



INVITATION FOR BID

IFB # 43-11-12

Smoke Testing of the Gravity Sanitary Sewer Collection System

RESPONSES ARE DUE NO LATER THAN

Tuesday, August 28, 2012 at 3:00 PM (Local Time)

AT

**CITY OF NORTH MIAMI
OFFICE OF THE CITY CLERK
CITY HALL, 1ST FLOOR
776 NE 125TH STREET
NORTH MIAMI, FL 33161-4116**

The responsibility for submitting a response to this solicitation at the Office of the City Clerk on or before the stated time and date will be solely and strictly the responsibility of the proposer. The City of North Miami will in no way be responsible for delays caused by the United States mail delivery or caused by any other occurrence.

Copies of this IFB Document may be obtained by contacting DemandStar by Oniva at www.demandstar.com or calling toll free 1-800-711-1712 and request Document No. 43-11-12

Contact Person: Tiffany Nunn
Email: tnunn@northmiamifl.gov | Phone: (305) 895-9886 | Fax: (305) 895-1015



INVITATION FOR BID

The City of North Miami (City) is seeking sealed bids from licensed General Contractors, to furnish all labor, equipment, materials and expertise as required for the Smoke Testing of Gravity Sanitary Sewer System in the City of North Miami, Florida.

BID SUBMISSION

Please submit an original bid and two (2) copies in response to this Invitation for Bid (IFB). The bids are to be submitted in a sealed envelope bearing the name of the proposer, and the address as well as the title of the IFB no later than 3:00 P.M. local time **Tuesday, August 28, 2012** at which time they will be opened and read in the Council Chambers by the Procurement Director. Bids received after this time will not be considered and no time extensions will be permitted. Address your proposal to City of North Miami, Office of the City Clerk, 776 N E 125th Street, North Miami, Florida 33161. Please clearly mark bids:

IFB # 43-11-12

Smoke Testing of the Gravity Sanitary Sewer Collection System

A 5% Bid Bond and 100% Performance Bond is a requirement of this bid.

The City's tentative schedule for this Invitation to Bid is as follows:

Issue Date:	August 3, 2012
Opening of Bids:	August 28, 2012
Cut- off Date for Questions:	August 24, 2012
Bid Review:	August 31, 2012
Award / Council Approval:	TBD

The City reserves the right to delay or modify scheduled dates and will notify proposers of all changes in scheduled dates.

Copies of this Bid Document may be obtained by contacting DemandStar by Oniva at www.demandstar.com or calling toll free 1-800-711-1712 and request Document No. 43-11-12 or may be purchased for a non-refundable fee of \$25.00 for a hard copy from the Purchasing Department, 776 N E 125th Street, North Miami, Florida 33161.

FOR INFORMATION

For information on this Invitation for Bid, contact the Purchasing Department, (305) 893-6511 ext. 12131.

ACCEPTANCE AND REJECTIONS

The City of North Miami reserves the right to reject any or all bids with or without cause; to waive any or all irregularities with regard to the specifications and to make the award to the firm offering the greatest advantage to the City.

Please be advised that the Bid(s) are issued subject to the City of North Miami Code Section 2-312 prohibiting certain communications with the City as completely specified in General Conditions of the Bid(s).

We look forward to your active participation in this solicitation.

Sincerely,

Tiffany Nunn

Tiffany Nunn, CPPB

Purchasing Agent

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All of our forms can now be found on our website at:
<http://www.northmiamifl.gov/business/purchasing/forms.asp>. These forms are fill –in forms.
Please ensure to include all applicable forms with your bid documents signed and notarized as required. Emailed forms will not be accepted.

Section 5 **General Terms & Conditions**

Section 6 **Attachments**

LOCATION MAPS

Section 1.0
SCOPE OF WORK

1.1 SCOPE OF WORK

The purpose and intent of this invitation for bid is to establish a contract, by means of sealed bids, to furnish all labor, equipment, materials and expertise as required for the Smoke Testing of the Gravity Sanitary Sewer Collection System in the City of North Miami, Florida.

1.2 GENERAL

All materials and procedures shall be consistent with these specifications, current industry standards, and as approved by the City's Engineer. The awarded bidder shall minimize the physical entry of the smoke testing personnel into the sanitary sewer facilities. If required, manhole entry shall be in accordance with Federal, State, and local regulations for confined space entry. The Contractor shall provide all safety equipment required for manhole entry operations, including harnesses, ventilation equipment, etc.

The Work to be performed under this Invitation for Bid shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles and for furnishing all transportation and services, including fuel, power, water, and essential communications, and for the performance of all labor, work, or other operations required for the fulfillment of smoke testing of gravity sewer collection system.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Project consists of smoke testing of gravity sewers and shall include furnishing all labor, materials, equipment and incidentals for performing the work.
- B. Prior to construction, the Contractor shall identify existing utilities. The CONTRACTOR will be responsible for the coordination of his work with the associated utility owner and permitting agencies having jurisdiction over the existing utilities or the associated work.
- C. The Work also includes providing temporary sanitary sewer service of service laterals bypass pumping or plugging, if needed, and other appurtenant and miscellaneous items and work for a completed project.
- D. Work shall be performed to ensure a minimum of traffic disruption or sewer down time as necessary, and work must be coordinated with affected residents and utility personnel. Whenever the property owners' use of the sanitary sewer must be interrupted by the Work, the Contractor shall notify the residents well in advance of the interruption. This notification shall be accomplished with door hanger notification cards to be placed at the addresses of affected customers. Property owners shall be informed when service interruption will take place and the approximate duration. This notice shall be provided a minimum of 24 hours in advance of commencement of service intrusion. The Contractor shall make every effort to minimize inconvenience to the public and property owners.
- E. The Contractor shall perform all work in strict accordance with all applicable OSHA Standards. Particular attention is drawn to those safety requirements involving man entry in confined spaces. Prior to entering manholes and other confined spaces the atmosphere shall be evaluated by the Contractor to determine the presence of toxic, flammable or explosive vapors or lack of oxygen in accordance with local, state, or federal safety regulations. Contractor shall follow all procedures outline by OSHA's Confined Space Entry requirements.
- F. The Contractor shall warrant to the OWNER that the equipment used on this Contract where covered by patents or license agreements is furnished in accordance with such agreements and that the prices included herein cover all applicable royalties and fees in

accordance with such license agreements. The Contractor shall defend, indemnify and hold the OWNER harmless from and against any and all costs, loss, damage or expense arising out of or in any way connected with any claim of infringement of patent, trademark or violation of license agreement.

1.4 MINIMUM QUALIFICATIONS

Bidder shall have been in the business of providing similar smoke testing services for a minimum of 3 years and submit proof of same in the bid submittal. In addition to this requirement, the bidder shall submit with its bid the following items:

- A. A list of references from present or former clients. This list shall demonstrate the successful completion of at least 3 similar projects of similar size (600,000 LF) or greater. The information required for the reference list shall include the Client Organization's Name, Address, Contact Person(s), Telephone Number(s) and Description of Service including Start and Completion Dates. By submitting a bid, the Bidder authorizes the City to conduct reference investigations as needed.
- B. A list of employees that will be involved in performing the specific work under this award, including years of experience and any licensing, certifications and training received.
- C. A list of equipment and materials that are to be used in the execution of the work detailed herein. This list shall include the capabilities and any other relevant technical data of the equipment that is listed. This information shall be sufficient for the City to determine the suitability of the equipment to accomplish the work described herein. The City reserves the right to inspect the Contractor's place of business to ensure adequacy in these aforementioned items prior to the start of the award resulting from this specification.
- D. Documentation that details an established in-house safety training program or procedures for employees who will be involved in the performing of the work described herein. Bidders that do not meet these requirements and/or do not submit the abovementioned information in their bid response package may not be considered.

1.5 ON-SITE SUPERVISOR

The contractor shall provide a local superintendent at all times work is in progress. The superintendent will maintain a local cellular telephone number at which the superintendent can be reached at all times while work is under way.

1.6 WEEKLY NOTICES

The contractor will provide weekly notices to the City by facsimile or e-mail before 8:00 a.m. on each Monday of any week that smoke testing activities occur. These notices will provide the working location(s) for that week. If necessary, and at the sole discretion of the City, the contractor will also notify business and commercial or residential customers of the contractor's operations the day prior to the performance of the work. These notices will provide the working location(s) for that day.

1.7 ADDITIONAL SPECIFICATIONS

Please see Attachments in Section 6.0 for additional specifications.

End of Section 1

SECTION 2.0 SPECIAL CONDITIONS

2.1 PURPOSE

The purpose of this bid is to establish a contract, by means of sealed bids, to furnish all labor, equipment, materials and expertise as required for the Smoke Testing of the Gravity Sanitary Sewer Collection System in the City of North Miami, Florida.

The City further seeks a contractor that is a willing participant in the City's goal to develop subcontracting and employment opportunities to local businesses and residents as defined by Section 7-151 of the City Code.

The successful bidder will be required to submit, a Community Benefits Plan for approval by the City Manager. The Community Benefit plan shall be exclusive of the City of North Miami's Local Preference requirement, under Section 7-151 of the Code. The successful Bidder's Community Benefits Plan shall be incorporated into and shall become a part of the agreement entered into between the City and the selected Bidder (See Section 2.30).

2.2 PROJECT SCHEDULE

The Contractor shall meet with City's designee prior to the commencement of work in order to finalize the schedule and timeline to complete the services in the designated areas. The City estimates that all work, including inspections should be completed within 120 days of the Notice to Proceed. Any schedule changes shall be approved in writing by the City. In the event that the Contractor does not complete all work detailed herein within the 120 day period, the City shall have the right to assess monetary deductions in the amount of \$100.00 per day for every day after the initial project schedule completion date.

2.3 METHOD OF AWARD

Award of this bid may be made to the lowest responsive, responsible Bidder whose bid, qualifications and references demonstrates to be the most advantageous to the City of North Miami. The City reserves the right to award to more than one Bidder.

2.4 MINIMUM QUALIFICATIONS

Bidder shall have been in the business of providing similar smoke testing services for a minimum of 3 years and submit proof of same in the bid submittal. In addition to this requirement, the bidder shall submit with its bid the following items:

- A list of references from present or former clients. This list shall demonstrate the successful completion of at least 3 similar projects of similar size (600,000 LF) or greater. The information required for the reference list shall include the Client Organization's Name, Address, Contact Person(s), Telephone Number(s) and Description of Service including Start and Completion Dates. By submitting a bid, the Bidder authorizes the City to conduct reference investigations as needed.
- A list of employees that will be involved in performing the specific work under this award, including years of experience and any licensing, certifications and training received.
- A list of equipment and materials that are to be used in the execution of the work detailed herein. This list shall include the capabilities and any other relevant technical data of the equipment that is listed. This information shall be sufficient for the City to determine the

suitability of the equipment to accomplish the work described herein. The City reserves the right to inspect the Contractor's place of business to ensure adequacy in these aforementioned items prior to the start of the award resulting from this specification.

- Documentation that details an established in-house safety training program or procedures for employees who will be involved in the performing of the work described herein. Bidders that do not meet these requirements and/or do not submit the above-mentioned information in their bid response package may not be considered.

2.5 QUANTITIES

The City shall not be required to purchase any minimum or maximum quantities during the term of any award resulting from this specification.

- A. The quantities for each item are identified by liner feet, and shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the OWNER unless otherwise specified. The OWNER will witness all field measurements.
- B. When depths of cuts are indicated in the bid items, they shall be measured vertically from the existing grade at excavation point, paved or unpaved, to the pipe invert.
- C. The quantities stated in the Bid Proposal are approximate only and are intended to serve as a basis for the comparison of bids and to fix the approximate amount of the cost of the Project. The OWNER does not expressly or impliedly agree that the actual amount of the work to be done in the performance of the contract will correspond with the quantities in the Bid Proposal; the amount of work to be done may be more or less than the said quantities and may be increased or decreased by the OWNER as circumstances may require. The increase or decrease of any quantity shall not be regarded as grounds for an increase in the unit price or in the time allowed for the completion of the work. Although, if any quantity in the Bid is increased or decreased by 25% of the amount in the Bid Proposal form, or any item(s) or work is extended or increased by 25% of the amount in the Bid Proposal form, the OWNER retains the right to re-negotiate the unit price of said item(s).

2.6 PAYMENT

Items 1-3 on the bid response page shall provide full compensation for smoke testing operations required for the completion of the work. These items shall include, but not be limited to, all necessary and required labor, materials, equipment and incidentals associated with smoke testing.

- A. These items shall include, but not be limited to, all necessary and required traffic control; pumps; piping; gasoline/diesel fuel; maintenance; transportation and storage; temporary bypass and service piping; labor; materials and/or any other costs associated with bypass pumping.
- B. These items shall include, but not be limited to, all necessary and required flagmen; arrow boards; barricades; cones; mobilization; gasoline/diesel fuel; maintenance; transportation and storage; labor; materials and/or any other costs associated with maintenance of traffic.
- C. Plugging or blocking a sewer line shall be included in these bid items and shall be considered incidental work and no additional payment shall be considered.
- D. Maintenance of traffic shall be included in these bid items and shall be considered incidental work and no additional payment shall be considered.

2.7 PRICES SHALL BE FIXED AND FIRM FOR TERM OF CONTRACT

If the Bidder is awarded a contract under this bid solicitation, the prices quoted by the Bidder on the Bid Form shall remain fixed and firm during the term of this contract; provided, however, that the Bid may offer incentive discounts from this fixed price to the City at any time during the contractual term.

