work shall correspond to the approved samples or other data.

1.04 MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instruction, obtain, and distribute copies of such instructions to parties involved in the installation, including copies to the Engineer.
 - 1. Maintain one set of complete instructions at the job site during installation and until completion.
- B. Handle, install, connect, clean, condition, and adjust products in strict accord with such instructions and in conformity with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Engineer for further instructions.
 - 2. Do not proceed with work without clear instructions.
- C. Perform work in accord with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.05 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of Products in accord with construction schedules; coordinate to avoid conflict with work and conditions at the site.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 2. Immediately upon delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

1.06 STORAGE AND PROTECTION

- A. The Contractor shall furnish a covered, weather-protected storage structure, providing a clean, dry, noncorrosive environment for all mechanical equipment, valves, electrical and instrumentation equipment, and special equipment to be incorporated into this project. Storage of equipment shall be performed to allow easy access and be in strict accordance with the "instructions for storage" of each equipment supplier and manufacturer including weather/humidity protection, connection of heaters, placing of storage lubricants in equipment, blocking, or skid storage, etc. Corroded, damaged, or deteriorated equipment and parts shall be replaced before acceptance of the project.
- B. Store Products in accord with manufacturer's instructions, with seals and labels intact and legible.
1. Store products subject to damage by the elements in weather-tight enclosures.
 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
 3. Store fabricated products above the ground, on blocking or skids, to prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings. Provide adequate ventilation to avoid condensation.
 4. Store loose granular materials in a well drained area on solid surfaces to prevent mixing with foreign matter.
- C. All materials and equipment to be incorporated in the work shall be handled and stored by the Contractor before, during, and after shipment in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and any injury, theft or damage of any kind whatsoever to the material or equipment.
- D. Cement, sand, and lime shall be stored under a roof, off the ground, and shall be kept completely dry at all times. All structural and miscellaneous steel and reinforcing steel shall be stored off the ground, or otherwise, to prevent accumulations of dirt or grease, and to minimize rusting. Brick, block, and similar masonry products shall be handled and stored in a manner to reduce breakage, chipping, cracking, and spalling to a minimum.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- E. Moving parts shall be rotated a minimum of once weekly to insure proper lubrications, and to avoid metal-to-metal "welding". Upon installation of the equipment, the Contractor shall start the equipment, at least half-load, once weekly, for an adequate period of time to insure that the equipment does not deteriorate from lack of use.
- F. All materials which, in the opinion of the Engineer, have become so damaged as to be unfit for the use intended or specified, shall be promptly removed from the site of the work, and the Contractor shall receive no compensation for the damaged material or its removal.
- G. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that Products are maintained under specific conditions, and free from damage or deterioration.
- H. Contractor shall be responsible for protection after installation by providing substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations.
- I. The Contractor shall be responsible for all materials, equipment, and supplies sold and delivered to the Owner under this Contract, until final inspection of the work and acceptance thereof by the Owner. In the event any such material, equipment, and supplies are lost, stolen, damaged, or destroyed prior to final inspection and acceptance, the Contractor shall replace same without additional cost to the Owner.
- J. Should the Contractor fail to take proper action on storage and handling of equipment supplied under this Contract within seven days after written notice to do so has been given, the Owner retains the right to correct all deficiencies noted in previously transmitted written notice and deduct the cost associated with these corrections from the Contractor's Contract. These costs may be comprised of expenditures for labor, equipment usage, administrative, clerical, engineering, and any other costs associated with making the necessary corrections.

1.07 SUBSTITUTIONS AND PRODUCT OPTIONS

- A. Products List
 - 1. Within 30 days after the effective date of the Agreement, submit to the Engineer a complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.
- B. Contractor's Options
 - 1. For Products specified only by reference standard, select any product meeting that standard.
 - 2. For Products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications, subject to the bid procedures outlined under other applicable contract documents.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3. For products specified by naming one or more Products or Manufacturers and an "or equal", the Contractor must submit a request for substitutions of any Product or Manufacturer not specifically named.

C. Substitutions

1. For a period of 30 days after the effective date of the Agreement, the Engineer will consider written requests from Contractor for substitution of Products.
2. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
3. The Engineer shall be the judge of the acceptability of the proposed substitution.
4. No substitutions will be considered by the Engineer after 30 days from the Contract Date.

D. Contractor's Representation

1. A request for a substitution constitutes a representation that Contractor:
 - a. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
 - b. Will provide the same warranties or bonds for the substitution as for the Product specified.
 - c. Will coordinate the installation of an accepted substitution into the Work, and make such other changes as may be required to make the Work complete in all respects.
 - d. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- e. The Engineer will review requests for substitutions with reasonable promptness, and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

1.08 SPECIAL TOOLS

- A. Manufacturers of equipment and machinery shall furnish any special tools (including grease guns or other lubricating devices) required for normal adjustment, operations and maintenance, together with instructions for their use. The Contractor shall preserve and deliver to the Owner these tools and instructions in good order no later than upon completion of the Contract.

1.09 STORAGE AND HANDLING OF EQUIPMENT ON SITE

- A. Because of the long period allowed for construction, special attention shall be given to the storage and handling of equipment on site. As a minimum, the procedure outlined below shall be followed.
 - 1. Equipment shall not be shipped until approved by the Engineer. The intent of this requirement is to reduce on-site storage time prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the Engineer, unless upon arrival it is to be stored as specified in Paragraph 1.06. Operation and maintenance data, as described in Paragraph 1.08 of Section 01730 shall be submitted to the Engineer for review prior to shipment of equipment.
 - 2. All equipment having moving parts, such as gears, electric motors, etc. and/or instruments, shall be stored in a temperature and humidity controlled building approved by the Engineer, until such time as the equipment is to be installed.
 - 3. All equipment shall be stored fully lubricated with oil, grease, etc. unless otherwise instructed by the manufacturer.
 - 4. Manufacturer's storage instructions shall be carefully studied by the Contractor and reviewed with the Engineer by him. These instructions shall be carefully followed and a written record of this kept by the Contractor.
 - 5. Moving parts shall be rotated a minimum of once weekly to insure proper lubrication, and to avoid metal-to-metal "welding". Upon installation of the equipment, the Contractor shall start the equipment, at least half-load, once weekly for an adequate period of time to insure that the equipment does not deteriorate from lack of use.
 - 6. Lubricants shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. Mechanical equipment to be used in the work, if stored for longer than ninety (90) days, shall have the bearings cleaned, flushed, and lubricated prior to testing and start up, at no extra cost to the Owner.
 - 7. Prior to acceptance of the equipment, the Contractor shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certifications

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

by the manufacturer shall be deemed to mean that the equipment is judged by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested, and accepted in a minimum time period. As such, the manufacturer will guarantee the equipment equally in both instances. If such a certification is not given, the equipment shall be judged to be defective. It shall be removed and replaced at the Contractor's expense.

1.10 WARRANTY

- A. For all major pieces of equipment, submit a warranty from the equipment manufacturer as specified in Section 01740.

1.11 SPARE PARTS

- A. Spare parts for certain equipment provided under Division 11 through 16 have been specified in the pertinent sections of the Specifications. The Contractor shall collect and store all spare parts so required in an area to be designated by the Engineer. In addition, the Contractor shall furnish to the Engineer an inventory listing all spare parts, the equipment they are associated with, the name and address of the supplier, and the delivered cost of each item. Copies of actual invoices for each item shall be furnished with the inventory to substantiate the delivered cost.

1.12 LUBRICANTS

- A. During testing and prior to acceptance, the Contractor shall furnish all lubricants necessary for the proper lubrication of all equipment furnished under this Contract.

1.13 GREASE, OIL AND FUEL

- A. All grease, oil, and fuel required for testing of equipment shall be furnished with the respective equipment. The Owner shall be furnished with a year's supply of required lubricants including grease and oil of the type recommended by the manufacturer with each item of the equipment supplied under Division 11 through 16.
- B. The Contractor shall be responsible for changing the oil in all drives and intermediate drives of each mechanical equipment after initial break-in of the equipment, which in no event shall be any longer than three weeks of operation.

1.14 PROTECTION AGAINST ELECTROLYSIS

- A. Where dissimilar metals are used in conjunction with each other, suitable insulation shall be provided between adjoining surfaces so as to eliminate direct contact and any resultant electrolysis. The insulation shall be bituminous impregnated felt, heavy bituminous coatings, nonmetallic separators or washers, or other acceptable materials.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.15 FASTENERS

- A. All necessary bolts, anchor bolts, nuts, washers, plates and bolt sleeves shall be furnished by the Contractor. Bolts shall have suitable washers and, where so required, their nuts shall be hexagonal.
- B. All bolts, anchor bolts, nuts, washers, plates, and bolt sleeves shall be Type 316 stainless steel unless otherwise specifically indicated or specified.
- C. Unless otherwise specified, stud, tap, and machine bolts shall be of the best quality refined bar iron. Hexagonal nuts of the same quality of metal as the bolts shall be used.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01670

TESTING PIPING SYSTEMS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Perform specified services with Contractor's qualified personnel, or employ and pay for a qualified organization to perform specified services.
- B. Pressure and Piping Systems.

1.02 RELATED REQUIREMENTS

- A. Other Sections as applicable.

1.03 DESCRIPTION

- A. Perform testing of piping systems in accordance with the latest edition of AWWA and as specified below.
- B. Provide instrument required for testing of piping systems.
 - 1. Make instruments available to Engineer to facilitate spot checks during testing.
 - 2. Retain possession of instruments; remove from site at completion of services.
- C. Provide all water required for flushing and testing. The Contractor shall obtain a construction meter from the City at current rates and pay for meter rental and all water used.
- D. Provide all necessary pumping equipment and other equipment, materials and facilities required for proper completion of the flushing and testing specified.
- E. Source and quality of water, procedure and test equipment shall be acceptable to the Engineer. Length of tested line shall not exceed 2,000 feet.
- F. All tests shall be made in the presence of the Engineer. Notify Engineer at least 48 hours before any Work is to be inspected or tested.
- G. If inspection or test shows defects, the piping system(s) shall be repaired or replaced and inspection repeated, until such piping is acceptable to the Engineer.
- H. All pipe, fittings, valves and joints shall be carefully examined during test. Leaky joints shall be tightened by remaking the joint.
- I. Sections of the system may be tested separately. It shall be distinctly understood that any defect which may subsequently develop in section already tested and accepted shall promptly be corrected and that section retested.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

J. Disposal of the water used for testing shall be subject to the approval of the Engineer.

1.04 QUALITY ASSURANCE

A. The organization which performs the testing shall, prior to testing, provide their qualifications and demonstrate their ability to perform the services to the satisfaction of the Engineer.

1.05 SUBMITTALS

A. Preliminary

1. Submit three copies of documentation to confirm compliance with Quality Assurance provisions:

- a. Organization supervisor and personnel training and qualifications.
- b. Specimen copy of each of the report forms proposed for use.

B. At least fifteen days prior to Contractor's request for final inspection, submit three copies of final reports on applicable reporting forms, for review.

1. Each individual final reporting form must bear the signature of the person who recorded data and that of the supervisor of the reporting organization.
2. Identify instruments of all types which were used and last date of calibration of each.

1.06 JOB CONDITIONS

A. Prior to start of testing of piping systems, verify that required "Job Conditions" are met:

1. System or system element installation is complete.
2. All required materials, water, instruments, etc. are on hand.
3. All other preparations are completed.

1.07 TESTING PROCEDURES

A. Domestic and Small Diameter Process Systems Test: Not Used.

B. Interior Drainage System: Not Used.

C. Underground Sewer System: Not Used.

D. Exterior and Interior Piping Systems:

1. Exterior and interior piping shall pass a hydrostatic pressure test and a leakage test as defined below before acceptance. The pressure and leakage test shall be made after all jointing operations are completed and after backfilling is completed. All concrete reaction blocks, or other bracing and restraining facilities, shall be in place at least 14 days before the initial filling of the line.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2. The pressure and leakage tests may be applied to an individual section of line isolated between the existing line valves, or may be applied to shorter sections of line at the Contractor's option. If shorter sections are tested, test plugs or bulkheads as required at the ends of the test section shall be furnished and installed by the Contractor at his expense, together with all anchors, braces, and other devices required to withstand the hydrostatic pressure on such plug or plugs, without imposing any hydraulic thrust on the pipe line or any part thereof. The Contractor shall be solely responsible for any and all damage to the pipe line, and/or to any other facility, which may result from the failure of test plugs furnished by him or supports therefore, in any case.

3. Hydrostatic Tests:

a. The section of line to be tested shall be slowly filled with water and all air expelled from the pipe. Care shall be taken that all air valves are installed and open in the section being filled, and that the rate of filling does not exceed the venting capacity of the air valves.

b. Hydrostatic test pressure shall be as follows:

<u>System</u>	<u>Test Rating</u>
Wastewater Force Main	150 psi
Potable Water	150 psi
Other Pressure Pipe	1.5 times maximum operation pressure.

c. After the pipe has been laid, all newly laid pipe of any valved section thereof shall be subjected to a hydrostatic pressure test.

1) Test pressure shall:

- i. Not exceed pipe or thrust-restraint design pressures.
- ii. Be of at least 2-hour duration.
- iii. Not vary by more than ± 5 psi (0.35 Bar) for the duration of the test.
- iv. Not exceed twice the rated pressure of the valves or hydrants when the pressure boundary of the test section includes closed gate valves or hydrants.
NOTE: Valves shall not be operated in either direction at differential pressures exceeding the rated pressures.
- v. Not exceed the rated pressure of the valves when the pressure boundary of the test section includes closed valves.

2) Each valved section of pipe shall be filled with water slowly and the specified test pressure based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test gauge shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Engineer. Valves shall not be operated in either the opening

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

or closing direction at differential pressures above the rated pressure. The system shall be allowed to stabilize at the test pressure before conducting the leakage test.

- d. Examination. Any exposed pipe, fittings, valves, hydrants and joints shall be examined carefully during the test. Any damaged or defective pipe fittings, valves or hydrants that are discovered following the pressure test shall be repaired or replaced with sound material and the test shall be repeated until it is satisfactory to the Engineer.

1) Leakage Test

- i. A leakage test shall be conducted concurrently with the pressure test. Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or valved section thereof, to maintain pressure within 5 psi (0.35 Bar) of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water. Leakage SHALL NOT BE MEASURED BY A DROP IN PRESSURE IN A TEST SECTION OVER A PERIOD OF TIME.
- ii. No pipe installation will be accepted if the leakage is greater than that determined by the following formula:

$$L = \frac{SD * P^{1/2}}{148,000}$$

In which L is the allowable leakage, in gallons per hour; S is the length of pipe tested in feet; D is the nominal diameter of the pipe in inches; and P is the average test pressure during the leakage test in pounds per square inch.

- (a) To obtain leakage in liter/hour, multiply the values in the table by 3.785.
- (b) When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gal/h/in (0.0012 L/h/mm) of nominal valve size shall be allowed.
- (c) When hydrants are in the test section, the test shall be made against the closed hydrant.
- (d) Acceptance shall be determined on the basis of allowable leakage. If any test of pipe laid discloses leakage greater than that specified in Section "b" above, Contractor shall, at his own expense, locate and make repairs as necessary until the leakage is within the specified allowance.
- (e) All visible leaks are to be repaired regardless of the amount of leakage.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 GENERAL

- A. Prior to testing, pig and flush all piping systems with water to remove all debris in the system. Pigging of lines 12" and smaller is not required unless the line becomes contaminated.
- B. For testing refer to the Testing Procedures above.
- C. No separate payment for testing shall be made.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
SECTION 01700
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Administrative and procedural requirements for project closeout.
 - 1. Inspection procedures.
 - 2. Project Record Document submittal.
 - 3. Final cleaning.
- B. Warranty and bond submittal.
- C. Closeout submittals, warranties and bonds required for specific products of work.

1.02 RELATED SECTIONS

- A. Section 7 – General Conditions
- B. Section 8 – Special Conditions
- C. Section 01310 - Construction Schedules
- D. Section 01370 - Schedule of Values
- E. Section 01380 - Construction Photographs
- F. Section 01710 - Cleaning
- G. Section 01720 - Project Record/As-built Documents
- H. Section 01740 – Warranties and Bonds
- I. Other Sections as applicable.

1.03 SUBSTANTIAL COMPLETION

- A. Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - 1. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 2. Advise Owner of pending insurance change-over requirements.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
 4. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
 5. Submit record drawings, maintenance manuals, and similar final record information.
 6. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
- B. When the Contractor considers the Work to be substantially complete, he shall submit a written notice to the Engineer that the Work, or designated portion of the Work, is complete and ready for inspection.
- C. Within a reasonable time of receipt of a request for inspection, the Engineer will either proceed with inspection or advise the Contractor of unfulfilled requirements. When the Engineer and Owner concur that the Work, or designated portion of the Work, is substantially complete, the Engineer will prepare the Certificate of Substantial Completion following inspection.
- D. Should the Engineer determine that the Work is not substantially complete, he will advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Engineer will repeat inspection when requested and assured that the Work has been substantially completed.
 2. Results of the completed inspection will form the basis of requirements for final acceptance.

1.04 FINAL COMPLETION

- A. When Contractor considers the Work to be complete, he shall submit written certification to the Engineer that the Work is completed and ready for final inspection. Include the following:
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 3. Submit a certified copy of the Engineer's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, the list has been endorsed and dated by the Engineer.
 4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

took possession of and responsibility for corresponding elements of the Work.

5. Submit consent of surety to final payment.
 6. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. The Engineer will inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the - Engineer.
1. Upon completion of inspection, the Engineer will prepare a certificate of final acceptance, or advise the Contractor of Work that is incomplete, or of obligations that have not been fulfilled but are required for final acceptance.
 2. If necessary, re-inspection process will be repeated.

1.05 AS-BUILT DOCUMENT SUBMITTALS (REFER TO SECTION 01720).

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 FINAL CLEANING

- A. Remove temporary protection and facilities installed for protection of the Work during construction.
- B. Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.
- C. Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01710

CLEANING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Execute cleaning, during progress of the Work, and at completion of the Work, as required by General Conditions.

1.02 RELATED SECTIONS

- A. Section 01010 – Summary of Work
- B. Other Sections as applicable.

1.03 DISPOSAL REQUIREMENTS

- A. Conduct cleaning and disposal operations to comply with applicable codes, ordinances, regulations, and anti-pollution laws.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute periodic cleaning to keep the Work, the site and adjacent properties, free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris and rubbish.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

DOCUMENT 01720

PROJECT RECORD/AS-BUILT DOCUMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section includes the requirements for maintaining, recording and submitting Project Record Documents, As-built drawings, including, but not limited to,
 - 1. As-Built Drawings
 - 2. Record Drawings
 - 3. Record Specifications and other Contract Documents
 - 4. Record Samples, Shop Drawings or Record Product Data

1.02 RELATED SECTIONS

- A. Section 01050 - Field Engineering and Surveying
- B. Section 01152 – Applications for Payment
- C. Section 01340 - Shop Drawings, Working Drawings and Samples
- D. Section 01700 – Project Closeout
- E. Other Sections as applicable.

1.03 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Maintain at the site for the Owner and Engineers review one record copy of:
 - 1. Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other Modifications to the Contract
 - 5. Engineer's Field Orders or Written Instructions
 - 6. Approved Shop Drawings, Working Drawings, and Samples
 - 7. Field Test Reports
 - 8. Construction Photographs
- B. Store Record Documents in the Contractor's field office apart from documents used for construction.
- C. File Record Documents in accordance with the CSI format number system utilized in the Contract Documents.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- D. Maintain Record Documents in a clean, dry, legible condition and in good order. Do not use Record Documents for construction purposes.
- E. Make Record Documents available at all times for inspection by the Engineer.
- F. As a prerequisite for monthly progress payments, the Contractor is to exhibit the currently updated Record Documents for review by the Engineer and the Owner.

1.04 RECORDING

- A. Record Drawings:
 - 1. Maintain a clean, undamaged set of prints of Contract Drawings to serve as the project Record Drawings.
 - 2. Label each sheet "RECORD DRAWING" in neat large printed letters with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
 - 3. The Record Drawings shall be presented at the same scale as the Contract Drawings.
 - 4. The Record Drawings shall correctly and accurately show all changes from the Contract Drawings made during construction.
 - 5. All information shall be verified and certified by an independent Professional Surveyor and Mapper registered in the State of Florida.
 - 6. All vertical information shall be provided in the datum indicated in the Contract Drawings.
 - 7. Horizontal and vertical locations referenced to base-line or permanent surface improvements.
 - 8. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross reference at the corresponding location on the Record Drawings.
 - 9. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - 10. Mark new information that was not shown on Contract Drawings or Shop Drawings.
 - 11. Note related Change Order numbers where applicable.
 - 12. Organize Record Drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
 - 13. Do not use Record Drawings for construction purposes.
 - 14. Record information concurrently with construction progress.
- B. The Record Drawings shall be neat and legible including the following:
 - 1. Above ground piping and equipment:

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- a. All equipment locations, dimensions and elevations as indicated in the Contract Drawings.
 - b. All building and tank locations, dimensions and elevations as indicated in the Contract Drawings.
 - c. All above ground piping size, material, class, lengths, dimensions, and elevations as indicated in the Contract Drawings.
 - d. Horizontal locations of piping, fittings, valves and appurtenances.
 - e. Elevations of the top of pipe, fittings, valves and appurtenances.as indicated in the Contract Drawings and at 50' maximum increments
 - f. All changes from the original design.
2. Underground pressure pipe including potable water mains sanitary sewer force mains, drainage force mains and the like:
- a. All piping size, material, class, lengths, dimensions, bury depth and elevations as indicated in the Contract Drawings.
 - b. Horizontal locations of piping, fittings, valves and appurtenances.
 - c. Elevations of the top of pipe, fittings, valves and appurtenances.
 - d. Elevations as indicated in the Contract Drawings and at 50' maximum increments.
 - e. Lengths of restrained pipe.
 - f. Water service locations.
 - g. Meter sizes.
 - h. All changes from the original design.
3. Gravity sanitary sewer:
- a. All piping size, material, class, lengths, slopes, dimensions and elevations as indicated in the Contract Drawings.
 - b. Horizontal locations of manholes.
 - c. Rim, invert, and size of all manholes.
 - d. Service terminal end locations.
 - e. Wet well construction including diameter, bottom, invert and float elevations.
 - f. All changes to piping from the original design.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

4. Stormwater Drainage:
 - a. All piping size, material, class, lengths, dimensions and elevations as indicated in the Contract Drawings.
 - b. Horizontal locations of manholes and catch basins.
 - c. Rim, invert, bottom elevations and size of all manholes and catch basins.
 - d. All surface elevations indicated on the Contract Drawings including, but not limited to, swales, berms, yards, sidewalks, and the like.
 - e. Horizontal location and elevation of all storm water retention or detention areas.
 - f. All changes from the original design.
5. Limerock base:
 - a. Upon completion of all underground utilities and limerock base, and before placement of asphalt, provide the following for Engineer review:
 - 1) Finished limerock base elevations taken at the location of finished asphalt elevations as indicated in the Contract Drawings.
 - 2) Additional elevations as required by the Engineer, including, but not limited to:
 - (a) Finished limerock base at centerline, edge of median and edge of pavement.
 - (b) Back of sidewalk or right of way.
 - (c) Bottom of swale or flow line of gutter.
 - (d) Top of curb.
 - (e) High points, low points and grade breaks.
 - (f) Intersections.
6. Miscellaneous:
 - a. Field changes of dimensions and details.
 - b. Details not on original contract drawings.
- C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction.
 1. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.
 2. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3. Note related record drawing information and Product Data.
 4. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
 5. Changes made by field order or by Change Order.
- D. Record Product Data (Shop Drawings): Maintain one copy of each Product Data submittal.
1. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations.
 2. Give particular attention to concealed products and portions of the work which cannot otherwise be readily discerned later by direct observation.
 3. Note related Change Orders and mark-up of record drawings and Specifications.
- E. Record Sample Submitted: Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Engineer and the Owner to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's Sample storage area.
- F. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work.

1.05 SUBMITTAL

- A. Project Record Documents, demonstrating construction progress, shall be submitted only with each Application for Payment.
- B. Project As-Built Drawings, demonstrating construction completion shall be submitted with the balance of Closeout documents at the conclusion of construction including:
1. Three sets of signed and sealed sets of prints by a registered professional surveyor.
 2. One compact disc copy of As-built drawings in Autocad format, and PDF format.
- C. Accompany submittals with transmittal letter in duplicate, containing:
1. Date
 2. Project Title and Number
 3. Contractor's Name and Address
 4. Title and Number of each As-Built drawing
 5. Signature of Contractor or his Authorized Representative

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS
PROJECT

SECTION 01730

OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
 - 1. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of Specifications.
- B. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

1.02 RELATED SECTIONS

- A. Section 01030 – Special Project Procedures
- B. Section 01340 – Shop Drawings, Working Drawings and Samples
- C. Section 01700 – Contract Closeout
- D. Section 01720 – Project Record/As-built Documents
- E. Section 01740 – Warranties & Bonds
- F. Other Sections as applicable.

1.03 QUALITY ASSURANCE

- A. Preparation of data shall be done by personnel:
 - 1. Trained and experienced in maintenance and operation of described products.
 - 2. Familiar with requirements of this Section.
 - 3. Skilled as technical writers to the extent required to communicate essential data.
 - 4. Skilled as draftsman competent to prepare required drawings.

1.04 FORM OF SUBMITTALS

- A. Prepare data in form of an instructional manual for use by Owner's personnel.
- B. Format
 - 1. Size: 8 1/2 inches x 11 inches
 - 2. Paper: 20 pound minimum, white, for typed pages.
 - 3. Text: Manufacturer's printed data, or neatly typewritten.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

4. Drawings:
 - a. Provide reinforced punched binder tab, bind in with text.
 - b. Reduce larger drawings and fold to size of text pages, but not larger than 11 inches x 17 inches.
5. Provide fly-leaf for each separate product, or each piece of operating equipment.
 - a. Provide types description of product, and major component parts of equipment.
 - b. Provide indexed tabs.
6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:
 - a. Title of Project
 - b. Identity of separate structure as applicable.
 - c. Identity of general subject matter covered in this manual.

C. Binders

1. Commercial quality three-ring binders with durable and cleanable plastic covers.
2. Maximum ring diameter shall be 2 inches.
3. When multiple binders are used, correlate the data into related consistent groupings.

1.05 CONTENT OF MANUAL

- A. Neatly typewritten Table of Contents for each volume, arranged in systematic order.
 1. Contractor, name of responsible principal, address, and telephone number.
 2. A list of each product required to be included, indexed to content of the volume.
 3. List, with each product, name, address, and telephone number of:
 - a. Subcontractor of installer
 - b. Maintenance contractor, as appropriate
 - c. Identify area of responsibility of each
 - d. Local source of supply for parts and replacement.
 4. Identify each product name and other identifying symbols as set forth in Contract Documents.
- B. Product Data
 1. Include only those sheets which are pertinent to the specific product.
 2. Annotate each sheet to:
 - a. Clearly identify specific product or part installed.
 - b. Clearly identify data applicable to installation.
 - c. Delete references to inapplicable information.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

C. Drawings

1. Supplement product data with drawings as necessary to clearly illustrate:
 - a. Relations of component parts of equipment and systems.
 - b. Control and flow diagrams.
2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
3. Do not use Project Record Documents as maintenance drawing.

D. Written text, as required to supplement product data for the particular installation:

1. Organize in consistent format under separate headings for different procedures.
2. Provide logical sequence of instructions of each procedure.

E. Copy of each warranty, bond and service contract issued:

1. Provide information sheet for Owner's personnel, give:
 - a. Proper procedures in event of failure.
 - b. Instances which might affect validity of warranties or bonds.

1.06 MANUAL FOR MATERIALS AND FINISHES

A. Submit five copies of complete manual in final form.

B. Content for architectural products, applied materials and finishes

1. Manufacturer's data, giving full information on products.
 - a. Catalog number, size, composition.
 - b. Color and texture designations.
 - c. Information required for re-ordering special-manufactured products.
2. Instructions for care and maintenance.
 - a. Manufacturer's recommendation for types of cleaning agents and methods.
 - b. Cautions against cleaning agents and methods which are detrimental to product.
 - c. Recommended schedule for cleaning and maintenance.

C. Content, for moisture-protection and weather-exposed products

1. Manufacturer's data, giving full information on products
 - a. Applicable standards.
 - b. Chemical composition.
 - c. Details of installation.
2. Instructions for inspection, maintenance and repair.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- D. Additional requirements for maintenance data: Respective sections of Specifications.
- E. Provide complete information for products specified.

1.07 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit five copies of complete manual in final form.
- B. Content, for each unit of equipment and system, as appropriate:
 - 1. Description of unit and component parts
 - a. Function, normal operating characteristics and limiting conditions
 - b. Performance curves, engineering data and tests
 - c. Complete nomenclature and commercial number of replaceable parts
 - 2. Operating procedures
 - a. Start-up, break-in, routine and normal operating instructions
 - b. Regulation, control, stopping, shut-down and emergency instructions
 - c. Summer and winter operating instructions
 - d. Special operating instructions
 - 3. Maintenance Procedures
 - a. Routine operations
 - b. Guide to "trouble-shooting"
 - c. Disassembly, repair and reassembly
 - d. Alignment, adjusting and checking
 - 4. Servicing and lubrication schedule
 - a. List of lubricants required
 - 5. Manufacturer's printed operating and maintenance instructions
 - 6. Description of sequence of operation by control manufacturer
 - 7. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance
 - a. Predicted list of parts subject to wear
 - b. Items recommended to be stocked as spare parts
 - 8. As-installed control diagrams by controls manufacturer
 - 9. Each contractor's coordination drawings
 - a. As-installed color coded piping diagrams
 - 10. Charts of valve tag numbers, with location and function of each valve
 - 11. List of original manufacturer's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage
 - 12. Other data as required under pertinent sections of specifications

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Contents, for each electric and electronic system, as appropriate
 - 1. Description of system and component parts
 - a. Function, normal operating characteristics, and limiting conditions
 - b. Performance curves, engineering data and tests
 - c. Complete nomenclature and commercial number of replaceable parts
 - 2. Circuit directories of panel-boards
 - a. Electrical service
 - b. Controls
 - 3. As-installed color coded wiring diagrams
 - 4. Operating procedures:
 - a. Routine and normal operating instructions
 - b. Sequences required
 - c. Special operating instructions
 - 5. Maintenance procedures
 - a. Routine operations
 - b. Guide to "trouble-shooting"
 - c. Disassembly, repair and reassembly
 - d. Adjustment and checking
 - 6. Manufacturer's printed operating and maintenance instructions
 - 7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
 - 8. Other data as required under pertinent sections of specifications
- D. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.
- E. Additional requirements for operating and maintenance data: Respective sections of Specifications.
- F. Provide complete information for product specified.

1.08 SUBMITTAL SCHEDULE

- A. Submit two copies of preliminary draft of proposed formats and outlines of contents of Operation and Maintenance Manuals within 30 days after Notice to Proceed.
 - 1. The Engineer will review the preliminary draft and return one copy with comments.
- B. Submit two copies of completed data in final form no later than 30 days following the Engineer's review of the last shop drawing and submittal specified under Section 01340.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS
PROJECT

1. One copy will be returned with comments to be incorporated into final copies.
- C. Submit specified number of copies of approved data in final form directly to the offices of the Engineer, Calvin, Giordano & Associates, within 30 calendar days of product shipment to the project site and preferably within 30 days after the reviewed copy is received.
- D. Submit six copies of addendum to the operation and maintenance manuals as applicable and certificates as specified in paragraph 1.01B of Section 01030 within 30 days after final inspection and plant start-up test.
- E. Final Operation and Maintenance submittals shall be in large three-ring binders organized by specification Section and plainly marked per paragraph 1.04Ca.

1.09 INSTRUCTION OF OWNER'S PERSONNEL

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment, and maintenance of products, equipment and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction.
 1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

1.10 ENGINEER'S O & M CHECKLIST

- A. The Engineer will review Operation and Maintenance Manuals submittals on operating equipment for conformance with the requirements of this Section. The review will generally be based upon the *O&M Review Checklist* (presented on the pages at the end of this section for the benefit of the Contractor and his suppliers).

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)



Calvin, Giordano & Associates, Inc.

EXCEPTIONAL SOLUTIONS™

O & M REVIEW CHECKLIST

EQUIPMENT SUBMITTED _____ DATE OF SUBMITTAL _____

MANUFACTURER _____ DEGREE OF APPROVAL _____

SPECIFICATION SECTION _____ DRAWING NUMBER _____

- _____ Is the submittal correct for model/series/configuration originally submitted with shop drawings?
- _____ Is the binding correct with assigned color/printing etc.?
(Pertains to final three volumes)
- _____ Is the submittal properly indexed?
- _____ Does the submittal pertain only to equipment being furnished?
- _____ Is the submittal easily understood and instructively arranged?
- _____ Does the submittal include start-up, shutdown and troubleshooting procedures?
- _____ Are sufficient drawings and schematics included to supplement written descriptions?
- _____ Is the listing of name plate data for each piece of supplied equipment provided and attached?
- _____ Are all submitted "C" and "D" size drawings printed on paper that is 11 inches high and folded to 8 1/2 inches wide?
- _____ Is proper and complete instruction for servicing included?
- _____ Is there a suggested operating log sheet for equipment?
- _____ Is schedule for lubrication provided?
- _____ Is there a recommended preventative maintenance schedule?
- _____ Are necessary safety precautions clearly indicated where they relate to the equipment?
- _____ Is the Area Representative information provided, i.e., Name, Address, Telephone Number?
- _____ Are specified spare parts indicated and listed?

The following are the points of rejection requiring resubmittal by Contractor:

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 01740

WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Compile warranties and bonds as specified in the Contract Documents.
- B. Co-execute submittals when so specified.
- C. Review submittals to verify compliance with Contract Documents.
- D. Submit to the Engineer for review and transmittal to Owner.

1.02 RELATED SECTIONS

- A. General Instructions and General Conditions of Contract.
- B. Section 01030 - Special Project Procedures.
- C. Section 01700 - Contract Closeout.
- D. Other Sections as applicable.

1.03 SUBMITTAL REQUIREMENTS

- A. Assemble warranties, bond, service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.
- B. Number of original signed copies required: two (2) each.
- C. Table of Contents: neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item
 - 2. Firm, with name of principal, address and telephone number
 - 3. Scope
 - 4. Date of beginning of Warranty, bond or service and maintenance contract
 - 5. Duration of warranty, bond or service maintenance contract
 - 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure
 - b. Instances which might affect the validity of warranty or bond
 - 7. Contractor, name of responsible principal, address and telephone number

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.04 FORM OF SUBMITTALS

- A. Prepare in duplicate packets
- B. Format:
 - 1. Size 8 1/2 inches x 11 inches, punch sheets for standard 3-post binder
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
 - a. Title of Project
 - b. Name of Contractor
- C. Binders: Commercial quality, three-post (3) binder, with durable and cleanable plastic covers and maximum post width of 2 inches.

1.05 WARRANTY SUBMITTAL REQUIREMENTS

- A. For all equipment, submit a one-year warranty from the equipment manufacturer, unless otherwise specified. The manufacturer's warranty period shall be concurrent with the Contractor's for one year commencing at the time of acceptance by the Owner.
- B. The Contractor shall be responsible for obtaining certificates for equipment warranty for all major equipment and which has a 1 HP motor or which lists for more than \$1,000. The Engineer reserves the right to request warranties for equipment not classified as major. The Contractor shall still warrant equipment not considered to be "major" in the Contractor's one-year warranty period even though certificates of warranty may not be required.
- C. In the event that the equipment manufacturer or supplier is unwilling to provide a one-year warranty commencing at the time of Owner acceptance, the Contractor shall obtain from the manufacturer a two (2) year warranty commencing at the time of equipment delivery to the job site. This two-year (2) warranty from the manufacturer shall not relieve the Contractor of the one-year warranty starting at the time of Owner acceptance of the equipment.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02100

SITE PREPARATION

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Section covers clearing, grubbing, stripping and demucking of the construction site, complete as specified herein.
- B. Clear and demuck the area within the limits of construction as required.

1.02 RELATED SECTIONS

- A. Section 02221 - Trenching, Bedding & Backfill for Pipe
- B. Section 02510 - Walkways
- C. Section 02513 - Asphaltic Concrete Paving
- D. Other Sections as applicable.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 CLEARING

- A. The surface of the ground, for the area to be cleared and grubbed shall be completely cleared of all timber, brush, stumps, roots, grass, weeds, rubbish and all other objectionable obstructions resting on or protruding through the surface of the ground. However, those trees which are designated by the Engineer shall be preserved as hereinafter specified. Clearing operations shall be conducted so as to prevent damage to existing structures and installations, and to those under construction, so as to provide for the safety of employees and others. Clearing for structures shall consist of topsoil and vegetation removal. Clearing for pipelines shall consist of vegetation removal.

3.02 GRUBBING

- A. Grubbing shall consist of the complete removal of all stumps, roots larger than 1¹/₂ inches in diameter, matted roots, brush, timber, logs and any other organic or metallic debris resting on, under or protruding through the surface of the ground to a depth of 18 inches below the subgrade. All depressions excavated below the original ground surface for or by the removal of such objects, shall be refilled with suitable materials and compacted to a density conforming to the surrounding ground surface.

3.03 STRIPPING

- A. In areas so designated, top soil, not muck shall be stockpiled. Topsoil stockpiled shall be protected until it is placed as specified. Any topsoil remaining after all work is in place shall be disposed of by the Contractor.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.04 DEMUCKING

- A. When encountered, organic material (muck) shall be excavated and removed. This material may be stockpiled temporarily, but must be disposed of as directed by the Engineer or the Owner.

3.05 DISPOSAL OF CLEARED AND GRUBBED MATERIAL

- A. The Contractor shall dispose of all material and debris from the clearing and grubbing operation by shipping such material and debris and disposing such material to a suitable location as required by the Engineer or the governmental agencies. Disposal by deep burial will not be permitted. The cost of disposal of material (including hauling) shall be considered a subsidiary obligation of the Contractor, the cost of which shall be included in the contract prices.

3.06 PRESERVATION OF TREES

- A. Those trees which are designated by the Engineer or as shown on the drawings for preservation shall be carefully protected from damage. The Contractor shall erect such barricades, guards, and enclosures as may be considered necessary by him for the protection of the trees during all construction operations.

3.07 PRESERVATION OF DEVELOPED PRIVATE PROPERTY

- A. The Contractor shall exercise extreme care to avoid necessary disturbance of developed private property as applicable. Trees, shrubbery, gardens, lawn and other landscaping, which in the opinion of the Engineer must be removed, shall be replaced and replanted to restore the construction easement to the condition existing prior to construction.
- B. All soil preparation procedures and replanting operations shall be under the supervision of nurseryman experienced in such operations.
- C. Improvements to the land such as fences, walls, outbuildings, etc., which of necessity must be removed shall be replaced with equal quality materials and workmanship.
- D. The Contractor shall clean up the construction site across developed private property directly after construction is complete upon approval of the Engineer.

3.08 PRESERVATION OF PUBLIC PROPERTY

- A. The appropriate paragraphs of Articles 3.06 and 3.07, of these specifications shall apply to the preservation and restoration of all damaged areas of public lands, rights-of-way, easements, etc.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02200

EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Earthwork operations necessary to achieve the Work including, but not limited to, excavation of soil, grading, removal and replacement of unsuitable soil, fill, backfill, embankment and compaction more specifically described as follows:
 - 1. Earthwork operations generally consists of excavation and embankment of soil materials from the existing elevations to the proposed elevations.
 - 2. Embankment necessary to achieve the proposed elevations may consist of in situ soils, whether classified as suitable or unsuitable, or imported suitable soil material. All imported soil material for embankment is to be included in the Contract price.
 - 3. Soil material categorized as sub-grade is to be imported suitable soil. The Owner reserves the right to decline imported sub-grade material should in-suitable material be encountered and seek a credit for imported, placed and compacted sub-grade per the Unit Price Schedule.
 - 4. Where unsuitable soil materials are encountered under or around sidewalks, pipes, exfiltration trenches or structural elements, the Owner reserves the right to specify removal and replacement of unsuitable soil with imported suitable soil. All imported suitable soil material for placement under of around structural elements is to be paid out of the Owners Contingency.