2.8 INSURANCE

Bidders must submit with their bid, proof of insurance meeting or exceeding the following requirements or a letter of intent to provide the following requirements if awarded the contract:

- Worker's Compensation Insurance – as required by law
- Employer's Liability Insurance - \$1,000,000 per occurrence
- Commercial General Liability Insurance - \$1,000,000 per person and \$1,000,000 per accident for bodily injury (occurrence based policy form preferred). This coverage shall include premises, operations, independent contractors, products-completed operations, personal & advertising injury and liability assumed under an insured contract.
- Professional Liability - \$1,000,000
- Business Automobile Liability Insurance (covering owned, non-owned & hired vehicles) - \$500,000 per occurrence, \$500,000 per accident for bodily injury and \$500,000 per accident for property damage

The required insurance coverage shall be issued by an insurance company authorized and licensed to do business in the State of Florida, with the minimum rating of B+ or better, in accordance with the latest edition of A.M. Best's Insurance Guide.

The City of North Miami shall be endorsed as an additional insured under the Commercial General Liability and Business Automobile Liability. The contractor will be responsible for paying on behalf of the additional insured any deductible or self insured retention. All policies must be endorsed to provide notice of cancellation to the City.

The successful Bidder(s) must submit, no later than ten (10) days after award and prior to commencement of any work, a Certificate of Insurance evidencing required coverage including "additional insured" designation to the City of North Miami.

2.9 CONTACT PERSON

For any additional information regarding the specifications and requirements of this bid, contact: Tiffany Nunn via facsimile: (305) 891-1015 or email at tnunn@northmiamifl.gov.

2.10 BID CLARIFICATION

Any questions or clarifications concerning this Bid shall be submitted in writing by mail, facsimile or email to the Purchasing Department, 776 N.E. 125th Street, North Miami, Florida 33161, FAX: (305) 891-1015. The bid title/number shall be referenced on all correspondence. All questions must be received no later than **3:00 pm Thursday, August 24, 2012**. All responses to questions/clarifications will be sent to all prospective Bidders in the form of an addendum. **NO QUESTIONS WILL BE RECEIVED VERBALLY OR AFTER SAID DEADLINE.**

2.11 **FAILURE TO PERFORM**

If in the opinion of the City's representative, the Bidder refuses to begin work, improperly perform said work, or shall neglect or refuse to take out or rebuild such work, as shall have been rejected or as being defective or unsuitable, then City's representative may notify the Bidder to repair and replace work immediately or discontinue all work under this Contract.

If at any time the City's representative shall be of the opinion that the said work is being unnecessarily delayed and will not be finished within the prescribed time then City's representative may notify the Bidder to discontinue all work under this Contract. The Bidder shall immediately respect said notice and stop said work and cease to have any rights in the possession of the ground and shall forfeit this contract.

The City may thereupon look to the next lowest and responsive and responsible Bidder to complete the work or advertise for bids and let a contract for the uncompleted work in the same manner as was followed in the letting of this Contract and charge the cost thereof to the original Bidder upon his contract. **Any excess cost arising there from over and above the original contract price shall be charged to the Bidder.**

2.12 **BID/PERFORMANCE/PAYMENT BOND**

All bids must be accompanied by a bid bond in the amount of 5% of the total bid submitted, to be in the form of a Cashier's Check, made payable to the City of North Miami; a bond written by a surety company authorized to do business in the State of Florida and shall comply with State Statute 287.0935. The bond, if in the form of a Cashier's Check, of all unsuccessful Bidders will be returned after bid award.

The **successful** Bidder will be required to furnish to the City of North Miami, a Performance Bond and Payment Bond for 100% of the total bid submitted, to be in the form of a Cashier's Check, made payable to the City of North Miami no later than ten (10) days after award; a bond written by a surety company authorized to do business in the State of Florida and shall comply with State Statute 287.0935; or an Irrevocable Letter of Credit. If the latter is chosen, it must be written on a bank located Miami-Dade County, be in the amount of the contract and should clearly and expressly state that it cannot be revoked until express written approval has been given by the City of North Miami. The City, to draw on same, would merely have to give written notice to the bank with a copy to the successful Bidder.

2.13 **LIQUIDATED DAMAGES**

Liquidated damages may apply for untimely delivery of goods or services.

2.14 **CONDITIONS OF WORK**

If property (public or private) is damaged performing work specified or is removed for the convenience of the work, it shall be repaired or replaced at the expense of the Bidder in a manner acceptable to the City of North Miami. Such property shall include but not limited to: roads, driveways (whether concrete or asphalt), approaches (whether concrete or asphalt), sod, walls, fences, water features, footings, underground utilities, shrubs, trees, etc.

Bidder shall submit to the Public Works Department for review, pictures or video of the work site(s) having pre-existing damage to roadways, driveways, approaches, sod, swales, adjacent improvements, etc. before beginning work. Failure to do so shall obligate the Bidder to make repairs per above paragraph.

2.15 PROTECTION

Bidder shall be solely responsible for pedestrian and vehicular safety and control within the work site and shall provide the necessary warning devices, barricades and ground personnel needed to give safety, protection and warning to persons and vehicular traffic within the area. All safety devices must have suitable and sufficient lighting for the prevention of accidents. All minimum safety standards required by Municipal, County, State and Federal ordinances and laws shall be strictly met by the Bidder.

2.16 HOURS OF WORK

Bidder will perform work Monday through Friday from 7:30 a.m. to 5:00 p.m., excluding holidays unless prior approval is given by the City. Hours beyond those allotted must be requested in writing and approved by the City of North Miami.

2.17 EMPLOYEES

Bidder shall be responsible for the appearance of all working personnel assigned to the project (clean and appropriately dressed at all times). Personnel must be able to supply proper identification at all times.

All employees of the Bidder shall be considered to be at all times the sole employees of the contractor, under the Bidder's sole direction, and not an employee or agent of the City of North Miami. The Bidder shall supply competent and physically capable employees and the City may require the Bidder to remove any employee it deems careless, incompetent, insubordinate or otherwise objectionable and whose presence on City property is not in the best interest of the City. City shall not have any duty to implement or enforce such requirements. Bidder shall assign an "On Duty" supervisor who speaks and reads English.

2.18 WARRANTY

The successful Bidder will be required to warranty all work performed for a minimum of one (1) year.

2.19 PERMITS

Bidder shall obtain all necessary permits. As to the City, the City will waive its permit fee, but is required to collect the \$.60/\$1,000 Miami-Dade county surcharge fee. Work to be performed is located on a County maintained road and Bidder must obtain permits from the County and other authorities having jurisdiction.

Bidder shall verify all locations of underground utilities with any and all applicable utility company prior to any work.

All work not stated herein shall be in compliance with the Florida Building Code and all other national, state, and local codes and regulations. All permits to be posted on job site.

All inspections shall be requested a minimum of twenty-four (24) hours prior to inspection. Inspection shall be required at the following stages of construction:

- a. Subgrade prep completion
- b. Sidewalk formed prior to pouring concrete

- c. Paving
- d. Final

2.20 PRODUCT INFORMATION

All Bidders must submit product information on the items they propose to furnish on this bid if different from products specified. Any bid not containing this information may be rejected for that reason.

2.21 EQUAL PRODUCT, MANUFACTURER'S PRODUCT

Where equal is proposed, bid must be accompanied by complete product information sheet. The City shall be the sole judge of the acceptability of the product in conformance with the Bid Specifications and its decision shall be final.

2.22 COMPLETE PROJECT REQUIRED

These specifications describe the various items or classes of work required, enumerating or defining the extent of same necessary, but failure to list any items or classes under scope of the several sections shall not relieve the Bidder from furnishing, installing or performing such work where required by any part of these specifications, or necessary to the satisfactory completion of the project.

2.23 BID SUBMITTAL

All bids submitted shall include the completed Bid Form and all required product information and any other items as indicated on the Bid Form. Bids will be considered "Non-Responsive" if the required information is not submitted by the date and time specified.

Before submitting bid, each Bidder shall make all investigations and examinations necessary to ascertain if any addendums were issued by the Purchasing Director.

2.24 REFERENCES AND SUB-CONTRACTORS

Each bid must be accompanied by a list of three (3) references of similar work, which shall include the name of the company, a contact person and the telephone number. **NO BID WILL BE CONSIDERED WITHOUT THIS LIST.** It is the responsibility of the Bidder to ascertain that the contact person will be responsive.

Bidders must complete "Form A-6 - Proposer's Disclosure of Subcontractors and Suppliers". Forms must be completed and returned with Bid package.

2.25 LATE BIDS

The City of North Miami cannot accept bids received after opening time and encourages early submittal.

2.26 EXCEPTIONS TO SPECIFICATIONS

Exceptions to the specifications shall be listed on the Bid Form and shall reference the section. Any exceptions to the General or Special Conditions shall be cause for the bid to be considered non-responsive.

2.27 BID FORMAT

To be considered a valid bid, Bidders must provide an **ORIGINAL, TWO (2) COPIES AND ONE (1) CD** of the Bid and the Bid Form and must be filled in completely in a sealed envelope in the following format:

- Section 1 Bidder's Qualifications & References (See Section 1.4)
- Section 2 Bid Form/Price List
- Section 3 Required Forms A1-A10

2.28 CHANGE ORDERS

After the issuance of a purchase order, the successful Bidder agrees if any change orders are necessary price will not exceed actual cost plus five percent (5%).

2.29 COMPLETE JOB

The Work to be performed under this Contract shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles and for furnishing all transportation and services, including fuel, power, water, and essential communications, and for the performance of all labor, work, or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The Work shall be complete and all work, materials, and services not expressly shown or as called for in the Contract Documents which may be necessary for the complete and proper construction of the Work in good faith shall be performed, furnished, and installed by the contractor as though originally so specified or shown, at no increase in cost to the City.

2.30 COMMUNITY BENEFITS PLAN

The Successful Bidder will be required to submit, a Community Benefits Plan for approval by the City Manager. The Community Benefit plan shall be exclusive of the City of North Miami's Local Preference requirement, under Section 7-151 of the Code.

The Successful Bidder will be required to document their experience and track record in delivering to a municipality, county or other local government agency a Community Benefits Plan. The Successful Bidder shall be required to demonstrate and provide to the City a proposed Community Benefit Plan which has identifiable and observable benefit to the community within the City. Bidders are encouraged to be creative in the development of a Community Benefit Plan and the types of benefits their plan is designed to provide. The City Manager, as the City's Chief Executive Officer, shall approve the final Community Benefits Plan proposed by the successful Bidder, as a precondition to the execution of any agreement. The Successful Bidder's Community Benefits Plan shall be incorporated into and shall become a part of the agreement entered into between the City and the selected Bidder.

End of Section 2

**INVITATION TO BID
SECTION 3
BID SUBMITTAL FORMS**

DELIVER TO:

City Of North Miami
City Clerk
776 N.E. 125th Street
North Miami, FL 33161-5654

**OPENING: 3:00 P.M.
August 28, 2012**

PLEASE QUOTE PRICES F.O.B. DESTINATION, LESS TAXES, DELIVERED IN
CITY OF NORTH MIAMI, FLORIDA

NOTE: City of North Miami is exempt from all taxes (Federal, State, and Local). Bid price should be less all taxes. Tax Exemption Certificate furnished upon request.

Issued by: City of North Miami
Purchasing Department

Date Issued:
August 3, 2012

Sealed bids are subject to the Terms and Conditions of this Invitation to Bid and the accompanying Bid Submittal. Such other contract provisions, specifications, drawings or other data as are attached or incorporated by reference in the Bid Submittal, will be received at the office of the Purchasing Department at the address shown above until the above stated time and date, and at that time, publicly opened for furnishing the supplies or services described in the accompanying Bid Submittal Requirement.

43-11-12

Smoke Testing of the Gravity Sanitary Sewer Collection System

A Bid Deposit in the amount of **5%** of the total amount of the bid shall accompany all bids

A Performance Bond in the amount of **100%** of the total amount of the bid will be required upon execution of the contract by the successful bidder and City of North Miami

Procurement Agent:

Tiffany Nunn

Firm Name:

Commodity Code(s):

89000,89064

**RETURN ONE ORIGINAL AND TWO COPIES OF BID SUBMITTAL PAGES AND
AFFIDAVITS**

**FAILURE TO COMPLETE THE CERTIFICATION REGARDING LOCAL PREFERENCE ON
PAGE 14 OF SECTION 3, BID SUBMITTAL FORM SHALL RENDER THE VENDOR
INELIGIBLE FOR LOCAL PREFERENCE**

**FAILURE TO SIGN PAGE 14 OF SECTION 3, BID SUBMITTAL, WILL RENDER YOUR BID
NON-RESPONSIVE**

BID FORM: PRICE LIST

Item Number	Description	Unit	Quantity	Unit Price	Total Price
1	Smoke Testing of Gravity Sewers (4- inch to 12-inch)	LF	600,000	\$ _____	\$ _____
2	Smoke Testing of Gravity Sewers (15-inch to 24-inch)	LF	20,000	\$ _____	\$ _____
3	Smoke Testing of Gravity Sewers (30-inch to 36 inch)	LF	5,000	\$ _____	\$ _____
GRAND TOTAL					\$ _____

The price listed in the bid form shall include the total cost to complete the Work including but not limited to materials, labor, equipment, bonds, insurance, etc., as necessary to ensure proper delivery of services and product requested by the City of North Miami.

I understand and agree to be bound by the conditions contained in the IFB and shall conform with all requirements of the IFB.

FIRM NAME (Please Print)

AUTHORIZED SIGNATURE

TITLE

DATE

**BID SUBMITTAL FOR:
43-11-12**

FEIN NO. : ____/____-____/____/____/____/____/____/____

(Bidder Federal Employer Identification Number) If none, Bidder Social Security Number.