1.02 RELATED SECTIONS

- A. Section 01410 – Materials and Installation Testing
- B. Section 02100 – Site Preparation
- C. Section 02210 – Finish Grading
- D. Other Sections as applicable.

1.03 REFERENCES

- A. FDOT Standard Specifications for Road and Bridge Construction
- B. FDOT Design Standards
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- D. AASTHO M-145 - Standard Specification for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.04 PROJECT CONDITIONS

- A. Locate existing underground utilities in areas of work. Provide adequate means of support and protection during earthwork operations.
- B. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
- C. Do not interrupt existing utilities serving occupied facilities.
- D. Use of Explosives: If the use of explosives is necessary for the execution of the Work, and the use of explosives is allowed by local government, the Contractor shall conduct his blasting operations in conformance with these specifications and all applicable state and local codes and regulations.
 - 1. The contractor shall obtain a testing laboratory to perform pre and post blasting surveys of all nearby structures at no cost to the Owner.
- E. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

PART 2 - PRODUCTS

2.01 SOIL MATERIALS

- A. Satisfactory or Suitable Soil Materials: ASTM D2487 soil classification groups GW, GP, GP-GM and SW.
- B. Unsatisfactory or Unsuitable Soil Materials: ASTM D2487 soil classification groups GM, GC, SW, SM, SC, CL, ML, OL, CH, MH, OH and PT.
- C. Satisfactory and unsatisfactory soil materials for roadway embankment, including pipe trench backfill under roadways, shall meet the requirements as defined in AASHTO M-145 soil classification groups and FDOT index 505.
- D. Satisfactory materials encountered during excavation, may be stored in segregated stockpiles for reuse. All material which, in the opinion of the Engineer, is not suitable for reuse shall be spoiled as specified herein for disposal of unsuitable materials.
- E. Sub-base material:
 - 1. Satisfactory materials may be Select, Structural or Common fill.
- F. Select or Structural Fill or backfill:
 - 1. Select or structural fill material shall be a satisfactory soil material, well graded, consisting of a minimum of 60 percent clean medium fine grain sized quartz sand, free of organic, deleterious and/or compressible percent

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

clean medium fine grain sized quartz sand, free of organic, deleterious and/or compressed material. Rock in excess of 2 inches in diameter shall not be permitted.

G. Common Fill:

1. Common fill material shall be a satisfactory soil material containing no more than 20 percent by weight finer than No. 200 mesh sieve. It shall be free from organic matter, muck, marl, and rock exceeding 2 1/2 inches in diameter.

H. Course Aggregate:

1. Course aggregate, or gravel, shall be used for rock bedding, drainage rock or as otherwise depicted in the Drawings. Unless otherwise noted, course aggregate shall consist of washed and graded crushed rock meeting FDOT specification 901, size number 57 or approved equal.

I. Sand:

1. Where specified, sand, clean sand, silica sand or other nomenclature shall refer to silica sand meeting FDOT specification 902-2.

J. Satisfactory or suitable soil materials shall free of muck, clay, rock or gravel larger than 2-1/2 inches in any dimension, debris, trash, waste, frozen materials, broken concrete, masonry, rubble, vegetable or other similar materials or deleterious matter. Materials of this nature encountered during the excavation which, in the opinion of the Engineer, is not suitable for reuse shall be stockpiled for disposal as unsuitable materials.

K. Material substitutions may be permitted if accompanied by a geotechnical engineers report substantiating the proposed substitution which is approved by the Engineer and is at no cost to the Owner.

PART 3 - EXECUTION

3.01 EXCAVATION

A. The contractor shall perform trench excavations in accordance with applicable trench safety standards and is responsible to determine any safety or safety related standards that apply to the Project. The Owner and Engineer are not responsible to review and/or assess safety precautions, programs and costs, and the means, methods, techniques or technique adequacy, reasonableness of cost, sequences and procedures of any safety precaution, including, but not limited to, compliance with any and all requirements of Florida Trench Safety Act.

B. Excavation is Unclassified, and includes excavation to sub-grade elevations indicated, regardless of character of materials and obstructions encountered.

C. Unauthorized Excavation: Removal of materials beyond indicated sub-grade elevations or dimensions without specific direction. Unauthorized excavation, as well as remedial work directed by Engineer, shall be at Contractor's expense.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- D. Additional Excavation:
1. Where unsuitable soil materials are encountered under or around structural elements, the Owner reserves the right to specify removal and replacement of unsuitable soil with imported suitable soil. All imported suitable soil material for placement under or around structural elements is to be paid out of the Owners Contingency.
- E. Stability of Excavations:
1. Slope sides of excavations to comply with local codes and ordinances having jurisdiction.
 2. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated.
 3. Maintain sides and slopes of excavations in safe condition until completion of backfilling.
- F. Shoring and Bracing:
1. Establish requirements for trench shoring and bracing to comply with local codes and authorities having jurisdiction.
 2. Maintain shoring and bracing in excavations regardless of time period excavations will be open. Carry down shoring and bracing as excavation progresses.
- G. Dewatering:
1. The bottom of the excavations shall be firm and dry and in all respects acceptable to the Engineer.
 2. Prevent surface water and sub-surface or ground water from flowing into excavations. Do not allow water to accumulate in excavations.
 3. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.
 4. The Contractor shall obtain all dewatering permits as required from agencies having jurisdiction
- H. Stockpile satisfactory excavated materials where directed, until required for embankment, backfill or fill. Place, grade and shape stockpiles for proper drainage.
- I. Excavation for Trenches: Dig trenches to the uniform width required for particular item to be installed, sufficiently wide to provide ample working room. Provide minimum 6 in. clearance on each side of pipe or conduit.
1. Excavate trenches to depth indicated or required for indicated flow lines and invert elevations.
 2. Where rock is encountered, carry excavation 6 in. below scheduled elevation and backfill with a 6 in. layer of crushed stone or gravel prior to installation of pipe.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3. For pipes or conduit 5 in. or less, excavate to indicate depths. Hand excavate bottom cut to accurate elevations and support pipe or conduit on undisturbed soil.
 4. For pipes or conduit 6 in. or larger, tanks and other work indicated to receive sub-base, excavate to sub-base depth indicated, or, if not otherwise indicated, to 6 in. below bottom of work to be supported.
 5. Except as otherwise indicated, excavate for exterior water-bearing piping so top of piping is minimum 3'-6" below finished grade.
 6. Grade bottoms of trenches as indicated, notching under pipe bells to provide solid bearing for entire body of pipe.
- J. Do not backfill trenches until tests and inspections have been made and backfilling authorized by Engineer.

3.02 COMPACTION

- A. Areas to be compacted shall be moistened and compacted by either rolling, tamping or any other approved method by the Engineer in order to obtain the desired density.
- B. Hydraulic compaction will require a geotechnical engineers recommendation, observation and certification at the Contractors expense.
- C. The Contractor shall inspect all compacted areas prior to further construction operations to ensure that satisfactory compaction has been obtained.
- D. All sub-grade shall be compacted as indicated on the Drawings unless otherwise stated in the FDOT Standard Specifications for Road and Bridge Construction.
- E. All embankment shall be compacted by proof-rolling to achieve 95% of AASHTO T-99.
- F. All soil beneath structures shall be compacted to 98% of AASHTO T-180.
- G. Hydraulic compaction shall be permitted if accompanied by a geotechnical engineers report substantiating the proposed methods. The geotechnical engineers report shall be submitted to the Engineer prior to any work and shall be at no cost to the Owner.
- H. The frequency of testing shall be as indicated on the Drawings unless otherwise stated in the FDOT Standard Specifications for Road and Bridge Construction.
- I. All earthwork testing shall be at the expense of the Contractor unless otherwise stated in the Contract Documents.
- J. The Contractor shall instruct the testing laboratory to forward copies of all test reports to the Engineer.
- K. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.03 EMBANKMENT, BACKFILL AND FILL

- A. Place specified soil material in layers required to achieve proposed elevations:
 - 1. Place materials in layers of 8 inches loose depth for material compacted by heavy compaction equipment and 4 in. in loose depth for material compacted by hand operated tampers.
 - 2. Place materials in layers of 12 inches loose depth for material compacted by proof rolling equipment.
 - 3. Under grassed areas, use satisfactory or unsatisfactory excavated or imported soil material if approved by the Engineer.
 - 4. Under walks and pavements, use sub-base material, or satisfactory excavated or borrow material, or combination of both. Place shoulders along edges of sub-base course to prevent lateral movement with satisfactory excavated or borrow material.
 - 5. Under steps, use sub-base material.
 - 6. Under building slabs, use drainage fill material.
 - 7. Under piping and conduit, use sub-base material where sub-base is indicated under piping or conduit; shape to fit bottom 90 degrees of cylinder.
- B. Backfill excavations as promptly as work permits, but not until completion of the following:
 - 1. Acceptance of construction below finish grade including waterproofing and perimeter insulation.
 - 2. Inspection, testing, approval, and recording locations of underground utilities.
 - 3. Removal of shoring and bracing, and backfilling of voids with satisfactory materials.
- C. Remove all trash, roots, vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow strip, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.
- D. When existing ground surface has a density less than that specified for particular area classification, break up ground surface, pulverize, moisture-condition to optimum moisture content, and compact to required depth and percentage of maximum density.
- E. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
- F. Place backfill and fill materials evenly adjacent to structures, without wedging against structures or displacement of piping or conduit. Compaction equipment used within 10 ft. of buried walls and soil supported structures shall not exceed 2000 lbs.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.04 GRADING

- A. Grading Outside Building Lines: Grade areas adjacent to building lines to drain away from structures and to prevent ponding and as follows:
 - 1. Finish to within not more than 0.10 ft. above or below required sub-grade elevations.
 - 2. Walks: Shape surface to line, grade and cross-section, with finish surface not more than 0.10 ft. above or below required sub-grade elevation.
 - 3. Pavements: Shape surface to line, grade and cross-section, with finish surface 1/2 in. above or below required sub-grade elevation.
 - 4. Sod: Where sod abuts pavement, sidewalks, etc., finish surface below as required to accommodate thickness of sod as not to prohibit drainage.
- B. Grading Surface of Fill under Building Slabs: Grade smooth and even, free of voids, compacted as specified, and to 1/2 in. below required elevation.

3.05 QUALITY CONTROL

- A. Perform earthwork in compliance with applicable requirements of governing authorities having jurisdiction.
- B. Contractor will engage soil testing and inspection service for quality control testing during earthwork operations.
- C. Allow testing service to inspect and approve sub-grades and fill layers before further construction work is performed.
- D. If in opinion of Engineer, based on testing service reports and inspection, sub-grade or fills which have been placed below specified density, provide additional compaction and testing at no additional expense to Owner.

3.06 CLEANING AND PROTECTION

- A. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
- C. Remove excess excavated and waste materials, including unacceptable excavated material, trash and debris, and legally dispose of it at no cost to the Owner.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02205

CLEARING AND GRUBBING

PART 1 - GENERAL

1.01 DISCRIPTION

- A. This Section includes removal and disposal of all designated trees, palms, brush, stumps, grass, roots, and other such protruding objects.

1.02 RELATED SECTIONS

- A. Section 01410 – Materials and Installation Testing
- B. Section 02100 – Site Preparation
- C. Section 02200 - Earthwork
- D. Section 02210 – Finish Grading
- E. Other Sections as applicable.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 CLEARING AND GRUBBING

- A. Clearing and Grubbing within areas specified in the Contract Documents or as directed by the Owner's representative included but not limited to the following:
 - 1. Removal and disposal of all designated trees, palms, brush, stumps, grass, roots, and other such protruding objects.
 - 2. Removal and disposal of fencing, existing pavement, and debris not required to remain or to be salvaged that is necessary to prepare the area for the proposed improvements.
 - 3. Contractor shall notify all utility companies or utility owners, both public and private of their intent to perform such work and shall coordinate field location of utility lines prior to commencement of construction.
 - 4. Other miscellaneous work considered necessary for the complete preparation of the overall project site is also included under this Section, included, but is not limited to, the following:

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- a. Leveling, harmonization and restoration of terrain outside the limits of construction for purposes of facilitating maintenance, proper grading and other post-construction operations.
 - b. Trimming of certain trees and shrubs within project limits for utilization in subsequent landscaping of the project.
- B. Unless otherwise shown in the Drawings or Contract Documents, Clearing and Grubbing shall be done within the following areas:
1. All areas where any type of excavation is to be done.
 2. All areas where any type of filling and embankment will be constructed.
 3. All areas where any type of pavement will be constructed.
 4. Other areas designated in the Plans or by the Specifications.
 5. No clear and grubbing shall take place beyond the wetland delineation line established by the Engineer and the Broward County Environmental Division.
- C. Depths of Removal
1. In the areas listed below all roots and other debris shall be removed to a depth of at least one foot below ground surface. The surface shall then be plowed to a depth of at least six inches and all roots exposed shall be removed to a depth of at least one foot. All stumps including subsurface roots shall be completely removed to the satisfaction of the Landscape Architect.
- D. Trees to Remain: As an exception to the above provisions, where so directed by the Existing Tree Disposition Plan, the Landscape Architect or Engineer, desirable trees within the clearing limits shall be protected and left standing. No equipment shall stand, stop, or travel across or inside the drip line of any trees or vegetation designated to be saved or protected.
- E. Boulders: Any rocks or boulders greater than two (2) inches in diameter laying on the top of the existing surface or otherwise encountered during the Clearing and Grubbing shall be removed and disposed of by the Contractor. No boulders or rock shall be left or placed on-site.

3.02 SELECTIVE CLEARING AND GRUBBING

- A. Selective Clearing and Grubbing shall consist of removing and disposing of all vegetation, obstructions, etc. as provided above except that in non-structural areas where the Contractor so elects, roots may be cut off flush with the ground surface. Stumps shall be completely removed. Undergrowth shall be completely removed except in areas designated by the Landscape Architect for aesthetic purposes.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Desirable trees, that are designated by the Landscape Architect to remain, shall be protected and trimmed in such a way to avoid damage to limbs during construction. All pruning of trees and palms shall be performed by, or under the direct supervision of, a certified arborist.

3.03 ERADICATION OF EXOTIC VEGETATION

- A. N/A

3.04 REMOVAL OF EXISTING STRUCTURES

- A. Work specified in this Article shall include removal and disposal of existing sidewalks, footers, pipes, and structures of whatever type as specifically shown in the plans to be removed or as otherwise specified for removal in the Contract Documents. Also included are structures of whatever type or portions thereof which are encountered during construction operations. Where partial removal of a structure is approved by the Engineer, or Landscape Architect, the portion of the existing structure to remain shall be backfilled, plugged, or filled in such a way that will prevent the settlement, movement, erosion or collapse of the adjacent soils.

3.05 DISPOSAL OF MATERIALS

- A. All materials from Clearing and Grubbing operations shall be legally disposed of off-site as determined by the Contractor.
- B. All disposal costs shall be included in the Bid.

3.06 OWNERSHIP OF MATERIALS

- A. Except as may be otherwise stated in the Contract Documents, or directed by the Owner's Representative, all buildings, structures, appurtenances and other materials removed by the Contractor shall become the property of the Contractor, to be disposed of in areas provided by him.

3.07 MEASUREMENT AND PAYMENT

- A. Unless stated otherwise, the cost of Clearing and Grubbing shall be incidental to the cost of construction.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02210

FINISH GRADING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, necessary equipment or services to complete the Finish Grading work, as indicated on the Contract Documents.

1.02 RELATED SECTIONS

- A. Section 02200 - Earthwork
- B. Section 02420 – Soil Preparation and Soil Mixes
- C. Section 02430 – Sodding
- D. Other Sections as applicable.

1.03 SITE INSPECTION

- A. The Contractor shall visit the site and acquaint himself with all existing conditions. The Contractor shall be responsible for his own subsurface investigations, as necessary, to satisfy requirements of this Section. All subsurface investigations shall be performed only under time schedules and arrangements approved in advance by the Engineer or Owner's Representative.

1.04 EXISTING CONTOURS

- A. The existing elevations shown on the drawings are approximate only. The contractor is responsible for grading to meet existing elevations as required.
- B. The contours and elevations established under contract will be the finished grades shown. The Contractor under this Contract shall perform the work for construction using the finished grades previously established and making whatever corrections and/or repairs to grades to make them consistent with the requirements of the drawings and specifications.

1.05 UTILITIES

- A. Before starting site operations verify that the earlier contractors have disconnected all temporary utilities which might interfere with the fine grading work.
- B. Locate all existing, active utility lines traversing the site and determine the requirements for their protection. Preserve in operating condition all active utilities adjacent to or transversing the site that are designated to remain.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Observe rules and regulations governing respective utilities in working under requirements of this section. Adequately protect utilities from damage, remove or relocate as indicated, specified or required. Remove, plug or cap inactive or abandoned utilities encountered in excavation. Record location of active utilities.

1.06 QUALITY ASSURANCE

- A. Requirements of all applicable building codes and other public agencies having jurisdiction upon the work.
- B. Primary emphasis should be given to the aesthetic appearance and functioning of berming and swales, as directed by the Engineer or Owner's Representative. The Contractor shall employ skilled personnel and any necessary equipment to ensure that finish grading is smooth, aesthetically pleasing, drains well, and is ideal for receiving sod and plant materials.
- C. As-build survey drawings of all finished grading are to be submitted to the Engineer for review prior to landscape installation or agency certifications.

PART 2 - MATERIALS

2.01 TOP SOIL

- A. Refer to Related Sections for material specifications.
- B. In areas to receive turf, rough grade shall be a minimum of 2 inches below finished grades.
- C. Rough grade fill is to be fine, compacted, satisfactory fill material, with no rocks larger than 2-inches.
- D. Both surface and subsurface, both before and after fill operations, shall be checked to confirm that percolation/compaction levels meet the needs of the proposed planting for that area.

PART 3 - EXECUTION

3.01 EXCAVATION

- A. Excavate where necessary to obtain subgrades, percolation, and surface drainage as required.
- B. All unsatisfactory soil materials are to be removed and replaced with satisfactory soil materials.
- C. Remove entirely any existing obstructions after approval by the Engineer's or Owner's Representative.
- D. Remove from site and dispose of debris and excavated material not required.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.02 GRADING

- A. The Contractor shall establish finished grades as shown on the Engineers grading plans, and as directed by Engineer and/or Owner's Representative, including areas where the existing grade has been disturbed by other work.
- B. Finished grading shall be smooth, aesthetically pleasing, drain well and ready to receive sod and other plant material to full satisfaction of Engineer and Owner's Representative.
- C. Finish grading accuracy is to be within 1/10 foot of specified elevations.
- D. Finish grading is to be performed using hand raking throughout and shall remove all objectionable material and rocks greater than 1 inch in diameter.
- E. A finish grading inspection is required prior to sod placement.

3.03 COMPACTION

- A. Compact each layer of fill in designated areas with approved equipment in accordance with Section 02200.
 - 1. In landscaped areas, compaction shall not exceed 95% of maximum density and no less than 90%.
 - 2. In landscaped areas which are sloped at 1:4 or steeper, compaction shall not exceed 95% of maximum density and no less than 90%.
- B. No backfill shall be placed against any masonry or other exposed building surface until permission has been given by the Owner's Representative, and in no case until the masonry has been in place seven days.
- C. Compaction in limited areas shall be obtained by the use of mechanical tampers or approved hand tampers. When hand tampers are used, the materials shall be deposited in layers not more than four inches thick. The hand tampers used shall be suitable for this purpose and shall have a face area of not more than 100 square inches. Special precautions shall be taken to prevent any wedging action against masonry, or other exposed building surfaces.

3.04 CORRECTION OF GRADE

- A. Bring to required grade levels areas where settlement, erosion, or other grade changes occur. Adjust grades as required to carry drainage away from buildings and to prevent ponding around the buildings and on pavements.
- B. All soil surfaces shall have sufficient percolation and surface drainage to support grasses and plant material.
- C. Contractor shall be responsible for stabilizing grades by approved methods prior to landscaping, and shall be responsible for correction of grades as mentioned above, and cleanup of any wash outs or erosion.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02221

TRENCHING, BEDDING, AND BACKFILL FOR PIPE

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Furnish labor, materials, equipment, and incidentals necessary to perform all excavation, backfill, fill, grading, and slope protection required to complete the piping work shown on the Drawings and specified herein. The work shall include, but not necessarily be limited to, manholes, vaults, duct conduit, pipe, roadways, paving, bedding, backfilling, fill, required borrow; grading, disposal of surplus and unsuitable materials, and all related work such as sheeting, bracing, and dewatering.

1.02 RELATED SECTIONS

- A. Section 01340 – Shop Drawings, Working Drawings and Samples
- B. Section 02100 - Site Preparation
- C. Section 02200 - Earthwork
- D. Other Sections as applicable.

1.03 REFERENCES

- A. FDOT Standard Specifications for Road and Bridge Construction
- B. FDOT Design Standards
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- D. AASTHO M-145 - Standard Specification for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes

1.04 JOB CONDITIONS

- A. The Contractor shall examine the site and review the available test borings or undertake his own soil borings prior to submitting his bid, taking into consideration all conditions that may affect his work. The Owner and Engineer will not assume responsibility for variations of sub-soil quality or conditions at locations other than places shown and at the time the available test borings were made.
- B. Existing Utilities: Locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
 - 1. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the Engineer and the Owner of such piping or utility immediately for directions.
 - 2. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
 - 3. Demolish and completely remove from site existing underground utilities indicated on the drawings to be removed.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Protection of Persons and Property: Contractor shall barricade open excavations occurring as part of this work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction.
 - 1. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

1.05 SUBMITTALS

- A. The Contractor shall furnish the Engineer, for approval, a certificate of origin and compliance with specifications for any fill material obtained from off-site sources.
- B. At the discretion of the Engineer, the Contractor shall furnish the Engineer, for approval, a representative sample of fill material obtained from on-site sources weighing approximately 50 pounds, at least ten calendar days prior to the date of anticipated use of such material.
- C. At the discretion of the Engineer, for each material obtained from off-site sources, the Contractor shall notify the Engineer of the source of the material and shall furnish the Engineer, for approval, a representative sample weighing approximately 50 pounds, at least ten calendar days prior to the date of anticipated use of such material.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Satisfactory Soil Materials: ASTM D2487 soil classification groups GW, GP, SW, and SP.
- B. Unsatisfactory Soil Materials: ASTM D2487 soil classification groups GM, GC, SM, SC, CL, ML, OL, CH, MH, OH and PT.
- C. Satisfactory and unsatisfactory soil materials for roadway embankment, including pipe trench backfill under roadways, shall meet the requirements as defined in AASHTO M-145 soil classification groups and FDOT index 505.
- D. Satisfactory materials encountered during excavation, may be stored in segregated stockpiles for reuse. All material which, in the opinion of the Engineer, is not suitable for reuse shall be spoiled as specified herein for disposal of unsuitable materials.
- E. Sub-base material:
 - 1. Refer to plans and/or specifications.
- F. Select or Structural Fill or backfill:
 - 1. Select or structural fill material shall be a satisfactory soil material, well graded, consisting of a minimum of 60 percent clean medium fine grain sized quartz sand, free of organic, deleterious and/or compressible percent clean medium fine grain sized quartz sand, free of organic, deleterious and/or compressed material. Rock in excess of 1 inches in diameter shall not be permitted.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- G. Common Fill:
 - 1. Common fill material shall be a satisfactory soil material containing no more than 20 percent by weight finer than No. 200 mesh sieve. It shall be free from organic matter, muck, marl, and rock exceeding 2 1/2 inches in diameter.
- H. Course Aggregate:
 - 1. Course aggregate, or gravel, shall be used for rock bedding, drainage rock or as otherwise depicted in the Drawings. Unless otherwise noted, course aggregate shall consist of washed and graded crushed limerock meeting FDOT specification 901, size number 57 or approved equal.
- I. Sand
 - 1. Where specified, sand, clean sand, silica sand or other nomenclature shall refer to silica sand meeting FDOT specification 902-2.
- J. Satisfactory soil materials shall free of muck, clay, rock or gravel larger than 2-1/2 inches in any dimension, debris, trash, waste, frozen materials, broken concrete, masonry, rubble, vegetable or other similar materials or deleterious matter. Materials of this nature encountered during the excavation which, in the opinion of the Engineer, is not suitable for reuse shall be stockpiled for disposal as unsuitable materials.
- K. Material substitutions may be permitted if accompanied by a geotechnical engineers report substantiating the proposed substitution which is approved by the Engineer and is at no cost to the Owner.

PART 3 - EXECUTION

3.01 GENERAL

- A. All excavation, backfill and grading necessary to complete the work shall be made by the Contractor and the cost thereof shall be included in the Contract price.
- B. Material shall be furnished as required from off-site sources and hauled to site.
- C. The Contractor shall take all necessary precautions to maintain the work area in a safe and workable condition.
- D. The Contractor shall protect his work at all times by flagging, marking, lighting and barricading. It shall also be the Contractor's responsibility to preserve and protect all above and underground structures, pipe lines, conduits, cables, drains, or utilities which are existing at the time he encounters them. Failure of the Drawings to show the existence of these obstructions shall not relieve the Contractor from this responsibility. The cost of repair of damage which occurs to these obstructions during or as a result of construction shall be borne by the Contractor without additional cost to the Owners.

3.02 DEWATERING

- A. The bottom of the excavations shall be firm and dry and in all respects acceptable to the Engineer.
- B. Prevent surface water and sub-surface or ground water from flowing into excavations. Do not allow water to accumulate in excavations.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.
- D. The Contractor shall obtain all dewatering permits as required from agencies having jurisdiction.

3.03 TRENCH EXCAVATION

- A. Excavation for all trenches required for the installation of pipes shall be made to the depths indicated on the Drawings. Excavate trench to provide minimum of 30-inch clear cover over the pipe bell unless otherwise noted on the Drawings. Excavate in such manner and to such widths as will give suitable room for laying the pipe within the trenches, for bracing and supporting and for pumping and drainage facilities. The trench width at the top of the pipe shall not exceed the allowable as determined by the depth of cut and indicated on the Drawings.
- B. Rock shall be removed to a minimum 8-inches clearance around the bottom and sides of all the pipe or ducts being laid.
- C. Where pipe is to be laid in limerock bedding or encased in concrete, the trench may be excavated by machinery to or just below the designated subgrade provided that the material remaining in the bottom of the trench remains undisturbed.
- D. Where the pipes or ducts are to be laid directly on the trench bottom the lower part of the trenches shall not be excavated to the trench bottom by machinery. The last of the material being excavated shall be done manually in such a manner that will give a flat bottom true to grade so that pipe can evenly and uniformly supported along its entire length on undisturbed material or bedding rock. Bell holes shall be made as required manually so that there is no bearing surface on the bells and pipes are supported along the barrel only.
- E. The bottom of the excavations shall be firm and dry and in all respects acceptable to the Engineer. Excavate any organic soil material from the bottom of the trench and replace with rock bedding, at least 6 inches thick.

3.04 TRENCH PROTECTION

- A. The contractor shall perform trench excavations in accordance with applicable trench safety standards and is responsible to determine any safety or safety related standards that apply to the Project. The Owner and Engineer are not responsible to review and/or assess safety precautions, programs and costs, and the means, methods, techniques or technique adequacy, reasonableness of cost, sequences and procedures of any safety precaution, including, but not limited to, compliance with any and all requirements of Florida Trench Safety Act.
- B. The Contractor shall construct and maintain sheeting and bracing as required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that necessary for proper construction, and to protect adjacent structures, existing piping, and foundation material from disturbance, undermining, or other damage. Care shall be taken to prevent voids outside of the sheeting, but if voids form, they shall be immediately filled and compacted.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. For pipe trench sheeting, no sheeting is to be withdrawn if driven below mid-diameter of any pipe, and no wood sheeting shall be cut off at a level lower than 1 foot above the top of any pipe unless otherwise directed by the Engineer. If during the progress of the work the Engineer decides that additional wood sheeting should be left in place, he may direct the Contractor in writing. If steel sheeting is used for trench sheeting, removal shall be as specified above, unless written approval is given by the Engineer for an alternate method of removal.
- D. All sheeting and bracing not left in place, shall be carefully removed in such a manner as not to endanger the construction or other structures, utilities, existing piping, or property. All voids left or caused by withdrawal of sheeting shall immediately be refilled with sand or rammed with tools especially adapted to that purpose, by watering or otherwise as may be directed.
- E. The right of the Engineer to order sheeting and bracing left in place shall not be construed as creating any obligation on his part to issue such orders, and his failure to exercise his right to do so shall not relieve the Contractor from liability for damages to persons or property occurring from or upon the work occasioned by negligence or otherwise growing out of a failure on the part of the Contractor to leave in place sufficient sheeting and bracing to prevent any caving or moving of the ground.

3.05 PIPE INTERFERENCES AND ENCASEMENT

- A. The contractor shall abide by the following schedule of criteria concerning interferences with other utilities.
 - 1. In no case shall there be less than 0.5 feet between any two pipe lines and structures.
 - 2. Class I Concrete Encasement: Wherever there is more than 0.5 foot, but not less than 1.5 foot clearance between water mains or water services, then a concrete encasement shall be provided in accordance with the typical detail as shown on the Drawings.
 - 3. Class II Concrete Encasement: Wherever there is more than 0.5 foot, but less than 1.0 foot clearance between any two pipe lines, or between pipe lines and structures, then a concrete encasement shall be provided in accordance with the typical detail as shown on the Drawings.
- B. The Engineer shall have full authority to direct the placement of the various pipes and structures in order to facilitate construction, expedite completion and to avoid conflicts.

3.06 BACKFILLING

- A. Do not backfill trenches until tests and inspections have been made and backfilling authorized by Engineer.
- B. Perform backfill in lifts and compact as specified in the Drawings.
- C. Backfilling over pipes shall begin as soon as practical after the pipe has been laid, jointed, and inspected and the trench filled with suitable compacted material to the mid-diameter of the pipe.
- D. Backfilling over ducts shall begin not less than three days after placing concrete encasement.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- E. All backfilling shall be prosecuted expeditiously as detailed on the Drawings.
- F. Any space remaining between the pipe and sides of the trench shall be packed full by hand shovel with selected earth and thoroughly compacted with a tamper as fast as placed, up to a level of one foot above the top of pipe.
- G. The filling shall be carried up evenly on both sides with at least one man tamping for each man shoveling material into the trench.
- H. The Contractor shall take all precautions necessary to maintain the bedding in a compacted state and to prevent washing, erosion or loosening of this bed.
- I. In areas where unsuitable soil is discovered in the pipe bedding, the unsuitable soil shall be removed and stockpiled for disposal by the contractor. Suitable soils shall be substituted at a depth as directed by the Engineer. If gravel is required by the Engineer as suitable bedding, the gravel shall be wrapped in filter fabric prior to backfill operations.
- J. Gravel bedding shall not be used under any circumstances as a drain for ground water.
- K. In locations where pipes pass through building walls, the Contractor shall take the following precautions to consolidate the refill up to an elevation of at least 1 foot above the bottom of the pipes:
 - 1. Place structural fill in such areas for a distance of not less than 3 feet either side of the centerline of the pipe in level layers not exceeding 6-inches in depth.
 - 2. Wet each layer to the extent directed and thoroughly compact each layer with a power tamper to the satisfaction of the Engineer.

3.07 COMPACTION

- A. Perform compaction and compaction tests as specified in the Drawings.
- B. Hydraulic compaction shall be permitted if accompanied by a geotechnical engineers report substantiating the proposed methods. The geotechnical engineers report shall be submitted to the Engineer prior to any work and shall be at no cost to the Owner.

3.08 GRADING

- A. Grading shall be performed at such places as are indicated on the Drawings, to the lines, grades and elevations shown or as directed by the Engineer and shall be made in such manner that the requirements for formation of embankments can be followed. All unacceptable material encountered, of whatever nature within the limits indicated, shall be removed and disposed of as directed. During the process of excavation, the grade shall be maintained in such condition that it will be well drained at all times. When directed, temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the prosecution or condition of the work.
- B. If at the time of excavation it is not possible to place any material in its proper section of the permanent structure, it shall be stockpiled in approved areas for later use. No extras will be considered for the stockpiling or double handling of excavated material.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. The right is reserved to make minute adjustments or revisions in lines or grades if found necessary as the work progresses, due to discrepancies on the Drawings or in order to obtain satisfactory construction.
- D. Stones or rock fragments larger than 2 1/2 inches in their greatest dimensions will not be permitted in the top 6 inches of the subgrade line of all fills or embankments.
- E. All fill slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the Drawings, or as directed by the Engineer.
- F. In cut, all loose or protruding rocks on the back slopes shall be barred loose or otherwise removed to line or finished grade of slope. All cut and fill slopes shall be uniformly dressed to the slope, cross-section and alignment shown on the Drawings or as specified by the Engineer.
- G. No grading is to be done in areas where there are existing pipe lines that may be uncovered or damaged until such lines which must be maintained are relocated, or where lines are to be abandoned, all required valves are closed and drains plugged at manholes.
- H. The Contractor shall replace all pavement cut or otherwise damaged during the progress of the work as specified elsewhere herein or as shown on the Drawings.

3.09 DISPOSAL OF UNSUITABLE AND SURPLUS MATERIAL

- A. All surplus and unsuitable excavated material shall be disposed of at the Contractor's cost.
 - 1. Any permit required for the hauling and disposing of this material beyond Owner's property shall be obtained prior to commencing hauling operations. Copies of all required permits shall be provided to the Engineer.
- B. Suitable excavated material may be used for fill if it meets the specifications for common fill and is approved by the Engineer. Excavated material so approved may be neatly stockpiled at the site where designated by the Engineer provided there is an area available where it will not interfere with the operation of the facility nor inconvenience traffic or adjoining property owners.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

SECTION 02420

SOIL PREPARATION AND SOIL MIXES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, necessary equipment and services to complete the soil preparation and soil mixes work, as indicated on the drawings, as specified herein or both, except as for items specifically indicated as "NIC ITEMS".
- B. Including, but not limited to:
 - 1. Topsoil
 - 2. Soil Conditioners
 - 3. Planting Soil Mixes

1.02 RELATED WORK

- A. Section 02430 – Sodding
- B. Other Sections as applicable.

1.03 QUALITY ASSURANCE

- A. Testing Agency: Approved Independent testing laboratory utilizing EPA, ASTM, USGS methods.
- B. Requirements or Regulatory Agencies: Conform to requirements of all Municipal, County and State agencies.
- C. Reference standards.

1.04 SUBMITTALS:

- A. Test Reports: Test reports shall consist of pH range, major and minor element analysis, including but not limited to Ammonia,, Nitrate, Phosphorus, Potassium, Magnesium, Calcium, Sulfur, Boron, Zinc, Manganese, Iron, Copper and soluble salt and any other materials designed by the Landscape Architect. Recommendations shall be made by the testing agency as to the type and quantity of soil additives required to bring the nutrient and ph to an acceptable or optimum range for planting. Reports shall be identified by project name, date, and soil mix type.
 - 1. Results of topsoil (on-site existing soil) analysis.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2. Results of planting/top soil mix(es) analysis: One test required per each type of soil mix.
- B. Certificates:
1. The Contractor must submit certificates from suppliers stating that the planting/topsoil mix, turfgrass sod and other landscape material used comply with requirements specified.
 2. Manufacturer's certificate of fertilizer's chemical composition including but not limited to percentage and derivation of nitrogen, phosphorus, potassium, and micronutrients.
 3. Testing laboratory certification that content of soil conditioners meet specification requirements.
- C. Soil Samples:
1. Submit a one-pound sample of each soil mix specified.
- D. All State, County and Municipal governmental regulations must be met including any licensing or certifications requirements for uses or applications.
- E. Costs of all submittals, including but not limited to Test reports, Certificates, Licenses, and samples will be borne by the Contractor.

1.05 JOB CONDITIONS

- A. Contractor shall become familiar with the site and the required work to complete this section in accordance with the drawings and what is specified herein.
- B. Responsibility for finish grading shall occur under a separate contract. Any changes, modifications, or disturbances to the finish grading shall be corrected by the responsible contractor.
- C. PROTECTION: Protect and avoid any damage whatsoever to existing walks, pavement, curbs, utilities, plant material, and any other existing work.

PART 2 - PRODUCTS

2.01 TOP SOIL

- A. Topsoil shall be an 80-20 mix, 80% fresh water sand (medium to coarse grade) and 20% inland glades muck thoroughly mixed with a commercial shredder/blender or equivalent. It shall be suitable for ornamental plant growth and free from hard clods, stiff clay, hardpan, gravel, subsoil, brush, large roots, weeds, refuse or other deleterious material, and of reasonably uniform quality. No site mixing will be acceptable.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- B. Mechanical analysis: Topsoil and soil mixture(s) shall meet these specifications and the following mechanical analysis, and shall be proportioned by volume rather than by weight.

Sieve Size	% Passing By Dry Weight
1 inch	99-100
1/4 inch	97-99
No. 100	40-60

Materials larger than one-half inch shall be disposed of off the site or as directed by the architect. Existing leaf litter and plant material shall be excluded from topsoil and soil mix.

- C. Maximum Soluble Salts: 300 ppm.
- D. Sterilize topsoil to be used in soil mixture(s) to make free of all viable nut grass, and other undesirable weed seeds.
- E. A sample of the sand and a sample of the 80-20 sand and muck mixture shall be submitted to the Owner for approval prior to installation.
- F. The Landscape Architect has the right to reject topsoil utilized at anytime during the execution of work that does not meet specifications. Topsoil and planting soil will be tested at Owners request for suitability of horticultural use.

2.02 SOIL CONDITIONERS

- A. Dolomitic Limestone: Approved product, designated for agriculture use.
- B. Aluminum Sulfate: Manufacturer's standard commercial grade.
- C. Florida Peat: Suitable for plant growth, capable of sustaining vigorous plant growth, and specifically pulverized for agricultural use. Florida peat shall be free of deleterious materials that would be harmful to plant growth, shall be free of nematodes, shall be of uniform quality, and shall have a pH value between 5.5 and 6.5 (as determined in accordance with ASTM E70). Florida peat shall be sterilized to make free of all viable nut grass and other undesirable weeds.
- D. Pesticides: As recommended by applicable Agricultural Public Agencies.
- E. Herbicides: As recommended by applicable Agricultural Public Agencies.
- F. Soil Fumigants: As recommended by applicable Agricultural Public Agencies.
- G. Fertilizer:
1. Specified commercial grade fertilizer to comply with State of Florida Fertilizer laws. Chemical designation shall be as specified with at least 50% of the nitrogen derived from a non-water soluble organic source and all potash to be derived from sulfate forms for all plantings excluding sod and plantings on the lake edges.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Chemical designation shall be as specified with at least 80% of the nitrogen derived from a non-water-soluble organic source and all potash to be derived from sulfate forms for all sod and plantings on lake edges.

The following minor elements shall be included:

2.2% ZnO	0.25% CuO
4.0% MgO	0.005% Fe ₂ O ₃
0.5% MnO	0.1% B ₂ O ₃

- a. Federal Specifications O-F0241 Type 1, Grade A or B.
 - b. The chemical designation for granular fertilizer for all plantings shall be 12-8-8.
- H. Water: Free of substances harmful to growth of plants. Water shall also be free of staining agents as well as elements causing odors.
- I. Soil Sterilizers: As recommended by State and Local Agriculture agencies.
- J. Sand: Clean, white, coarse-grained builders sand, free of substances harmful to growth of plants.
- K. Supply complete information on all analysis/test methodologies and results; laboratory certifications, manufacturer's specifications, and agency approvals to Landscape Architect prior to placement of soil conditioners. Landscape contractor shall make all modifications and improvements to soil and soil mixes deemed necessary by Landscape Architect to meet requirements herein, and to ensure proper growing medium for all plant material without cost to Owner, prior to planting.