- LOCAL PREFERENCE CERTIFICATION:** For the purpose of this certification, a "local business" is a business located within the limits of City of North Miami that conforms with the provisions of Section 5.62 of the General Terms and Conditions of this solicitation and contributes to the economic development of the community in a verifiable and measurable way. Place a check here only if affirming bidder meets requirements for Local Preference. **Failure to complete this certification at this time (by checking the box above) shall render the Bidder ineligible for Local Preference.**

OR

- WORKFORCE LOCAL PREFERENCE CERTIFICATION:** The local preference may be applied to firms with a least ten percent (10%) of its total workforce residing within the geographical boundaries of the City. Place a check here only if affirming bidder meets the requirements for workforce Local Preference. **Failure to complete this certification at this time (by checking the box above) shall render the Bidder ineligible for Workforce Local Preference.**

OR

- SUBCONTRACTOR LOCAL PREFERENCE CERTIFICATION:** The local preference may be applied to firms that subcontract at least ten percent (10%) of the contractual amount of a City project to subcontractor who are physically located within the City of North Miami. **(Must complete forms A-3a Statement of Intent & A-3b Participation Schedule.)** Place a check here only if affirming bidder meets the requirements for Subcontractor Local Preference. **Failure to complete this certification at this time (by checking the box above) shall render the Bidder ineligible for Subcontractor Local Preference.**

All referenced forms can be found on the City's website at:

<http://www.northmiamifl.gov/departments/purchasing/forms.asp>

The undersigned bidder certifies that this bid is submitted in accordance with the bid specifications and conditions governing this bid, and that the bidder will accept any award(s) made to him as a result of this bid.

FIRM NAME: _____

STREET ADDRESS _____

CITY/STATE/ZIP CODE _____

TELEPHONE NO. _____ FAX NO. _____

E-MAIL _____

By signing this document the bidder agrees to all Terms and Conditions of this Solicitation and the resulting Contract.

AUTHORIZED SIGNATURE _____ Date _____
PERSON AUTHORIZED TO ENTER INTO CONTRACTUAL AGREEMENT

PRINT NAME OF AFFIANT _____

TITLE OF OFFICER _____

THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF BIDDER TO BE BOUND BY THE TERMS OF ITS BIDS. FAILURE TO SIGN THIS SOLICITATION WHERE INDICATED ABOVE BY AN AUTHORIZED REPRESENTATIVE SHALL RENDER THE BID NON-RESPONSIVE. THE CITY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY BID THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE BIDDER TO THE TERMS OF ITS OFFER.

SECTION IV

Contract Forms

The following forms are a requirement of this bid:

- A-1 Public Entity Crimes Form
- A-2 Non-Collusive Proposal Certificate
- A-3 Local Business Certification
- A-4 Questionnaire
- A-5 Acknowledgement of Addenda
- A-6 Proposer's Disclosure of Subcontractors and Suppliers
- A-7 Insurance Requirements
- A-9 Bid Bond
- A-10 Performance Bond (submitted at time of award)

All of our forms can now be found on our website at:

<http://www.northmiamifl.gov/business/purchasing/forms.asp>. These forms are fill –in forms. Please ensure to include all applicable forms with your bid documents signed and notarized as required. Emailed forms will not be accepted.

**SECTION 5.0
CITY OF NORTH MIAMI
GENERAL TERMS & CONDITIONS**

5.1 CITY OVERVIEW

North Miami, Florida (pop.60, 000) is a diverse community, ideally located midway between Miami and Fort Lauderdale and encompasses approximately 9.5 square miles. As the fifth largest city of Miami-Dade County, North Miami is committed to growth in its business community, while also focusing on issues such as education, the arts, leisure activities and sustainability to provide a viable future for our residents and preserve the City's rich history since its incorporation in 1926.

The City currently has 550+ employees and provides a wide range of governmental services including public safety / police services, parks and recreation, public works, water and sewer, planning, building and zoning, code enforcement, and community development to its citizens.

The City is a very large consumer of goods and services and the purchasing decisions of our employees and contractors can positively or negatively affect the environment. By including environmental considerations in our procurement decisions, along with our traditional concerns with price, performance and availability, we will remain fiscally responsible while promoting practices that improve public health and safety, reduce pollution, and conserve natural resources.

5.2 DEFINITIONS

The following terms, phrases, words and their derivations shall have the meaning given herein:

- a) **'Award'** means the acceptance of a bid, offer, or proposal by the City, pursuant to code.
- b) **'Awarded Bidder'** or **'Contractor'** means the Bidder or Bidders that receive any award of contract from the City as a result of this 'Invitation to Bid'
- c) **'Bidder'** means the person firm, entity or organization submitting a bid in response to this Invitation to Bid.
- d) **'City'** means The City of North Miami.
- e) **'Solicitation'** means an Invitation to Bid, Request for Proposal, Request for Quotation or any document used to obtain bids and proposals for the purposes of entering into a contract.

- f) **'Work', 'Services', 'Program', 'Project',** or **'Engagement'** to mean all matters and things that will require to be done by the Awarded Bidder(s) in accordance with the scope of work and all terms and conditions of this Invitation to Bid.
- g) **"Owner" or "Engineer"** shall mean the City of North Miami.

5.3 INVITATION

This Invitation for Bid is extended to firms and organizations that can provide the requirement(s) specified herein. The requirements presented in this Invitation for Bid represent the City's anticipated needs.

5.4 PUBLIC ENTITY CRIME/ DISCRIMINATORY VENDOR LIST

The *Public Entity Crime Affidavit Form, (Form "A-1")* attached to this Invitation for Bid, includes documentation that shall be executed by an individual authorized to bind the Bidder. Any Bidder, or any of its suppliers, subcontractors, or consultants who shall provide goods and services which are intended to benefit the City, shall not be a convicted vendor or included on the discriminatory vendor list. If the Bidder or any affiliate of the Bidder has been convicted of a public entity crime or has been placed on the discriminatory vendor list, a period longer than 36 months must have passed since that person was placed on the convicted vendor or discriminatory vendor list. The Bidder further understands and accepts that any contract issued as a result of this Invitation for Bid shall be either voidable or subject to immediate termination by the City. In the event there is any misrepresentation or lack of compliance with the mandates of Section 287.133 or Section 287.134, respectively, Florida Statutes. The City in the event in such termination, shall not incur any liability to the Bidder for any goods, services or materials furnished.

5.5 LOBBYING

All Bidders, their agents and proposed sub consultants or subcontractors, are hereby placed on notice that neither the City Council Members, any evaluation committee members, employees of the City or employees of any other project sponsoring agencies shall be lobbied either individually or collectively regarding this Invitation for Bid. Bidders, their agents and proposed sub-consultants or subcontractors are hereby placed on notice that

they are prohibited from contacting any of these individuals for any purpose relating to the Invitation for Bid (e.g., general information, meetings of introduction, meals, etc.). Any bid submitted by a Bidder, its agents and potential sub consultants or subcontractors who violate these guidelines will not be considered for review. The Purchasing Director or Contract Specialist (identified on the cover page of this Invitation for Bid) shall be the only point of contact for questions and/or clarifications concerning the Invitation for Bid, the selection process and the negotiation and award procedures.

5.6 SUSPENSION OF CONTRACTORS FOR MATERIAL BREACH OF CITY CONTRACTS

Pursuant to Sec 7-160 (a), (b) & (c) upon recommendation by the Director of Purchasing may temporarily or permanently suspend contractors from doing business with the city whenever a contractor materially breaches its contract with the City. Any Bid submitted by a Bidder, its proposed subcontractors or sub consultants who are included on the City's Suspension List shall not be considered for review.

In addition, the principles of any Bidders or its proposed subcontractors or sub consultants shall not attempt to do business with the City under a different name or form a new legal entity in order to do business with the City while the principals of the Bidder or its proposed subcontractors or sub consultants remain on the Suspension List. In the event there is any intentional misrepresentation, the Bidder further understands and accepts that any contract issued as a result of this Invitation for Bid shall be subject to immediate termination for default and suspension procedures by the City. The City, in the event of such termination, shall not incur any liability to the Bidder for any goods, services or materials furnished.

5.7 POINTS OF CONTACT/ TIMETABLE FOR INQUIRES

Bidders shall contact the contract specialist, identified on the cover page of this Invitation for Bid, for all related inquiries. All Bidders' technical inquiries shall be confirmed in writing either through the mail, via facsimile transmission or electronic mail.

Technical questions will not be entertained beyond the cut-off date indicated on the cover page so that answers to substantive questions, in the form of

written addenda, can be posted on the City's web site (www.northmiamifl.gov) and Demand Star by Onvia at www.demandstar.com or calling toll free 1-800-711-1712 and requesting the corresponding documents number.

5.8 ORAL REPRESENTATION

No oral representation made by the City staff shall be binding. The contents of this Invitation for Bid and any subsequent addenda issued by the City shall govern all aspects of this Invitation for Bid.

5.9 ADDENDA

If any revisions to the Invitation for Bid become necessary (other than changes to the deadline for Bid submission), the City will post written addenda on the City web's site at (www.northmiamifl.gov) and on Demand Star by Onvia at www.demandstar.com or calling toll free 1-800-711-1712 and requesting the corresponding document number at least seven (7) calendar days before the date scheduled for opening the Bids. The City may revise the deadline for Bid submission at any time prior to the date and time scheduled for opening the Bids. **It is the responsibility of all Bidders to ascertain whether any addenda have been issued before the Invitation for Bid deadline by either calling or checking the City's web site (www.northmiamifl.gov) and Demand Star and by Onvia at www.demandstar.com or calling toll free 1-800-711-1712 and requesting the corresponding document number. All addenda placed on the Demand Star can be down loaded.**

5.10 CANCELLATION OF THE INVITATION FOR BID

The City reserves the right to cancel this Invitation for Bid and/or re-advertise and re-solicit the requirements at any time when determined to be in the best interest of the city.

5.11 BID PROTEST

If a potential Bidder protest any provisions of the Invitation for Bid documents a written protest must be filed with the City Clerk within five (5) business days (excluding weekends and City observed holidays) prior to date set for opening of the bids. A written protest is considered filed when received by the City Clerk.

Any Bidder who files a formal written protest pursuant to Section 7-158 City Code, shall post with

the city at the time of filing the formal written protest a filing fee in an amount equal to one percent (1%) of the amount of the bid or proposed contract, or one thousand dollars (\$1,000), whichever is less. Failure to file a notice of protest within the time prescribed in Section 7-158, City Code, or failure to post the filing fee within the time allowed, shall constitute a waiver of such Bidder's right to file a protest.

Notice of written protest along with the filing fee, shall be timely filed with the City Clerk of the City North Miami at 776 NE 125th Street, 1st Floor North Miami, FL 33161. The City will not accept receipt of any formal written protests filed at any location other than the City's Clerk's Office

5.12 DEVELOPMENT COSTS

Neither the City nor its representatives shall be liable for any expenses incurred in connection with the preparation, submission or presentation of a Bid in response to this Invitation for Bid. All information in the Bid shall be provided at no cost to the City.

5.13 TAX EXEMPT STATUS

The City is exempt from Florida Sales and Federal Excise taxes on direct purchase of tangible property.

5.14 BID SUBMISSION AND OPENING

All Bids shall be submitted in a sealed envelope by the deadline indicated on the cover page of this Invitation for Bid. The Bid shall identify the Bid number and title specified on the cover page of this Invitation for Bid. Reference information shall also be marked on the outside of the sealed envelope, including the Bidder's return address. The City assumes no responsibility for Bids not properly marked.

The City will not accept Bids delivered after the established deadline. If the Bid is delivered after the established deadline, a Bidder shall be deemed non-responsive to the Invitation for Bid requirements.

Receipts of a Bid by any City office, receptionist or personal other than the Clerk's Office will not constitute "delivery" as required by this Invitation for Bid. The City will not accept or consider Bids submitted via facsimile transmission. The public is welcome to attend the Bid opening.

5.15 ASSIGNMENT OF BIDS

A Bidder shall not transfer or assign its Bid to a third party following submission of a Bid to the City.

5.16 WITHDRAWAL OF BID

Bidders shall withdraw their submitted Bid by notifying the City either in writing or in person through an authorized representative at any time prior to the deadline. Individuals making the withdrawal shall provide evidence of serving as an authorized representative of the Bidder. Bids, once received, become the property of the City, and will not be returned to Bidders even when they are withdrawn from consideration.

Bids, once opened, shall not be withdrawn or modified except to the extent agreed to by the City during subsequent contract negotiation.

5.17 PUBLIC RECORDS AND EXEMPTIONS

Upon receipt, Bids become "public records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes. Bidders shall invoke the exemptions to disclosure provided by law, in the Bid, by providing the specific statutory authority for the claimed exemption, identifying the data or other materials to be protected and stating the reasons why such exclusion from public disclosure is necessary. Bids will be made available for public inspection at the time the City posts notice of its decision or intended decision concerning contract awards, or ten (10) days after the Bid opening, whichever is earlier.

5.18 REJECTION OF BIDS

Pursuant to Section 7-136 of the City Code the City reserves the right to reject any and all Bids for reasons including, but not limited to, the following: (1) when such rejection is in the best interest of the City; (2) if such Bid is deemed non-responsive; (3) if the Bidder is deemed non-responsible; or (4) if the Bid contains any materials irregularities. Minor irregularities contained in Bid will be waived by the City. A minor irregularity is a variation from the Invitation for Bid that does not affect the price of the contract nor does it give a Bidder an advantage or benefit not enjoyed by other Bidders and does not adversely impact the City.

5.19 CONE OF SILENCE / CONFLICT OF INTEREST AND CODE OF ETHICS

This Invitation for Bid is issued pursuant to the City of North Miami Code Section 7-193 which prohibits

certain types of communications: (a) A Cone of Silence shall be imposed upon each Invitation for Bid after the advertisement of said Invitation for Bid. At the time of imposition of the Cone of Silence, the director of the purchasing department or designee shall provide for public notice of the Cone of Silence. The director of the purchasing department shall issue a written notice thereof to the affected departments, file a copy of such a notice with the city clerk, with the copy thereof to each city council member, and shall include in any public solicitation for supplies or services a statement disclosing the requirements of this ordinance. Notwithstanding any other provision of this section, the imposition of a cone of silence on a particular Invitation for Bid shall not preclude purchasing staff from obtaining industry comment or performing market research provided all communication related thereto with a potential offeror, service provider, bidder, lobbyist, or consultant are in writing or are made at a duly noticed public meeting.