2.03 PLANTING SOIL MIXES

- A. Planting soil shall be an evenly blended mixture of 80% sand/20% muck, (with any other soil conditions per Testing Agency recommendations) specified to each cubic yard of soil and thoroughly mix. Mix shall be suitable for plant growth and free from hard clods, stiff clay, hardpan, gravel, brush, large roots, nematodes, weeds, refuse, or other deleterious material, and of reasonably uniform quality.
- B. Palms: Planting soil mixture to be placed as backfill around the root balls of all Palms shall consist of a mixture as specified above.
Note: Bottom 1/4 of planting pit shall be backfilled with clean, coarse-grained builder's sand.
- C. Trees, Shrubs, and Groundcovers: Planting soil mixture to be placed as backfill around the root balls of all trees, shrubs, and groundcovers shall consist of a mixture of 80% sand and 20% muck.
- D. Sterilize planting soil mixtures to make free of all viable nut grass, and other undesirable weed seeds.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- E. All planting soil mixes shall be thoroughly blended to form a uniform planting medium suitable for exceptional plant growth.
- F. Test PH of existing soil and planting soil mixtures by method acceptable to current industry standards. If pH is not between 6.0 and 7.0, add approved soil conditioner/additive to bring PH within that range.
- G. Supply complete information on all analysis/test methodologies and results; laboratory certifications, manufacturer's specifications, and agency approvals and recommendations shall be made by the testing agency as to the type and quantity of soil additives required to bring the nutrient and pH to an acceptable or optimum range for planting to Landscape Architect prior to placement of soil mixtures. In addition, provide Landscape Architect with thoroughly mixed sample of all soil mixes for approval prior to placement (note PH ranges). Landscape Contractor shall make all modification and improvement to soil mixes deemed necessary by Landscape Architect to meet requirements herein, and to ensure proper growing medium for all plant material without cost to Owner, prior to planting.

PART 3 - EXECUTION

3.01 INSPECTIONS

- A. Examine areas to receive soil preparation to assure work of other trades has been completed.
- B. Verify that plants to remain undisturbed have been clearly identified and protected from injury during construction. If not, identify and protect plants to remain according to procedures set forth in Section 02490 - Trees, Plants and Groundcover. Refer to Protective Fencing on plans.
- C. Remove all construction materials and debris from all areas to be landscaped, without additional expense to Owner, prior to subsoil preparation.
- D. Do not proceed with soil preparation until all unsatisfactory conditions are corrected.

3.02 SITE PREPARATION

- A. General: Within the entire area to be landscaped as shown on the drawings, the contractor shall complete the following site topsoil preparation items to eradicate all existing weed and/or natural groundcover. Initiate site topsoil preparation as stated herein and coordinate all work with the existing underground sprinkler system and electrical lines.
- B. Post Emergence Herbicide: Apply "Roundup" as manufactured by Monsanto Corp. according to manufacturer's recommended rate and specification within the limits of all areas to be landscaped not specified as existing, to be relocated, or to be removed. Protect existing plants from overspray.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Pre-Emergence Herbicide: Apply "Ron-Star" or approved equal to all areas to be landscaped according to the manufacturer's recommended rate and specification. Contractor shall be responsible to re-apply appropriate herbicide to eradicate all remaining weeds and maintain a weed-free condition in all areas throughout all landscape planting operations.

3.03 PERFORMANCE

- A. Subsoil: Remove all debris, gravel, rocks and other deleterious material, within 12 inches of surface in areas to receive topsoil mixture, from the project site. Fine grade subsoil to assure finish grades are achieved by adding the specified depth of topsoil/planting mixture.
- B. Soil mixtures:
 - 1. Remove rocks and other objects
 - 2. Smooth soil mixtures to two 2 inches below top of surrounding paving, wherever planting beds abut paved surfaces.
 - 3. Do not compact planting soil mixture, but do wet-soak planting areas to assure proper settlement. Replace topsoil/planting soil mixture to specified grade after watering, where necessary.
 - 4. Smooth topsoil to two inches (2") below finish grade in areas to be sodded. Remove plant material not indicated as existing or be relocated in order to adhere to sod lines.
 - 5. Prior to installing planting soil, test tree pits and planting areas for percolation. If areas do not drain, it is the contractor's responsibility to assure percolation by approved means.
 - 6. Remove limerock or soil cement in tree planter islands within paved parking areas at the depth specified on the plans. Do not damage sub-base material for paved surfaces. Assure percolation and then backfill with approved planting soil mix.

3.04 CLEAN-UP

- A. Immediately clean up spills, soil and conditioners on paved and finished surface areas.
- B. Remove debris and excess materials from project site immediately.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02430

SODDING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Provide all labor, materials, necessary equipment and services to complete the turfgrass Sodding work, as indicated on the drawings, as specified herein or both, except as for items specifically indicated as "NIC ITEMS".

1.02 RELATED SECTIONS

- A. Section 02200 - Earthwork
- B. Section 02210 – Finish Grading
- C. Section 02420 – Soil Preparation and Soil Mixes
- D. Other Sections as applicable.

1.03 QUALITY ASSURANCE

- A. Standards: Federal Specifications (FS) 0-F-241c (1), Fertilizers, Mixed, Commercial.
- B. Requirements or Regulatory Agencies: Conform to the requirements of the State Department of Agriculture.

1.04 SUBMITTALS

- A. Growers Certifications:
 - 1. Turfgrass Sod species and location of field from which turfgrass sod is cut.
 - 2. Compliance with state and federal quarantine restrictions. Manufacturer's certification of fertilizer and herbicide composition.
 - 3. All Contractors' licenses and or certifications for the uses and or application of herbicides, pesticides and fertilizers per the State, County and governing municipality.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver turfgrass sod on pallets.
- B. Protect root system from exposure to wind or sun.
- C. Protect turfgrass sod against dehydration, contamination, and heating during transportation and delivery. Such protection shall encompass the entire period during which the turfgrass sod is in transit, being handled, or in temporary storage. Evidence of inadequate protection against drying out shall be cause for rejection.
- D. Do not deliver more turfgrass sod than can be installed within 24 hours.
- E. Keep stored turfgrass sod moist and under shade, or covered with moistened burlap.
- F. Do not break, tear, stretch, or drop turfgrass sod. The Landscape Architect may reject sod that has been damaged by poor handling.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- G. Unless otherwise authorized by Landscape Architect, the Contractor shall notify the Landscape Architect at least 48 hours in advance of anticipated delivery date of the turfgrass sod. A legible copy of the invoice showing species and variety of the turfgrass sod included for each shipment shall be submitted to the Landscape Architect for approval.

1.06 JOB CONDITIONS

- A. Begin installation of turfgrass sod after preceding related work is accepted.
- B. Environmental Requirements:
 - 1. Install turfgrass sod during months acceptable to the Landscape Architect.
 - 2. Do not install turfgrass sod on saturated soil.
- C. Protection: Erect signs and barriers against vehicular traffic on areas prepared for sod.

1.07 GUARANTEE

- A. Guarantee turfgrass sod for period of twelve months after date of Final Approval.
- B. Replacement turfgrass sod under this guarantee shall be guaranteed for twelve months from the date of installation.
- C. Repair damage to other plants during turfgrass sod replacement at no cost to the Owner.

PART 2 - PRODUCTS

2.01 TURFGRASS SOD

- A. Turfgrass Sod Species: Sod shall be either Bahia, St. Augustine or to match existing type.
- B. All turfgrass sod shall conform to the following requirements:
 - 1. Furnish in pads that are not stretched, broken, or torn.
 - a. Turfgrass Sod pads shall be 18x24 inches in size (plus or minus 5%) with a 1-1/2 inch thickness (excluding top growth and thatch). Broken and torn or uneven ends will not be accepted.
 - 2. Uniformly mowed height when harvested:
 - a. Turfgrass Sod - 2 inches in height.
 - 3. Thatch: Maximum 1/2 inch uncompressed.
 - 4. Inspected and found free of diseases, nematodes, pests, and pest larvae, by entomologist of State of Florida Department of Agriculture.
 - 5. Weeds:
 - a. Free of horse grass, nut grass or other objectionable weeds or weed seeds.
 - 6. Uniform in green color, leaf texture, and density.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

2.02 WATER

- A. Free of substances harmful to plant growth, objectionable odor or staining agents.

2.03 FERTILIZER

- A. FS 0-F-241c(1), Grade A or B.
- B. The Chemical designation for slow release granular fertilizer with minor trace elements in addition to 12% Nitrogen, 8% Phosphorous, and 8% Potassium (Lesco or approved equal) shall have at least 50% of the nitrogen from a non-water-soluble organic source for all plantings except on lake banks.
- C. Apply and distribute by methods and rates as recommended by manufacturer.
- D. All State, County, and Municipal governmental regulations must be met including any licensing or certification requirements for uses and/or applications.

2.04 HERBICIDES

- A. As recommended by the State of Florida Department of Agriculture.
- B. Post-emergent Herbicide: Roundup as manufactured by Monsanto Corp. or approved equal.
- C. Pre-emergent Herbicide: Ron Star or approved equal.
- D. When next to an aquatic water body, an approved aquatic herbicide or approved equal must be utilized that will meet the State, County or Municipal requirements.
- E. All State, County and municipal governmental regulations must be met including any licensing or certification requirements for uses or applications.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Verify that excavation for turfgrass sod is 5 inches below finish grade and approved Planting/Top Soil Mix to depth of 3 inches for turfgrass sod (3 inches) to meet finish grade.
- B. Water dry soil to depth of 6 inches 48 hours before turfgrass sodding.

3.02 INSTALLATION

- A. All areas to be turfgrass sodded shall receive finish grading per Section 02210.
- B. Transplant turfgrass sod within 48 hours after harvesting.
- C. Turfgrass Sod coverage must provide 100% coverage at Final Approval.
- D. Begin turfgrass sodding at bottom of slopes. When installing turfgrass sod adjacent to a water body, install turfgrass sod to the waterline.
- E. Lay first row of turfgrass sod in straight line with long dimension of pads parallel to slope contours.
- F. Butt side and end joints. Ensure that joints are tight, thereby eliminating the need to patch and/or top-dress to eliminate gaps.
- G. Stagger end joints in adjacent rows.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- H. Do not stretch or overlap rows.
- I. Water turfgrass sod immediately after transplanting.
- J. Top dressing for turfgrass sodded areas may be clean sand(sterilized), mined from fresh water sources. Sand mined from salt water is unacceptable. Sand shall be free from construction debris, weeds, turfgrass sod, biodegradable materials, noxious pests and diseases and other deleterious materials.

3.03 LAWN ESTABLISHMENT

- A. Maintenance of sodded areas shall begin immediately after so installation and shall continue until final approval. Maintenance shall consist of protecting, watering, weeding, cutting, fertilizing, repairing eroded area and re-sodding dead and or damaged turfgrass sod.
- B. Watering:
 - 1. Keep turfgrass sod moist during first week after planting.
 - 2. After first week, supplement rainfall to produce a total of 2 inches per day until final acceptance.
 - 3. It is the contractors' responsibility to water all plant material.
- C. Mowing:
 - 1. Maintain turfgrass sod between 2 inches and 2-1/2 inches in height. When turfgrass sod reaches 3 inches in height, mow to 2 inches in height.
 - 2. Do not cut off more than 40% of grass leaf in single mowing.
 - 3. Remove all turfgrass sod clippings throughout.
- D. Re-turfgrass sod areas which in the opinion of the Landscape Architect is required to establish a uniform stand of turfgrass sod.
- E. Weed Eradication:
 - 1. Apply specified or approved equal post-emergent herbicide per manufacture's rate and method of application to all areas to receive sod.
 - 2. Apply specified or approved equal pre-emergent herbicide before sodding and between second and third mowing, per manufacturer's rate and method of applications.
 - 3. Verify that the herbicide and applicant technique will not damage sod prior to application, and replace all damaged sod and any other landscaping due to herbicide at no cost to the owner.
- F. Fertilizer: Apply fertilizer uniformly at manufacturer's recommended rate 30 days after turfgrass sodding and at three-month intervals thereafter. Water in to avoid "burning" or damaging turfgrass sod.
- G. Establishment period shall extend until final acceptance by the Owner according to the conditions of the Contract.

3.04 CLEANING

- A. Immediately clean spills from paved and finished surface areas.
- B. Remove debris and excess materials from project site.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Dispose of protective barricades and warning signs at termination of lawn establishments.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02510

WALKWAYS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish all labor, materials and equipment necessary to complete all walkways and related items depicted in the Drawings and specified herein.

1.02 REFERENCES

- A. FDOT Standard Specifications for Road and Bridge Construction.
- B. ASTM C 171 – Specification for Sheet Materials for Curing Concrete.
- C. ACI 308 – Standard Practice for Curing Concrete

1.03 RELATED SECTIONS

- A. Section 01340 – Shop Drawings, Working Drawings and Samples
- B. Section 02200 – Earthwork
- C. Section 02210 – Finish Grading
- D. Other Sections as applicable.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All materials for work under this Section, including concrete, sub-grade or foundation and joint material shall be as depicted in the Drawings.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All work shall be performed in accordance with the Reference standards.
- B. Sub-grade or foundation installation and compaction specifications shall be as depicted in the Drawings.
- C. Forms shall conform to the shapes, lines and dimensions of the members as depicted in the Drawings and shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be properly braced or tied together so as to maintain

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

position and shape.

D. Finishing:

1. Float concrete until 1/4-inch cement gel is brought to surface; steel trowel until dense surface is obtained.
2. Finish with broom at right angles to alignment of work, then round all exterior edges with 1/2-inch radius after brooming.

E. Curing:

1. The Contractor shall take appropriate precautions to retain moisture by applying materials to cover the walkways and provide water during the curing period or a minimum of six (6) consecutive days.
2. The Contractor shall remove and replace any concrete section which has been damaged, stained or otherwise has become unacceptable due to curing techniques.
3. Acceptable materials to cover walkways and retain moisture include burlap or cotton mats, bags and rugs.
 - a. The edges of materials shall be lapped and weighted down.
 - b. Water shall be applied by sprinkler or soaker hose.
 - c. Coverings shall not be allowed to dry out during the curing period.
 - d. Straw may be used in 6" thick layers covered with a tarp.
 - e. Plastic sheets may not be used.
 - f. Soil may not be used.

F. Cover walks until final clean-up to prevent damages.

G. Concrete walks shall be constructed to lines, widths, slope, grades and thickness as depicted in the Drawings.

H. Expansion joint material shall be placed to separate concrete for any pipes, structures, poles, etc.

3.02 CLEANUP

A. At the completion of the work, Contractor shall clean up all scraps, rubbish and surplus materials caused by this work and haul them away from the site and leave job in a neat, clean and orderly condition.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02513

ASPHALTIC CONCRETE PAVING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Furnish all labor, materials, equipment and incidentals required and place asphaltic concrete pavement in accordance with the elevations and typical sections as depicted in the Drawings and specified herein.

1.02 RELATED SECTIONS

- A. Section 01340 – Shop Drawings, Working Drawings and Samples.
- B. Section 01410 – Materials and Installation Testing.
- C. Section 02100 - Site Preparation.
- D. Other Sections as applicable.

1.03 REFERENCES

- A. The Work under this Contract shall be in strict accordance with the following codes and standards.
 - 1. The applicable municipality,
 - 2. Broward County Traffic Engineering Division,
 - 3. Florida Department of Transportation Specifications (FDOT),
 - 4. OSHA Safety and Health Standards for Construction.

1.04 SUBMITTALS

- A. Submit mix design for approval in accordance with Section 01340.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Asphaltic concrete pavement shall conform to the following FDOT Standard Specifications:
 - 1. Section 160 - Stabilization.
 - 2. Section 200 - Limerock base.
 - 3. Section 300 – Prime and tack coats.
 - 4. Section 334 –Superpave asphalt concrete.
- B. The materials of the asphaltic concrete surface shall conform the applicable sections of FDOT Standard Specifications for Asphaltic Concrete with the following exception:
 - 1. Recycled asphalt may not be used for the final course.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All asphalt installation shall be in accordance with FDOT Standard Specification 330 – Hot Mix Asphalt General Construction Requirements.
- B. All soft and yielding material and other portions of the subgrade which will not compact readily shall be removed and replaced with suitable material and the whole subgrade brought to line and grade and to a foundation of uniform compaction and supporting power. The cost of removing and replacing unsuitable material shall be included in the bid for the paving.
- C. The subgrade, in both cut and fill sections, shall be compacted to a density and LBR as indicated in the Drawings. Unless the subgrade material at the time of compacting contains sufficient moisture to permit proper compaction it shall be moistened as necessary and then compacted. Subgrade material containing excess moisture shall be permitted to dry to the proper consistency before being compacted. The subgrade shall be shaped prior to making the density tests. The required density shall be maintained until the base or pavement has been laid or until the aggregate materials for the base or pavement course have been spread in place.
- D. The minimum compacted thickness of the limerock base shall be as depicted in the Drawings applied in four-inch maximum layers of equal depth unless otherwise depicted in the Drawings. The width of the limerock base shall be wider than the pavement as depicted in the Drawings.
- E. Before the prime coat is applied, all loose material, dust, dirt or other foreign material which might prevent bond with existing surface shall be moved to the shoulders to the full width of the base by means of revolving brooms, mechanical sweepers, blowers, supplemented by hand sweeping or other approved methods. The glazed finish shall have been removed from the base. The prime coat shall be applied by a pressure distributor so that approximately 0.1 gallons per square yard is applied uniformly and thoroughly to a clean surface.
- F. Prior to the application of the surface course, all loose material, dust, dirt and all foreign material which might prevent proper bond with the existing surface shall be removed to the full width of the repair by means of approved mechanical sweepers and supplemented by hand sweeping if required.
- G. Apply bituminous tack coat at a rate between 0.02 and 0.10 gallons per square yard. Bituminous material shall be heated as per manufacturers' recommendations.
- H. All manhole castings, valve boxes or other utility castings within the area to be surfaced shall be adjusted to the proposed surface elevation by the Contractor. The work shall be accomplished in such a manner as to leave the casting fixed permanently in its correct position.

3.02 PAVEMENT REPAIR

- A. All damage to pavement as a result of the work (construction or maintenance) under this contract shall be repaired according to the plans and specifications at the Contractor's cost. Pavement shall be repaired to match the original surface material and original grade; however, the asphalt concrete thickness shall not be less than 1 inch. The repair shall include the preparation of the subgrade, the placing and

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

compacting of the limerock base, the preparation and priming of the base, the placing and maintaining of the surface treatment, all as specified herein and as shown on the Drawings.

- B. The width of all repairs shall extend at least 12 inches beyond the limit of the damage or as shown on the Drawings. The edge of the pavement to be left in place shall be saw cut to a true edge and should provide a clean edge to abut the repair. The line of the repair shall be reasonably uniform with no unnecessary irregularities.

3.03 TESTING

- A. Refer to Section 01410 – Materials and Installation Testing.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02580

PAVEMENT MARKINGS AND SIGNING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall supply all labor, equipment, materials and incidentals necessary to install pavement markings and signing in accordance with the plans and the following specifications.

1.02 RELATED SECTIONS

- A. Section 01340 – Shop Drawings
- B. Other Sections as applicable.

1.03 REFERENCED SPECIFICATIONS, CODES AND STANDARDS

- A. The American Association of State Highway and Transportation Officials (AASHTO).
- B. Federal Highway Administration - Manual of Uniform Control Devices (MUTCD).
- C. FDOT Design Standards.
- D. FDOT Standard Specifications for Road and Bridge Construction.
- E. Broward County Traffic Engineering Division (BCTED) Minimum Standards and the BCTED Pavement Markings & Signs Detail Sheet.
- F. Other standards references in the Plans.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All pavement markings shall be thermoplastic unless otherwise noted. Thermoplastic pavement markings shall be fully reflectorized and meet the requirements of AASHTO M249 and the FDOT Standard Specifications for Road and Bridge Construction.
- B. Traffic paint shall be fully reflectorized and meet the requirements of the FDOT Standard Specifications for Road and Bridge Construction and shall be Sherwin-Williams "Pro-Mar" Traffic Marking Paint, series B29 or Glidden Traffic paint #63228. Provide two (2) coats of paint, 5 mil minimum wet film thickness each.
- C. Pavement markings on brick or concrete pavers shall be 3M 5730/31 tape applied with contact cement per manufacturers specifications.
- D. All signs in Broward County right of way shall have type IX prismatic sheeting except for school zone and pedestrian signs which shall be comprised of retroreflective fluorescent yellow-green sheeting certified to meet ASTM D4956 Type IV retroreflective sheeting materials.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

PART 3 - EXECUTION

- A. All pavement marking and signing shall be applied in accordance with Broward County Traffic Engineering Division (BCTED) Minimum Standards and the BCTED Pavement Markings & Signs Detail Sheet.
- B. All pavement markings shall be temporarily applied as paint upon completion of construction of asphalt paving. All such temporary paint shall be replaced with thermoplastic at least 90 days, but no later than 120 days, after paving.
- C. Precast concrete bumpers (wheelstops) are required for all parking stall unless specifically stated in the Drawings. Wheelstops are to be pinned using (2) - 24" #4 bar. Wheelstops are to be painted as directed by the Owner.
- D. Parking stalls shall be marked in accordance with the typical pattern indicated on the Drawings. Stall width and depth, and drive widths indicated are minimum and must not be reduced.
- E. An FDOT approved sealer must be applied to concrete surfaces prior to application of pavement markings.
- F. Paint concrete base and base plate at all parking lot lighting standards.
- G. RPM's for fire hydrants and valve boxes shall be installed per plans or as directed by the utility Owner.
- H. The contractor shall refurbish pavement marking and signs damaged during construction at no additional cost.
- I. All signs and sign supports intended for removal shall be removed completely and disposed of properly.
- J. All signs to be relocated shall be properly installed in a temporary location with applicable viability and not interfere with construction prior to proper installation in the proposed location.

END OF SECTION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02630

STORM DRAINAGE

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section provides for materials, installation and testing of storm drainage piping and structures.

1.02 RELATED SECTIONS

- A. Other Sections as applicable.
- B. Section 02631 – High Performance Polypropylene Storm Gray Pipe (HP Storm Gray Pipe)

1.03 REFERENCES

- A. Standards and Specifications of the allocable local municipality.
- B. Federal Highway Administration - Manual of Uniform Control Devices (MUTCD).
- C. FDOT Design Standards.
- D. FDOT Standard Specifications for Road and Bridge Construction.
- E. Broward County Traffic Engineering Division (BCTED) Minimum Standards and the BCTED Pavement Markings & Signs Detail Sheet.
- F. The Occupational Safety and Health Administration (OSHA).The Manual of Uniform Traffic Control Devices (MUTCD).ASTM C478 - Standard Specification for Circular Precast Reinforced Concrete Manhole Sections.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All drainage structures, including headwalls, shall be precast concrete as manufactured by U.S. Precast Corporation, or approved equal. Block catch basins will be allowed only with approval of the Engineer. The minimum wall and slab thickness shall be 8 inches and the minimum reinforcing shall be No. 4 bars at 12 inches each way, unless otherwise indicated.
- B. Concrete for all drainage structures, including headwalls, shall be FDOT Class II in accordance with Standard Specification 346 and ASTM C478.

EXHIBIT A
 TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
 RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. Corrugated aluminum pipe (CAP) shall be helical type, manufactured in conformance with ASTM B-209 and AASHTO M-193, as manufactured by Kaiser Aluminum, Inc., or approved equal. The corrugation pattern and gauge shall be as follows:

DIAMETER	CORRUGATION	GAUGE
12" x 21"	2 2/3" x 1/2"	16
24" x 27"	2 2/3" x 1/2"	16
30"	2 2/3" x 1 1/2"	14
36" x 54"	3" x 1"	14
60" x 72"	3" x 1"	12

- D. Pipe couplings for CAP shall be 12" wide (minimum), 24" for 60" diameter or larger. Split bands of the same alloy as the pipe, and may be one gauge lighter than the pipe. Polyurethane or other manufacturer supplied sealant shall be used with the couplings.
- E. High Performance polypropylene (PP) pipe shall meet or exceed ASTM F2881 and AASHTO M330. ADS High Performance Polypropylene Storm Gray Pipe or Approved Equal shall meet the requirements of ASTM F2736. Rubber gaskets or other manufacturer supplied joint sealer shall be used.
- F. The rip rap headwalls, which will be provided on an as needed basis, shall be constructed of sand/cement with a minimum 2000 psi compressive strength to meet FDOT standards. The bags shall be permeable burlap, cloth or paper. A concrete cap shall be poured on top of sand/cement rip rap bags with a minimum 3000 psi compression strength.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Pipe and fittings shall be installed in accordance with the requirements of the manufacturer.
- B. All pipe shall be carefully laid true to line and grade. Any deflection proposed by the Contractor must be approved by the Engineer prior to placement.
- C. Pipe shall be placed on stable granular material, free of rock formation, other foreign formations, and in accordance with the detail drawings.
- D. Blocking under pipe is not permitted.
- E. The Contractor shall avoid unnecessary crossing by heavy construction vehicles during construction.
- F. The contractor shall notify the local water control district at least 24 hours prior to the start of the construction and inspection.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

3.02 STORM DRAINAGE PRE-TREATMENT/EXFILTRATION SYSTEM

- A. Any conflict with existing or proposed utilities shall immediately be brought to the attention of the Engineer. Any impermeable material encountered in the excavation for the drainfield shall be removed as directed by the Engineer.
- B. The trench liner shall be used on the bottom, sides and top of exfiltration trench ditch or in accordance with the local drainage authority. The top section of the material shall be lapped a minimum of 24 inches and the Contractor shall take extreme care in backfilling to avoid bunching of the fabric.
- C. Perforated pipe within the exfiltration trench shall have 3/8 inch perforations 360° around the pipe with approximately 120 perforations per foot of pipe.
- D. Perforated pipe shall terminate four feet (5') from the drainage structure. The remaining four feet (5') shall be non-perforated pipe.
- E. Pipes shall terminate at an additional catch basin or as shown on the plans.
- F. Exfiltration Trench shall be installed in accordance with Section 443 of FDOT Standard Specifications for Road and Bridge Construction.

3.03 TESTING

- A. All drainage piping shall be lapped to the satisfaction of the Engineer prior to acceptance.
- B. At the conclusion of the Work, the Contractor shall thoroughly clean all of the pipe and structures, whether existing or proposed, within the area of work or as directed by the Engineer. All debris, obstructions, defective pipes, brick and mortar, joints, etc. shall be cleaned and repaired prior to acceptance.
- C. All drainage pipes and structures shall be maintained in working condition and kept clean until contract close-out.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

SECTION 02631

HIGH PERFORMANCE POLYPROPYLENE STORM GRAY PIPE (HP STORM GRAY PIPE)

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required and install High Performance Polypropylene Storm Gray pipe (HP Storm Gray Pipe by ADS or approved equal) and appurtenances as described herein.

1.02 RELATED WORK

- A. Section 01015 - General Requirements
- B. Section 01025 - Measurement and Payment
- C. Section 01340 - Shop Drawings, Working Drawings and Samples
- D. Section 02221 - Trenching, Bedding and Backfill for Pipe
- E. Other Sections as applicable

1.03 DESCRIPTION OF SYSTEM

- A. High Performance polypropylene (PP) pipe shall meet or exceed ASTM F2881 and AASHTO M330. The pipe shall have a smooth interior and annular exterior corrugations. ADS High Performance Polypropylene Storm Gray Pipe or Approved Equal shall meet the requirements of ASTM F2736. Rubber gaskets or other manufacturer supplied joint sealer shall be used.
- B. Drainage piping shall be installed as indicated on the Drawings. Installation shall be in accordance with ASTM D2321 and manufacturer's recommended installation guidelines with the exception of minimum cover requirement.

1.04 QUALIFICATIONS

- A. All piping and appurtenances shall be furnished by a single manufacturer who is fully experienced, reputable, and qualified in the manufacture of the items to be furnished. All pipes shall be manufactured and installed in accordance with the best practices and methods and shall comply with these Specifications as well as the requirements of the Owner.

1.05 SUBMITTALS

- A. Shop drawings shall be submitted to the Engineer in accordance with Section 01340 and shall include dimensioning and technical specification for all piping to be furnished.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

1.06 INSPECTION

- A. The manufacturer shall inspect all pipe joints for out-of-roundness and pipe ends for squareness. The manufacturer shall furnish to the Engineer a notarized affidavit stating all pipe meets the requirements of AASHTO M330.
- B. The quality of the finished pipe shall be subject to inspection and approval by the Engineer and other representatives of the Owner. Pipe rejected after delivery shall be marked for identification and shall be removed from the project at once.

1.07 TOOLS

- A. Special tools, solvents, lubricants, and sealing compounds, etc. required for normal installation shall be furnished with the pipe.

PART 2 - PRODUCTS

2.01 HIGH PERFORMANCE POLYPROPYLENE STORM GRAY PIPE

- A. Pipe shall comply with the requirements for test methods, dimensions, and markings found in AASHTO Designations M330. Polypropylene pipe and fitting production shall be impact modified copolymer meeting the material requirements of ASTM F2881, Section 5 and AASHTO M330, Section 6.1.

2.02 PIPE FITTINGS

- A. Fittings shall conform to ASTM F2881 and AASHTO M330. Bell and spigot connections shall utilize a spun-on, welded or integral bell and spigots with gaskets meeting ASTM F477. Bell & spigot fittings joint shall meet the watertight joint performance requirements of ASTM D3212. Corrugated couplings shall be split collar, engaging at least 2 full corrugations.

2.03 MANHOLE CONNECTIONS

- A. The pipe shall be grouted into the concrete manhole wall using an approved non-shrink grout and waterstop gasket.

PART 3 - EXECUTION

3.01 INSTALLATION, HANDLING PIPE AND FITTINGS

- A. Care shall be taken in loading, transporting and unloading to prevent injury to the pipe. Pipe and fittings shall not be dropped. All pipe and fittings shall be examined before laying, and no piece shall be installed which is found to be defective. Any damage to the pipe shall be cause to reject it.
- B. All pipe and fittings shall be subjected to a careful inspection prior to being installed.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

- C. If any defective pipe is discovered after it has been installed it shall be removed and replaced with a sound pipe in a satisfactory manner at no additional expense to the Owner. All pipe and fittings shall be thoroughly cleaned before laying, shall be kept clean until they are used in the work, and when installed, shall conform to the lines and grades required.

END OF SECTION

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Document 02640

GEOTECHNICAL REPORT

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

REPORT OF
GEOTECHNICAL EXPLORATION

HALLANDALE BEACH STORMWATER 42 YEAR CDBG
CGA PROJECT NO. 16-9047
HALLANDALE BEACH, FLORIDA

FOR

CALVIN GIORDANO AND ASSOCIATES, INC.
1800 ELLER DRIVE, SUITE 600
FT. LAUDERDALE, FLORIDA 33316

PREPARED BY

NUTTING ENGINEERS OF FLORIDA, INC.
2051 NW 112TH AVENUE, SUITE 126
MIAMI, FLORIDA 33172

PROJECT No. 101.139

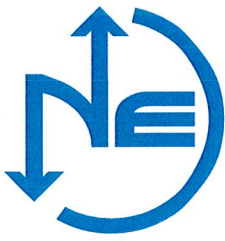
FEBRUARY 2017
(REVISED MAY 2017)



*Geotechnical & Construction Materials
Engineering, Testing & Inspection
Environmental Services*

Offices throughout the state of Florida

www.nuttingengineers.com info@nuttingengineers.com



Nutting Engineers

of Florida Inc. | Established 1967
Your Project is Our Commitment

2051 N.W. 112th Avenue, Suite 126
Miami, Florida 33172
305-557-3083
Toll Free: 877-NUTTING (688-8464)
Fax: 305-824-8827
Broward 954-941-8700
Palm Beach 561-736-4900
St. Lucie 772-408-1050
www.nuttingengineers.com

Geotechnical and Construction Materials | Engineering, Testing and Inspections | Environmental Services

February 20, 2017 (Revised May 10, 2017)

Mr. Mohammed Sharifuzzaman, P.E.
Calvin Giordano and Associates, Inc.
1800 Eller Drive, Suite 600
Ft. Lauderdale, Florida 33316
Phone: (954) 921-7781
Fax: (954) 921-8807
Email: msharifuzzaman@cgasolutions.com

Re: Report of Geotechnical Exploration
**Hallandale Beach Stormwater 42 Year CDBG
CGA Project No. 16-9047**
Hallandale Beach, Florida

Dear Mr. Sharifuzzaman:

Nutting Engineers of Florida, Inc. has performed a geotechnical exploration for the referenced project in Hallandale Beach, Florida. The purpose of the exploration was to obtain information concerning the site and subsurface conditions at specific test locations in order to provide soil parameters for the proposed construction. Initially, the report was written with only the B-1 boring logs as boring location B-2 was omitted due to utility concerns. This report presents our findings and recommendations with both boring locations.

PROJECT INFORMATION

Per your email dated November 21, 2016, we understand that plans for this project include the installation of drainage pipes, catch basins, manholes, and exfiltration trenches throughout the referenced project. The pipe inverts are assumed to be located approximately four to five feet below the existing grade. If any of the above information or assumptions are incorrect, we should be notified in writing in order to revisit our recommendations.

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

OFFICES
Palm Beach
Miami-Dade
St. Lucie



GENERAL SUBSURFACE CONDITIONS

Soil Survey Maps

A review of the United States Soil Conservation map of Broward County indicates that at the time the survey was conducted, Dade-Urban land complex was located in the area of the site. This complex consists of Dade fine sand, which makes up the open areas, and of Urban land, which are covered by concrete and buildings. The Dade soil in the open areas is nearly level, well drained, and sandy and has limestone at varying depths. In most places, a thin layer of gravelly sand has been spread over the surface of these soils to stabilize the loose, dry sands of the natural surface. We note that the maximum depth of the survey is approximately 6 feet.

Subsurface Exploration

NUTTING ENGINEERS OF FLORIDA, INC. was requested to perform two (2) Standard Penetration Test (SPT) borings (ASTM D-1586) to a depth of ten feet below land surface. The locations of the test borings are indicated on the attached site plan presented in the Appendix of this report. The boring locations were established in the field using approximate methods; namely, a measuring wheel and available surface controls. As such the soil boring locations should be considered to be approximate.

The appended boring log presents information and descriptions of the subsurface conditions at each specific test boring location. Representative samples collected from the SPT boring were visually reviewed in the laboratory by a geotechnical engineer in order to confirm the field classifications. The Standard Penetration Test N-values, the number of successive blows required to drive the sampler into the soil one foot, are presented on the individual boring logs. The SPT N value has been empirically correlated with various soil properties and is considered to be indicative of the relative density of cohesionless soils and the consistency of cohesive soils. The correlation of penetration resistance with relative density is presented in the Soil Classification Criteria attached in the Appendix.

Test Boring Results

In general, the review of the boring logs indicated a surficial layer of sandy topsoil or asphalt followed by very loose to medium dense fine sand and trace organic material to a depth of approximately five feet below grade. Below this layer, the borings revealed soft to medium hard limestone and slightly silty sand to ten feet, the maximum depth explored. A detailed description of the soil/rock profile is presented on the test boring records provided in the Appendix.

Note: Substantially different subsurface conditions may exist at iother areas of the site. Buried debris may or may not be identified or adequately delineated by soil borings. Test pit excavation can provide more insight into such conditions and rock lithology if present.

Such conditions may be revealed during site development activities or other related activities. Should additional assurance be desired by the client, further subsurface investigation could be performed.

Groundwater Information

The immediate groundwater level was measured at the boring locations at the time of drilling. The groundwater level was encountered to range from depths of approximately five to six feet below the existing ground surface during our subsurface exploration.

The immediate depth to groundwater measurement presented in this report may not provide a reliable indication of stabilized or longer term depth to groundwater at this site. Water table elevations can vary dramatically with time through rainfall, droughts, storm events, flood control activities, nearby surface water bodies, tidal activity, pumping and many other factors. For these reasons, this immediate depth to water data **should not** be relied upon alone for project design considerations.

Further information regarding stabilized groundwater elevations at the site could be developed upon specific request. Additional evaluation, which was not part of this study, might include a pumping test, monitoring of piezometers, survey of the project area for evidence of current groundwater elevation influences such as well fields, obvious construction dewatering, tidal activity, flood control canals and other surface water bodies.

ENGINEERING EVALUATION AND RECOMMENDATIONS

Our soil exploration for this project encountered a soil profile consisting primarily of sand and limestone. In our opinion, these soils should provide adequate support for the proposed construction.

Based upon the depth to ground water encountered in our exploration, we anticipate that dewatering may be necessary. If dewatering is to be performed, it is recommended that such work be designed, permitted and executed by qualified knowledgeable parties thoroughly experienced with similar local dewatering operations.

Piping laid through areas of limestone should be bedded in a granular material, or as specified by the civil engineer, in order to account for the associated stress concentrations on the pipe. Piping laid through these areas should be over-excavated approximately six

inches below the anticipated pipe bedding elevation and backfilled using a granular fill compacted to at least 95 percent of the materials maximum dry density.

Although substantial deleterious materials were not encountered within the study area, in the case peat or silt materials are encountered within the pipe bedding area, the soils should be over-excavated to at least 6 inches below the proposed pipe, whichever is greater. Backfill should be performed in accordance with the recommendations presented herein or as specified by the civil engineer. Sand and/or limestone fragments encountered above the unsuitable material layer may be stockpiled for later use.

Fill needed to bring the site to back to grade may be placed in lifts not exceeding twelve inches in loose thickness. Each lift should be thoroughly compacted until densities equivalent to at least 98 percent of the modified Proctor maximum dry density (ASTM D-1557) are uniformly obtained. Fill should consist of granular soil, with less than ten percent passing the No. 200 sieve, free of rubble, organics (five percent or less) clay, debris and other unsuitable material.

The fill should have ASTM designation (D-2487) of GP, GW, SP, or SW, with a maximum particle size of no more than three inches or as otherwise approved by the geotechnical engineer.

As previously stated, limestone was encountered within the soil profile of the study area. The limestone surface undulates and the depth to the limestone may vary dramatically over small horizontal distances. Hard digging conditions should be anticipated and planned for. We are available to discuss excavation issues and to provide input concerning implementation.

Pavements

The The pavement section should be designed based on traffic loading conditions and other factors specific to the project. At a minimum, we recommend a stabilized subgrade having a minimum LBR of 40 shall be placed to a depth of at least twelve inches below the base course. The stabilized subgrade should be compacted to an equivalent density of 98 percent of the modified Proctor maximum dry density. The base course should be placed to at least eight inches below the asphalt and should have a minimum LBR of 100. The base material should be compacted to 98 percent of the modified Proctor maximum dry density. The project civil engineer should provide the final pavement section plans and specifications.

GENERAL INFORMATION

Our client for this geotechnical evaluation was:

Calvin Giordano and Associates, Inc.
1800 Eller Drive, Suite 600
Ft. Lauderdale, Florida 33316

The contents of this report are for the exclusive use of the client, the client's design & construction team and governmental authorities for this specific project exclusively. Information conveyed in this report shall not be used or relied upon by other parties or for other projects without the expressed written consent of NE. This report discusses geotechnical considerations for this site based upon observed conditions and our understanding of proposed construction for foundation support. Environmental issues including (but not limited to), soil and/or groundwater contamination are beyond our scope of service for this project. As such, this report shall not be used or relied upon for evaluation of environmental issues.

Excavations of five feet or more in depth should be sloped or shored in accordance with OSHA and State of Florida requirements.

Prior to initiating compaction operations, we recommend that representative samples of the structural fill material to be used and acceptable in-place soils be collected and tested to determine their compaction and classification characteristics. The maximum dry density, optimum moisture content, gradation and plasticity characteristics should be determined. These tests are needed for compaction quality control of the structural fill and existing soils, and to determine if the fill material is acceptable.

If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified in writing immediately so that the condition or change can be evaluated and appropriate action taken.

The vibratory compaction equipment may cause vibrations that could be felt by persons within nearby buildings and could potentially induce structural settlements. Additionally, preexisting settlements may exist within these structures that could be construed to have been caused or worsened by the proposed vibratory compaction after the fact. Pre- and post conditions surveys of these structures along with the vibration monitoring during vibratory compaction could be performed to better evaluate this concern. The contractor should exercise due care during the performance of the vibratory compaction work with due consideration of potential impacts on existing structures. If potential vibrations and impacts are not considered tolerable, then alternate foundation modification techniques should be considered and the Geotechnical Engineer notified in writing immediately.



EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

NE shall bear no liability for the implementation of recommended inspection and testing services as described in this report if implemented by others. NE has no ability to verify the completeness, accuracy or proper technique of such procedures if performed by others.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with general accepted professional practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

We appreciate the opportunity to provide these services for you and look forward to completing this and other projects with you. If we can be of any further assistance with the design or construction services, or if you need additional information, please feel free to contact us at your convenience.

Sincerely,
NUTTING ENGINEERS OF FLORIDA, INC.

Richard Wohlfarth 5/10/17

Richard C. Wohlfarth, P.E. #50858
Director of Engineering

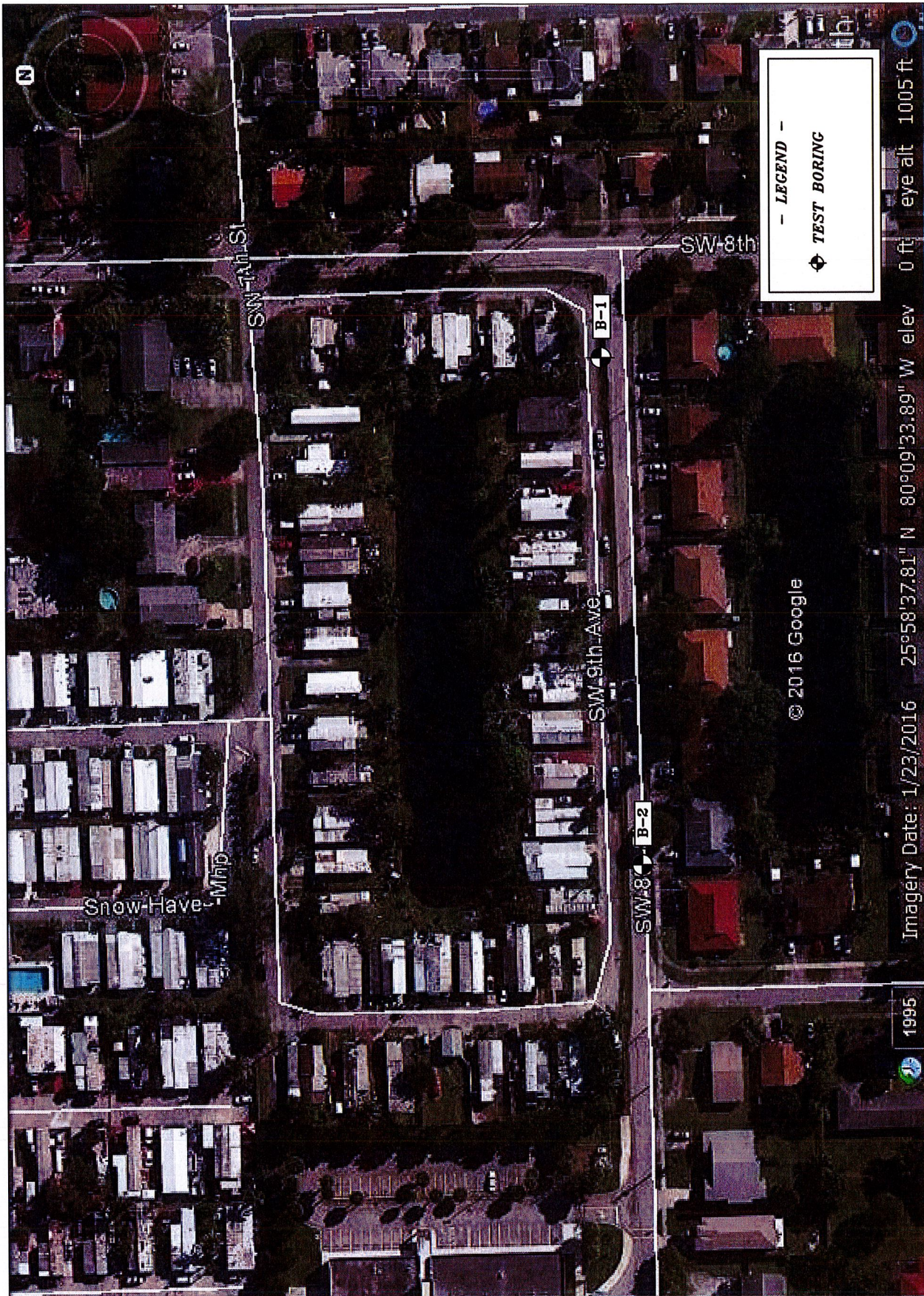
ARC


Adrian Ramirez
Engineering Intern

Attachments: Boring Location Plan
Test Boring Reports
Limitations of Liability
Soil Classification Criteria



EXHIBIT A
 TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
 RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT



 <p>NUTTING ENGINEERS OF FLORIDA, INC. ESTABLISHED 1967</p>	<p>HALLANDALE BEACH STORMWATER 42 YEAR CDBG HALLANDALE BEACH, FL</p>	<p>APPROXIMATE TEST LOCATIONS</p>	<p>NOT TO SCALE</p>	<p>FIGURE 1</p>
---	--	--	---------------------	-----------------



1310 Neptune Drive
 Boynton Beach Fl. 33426
 Telephone: 5617364900
 Fax: 5617379975

BORING NUMBER B-1

CLIENT Calvin Giordano & Associates, Inc.

PROJECT NUMBER 101.139

PROJECT LOCATION Hallandale Beach, FL

PROJECT NAME Hallandale Beach Stormwater 42 Year CDBG

DATE STARTED 2/13/17 COMPLETED 2/13/17 SURFACE ELEVATION REFERENCE Same as road crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY D. Tyson CHECKED BY C. Gworek AT TIME OF DRILLING 6.0 ft ft

APPROXIMATE LOCATION OF BORING As located on site plan

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲					
						10	20	30	40		
						PL	MC	LL			
						20	40	60	80		
						□ FINES CONTENT (%) □					
						20	40	60	80		
0		Gray fine SANDY TOPSOIL									
		Dk. gray fine SAND, trace organic	AU 1								
			AU 2								
5		Lt. tan LIMESTONE and fine slightly SILTY SAND	SS 3	4-4-4-5	8						
			SS 4	6-6-7-6	13						
			SS 5	5-5-5-6	10						
10		Bottom of hole at 10.0 feet.									

TEST NUTTING BOREHOLE 2-101.139 CALVIN GIORDANO & ASSOCIATES, INC. - HALLANDALE BEACH STORMWATER 42 YEAR CDBG.GPJ GINT US.GDT 2/15/17



1310 Neptune Drive
 Boynton Beach Fl. 33426
 Telephone: 5617364900
 Fax: 5617379975

BORING NUMBER B-2

CLIENT Calvin Giordano & Associates, Inc.

PROJECT NUMBER 101.139

PROJECT LOCATION Hallandale Beach, FL

PROJECT NAME Hallandale Beach Stormwater 42 Year CDBG

DATE STARTED 5/2/17 COMPLETED 5/2/17 SURFACE ELEVATION REFERENCE Same as road crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY D. Tyson CHECKED BY C. Gworek ∇ AT TIME OF DRILLING 5.3 ft ft

APPROXIMATE LOCATION OF BORING As located on site plan

TEST NUTTING BOREHOLE 2-101-139 CALVIN GIORDANO & ASSOCIATES, INC. - HALLANDALE BEACH STORMWATER 42 YEAR CDBG.GPJ GINT US.GDT 5/5/17

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	Blows	N-Value	▲ SPT N VALUE ▲			
						10	20	30	40
						PL MC LL 20 40 ● 60 80			
						□ FINES CONTENT (%) □			
						20 40 60 80			
0		ASPHALT - BASECOURSE							
		Brown fine SAND	SS 1	37-31-28	59				>>▲
			SS 2	10-10-9-8	19		▲		
5	∇		SS 3	3-2-1-1	3	▲			
		Lt. brown fine slightly SILTY SAND and LIMESTONE	SS 4	1-1-3-6	4		▲		
			SS 5	6-4-5-5	9		▲		
10		Bottom of hole at 10.0 feet.							

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
LIMITATIONS OF LIABILITY

WARRANTY

We warrant that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession in our area currently practicing under similar conditions at the time our services were performed. **No other warranties, expressed or implied, are made.** While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality, completeness, or satisfactory performance of designs, construction plans, specifications we have not prepared, nor the ultimate performance of building site materials or assembly/construction.

SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented in the soil boring logs and/or a drawing. The location and elevation of the borings should be considered accurate only to the degree inherent with the method used and may be approximate.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata as encountered and immediate depth to water data. The log represents conditions recorded specifically at the location where and when the boring was made. Site conditions may vary through time as will subsurface conditions. The boundaries between different soil strata as encountered are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling, nature and consistency of the respective strata. Substantial variation between soil borings may commonly exist in subsurface conditions. Water level readings are made at the time and under conditions stated on the boring logs. Water levels change with time, precipitation, canal level, local well drawdown and other factors. Water level data provided on soil boring logs shall not be relied upon for groundwater based design or construction considerations.

LABORATORY AND FIELD TESTS

Tests are performed in *general* accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test boring report indicates the measurements and data developed at each specific test location.

ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it shall not be utilized to determine the cost of construction nor to stand alone as a construction specification. Contractors shall verify subsurface conditions as may be appropriate prior to undertaking subsurface work.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations commonly exist between boring locations. Such variations may not become evident until construction. Test pits sometimes provide valuable supplemental information that derived from soil borings. If variations are then noted, the geotechnical engineer shall be contacted in writing immediately so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. **Any significant changes of the site improvements or site conditions must be communicated in writing to the geotechnical engineer immediately** so that the geotechnical analysis, conclusions, and recommendations can be reviewed and appropriately adjusted as necessary.

CONSTRUCTION OBSERVATION

Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. **The geotechnical engineer's field representative does not direct the contractor's construction means, methods, operations or personnel.** The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications. The enclosed report may be relied upon solely by the named client.

SOIL AND ROCK CLASSIFICATION CRITERIA

SAND/SILT

N-VALUE (bpf)	RELATIVE DENSITY
0 – 4	Very Loose
5 – 10	Loose
11 – 29	Medium
30 – 49	Dense
>50	Very dense
100	Refusal

CLAY/SILTY CLAY

N-VALUE (bpf)	UNCONFINED COMP. STRENGTH (tsf)	CONSISTENCY
<2	<0.25	v. Soft
2 – 4	0.25 – 0.50	Soft
5 – 8	0.50 – 1.00	Medium
9 – 15	1.00 – 2.00	Soft
16 – 30	2.00 – 4.00	v. Stiff
>30	>4.00	Hard

ROCK

N-VALUE (bpf)	RELATIVE HARDNESS	ROCK CHARACTERISTICS
$N \geq 100$	Hard to v. hard	Local rock formations vary in hardness from soft to very hard within short vertical and horizontal distances and often contain vertical solution holes of 3 to 36 inch diameter to varying depths and horizontal solution features. Rock may be brittle to split spoon impact, but more resistant to excavation.
$25 \leq N \leq 100$	Medium hard to hard	
$5 \leq N \leq 25$	Soft to medium hard	

PARTICLE SIZE

Boulder	>12 in.
Cobble	3 to 12 in.
Gravel	4.76 mm to 3 in.
Sand	0.074 mm to 4.76 mm
Silt	0.005 mm to 0.074 mm
Clay	<0.005 mm

DESCRIPTION MODIFIERS

0 – 5%	Slight trace
6 – 10%	Trace
11 – 20%	Little
21 – 35%	Some
>35%	And

Major Divisions	Group Symbols	Typical names	Laboratory classification criteria		
Coarse-grained soils (More than half of material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	CW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3 Not meeting all gradation requirements for GW	
		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines		
		GW* d u	Silty gravels, gravel-sand-silt mixtures		
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Gravels with fines (Appreciable amount of fines)	GC	Clayey gravels, gravel-sand-clay mixtures	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3 Not meeting all gradation requirements for SW
			SW	Well-graded sands, gravelly sands, little or no fines	
		Clean sands (Little or no fines)	SP	Poorly graded sands, gravelly sands, little or no fines	
			Sands with fines (Appreciable amount of fines)	SM* d u	
	SC	Clayey sands, sand-clay mixtures		Atterberg limits below "A" line or P.I. less than 4 Atterberg limits above "A" line with P.I. more than 7 Limits plotting in hatched zone with P.I. between 4 and 7 are borderline cases requiring use of dual system.	
	Fine-grained soils (More than half of material is smaller than No. 200 sieve size)	Sills and clays (Liquid limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	<p style="text-align: center;">Plasticity Chart</p>
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy, clays, silty clays, lean clays	
OL			Organic silts and organic silty clays of low plasticity		
Sills and clays (Liquid limit greater than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
		CH	Inorganic clays or high plasticity, fat clays		
		OH	Organic clays of medium to high plasticity, organic silts		
Highly organic soils		PT	Peat and other highly organic soils		



EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Document 02650

SOFT DIGS REPORT BY US POTHOLING & AIR EXCAVATION

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

May 18, 2017

Mohammed Sharifuzzaman, P.E.
Calvin Giordano & Associates
1800 Eller Dr Suite 600
Fort Lauderdale, FL 33316

Dear Mr Sharifuzzaman,

I would like to thank you for choosing US Utility Potholing & Air Excavation to perform the Soft Digs on your project. The following report details our findings for the pothole locations identified by your company.

US Utility Potholing & Air Excavation performs all soft digs with the use of compressed air and vacuum excavation the safest way possible to expose existing utilities.

There is a note that I think I wanted point out on this project:

PH 3 the 12" DIP Force Main was located on the South Side of the Catch Basin.

We are constantly looking to our customers for improvements to our reporting. Any comments suggestions to improve the quality of this report would be appreciated.

Thanks for your business!

Sincerely,



Chuck Faust
US Utility Potholing & Air Excavation



US Utility Potholing & Air Excavation
4630 NE 11th Ave, Oakland Park, FL 33305
www.usutilitypotholing.com
954-937-1488
Florida's Soft Dig Specialists

Reset Form



PO Box 257 Pompano Beach, FL 33061
 (954) 993-5552. USUtilityPotholing@gmail.com

Subsurface Utility Report

Customer	Calvin Giordano & Associates
Project	1429 Hallandale Storm Water 42
Location	SW 8th St Hallandale
Date	05/19/2017

Pothole #	1	Station	NA	Plan Sheet			
Station	Utility	Top	Bottom	Size	Type	Curb Distance	Direction
NA	WaterMain	3.70	NA	8"	C900	4.5' N of CB	E-W
Comments	4.50 N' of center of catch basin						
Operator	Chuck F	Technician	Juan R	Vehicle ID	USUP-1		
Field Log #	1429	Log Date	05/17/2017	Soil Type	Sand		
Asphalt Depth	.30	Concrete Depth	NA	Marker	PK/Paint		
Pavement Type							

Pre Excavation	Finish Photo
	PHOTO NOT AVAILABLE
Sub Surface	Area Photo 1 note watermain on right side of catch basin
Top Cover	Area Photo 2 note watermain North of Catch Basin

Reset Form

Reset Form



PO Box 257 Pompano Beach, FL 33061
 (954) 993-5552. USUtilityPotholing@gmail.com

Subsurface Utility Report

Customer	Calvin Giordano & Associates
Project	1429 Hallandale Storm Water 42
Location	SW 8th St Hallandale
Date	05/19/2017

Pothole #	2		Station	NA		Plan Sheet	
Station	Utility	Top	Bottom	Size	Type	Curb Distance	Direction
NA	FM	3.65	NA	12"	DIP	4' S' of CB	E-W
Comments	4' S of center of catch basin (Plans had on North side) 1" Cable in same are (2A)						
Operator	Chuck F		Technician	Juan R	Vehicle ID	USUP-1	
Field Log #	1429		Log Date	05/17/2017	Soil Type	Sand	
Asphalt Depth	.20		Concrete Depth	NA	Marker	PK/Paint	
Pavement Type							

Pre Excavation	Finish Photo
Sub Surface	Area Photo 1 note FM on Left side of catch basin
Top Cover	Area Photo 2 note FM South of Catch Basin

Reset Form

Reset Form



PO Box 257 Pompano Beach, FL 33061
 (954) 993-5552. USUtilityPotholing@gmail.com

Subsurface Utility Report

Customer	Calvin Giordano & Associates
Project	1429 Hallandale Storm Water 42
Location	SW 8th St Hallandale
Date	05/19/2017

Pothole #	2A		Station	NA		Plan Sheet	
Station	Utility	Top	Bottom	Size	Type	Curb Distance	Direction
NA	Unknown	2.12	NA	1"	Cable	3.35 S of CB	E-W
Comments	3.35' S' of Catch Basin.						
Operator	Chuck F		Technician	Juan R	Vehicle ID	USUP-1	
Field Log #	1429		Log Date	05/17/2017	Soil Type	Sand	
Asphalt Depth	.20		Concrete Depth	NA	Marker	PK/Paint	
Pavement Type							

Pre Excavation	Finish Photo
Sub Surface	Area Photo 1 note FM on Left side of catch basin
Top Cover	Area Photo 2 note FM South of Catch Basin

Reset Form

Reset Form



PO Box 257 Pompano Beach, FL 33061
 (954) 993-5552. USUtilityPotholing@gmail.com

Subsurface Utility Report

Customer	Calvin Giordano & Associates
Project	1429 Hallandale Storm Water 42
Location	SW 8th St Hallandale
Date	05/19/2017

Pothole #	3		Station	NA		Plan Sheet	
Station	Utility	Top	Bottom	Size	Type	Curb Distance	Direction
NA	Sewer Lat	4.40	NA	6"	PVC	106.4 E' MH	N-S
Comments	106.4' East of Manhole						
Operator	Chuck F		Technician	Juan R	Vehicle ID	USUP-1	
Field Log #	1429		Log Date	05/17/2017	Soil Type	Sand/Rock	
Asphalt Depth	.20		Concrete Depth	NA	Marker	PK/Paint	
Pavement Type							

Pre Excavation	Finish Photo
Sub Surface	Area Photo 1
Top Cover	Area Photo 2

Reset Form

Reset Form









PO Box 257 Pompano Beach, FL 33061
 (954) 993-5552. USUtilityPotholing@gmail.com

Subsurface Utility Report

Customer	Calvin Giordano & Associates
Project	1429 Hallandale Storm Water 42
Location	SW 9th St Hallandale
Date	05/19/2017

Pothole #	4	Station	NA	Plan Sheet			
Station	Utility	Top	Bottom	Size	Type	Curb Distance	Direction
NA	Sewer Lat	3.10	NA	6"	Clay	2.20 E' of Driv	N-S
Comments	2.20 East of Driveway/ 2.70 North of Edge of pavement						
Operator	Chuck F	Technician	Juan R	Vehicle ID	USUP-1		
Field Log #	1429	Log Date	05/17/2017	Soil Type	Sand		
Asphalt Depth	Grass	Concrete Depth	NA	Marker	feather/Stake		
Pavement Type							

Pre Excavation	Finish Photo
	
Sub Surface	Area Photo 1
	
Top Cover	Area Photo 2
	

Reset Form

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Document 02660

**BROWARD COUNTY SURFACE WATER MANAGEMENT
GENERAL LICENSE (GL2017-042)**



Environmental Protection and Growth Management Department
ENVIRONMENTAL ENGINEERING AND PERMITTING DIVISION
Water and Environmental Licensing Section
1 North University Drive, Room 201-A, Plantation, Florida 33324
Phone * 954-519-1483 Fax * 954-519-1412

May 26, 2017

City of Hallandale Beach
Attention: Mariana Pitiriciu, P.E., City Engineer
630 NW 2nd Street
Hallandale Beach, FL 33009

RE: GENERAL LICENSE GL2017-042

Project Name: Hallandale Beach Stormwater 42 Year CDBG
Project Address: SW 8TH ST,

This is to notify you of the action taken by the Environmental Protection and Growth Management Department (EPGMD) concerning your application received April 06, 2017. The application has been reviewed for compliance with the following requirements.

Broward County Surface Water Management Review - GRANTED:

EPGMD has reviewed the project for compliance with the General License requirements of Chapter 27, Article V Sec. 27-191 through 27-202 of the Broward County Code.

Based on the information submitted, Surface Water Management General License No. GL2017-042 was issued on May 26, 2017. The above named licensee is hereby authorized to perform the work or operate the facility shown on the approved drawings, plans, documents and specifications, as submitted by licensee, and made a part hereof.

This approval will remain in effect subject to the following:

1. the attached Broward County General Conditions;
2. the attached Broward County Specific Conditions.

Please contact me at (954) 357-4955 should you have any questions.

Issued by:

Danyl Noel, E.I., Engineer Intern
Surface Water Management Program

C: Calvin, Giordano & Associates, Inc.
Attention: Mohammed Sharifuzzaman, P.E.
1800 Eller Drive, Suite 600
Fort Lauderdale, FL 33316

Broward County General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth herein are accepted by the licensee and enforceable by the Environmental Protection and Growth Management Department (EPGMD) pursuant to this chapter. EPGMD will review this license periodically and may revoke the license, initiate administrative and/or judicial action for any violation of the conditions by the licensee, its agents, employees, servants or representatives or principals.
2. This license is valid only for the specific uses set forth in the license application, and any deviation from the approved uses may constitute grounds for revocation and enforcement action by EPGMD.
3. In the event the licensee is temporarily unable to comply with any of the conditions of the license, the licensee shall notify EPGMD within eight (8) hours. Within three (3) working days of the event, the licensee shall submit a written report to EPGMD that describes the incident, its cause, the measures being taken to correct the problem and prevent its reoccurrence, the owner's intention toward repair, replacement, and reconstruction of destroyed facilities, and a schedule of action leading toward operation within the license conditions.
4. The issuance of this license does not convey any vested rights or exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, or any violations of federal, state or local laws or regulations.
5. This license must be available for inspection on licensee's premises during the entire life of the license.
6. By accepting this license, the licensee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this licensed facility or activity, that are submitted to the EPGMD, may be used by the EPGMD as evidence in any enforcement proceeding arising under Chapter 27 of the Broward County Code of Ordinances, except where such use is prohibited by Section 403.111, Florida Statutes.
7. The licensee agrees to comply with Chapter 27 of the Broward County Code of Ordinances, and shall comply with all provisions of the most current version of this chapter, as amended.
8. Any new owner of a licensed facility shall apply by letter for a transfer of license within thirty (30) days after sale or legal transfer. The transferor shall remain liable for performance in accordance with the license until the transferee applies for, and is granted the transfer of license. The transferee shall also be liable for performance in accordance with the license.
9. The licensee, by acceptance of this license, specifically agrees to allow access and shall allow access to the licensed source, activity or facility at times by EPGMD personnel for the purposes of inspection and testing to determine compliance with this license and Chapter 27 of the Broward County Code of Ordinances.
10. This license does not constitute a waiver or approval of any other license, approval, or regulatory requirement by this or any other governmental agency that may be required.
11. Enforcement of the terms and provisions of this license shall be at the reasonable discretion of EPGMD, and any forbearance on behalf of EPGMD to exercise its rights hereunder in the event of any breach by the licensee shall not be deemed or construed to be a waiver of EPGMD's rights hereunder.

Broward County Special Conditions

1. The licensee shall comply with all applicable local land use and subdivision regulations and other local requirements. In addition, the licensee shall obtain all necessary Federal, State, local and special district authorizations prior to the start of any construction alteration of works authorized by this license.
2. Electronic self-certification through the website: www.fideportal.com/go/apply-build is required no later than 30 days after the start of construction, in accordance with the 10/2 General Permit requirements of 403.814(12) F.S.
3. The operation or construction will be in accordance with the approved details and plans submitted with the application. Any modification must be submitted to the EPGMD in writing and receive prior approval.

Broward County Board of County Commissioners

Mark D. Bogen • Beam Furr • Steve Geller • Dale V.C. Holness • Chip LaMarca • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine
Broward.org

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Document 02670

BROWARD COUNTY TRAFFIC ENGINEERING DIVISION REVIEW

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER
IMPROVEMENTS PROJECT



PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION
2300 W. Commercial Boulevard • Fort Lauderdale, Florida 33309 • 954-847-2600

May 9, 2017

Mr. Mohammed Sharifuzzaman, P.E.
Calvin, Giordano & Associates, Inc.
1800 Eller Drive Suite 600
Fort Lauderdale Florida 33316

Re: **City of Hallandale Beach Storm Water 42 year CDBG – PM&S Review**
1. SW 8 Street from SW 10 Avenue to SW 8 Avenue – Various Locations
2. SW 9 Street from SW 10 Avenue to SW 8 Avenue – Various Locations
BCTED Reference # 170405060

Dear Mr. Sharifuzzaman:

Broward County Traffic Engineering Division has reviewed the above referenced plan, and finds the pavement marking and signing portion of the plan to be **acceptable, as noted in red** on the attachment. There are no copper communications/interconnect, fiber optic communications/interconnect, signal design or school/pedestrian comments.

A copy of the Pavement Marking and Signing Inspection Procedure and a copy of the Specification for Retro-Reflective Traffic Sign Materials are attached for your use.

Reviewed by:

Pavement markings, signing: David Zeller @ 954-577-4588 or dzeller@broward.org

Once the correction has been made, please submit four signed and sealed plan sets to David Zeller, of the Broward County Highway Construction and Engineering Division.

You may call me at 954-847-2641, or contact me by E-Mail at sgross@broward.org, if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Sharon Gross".

SHARON GROSS

Attachments

170405060 Acpt Ltr as Noted in Red DZ

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

MEMORANDUM

TO: David Zeller, PM&S

Accepted *[Signature]* 5/5/17

FROM: Sharon Gross

DATE: May 3, 2017

SUBJECT: **City of Hallandale Beach Storm Water 42 year CDBG**
1. SW 8 St from SW 10 Ave to SW 8 Ave – Various Locations
2. SW 9 St from SW 10 Ave to SW 8 Ave – Various Locations
PM&S Review - Revised Submittal
BCTED Reference # 170405060

RECEIVED BY
HIGHWAY CONSTRUCTION
& ENGINEERING DIV
2017 MAY -5 PM 3:56

Please check the resubmitted plan, to see if it meets with your approval. Initial and advise if the plan is acceptable. If there are comments please mark them on the plan and I will forward the comments to the Engineer for corrections.

Due date: May 9, 2017

Thank you.

RECEIVED
MAY 09 2017
BROWARD COUNTY
TRAFFIC ENGINEERING DIVISION



PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION
2300 W. Commercial Boulevard • Fort Lauderdale, Florida 33309 • 954-847-2600

Broward County Traffic Engineering Division
Pavement Marking and Signing Inspection Request Procedure

(Effective Date: October 1, 2009)

- 1) The Broward County Traffic Engineering Division (BCTED) limits inspections to final inspections only. Inspections are limited to work/projects in the public right-of-way or connections to the public right-of-way.
- 2) Traffic Engineering Division staff's contact for a project is the Engineer-of-Record (EOR) only. The EOR is expected to resolve any issues/questions raised by the pavement marking and signing Contractor(s) or Sub-Contractor(s).
- 3) It is the responsibility of the EOR to insure that the project is completed in conformance with the approved plan, prior to requesting a pavement marking and signing inspection. The EOR is to inspect the project and generate a punch list, as needed. The EOR will be responsible for making sure that the Contractor or Sub-Contractor correct the deficiencies listed in the punch list generated by the EOR.
- 4) After the EOR determines that the completed project conforms to the approved plans, the EOR shall take photographs to document the conformance. The photographs should be compared with the approved plans and be identified by station number. The photographs should show, but, not be limited to:
 - (a) RPM's - four-corner coverage, correct spacing and location.
 - (b) Signs – correct location, correct sign as shown on approved plan.
 - (c) Messages on Pavement – correct location, spelling and size.
 - (d) Arrows – correct location, shape and size, centered in lane.
 - (e) Edge Lines and Lane Lines – correct color and correct width.
 - (f) Stop Bar – correct location and width.
 - (g) Reflectivity of Thermoplastic markings – even distribution of glass beads.
- 5) After all deficiencies have been satisfactorily corrected, the EOR will be able to submit a final inspection/acceptance request to BCTED.
- 6) The EOR shall submit a written request for pavement marking and signing inspections to Sharon Gross. The complete inspection request shall include:
 - (a) A signed and sealed letter requesting the inspection and certifying that the

EXHIBIT A

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

project conforms to the approved plans, and that the EOR has personally inspected the completed project for conformance with the approved plan.

- (b) Photographs which document that the completed project conforms to the approved plan.
- (c) Copies of the Broward County Certificate of Competency, issued by the Broward County Permitting, Licensing and Consumer Protection Division, for each contractor and/or sub-contractor that worked on the pavement marking and signing portion of the project.

7) Upon receipt of the certification letter and photographs, BCTED staff will examine the photographs within one week of receipt of a completed request. If a review of the photographs reveals deficiencies in the project, the EOR will be notified in writing by US Mail or by E-Mail, that the photographs indicate that the project is not ready for a final inspection. No field inspection will be performed and no punch list will be issued by BCTED. The EOR will be asked to repeat the certification and inspection request procedure, detailed in paragraphs 4 through 6, after the project deficiencies have been corrected.

8) If a BCTED staff review of the photographs does not show major deficiencies, a field inspection will be performed and the results will be provided to the EOR within four weeks of receipt of the completed certification package. If the project is accepted, an acceptance letter will be sent to the EOR, via US Mail. If, however, several deficiencies are identified during the field inspection, the inspection will be terminated and the EOR will be notified of the termination by US Mail or by E-mail. No punch list will be issued by BCTED. The Engineer-of-Record will be instructed to repeat the certification and inspection request procedure, detailed in paragraphs 4 through 6, after the project deficiencies have been corrected.

9) Items that will result in the termination of an inspection include, but are not limited to:

- (a) A lack of uniformity of glass bead coverage, at multiple locations.
- (b) A lack of reflectivity of the Thermoplastic markings, at multiple locations.
- (c) Incorrect application of materials, not in conformance with manufacturer's instructions.
- (d) Incorrect color or thickness of Thermoplastic markings.
- (e) Signs that are missing, incorrectly spelled, or that are not to current standards
- (f) A lack of four-corner coverage on multiple RPM's.

EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT



PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION

2300 W. Commercial Boulevard • Fort Lauderdale, Florida 33309 • 954-847-2600

TO: Public Works Department, Traffic Engineering Division and Affected Parties
FROM: Scott Brunner, Director, Traffic Engineering Division
DATE: December 9, 2016 *SB 12/9/2016*
SUBJECT: Traffic Engineering Division Technical Policy Memo #TPM-16-001
Specifications for Retroreflective Traffic Sign Materials

EFFECTIVE: December 9, 2016
EXPIRES: September 30, 2018
PRIOR EFFECTIVE: December 29, 2015 through December 8, 2016

In response to recent directives established by the Federal Highway Administration (FHWA), and in accordance with Section 2A.08 of the 2009 Manual on Uniform Traffic Control Devices (MUTCD) pertaining to minimum standards of retroreflectivity for roadway traffic signs, it shall be the policy of the Traffic Engineering Division to fabricate, install and maintain all traffic control signs under its jurisdiction with the highest grade of retroreflective materials available in the industry. The use of the highest quality materials will ensure optimal levels of retroreflectivity throughout the life of the subject traffic control signs, reduce field maintenance and life-cycle replacement, and improve overall safety for system users.

Therefore, effective December 9, 2016, the Traffic Engineering Division shall continue to only install and approve traffic control signs that meet all of the following:

1. Meet the criteria outlined in Section 2A.08 of the 2009 MUTCD
2. Meet the specifications outlined in Section 700 and 994 of the 2016 Standard Specifications of the Florida Department of Transportation (FDOT).
3. Consist of sheeting materials certified to meet the reflective sheeting requirements outlined in the 2009 version of **ASTM D4956 for Type XI** (FDOT Type XI) retroreflective sheeting materials made with prisms, except for school zone and pedestrian signs which shall be comprised of reflective fluorescent yellow-green sheeting certified to meet **ASTM D4956 Type IV** (FDOT Type IV) reflective sheeting requirements.
4. Consist of retroreflective sheeting materials that have a valid FDOT Qualified Product List (QPL) certification for Specification 700 Highway Signing for FDOT Sheeting Type XI (or Type IV for school and pedestrian signs), approved for jobs let after December 31, 2015.

These specifications shall be applied to all County, municipal and privately-installed traffic control signs to be maintained by the Traffic Engineering Division, and shall be applicable to all sign types and colors, except fluorescent pink emergency management signs that shall be covered by a future policy memorandum.

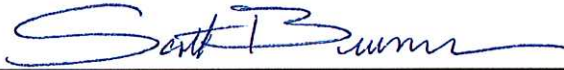
EXHIBIT A
TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS
RE-BID #FY 2016-2017-009-001 42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT

Traffic Engineering Division Technical Policy Memo #TPM-16-001 Specifications for Retroreflective Traffic Sign Materials

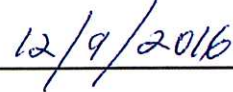
EFFECTIVE DATE

This policy shall be in effect through September 30, 2018, unless superseded by an updated technical policy memorandum.

APPROVED



Scott Brunner, P.E.
Division Director



Date

- C. Andrew Sebo, Assistant Director, Traffic Engineering Division
- Ron Delello, Signs and Pavement Marking Superintendent, Traffic Engineering Division
- Kaylee Kildare, Sign Shop Supervisor, Traffic Engineering Division

THIS PAGE LEFT INTENTIONALLY BLANK

EXHIBIT B
RE-BID #FY 2016-2017-009-001
42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
FEDERAL GRANT

**DEPARTMENT OF HOUSING AND
URBAN DEVELOPMENT (HUD)**

**A COMMUNITY DEVELOPMENT
BLOCK GRANT PROJECT (CDBG)**

A BOILER PLATE (GUIDE)

FOR

**City of Hallandale Beach – Public Works
Improvements**

Project:

42nd Year CDBG- Infrastructure Improvements to retrofit and Upgrade City's Storm Drainage System. Project consists of the installation of approximately 280 Linear feet of storm drain pipe, 5 catch basins, 200 square yards of concrete sidewalks and aprons, 300 square yards of asphalt pavement, landscaping including, but not limited to 200 square yards of sodding. The area is bounded by, SW 11th Street to the South, SW 11th Avenue to the West, SW 8th Avenue to the East and SW 7th Street to the North.

EXHIBIT B
RE-BID #FY 2016-2017-009-001
42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
FEDERAL GRANT DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD) A
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) A BOILER PLATE GUIDE

TABLE OF CONTENTS	Page #
Supplementary Conditions	2
Required Documents prior to and after project award	3
Special Requirements of Broward County CDBG Projects	4-5
Certification of Fiscal Year 1988 Restrictions ...to Foreign Countries	6-7
Certification of Bidder Regarding Equal Employment Opportunity	8
Certification by Proposed Subcontractor regarding Equal Employment	9
Section 3 Requirements	10-11
Bidders Initial Section 3 Goals	12
Section 3 Clause	13
Broward County Section 3 Form and income limits	14
Monthly Section 3 Compliance Report	15
Section 3 Eligible Jobs Availability Form	16
Section 3 Unavailability Certification	17
Florida Statutes	18-19
Notice to Prospective Subcontractors (non-segregated facilities)	20
Notice to Labor Unions	21
Labor Requirements	22
29 CFR 1.6 –Use and Effectiveness of wage determinations	23-25
Wage Determination Assigned by DOE	26
County Business Enterprise Program Information	27
Certification regarding prime contractor debarment	28
Certification regarding sub-contractor debarment	29
Certified Payroll, Statement of Compliance and Instructions	30-33
Federal Labor Standards Provisions	34-38
Sample Project Sign	39

EXHIBIT B

RE-BID #FY 2016-2017-009-001

**42nd YR CDBG PW STORMWATER IMPROVEMENTS PROJECT
FEDERAL GRANT DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD) A
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) A BOILER PLATE GUIDE (pgs 4-45)**

SUPPLEMENTARY CONDITIONS

I. FEDERAL GRANTS PROJECTS:

By virtue of the fact that funding of this project will be delivered in full or in part from the United States government through: Housing and Urban Development (HUD).

Federal assurances must follow the grant application in addition to any and all supervening assurances set forth in Rules and Regulations published in the Federal Register or CFR.

Clauses, terms or conditions required by federal grantor agency are hereby attached and made a part of this Project Manual.

REQUIRED DOCUMENTS

THE FOLLOWING DOCUMENTS SHALL BE COMPLETED AND SUBMITTED WITH THE BID IN ORDER FOR THE BIDDER TO BE CONSIDERED RESPONSIVE:

1. BIDDER'S INITIAL SECTION 3 GOALS, **Page # 12.**
2. ELIGIBLE JOBS AVAILABILITY FORM or UNAVAILABILITY CERTIFICATION, **Page #'s 16 or 17. One of these should match to page #12.**

THE FOLLOWING DOCUMENTS MUST BE COMPLETED AND SUBMITTED PRIOR TO AWARD OF CONTRACT: THESE PAGES ARE PART OF THIS BOILER PLATE

1. Certification of F. Y. 1988 Restrictions on the Award of Certain Contracts and Subcontractors to Foreign Countries, **Pages 6 through 7.**
2. Certification of Bidder Regarding Equal Employment Opportunities, (EEO) **Page 8.**
3. Certification of Proposed Subcontractor Regarding Equal Employment Opportunities (EEO), **Page 9.**
4. Broward County Section 3 Form, **Page 15.**
5. Certification of Non-Segregated Facilities, **Page 20 .**
6. Notice to Labor Unions or other organizations of Workers Nondiscrimination In employment, **Page 21 .**
7. Certification REGARDING PRIME CONTRACTOR DEBARMENT **Page 28**
8. Certification regarding sub-contractor(s) debarment **Page 29.**

**SPECIAL REQUIREMENTS OF BROWARD COUNTY
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROJECTS**

- 1) On the 11th day of October, 1983, the Board of County Commissioners passed a Resolution approving concept of First-Source Hiring as a method to induce contractors who receive bid awards under the Emergency Jobs Bill and other Community Development Block Grant Programs, to hire unemployed residents of Broward County. The funds made available for work to be performed under this contract authorized by Public Law 98-8, commonly known as the Jobs Bill, require that these funds be obligated and disbursed as rapidly as possible so as to quickly assist the unemployed and the needy. These funds should be used to maximize the immediate creation of new employment opportunities to individuals who are unemployed at least fifteen (15) weeks out of the last twenty-six (26) weeks.
- 2) Prime and Subcontract Awards are crucial to the achievement of the success of this program. Therefore, the Prime Contractor shall, and shall require each subcontractor, to fulfill the County requirements by accepting referrals and interviewing eligible laborers and/or trainees as outlined in paragraph (4) below. These eligible laborers and trainees shall fill entry-level positions in the contractor's construction work force and be provided with meaningful training in order to increase the likelihood that they be absorbed into the permanent work force upon completion of the project if the contractor has entry-level positions available.
- 3) **FOR BIDDERS TO BE RESPONSIVE EACH MUST SUBMIT WITH THEIR BIDS THE BIDDER'S INITIAL SECTION 3 GOALS (PAGE 12). "ELIGIBLE JOBS AVAILABILITY FORM" (PAGE 15) OR THE "UNAVAILABILITY CERTIFICATION" (PAGE 16). NO FORMS WILL BE ACCEPTED AFTER THE BID DUE TIME. NO EXCEPTIONS.**
- 4) If the successful bidder has eligible job vacancies available, it is the bidder's responsibility to contact Workforce One at least two (2) weeks before the commencement of construction in order to obtain job recruitment referrals.
- 5) **To obtain a list of job recruitment referrals the contractor shall contact:** Workforce One, 2610 W. Oakland Park Boulevard, Fort Lauderdale, Florida 33311. Telephone (954) 677-5627 or visit their website at www.wf1broward.com
- 6) In the event of the occurrence of any vacancy of eligible job positions at any time during the project, the contractor shall immediately contact Workforce One for new referrals in order to fill those vacancies.
- 7) In the event that Workforce One is unable to provide referrals in a timely manner, upon notification from the contractor, the contractor shall immediately notify the County who shall provide the contractor with a contact name at the Florida State Employment Service.
- 8) Contractor shall refer all entry-level job applicants contacting him directly to Workforce One for determination for their eligibility.
- 9) Contractor may obtain from Workforce One or the Community Development Division information regarding wage subsidies and tax credits as related to the employment to

low income persons and residences of enterprise zones.