The ordinance does not apply to oral communications at pre-bid conference, oral presentations before selection committees, contract negotiations, public presentations made to the City Council during any duly noticed public meeting or communications in writing at any time with any City Council unless specifically prohibited by the applicable Invitation for Bid documents. A copy of all written communications must be filed with the City Clerk.

5.20 BUSINESS ENTITY REGISTRATION

The City of North Miami requires business entities to complete registration application before doing business with the City. Bidders need not register with the City to present a bid; however, the selected Bidder(s) must register prior to award of a contract as failure to register may result in the rejection of the bid. To register, contact the Purchasing Department at (305) 895-9886 or you may download the application (*revised 7/09*) from our website at www.northmiamifl.gov it is the responsibility of the business entity to update and renew its application concerning any changes such as new address, telephone number, commodities, etc. during the performance of any agreement obtained as a result of this Invitation for Bid.

5.21 SEALED BIDS:

Original copy of the Bid Form as well as any other pertinent documents must be returned in order for the Bid to be considered for award. All Bids are subject to the conditions specified herein and on the attached Special Conditions, Specifications and Bid Form.

The completed Bid must be submitted in a sealed envelope clearly marked with the Bid Title to the Office of the City Clerk of North Miami, Room 12, City Hall, 776 N.E.125th Street, North Miami, Florida 33161-5216 until 3:00 p.m., local time on date due.

5.22 EXECUTION OF BID:

The Bid must contain a manual signature of an authorized representative in the space provided on the Bid Form. Failure to properly sign Bid shall invalidate same and it shall NOT be considered for award. All Bids must be completed in pen or be typewritten. No erasures are permitted. If a correction is necessary draw a single line through the entered figure and enter the corrected figure above it. Corrections must be initialed by the person signing the Bid. Any illegible entries, pencil bids or corrections not initialed will not be tabulated. The original Bid conditions and specifications CANNOT be changed or altered in any way after being submitted to the City.

5.23 PRICES QUOTED:

Deduct trade discounts and quote firm net prices. Give both unit price and extended total, when requested. Prices must be stated in units of quantity specified in the Bid specifications. In case of discrepancy in computing the amount of the bid, the UNIT PRICE quoted will govern. All prices must be F.O.B. destination, freight prepaid (unless otherwise stated in special conditions). Award, if made, will be in accordance with terms and conditions stated herein. Each item must be proposed separately and no attempt is to be made to tie any item or items in with any other item or items. Cash or quantity discounts offered will not be a consideration in determination of award of Bid(s). All prices quoted shall be guaranteed for 60 days from bid date unless otherwise specified in Special Conditions.

5.24 MISTAKES:

Bidders are expected to examine the specifications, delivery schedules, bid prices and extensions and all instructions pertaining to supplies and services. Failure to do so will be at the Bidder's risk.

5.25 UNDERWRITERS' LABORATORIES:

Unless otherwise stipulated in the Bid, all manufactured items and fabricated assemblies shall be U.L. listed or re-examination listing where such has been established by U.L. for the item(s) offered and furnished.

5.26 BID'S CONDITIONS:

The City reserves the right to waive irregularities in Bids or to reject all Bids or any part of any Bid deemed necessary for the best interest of the City of North Miami, Florida.

5.27 PRODUCTS, MATERIALS WITH RECYCLED CONTENT:

It is the intent and policy of the City of North Miami, Florida, that the needs of the City for products and materials be made using recycled contents whenever possible. Bidders must certify in writing the percentage of recycled content in the product or material. "Recycled content" means materials that have been recycled that are contained in the products or materials to be procured, including, but not limited to, paper, aluminum, glass and composted material. The minimum percentage of recycled content shall be twenty-five (25) percent of materials recovered from post consumer waste. The term does not include internally generated scrap that is commonly used in industrial or manufactured processes or waste or scrap purchased from another manufacturer who manufactures the same or a closely related product. The City may allow up to ten (10) percent price difference to a responsible Bidder who has certified in writing the above recycled content.

5.28 EQUIVALENTS:

If Bidder offers makes of equipment or brands of supplies other than those specified, it must be indicated in the Bid. Specific article(s) of equipment/supplies shall conform in quality, design and construction with all published claims of the manufacturer.

Brand Names: Catalog numbers, manufacturers' and brand names, when listed, are informational guides as to a standard of acceptable product quality level only and should not be construed as an endorsement or a product limitation of recognized and legitimate manufacturers. Bidders shall formally substantiate and verify that product(s) offered

conform with or exceed quality as listed in the specifications.

Bidder shall indicate on the Bid Form the manufacturers' name and number if proposing other than the specified brands, and shall indicate ANY deviation from the specifications as listed. **Other than specified items offered requires complete descriptive technical literature marked to indicate detail(s) conformance with specifications and must be included with the Bid. No bids will be considered without this data.**

Lacking any written indication of intent to quote an alternate brand or model number, the Bid will be considered as a Bid in complete compliance with the specifications as listed on the attached form.

5.29 NON-CONFORMANCE TO CONTRACT CONDITIONS:

Items may be tested for compliance with specifications. Any item delivered, not conforming to specifications, may be rejected and returned at Bidder's expense. These items and items not delivered as per delivery date in Bid and/or purchase order may be purchased on the open market. Any increase in cost may be charged against the Bidder. Any violation of these stipulations may also result in Bidder's Name being removed from the vendor list.

5.30 SAMPLES:

Samples of items, when required, must be furnished free of expense and, if not destroyed, will, upon request, be returned at the Bidder's expense. Bidders will be responsible for the removal of all samples furnished within (30) days after Bid opening. All samples will be disposed of after thirty (30) days. Each individual sample must be labeled with Bidder's name. Failure of Bidder to either deliver required samples or to clearly identify samples may be reason for rejection of the bid. Unless otherwise indicated, samples should be delivered to the Purchasing Department, 776 N.E. 125th Street, North Miami, Florida 33161.

5.31 DELIVERY:

Unless actual date of delivery is specified (or if specified delivery cannot be met), show number of days (in calendar days) required to make delivery after receipt of purchase order, in space provided. Delivery time may become a basis for making an Award. Delivery shall be within the normal working

hours of the City, Monday through Friday, excluding holidays.

5.32 INTERPRETATIONS:

Unless otherwise stated in the Bid, any questions concerning conditions and specifications should be submitted in writing to the Purchasing Director, 776 N.E. 125th Street, North Miami, FL 33161, facsimile or email.

5.33 BID OPENING:

Bids shall be opened and publicly read in the Council Chambers, 776 N.E. 125th Street, North Miami, Florida 33161 on the date and at the time specified on the Bid Form. All bids received after that time shall be returned, unopened.

5.34 INSPECTION, ACCEPTANCE & TITLE:

Inspection and acceptance will be destination unless otherwise provided. Title to/or risk of loss or damage to all items shall be the responsibility of the successful Bidder until acceptance by the City unless loss or damage result from negligence by the City. If the materials or services supplied to the City are found to be defective or not conform to specifications, the City reserves the right to cancel the order upon written notice to the seller and return product at Bidder's expense.

5.35 PAYMENT:

Payment will be made by the City after the items awarded to a Bidder have been received, inspected, and found to comply with award specifications, free of damage or defect and properly invoiced. The City of North Miami complies with Florida Statue 218.70, Florida Prompt Payment Act. Prompt payment is made within forty-five (45) days of date on which proper invoicing is received for goods and services and twenty (20) business days for construction services.

5.36 DISPUTES:

In case of any doubt or difference of opinion as to the items to be furnished hereunder, the decision of the City shall be final and binding on both parties.

5.37 LEGAL REQUIREMENTS:

Federal, State, County and City laws, ordinances, rules and regulations that in any manner affect the items covered herein apply. Lack of knowledge by the Bidder will in no way be a cause for relief from responsibility.

The individual executing this Bid on behalf of the Company warrant to the City that the Company is a Florida corporation duly constituted and authorized to do business in the State of Florida, is in good standing and that Company possesses all of the required licenses and certificates of competency required by the State of Florida and the County of Miami-Dade to provide the goods or perform the services herein described.

5.38 PATENTS & ROYALTIES:

The Bidder, without exception, shall indemnify and save harmless the City of North Miami, Florida and its employees from liability of any nature or kind, including cost and expenses for, or on account of, any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by The City of North Miami, Florida. If the Bidder uses any design, device or materials covered by letters, patent, or copyright, it is mutually understood and agreed, without exception, that the Bid prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in providing the required goods or services.

5.39 OSHA:

The Bidder warrants that the product and services supplied to the City of North Miami, Florida shall conform in all respects to the standards set forth in the Occupational Safety and Health Act of 1970, as amended, and the failure to comply with this condition will be considered as a breach of contract. Any fines levied because of inadequacies to comply with these requirements shall be borne solely by the Bidder responsible for same.

5.40 SPECIAL CONDITIONS:

Any and all Special Conditions that may vary from these General Conditions shall have precedence.

5.41 ANTI-DISCRIMINATION:

The Bidder certifies compliance with the non-discrimination clause contained in Section 202, Executive Order 11246, as amended by Executive Order 11375, relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin.

5.42 INSURANCE:

Bidders are required assume the full duty, obligation and expense of obtaining all necessary licenses, permits and insurance and assure all work complies

with all Dade County and City of North Miami building requirements and the South Florida Building Code. The Bidder shall be liable for any damages or loss to the City occasioned by negligence of the Bidder (or agent) or any person the Bidder has designated in the completion of the contract as a result of the Bid.

5.43 BID BONDS, PERFORMANCE BONDS, CERTIFICATES OF INSURANCE:

Bid Bonds, when required, shall be submitted with the bid in the amount specified in Special Conditions. After acceptance of Bid, the City will notify the successful Bidder to submit a performance bond and certificate of insurance in the amount specified in Special Conditions.

5.44 DEFAULT/FAILURE TO PERFORM:

The City shall be the sole judge of nonperformance, which shall include any failure on the part of the successful Bidder to accept the Award, to furnish required documents, and/or to fulfill any portion of this contract within the time stipulated.

Upon default by the successful Bidder to meet any terms of this agreement, the City will notify the Bidder five (5) days (weekends and holidays excluded) to remedy the default. Failure on the contractor's part to correct the default within the required five (5) days shall result in the contract being terminated and upon the City notifying in writing the contractor of its intentions and the effective date of the termination. The following shall constitute default:

- A. Failure to perform the work required under the contract and/or within the time required or failing to use the subcontractors, entities and personnel as identified and set forth, and to the degree specified in the contract.
- B. Failure to begin the work under this Bid within the time specified.
- C. Failure to perform the work with sufficient workers and equipment or with sufficient materials to ensure timely completion.
- D. Neglecting or refusing to remove materials or perform new work where prior work has been rejected as non conforming with the terms of the contract.
- E. Becoming insolvent, being declared bankrupt, or committing act of bankruptcy or insolvency, or making an assignment renders the successful Bidder incapable of performing the work in accordance with and as required by the contract.

- F. Failure to comply with any of the terms of the contract in any material respect.

In the event of default of a contract, the successful Bidder shall pay all attorney's fees and court costs incurred in collecting any damages. The successful Bidder shall pay the City for any and all costs incurred in ensuing the completion of the project.

5.45 BILLING INSTRUCTIONS:

Invoices, unless otherwise indicated, must show purchase order numbers and shall be submitted in DUPLICATE to the City of North Miami, 776 N.E. 125th Street, North Miami, Florida 33161.

5.46 SUBSTITUTIONS:

The City of North Miami, Florida WILL NOT accept substitute shipments of any kind. Bidder(s) is expected to furnish the brand quoted in their bid once awarded. Any substitute shipments will be returned at the Bidder's expense.

5.47 FACILITIES:

The City reserves the right to inspect the Bidder's facilities at any time with prior notice.

5.48 BID TABULATIONS:

Bidders desiring a copy of the bid tabulation may request same by enclosing a self-addressed stamped envelope with the bid or may visit the City's website to view bid tabulations at www.northmiamifl.gov or Demand Star at www.demandstar.com

5.49 APPLICABLE LAW AND VENUE:

The law of the State of Florida shall govern the contract between the City of North Miami and the successful Bidder and any action shall be brought in Miami-Dade County, Florida.

5.50 CLARIFICATION AND ADDENDA TO BID SPECIFICATIONS:

If any person contemplating submitting a Bid under this Invitation for Bid is in doubt as to the true meaning of the specifications or other Bid documents or any part thereof, the Bidder must submit to the City of North Miami Purchasing Director at least seven (7) calendar days prior to scheduled Bid opening, a request for clarification. All such requests for clarification must be made in writing and the person submitting the request will be responsible for its timely delivery.

Any interpretation of the Bid, if made, will be made only by Addendum duly issued by the City of North Miami Purchasing Director. The City shall issue an Informational Addendum if clarification or minimal changes are required. The City shall issue a Formal Addendum if substantial changes which impact the technical submission of Bids are required. A copy of such Addendum will be emailed to each Bidder receiving the Invitation for Bid. In the event of conflict with the original Contract Documents, Addendum shall govern all other Contract Documents to the extent specified. Subsequent addendum shall govern over prior addendum only to the extent specified.

5.51 AWARD OF CONTRACT:

- A. A contract may be awarded to the lowest responsive, responsible Bidder(s) whose Bid(s), conforming to the Invitation for Bid, is most advantageous to the City of North Miami. The lowest responsive, responsible Bidder(s) will be determined in conjunction with the method of award which is described in the Special Conditions. Tie bids will be decided as described in Special Conditions.
- B. The City shall award a contract to a Bidder through action taken by the City Council or the City Manager of the City of North Miami, Florida.
- C. The General Terms and Conditions, the Special Conditions, the Technical Specification, and the Bidder's Bid are collectively and integral part of the contract between the City of North Miami and the successful Bidder.
- D. While the City of North Miami may determine to award a contract to a Bidder(s) under this Invitation for Bid, said Award may be conditional on the subsequent submission of other documents as specified in the Special Conditions. The Bidder shall be in default of any conditional award if any of these documents are not submitted in a timely manner and in the form required by the City. If the Bidder is in default, the City, through the Purchasing Director, will void its acceptance of the Bidder's offer and may determine to select the second lowest responsive, responsible Bidder or re-solicit Bids. The City may, at its sole option, seek monetary restitution from the defaulting Bidder as a result of damages or excess costs sustained and/or may prohibit the Bidder from submitting future Bids for a period of one year.