- 10) Contractor shall include, or cause to be included, in all subcontracts covering any of the work covered by this contract, the requirements applicable to the Contractor and appearing herein. The requirements for subcontractors only apply to labor and installation subcontracts and exclude materials and supplies subcontracts.
- 11) Nothing herein shall be construed to require or warrant the award of a bid to a Prime Contractor when it is not the lowest responsive bid when two (2) or more bidders either meet the requirements or certify that no entry level positions are available.
- 12) Nothing herein shall be construed to require a Prime Contractor to award a subcontract bid if it is not the lowest responsive bid.
- 13) Nothing herein shall be construed to indicate that a higher level of Jobs Bill Involvement will give the bidder the right of award over other bidders who have agreed to accept referrals from Workforce One. However, when all elements of a bid are substantially equal, the number of entry-level positions available may be used to break ties.

14) **DEFINITIONS**

a. Laborer: Includes at least those workers whose duties are manual or physical in nature, including those workers who use tools or who are performing the work of trade

b. Trainee: Includes a person registered and receiving on-the-job training in a construction occupation under a program which has been approved in advance by the United States Department of Labor and Employment Training Administration as meeting its standards for the on-the-job training programs which have been certified by that Administration.

CERTIFICATION OF FISCAL YEAR 1988 RESTRICTIONS ON THE AWARD OF CERTAIN CONTRACTS AND SUB-CONTRACTS TO FOREIGN COUNTRIES

This certification is to verify that the offeror 1) is not a contractor of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S. Trade Representative (USTR); 2) has not or will not enter into any subcontract with a subcontractor or a foreign country included on the USTR list, and 3) will not provide any product of a country included on the USTR list. These prohibitions also apply to certain products used in these activities, such as affixed equipment, electronics, utilities, and instruments.

Grantees or subgrantees recipients entering into contract for construction, alteration, or repair of any public building or public work project subject to the prohibitions described in this Notice shall include the following provision in all such contracts:

Restriction on Public Building and Public Works Projects.

Definitions.

"Component" as used in this clause, means those articles, materials, and supplies incorporated directly into the product.

"Product", as used in this clause, means construction materials - i.e. articles, materials, and supplies brought to the construction site for incorporation into the public works project, including permanently affixed equipment, instruments, utilities, electronic or other devices, but not including vehicles or construction equipment. In determining the origin of a product BROWARD COUNTY will consider a product as product as produced in a foreign country if it has been assembled or manufactured in the foreign country, or if the cost of the components mine, produced, or manufactured in the foreign country exceed 50 percent of the cost of all its components.

"Contractor or subcontractor of a foreign country", as used in this clause, means any contractor or subcontractor that is a citizen or national of a foreign country or is controlled directly or indirectly by citizens or nationals of a foreign country. A contractor or subcontractor shall be considered to be a citizen or national of a foreign country, or controlled directly or indirectly by citizens or nationals of a foreign country:

1. If 50 percent or more of the contractor or subcontractor is owned by a citizen or national of the foreign country;
2. If the title of 50 percent or more of the stock of the contractor or subcontractor is held subject to trust or fiduciary obligation in favor of citizens or nationals of the foreign country;
4. If 50 percent or more of the voting power in the Contractor or subcontractor is vested in or exercisable on behalf of a citizen or national of the foreign country.
4. In the case or partnership, if any general partner is a citizen of the foreign country;

5. In the case of a corporation, if its president or other chief executive officer or the chairman or its board of directors is a citizen of the foreign country or the majority of any number of its directors necessary to constitute a quorum are citizen of the foreign country or the corporation is organized under the laws of the foreign country or any subdivision, territory, or possession thereof; or
6. In the case of a contractor or subcontractor who is a joint venture, if any participation firm is a citizen or national of a foreign country or meets any of the criteria in subparagraphs (a) (1) through (5) of this clause.

Contractor Signature

Date

(a) Restrictions

The Contractor shall not (1) knowingly enter into any subcontract under this contract with a subcontractor of a foreign country included on the list of countries that discriminate against U.S. firm published by the United States Trade Representation (See Paragraph (c) of this clause), or (2) supply any product under this contract of a country included on the list of foreign countries that discriminate against U.S. firms published by the USTR.

(b) USTR List

The USTR published a list in the Federal Register in accordance with section 109(c) of publication L 100-202 where countries can be added or deleted.

(c) Certification

The Contractor may rely upon the certification of a prospective subcontractor that is not a subcontractor of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR and that products supplied by such subcontractor for use on the Federal public works project under this contractor are not products of a foreign country included on the list of foreign countries that discriminate against U.S. firms published by the USTR, unless such Contractor has knowledge that the certification is erroneous.

(d) Subcontracts

The Contractor shall incorporate this clause, modified only for the purpose of properly identifying the parties, in all subcontracts. This paragraph (e) shall also be incorporated in all subcontracts.

For additional information see Federal Register Vol.53, No. 53, No. 116, Pages 22569-22573.

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bids or prospective contractor, or any of their proposed subcontractors, should state as an initial part of the bid or negotiations of the contract whether he has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the Certification indicates that the apparent successful bidder has not filed a compliance report due under applicable instructions, bidder shall submit a compliance report prior to award. NO CONTRACT SHALL BE AWARDED UNLESS SUCH REPORT IS SUBMITTED.

CERTIFICATION BY BIDDER

BIDDER'S NAME: _____

ADDRESS: _____

- 1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes _____ No _____
- 2. Compliance reports were required to be filed in connection with such contract or subcontract. Yes _____ No _____
- 3. Bidder has filed all compliance reports due under applicable instructions, including SF. 100. Yes _____ No _____

If answer to item 3 is "No", please explain in detail on reverse side of this certification.

CERTIFICATION BY PROPOSED SUBCONTRACTOR REGARDING EQUAL EMPLOYMENT OPPORTUNITY

Name of Prime Contractor

Project No. /Project Name

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bids of prospective contractor, or any of their proposed subcontractors, should state as an initial part of the bid or negotiations of the contract whether he has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the Certification indicates that the apparent successful bidder has not filed a compliance report due under applicable instructions, bidder shall submit a compliance report prior to award. NO CONTRACT SHALL BE AWARDED UNLESS SUCH REPORT IS SUBMITTED.

SUBCONTRACTOR'S CERTIFICATION

SUBCONTRACTOR'S NAME: _____

ADDRESS: _____

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes _____ No _____
2. Compliance reports were required to be filed in connection with such contract or subcontract. Yes _____ No _____
3. Bidder has filed all compliance reports due under applicable instructions, including SF. 100. Yes _____ No _____
5. If answer to any item is "No", please explain in detail below or attach a piece of paper if needed.

Certification – The information above is true and complete to the best of my knowledge and belief.

Print Name

Signature

Date

SECTION 3 REQUIREMENTS

I. ASSURANCE STATEMENT

Each applicant, recipient, contractor, and subcontractor on a Section 3 covered project shall sign the attached Section 3 Assurance of Compliance.

II. AFFIRMATIVE ACTION PLAN for UTILIZATION OF PROJECT AREA BUSINESS

Each applicant, recipient, contractor, and subcontractor preparing to undertake work pursuant to a Section 3 covered contract shall develop and implement an affirmative action plan, which shall:

- (a) Set forth the approximate number and dollar value of all contracts proposed to be awarded to all businesses within each category (type or profession) over the duration of the Section 3 covered project.
- (b) Analyze the information set forth in paragraph (a) and the availability of eligible business concerns within the project area doing business in professions or occupations identified as needed in paragraph (a) and set forth a goal or target number and estimated dollar amount to be awarded to the eligible businesses and entrepreneurs within each category over the duration of the Section 3 covered project.
- (c) Outline the anticipated program to be used to achieve the goals for each business and/or professional category identified. This program should include but not be limited to the following actions:
 - (1) Insertion in bid documents, if any, of the affirmative action plan of the applicant, recipient, contractor, or subcontractor letting the contract; and
 - (2) Identification within the bid documents, if any, of the applicable Section 3 project area.
 - (3) Ensuring that the appropriate business concerns are notified of pending Contractual opportunities either personally or through locally utilized media. (See attached Section 135.70 excerpt).

III. BIDDING AND NEGOTIATION REQUIREMENTS

Every applicant and recipient shall require prospective contractors for work in connection with Section 3 covered projects to provide, prior to the signing of the contract, a preliminary statement of work force needs (skilled, semi-skilled, unskilled labor and trainees by category) where known, where not known, such information shall be supplied prior to the signing of any contract between contractors and their subcontractors. Consideration should be given to those contractors who will have training and employment opportunities for project area residents.

When a bidding procedure is used to let the contract, the invitation or Solicitation for bids shall advise prospective contractors of the requirements of these regulations.

Plan for utilization of project area business should be inserted in the bid documents by applicant, recipient and contractors. The recipient must have indicated therein that Section 3 applies to the project and what is expected of them. All contractors who bid a job must show in their bid what they will do to implement Section 3. They must in the bid commit themselves to a goal and show what they intend to do to reach that goal. When the bids are opened, they must be evaluated in terms of the bidders' responsiveness to Section 3. A bid which lacks a commitment to Section 3 or which lacks a goal or plan to reach a goal may be judged nonresponsive.

Applicants, recipients and contractors will ensure that the attached Section 3 Clause and Assurance of Compliance are made a part of all contracts.

In implementing its affirmative action plan, each applicant, recipient, contractor, or subcontractor shall make a good faith effort to achieve its goal or target number and estimated dollar amount of contracts to be awarded to the eligible business and entrepreneurs within category over the duration of the Section 3 covered project.

IV. UTILIZATION OF LOWER INCOME RESIDENTS AS TRAINEES & EMPLOYEES

Each applicant, recipient, contractor or subcontractor undertaking work in connection with a Section 3 covered project shall make a good faith effort to fill all vacant training and occupational category positions with lower income project area residents.

BIDDER'S INITIAL SECTION 3 GOALS

1. The Bidder agrees to comply with Section 3 of the Housing and Urban Development Act of 1968.
2. The Bidder estimates that there will be _____ new employees hired during the performance of this contract. Furthermore, should this contract be let to the Bidder, the Bidder agrees to delineate work force needs (skilled, semi-skilled, unskilled, labor and trainees) by category.
3. Of these new employees, the Bidder plans to hire at least _____% (percent) from the Section 3 Covered Area (Broward County).

I, _____(please print), as an Authorized Officer of the Bidder, do hereby acknowledge that we are aware of the requirements under Section 3 of the Housing and Urban Development Act of 1968 and will abide by them. We further agree to abide by this Affirmative Action Plan to the greatest extent feasible and realize that should we be awarded the contract, Broward County Community Development Division will monitor the project to assure compliance with this plan.

Company Name: _____

Business Address: _____

Employer Federal ID #

Printed Name

Signature

Date

****Please Note Section 3 Clause**

§ 135.38 Section 3 clause.

All section 3 covered contracts shall include the following clause (referred to as the section 3 clause):

A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development

Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR

§ 135.40 part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

BROWARD COUNTY SECTION 3 FORM

Name of Project: _____

Amount of Contract: \$ _____

Prime Contractor: _____

Address: _____

Will you hire new employees as a result of this contract? Yes [] No []

Background:

Section 3 of the Housing and Community Development Act of 1968, as amended, requires that when employment or contract opportunities are generated because of a project or activity undertaken by a recipient or HUD financial assistance necessitates the employment of additional personnel through individual hiring or the awarding of contracts for the work, the recipient must give preference in hiring low and very low-income persons. Section 3 requires that recipients not only include low and very low-income persons in their recruitment and solicitation efforts, but that, in fact, extra or greater efforts be undertaken to these persons aware of the existence of economic opportunities, encourage their application for these opportunities, and facilitate the employment or, or award of contract to these persons.

A Section 3 resident is defined as:

- A public housing resident; or
- An individual who resides in the metropolitan county in which the Section 3 covered assistance is expended and who is: (1) a low-income person; or (ii) a very low-income person

Check all that apply (you must check at least one (1) of the following):

Refer to the Income Limits Chart for Broward County below to determine if your total household income is at or below the low-income limit depending upon the total number of persons residing in the household.

- Your business is at least 51% or more owned by Section 3 residents.
- At least 30% of your permanent, full-time workforce employees are comprised of current Section 3 residents.
- At least 30% of your permanent, full-time workforce employees who within the 3 years of employment with your business were Section 3 residents.
- Your business will provide evidence of a commitment to subcontract in excess of 25% of the dollar award of all subcontractors to be awarded to businesses which meet the above qualifications.
- My business does not meet any of the above qualifications and I cannot commit to subcontract in excess of 25% of the dollar award of all subcontractors to be awarded to businesses which do meet the above qualifications.

2017 INCOME CATEGORY CHART FOR BROWARD COUNTY, FLORIDA, effective Apr. 14, 2017

Family Size	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Very Low Income 50% of median	\$26,700	\$30,500	\$34,300	\$38,100	\$41,150	\$44,200	\$47,250	\$50,300

MONTHLY SECTION 3 COMPLIANCE REPORT

CONTRACTOR: _____

SUBCONTRACTOR: _____
(If applicable)

PROJECT NAME: _____

for the MONTH of _____, Year _____

This report is required of all contractors/subcontractors having contracts which are funded in whole or in part with Community Development Block Grant funds. This report must be submitted to the Broward County Community Development Division no later than ten (10) days after the end of the reported month.

Please answer the following questions accurately and completely:

1. How many new employees were hired to work on this project during the month? _____
2. Of those hired during the month, how many were residents of the Section 3 Covered Area (Broward County)? _____

I, _____ (please print), do hereby certify that the above information is true and correct. I further certify that we have been informed of and understand our responsibilities in utilizing Section 3 Covered Area businesses and residents during performance of our contract.

Date

Signature & Title

SECTION 3
ELIGIBLE JOBS AVAILABILITY FORM

(Name of Contractor)

(Contract No.)

(Location)

Available Entry Level Jobs

Salary Level

Maximum Duration of Employment

- 1.
- 2.
- 3.

The undersigned agrees to accept referrals from Workforce One and to interview referrals for the above-designated positions.

(If incorporated sign here)

ATTEST

CONTRACTOR

Secretary

By _____

(CORPORATE SEAL)

(If not incorporated sign here)

WITNESSES:

CONTRACTOR

By _____

SECTION 3
UNAVAILABILITY CERTIFICATION

I, _____, _____ (Title)

of _____
(Prime Contractor)

Certify that the undersigned does not have any entry-level jobs available. However, should such jobs become available during the project period, the undersigned agrees to accept referrals from Workforce One to interview these referrals for the available positions.

(If incorporated sign here)

ATTEST

CONTRACTOR

Secretary

By _____

(CORPORATE SEAL)

(If not incorporated sign here)

WITNESSES:

CONTRACTOR

By _____

FLORIDA STATUTES

Title XLI Statute of Frauds, Fraudulent Transfers, And General Assignments Chapter 725
Unenforceable Contracts View Entire Chapter

725.06 Construction contracts; limitation on indemnification

Any portion of any agreement or contract for or in connection with, or and guarantees of or in connection with, any construction, alteration, repair, or demolition of a building, structure, appurtenance, or appliance, including moving and excavating associated therewith, between an owner of real property and an architect, engineer, general contractor, subcontractor, sub-subcontractor, or materialman or an combination thereof wherein any party referred to herein promises to indemnify or hold harmless the other party to the agreement, contract, or guarantee for liability for damages to persons or property caused in whole or in part by any act, omission, or default of the indemnitee arising from the contract or its performance, shall be void and unenforceable unless the contract contains a monetary limitation on the extent of the indemnification that bears a reasonable commercial relationship to the contract and is part of the project specifications or bid documents, if any. Notwithstanding the foregoing, the monetary limitation on the extent of the indemnification provided to the owner of real property by any party in privity of contract with such owner shall not be less than \$1 million per occurrence, unless otherwise agreed by the parties. Indemnification provisions in any such agreements, contracts, or guarantees may not require that the indemnitor indemnify the indemnitee for damages to persons or property caused in whole or in part by any act, omission, or default of a party other than:

- (a) The indemnitor;
 - (b) Any of the indemnitor's contractors, subcontractors, sub-subcontractors, materialmen, or agents of any tier or their respective employees; or
 - (c) The indemnitee or its officers, directors, agents, or employees. However, such indemnification shall not include claims of, or damages resulting from, gross negligence, or willful, wanton or intentional misconduct of the indemnitee or its officers, directors, agents or employees, or for statutory violation or punitive damages except and to the extent the statutory violation or punitive damages are caused by or result from the acts or omissions of the indemnitor or any of the indemnitor's contractors, subcontractors, sub-subcontractors, materialmen, or agents or any tier of their respective employees.
- (2) A construction contract for a public agency or in connection with a public agency's project may require a party to that contract to indemnify and hold harmless the other party to the contract, their officers and employees, from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the indemnifying party and persons employed or utilized by the indemnifying party in the performance of the construction contract.

NOTICE TO PROSPECTIVE FEDERALLY ASSISTED CONSTRUCTION CONTRACTORS

(A) A Certification of Nonsegregated Facilities, as requested 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 federally assisted Construction Contract exceeding \$10,000.00 which is not exempt from the provisions of the Equal Opportunity Clause. A certification form is enclosed with the Bid Proposal Form and should be submitted with each CONTRACTOR'S BID, but must be submitted prior to award.

(B) CONTRACTORS receiving federally assisted Construction Contract awards exceeding \$10,000.00 which are not exempt from the provision of the Equal Opportunity clause will be required to provide for the forwarding of the following Notice to Prospective Subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000.00 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 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 federally assisted Construction Contract exceeding \$10,000.00 which is not exempt from the provisions of the Equal Opportunity Clause.

(b) CONTRACTORS receiving subcontract awards exceeding \$10,000.00 which are not exempt from the provision of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000.00 and are not exempt from the provisions of the Equal Opportunity Clause.

(c) A Certification for regarding Equal Employment Opportunity is also enclosed with the Bid Proposal Form and should be submitted by the CONTRACTOR with his bid, but must be submitted prior to award.

(d) The Notice to Labor Unions on the following page shall be forwarded by the CONTRACTOR in accordance with Paragraph 3 of Nondiscrimination Provisions to be included in Federally Assisted Construction Contracts.

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS
FOR CERTIFICATION OF NON-SEGREGATED 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 \$10,000.00 which is not exempt from the provisions of the Equal Opportunity Clause. The Certification may be submitted either for each subcontractor or for all subcontracts during a period (i.e. quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

DATE _____

Signature of Bid
Prospective Contractor

ADDRESS (including zip code)

NOTICE TO LABOR UNIONS OR OTHER ORGANIZATIONS OF WORKERS
NONDISCRIMINATION IN EMPLOYMENT

TO: _____
(Name of Union or Organization of Workers)

The undersigned currently holds contract(s) with

(Name of Applicant)

Involving funds or credit of the U.S. Government of (a) subcontract (s) with prime contractor holding such contract(s).

You are advised that under the provisions of the above contract(s) or subcontract(s) and In accordance with Executive Order 11246, dated September 4, 1965, the undersigned is obligated not to discriminate against any employee or applicant for employment because of race, color, creed, or national origin. This obligation not to discriminate includes, but is not limited to the following:

HIRING, PLACEMENT, UPGRADING, TRANSFER OR DEMOTION, RECRUITMENT, ADVERTISING OR SOLICITATION FOR EMPLOYMENT TRAINING DURING EMPLOYMENT, RATES OF PAY OR OTHER FORMS OF COMPENSATION, SELECTION FOR TRAINING INCLUDING APPRENTICESHIP, LAYOFF OR TERMINATION.

This notice is furnished to you pursuant to the provisions of the above contract(s) and Executive Order 11246.

Copies of this notice will be posted by the undersigned in conspicuous places available to employees or applicants for employment.

(Contractor or Subcontractor)

(Date)

LABOR REQUIREMENTS (Applicable to all Prime and Sub-contractors)

Grantees must comply with certain regulations on wage and labor standards. In the case of Davis-Bacon and the Contract Work Hours and Safety Standards Acts, every construction (in the case of residential construction, projects with eight or more units) triggers the requirements.

- Davis-Bacon and Related Acts (40 USC 276(a)-7): Ensures that mechanics and laborers employed in construction work under Federally assisted contracts are paid wages and fringe benefits equal to those that prevail in the locality where the work is performed. This act also provides for the withholding of funds to ensure compliance, and excludes from wage requirements apprentices enrolled in bona fide apprenticeship programs.
- Contract Work House and Safety Standards Act, as amended (40 USC 327-333): Provides that mechanics and laborers employed on Federally assisted construction jobs are paid time and one-half for work in excess of 40 hours per week, and provides for the payment of liquidated damages where violations occur. This act also addresses safe and health working conditions.
- Copeland (Anti-Kickback) Act (40 USC 276c): Governs the deductions from paychecks that are allowable. Makes it a criminal offense to induce anyone employed on a Federally assisted project to relinquish any compensation to which he/she is entitled, and requires all contractors to submit weekly payrolls and statements of compliance.
- Fair Labor Standards Act of 1938. As Amended (26 USC 201.et.seq.): Establishes the basic minimum wage for all work and requires the payment of overtime at the rate of at least time and one-half. It also requires the payment of wages for the entire time that an employee is required or permitted to work, and establishes child labor standards.

Responsibility of the Prime Contractor

The principal contractor is responsible for the full compliance of all employers (the contractor, subcontractors and any lower-tier subcontractors) with the labor standards provisions applicable to the project.

Administrative Sanctions

Contractors and/or subcontractors that violate the labor standards provisions may face administrative sanctions imposed by HUD and/or the Department of Labor.

29 CFR 1.6 - Use and effectiveness of wage determinations.

Section Number: 1.6

Section Name: Use and effectiveness of wage determinations.

(a)(1) Project wage determinations initially issued shall be effective for 180 calendar days from the date of such determinations. If such a wage determination is not used in the period of its effectiveness it is void. Accordingly, if it appears that a wage determination may expire between bid opening and contract award (or between initial endorsement under the National Housing Act or the execution of an agreement to enter into a housing assistance payments contract under section 8 of the U.S. Housing Act of 1937, and the start of construction) the agency shall request a new wage determination sufficiently in advance of the bid opening to assure receipt prior thereto. However, when due to unavoidable circumstances a determination expires before award but after bid opening (or before the start of construction, but after initial endorsement under the National Housing Act, or before the start of construction but after the execution of an agreement to enter into a housing assistance payments contract under section 8 of the U.S. Housing Act of 1937), the head of the agency or his or her designee may request the Administrator to extend the expiration date of the wage determination in the bid specifications instead of issuing a new wage determination. Such request shall be supported by a written finding, which shall include a brief statement of the factual support, that the extension of the expiration date of the determination is necessary and proper in the public interest to prevent injustice or undue hardship or to avoid serious impairment in the conduct of Government business. The Administrator will either grant or deny the request for an extension after consideration of all of the circumstances, including an examination to determine if the previously issued rates remain prevailing. If the request for extension is denied, the Administrator will proceed to issue a new wage determination for the project.

(2) General wage determinations issued pursuant to Sec. 1.5(b), notice of which is published in the Federal Register, shall contain no expiration date.

(b) Contracting agencies are responsible for insuring that only the appropriate wage determination(s) are incorporated in bid solicitations and contract specifications and for designating specifically the work to which such wage determinations will apply. Any question regarding application of wage rate schedules shall be referred to the Administrator, who shall give foremost consideration to area practice in resolving the question.

(c)(1) Project and general wage determinations may be modified from time to time to keep them current. A modification may specify only the items being changed, or may be in the form of a supersede wage determination, which replaces the entire wage determination. Such actions are distinguished from a determination by the Administrator under paragraphs (d), (e) and (f) of this section that an erroneous wage determination has been issued or that the wrong wage determination or wage rate schedule has been utilized by the agency.

(2)(i) All actions modifying a project wage determination received by the agency before contract award (or the start of construction where there is no contract award) shall be effective except as follows:

(A) In the case of contracts entered into pursuant to competitive bidding procedures, modifications received by the agency less than 10 days before the opening of bids shall be effective unless the agency finds that there is not a reasonable time still available before bid opening, to notify bidders of the modification and a report of the finding is inserted in the contract file. A copy of such report shall be made available to the Administrator upon request. No such report shall be required if the modification- is received after bid opening.

(B) In the case of projects assisted under the National Housing Act, modifications shall be effective if received prior to the beginning of construction or the date the mortgage is initially endorsed, whichever occurs first.

(C) In the case of projects to receive housing assistance payments under section 8 of the U.S. Housing Act of 1937, modifications shall be effective if received prior to the beginning of construction or the date the agreement to enter into a housing assistance payments contract is executed, whichever occurs first.

(ii) Modifications to project wage determinations and supersede wage determinations shall not be effective after contract award (or after the beginning of construction where there is no contract award).

(iii) Actual written notice of a modification shall constitute receipt.

(3) All actions modifying a general wage determination shall be effective with respect to any project to which the determination applies, if notice of such actions is published before contract award (or the start of construction where there is no contract award), except as follows:

(i) In the case of contracts entered into pursuant to competitive bidding procedures, a modification, notice of which is published less than 10 days before the opening of bids, shall be effective unless the agency finds that there is not a reasonable time still available before bid opening to notify bidders of the modification and a report of the finding is inserted in the contract file. A copy of such report shall be made available to the Administrator upon request. No such report shall be required if notice of the modification is published after bid opening.

(ii) In the case of projects assisted under the National Housing Act, a modification shall be effective if notice of such modification is published prior to the beginning of construction or the date the mortgage is initially endorsed, whichever occurs first.

(iii) In the case of projects to receive housing assistance payments under section 8 of the U.S. Housing Act of 1937, a modification shall be effective if notice of such modification is published prior to the beginning of construction or the date the agreement to enter into a housing assistance payments contract is signed, whichever occurs first.

(iv) If under paragraph (c) (3) (i) of this section the contract has not been awarded within 90 days after bid opening, or if under paragraph

(c)(3)(ii) or (iii) of this section construction has not begun within 90 days after initial endorsement or the signing of the agreement to enter into a housing assistance payments contract, any modification, notice of which is published in the Federal Register prior to award of the contract or the beginning of construction, as appropriate, shall be effective with respect to that contract unless the head of the agency or his or her designee requests and obtains an extension of the 90-day period from the Administrator. Such request shall be supported by a written finding, which shall include a brief statement of the factual support, that the extension is necessary and proper in the public interest to prevent injustice or undue hardship or to avoid serious impairment in the conduct of Government business. The Administrator will either grant or deny the request for an extension after consideration of all the circumstances.

(v) A modification to a general wage determination is "published" within the meaning of this section on the date of publication of notice of such modification in the Federal Register, or on the date the agency receives actual written notice of the modification from the Department of Labor, whichever occurs first.

(vi) A supersede wage determination or a modification to an applicable general wage determination, notice of which is published after contract award (or after the beginning of construction where there is no contract award) shall not be effective.

(d) Upon his/her own initiative or at the request of an agency, the Administrator may correct any wage determination, without regard to paragraph (c) of this section, whenever the Administrator finds such a wage determination contains clerical errors. Such corrections shall be included in any bid specifications containing the wage determination, or in any on-going contract containing the wage determination in question, retroactively to the start of construction.

(e) Written notification by the Department of Labor prior to the award of a contract (or the start of construction under the National Housing Act, under section 8 of the U.S. Housing Act of 1937, or where there is no contract award) that: (1) There is included in the bidding documents or solicitation the wrong wage determination or the wrong schedule or that (2) a wage determination is withdrawn by the Department of Labor as a result of a decision by the Administrative Review Board, shall be effective immediately without regard to paragraph (c) of this section.

(f) The Administrator may issue a wage determination after contract award or after the beginning of construction if the agency has failed to incorporate a wage determination in a contract required to contain prevailing wage rates determined in accordance with the Davis Bacon Act, or has used a wage determination which by its terms or the provisions of this part clearly does not apply to the contract. Further, the Administrator may issue a wage determination which shall be applicable to a contract after

contract award or after the beginning of construction when it is found that the wrong wage determination has been incorporated in the contract because of an inaccurate description of the project or its location in the agency's request for the wage determination. Under any of the above circumstances, the agency shall either terminate and resolicit the contract with the valid wage determination, or incorporate the valid wage determination retroactive to the beginning of construction through supplemental agreement or through change order, Provided That the contractor is compensated for any increases in wages resulting from such change. The method of incorporation of the valid wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable procurement law.

(g) If Federal funding or assistance under a statute requiring payment of wages determined in accordance with the Davis-Bacon Act is not approved prior to contract award (or the beginning of construction where there is no contract award), the agency shall request a wage determination prior to approval of such funds. Such a wage determination shall be issued based upon the wages and fringe benefits found to be prevailing on the date of award or the beginning of construction (under the National Housing Act, under section 8 of the U.S. Housing Act of 1937 or where there is no contract award), as appropriate, and shall be incorporated in the contract specifications retroactively to that date, Provided, That upon the request of the head of the agency in individual cases the Administrator may issue such a wage determination to be effective on the date of approval of Federal funds or assistance whenever the Administrator finds that it is necessary and proper in the public interest to prevent injustice or undue hardship, Provided further That the Administrator finds no evidence of intent to apply for Federal funding or assistance prior to contract award or the start of construction, as appropriate. [48 FR 19533, Apr. 29, 1983, as amended at 50 FR 49823, Dec. 4, 1985]

WAGE DETERMINATION(S) ASSIGNED TO THIS PROJECT:

(Insert Wage Determination(s))

General Decision Number: FL170203 01/06/2017 FL203

Superseded General Decision Number: FL20160203

State: Florida

Construction Type: Highway

County: Broward County in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 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 \$10.20 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 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number 0 Publication Date 01/06/2017

* SUFL2013-021 08/19/2013

	Rates		Fringes	
CARPENTER.....	\$ 16.05	+	0.00	= \$16.05
CEMENT MASON/CONCRETE FINISHER, Includes Form Work.....	\$ 15.31	+	0.00	= \$15.30
ELECTRICIAN.....	\$ 22.15	+	0.00	= \$22.15
FENCE ERECTOR.....	\$ 12.82	+	0.00	= \$12.82
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....	\$ 15.75	+	0.00	= \$15.75
HIGHWAY/PARKING LOT STRIPING: Painter.....	\$ 12.13	+	0.00	= \$12.13
HIGHWAY/PARKING LOT STRIPING: Operator (Spray Nozzleman).....	\$ 11.94	+	0.00	= \$11.94
INSTALLER - GUARDRAIL.....	\$ 12.37	+	0.00	= \$12.37
IRONWORKER, ORNAMENTAL.....	\$ 13.48	+	0.00	= \$13.48
IRONWORKER, REINFORCING.....	\$ 16.84	+	0.00	= \$16.84
IRONWORKER, STRUCTURAL.....	\$ 16.42	+	0.00	= \$16.42

LABORER (Traffic Control Specialist incl. placing of cones/barricades/barrels - Setter, Mover, Sweeper).....	\$ 11.57	+	0.00 = \$ 11.57
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 11.84	+	0.00 = \$ 11.84
LABORER: Common or General.....	\$ 10.76	+	0.00 = \$ 10.76
LABORER: Flagger.....	\$ 12.53	+	0.00 = \$ 12.53
LABORER: Grade Checker.....	\$ 12.41	+	0.00 = \$ 12.41
LABORER: Landscape & Irrigation.....	\$ 9.12	+	0.00 = PER E013658 = \$ 10.20
LABORER: Mason Tender - Cement/Concrete.....	\$ 13.91	+	3.50 = \$ 17.41
LABORER: Pipelayer.....	\$ 14.61	+	0.00 = \$ 14.61
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 15.43	+	0.00 = \$ 15.43
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 12.88	+	0.00 = \$ 12.88
OPERATOR: Boom.....	\$ 18.50	+	0.00 = \$ 18.50
OPERATOR: Boring Machine.....	\$ 17.33	+	0.00 = \$ 17.33
OPERATOR: Broom/Sweeper.....	\$ 13.41	+	0.00 = \$ 13.41
OPERATOR: Bulldozer.....	\$ 17.07	+	0.00 = \$ 17.07
OPERATOR: Concrete Finishing Machine.....	\$ 15.44	+	0.00 = \$ 15.44
OPERATOR: Concrete Saw.....	\$ 13.76	+	0.00 = \$ 13.76
OPERATOR: Crane.....	\$ 19.14	+	0.00 = \$ 19.14
OPERATOR: Curb Machine.....	\$ 21.33	+	0.00 = \$ 21.33
OPERATOR: Distributor.....	\$ 13.13	+	0.00 = \$ 13.13
OPERATOR: Drill.....	\$ 14.78	+	0.00 = \$ 14.78
OPERATOR: Forklift.....	\$ 16.32	+	0.00 = \$ 16.32
OPERATOR: Gradall.....	\$ 14.71	+	0.00 = \$ 14.71
OPERATOR: Grader/Blade.....	\$ 18.98	+	0.00 = \$ 18.98
OPERATOR: Loader.....	\$ 13.84	+	0.00 = \$ 13.84
OPERATOR: Mechanic.....	\$ 18.03	+	0.00 = \$ 18.03

OPERATOR: Milling Machine.....	\$ 14.89	+	0.00	= \$14.89
OPERATOR: Oiler.....	\$ 16.32	+	0.00	= \$16.32
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 14.34	+	0.00	= \$14.34
OPERATOR: Piledriver.....	\$ 17.23	+	0.00	= \$17.23
OPERATOR: Post Driver (Guardrail/Fences).....	\$ 13.71	+	0.00	= \$13.71
OPERATOR: Roller.....	\$ 13.10	+	0.00	= \$13.10
OPERATOR: Scraper.....	\$ 12.01	+	0.00	= \$12.01
OPERATOR: Screed.....	\$ 14.85	+	0.00	= \$14.85
OPERATOR: Tractor.....	\$ 12.62	+	0.00	= \$12.62
OPERATOR: Trencher.....	\$ 14.58	+	0.00	= \$14.58
PAINTER: Spray.....	\$ 16.52	+	0.00	= \$16.52
SIGN ERECTOR.....	\$ 14.23	+	0.00	= \$14.23
TRAFFIC SIGNALIZATION: Traffic Signal Installation.....	\$ 14.74	+	0.00	= \$14.74
TRUCK DRIVER: Distributor Truck.....	\$ 14.96	+	2.17	= \$17.14
TRUCK DRIVER: Dump Truck.....	\$ 11.71	+	0.00	= \$11.71
TRUCK DRIVER: Flatbed Truck.....	\$ 14.28	+	0.00	= \$14.28
TRUCK DRIVER: Lowboy Truck.....	\$ 14.06	+	0.00	= \$14.06
TRUCK DRIVER: Slurry Truck.....	\$ 11.96	+	0.00	= \$11.96
TRUCK DRIVER: Vector Truck.....	\$ 14.21	+	0.00	= \$14.21
TRUCK DRIVER: Water Truck.....	\$ 13.22	+	0.00	= \$13.22

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

=====

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.

=====

END OF GENERAL DECISION

□

County Business Enterprise

COUNTY has established a policy relating to County Business Enterprise (“CBE”) Program participation in all COUNTY Contracts. Although this Agreement does not have assigned CBE Goals or Sheltered Market participation, CONTRACTOR is encouraged to utilize local County business enterprises, where applicable.

COUNTY and CONTRACTOR agree that contractor and vendor awards to CBE are crucial to the achievement of COUNTY’s CBE participation objectives. In an effort to assist COUNTY in achieving its objectives for CBE, CONTRACTOR agrees to make a good faith effort to incorporate CBE participation.

If interested in locating a small business or becoming a small business under the County’s program contact Broward County Small Business Development Division at:

115 South Andrews Ave – Room A640
Fort Lauderdale, FL 33301
Phone: 954-357-6400
Fax: 954-357-6010

Or visit the website: www.broward.org/smallbusiness

**Certification Regarding
Debarment, Suspension,
And Other Responsibility Matters
Primary Covered Transactions**

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

Name

Project Name

Title

Project Number

Firm

Street Address

City, State, Zip

**Certification Regarding
Debarment, Suspension, Ineligibility
And Voluntary Exclusion**

Lower Tier Covered Transactions

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

- (2) Where the prospective lower tier participant is unable to certify to the above statement, the prospective participant shall attach an explanation to this form.

Name

Local Government

Title

CDBG Contract Number

Firm

Street Address

City, State, Zip

Date

APPENDIX II

CERTIFIED PAYROLL, STATEMENT OF COMPLIANCE & Instructions

U.S. DEPARTMENT OF LABOR
WAGE AND HOUR DIVISION

OMB No.: 1215-0149
Expires: 06-30-88

PAYROLL

(For Contractor's Optional Use; See Instruction, Form WH-347 Inst.)

NAME OF CONTRACTOR _____ OR SUBCONTRACTOR _____										ADDRESS _____										
PAYROLL NO.			FOR WEEK ENDING							PROJECT AND LOCATION				PROJECT OR CONTRACT NO.						
(1) NAME, ADDRESS, AND Last 4 digits of SOCIAL SECURITY NUMBER OF EMPLOYEE	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	O T O R S T	(4) DAY AND TIME							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS					(9) NET WAGES PAID FOR WEEK	
				HOURS WORKED EACH DAY										FICA	WITH- HOLDING TAX		OTHE R	TOTAL DEDU CTIONS		
			o																	
			s																	
			o																	
			s																	
			o																	
			s																	
			o																	
			s																	
			o																	
			s																	
			o																	
			s																	
			o																	
			s																	

FORM WH-347 (1/68) - FORMERLY SOL 184 - PURCHASE THIS FORM DIRECTLY FROM THE SUPT. OF DOCUMENTS

Date _____

I, _____,

(Name of signatory party)

(Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ on the _____ (Contractor or subcontractor)

_____ ; that during the _____ (Building or work)

payroll period commencing on the _____ day of _____, _____, and ending the _____ day of _____, _____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made wither directly or indirectly to or on behalf of said

_____ (Contractor or subcontractor)

from the full weekly wages earned by any person and that no deductions have been made wither directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat, 948, 63 Stat. 108, 72 State 967; 76 State 357; 40 U.S.C. 276c), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are no less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS OR PROGRAMS

--In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate

programs for the benefit of such employees, except as noted in Section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

--Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount of the required fringe benefits as listed in the contract, except as noted in Section 4 (c) below.

c. EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS

NAME AND TITLE	SIGNATURE
----------------	-----------

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

U.S. DEPARTMENT OF LABOR
Wage and Hour Division
INSTRUCTIONS FOR COMPLETING THE PAYROLL FORM, WH-347

General: The use of WH-347, payroll form, is not mandatory. This form has been made available for the convenience of contractors and subcontractors required by their Federal or Federally-aided construction-type contracts and subcontracts to submit weekly payrolls. Properly filled out, this form will satisfy the requirements of Regulations, Parts 3 and 5 (29 CFR, Subtitle A) as to payrolls submitted in connection with contracts subject to the Davis-Bacon and related Acts.

This form meets needs resulting from the amendment of the Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay not less than fringe benefits as predetermined by the Department of Labor, in addition to payment of not less than the predetermined rates. The contractor's obligation to pay fringe benefits may be met either by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

This payroll provides for the contractor's showing in the face of the payroll all monies paid to the employees, whether as basic rates or as cash in lieu of fringes and provides for the contractor's representation in the statement of compliance on the rear of the payroll of payment to others of fringes required by the contract and not paid as cash on lieu of fringes. Detailed instructions concerning the preparation of the payroll follow:

Contractor or Subcontractor: Fill in your firm's name and check appropriate box.

Address: Fill in your firm's address.

Column 1 - Name, Address, and Social Security number of Employee: The employee's full name and Social Security number must be shown on each weekly payroll submitted. The employee's address must also be shown on the payroll covering the first week in which the employee works on the project. The address need not be shown on subsequent weekly payrolls unless the address changes.

Column 2 - Withholding Exemptions: This column is merely inserted for the employer's convenience and is not a requirement of Regulations, parts 3 and 5.

Column 3 - Work Classifications: List classification descriptive of work actually performed by employees. Consult classifications and minimum wage schedule set forth in contract specification. If additional classifications are deemed necessary, see Contracting Officer or Agency representative. Employee may be shown as having worked in more than one classification provided accurate breakdown of hours so worked is maintained and shown on submitted payroll by use of separate line entries.

Column 4 - Hours Worked: On all contracts subject to the Contract Work Hours and Safety Standard Act enter as overtime hours all hours worked in excess of 40 hours a week. (Section 1241(a), Public Law 99-145 (99 Stat. 734) eliminated language applying the statutory overtime requirements to a workday of eight hours, effective January 1, 1986.)

Column 5 - Total: Self-explanatory.