- E. The City reserves the right to exercise the option to renew a term contract of any successful Bidder(s) to a subsequent optional period; provided that such option is stipulated in the Special Conditions and is contained in any contract ultimately awarded in regard to this bid.
- F. The City reserves the right to automatically extend any contract for a maximum period not to exceed ninety (90) calendar days in order to provide City departments with continual service and supplies while a new contract is being solicited, evaluated and/or awarded, provided this is expressly made a part of any contract awarded in regard to this bid.

5.52 ASSIGNMENT:

The Bidder shall not assign, transfer, convey, or otherwise dispose of any contract, including any or all of its right, title, or interest therein, or his or its power to execute such contract to any person, company or corporation without prior written consent of the City of North Miami.

5.53 LAWS, PERMITS AND REGULATIONS:

The Bidder shall obtain and pay all licenses, permits and inspection fees as may be required; and shall comply with all laws, ordinances, regulations, building code requirements applicable to the goods or services contemplated herein.

5.54 OPTIONAL CONTRACT USAGE:

Other State agencies, and/or Governmental Entities in the State of Florida may purchase from the resulting contract, provided the Department of Management Services, Division of Purchasing, has certified its use to be cost effective and in the best interest of the State. Bidders shall sell these commodities or services certified by the Division to the other State agencies and/or Governmental Entities in the State of Florida at the agencies' and/or entities option.

5.55 SPOT MARKET PURCHASES:

It is the intent of the City to purchase the goods or services specifically listed in this bid from the selected Bidder. However, items that are to be "Spot Market Purchased" may be purchased by other methods, i.e. Federal, State or local contracts.

5.56 INCENTIVES/DISINCENTIVES:

The City of North Miami has EXCLUDED incentive/disincentive for early completion provisions in the contract. Liquidated damages may apply for untimely delivery of goods or services.

5.57 NON-COLLUSION:

By submitting this bid, Bidder certifies that this offer is made without prior understanding, agreement, or connection with any corporation, firm or person submitting an offer for the same materials, services, supplies, or equipment and is in all respects fair and without collusion or fraud.

No premiums, rebates or gratuities are permitted, either with, prior to or after any delivery of material or provision of services. Any violation of this provision may result in the Contract cancellation, return of materials or discontinuation of services and the possible removal from the vendor bid list(s).

5.58 FLORIDA PUBLIC RECORDS ACT:

All material submitted regarding this bid becomes the property of the City. Bids may be reviewed by any person ten (10) days after the public opening. Bidders should take special note of this as it relates to any proprietary information that might be included in their offer.

Any resulting contract may be reviewed by any person after the contract has been executed by the City. The City has the right to use any or all information/material submitted in response to this bid and/or any resulting contract from same. Disqualification of a Bidder does not eliminate this right.

5.59 CONVICT PRODUCED MATERIAL

Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:

1. Produced by convicts who are on parole, supervised release, or probation from a prison or;
2. Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987. Qualified prison facility means any prison facility in which

convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.[53 FR 1923, Jan. 25, 1988, as amended at 58 FR 38975, July 21, 1993] Item 26. Public Agencies in Competition (e) except in the case of a concession agreement, as defined in section 710.703 of this title, no public agency shall be permitted to bid in competition or to enter into subcontracts with private Bidders.

5.60 PROJECT RECORDS

City shall have the right to inspect and copy, at City's expense, the books and records and accounts of the awarded Bidder which relate in any way to the Project, and to any claim for additional compensation made by the Bidder, and to conduct an audit of the financial and accounting records of the Bidder which relate to the Project and to any claim for additional compensation made by the Bidder. Bidder shall retain and make available to City all such books and records and accounts, financial or otherwise, which relate to the Project and to any claim for a period of three (3) years following final completion of the Project. During the Project and the three (3) year period following final completion of the Project, the Bidder shall provide City access to its books and records upon seventy-two (72) hours written notice.

5.61 STANDARDIZED CHANGES

Contract documents shall be modified to reflect the requirements of 23 CFR 635.109. The changed conditions contract clauses shall be made part of, and incorporated in this project which has been approved under 23 U.S.C. 106.

5.62 LOCAL PREFERENCE / 10% TOTAL WORKFORCE CONSISTING OF NORTH MIAMI RESIDENTS

The evaluation of competitive bids is subject to Section 7-151 of the City Code which, except where contrary to federal and state law, or any other funding source requirements, provides that preference be given to local businesses. To satisfy this requirement, the Bidder shall affirm in writing its compliance with either of the following objective criteria as of the Bid submission date stated in the Invitation for Bid. A local business shall be defined as:

- a) A business that has a valid local business tax receipt, issued by City of North Miami at least one year prior to bid submission, that is appropriate for the goods, services or construction to be purchased; or
- b) A business that has a physical business address located within the limits of the City of North Miami from which the vendor operates or performs business. Post Office Boxes are not verifiable and shall not be used for the purpose of establishing said physical address; or
- c) A business has at least ten percent (10%) of its total workforce residing in the city prior to the city's issuance of the solicitation for supplies or services; or
- d) A business that subcontracts at least ten percent (10%) of the contractual amount of a City project to subcontractors who are physically located within the City of North Miami.

The preference is applied during the evaluation process. Bids received from local businesses are assigned a preference of ten (10) percent of the total price. **(See Form A-3, A-3a & A-3b)**

5.63 NON-EXCLUSIVITY

It is the intent of the City to enter into an agreement with the successful Bidder that will satisfy its needs as described herein. However, the City reserves the

right as deemed in its best interest to perform, or cause to be performed, the work and services, or any portion thereof, herein described in any manner it sees fit, including but not limited to: award of other contracts, use of any contractor, or perform the work with its own employees.

5.64 TERMINATION FOR CONVENIENCE

The City, at its sole discretion, reserves the right to terminate this contract without cause upon thirty (30) days written notice. Upon receipt of such notice, the successful bidder(s) shall not incur any additional costs under this contract. The City shall be liable only for reasonable costs incurred by the successful Bidder(s) prior to the notice of termination. The City shall be the sole judge of "reasonable costs".

**END OF CITY OF NORTH MIAMI
GENERAL TERMS AND CONDITIONS**

SECTION VI

Attachments

SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.01 DEFINITIONS

- A. The term “submittals” shall mean shop drawings, if any, manufacturer’s drawings, catalog sheets, brochures, descriptive literature, diagrams, schedules, calculations, material lists, performance charts, test reports, office and field samples, and items of similar nature which are normally submitted for the OWNER’s review for conformance with the design concept and compliance with the Contract Documents.

1.02 GENERAL REQUIREMENT FOR SUBMITTALS

- A. Project data shall include manufactures’ standard schematic drawings modified to delete information which is not applicable to the project. Each copy of descriptive literature shall be clearly marked to identify pertinent information as it applies to the project.
- B. Where samples are required, they shall be adequate to illustrate materials, equipment or workmanship, and to establish standards by which completed Work is judged. Provide sufficient size and quantity to clearly illustrate functional characteristics of product and material, with integrally related parts and attachment devices.
- C. All submittals shall be marked to identify the project, CONTRACTOR, subcontractor, or supplier; pertinent Contract Documents; and specification section if applicable.
- D. Prior to submittal to the OWNER, the CONTRACTOR shall review and check submittals, and shall indicate review by his stamp, initials, and date.
- E. If the submittals indicate deviations from the Contract Documents, the CONTRACTOR shall advise the OWNER, in the letter of transmittal of the deviation and the reasons thereof. All deviations and variances shall be clearly marked on the submittal with a bold red mark. All additional costs resulting from modifications requested by the CONTRACTOR shall be borne by the CONTRACTOR.
- F. In the event the OWNER does not specifically reject the use of material or equipment at variance to that which is in the Contract Documents or specified, the CONTRACTOR shall, at no additional expense to the OWNER, and using methods reviewed by the OWNER, make any changes necessary to accommodate the material and equipment.

- G. Additional information on particular items, such as special drawings, schedules, calculations, performance curves, and material details shall be provided when specifically requested in the Specifications.
- H. Where manufacturers' brand names are given in the Specifications the CONTRACTOR shall submit names and descriptive literature of such materials and products proposed for use in this Contract.
- I. No material shall be fabricated or shipped unless the applicable drawings or submittals have been reviewed and approved by the OWNER and returned to the CONTRACTOR.
- J. All bulletins, brochures, instructions, parts lists, and warranties packaged with and accompanying materials and products delivered to and installed in the project shall be saved and transmitted to the OWNER.

1.03 SUBMITTAL PROCEDURES

A. Scheduling and Handling

- a. The CONTRACTOR shall schedule submittals well in advance of the need for the material or equipment for proposed scope of work and shall allow time to make delivery of material or equipment after submittal is approved.
- b. The CONTRACTOR shall develop a submittal schedule that allows sufficient time for initial review, correction, resubmission, and final review of all submittals. The OWNER shall review and return submittals to the CONTRACTOR as expeditiously as possible but the amount of time required for review will vary depending on the complexity and quantity of data submitted. In no case will a submittal schedule be acceptable which allows less than 30 days for initial review by the OWNER. The time for review shall in no way be justification for delays or additional compensation to the CONTRACTOR.
- c. The OWNER's review of submittals covers only general conformity to the Contract Documents and general conformity with dimensions and elevations. The CONTRACTOR shall be responsible for accuracy of dimensions and elevations. The CONTRACTOR shall be responsible for accuracy of dimensions and elevations. No quantities will be determined or verified by the OWNER. The CONTRACTOR is responsible for any errors, omissions, or deviations from the contract requirements. Review of submittals in no way relieves the CONTRACTOR from his obligation to furnish required items according to the Contract Documents.

- d. The CONTRACTOR shall submit nine (9) copies of submittal documents unless otherwise specified in the following paragraphs.
- e. The CONTRACTOR shall revise and resubmit submittals as required and identify all changes made since previous submittal.
- f. The CONTRACTOR shall assume the risk for material or equipment that is fabricated or delivered prior to approval. No material or equipment shall be incorporated into the Work or included in periodic progress payments until approval has been obtained in the specified manner.

B. Transmittal Form and Numbering

1. The CONTRACTOR shall transmit each submittal with a Submittal Form approved by the OWNER.
2. The CONTRACTOR shall sequentially number each transmittal form beginning with the number 1.
3. The CONTRACTOR shall revise submittals with original number and sequential alphabetic suffix.
4. Videotapes submittal number shall be in accordance with requirements of this section.

C. CONTRACTOR's Stamp

1. The CONTRACTOR shall apply CONTRACTOR's stamp, initials, and date certifying that the items have been reviewed in detail and are correct and in accordance with Contract Documents, except as noted by any requested variance.
2. As a minimum, CONTRACTOR's Stamp shall include:
 - a. CONTRACTOR's name
 - b. Job number
 - c. Submittal number
 - d. Certification statement that the CONTRACTOR has reviewed the submittal and it is in compliance with the Contract Documents.
 - e. Signature line for CONTRACTOR
 - f. The CONTRACTOR shall place CONTRACTOR's Stamp on the front page of each document.

1.04 PROJECT PROGRESS SCHEDULES

- A. The CONTRACTOR shall submit Construction Progress Schedules in accordance with Section 01310 - Project Progress Schedules.

1.05 SHOP AND ERECTION DRAWINGS, PRODUCT DATA, AND SAMPLES

- A. The CONTRACTOR shall submit shop and erection drawings, product data, and samples in accordance with Section 01340 - Shop and Erection Drawings, Product Data, and Samples.

1.06 OPERATIONS AND MAINTENANCE DATA

- A. When specified in Specification sections, the CONTRACTOR shall submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, operation, adjusting, finishing, and maintenance.
- B. The CONTRACTOR shall identify conflicts between manufacturers' instruction and Contract Documents.

1.07 MANUFACTURERS' CERTIFICATES

- A. When specified in Specification section, the CONTRACTOR shall submit manufacturers' certificate of compliance for review by the OWNER, and for project records.
- B. The CONTRACTOR shall submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product, but must be acceptable to the OWNER.

1.08 CONSTRUCTION PHOTOGRAPHS

- A. When required by Specification sections, the CONTRACTOR shall submit photographs taken prior to start of construction to show original site conditions.
- B. When required by Specification sections, the CONTRACTOR shall submit photographs monthly with pay estimate.
- C. The CONTRACTOR shall make two prints; color, matte, finish; 3x5 inch size; mounted on 8-1/2x11 inch soft card stock, with left edge binding margin for three-hole punch. The CONTRACTOR shall submit one print to the OWNER and retain the other prints.
 - 1. For linework, the CONTRACTOR shall provide photographs at a frequency that will document the Work before and, as the Work is being backfilled.

- D. The CONTRACTOR shall identify photographs with date, time, orientation, and project identification.

1.09 PROJECT RECORD DOCUMENTS

- A. The CONTRACTOR shall submit Project Record Documents in accordance with Section 01700 - Project Closeout

1.10 VIDEO

- A. The CONTRACTOR shall submit television videotapes as required in Section 02752 – Television Survey
- B. Transmittal forms for videotapes shall be numbered sequentially.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01310

PROJECT PROGRESS SCHEDULES

1.01 REFERENCES

- A. Associated General CONTRACTOR of America (AGC) Publication: “The Use of CPM in Construction - A Manual for General CONTRACTORs and the Construction Industry.”

1.02 REQUIREMENTS

- A. The project management scheduling tool, “Critical Path Method” commonly called CPM, shall be used by the CONTRACTOR for the planning and scheduling of all work required under the Contract Documents.

1.03 QUALIFICATIONS

- A. The CONTRACTOR shall submit evidence of CPM capability for Engineer’s review.

1.04 FORMAT

- A. The CONTRACTOR shall prepare a network analysis system using the Critical Path Method, as outlined in AGC - The Use of CPM in Construction.

1.05 CONTENT

- A. Show complete sequence of construction by activity, which dates for beginning and completion of each element of construction.
- B. Identify each item by Specification section number.
- C. Identify work of separate stages and other logically grouped activities.
- D. Provide sub-schedules for each stage of work identified in Section 01010 - Summary of Work.
- E. Provide sub-schedules to define critical portions of the entire schedule.
- F. Include conferences and meeting in schedule.
- G. Show accumulated percentage of completion of each item and total percentage of work completed, as of the first day of each month.
- H. Provide separate schedule of submittal dates for shop and erection drawings, product data, and samples, and dates reviewed submittals will be required from ENGINEER. Indicate decision dates for selection of finishes.

1.06 REVISIONS TO SCHEDULES

- A. The CONTRACTOR shall indicate progress of each activity to date of submittal, and projected completion date of each activity.
- B. The CONTRACTOR shall identify activities modified since previous submittal, major change in scope, and other identifiable changes.
- C. The CONTRACTOR shall provide narrative report to define problem areas, anticipated delays, and impact on Schedule. The CONTRACTOR shall report corrective action taken, or proposed, and its effect including the effect of changes on schedules for separate CONTRACTORS.

1.07 SUBMITTAL PROCEDURES

- A. Submittal requirements shall include:
 - 1. Logic network and/or time phased bar chart, computer generated, utilizing the precedent diagram method.
 - 2. Computerized network analysis.
 - a. Activity sort by early start, organized by related elements.
 - b. Activity sort by float, organized by related elements.
 - c. Activity sort by predecessor/successor.
 - 3. Schedule of shop drawing submittals.
 - 4. Schedule of values (lump sum price breakdown).
- B. Within fifteen (15) working days after Notice to Proceed, the CONTRACTOR shall submit a network diagram describing the activities to be accomplished in the project and their dependency relationships, (predecessor/successor) as well as a tabulated schedule as defined in this section. The schedule produced and submitted shall indicate a project completion date the same as the Contract completion date. The CONTRACTOR shall meet with the ENGINEER to review the proposed plan and schedule.
- C. Upon completion of the ENGINEER's review of the submittal, the Engineer will return the schedule with comments. The CONTRACTOR shall revise the network diagram as required and resubmit the network diagram and tabulated schedule shall be reviewed by the Engineer. The network diagram and tabulated schedule shall constitute the project work schedule unless a revised schedule is required due to substantial changes in the Work scope, a change in Contract Time, or delinquency by CONTRACTOR requiring a recovery schedule. When the

network diagram and tabulated schedule have been accepted, the CONTRACTOR shall submit to the Engineer nine (9) copies of all schedule information.

- D. The CONTRACTOR, if requested by the Engineer, shall provide a revised work schedule. The revised work schedule shall include a new diagram and tabulated schedule designed to show how the CONTRACTOR intends to accomplish the Work to meet the completion date. The form and method employed by the CONTRACTOR shall be the same as for the original schedule.

1.08 SCHEDULING RESPONSIBILITIES

- A. It is understood that the construction schedule and all revised information must be produced by the CONTRACTOR and subcontractors as to how they envision the Work to be accomplished. Similarly, all progress information to be provided by and through the CONTRACTOR must be an accurate representation of the CONTRACTOR's, the subcontractor's, or the supplier's actual performance. The schedule shall at all times remain an accurate reflection of the CONTRACTOR's actual or projected sequencing of the Work. Once accepted by the Engineer, adherence to the established CPM schedule shall be obligatory upon the CONTRACTOR and the subcontractors for the Work under the Contract.

- B. Progress of the Work

- 1. The CONTRACTOR shall start Work within ten (10) days following the Notice to Proceed and shall be executed with such progress as may be required to prevent delay to the general completion of the project. The Work shall be executed at such times and in or on such parts of the project, and with such forces, material, and equipment, to ensure completion of the Work in the time specified by the Contract.
- 2. The CONTRACTOR agrees that whenever it becomes apparent from the current monthly CPM Schedule update that delays to the critical path have resulted and, hence, the Contract completion date will not be met, or when so directed by the Engineer, the CONTRACTOR shall take some or all of the following actions at no additional cost to the Owner:
 - a. Increase construction manpower in such quantities and crafts as will substantially eliminate the backlog of Work.
 - b. Increase the number of working hours per shift, shifts per working day, or days per week, the amount of construction equipment, or any combination of the foregoing to substantially eliminate the backlog of Work.
 - c. Reschedule activities to achieve maximum practical concurrence of accomplishment of activities, and comply with the revised schedule.

- d. The CONTRACTOR shall submit to the Engineer for review a written statement of the steps intended to be taken to remove or arrest the delay to the critical path in the accepted schedule. If the CONTRACTOR should fail to submit a written statement of the steps as required by the Contract, the Engineer may direct the level of effort in manpower (trades), equipment, and work schedule (overtime, weekend, and holiday work, etc.), to be employed by the CONTRACTOR in order to remove or arrest the delay to the critical path in the accepted schedule, and the CONTRACTOR shall promptly provide such level of effort at no additional cost to the Owner.

1.09 CHANGE ORDERS

- A. Upon approval of a Change Order, the approved change shall be reflected in the next scheduled submittal by the CONTRACTOR.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01340

SHOP AND ERECTION DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 - GENERAL

1.01 SHOP AND ERECTION DRAWINGS

- A. The CONTRACTOR shall furnish to the OWNER detailed shop drawings for work that is to be fabricated and erection drawings of equipment that is to be installed. These drawings shall show the principal dimensions of the materials or equipment to be furnished, foundation Plans, number and position of all anchor bolts, together with the manufacturer's specifications, parts lists, descriptive literature, and operating instructions. Materials shall not be fabricated nor equipment shipped until these drawings have been reviewed and approved by the OWNER. Review of these drawings shall not relieve the CONTRACTOR for the correctness of all dimensions and for the correct fitting of all parts, or for the satisfactory installation and operation in service of all materials and equipment specified, or for the requirement that the Contract Documents be satisfied and observed.
- B. The CONTRACTOR shall submit shop drawings for review as required by the Contract Documents. Prior to submittal to the OWNER, Shop Drawings shall be reviewed and signed by the CONTRACTOR.
- C. The CONTRACTOR's Stamp shall be placed on each drawing.
- D. Shop drawings shall accurately and distinctly present the following:
 - 1. Field dimensions clearly identified as such.
 - 2. Arrangement and section views.
 - 3. Relation to adjacent materials or structure including complete information for making connections between the work under this Contract and work under other contracts.
 - 4. Kinds of materials and products.
 - 5. Where necessary for clarity, the CONTRACTOR shall identify details by reference to drawing sheet and detail numbers or schedule as shown on the Contract Plans.
- E. Drawings shall be to scale, and shall be a true representation of the specific item to be furnished.

1.02 PRODUCT DATA

- A. The CONTRACTOR shall submit product data for review as required in Contract Document sections.
- B. The CONTRACTOR's Stamp shall be placed on each data item submitted.
- C. The CONTRACTOR shall mark each copy to identify applicable products and construction methods to be used in this project. The CONTRACTOR shall supplement manufacturers' standard data to provide information unique to this project, where required by the Contract Documents.
- D. For products specified only by reference standard, the CONTRACTOR shall give manufacturers, trade names, model or catalog designation, and applicable reference standard.

1.03 SAMPLES

- A. The CONTRACTOR shall submit samples for review as required by the Specifications. Prior to submittal to the OWNER, samples shall be checked by the CONTRACTOR to ensure that they conform to requirements of the Contract Documents.
- B. CONTRACTOR's Stamp shall be placed on each sample or on a firmly attached sheet of paper.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01400

QUALITY CONTROL

PART 1 - GENERAL

1.01 QUALITY ASSURANCE

- A. The CONTRACTOR shall monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. The CONTRACTOR shall comply with manufacturer's instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, the CONTRACTOR shall request clarification from the OWNER before proceeding.
- D. The CONTRACTOR shall comply with specified standards as minimum quality for the Work except where more stringent tolerance, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. All Work shall be performed by persons qualified to produce required and specified quality.
- F. The CONTRACTOR shall verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. The CONTRACTOR shall not subcontract work involving excavation, including pipe replacement point repairs, point repairs at manhole connections, manhole replacement, and service lateral reconnection and repair.

1.02 CONTROL OF WORK

- A. Authority of OWNER
 - 1. The OWNER shall give all orders and directions contemplated under this Contract relative to the execution of the Work. The OWNER shall determine the amount, quality, acceptability, and fitness of the several kinds of Work and materials that are to be paid for under this Contract and shall decide all questions that may arise in relation to said Work and the construction thereof. The OWNER's estimates and decisions shall be final and conclusive, except as otherwise expressly provided herein. Should any questions arise between the parties relative to the Contract, the determination or decision of the OWNER shall be precedent to the right of the CONTRACTOR to receive any money or payment for Work.

2. The OWNER shall decide the meaning and intent of any portion of the Specifications and of any Contract Documents where the same may be found obscure or to be in dispute.
3. Any differences or conflicts in regard to their work that may arise between the CONTRACTOR under this Contract and other CONTRACTORS performing work for the OWNER shall be adjusted and determined by the OWNER.
4. The OWNER shall have the authority to suspend the Work wholly in part, due to failure of the CONTRACTOR to carry out provisions of the Contract; for failure to carry out orders; for such periods as he may deem necessary due to unsuitable weather; for conditions considered unsuitable for prosecution of the Work; or for any other condition or reason deemed to be in the public interest.
5. The OWNER shall have the authority to regulate and coordinate the stages of progress of construction, or items of Work of the respective CONTRACTORS to affect necessary cooperation and satisfactory performance and completion. The OWNER's decision shall be binding in any dispute in the Work arising between CONTRACTORS.

B. Conformity with Contract Documents

1. All Work and all materials furnished shall be in close conformity with the liens, grades, trenching sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the Plans and Specifications.
2. If the OWNER finds the materials furnished, Work performed, or finished product not within close conformity with the Plans and Specifications, but that the portion of the Work affected will, in his opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable, he will advise that the affected Work be accepted and remain in place. In this event, the OWNER will document his determination and recommend a basis of acceptance that may provide for an adjustment in the Contract Price for the affected portion of the Work. The OWNER's determination and recommended Contract Price adjustments will be based on sound judgment and such tests and retests of affected Work as are, in his opinion, needed. Changes in the Contract Price shall be covered by change order.
3. If the OWNER finds the material furnished, Work performed, or the finished product are not in close conformity with the Plans and Specifications and have resulted in an unacceptable finished product, the affected Work or materials shall be removed and replaced or otherwise

corrected by, and at the expense of the CONTRACTOR in accordance with the OWNER's written notification.

4. For the purpose of this subsection, the term "close conformity" shall not be construed as waiving the CONTRACTOR's responsibility to complete the Work in accordance with the Contract Documents. The term shall not be construed as waiving the OWNER's right to insist on strict compliance with the requirements of the Contract Documents during the CONTRACTOR's prosecution of the Work when, in the OWNER's opinion, such compliance is essential to provide an acceptable finished portion of the Work.
5. For the purpose of this subsection, the term "close conformity" is also intended to provide the OWNER with the authority to use sound judgment in his determinations as to acceptance of Work that is not in strict conformity but will provide a finished product equal to or better than that intended by the requirements of the Contract Documents.

C. Cooperation of CONTRACTOR

1. The CONTRACTOR shall, and will, in good workmanlike manner, do and perform all Work and furnish all supplies and materials, machinery, equipment, facilities, and means, necessary for proper completion of all the Work required by the Contract, within the time specified, and in accordance with provisions of these Contract Documents. The Work performed shall be in accordance with the directions of the OWNER. The CONTRACTOR shall furnish, erect, maintain, and remove such temporary works as may be required. The CONTRACTOR alone shall be responsible for the safety, efficiency, and adequacy of his operations, appliances, methods, and for any damage which may result from the failure or improper construction, maintenance, or operation. The CONTRACTOR shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the Contract Documents, and shall do, carry on, and complete the entire Work to the satisfaction of the OWNER.
2. If, through acts of neglect on the part of the CONTRACTOR, any other CONTRACTOR or any subcontractor suffers loss or damage on their work, the CONTRACTOR agrees to settle with such other CONTRACTOR or subcontractor by agreement or arbitration. If such other CONTRACTOR or subcontractor shall assert any claim against the OWNER on account of any damage alleged to have been sustained, the OWNER shall notify the CONTRACTOR who shall indemnify and save harmless the OWNER against any such claim.
3. The CONTRACTOR will be supplied with two copies each of the Plans and Specifications. The CONTRACTOR shall have on the Work at all

times one copy each of the Contract Documents. A reasonable number of additional copies of Plans and Specifications may be obtained by the CONTRACTOR upon request.

4. The CONTRACTOR shall give constant attention to the Work to facilitate the progress thereof, and he shall cooperate with the OWNER and the Resident Project Representative and with other CONTRACTORS in every way possible. The OWNER shall allocate the Work and suggest the sequence of construction in case of controversy between CONTRACTORS. THE CONTRACTOR SHALL HAVE COMPETENT SUPERINTENDENT ON THE WORK AT ALL TIMES WHO IS FULLY AUTHORIZED AS HIS AGENT ON THE WORK. The superintendent shall be capable of reading and thoroughly understanding the Plans and Specifications and shall receive and fulfill any instructions from the OWNER or his authorized representative.