Column 6 - Rate of Pay, including Fringe Benefits: In straight time box, list actual hourly rate paid the employee for straight time worked plus any cash in lieu of fringes paid the employee. When recording the straight time hourly rate, any cash paid in lieu of fringes may be shown separately from the basic rate, e.g., \$5.00/.50. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. Payment of not less than time and one-half the basic or regular rate paid is required for overtime under the Contract Work Hours and Safety Standards Act. In addition to paying not less than the predetermined rate for the classification in which the employee works, the contractor shall pay to approved plans, funds, or programs or shall pay as cash in lieu of fringes amounts predetermined as fringe benefits in the wage decision made part of the contract. See "FRINGE BENEFITS" below.

FRINGE BENEFITS - Contractors who pay all required fringe benefits: A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of the payroll the basic cash hourly rate and overtime rate paid to employees just as has always been done. Such a contractor shall check paragraph 4(a) of the statement on the reverse of the payroll to indicate payment of approved plans, funds, or programs not less than the amount predetermined as fringe benefits for each craft. Any exceptions shall be noted in Section 4(c).

Contractors who pay no fringe benefits: A contractor who pays no fringe benefits shall pay to the employee and insert the straight time hourly rate column of the payroll, an amount not less than the predetermined rate of each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash and paid in lieu of fringes, the overtime rate shall not be less than the sum of the basic predetermined rate, plus the half-time premium on basic or regular rate, plus the required cash in lieu of fringes at the straight time rate. In addition, the contractor shall check paragraph 4(b) of the statement on the reverse of the payroll to indicate payment of fringe benefits in cash directly to the employees. Any exceptions shall be noted in Section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid as cash in lieu of fringes and the hourly amount paid to plans, funds, or programs as fringes. The contractor shall pay, and shall show the payment to each such employee for all hours (unless otherwise provided by applicable determination) worked on Federal or federally assisted project an amount not less than the predetermined rate plus cash in lieu of fringes as shown in Section 4(c). The rate paid and amount of cash paid in lieu of fringe benefits per hour should be entered in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

Column 7 - Gross Amount Earned: Enter gross amount earned on this project. If part of the employee's weekly wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the Federal or federally assisted project and then the gross amount earned during the week on all projects.

Column 8 - Deductions: Five columns are provided for showing deductions made. If more than five deductions should be involved, use first 4 columns; show the balance of deductions under "Other" column; show actual total under "Total Deductions" column; and in the attachment to the payroll describe the deductions contained in the "Other" column. All deductions must be in accordance with the provisions of the Copeland Act Regulations, 29 CFR Part 3. If the employee worked on other jobs in addition to this project, show actual deductions for the weekly gross wage, but indicate that deductions are based on the gross wages.

Column 9 - Net Wages Paid for Week: self-explanatory.

Totals - Space has been left at the bottom of the columns so that totals may be shown if the contractor so desires.

Statement Required by Regulations, Parts 3 and 5: While this form need not be notarized, the statement on the back of the payroll is subject to the penalties provided by 18 U.S.C. 1001, namely, possible imprisonment for 5 years or \$10,000.00 fine or both. Accordingly, the party signing this required statement should have knowledge of the facts represented as true.

Space has been provided between items (1) and (2) of the statement for describing deductions made. If all deductions made are adequately described in the "Deduction" column above, state "See Deductions column in this payroll." See paragraph entitled "FRINGE BENEFITS" above for instructions concerning filling our paragraph 4 of the statement.

Form WH - 347 Inst. Rev. Sept. 1987

APPENDIX I

FEDERAL LABOR STANDARDS PROVISIONS

Federal Labor Standards Provisions

U.S. Department of Housing and Urban Development

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) **Minimum Wages.** All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), 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 29 CFR-5.5(a)(1)(iv); 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 included 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 Part 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 29 CFR Part 5.5(a)(1)(ii) 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.

(ii) (a) Any class of laborers or mechanics 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. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

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

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

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee 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 HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator,

or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the office if Management and Budget under OMB Control Number 1215-0140).

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, 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.

(iii) 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.

(iv) 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. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).

2. Withholding. HUD or its designee 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 (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, 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. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing act of 1949, in the construction or development of the project). 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. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 12215-0017).

911) (a) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Option Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-0014-1). U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149).

(b) 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:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete.

(2) 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 29 CFR Part 3;

(3) 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.

(c) 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 A.3(ii)(b) of this section.

(d) 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.

(iii) The contractor or subcontractor shall make the records required under paragraph A.3.(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee 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, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, 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 Part 5.12.

4. Apprentices and Trainees

(i) **Apprentices.** 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, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, 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 Bureau of Apprenticeship and Training 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 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 journeyman's 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. In the event 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 Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, 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.

(iii) **Trainees.** 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's 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 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 not longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **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.

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 will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses 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 Part 5.5

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR Part 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 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 HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. 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)(i) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) 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 5.129a(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 1, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose ofinfluencing in any way the action of such Administration.....makes, utters or publishes any statement knowing the same to be false....shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor of any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employee.

B. Contract Work House and Safety Standards Act. 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 work week in which he or she is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such work week 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 eight hours in any calendar day or in excess of forty hours in such workweek, whichever is greater.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of

this paragraph, the contractor and any subcontractor responsible therefore 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 subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee 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 of 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 subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraphs (1) through (4) of this paragraph 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 for lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

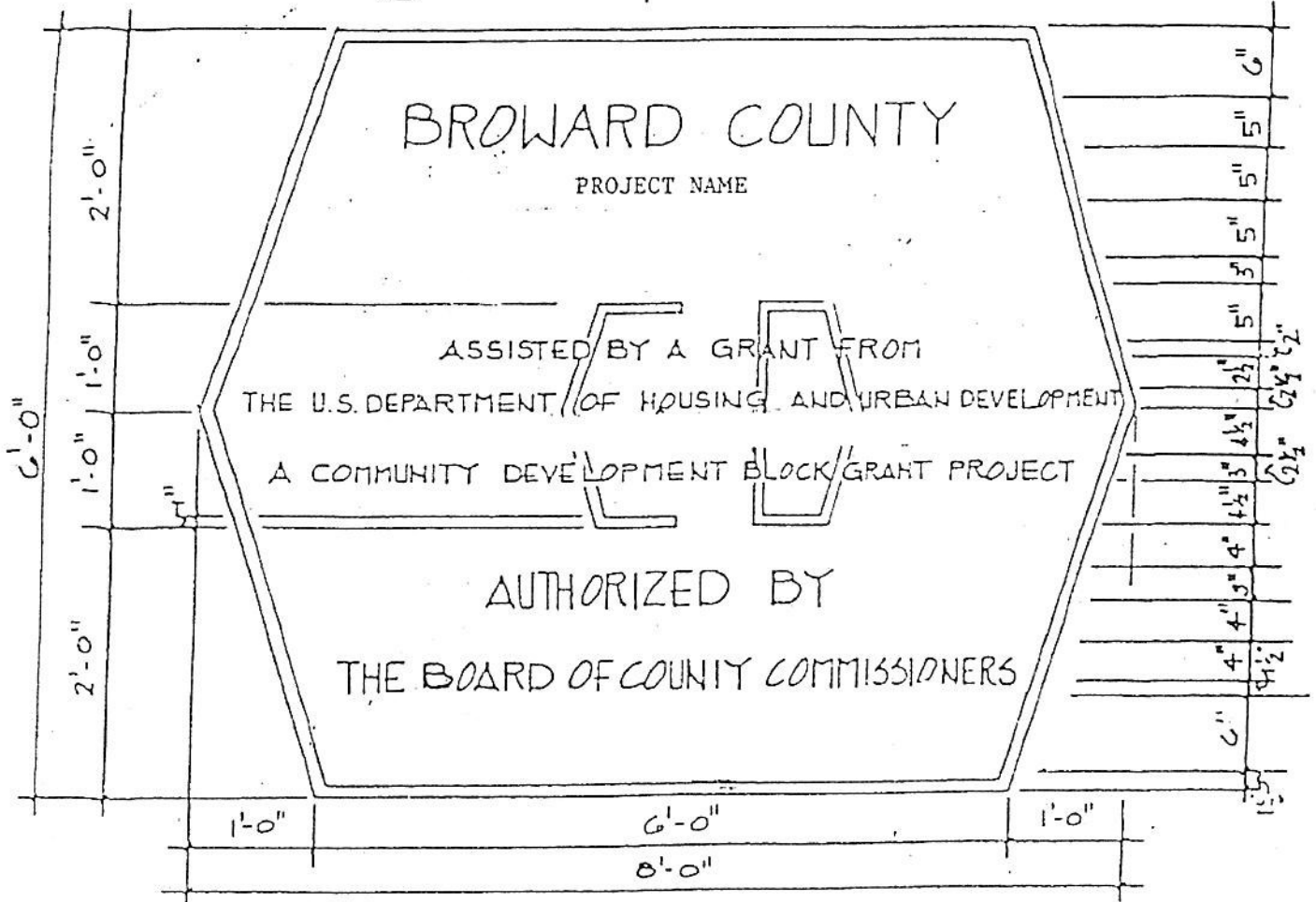
(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work House and Safety Standards Act (Public Law 91-54, 83 Stat 96).

(3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

PROJECT SIGN:

Contractor shall furnish and erect a sign at the project site. The sign shall be made of 3/4 inch plywood, substantially in accordance with the drawings on next page. Sign shall be placed in a prominent location and maintained in good condition until completion of the project.

Sample



COMMUNITY DEVELOPMENT SIGN

SCALE: 3/4" = 1'-0"

COLORS: BACKGROUND - EGG SHELL (OFF-WHITE) BORDER AND "C.D." DARK GREEN LETTERING - NAVY IN

HALLANDALE BEACH STORMWATER 42 YEAR CDBG

PROJECT No: 16-9047
16047-C-COV.dwg

HALLANDALE BEACH, FLORIDA



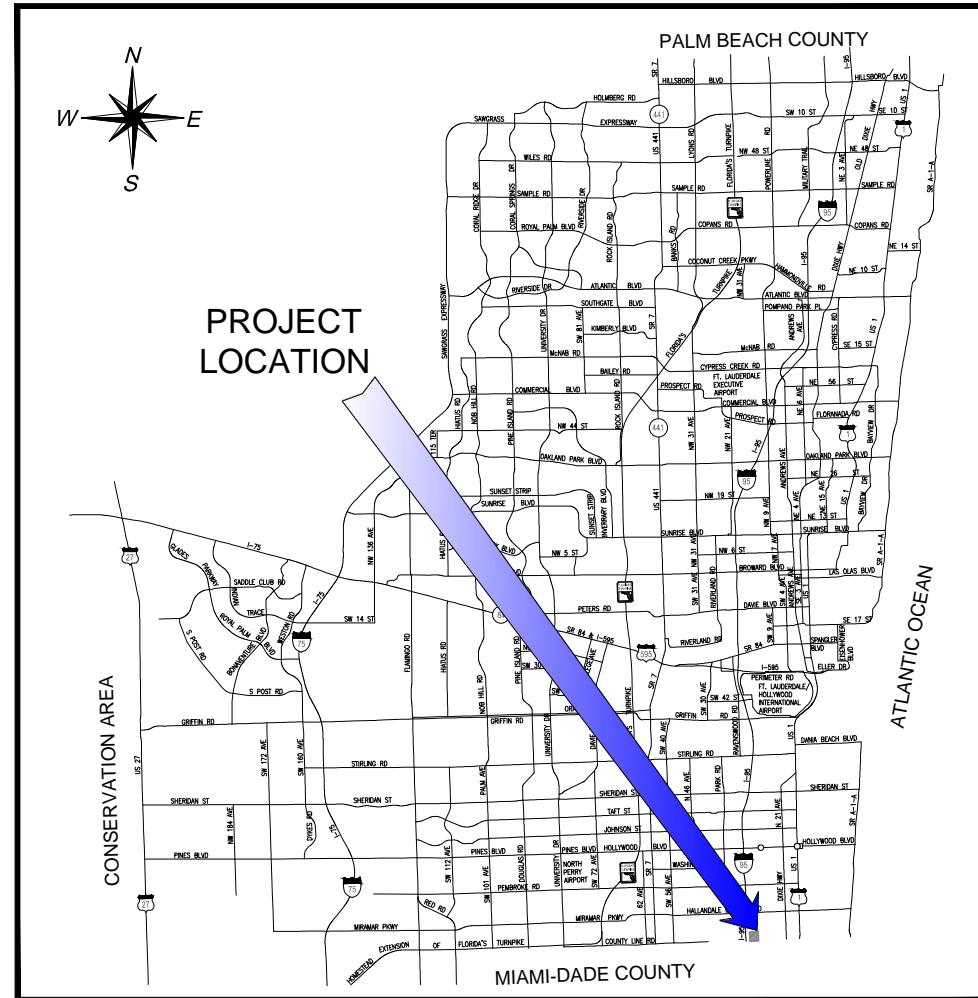
Hallandale Beach
PROGRESS. INNOVATION. OPPORTUNITY.

CITY OFFICIALS

MAYOR: JOY COOPER
VICE MAYOR: KEITH LONDON
COMMISSIONERS: ANTHONY SANDERS
ANABELLE TAUB
MICHELE LAZAROW
CITY MANAGER: ROGER CARLTON

Sheet List Table

Sheet Number	Sheet Title
G1	COVER SHEET
G2	LEGENDS AND ABBREVIATIONS
G3	GENERAL NOTES AND DETAILS
K1	KEY SHEET
D1	DEMOLITION PLAN
D2	DEMOLITION PLAN
PD1	PAVING GRADING AND DRAINAGE PLAN
PD2	PAVING GRADING AND DRAINAGE PLAN
PD3	DRAINAGE DETAILS
PD4	PAVEMENT MARKING AND SIGNAGE DETAILS
PD5	PAVEMENT MARKING AND SIGNAGE DETAILS



THE PROJECT IS LOCATED IN PORTION OF SECTION 28, TOWNSHIP 51 SOUTH, RANGE 42 EAST.
LYING WITHIN THE CITY OF HALLANDALE BEACH, BROWARD COUNTY, FLORIDA.

LOCATION MAP

Scale: N.T.S.

LEGAL DESCRIPTION:

A PORTION OF SECTION 28, TOWNSHIP 51 SOUTH, RANGE 42 EAST.
LYING WITHIN THE CITY OF HALLANDALE BEACH, BROWARD COUNTY, FLORIDA.

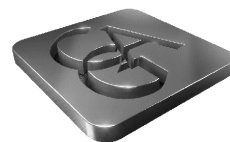
NOTES:

- RESPONSIBILITY FOR THE USE OF THESE PLANS FOR ANY PURPOSE PRIOR TO SECURING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THIS PROJECT WILL FALL SOLELY UPON THE USER.
- AN ELECTRONIC CAD FILE WILL BE PROVIDED FOR SURVEY LAYOUT.

BENCHMARK:

THE ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND REFERENCED TO THE NATIONAL GEODETIC SURVEY (NGS) BENCHMARK MORRIS RESET (PID AC3662), A BRASS DISK IN CONCRETE STAMPED MORRIS 1971-1977 HAVING AN ELEVATION OF 7.97'. 1.1 MILES WESTERLY ALONG PEMBROKE ROAD (STATE HIGHWAY 824) FROM THE INTERSECTION OF U.S. HIGHWAY 1 IN HALLANDALE BEACH, 0.2 MILES SOUTHERLY ALONG NORTHWEST 9TH AVENUE, 105.6 FEET EAST OF THE SOUTHEAST CORNER OF THE HALLANDALE BEACH HIGH SCHOOL, 81.4 FT WEST OF THE AVENUE CENTERLINE, 73.8 FEET NORTH OF REFERENCE MARK 3, 70.5 FT EAST OF REFERENCE MARK 4, 57.1 FEET WEST OF A CHAIN-LINK FENCE, 36.7 FEET WEST OF A CONCRETE RETAINING WALL, 28.2 FEET SOUTHEAST OF THE SOUTHERN MOST OF 3 UTILITY LIGHT POLES, THE MONUMENT IS SURROUNDED BY AND FLUSH WITH THE ASPHALT OF THE PARKING LOT.

**FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD**



Calvin, Giordano & Associates, Inc.

EXCEPTIONAL SOLUTIONSSM

1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807

Certificate of Authorization 514

PERMITTING AGENCIES	DATE SUBMITTED	CGA INITIALS	DATE APPROVED	PERMIT NUMBER
BROWARD COUNTY SURFACE WATER MANAGEMENT LICENSE	04/06/2017	MS	05/26/2017	GL2017-042
BROWARD COUNTY TRAFFIC ENGINEERING DIVISION	04/04/2017	MS	05/09/2017	BCTED REF # 170405060
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

CURRENT REV No.: ----	MOHAMMED SHARIFUZZAMAN, P.E. STATE OF FLORIDA PROFESSIONAL ENGINEER LICENSE No. 67640	SHEET: G1
	DATE: 6/9/17	

File Name: E:\Projects\2016\169047_Hallandale Beach Stormwater 42 Year Cdbg\cadd Files\Drawings\169047-C-COV.dwg - (Plotted by: Katharine Kupsky on Monday, June 12, 2017 11:22:07 AM)

File Name: P:\Projects\2016\169047_Hollandale Beach Stormwater 42 Year Cdbg\cadd Files\Drawings\169047-C-LCND-ABBR.dwg (Plotted by: Katharine Kupsky on Monday, June 12, 2017 11:22:23 AM)

ABBREVIATION LEGEND	LINE TYPE LEGEND	PROPOSED SYMBOL LEGEND	EXISTING SYMBOL LEGEND
ARV AIR RELEASE VALVE	--- LOT LINE	● AIR RELEASE VALVE	⊕ 8.15 EXISTING SPOT ELEVATION (FT)
BE BURIED ELECTRIC	----- SECTION LINE	● B.S.P. No. BACTERIOLOGICAL SAMPLE POINT	⊕ GUY ANCHOR
BFP BACKFLOW PREVENTOR	----- R/W OR PROPERTY LINE	⊕ WATER METER	⊕ FPL MANHOLE
BFV BUTTERFLY VALVE	----- CENTERLINE	⊕ FIRE HYDRANT	⊕ CLP CONC. LIGHT POLE
BM BENCHMARK	--- NVAL	⊕ FIRE DEPARTMENT CONNECTION	⊕ CONC. UTILITY POLE
BOP BOTTOM OF PIPE	--- x --- x --- x --- EXIST. CHAIN LINK FENCE	⊕ SINGLE WATER SERVICE	⊕ CSP CONC. SIGNAL POLE
BSP BACTERIOLOGICAL SAMPLING POINT	----- GUARDRAIL	⊕ DOUBLE WATER SERVICE	⊕ COMMUNICATION MH
CAP CORRUGATED ALUMINUM PIPE	----- PROPOSED CHAIN LINK FENCE	⊕ BACKFLOW PREVENTER	⊕ COMMUNICATION RISER
CB CATCH BASIN	----- EXISTING WOOD FENCE	⊕ DOUBLE DETECTOR CHECK VALVE	⊕ CABLE TV MANHOLE
CI CURB INLET	----- EXISTING PICKET FENCE	⊕ BLOWOFF	⊕ CABLE TV RISER
CIP CAST IRON PIPE	***** TO BE DEMOLISHED	▶ REDUCER	⊕ EHH ELEC. HANDHOLE
CLF CHAIN LINK FENCE	--- xSAN --- xSAN --- EXISTING SANITARY SEWER	⊕ GATE VALVE	⊕ FPL TRANSFORMER
CMP CORRUGATED METAL PIPE	--- xWM --- xWM --- EXISTING WATER MAIN	⊕ TEE	⊕ GAS METER
CO CLEANOUT	--- xSTRM --- xSTRM --- EXISTING STORM SEWER	⊕ CROSS	⊕ LIGHT POLE
CONC CONCRETE	--- xEFM --- xEFM --- EXISTING FORCE MAIN	[PLUG	⊕ TRAFFIC CONTROL BOX
DE DRAINAGE EASEMENT	--- xFIRE --- xFIRE --- EXISTING FIRE MAIN	⊕ BLOWOFF	⊕ WPP WOOD POWER POLE
DIP DUCTILE IRON PIPE	--- xIRR --- xIRR --- EXISTING IRRIGATION	⊕ TEE	⊕ GAS VALVE
E EAST	--- xOXY --- xOXY --- EXISTING OXYGEN	⊕ CROSS	⊕ SEWER VALVE
EL ELEVATION	--- xFPL --- xFPL --- EXISTING UNDERGROUND POWER	⊕ PLUG	⊕ WATER VALVE
EOW EDGE OF WATER	--- xNGAS --- xNGAS --- EXISTING NATURAL GAS	⊕ BLOWOFF	⊕ GATE VALVE
EXIST EXISTING	--- xCD --- xCD --- EXISTING CONDENSATION	⊕ VERTICAL BENDS	⊕ CLEANOUT
EXFILT EXFILTRATION	--- xBFO --- xBFO --- EXISTING BURIED FIBER OPTIC	→ SANITARY FLOW DIRECTION	⊕ FIRE HYDRANT
FF EL FINISHED FLOOR ELEVATION	--- xCOMCAST --- xCOMCAST --- EXISTING UNDERGROUND COMCAST	⊕ CLEAN OUT	⊕ REDUCER
FH FIRE HYDRANT	--- xCH --- xCH --- EXISTING CHILLER	⊕ SINGLE SANITARY LATERAL	⊕ IRRIGATION VALVE
FM FORCE MAIN	--- xATT --- xATT --- EXISTING AT&T UNDERGROUND	⊕ DOUBLE SANITARY LATERAL	⊕ MANHOLE
GALV GALVANIZED	--- xFUEL --- xFUEL --- EXISTING FUEL LINE	⊕ CONFLICT ID	⊕ FIRE DEPARTMENT
GV GATE VALVE	--- xOE --- xOE --- EXISTING OVERHEAD ELECTRIC	⊕ DRAINAGE FLOW	⊕ CATCH BASIN
HORZ HORIZONTAL	--- xUSE --- xUSE --- EXISTING UNDERGROUND ELECTRIC	⊕ SPOT GRADE	⊕ GROUND/LANDSCAPING LIGHTING
INV INVERT	--- xUNK --- xUNK --- EXISTING UNKNOWN UTILITY	⊕ SIGN	⊕ SIGN
JB JUNCTION BOX		⊕ CATCH BASIN	⊕ WATER METER
LF LINEAR FEET		⊕ MANHOLE	
MAX MAXIMUM		⊕ CLEANOUT	
MH MANHOLE		⊕ SLOTTED DRAIN	
MIN MINIMUM		⊕ STORM YARD DRAIN	
MJ MECHANICAL JOINT		⊕ P5 STORM INLET	
N NORTH		⊕ P6 STORM INLET	
NTS NOT TO SCALE		⊕ EXFILTRATION TRENCH	
NGVD NATIONAL GEODETIC VERTICAL DATUM		⊕ HEADWALL	
OE OVERHEAD ELECTRIC		⊕ MITERED END - RCP	
PCAP PERFORATED CORRUGATED ALUMINUM PIPE		⊕ MITERED END - HDPE	
PRB POLLUTION RETARDANT BAFFLE		⊕ HAY BALES	
PROP PROPOSED		⊕ ROCK BAGS W/ HAY BALES	
PSI POUNDS PER SQUARE INCH		⊕ SILT BARRIER FENCE	
PV PLUG VALVE		⊕ TURBIDITY BARRIER	
PVC POLYVINYL CHLORIDE			
R RADIUS			
RCP REINFORCED CONCRETE PIPE			
RCW RECLAIMED WATER			
RED REDUCER			
R/W RIGHT-OF-WAY			
S SOUTH			
SAN SANITARY			
SB SOIL BORING			
STA STATION			
TOB TOP OF BANK			
TOP TOP OF PIPE			
TYP TYPICAL			
UE UTILITY EASEMENT			
VERT VERTICAL			
W WEST			
WM WATER MAIN			

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY


Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
 Phone: 954.921.7781 • Fax: 954.921.8807
 Certificate of Authorization 514

HALLANDALE BEACH
STORMWATER 42 YEAR CDBG

HALLANDALE BEACH, FLORIDA

LEGENDS AND ABBREVIATIONS

MOHAMMED SHARFUZZAMAN, P.E. STATE OF FLORIDA PROFESSIONAL ENGINEER LICENSE No. 67640 DATE: 6/9/17	SCALE AS SHOWN PROJECT No 16-9047	SHEET G2
--	--	--------------------

FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD



GENERAL NOTES

- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD, THE CITY OF HALLANDALE BEACH, AND BROWARD COUNTY.
- ALL WORK TO BE PERFORMED TO COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE AGENCIES HAVING JURISDICTION ON THIS PROJECT.
- IT IS THE INTENT OF THESE CODES TO COMPLY WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRIC METHODS AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING AND CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- THE CONTRACTOR SHALL MAINTAIN ALL WATER SUPPLY AND SANITARY SEWER SERVICE THROUGHOUT CONSTRUCTION OF THIS PROJECT.
- PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY COMPANY BY LETTER PRIOR TO THE PRE-CONSTRUCTION MEETING APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS/HER COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS/HER COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.
- THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENHANCED BY THE LEGISLATURE OF THE STATE OF FLORIDA IN EFFECT SINCE OCTOBER 1, 1990.
- THE CONTRACTOR TO ADHERE TO ANY SPECIAL SHORING REQUIREMENTS OF THE STATE OR OTHER POLITICAL SUBDIVISION. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE SAFETY OF THE EXCAVATION OR DESIGN AND CONSTRUCTION OF ANY SHORING.
- AS-BUILT PLANS/DRAWINGS: THE CONTRACTOR SHALL PROVIDE THREE (3) SETS (24"x36" SIZE) OF SIGNED AND SEALED AS-BUILT PLANS BY A REGISTERED PROFESSIONAL SURVEYOR. ONE COMPACT DISC COPY OF AS-BUILT PLANS IN AUTOCAD FORMAT, AND PDF FORMAT. THE AS-BUILT PLANS/DRAWINGS SHALL BEAR THE CERTIFICATION, ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE SURVEYOR AND SHALL BE SUBMITTED AFTER THE COMPLETION OF CONSTRUCTION, BUT PRIOR TO FINAL APPROVAL.
- THE CONTRACTOR SHALL PREPARE A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION THAT WILL FACILITATE MAINTAINING EXISTING SERVICES DURING CONSTRUCTION.
- ALL WORK, MATERIALS, CONSTRUCTION METHODS, RESTORATION, TESTING AND DISINFECTION SHALL CONFORM TO THE REQUIREMENTS OF CITY OF HALLANDALE BEACH PUBLIC WORKS DEPARTMENT, BROWARD COUNTY, AND DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS AND SPECIFICATIONS.
- TELEPHONE, POWER, CABLE, WATER, SEWER, AND GAS LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE TO EXPOSE ALL CROSSING WITH AITK, CABLE/COV, GAS, AND FLORIDA POWER AND LIGHT ELECTRIC CONDUITS PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF THESE FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVE'S PRESENCE DURING CONSTRUCTION. A PROFILE OF THE PRIVATE UTILITY FACILITIES ARE NOT PROVIDED IN THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE APPROXIMATE LOCATION OF THESE FACILITIES.
- SHOP DRAWINGS ARE REQUIRED ON ALL CONSTRUCTION ITEMS.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE PROJECT MANUAL, LOCAL UTILITY COMPANY STANDARDS SPECIFICATIONS AND DETAILS, THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPY OF ANY REQUIRED CONSTRUCTION PERMITS.
- CONTRACTOR TO UTILIZE "FOR CONSTRUCTION" PLANS ONLY FOR CONSTRUCTION.
- IF HISTORICAL OR ARCHAEOLOGICAL ARTIFACTS ARE DISCOVERED ONSITE, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE CITY OF HALLANDALE BEACH AND BROWARD COUNTY.
- CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, AND UTILITIES NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY AT NO ADDITIONAL COST TO THE OWNER.
- ALL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS SHALL BE PROTECTED AND UNDISTURBED. IN THE EVENT THAT A CONTROL POINT IS DISTURBED OR DESTROYED THE POINT SHALL BE RE-ESTABLISHED BY A FLORIDA REGISTERED LAND SURVEYOR.
- ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL PREPARE A COMPLETE VIDEO RECORD OF THE PROJECT SITE BEFORE BEGINNING ANY WORK. THE VIDEO RECORD SHALL INCLUDE ALL ROADWAY, DRAINAGE AND UTILITIES POINTS OF CONNECTION AND SHALL EXTEND A MINIMUM OF 100 FEET BEYOND THE VIDEO LIMITS TO DOCUMENT THE EXISTING CONDITIONS. THE CONTRACTOR SHALL ALSO VIDEO DOCUMENT ALL HAUL ROUTES NEEDED FOR THE OFFSITE MOVEMENT OF EARTHWORK. COPIES OF THE VIDEO RECORD SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO SUBMITTAL OF THE FIRST PAY REQUEST. THE COST FOR ALL ITEMS RELATED TO VIDEO RECORD SHALL BE INCLUDED UNDER MOBILIZATION.
- THE ENGINEER IS NOT RESPONSIBLE FOR COORDINATING THE WORK OF OTHER UTILITIES, SUB-CONSULTANTS OR TRADES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE COORDINATION FOR, BUT NOT LIMITED TO, THE LOCATION OF WATER, SEWER, AND DRAINAGE UTILITIES, AS WELL AS THE SERVICES, THE LOCATION OF DRIVEWAYS, RAMP, LANDSCAPING, OTHER INFRASTRUCTURE IMPROVEMENTS AND OTHER SURFACE FEATURES.
- ALL DISPOSAL OF EXCESS AND UNSUITABLE MATERIAL, DEMOLITION, VEGETATION, RUBBISH AND DEBRIS SHALL BE MADE OUTSIDE THE LIMITS OF CONSTRUCTION AT A LEGAL DISPOSAL SITE PROVIDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, WITH THE PRIOR APPROVAL OF THE ENGINEER. MATERIAL CLEARED FROM THE SITE SHALL NOT BE DEPOSITED ON ADJACENT AND/OR NEARBY PROPERTY.
- PRIOR TO TRENCHING, DIGGING OR DEMOLITION IT IS REQUIRED THAT THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES, IRRIGATION LINES ETC. BE VERIFIED. DAMAGE TO EXISTING INSTALLATION SHALL BE PROPERLY REPAIRED AT NO ADDITIONAL COST TO THE OWNER. WHERE REQUIRED, HAND EXCAVATION SHALL BE PROVIDED. THE RELOCATION AND REMOVAL OF ANY UTILITY AND IRRIGATION LINE REQUIRED TO PERFORM THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC PLAN (MOT). THE MAINTENANCE OF TRAFFIC PLAN SHALL CONFORM TO THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) ROADWAY DESIGN STANDARDS TRAFFIC CONTROL THROUGH WORK ZONES (INDEX # 600 THRU 670, AS APPLICABLE). ALL WORK SHALL BE EXECUTED UNDER THE ESTABLISHED PLAN AND FDOT APPROVED PROCEDURES. THE MOT PLANS, PROVIDED BY THE CONTRACTOR, SHALL INCLUDE PROVISIONS FOR PEDESTRIAN AND/OR SCHOOL STUDENTS TRAFFIC AS WELL AS VEHICULAR TRAFFIC. THE MINIMUM REQUIREMENTS BY BROWARD COUNTY TRAFFIC ENGINEERING DIVISION ARE SHOWN ON SHEET P04.
- ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ENSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS SHALL BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION OF THE MUNICIPALITY.
- THE CONTRACTOR SHALL COMPLY WITH THE WATER QUALITY STANDARDS OF THE STATE OF FLORIDA. ADEQUATE SILT CONTAINMENT PROCEDURES AND/OR EQUIPMENT SHALL BE USED TO CONTROL TURBIDITY AT ALL TIMES. THERE SHALL BE NO DIRECT DISCHARGE OF WATER TO ANY OFFSITE DITCH, WATER BODY OR PRESERVATION AREA.
- THE CONTRACTOR SHALL OBSERVE THE SPECIAL, LIMITING, GENERAL AND SPECIFIC CONDITIONS OF ALL PERMITS APPLICABLE TO THIS WORK (COPIES OF WHICH WILL BE PROVIDED BY THE OWNER).
- INSPECTIONS:
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCY HAVING JURISDICTION, TO SCHEDULE INSPECTIONS AND TESTS A MINIMUM OF 24 HOURS IN ADVANCE FOR THE INSPECTION OF THE FOLLOWING GENERAL ITEMS, WHERE APPLICABLE:
 - CLEARING, EXCAVATION, AND EMBANKMENT
 - STORM DRAINAGE SYSTEM
 - SANITARY SEWER SYSTEM
 - WATER DISTRIBUTION SYSTEM
 - SUBGRADE
 - LMEROCK BASE
 - ASPHALT PAVING, SIDEWALK
 - PAVEMENT MARKING AND SIGNING
 - FINAL

MILLING AND RESURFACING SPECIFICATION

- GENERAL SCOPE:** THE WORK UNDER THIS SECTION INCLUDES THE FURNISHING OF ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO MILL EXISTING PAVEMENT AND INSTALL NEW PAVING AS SPECIFIED HEREINAFTER.
- GENERAL REQUIREMENTS:**
 - EXCEPT AS OTHERWISE PROVIDED HEREIN, MATERIALS AND METHODS OF OPERATIONS REQUIRED TO INSTALL NEW AND REPLACEMENT PAVEMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, (LATEST EDITION).
 - WHERE CONSTRUCTION REQUIRES REMOVING PAVEMENT, OR WHERE EXISTING PAVING IS DAMAGED BY THE CONTRACTOR'S OPERATION, IT IS THE INTENT OF THESE SPECIFICATIONS THAT DUE CARE BE EXERCISED IN CUTTING PAVEMENT, BACKFILLING TRENCHES AND REPLACING PAVEMENT WITH THE PURPOSE OF SECURING A CONDITION WHERE NO FURTHER SETTLEMENT OF TRENCHES WILL OCCUR AND THE PAVED SURFACES WILL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT EXISTING BEFORE CONSTRUCTION BEGAN.
 - NO PAVING WORK SHALL BE ACCOMPLISHED UNTIL ALL HEAVY CONSTRUCTION EQUIPMENT IS PERMANENTLY REMOVED FROM THE SITE. ALL SURFACES, WHICH HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS, SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY BEFORE WORK WAS BEGUN. THIS INCLUDES REFLECTIVE PAVEMENT MARKERS AND STRIPING.
 - ALL UNDERGROUND UTILITIES SHALL BE COMPLETED (WITH ACCEPTED BACTERIOLOGICAL AND PRESSURE TESTS) PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
 - ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
 - WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT.
 - VALVE BOXES AND MANHOLE COVERS WILL BE LEVEL WITH ASPHALT PAVEMENT. WHERE IT IS NECESSARY TO RAISE AND LOWER MANHOLE COVERS AND VALVE BOXES, AS DIRECTED BY THE PUBLIC WORKS DIRECTOR OR CITY INSPECTOR, THE CONTRACTOR SHALL PERFORM THE WORK AT NO ADDITIONAL COST TO THE CITY.

MATERIALS:

- MILLING - MILLING OF EXISTING ASPHALT PAVEMENT SHALL BE PERFORMED TO A DEPTH OF ONE (1) INCH. WHEN PROPOSED GRADES ARE HIGHER THAN EXISTING GRADES, MILL EXISTING PAVEMENT AS NEEDED TO RECEIVE A MINIMUM OF 1" ASPHALTIC CONCRETE TYPE SP-9.5 (TRAFFIC C) (FINE). ALL MATERIALS, EQUIPMENT AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH SECTION 327 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS EXCEPT THAT PARAGRAPHS 327-5 AND 327-6 SHALL BE OMITTED. MILLING WILL BE 1 INCH UNLESS AREAS ARE ENCOUNTERED WHERE THE BASE COURSE IS SHALLOWER THAN 1 INCH DEEP. IN THESE INSTANCES, THE PUBLIC WORKS DIRECTOR SHALL BE NOTIFIED AND A DECISION TO REDUCE THE MILLING WILL BE MADE IN THE FIELD.
- TRACKLESS TACK COAT.
- APPLY ASPHALTIC CONCRETE SURFACE COURSE, 1" COMPACTED (FDOT TYPE SP-9.5/TRAFFIC C)(FINE) THICK ON ALL MILLED ROADWAYS.
- THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/8 INCH FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
- DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY, CERTIFIED BY THE STATE OF FLORIDA.
- THE CONTRACTOR SHALL PERFORM ANY REQUIRED TESTING IN ACCORDANCE WITH SECTION 334 OF FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

SANITARY SEWER LATERAL INSTALLATION:

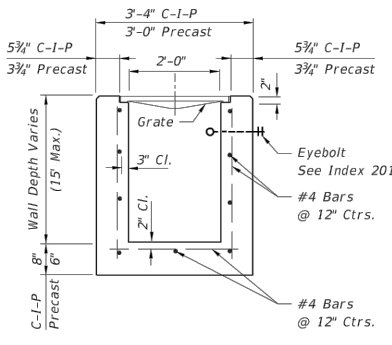
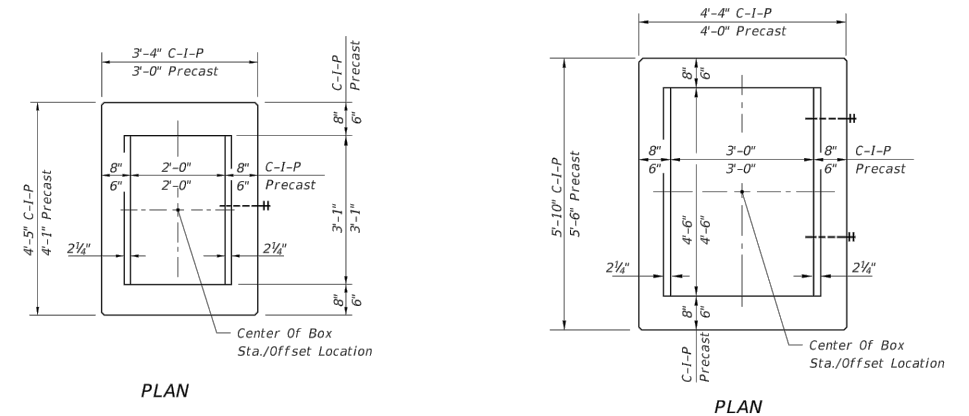
- ALL P.V.C. SEWER PIPE AND FITTINGS INSTALLED ABOVE AN INVERT ELEV. OF -6.0 N.G.V.D. SHALL BE UNPLASTICIZED, NON-PRESSURE POLYVINYL CHLORIDE (P.V.C.) PIPE CONFORMING TO ASTM D 3034 WITH SDR 35 AND INTEGRAL WALL BELL AND SPIGOT JOINTS. RUBBER SEALING RINGS FOR PIPE JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D 1869.
- ALL P.V.C. SEWER PIPE AND FITTINGS INSTALLED BELOW AN INVERT ELEVATION OF -6.0 N.G.V.D. AND ABOVE AN INVERT ELEVATION OF -9.0 N.G.V.D. SHALL BE ASTM D-3034 AND AWWA C900-97 PRESSURE PIPE CLASS 150, DR18, INTEGRAL BELL, CONTAINING A LOCKED-IN RING SPIGOT JOINT FOR GRAVITY SEWER CONSTRUCTION.
- ALL P.V.C. SEWER PIPE AND FITTINGS INSTALLED BELOW AN INVERT ELEV. OF -9.0 N.G.V.D. SHALL BE ASTM D-3034 AND AWWA C900-97 PRESSURE PIPE CLASS 200, DR14, INTEGRAL BELL, CONTAINING A LOCKED-IN RING SPIGOT JOINT FOR GRAVITY SEWER CONSTRUCTION.
- PVC SEWER PIPE SHALL BE LAID IN ACCORDANCE WITH ASTM D 2321 AND THE UNL-BELL PLASTIC PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER".
- ALL SEWER PIPES SHALL BE TRUE TO LINE AND GRADE WITH BELLS UPGRADE. JOINTS SHALL BE CAREFULLY FITTED SO AS TO ENSURE A TIGHT WATERPROOF JOINT.
- MINIMUM COVER REQUIREMENT FOR SANITARY SERVICE PIPE IS 36 INCHES.
- MINIMUM SLOPE FOR PVC SERVICE LATERAL IS 1%.