D. Construction Layout

1. The OWNER reserves the right to contract for and perform other or additional work on or near the Work covered by this Contract.
2. When separate contracts are let within the limits of any one project, each CONTRACTOR shall conduct his work so as not to interfere with or hinder the progress of completion of the work being performed by other CONTRACTORS. CONTRACTORS working on the same project shall cooperate with each other as directed by the OWNER.
3. Each CONTRACTOR involved shall assume all liability, financial or otherwise, in connection with his contract and shall protect and save harmless the OWNER and OWNER from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced by him because of the presence and operations of other CONTRACTORS working within the limits of the same project.
4. The CONTRACTOR shall arrange his work and shall place and dispose of the materials being used so as not to interfere with the operation of other CONTRACTORS within the limits of the same project. He shall join his work with that of the others in an acceptable manner shall perform it in proper sequence to that of the others to the satisfaction of the OWNER.

E. Construction Layout

1. The OWNER will furnish the CONTRACTOR with benchmarks, control points, and any other measurements that the OWNER may deem necessary for the proper prosecution and control of the Work.
2. The CONTRACTOR shall satisfy himself as to the accuracy of all measurements before proceeding with the Work. All stakes and markings

set by the OWNER for his own use or for the CONTRACTOR's guidance shall be scrupulously preserved by the CONTRACTOR. Any stakes or markings lost or destroyed by the CONTRACTOR's forces through negligence shall be replaced by the OWNER at the CONTRACTOR's expense when so ordered by the OWNER.

3. The CONTRACTOR shall furnish, free of charge, to the OWNER, such incidental labor as he may require in establishing points and lines necessary to the prosecution of the Work to satisfactory completion.

F. Authority and Duties of OWNER's Inspector

1. The OWNER's Inspector shall have full authority to reject any defective material or workmanship and to inform the CONTRACTOR that construction is being improperly performed (if such is the case), subject to final decision of the OWNER. OWNER's Inspectors will not be authorized to revoke, alter, enlarge, or relax the provisions of the Plans and Specifications or to issue any instructions contrary thereto.
2. The CONTRACTOR may request, and the OWNER will issue, written instructions on any important questions which may develop in respect to the acceptance or rejections of materials or workmanship.

G. OWNER's Representative

1. The OWNER may assign a representative to observe the construction of the Work and advise the OWNER of the Work's prosecution. The resident project representative shall not act as inspector. The CONTRACTOR shall continue to deal directly with the OWNER's Inspector as described above. The OWNER's Representative shall have full access to all job records and shall be allowed to take supplemental samples of materials used on the job.

H. Inspection of the Work

1. The OWNER will observe all phases of the Work in progress. The CONTRACTOR shall furnish the OWNER with every reasonable facility for ascertaining whether or not the Work as performed is in accordance with the requirements and intents of the Plans and Specifications. Should any Work be covered or hidden prior to the approval thereof by the OWNER, it shall be uncovered for examination and recovered at the CONTRACTOR's expense.
2. Should the Contract Work include relocation, adjustment, or any other modification to existing facilities, not the property of the OWNER, authorized representatives of the OWNERS of such facilities shall have the right to inspect such work. Such inspection shall in no case make any

facility OWNER a party to the Contract, and shall in no way interfere with the rights of the parties to this Contract.

I. Removal of Unacceptable and Unauthorized work

1. All work that does not conform to the requirements of the Contract, Plans, and Specifications will be considered by the OWNER as provided in this section.
2. Unacceptable Work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of Work, shall be removed immediately and replaced in an acceptable manner in accordance with the provision of section 01700 - Contract Closeout.
3. No work shall be done without lines and grades having been approved by the OWNER. Work done contrary to the instructions of the OWNER, work done beyond the lines shown on the Plans, except as herein specified, or extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of this Contract. Work so done may be ordered removed or replaced at the CONTRACTOR's expense.
4. Upon failure on the part of the CONTRACTOR to comply forthwith with any order of the OWNER made under the provisions of this section, the OWNER will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to recover the costs incurred by the OWNER from the CONTRACTOR. Said monies may be deducted from any amounts due the CONTRACTOR.

J. Load Restrictions

1. The CONTRACTOR shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the Work. A special permit will not relieve the CONTRACTOR of liability for damage that may result from the moving of material or equipment.
2. The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over a base course or surface course under construction shall be limited as directed by the OWNER. No loads will be permitted on a concrete pavement, base, or structure, before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by his hauling equipment and shall correct such damage at his own expense.

K. Maintenance During Construction

1. The CONTRACTOR shall maintain the Work during construction and until the Work is accepted. This maintenance shall constitute continuous and effective Work prosecuted day by day, with adequate equipment and forces so that the Work is maintained in satisfactory condition at all times.
2. All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various Contract Items, and the CONTRACTOR will not be paid an additional amount for such work.

L. Failure to Maintain the Work

1. Should the CONTRACTOR at any time fail to maintain the Work as provided in this section, the OWNER shall immediately notify the CONTRACTOR of such noncompliance. Such notification shall specify a reasonable time within which the CONTRACTOR shall be required to remedy such unsatisfactory maintenance to the exigency that exists.
2. Should the CONTRACTOR fail to respond to the OWNER's notification, the OWNER may suspend any work necessary for the OWNER to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the OWNER shall be recovered from the CONTRACTOR in the manner deemed most appropriate by the OWNER.

M. Test Period and Final Acceptance

1. As each separate principal part of the Work is completed it shall be immediately inspected by the OWNER. If found to be in substantial compliance with the Contract Documents, it shall be tentatively accepted by the OWNER. Thereafter, all such completed and accepted parts of the Work shall be maintained in good condition by and at the expense of the CONTRACTOR until final acceptance by the OWNER of all Work covered by the Contract.
2. After the principal operating parts of the Work have been completed and tentatively accepted, they shall be operated simultaneously as a single unit, by and at the expense of the CONTRACTOR in the presence of the OWNER, for a period of not less than thirty (30) days. During the test period, the CONTRACTOR shall make all such repairs and/or adjustments as may be found necessary to develop the capacities and complete operating functions called for or implied in the Specifications.
3. Operation and maintenance work prior to, during, and after the test period shall be by and at the expense of the CONTRACTOR and shall be

continued until all work performed under the Contract has been formally accepted by the OWNER.

4. After the test period has been concluded and the construction of all work under Contract has been completed, the OWNER, the CONTRACTOR, and a representative of the OWNER shall make a joint final inspection of all phases of the Work. If the Work is not acceptable at the time of such inspection, the OWNER will notify the CONTRACTOR of the defects that must be remedied before final acceptance can be made.

1.03 CONTROL OF MATERIALS

A. Source of Supply and Quality Requirements

1. The materials used in the Work shall conform to the requirements of the Contract Documents. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).
2. In order to expedite the inspection and testing of materials, the CONTRACTOR shall furnish complete statements to the OWNER as to the origin, composition, and manufacture of all materials used in the Work. Such statements shall be furnished promptly after execution of the Contract, but in all cases prior to delivery of such materials.
3. At the OWNER's option, materials may be approved at the source of supply before delivery is started. If it is found that source's of supply of previously approved materials do not produce specified products; the CONTRACTOR shall furnish materials from other sources.

B. Certification of Compliance

1. The OWNER may permit the use (with the approval of the OWNER), prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the Contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the Work must be accompanied by a certificate of compliance in which the lot is clearly identified.
2. Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and, if found not to be in conformity with Contract requirements, will be subject to rejection whether in place or not.
3. The form and distribution of certificates of compliance shall be as approved by the OWNER.

4. When a material or assembly is specified by “brand name or equal” and the CONTRACTOR elects to furnish the manufacturer’s certificate of compliance for each lot of such material or assembly delivered to the Work, such certificate for compliance shall clearly identify each lot delivered and shall certify as to conformance to the specified performance, testing, quality, or dimensional requirements; and suitability of the material or assembly for the use intended in the Contract Work.
5. Should the CONTRACTOR propose to furnish an “or equal” material or assembly the CONTRACTOR shall furnish the manufacturer’s certificates of compliance as herein before described for the specified brand name material or assembly. However, the OWNER shall be the sole judge as to whether the proposed “or equal” is suitable for use in the Work.
6. The OWNER reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

C. Plant Inspection

1. The OWNER or his authorized representative may inspect, at its source, any specified material or assembly to be used in the Work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the Work and to obtain samples required for the OWNER’s acceptance of the material or assembly.
2. Should the OWNER conduct plant inspections, the following conditions shall exist:
 - a. The OWNER shall have the cooperation and assistance of the CONTRACTOR and the producer with whom he has contracted for materials.
 - b. The OWNER shall have full entry at all reasonable times to such parts of the plants that concern the manufacture or production of the materials being furnished.
 - c. If required by the OWNER, the CONTRACTOR shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.
3. It is understood and agreed that the OWNER shall have the right to retest any material which has been tested and approved at the source of supply after it has been delivered to the site. The OWNER shall have the right to reject only material which, when retested, does not meet the requirement of the Contract Documents.

D. Storage of Materials and Equipment

1. Materials shall be stored to assure the preservation of their quality and fitness for the Work. Stored materials, even though approved before storage, may again be inspected prior to their use in the Work. Stored materials shall be located to facilitate their prompt inspection. The CONTRACTOR shall coordinate the storage of all materials with the OWNER. Storage facilities shall be provided at the expense of the CONTRACTOR, and all costs shall be included in the unit prices bid on the various Contract Items. The CONTRACTOR will not be paid an additional amount for the provision of such storage facilities.
2. Machinery, control equipment, etc. subject to damage by exposure to the elements shall be stored in a bonded warehouse or other locations that have been approved by the OWNER.
3. Unless otherwise in the Contract Documents, the storage of materials and the location of the CONTRACTOR's parked equipment or vehicles shall be as directed by the OWNER. Private property shall not be used for storage purposes without written permission of the private property OWNER or lessee of such property. The CONTRACTOR shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the CONTRACTOR shall furnish the OWNER a copy of the property OWNER's permission. All storage sites on private property shall be restored to their original condition by the CONTRACTOR entirely at his own expense, except otherwise agreed to, in writing by the private property OWNER or lessee of the property.
4. The CONTRACTOR shall be responsible for loss, damage, or deterioration of materials and equipment caused by improper protection from the weather or from other sources of damage.

E. Unacceptable Materials

1. Any materials or assembly that does not conform to the requirements of the Contract Documents shall be considered unacceptable and shall be rejected. The CONTRACTOR shall remove any rejected materials or assembly from the site of the Work, unless otherwise instructed by the OWNER.
2. No rejected material or assembly, the defects of which have been corrected by the CONTRACTOR, shall be returned to the site of the Work until such time as the OWNER has approved its use in the Work.

F. OWNER-furnished Materials

1. The CONTRACTOR shall furnish all materials required to complete the Work, except those specified (if any) to be furnished by the OWNER.

2. All costs of handling, transportation from the specified location to the site of Work, storage, and installation of OWNER-furnished materials shall be included in the unit price bid for the Contract Item in which such OWNER-furnished material is used. No additional payment for handling transportation will be made.
3. After any OWNER-furnished material has been delivered to the locations specified, the CONTRACTOR shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the CONTRACTOR's handling, storage, or use of such OWNER-furnished material. The OWNER will recover from the CONTRACTOR any cost incurred by the OWNER in making good such loss due to the CONTRACTOR's handling, storage, or use of OWNER-furnished materials.

G. Transportation of Materials.

1. Materials, including pipe, shall be transported in such a manner as to protect the materials from damage. Materials, even though inspected and approved before transportation, may again be inspected and/or tested after delivery to the site. Any damaged and/or unacceptable materials shall be removed from the site and replaced with materials meeting the Contract Documents.
2. The costs of transportation of materials and for replacing damaged or defective materials shall be borne by the CONTRACTOR.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01560

TEMPORARY ENVIRONMENTAL CONTROLS

Part 1 – GENERAL

EXPLOSIVES AND BLASTING

The use of explosives on the work will not be permitted.

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 abatement measures shall be continued until the CONTRACTOR is relieved of further responsibility by the ENGINEER or OWNER.

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.

SANITATION

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.

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 OWNER and in accordance with all laws and regulations pertaining thereto.

CHEMICALS

All chemicals used during project construction or furnished for project operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, reactant or of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. Use of all such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer.

NOISE CONTROL

- A. Noise resulting from the CONTRACTOR's work shall not exceed the noise levels and other requirements stated in local ordinances. The CONTRACTOR shall be responsible for curtailing noise resulting from his operation. He shall, upon written notification from the OWNER of the noise control officers, make any repairs, replacements, adjustments, additions and furnish mufflers when necessary to fulfill requirements.

EROSION ABATEMENT AND WATER POLLUTION

- A. It is imperative that any CONTRACTOR dewatering operation should not contaminate or disturb the environment of the properties adjacent to the work. The CONTRACTOR shall, therefore, schedule and control his operations to continue all runoff water from disturbed surfaces, water from dewatering operations that becomes contaminated with lime silt, muck and other deleterious matter, fuels, oils, bitumens, calcium, chloride, chemicals and other polluting materials.
- B. The CONTRACTOR shall construct temporary silting basin (s) of adequate size and provide all necessary materials, operations and controls including, but not limited to, filters, coagulants, screens, and other means necessary to attain the required discharge water quality.
- C. The CONTRACTOR shall be responsible for providing, operating and maintaining materials and equipment used for conveying the clear water to the point of discharge. All pollution prevention procedures, materials, equipment, and related items shall be operated and maintained until such time as the dewatering operation is discontinued. Upon the removal of the materials, equipment and related items, the CONTRACTOR shall restore the area to the condition prior to its commencing work.

PRECAUTIONS DURING ADVERSE WEATHER

- A. During adverse weather, and against the possibility thereof, the CONTRACTOR shall take all necessary precautions so that the work may be properly done and satisfactory in all respects. When require, protection shall be provided by use of tarpaulins, wood and building paper shelters, or other acceptable means. The CONTRACTOR shall be responsible for all changes caused by adverse weather.
- B. The OWNER may suspend construction operations at any time when, in his judgment, the conditions are unsuitable or the proper precaution are not being taken, whatever the weather conditions may be, in any season.