WATER SERVICE INSTALLATION:

- MINIMUM COVER REQUIREMENT FOR WATER SERVICE PIPE IS 36 INCHES.
- SERVICE SADDLES SHALL BE DUCTILE IRON WITH LOW ALLOY STEEL STRAPS. SADDLES SHALL CONFORM TO ANSI/AWWA C111/211-00 AND ASTM A-588 OF LATEST REVISION.
- POLYVINYL CHLORIDE (PVC) SCHEDULE 80 PIPE AND SCHEDULE 80 FITTINGS, DETECTOR TAPE TO BE USED ON ALL PVC PIPE. SOLVENT WELDED PVC FITTINGS ONLY.
- SERVICE LINES SHALL BE POLYETHYLENE (PE) TUBING AS DESCRIBED IN ANSI/AWWA C901-02 OR LATEST REVISION, WITH A WORKING PRESSURE OF 200 PSI (DR 9). PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIIP SEAL AND COUPLING NUT. POLYETHYLENE SHALL BE EXTRUDED FROM PE 3408 HIGH MOLECULAR WEIGHT MATERIAL AND MUST CONFORM TO ASTM D-2737.
- CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE ASTM B-62 WITH THREADED ENDS AND BE FORD OR APPROVED EQUAL.
- METER STOPS SHALL BE LOCKING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE WITH ASTM B-62. METER STOPS SHALL BE CLOSED BUTTON DESIGN AND RESILIENT "O" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY FORD OR APPROVED EQUAL.
- DETECTOR TAPE SHALL BE 3" WIDE BLUE TAPE FOR WATER MAIN AND BROWN TAPE FOR FORCE MAIN, WITH A METALLIZED FOIL CORE LAMINATED BETWEEN 2 LAYERS OF PLASTIC FILM. THE WORDS "CAUTION WATER LINE BURIED BELOW" OR "CAUTION FORCE MAIN BURIED BELOW" SHALL BE PRINTED AT 30" INTERVALS ALONG THE TAPE. TAPE SHALL BE PLACED 18" BELOW GRADE ABOVE ALL PVC MAINS AND SERVICES OR AS RECOMMENDED BY MANUFACTURER. NON-METALLIC TAPE SHALL BE USED ABOVE DUCTILE IRON PIPE.
- A BLUE REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED IN THE CENTER OF THE NEAREST LANES OF ROAD PAVEMENT ADJACENT TO ALL FIRE HYDRANT LOCATIONS.
- A REFLECTIVE PAVEMENT MARKER SHALL BE INSTALLED IN THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT ADJACENT TO ALL VALVE LOCATIONS OUTSIDE THE ROAD PAVEMENT. WATER MARKERS SHALL BE WHITE, SEWER MARKERS SHALL BE GREEN.

DEWATERING NOTES

- IN ACCORDANCE WITH SPWMD CRITERIA CONTAINED IN 40E-2.061 F.A.C., A DEWATERING PERMIT IS NOT REQUIRED PROVIDED THE FOLLOWING PROVISIONS ARE MET:
 - MAXIMUM DAILY PUMPAGE IS LESS THAN 5 MILLION GALLONS (MG) AND A MAXIMUM TOTAL PROJECT PUMPAGE OF LESS THAN 100 MG OVER A ONE YEAR PERIOD;
 - ALL DISCHARGE SHALL REMAIN ON THE PROJECT SITE;
 - NO DEWATERING SHALL OCCUR TO A DEPTH BELOW ELEVATION 0.0 FEET NVD WITHIN 1,000 FEET OF SALINE WATER, EXCEPT WHEN DEWATERING WATER WITH A CHLORIDE CONCENTRATION OF GREATER THAN 1,000 MILLIGRAMS PER LITER;
 - NO DEWATERING SHALL OCCUR WITHIN 100 FEET OF A WASTEWATER TREATMENT PLANT RAPID-RATE LAND APPLICATION SYSTEM PERMITTED UNDER PART IV OF CHAPTER 610, F.A.C.;
 - NO DEWATERING SHALL OCCUR WITHIN 1,000 FEET OF A KNOWN LANDFILL OR CONTAMINATIONAL.
 - NO DEWATERING SHALL OCCUR WITHIN 1,000 FEET OF A FRESHWATER WETLAND UNLESS DEWATERING ACTIVITIES ARE COMPLETED WITHIN 60 DAYS.
- THE CONTRACTOR SHALL APPLY FOR A DEWATERING PERMIT THROUGH THE SPWMD IF ANY OF THE ABOVE CONDITIONS CANNOT BE MET.



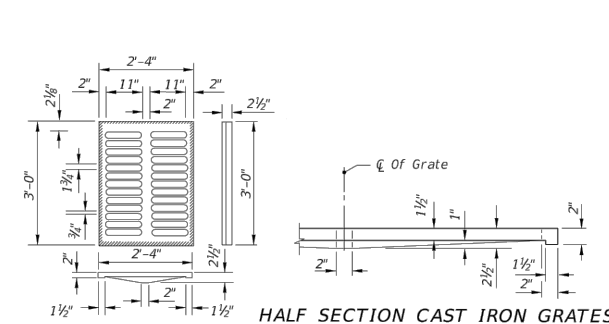
SECTION
HORIZONTAL WALL REINFORCING
SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BAR	WWF
0'-15"	A12	0.20	12"	8"

TYPE C

Recommended Maximum Pipe Size:

- 2'-0" Wall - 18" Pipe
- 3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

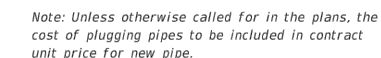


TYPE C
Approx. Weight 235 Lbs.

TYPE E
Approx. Weight 465 Lbs.

CAST IRON GRATES

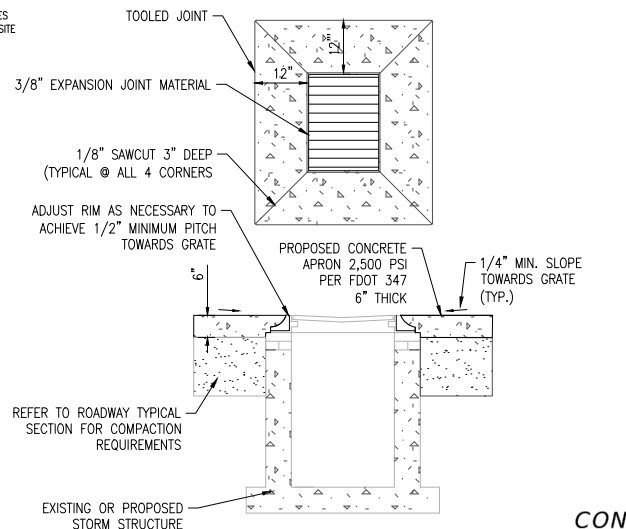
1
FDOT TYPE 'C' AND TYPE 'E' INLETS
FDOT INDEX # 232
SCALE: N.T.S.



PIPE PLUG

DISSIMILAR TYPES

CONCRETE JACKET FOR CONNECTING DISSIMILAR TYPES OF PIPE AND CONCRETE PIPES WITH DISSIMILAR JOINTS



3
CATCH BASIN CONCRETE APRON
SCALE: N.T.S.

2
MISCELLANEOUS DRAINAGE DETAILS
FDOT INDEX # 280
SCALE: N.T.S.

File Name: E:\Projects\2016\169047_Hallandale Beach Stormwater 42 Year Cdbg\Drawings\169047-C-NOTE.dwg - (Plotted by: Katherine Kupsky on Monday, June 12, 2017 11:22:45 AM)

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 514

**HALLANDALE BEACH
STORMWATER 42 YEAR CDBG**
HALLANDALE BEACH, FLORIDA

GENERAL NOTES AND DETAILS

FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD

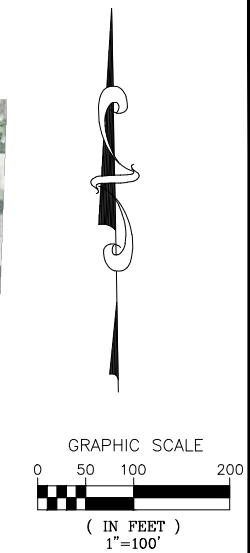
MOHAMMED SHARFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE NO. 67640
DATE: 6/9/17

SCALE
AS SHOWN
PROJECT No
16-9047

811
KNOW WHAT'S BELOW
BEFORE YOU DIG
It's fast. It's free. It's the best.
www.call811.com

SHEET
G3

File Name: P:\Projects\2016\169047_Hollandale Beach Stormwater 42 Year CDBG\Drawings\169047-C-STRM-PLAN.dwg (Plotted by: Katharine Kupsky on Monday, June 12, 2017 11:23:23 AM)



NO	DATE	REVISION	BY	NO	DATE	REVISION	BY



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 514

**HALLANDALE BEACH
STORMWATER 42 YEAR CDBG**

HALLANDALE BEACH, FLORIDA

KEY SHEET

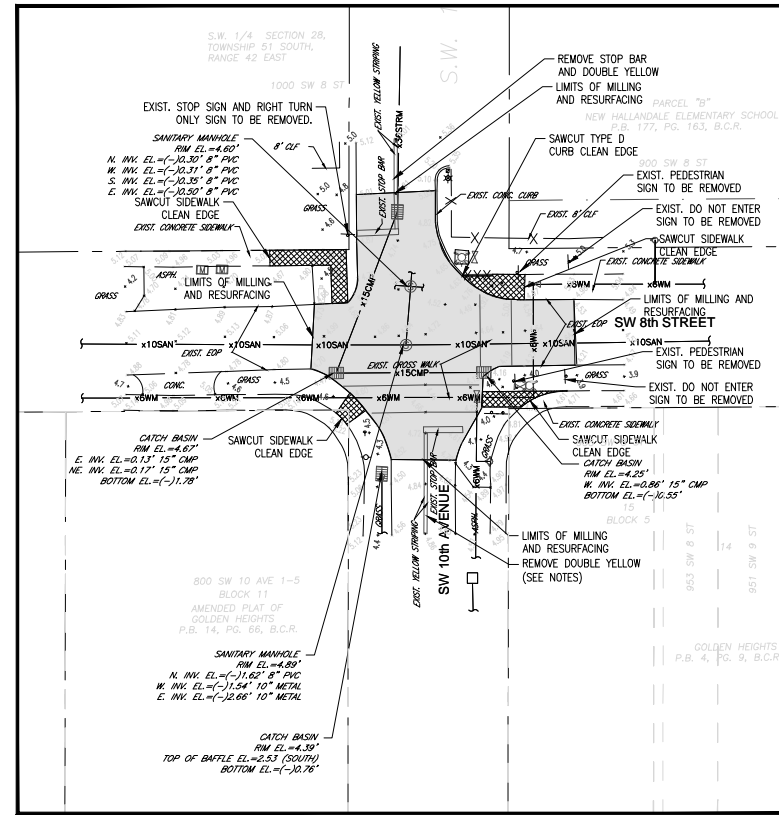
MOHAMMED SHARIFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE No. 67640
DATE: 6/9/17

SCALE
AS SHOWN
PROJECT No
16-9047

SHEET
K1

**FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD**

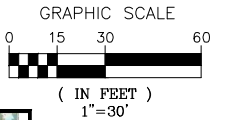




D1A

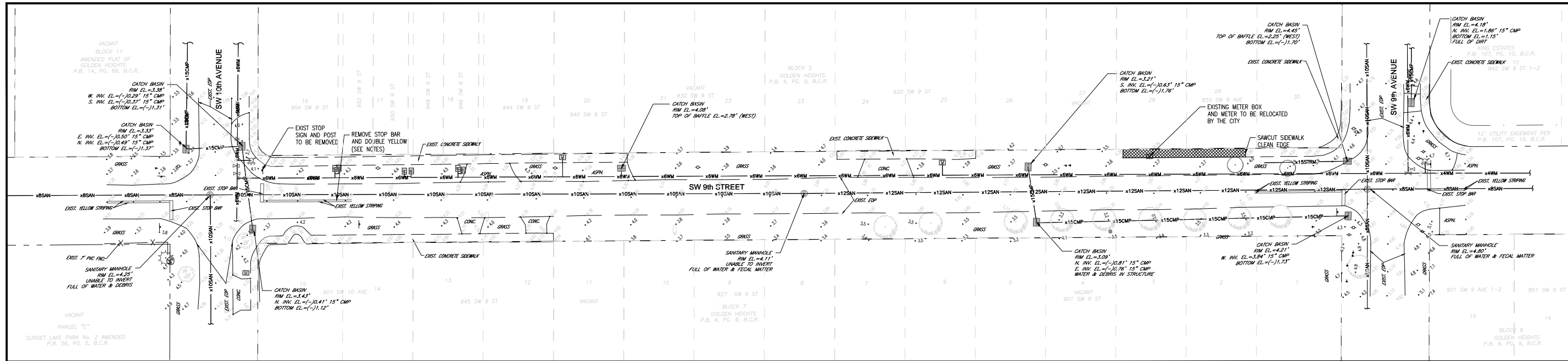
STORMWATER POLLUTION PREVENTION NOTES

1. THIS PROJECT WILL DISTURB LESS THAN (1) ACRE. THE CONTRACTOR WILL NOT BE REQUIRED TO HAVE A FORMAL STORMWATER POLLUTION PREVENTION PLAN OR OBTAIN A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). HOWEVER, THE CONTRACTOR WILL BE REQUIRED TO FOLLOW BEST MANAGEMENT PRACTICES (BMP'S) FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS AS DICTATED BY THE LOCAL AGENCY HAVING JURISDICTION (AHJ).
2. DISTURBANCES INCLUDING ASPHALT CUTTING, DIGGING, CLEARING, GRADING, AND EXCAVATING WILL REQUIRE BMP'S WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, DAMS, TRAPS, BARRIERS, MULCH, HAY BALES AND APPURTENANCES THAT WILL ENSURE SEDIMENTATION POLLUTION WILL BE EITHER ELIMINATED OR MAINTAINED WITHIN ACCEPTABLE LIMITS AS ESTABLISHED BY THE AHJ.
3. THE CONTRACTOR WILL BE SUBJECT TO AHJ FINES IF BMP'S ARE NOT IMPLEMENTED AND MAINTAINED.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY FLOATING TURBIDITY BARRIER, SILT BARRIER, INLET PROTECTIONS AND OTHER BEST MANAGEMENT PRACTICES AS NEEDED FOR THE PROPOSED CONSTRUCTION ACTIVITIES.
5. FURTHER INFORMATION ABOUT BMP'S VISIT: WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES/.



KEY MAP

Scale: NTS



D1B

DEMOLITION NOTES:

1. THE DEMO AS SHOWN IS GENERAL IN NATURE. LIMITS OF DEMO SHALL BE DETERMINED BY THE FIELD CONDITIONS IN CONFORMANCE WITH ROADWAY RECONSTRUCTION REQUIREMENTS.
2. TREE PROTECTION SHALL BE IN PLACE PRIOR TO ANY WORK COMMENCING.
3. WHEN SAW CUTTING EXIST SIDEWALK, SAW CUT TO THE NEAREST JOINT.
4. CONTRACTOR TO CLEAN EXISTING DRAINAGE PIPES AND CATCH BASINS AT THE BEGINNING AND CONCLUSION OF CONSTRUCTION.
5. EXISTING PAVEMENT MARKING SHALL BE REMOVED BY SAND-BLASTING OR OTHER WATER BLASTING METHODS.

LEGEND

- EXISTING DRIVEWAY, SIDEWALK AND CURB REMOVAL
- ASPHALT PAVEMENT MILLING AND RESURFACING
- EXISTING CURBSIDE REMOVAL



**FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD**

MOHAMMED SHARFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE NO. 67640

DATE: 6/9/17

DEMOLITION PLAN

**HALLANDALE BEACH
STORMWATER 42 YEAR CDBG**

HALLANDALE BEACH, FLORIDA

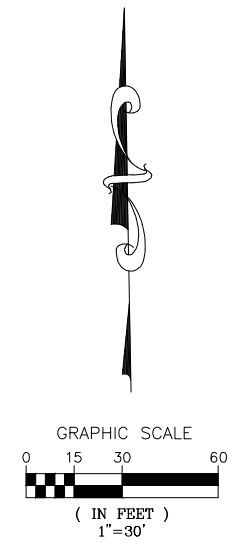
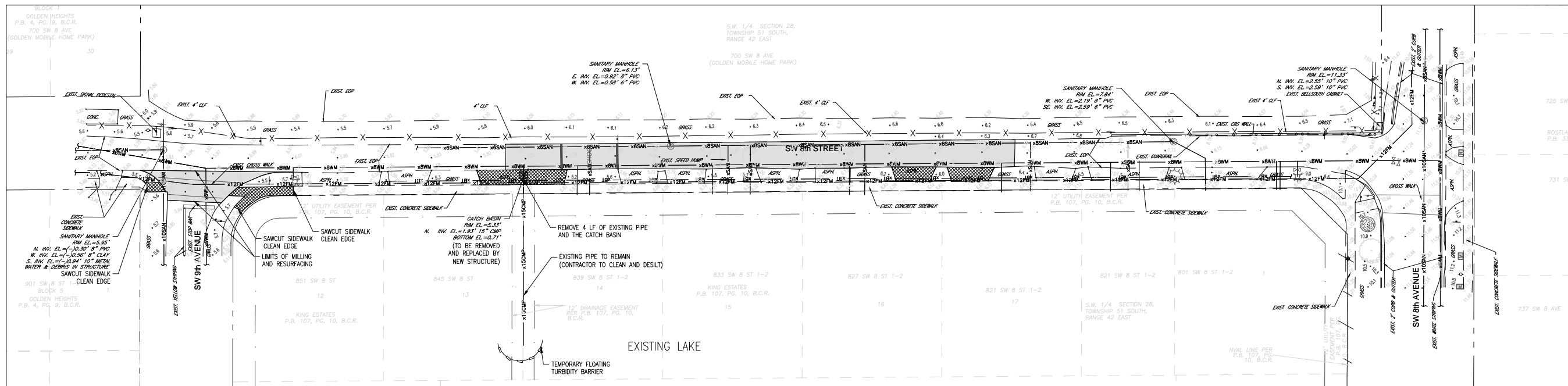


Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 514

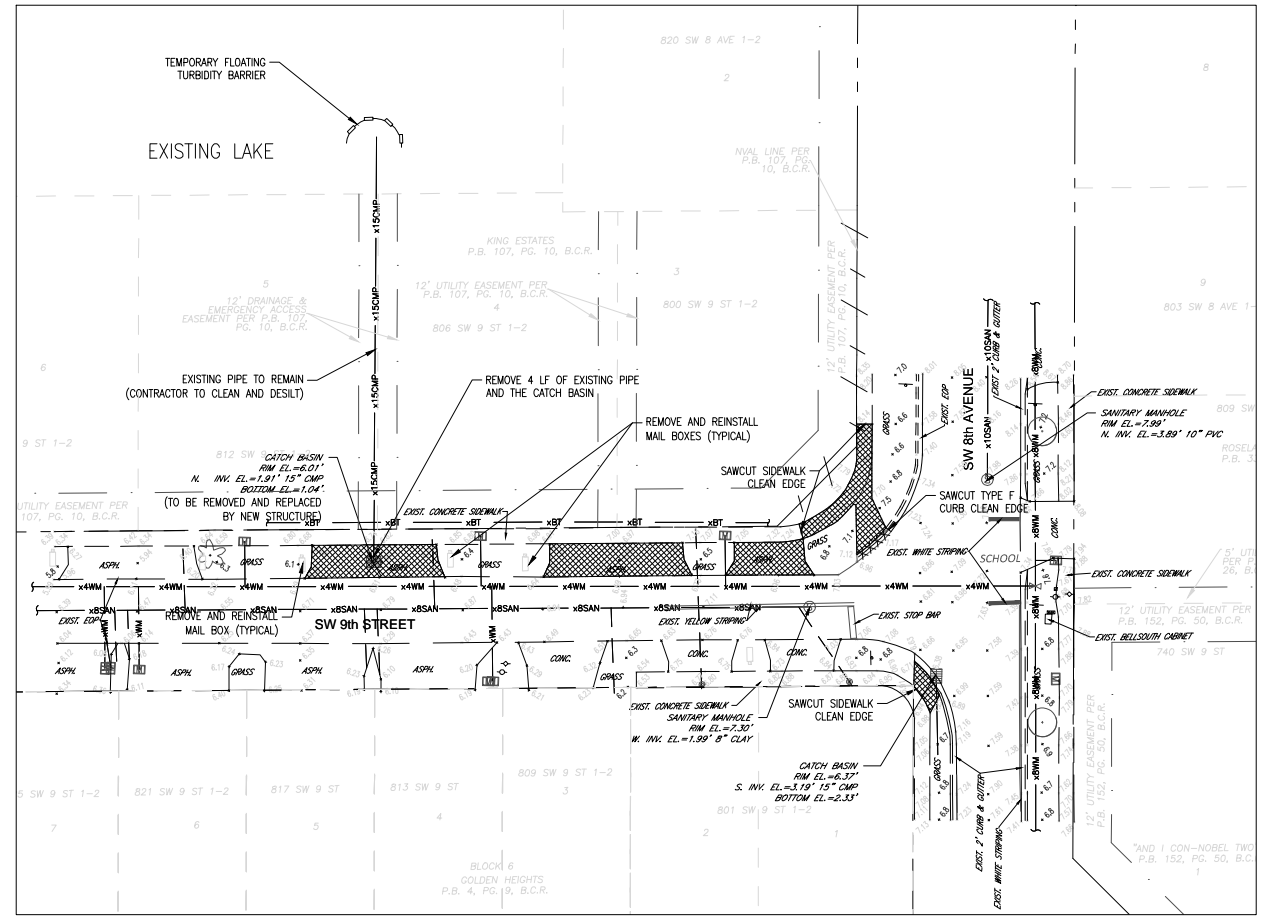
File Name: E:\Projects\2016\169047_Hallandale Beach Stormwater 42 Year Cdbg\cadd Files\Drawings\169047-C-XP-DEMO.dwg - (Plotted by: Katharine Kupsky on Monday, June 12, 2017 12:20:53 PM)

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

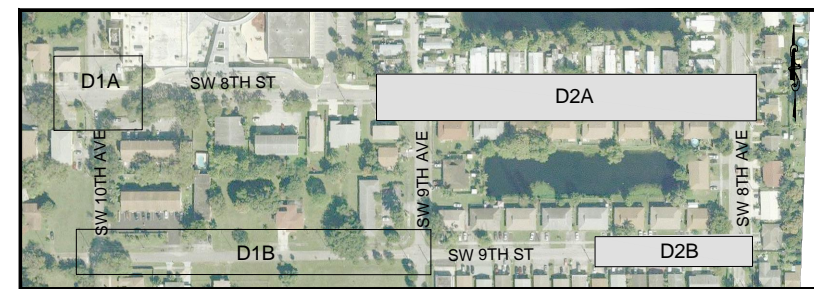
SCALE	SHEET
AS SHOWN	D1
PROJECT No	16-9047



D2A



D2B



KEY MAP
Scale: NTS

STORMWATER POLLUTION PREVENTION NOTES

1. THIS PROJECT WILL DISTURB LESS THAN (1) ACRE. THE CONTRACTOR WILL NOT BE REQUIRED TO HAVE A FORMAL STORMWATER POLLUTION PREVENTION PLAN OR OBTAIN A GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). HOWEVER, THE CONTRACTOR WILL BE REQUIRED TO FOLLOW BEST MANAGEMENT PRACTICES (BMP'S) FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS AS DICTATED BY THE LOCAL AGENCY HAVING JURISDICTION (AHJ).
2. DISTURBANCES INCLUDING ASPHALT CUTTING, DIGGING, CLEARING, GRADING, AND EXCAVATING WILL REQUIRE BMP'S WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCES, DAMS, TRAPS, BARRIERS, MULCH, HAY BALES AND APPURTENANCES THAT WILL ENSURE SEDIMENTATION POLLUTION WILL BE EITHER ELIMINATED OR MAINTAINED WITHIN ACCEPTABLE LIMITS AS ESTABLISHED BY THE AHJ.
3. THE CONTRACTOR WILL BE SUBJECT TO AHJ FINES IF BMP'S ARE NOT IMPLEMENTED AND MAINTAINED.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY FLOATING TURBIDITY BARRIER, SILT BARRIER, INLET PROTECTIONS AND OTHER BEST MANAGEMENT PRACTICES AS NEEDED FOR THE PROPOSED CONSTRUCTION ACTIVITIES.
5. FURTHER INFORMATION ABOUT BMP'S VISIT: WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES/.

DEMOLITION NOTES:

1. THE DEMO AS SHOWN IS GENERAL IN NATURE; LIMITS OF DEMO SHALL BE DETERMINED BY THE FIELD CONDITIONS IN CONFORMANCE WITH ROADWAY RECONSTRUCTION REQUIREMENTS.
2. TREE PROTECTION SHALL BE IN PLACE PRIOR TO ANY WORK COMMENCING.
3. WHEN SAW CUTTING EXIST SIDEWALK, SAW CUT TO THE NEAREST JOINT.
4. CONTRACTOR TO CLEAN EXISTING DRAINAGE PIPES AND CATCH BASINS AT THE BEGINNING AND CONCLUSION OF CONSTRUCTION.
5. EXISTING PAVEMENT MARKING SHALL BE REMOVED BY SAND-BLASTING OR OTHER WATER BLASTING METHODS.

LEGEND

- EXISTING DRIVEWAY, SIDEWALK AND CURB REMOVAL
- ASPHALT PAVEMENT MILLING AND RESURFACING
- EXISTING CURBING REMOVAL

File Name: E:\Projects\2016\169047_Hallandale Beach Stormwater 42 Year Cdbg\Drawings\169047-C-XP-DEMO.dwg - (Plotted by: Katharine Kupsky on Monday, June 12, 2017 12:21:12 PM)

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
 Phone: 954.921.7781 • Fax: 954.921.8807
 Certificate of Authorization 514

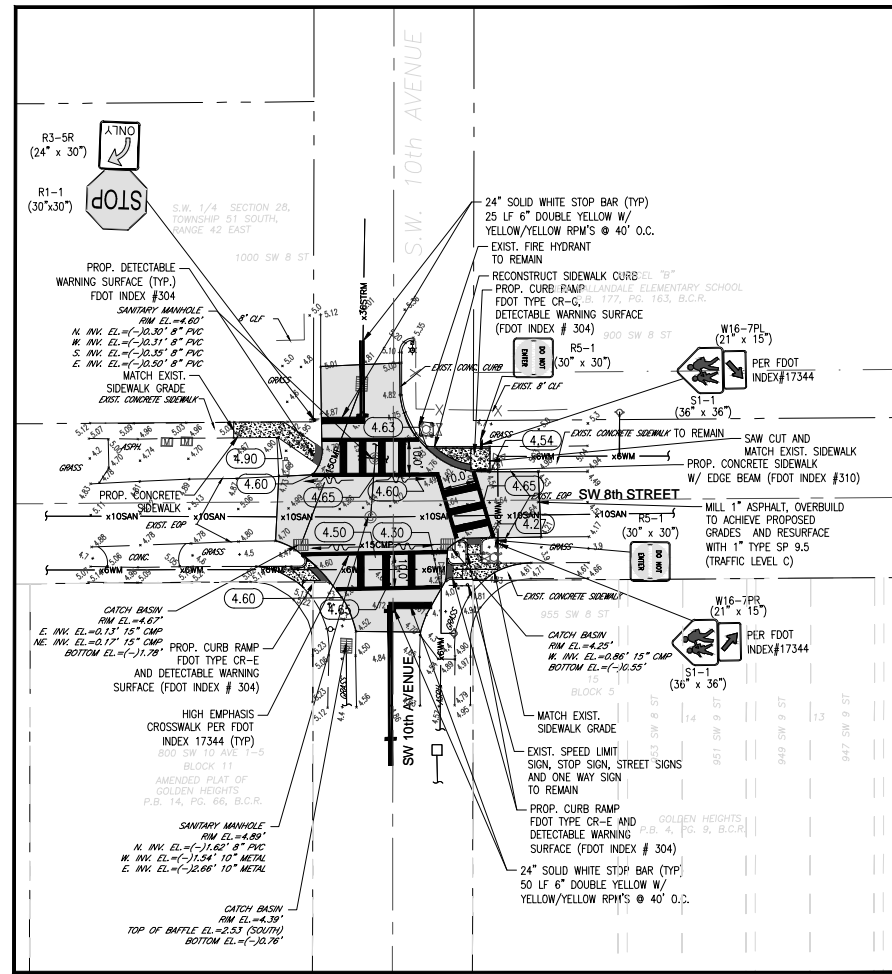
HALLANDALE BEACH
STORMWATER 42 YEAR CDBG
 HALLANDALE BEACH, FLORIDA

DEMOLITION PLAN

FOR BIDDING
 NOT FOR CONSTRUCTION
 ELEVATIONS ARE IN 88 NAVD
 MOHAMMED SHARFUZZAMAN, P.E.
 STATE OF FLORIDA PROFESSIONAL ENGINEER
 LICENSE No. 67640
 DATE: 6/9/17

FROM WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 It's fast. It's free. It's the best.
www.call811.com

SCALE: AS SHOWN
 PROJECT No: 16-9047
 SHEET: **D2**

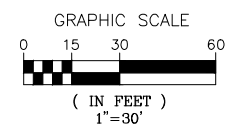
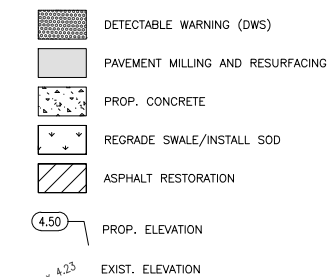


PD1A

GENERAL NOTES:

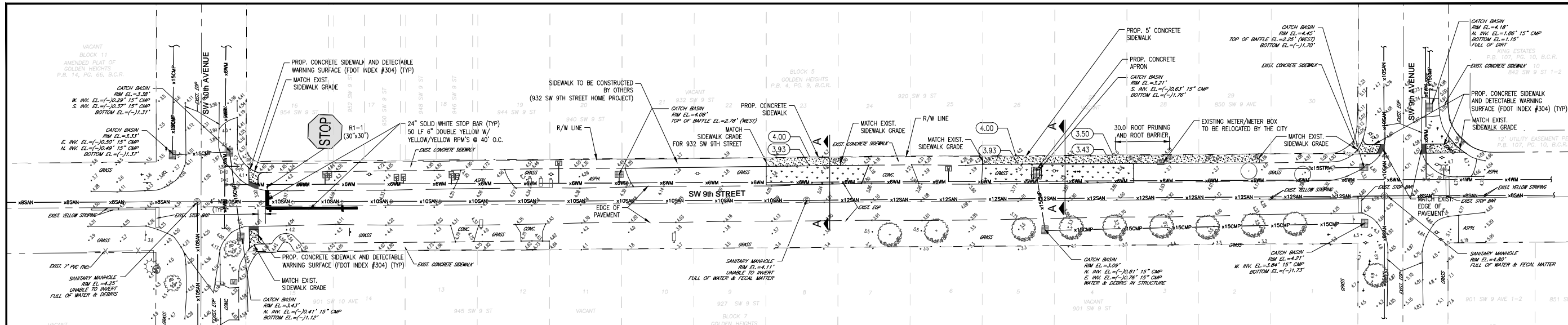
1. THE CONTRACTOR TO RESTORE, INCLUDING BUT NOT LIMITED TO, ALL DISTURBED ASPHALT PAVEMENT, PAVEMENT MARKINGS AND RPM, STREET SIGNS, SOD, LANDSCAPE, IRRIGATION, CURB, CURB & GUTTER, GUARD RAILS, FENCES, PAVEMENT BRICKS, SIDEWALKS, MAIL BOXES, ANY DISTURBED UNDERGROUND OR ABOVE GROUND UTILITIES.
2. THIS PLAN WAS DESIGNED BASED UPON THE INFORMATION AS CONTAINED IN THE TOPOGRAPHIC SURVEY PREPARED BY CALVIN, GIORDANO & ASSOCIATES, INC.
3. THE LOCATION OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION.
4. THE CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, UTILITIES, SIDEWALKS, ASPHALT PAVEMENT NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST OF SUCH REPAIR WORK.
5. WHERE PROPOSED, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
6. THE CONTRACTOR TO ADJUST ALL EXISTING/PROPOSED VALVE BOXES, METER BOXES, FULL BOXES, CLEAN-OUTS, MANHOLE COVERS TO MATCH PROPOSED GRADES IF NOT TO BE REMOVED.
7. THE CONTRACTOR SHALL INSTALL SOD FOR ALL DISTURBED AREAS. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES. SITE GRADING ELEVATIONS SHALL BE AT THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
9. CONTRACTOR SHALL BE RESPONSIBILITY TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
10. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY OF POWER LINES.
11. ALL LONGITUDINAL PAVEMENT RESTORATION SHALL BE FULL LANE WIDTH. ALL PAVING REPAIRS TO BE STRAIGHT.
12. ALL UNSUITABLE AND EXCESS SOIL SHALL BE DISPOSED BY THE CONTRACTOR. ANY SUITABLE REPLACEMENT SOIL IS TO BE INCLUDED IN THE BID.
13. ALL DAMAGED AREAS SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
14. THE DETECTABLE WARNING SURFACE FOR CURB RAMPS SHALL BE CAST IN PLACE (FDOT STANDARD INDEX # 304).
15. ANY PAVEMENT MARKINGS OR SIGNS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED ACCORDING TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS.
16. SIGNS SHALL BE MADE WITH TYPE XI RETROREFLECTIVE SHEETING EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
17. EXISTING PAVEMENT MARKING SHALL BE REMOVED BY SAND-BLASTING OR OTHER WATER BLASTING METHODS.
18. ALL STOP BARS TO BE 4\"/>

HATCHING LEGEND

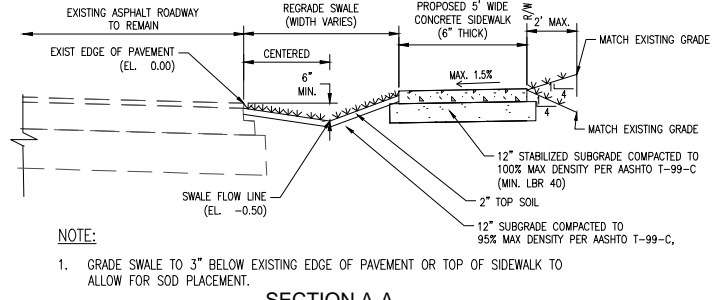


KEY MAP

Scale: NTS



PD1B



- NOTE:
1. GRADE SWALE TO 3\"/>

File Name: P:\Projects\2016\169047_Hallandale Beach Stormwater_42 Year Cdbg\Drawings\169047-C-STRM-PLAN.dwg (Plotted by: Katharine Kupsky on Monday, June 12, 2017 12:21:54 PM)

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

HALLANDALE BEACH STORMWATER 42 YEAR CDBG

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 514

HALLANDALE BEACH, FLORIDA

PAVING GRADING AND DRAINAGE PLAN

FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD

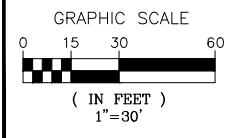
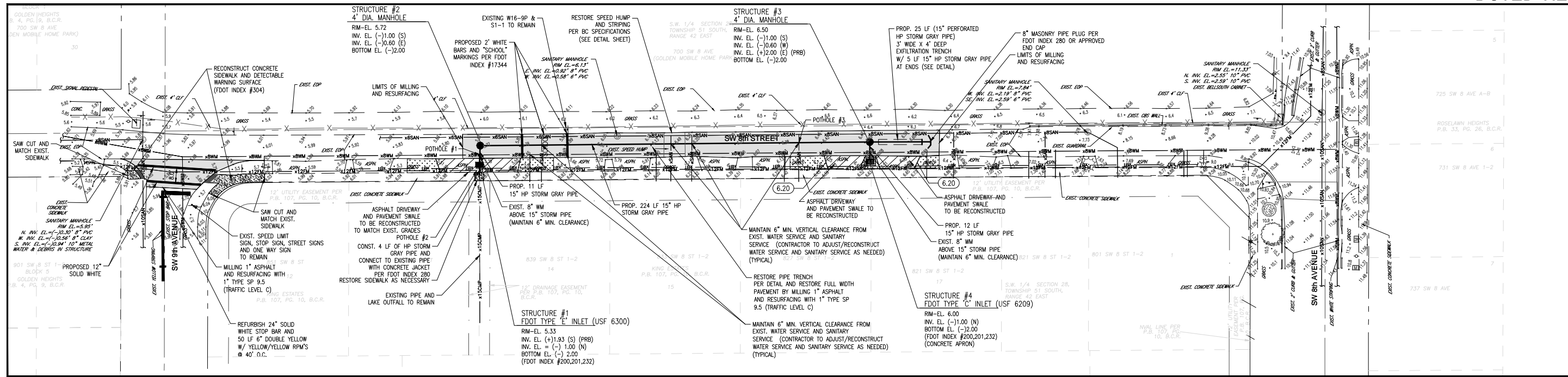
MOHAMMED SHARIFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE No. 67640

DATE: 6/9/17

811
KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG
It's free. It's fast. It's the law.
www.call811.com

SCALE: AS SHOWN
PROJECT No: 16-9047

SHEET: PD1



PD2A

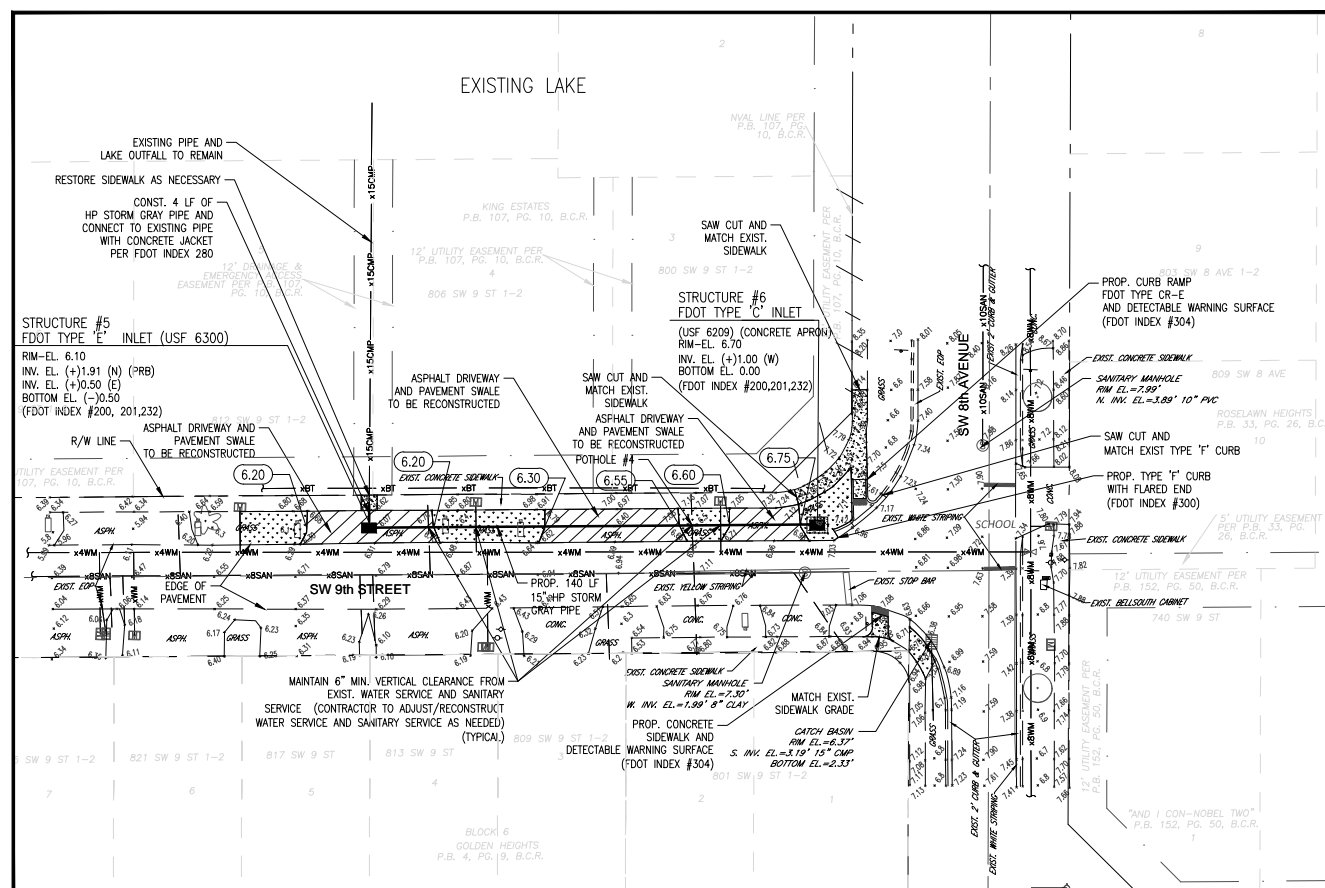
DRAINAGE STRUCTURES											
STRUCTURES NUMBER	GRATE/RIM ELEVATION	PIPE INV. ELEV. (SOLID)	PIPE INV. ELEV. (PERFORATED)	PIPE DIRECTION	BOTTOM ELEV.	EXFILTRATION TRENCH TOP ELEV.	EXFILTRATION TRENCH BOTTOM ELEV.	EXFILTRATION TRENCH WIDTH	STRUCTURE SIZE/ INSIDE DIM. (TYPE)	FRAME & GRATE OR COVER	BAFFLE/PRB
1	(+)5.33	(-)1.00	N/A	N	(-)2.00	N/A	N/A	N/A	FDOT TYPE "E" FDOT INDEX # 232	USF 6300	SOUTH
2	(+)5.72	(-)1.00	N/A	S	(-) 2.00	N/A	N/A	N/A	4" DIA. MANHOLE	USF 420-C	N/A
3	(+)6.50	(-)1.00	N/A	S	(-) 2.00	N/A	N/A	N/A	4" DIA. MANHOLE	USF 420-C	EAST
4	(+) 6.00	(-) 1.00	N/A	N	(-) 2.00	N/A	N/A	N/A	FDOT TYPE "C" FDOT INDEX # 232	USF 6209	N/A
5	(+) 6.10	(+)1.91	N/A	N	(-) 0.50	N/A	N/A	N/A	FDOT TYPE "E" FDOT INDEX # 232	USF 6300	NORTH
6	(+) 6.70	(+) 1.00	N/A	W	(+) 0.00	N/A	N/A	N/A	FDOT INDEX "C" FDOT INDEX # 232	USF 6209	N/A

GENERAL NOTES:

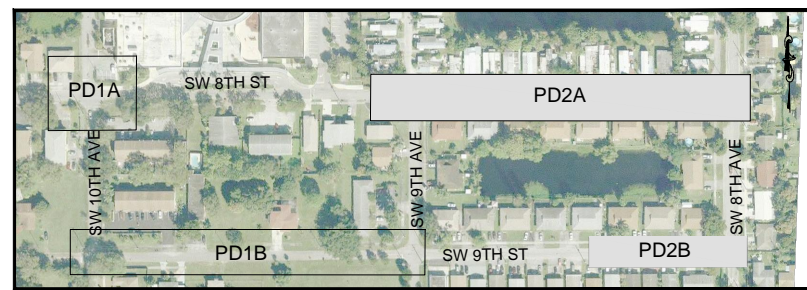
- THE CONTRACTOR TO RESTORE, INCLUDING BUT NOT LIMITED TO, ALL DISTURBED ASPHALT PAVEMENT, PAVEMENT MARKINGS AND RPM, STREET SIGNS, SOD, LANDSCAPE, IRRIGATION, CURB, CURBS & GUTTER, GUARD RAILS, FENCES, PAVEMENT BRICKS, SIDEWALKS, MAIL BOXES, ANY DISTURBED UNDERGROUND OR ABOVE GROUND UTILITIES.
- THIS PLAN WAS DESIGNED BASED UPON THE INFORMATION AS CONTAINED IN THE TOPOGRAPHIC SURVEY PREPARED BY CALVIN, GIORDANO & ASSOCIATES, INC.
- THE LOCATION OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, UTILITIES, SIDEWALKS, ASPHALT PAVEMENT NOT SHOWN ON THE PLANS TO BE REMOVED BY CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST OF SUCH REPAIR WORK, WHERE PROPOSED, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
- THE CONTRACTOR TO ADJUST ALL EXISTING/PROPOSED VALVE BOXES, METER BOXES, FULL BOXES, CLEAN-OUTS, MANHOLE COVERS TO MATCH PROPOSED GRADES IF NOT TO BE REMOVED.
- THE CONTRACTOR SHALL INSTALL SOD FOR ALL DISTURBED AREAS. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES. SITE GRADING ELEVATIONS SHALL BE AT THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
- CONTRACTOR SHALL BE RESPONSIBILITY TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
- CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY OF POWER LINES.
- ALL LONGITUDINAL PAVEMENT RESTORATION SHALL BE FULL LANE WIDTH. ALL PAVING REPAIRS TO BE STRAIGHT. ALL UNSUITABLE AND EXCESS SOIL SHALL BE DISPOSED BY THE CONTRACTOR. ANY SUITABLE REPLACEMENT SOIL IS TO BE INCLUDED IN THE BID.
- ALL DAMAGED AREAS SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE DETECTABLE WARNING SURFACE FOR CURB RAMPS SHALL BE CAST IN PLACE (FDOT STANDARD INDEX # 304). ANY PAVEMENT MARKINGS OR SIGNS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED ACCORDING TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARDS.
- SIGNS SHALL BE MADE WITH TYPE XI RETROREFLECTIVE SHEETING EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
- EXISTING PAVEMENT MARKING SHALL BE REMOVED BY SAND-BLASTING OR OTHER WATER BLASTING METHODS.
- ALL STOP BARS TO BE 4" BEHIND CROSSWALK OR CURB RAMP. (TYPICAL)

HATCHING LEGEND

- DETECTABLE WARNING (DWS)
- PAVEMENT MILLING AND RESURFACING
- PROP. CONCRETE
- REGRADE SWALE/INSTALL SOD
- ASPHALT RESTORATION
- PROP. ELEVATION
- EXIST. ELEVATION



PD2B



HALLANDALE BEACH STORMWATER 42 YEAR CDBG

PAVING GRADING AND DRAINAGE PLAN

HALLANDALE BEACH, FLORIDA

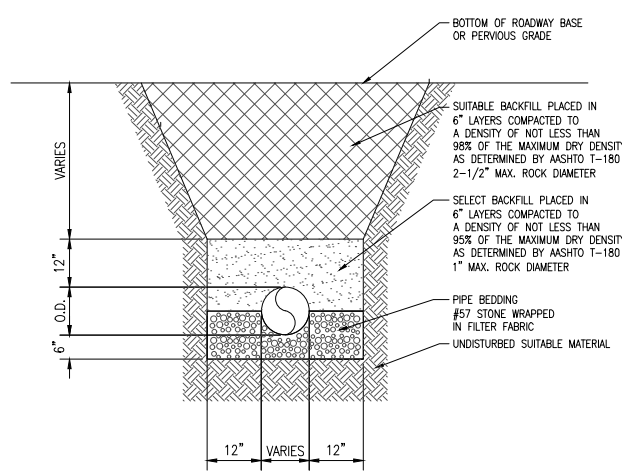
Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS
1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
Phone: 954.921.7781 • Fax: 954.921.8807
Certificate of Authorization 514

FOR BIDDING
NOT FOR CONSTRUCTION
ELEVATIONS ARE IN 88 NAVD

MOHAMMED SHARIFUZZAMAN, P.E.
STATE OF FLORIDA PROFESSIONAL ENGINEER
LICENSE No. 67640
DATE: 6/9/17

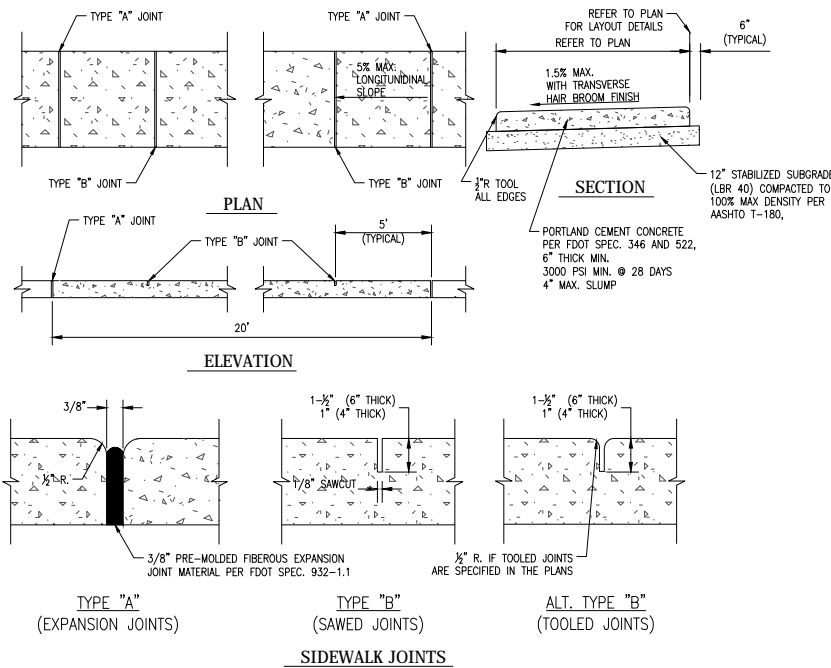
SCALE AS SHOWN
PROJECT No 16-9047
SHEET PD2





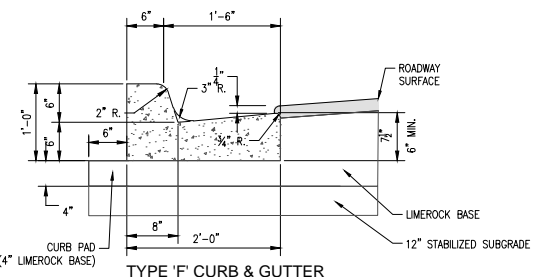
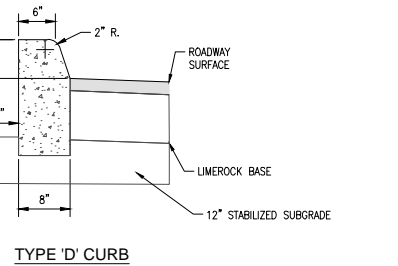
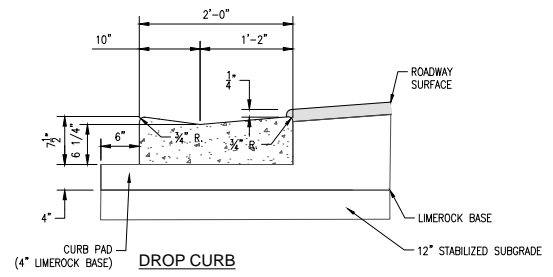
NOTE:
 1. ALL UNSATISFACTORY SOILS ENCOUNTERED ARE TO BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR AND REPLACED WITH SATISFACTORY SOILS.

4 TYPICAL PIPE TRENCH IN SATISFACTORY SOILS
 SCALE: N.T.S.



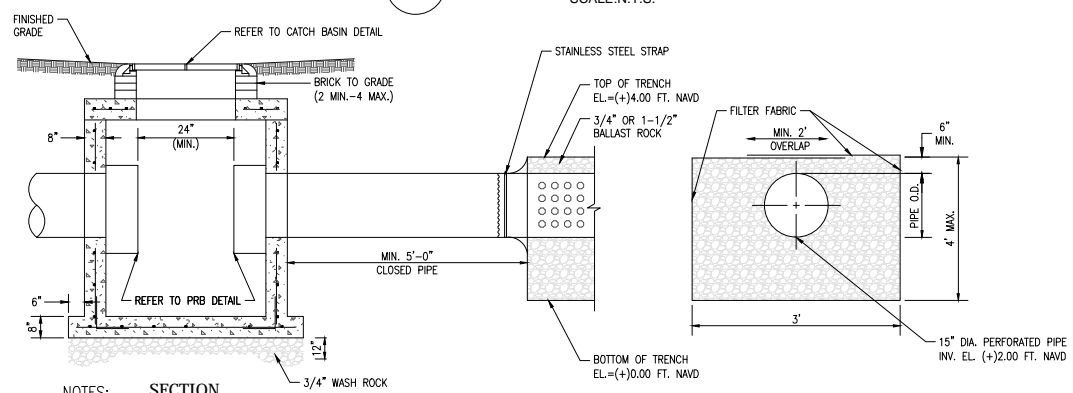
SIDEWALK JOINTS	
TYPE	LOCATION
"A"	30'-0" CENTER TO CENTER P.C. AND P.T. OF CURVES, JUNCTION OF EXISTING AND NEW SIDEWALKS, WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES OR AT THE DISCRETION OF THE ENGINEER.
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS THROUGHOUT THE SITE.

6 CONCRETE SIDEWALK (6" THICK)
 SCALE: N.T.S.



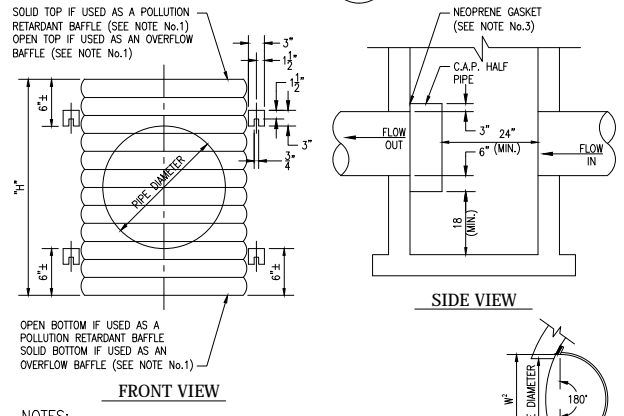
NOTES:
 1. ALL CURBS, GUTTERS AND CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARD INDEX 300 AND SPECIFICATION 520.
 2. CONCRETE SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION 346 HAVING A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
 3. WHEN USED ON HIGH SIDE OF ROADWAYS, CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE EDGE OF PAVEMENT SHALL MATCH THE LIP OF CURB ELEVATION. THE MINIMUM THICKNESS OF THE LIP SHALL BE 6".
 4. BACKFILL BEHIND CURBS TO 2" BELOW TOP OF CURB TO ALLOW FOR SOD OR AS SPECIFIED IN PLANS AND SPECIFICATIONS.
 5. SAWCUTS AT 10' CENTERS SHALL BE MADE WITHIN 24 HOURS OF CONCRETE PLACEMENT

5 CONCRETE CURB DETAILS
 SCALE: N.T.S. CURRENT



NOTES:
 1. PIPES SHALL TERMINATE 2' FROM END OF TRENCH (CAP ENDS OF PIPE) OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED. SIDES, BOTTOM AND TOP OF TRENCH ONLY TO BE LINED WITH FILTER FABRIC. OVERLAP LINER A MINIMUM OF 2' AT THE TOP OF THE TRENCH.
 2. BALLAST ROCK SHALL BE FROM FRESH WATER, WASHED AND FREE OF DELETERIOUS MATTER.
 3. ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE. (SEE POLLUTION RETARDANT BAFFLE (PRB) DETAIL)
 4. TRENCH TO BE LINED WITH MIRAFI 140N OR APPROVED EQUIVALENT TYPE FILTER FABRIC.

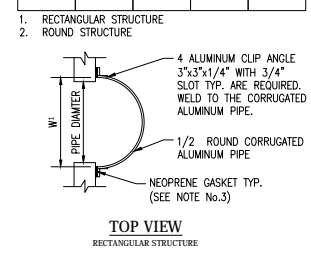
7 EXFILTRATION TRENCH
 SCALE: N.T.S.



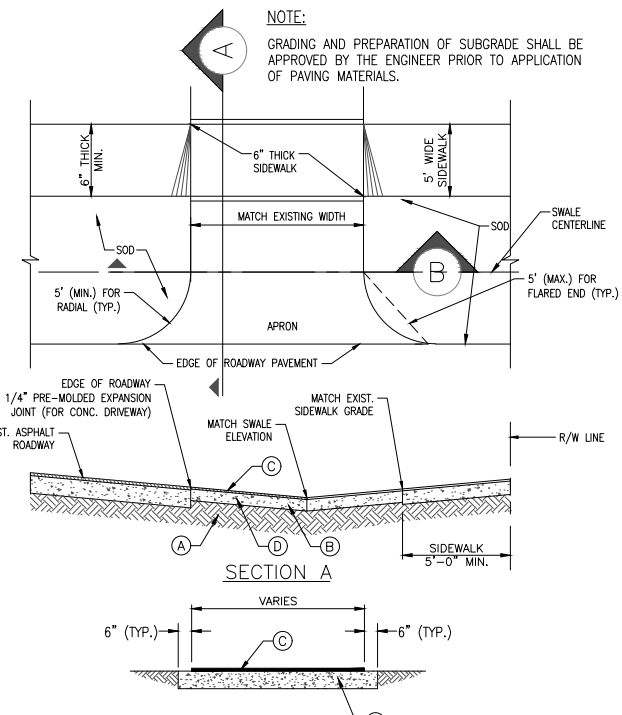
NOTES:
 1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING.
 2. BAFFLE SHALL BE AS MANUFACTURED BY SOUTHERN CULVERT OR ENGINEER'S APPROVED EQUAL.
 3. NEOPRENE GASKET (3/8" x 2") SHALL BE INSTALLED AT ALL BAFFLES.

8 POLLUTION RETARDANT BAFFLE (PRB)
 SCALE: N.T.S.

STANDARD DIMENSIONS				
PIPE DIA. (INCHES)	W ¹ (INCHES)	W ² (INCHES)	T (GAUGE)	H (INCHES)
12"	21"	30"	16	VARIES
15"	21"	30"	16	VARIES
18"	30"	36"	16	VARIES
24"	36"	42"	16	VARIES
30"	42"	48"	14	VARIES
36"	54"	54"	14	VARIES
42"	60"	60"	14	VARIES
48"	72"	72"	14	VARIES



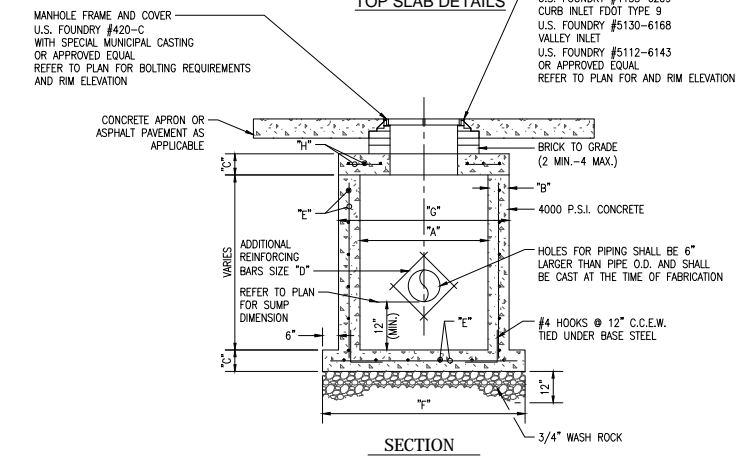
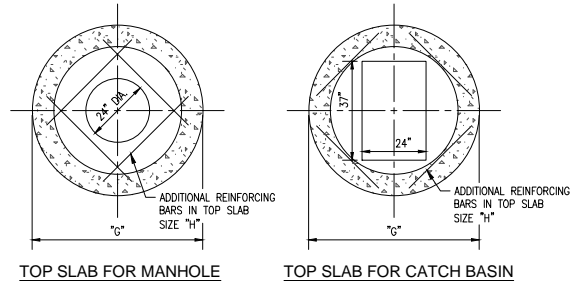
9 PRECAST CIRCULAR MANHOLE AND CATCH BASIN
 SCALE: N.T.S.



NOTE:
 GRADING AND PREPARATION OF SUBGRADE SHALL BE APPROVED BY THE ENGINEER PRIOR TO APPLICATION OF PAVING MATERIALS.

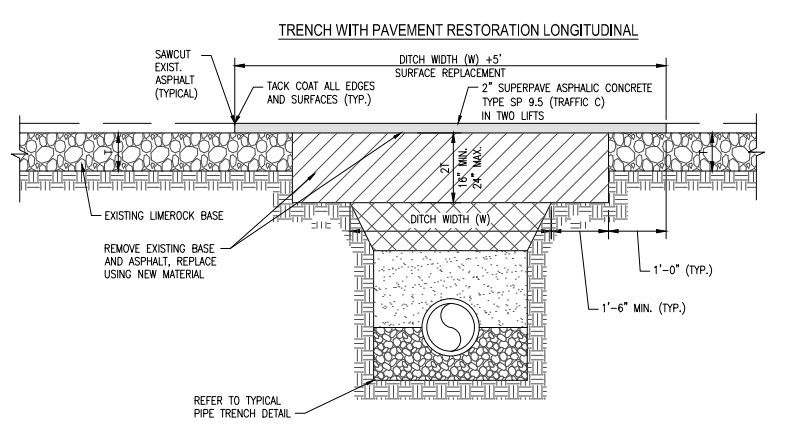
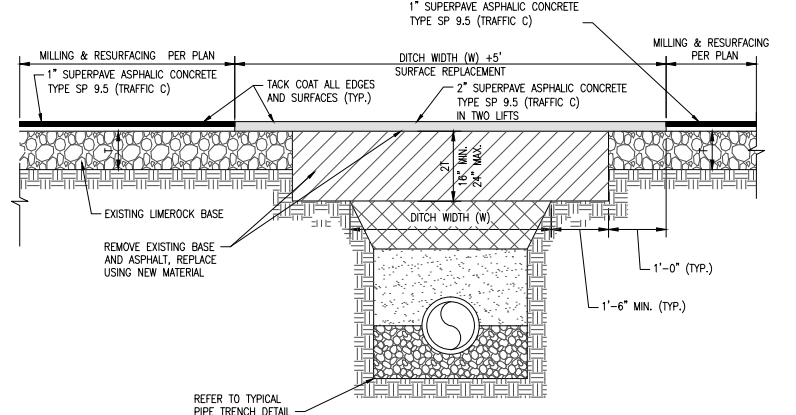
SECTION A
 12" SUBGRADE SHALL BE ORDINARY BACKFILL COMPACTED TO 98% T-180 AND FREE OF LARGE ROCKS OR BOULDERS.
 6" LIMEROCK BASE (LBR 100) COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 1" SUPERPAVE ASPHALTIC CONCRETE, FDOT TYPE SP 9.5 (TRAFFIC LEVEL C)
 6" MIN. LIMEROCK BASE COURSE FOR ASPHALT DRIVEWAYS OR OR
 6" MIN. 3,000 PSI CONCRETE REINFORCED WITH 6"x6" - W1.4XW1.4 WELDED WIRE MESH FOR CONCRETE DRIVEWAYS.

9 RESIDENTIAL DRIVEWAY (RIGHT-OF-WAY) RECONSTRUCTION DETAIL
 SCALE: N.T.S.



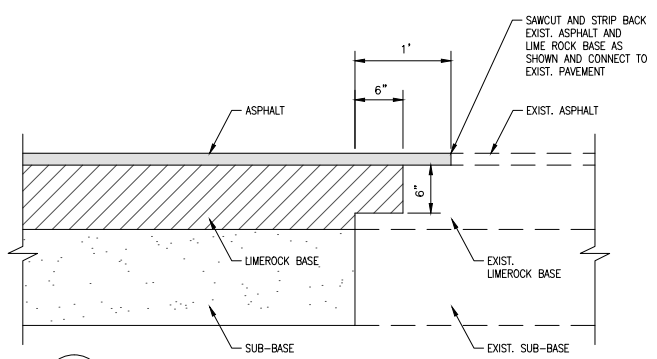
TYPE	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
C-4/M-4	4'-0"	8'	8'	#4 @ 12" C.C.E.W.	#4 @ 12" C.C.E.W.	6'-4"	5'-4"	#4 @ 6" C.C.E.W.
C-5/M-5	5'-0"	8'	8'	#5 @ 12" C.C.E.W.	#5 @ 12" C.C.E.W.	7'-4"	6'-4"	#5 @ 6" C.C.E.W.
C-6/M-6	6'-0"	8'	8'	#5 @ 6" C.C.E.W.	#5 @ 6" C.C.E.W.	8'-4"	7'-4"	#5 @ 6" C.C.E.W.

10 PRECAST CIRCULAR MANHOLE AND CATCH BASIN
 SCALE: N.T.S.



NOTES:
 1. REFER TO TYPICAL SECTION, GENERAL NOTES OR SPECIFICATIONS FOR INSTALLATION AND MATERIAL REQUIREMENTS.
 2. ALL EDGES OF THE EXISTING ASPHALT PAVEMENT WHERE RESURFACING WILL ABUT, SHALL BE SAWCUT IN STRAIGHT LINES PARALLEL TO OR PERPENDICULAR TO ROADWAY, PRIOR TO RESURFACING.
 3. IF THE DITCH IS FILLED TEMPORARILY, IT SHALL COVERED WITH A 2" THICK SP 9.5 ASPHALTIC CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING, UNTIL REPLACED WITH A PERMANENT PAVEMENT PATCH.

11 PAVEMENT RESTORATION CURRENT
 SCALE: N.T.S.



12 CONNECTION TO EXISTING PAVEMENT
 SCALE: N.T.S.

FOR BIDDING NOT FOR CONSTRUCTION ELEVATIONS ARE IN 88 NAVD



File Name: P:\Projects\2016\169047_Hallandale Beach Stormwater 42 Year Cdbg\cadd Files\Drawings\169047-C-STRM-DTL.S.dwg (Plotted by: Katharine Kupsky on Monday, June 12, 2017 12:22:37 PM)

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY

Calvin, Giordano & Associates, Inc.
 EXCEPTIONAL SOLUTIONS
 1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316
 Phone: 954.921.1778 • Fax: 954.921.8807
 Certificate of Authorization 514

HALLANDALE BEACH STORMWATER 42 YEAR CDBG
 HALLANDALE BEACH, FLORIDA

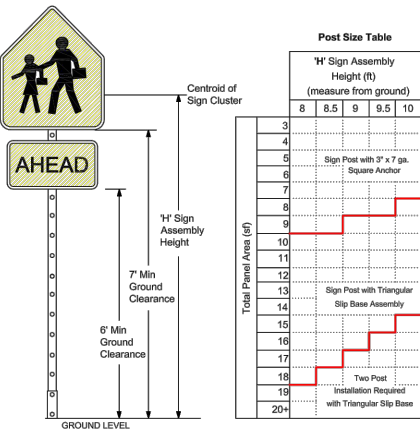
DRAINAGE DETAILS

MOHAMMED SHARFUZZAMAN, P.E.
 STATE OF FLORIDA PROFESSIONAL ENGINEER
 LICENSE No. 67640
 DATE: 6/9/17

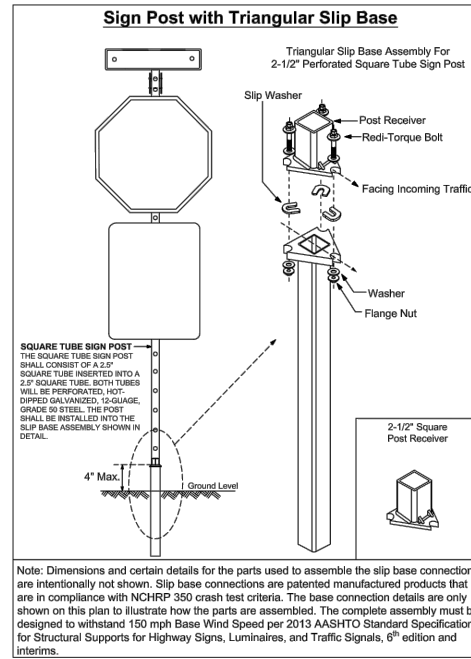
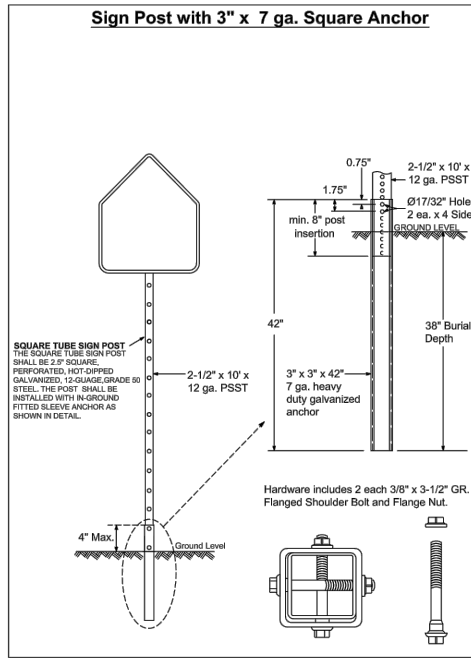
SCALE: AS SHOWN
 PROJECT No: 16-9047

SHEET: PD3

- GUIDE TO USE THIS STANDARD:**
1. Calculate the Total Panel Area and the centroid "C" for an individual sign or a sign cluster.
 2. Determine the height "H" from the groundline for the individual sign or the cluster.
 3. Consult the Post Size Table and find the intersection point.
 4. Design the post and the foundation according to the required Post Size and Assembly Details.



Post Size Table	
H' Sign Assembly Height (ft) (measure from ground)	Total Panel Area (ft²)
8	8.5
9	9.5
10	10.5
11	11.5
12	12.5
13	13.5
14	14.5
15	15.5
16	16.5
17	17.5
18	18.5
19	19.5
20	20.5



Note: Dimensions and certain details for the parts used to assemble the slip base connections are intentionally not shown. Slip base connections are patented manufactured products that are in compliance with NCHRP 350 crash test criteria. The base connection details are only shown on this plan to illustrate how the parts are assembled. The complete assembly must be designed to withstand 150 mph Base Wind Speed per 2013 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 6th edition and Interims.

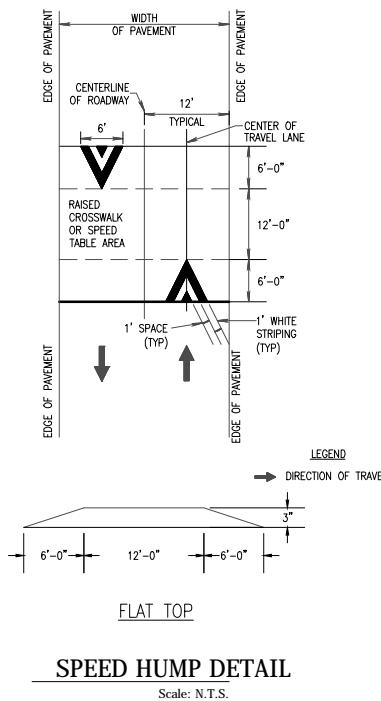
DATE	REVISIONS	DESCRIPTION
01-05-2016	N/A	
03-21-2017	UPDATED POST SIZE	



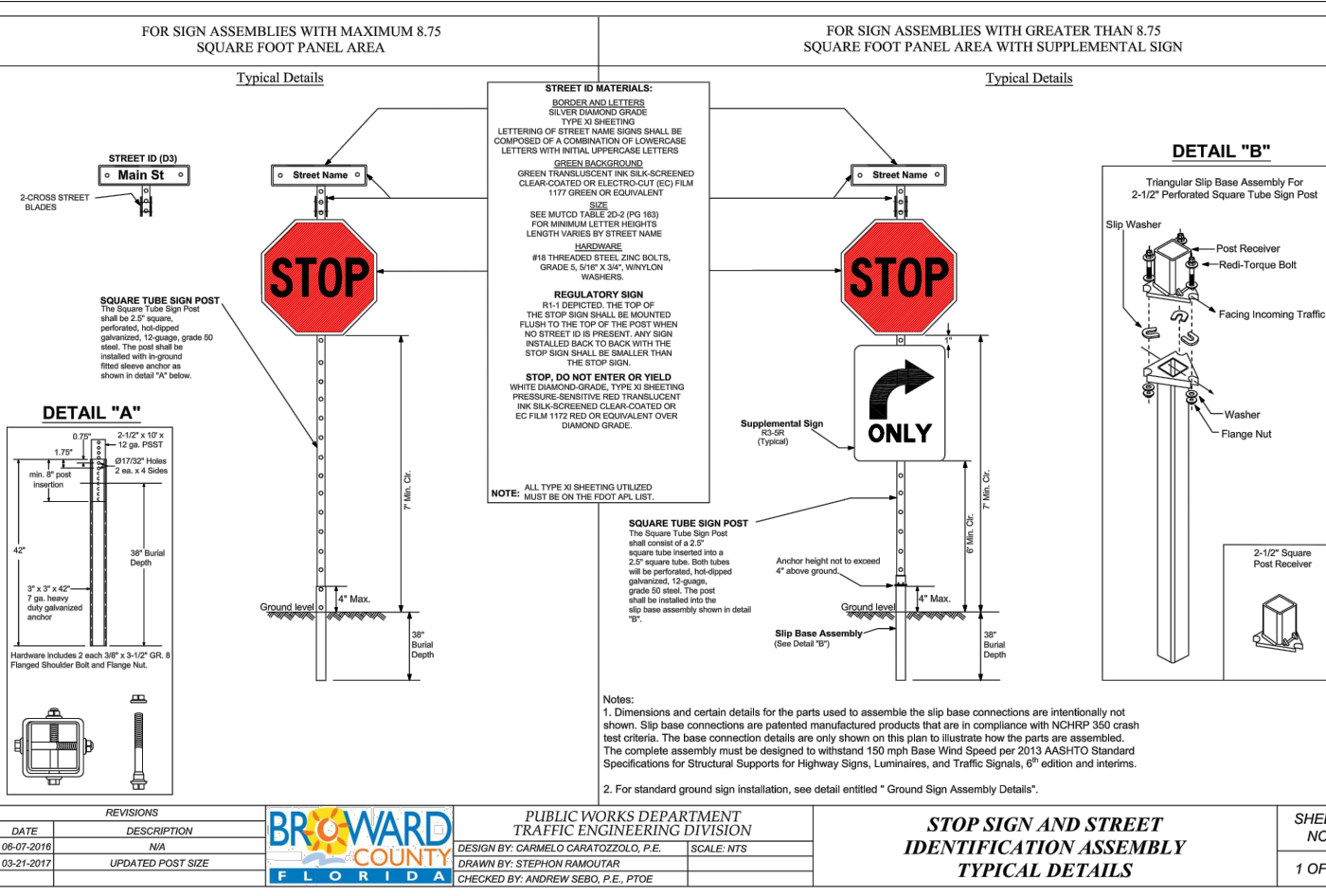
**PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION**
DESIGN BY: YVES DANJOU, P.E.
DRAWN BY: STEPHON RAMOUTAR
CHECKED BY: ANDREW SEBO, P.E., PTOE

**GROUND SIGN ASSEMBLY
DETAILS**

SHEET NO.
1 OF 1



SPEED HUMP DETAIL
Scale: N.T.S.



DATE	REVISIONS	DESCRIPTION
06-07-2016	N/A	
03-21-2017	UPDATED POST SIZE	



**PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION**
DESIGN BY: CARMELO CARATTOZZOLO, P.E.
DRAWN BY: STEPHON RAMOUTAR
CHECKED BY: ANDREW SEBO, P.E., PTOE

**STOP SIGN AND STREET
IDENTIFICATION ASSEMBLY
TYPICAL DETAILS**

SHEET NO.
1 OF 1

Broward County Traffic Engineering Division's
Speed Humps Specifications

The following is a typical installation of a speed hump within the unincorporated area of Broward County.

1. The speed hump shall be twenty-four (24) feet in length for the width of the roadway (typically twenty-four (24) feet), with the following characteristics:
 - a. Height of three (3) inches
 - b. Twelve (12) foot flat top
 - c. Six (6) foot transitions on both the near & far sides
 - d. Eighteen (18) inch transitions on both curb sides
2. Key cut twenty-four (24) inches on both the near & far sides with twelve (12) inches next to speed hump and twelve inches underneath, for a depth of one and a half (1 1/2) inches.
3. Key cut twelve (12) inches on both curb side edges, underneath the speed hump, for a depth of one and a half (1 1/2) inches.
4. Pavement markings shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) Figure 3B-30 Option "A".
 - a. For each direction of travel, install two (2) Chevrons, one (1) foot white pavement marking, spaced one (1) foot apart for a length of six (6) feet centered on the travel lane, placed on the transition only.
 - b. Six (6) inch white thermoplastic edge line to be replaced along side of the speed hump, if this edge line previously existed.
 - c. Centerline to be replaced if this centerline previously existed:
 - i. Either a six (6) inch single yellow in thermoplastic as a ten (10) / thirty (30) skip line; or
 - ii. Six (6) inch double yellow solid line in thermoplastic.

Other information:

1. All speed humps shall be installed in two (2) lifts of S3 asphalt.
2. Tack coat to be applied prior to laying the S3 asphalt.
3. An approved Maintenance of Traffic Plan shall be established for each speed hump installation.
4. Installation shall be in compliance with the FDOT Standards Specifications for Road and Bridge Construction 2010.

February 22, 2010; revised February 24, 2010

**PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION**
2300 W. Commercial Boulevard • Fort Lauderdale, Florida 33309 • 954-847-2600 • FAX 954-847-2700

MAINTENANCE OF TRAFFIC - SCHOOL/PEDESTRIAN

The Maintenance of Traffic plan, provided by the Contractor, shall include provisions for pedestrian and/or school student traffic as well as vehicular traffic. The following are minimum requirements:

1. The safe walk route for all school students within the vicinity of the construction zone shall be maintained during student arrival and dismissal times. If the current walking surface cannot be maintained, then a temporary walkable surface shall be created. The safe walk route shall be separated from the construction activity during the entire length of the project encompassing the entire walk route with proper pedestrian openings at designated crossings in compliance with FDOT Design Standards Index No. 600 as well as meeting all ADA requirements.
2. All construction equipment activity around any designated crosswalk shall cease to operate during the student arrival and dismissal times. All construction equipment activity adjacent to a designated walk route shall cease operating unless satisfactorily barricaded from the walk route.
3. In the case that a designated crossing or any portion of the designated walk route cannot be maintained, the Contractor shall notify the Special Projects Coordinator at Broward County Traffic Engineering Division, (954) 847-2600, a minimum of ten (10) working days prior to closing that route in order to establish an alternate crossing/route.
4. It shall be the Contractor's responsibility to install any necessary pavement, road rock, pavement markings and signage and/or any pedestrian signalization and/or signal modification to accommodate an existing or alternate walk route throughout the entire length of the project.
5. It shall be the Contractor's responsibility to provide State Certified School Crossing Guards or Off Duty Police Officers to cross students at all locations other than those previously designated. The Contractor may use Flagmen, but ONLY if they are State Certified as a School Crossing Guard.
6. Thirty (30) days prior to the beginning of construction the Contractor shall notify the Special Projects Coordinator at Broward County Traffic Engineering Division, (954) 847-2600 or at broward@traffic.org to discuss all necessary safety measures.
7. It shall be the Contractor's responsibility to notify the following Broward County School Board Pupil Transportation Department personnel if construction will impact any bus routes:

• Ruth Masters	Routing	(754) 321-4400 Ext. # 2309	ruth.masters@browardschools.com
• Vincent Harrell	Student Transportation & Fleet Service	(754) 321-4472	vincent.harrell@browardschools.com
• Mary Tochtermann	Student Transportation & Fleet Service	(754) 321-4400 Ext. # 2006	mary.tochtermann@browardschools.com
8. Upon coordination with the aforementioned personnel, and if deemed necessary, a pre-construction meeting will be held to determine all bus routes and to make any necessary arrangements for rerouting. The Special Projects Coordinator from the Broward County Traffic Engineering Division, (954) 847-2600, will be notified and may attend the pre-construction meeting.
9. The Contractor shall be responsible for obtaining an approved Maintenance of Traffic Plan (MOT), specifying the above school/pedestrian conditions, through the Broward County Traffic Engineering Division or the Local Municipality, depending on the roadway jurisdiction. The conditions outlined in the MOT are fully effective as part of the proposed improvements. The Contractor shall be responsible for ensuring that all work associated with the project is in compliance with all the requirements of the approved MOT.
10. The Contractor shall ensure that there are NO speed limit signs installed within the designated reduced speed school zone at any time throughout the project.

Revised: 9/24/14

File Name: E:\Projects\2016\169047_Hollandale Beach Stormwater_42 Year Cdbg\cadd Files\Drawings\169047-C-STRM-DTL.S.dwg (Plotted by: Katharine Kupsky on Monday, June 12, 2017 11:26:06 AM)