HURRICANE AND STORM WARNINGS

- A. During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, watch or warning, the CONTRACTOR shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as indicated below.
- B. The CONTRACTOR shall submit to the OWNER, for review and approval, a Plan of Action describing the procedures to be followed by the CONTRACTOR in the event of a Hurricane Alert, Watch, or Warning.
- C. Upon Notification of a Hurricane Alert:

- 1. Upon issuance of a Hurricane Alert by the County Manager, all CONTRACTORS**

- performing work within the right-of-way of a designated evacuation route shall immediately secure their work, backfill all excavations within the right-of-way and suitably prepare the roadway surface for full traffic flow. This work shall be completed within 24 hours of issuance of the alert. Work shall not be recommence until the “All Clear” is issued by the County Manager.

- 2. CONTRACTORS performing at all other locations shall remove all unnecessary debris, materials, and equipment from the job site. The CONTRACTOR shall also keep his crew on standby on weekends and holidays during the Hurricane Alert period.

- D. Upon Notification of a Hurricane Watch:

- 1. CONTRACTORS shall implement their approved plan of Action to protect the project and the public.

- E. Upon Notification of a Hurricane Warning:

1. CONTRACTORs shall implement their approved plan of Action to protect the project and the public.
2. For work within the public right-of-ways, the CONTRACTOR will be notified by the OWNER to suspend his construction operations. The CONTRACTOR will backfill all open trenches, remove all construction equipment and materials from the right-of-way and secure operations pending further notice.

PERIODIC CLEANUP AND BASIC SITE RESTORATION

During construction, the CONTRACTOR shall regularly remove from the site all accumulated debris and surplus materials of any kind which results from its operations. Unused equipment and tools shall be stored at the CONTRACTOR's yard base of operations for the project.

The CONTRACTOR shall perform the cleanup work on a regular basis and as frequently as ordered by the OWNER. Basic site restoration in a particular area shall be accomplished immediately following the installation of completion of the required facilities in that area. Furthermore, such work shall also be accomplished, when ordered by the OWNER, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.

Upon failure of the CONTRACTOR to perform periodic clean-up and basic restoration of the site to the OWNER's satisfaction, the OWNER may, upon 5 days prior written notice to the CONTRACTOR, employ such labor and equipment as it deems necessary for the purpose, and all costs resulting therefore shall be charged to the CONTRACTOR and deducted from amounts of money that it may be due.

part 2 – PRODUCTS (Not Used)
part 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01570

TRAFFIC REGULATIONS AND MAINTENANCE OF TRAFFIC

PART 1 - GENERAL

1.01 TRAFFIC CONTROL

- A. CONTRACTOR shall obey all traffic laws and comply with all the requirements, rules and regulations of the Florida State Department of Transportation, United States Department of Transportation Manual of Uniform Traffic Control Devices, the County, and other local authorities having jurisdiction, to maintain adequate warning signs, lights, barriers, etc., for the protection of traffic on public roadways.
- B. The CONTRACTOR shall maintain traffic and protect the public from all damage to persons and property within the Contract limits, in accordance with the Contract Documents and all applicable state, county and local regulations. He shall conduct his operations so as to maintain and protect access, for vehicular and pedestrian traffic, to and from all properties and business establishments adjoining or adjacent to those streets affected by his operations, and to subject the public to a minimum of delay and inconvenience. Suitable signs, barricades, railing, etc., shall be erected and the work outlined by adequate lighting at night. Danger lights shall be provided as required. Watchmen and flagmen shall be provided as may be necessary for the protection of traffic.
- C. Maintenance of Traffic Plans: When required for specific repairs, the CONTRACTOR shall immediately prepare and submit Maintenance of Traffic (M.O.T.) Plans for approval by authorities having jurisdiction. The traffic maintenance plan must meet the requirements of such authorities. Said M.O.T. Plans shall be in written form with sketches or drawings as necessary and shall comply with the State of Florida Department of Transportation standards for M.O.T. and the United States Department of Transportation Manual of Uniform Traffic Control Devices in construction areas. The Plans shall be submitted as soon as possible and not later than two weeks prior to any applicable construction work. A copy of the approval shall be provided to the OWNER.
- D. The CONTRACTOR shall maintain one copy of the approved M.O.T. plan at the construction site for inspection. The OWNER reserves the right to observe the M.O.T. plan in use and to make any changes as field conditions warrant. Any changes shall supersede the plan and be done at the CONTRACTOR's expense.
- E. The CONTRACTOR and his personnel are cautioned against parking vehicles in the business zones for any extended period of time. If necessary, the CONTRACTOR shall obtain offsite parking areas for his personnel.
- F. All dirt spilled from the CONTRACTOR's trucks on existing pavements shall be removed by the CONTRACTOR whenever in the opinion of the OWNER the

accumulation is sufficient to cause the formation of mud, dust, interference with traffic or create a traffic hazard.

- G. The CONTRACTOR shall comply with all traffic regulations and perform maintenance of traffic as part of his site operation.

PART 2 - PRODUCTS – (Not Used)

PART 3 - EXECUTION – (Not Used)

END OF SECTION

SECTION 01600

MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 PRODUCTS

- A. Products shall include the means, materials, equipment, or systems forming Work as approved by the OWNER. Products will not include machinery and equipment used for preparation, fabrication, conveying, and installation of Work. Products may also include existing materials or components designated for reuse.
- B. The CONTRACTOR shall not reuse materials and equipment designated to be removed except as approved by the OWNER or specified in the Contract Documents.

1.02 TRANSPORTATION AND HANDLING

- A. The CONTRACTOR shall transport and handle products in accordance with manufacturers' instructions.
- B. The CONTRACTOR shall promptly inspect shipments to ensure that the products comply with requirements, quantities are correct, and products are undamaged.
- C. The CONTRACTOR shall provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- D. The CONTRACTOR shall make arrangements for transportation, delivery, and handling of equipment and materials required for timely completion of the Work.

1.03 DELIVERY

- A. The CONTRACTOR shall arrange deliveries of products to accommodate the short-term site completion schedules and in ample time to facilitate inspection prior to installation. The CONTRACTOR shall avoid deliveries that cause lengthy storage or overburden of limited storage space.
- B. The CONTRACTOR shall coordinate deliveries to avoid conflict with Work and conditions at the site and to accommodate the following:
 - 1. Work of other CONTRACTORS or the OWNER.
 - 2. Limitation of storage space
 - 3. Availability of equipment and personnel for handling products.
 - 4. OWNER's use of premises.

- C. The CONTRACTOR shall have products delivered to the site in manufacturers' original, unopened, labeled containers.
- D. Immediately upon delivery, the CONTRACTOR shall inspect shipment to ensure that:
 - 1. The product complies with requirement of Contract Documents
 - 2. Quantities are correct.
 - 3. Container and packages are intact and labels are legible.
 - 4. Products are properly protected and undamaged.

1.04 PRODUCT HANDLING

- A. The CONTRACTOR shall coordinate the off-loading of materials and equipment delivered to the job site. If necessary to move stored materials and equipment during construction, the CONTRACTOR shall relocate materials and equipment at no additional cost to the Owner.
- B. The CONTRACTOR shall provide equipment and personnel necessary to handle products by methods to prevent damage to products or packaging.
- C. The CONTRACTOR shall provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.
- D. The CONTRACTOR shall handle products by methods to prevent over bending or over stressing.
- E. The CONTRACTOR shall lift heavy components only at designated lifting points.
- F. The CONTRACTOR shall handle materials and equipment in accordance with Manufacturers' recommendations.
- G. The CONTRACTOR shall not drop, roll, or skid products off deliver vehicles. The CONTRACTOR shall hand carry or use suitable materials handling equipment.

1.05 STORAGE OF MATERIAL

- A. The CONTRACTOR shall store and protect materials in accordance with manufacturers' recommendations and requirements of these Specifications.
- B. The CONTRACTOR shall make necessary provisions for safe storage of materials and equipment. The CONTRACTOR shall place loose soil materials, and materials to be incorporated into the Work to prevent damage to any part of

the Work or existing facilities and to maintain free access at all times to all parts of the Work and to utility service company installations in the vicinity of the Work. The CONTRACTOR shall keep material and equipment neatly and compactly stored in locations that will cause a minimum of inconvenience to other CONTRACTORS, public travel, adjoining owners, tenants, and occupants. The CONTRACTOR shall arrange storage in a manner to provide easy access for inspection.

- C. The CONTRACTOR shall restrict storage to areas available on the construction site for storage of material and equipment as shown on Plans or as approved by the OWNER.
- D. The CONTRACTOR shall provide off-site storage and protection when on-site storage is not adequate.
- E. The CONTRACTOR shall not use lawns, grass plots, or other private property for storage purposes without written permission of the property owner or other person in possession or control of such premises.
- F. The CONTRACTOR shall protect stored materials and equipment against loss or damage.
- G. The CONTRACTOR shall store materials and products in Manufacturers' unopened containers.
- H. Materials delivered and stored along the line of the Work shall be neatly, safely, and compactly stacked along the work site in such a manner as to cause the least inconvenience and damage to property owners and the general public, and shall not be closer than 3 feet to any fire hydrant. Public and private drives and street crossings shall be kept open.
- I. Damage to lawns, sidewalks streets, or other improvements shall be repaired or replaced by the CONTRACTOR to satisfaction of the OWNER and the property owner at no additional cost to the OWNER.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01700
PROJECT CLOSEOUT

PART 1 - GENERAL

1.01 CONTRACTOR'S RESPONSIBILITY FOR THE WORK

- A. Until final acceptance by the OWNER as provided for in these Contract Documents, the Work shall be under the charge and care of the CONTRACTOR, and he shall take every necessary precaution to prevent injury or damage to the Work or any part thereof by the action of the elements or from any other cause whatsoever, whether arising from the execution or from the non-execution of the Work. The CONTRACTOR shall rebuild, repair, restore, and make good, at his own expense, all injuries or damage to any portion of the Work occasioned by any of the forenamed causes before acceptance.

1.02 CLOSEOUT PROCEDURES

- A. The CONTRACTOR shall submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work has been completed in accordance with Contract Documents and ready for OWNER's review.
- B. The CONTRACTOR shall provide submittals to the OWNER as required by governing or other authorities.
- C. The CONTRACTOR shall submit final Application for Payment.

1.03 CONTRACT COMPLETION

- A. The Contract will be considered fulfilled, except as provided in any bond or by law, and the warranty specified in individual sections when all the Work has been completed, the final inspection made, and final acceptance and final payment have been made by the OWNER.
- B. After final inspection and upon receipt of satisfactory evidence of payment for all labor and materials used in the Work, the OWNER will notify the OWNER, in writing, of his acceptance of the Work performed under the contract and of his recommendations in respect to final payment to the CONTRACTOR.

1.04 FINAL SUBMITTALS

- A. Before the final acceptance of the project, the CONTRACTOR shall submit to the OWNER certain records, certification, etc., which are specified elsewhere in the Contract Documents. Missing, incomplete or unacceptable items, as determined by the OWNER, shall constitute grounds for withholding final payment to the CONTRACTOR. A partial list of such items appears below, but it shall be the CONTRACTOR's responsibility to submit any other items which are required in the Contract Documents:

1. Written test results of project completion
2. Written guarantees, where required
3. Certificates of inspection and acceptance by local governing agencies having jurisdiction.
4. Video tapes and logs of all lines televised
5. Pre-construction photos
6. Releases from all parties who are entitled to claims against the subject project, property, or improvement pursuant to the provisions of law.

1.05 FINAL CLEANUP

- A. The CONTRACTOR shall promptly remove from the vicinity of the completed Work, all rubbish, unused materials, concrete forms, construction equipment, temporary structures and facilities, construction signs, tools, scaffolding, materials, supplies and equipment which may have been used in the performance of the work. The CONTRACTOR shall broom clean paved surfaces and rake clean other surfaces of grounds. Final acceptance of the Work by the OWNER will be withheld until the CONTRACTOR has satisfactorily complied with foregoing requirements for final cleanup of the project site.**

PART 2 - PRODUCT (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01740

WARRANTIES

PART 1 - GENERAL

1.01 ONE YEAR WARRANTY

- A. Unless specified otherwise by individual specification sections, the CONTRACTOR shall warrant the fitness and soundness of all Work done and materials and equipment put in place under the Contract for a period of one (1) year after the completion of the Contract, and neither the payment of the final estimate nor any provision in Contract Documents nor partial or entire occupancy of the premises by the Owner shall constitute an acceptance of Work not done in accordance with the Contract Documents or relieve the CONTRACTOR of liability in respect to any express warranties or responsibility for faulty materials or Workmanship. The CONTRACTOR shall remedy all defects in the Work and pay for any damage to other Work resulting there from, which shall appear within a period of one year from the date of final acceptance of the Work, unless a longer period is specified in individual sections. The OWNER will give notice of observed defects with reasonable promptness. The accepted date of the beginning of the one- (1) year warranty shall be the date of final estimate payment to the CONTRACTOR by the OWNER.

1.02 FORM OF SUBMITTALS

- A. Warranty shall be bound in commercial quality 8-1/2 x 11 inch, three D side ring binders with durable plastic covers.
- B. Identify each binder with typed or printed title WARRANTIES with title of project; name, address, and telephone number of CONTRACTOR, equipment supplier, and name of responsible company principal.
- C. Table of Contents shall be neatly typed with each item identified with the number and title of the specification section in which specified, and the name of the product or Work item.
- D. Each warranty shall be separated with index tab sheets keyed to the Table of Contents listing. The CONTRACTOR shall provide full information, using separate type sheets as necessary. The CONTRACTOR shall list subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

1.03 PREPARATION OF SUBMITTALS

- A. The CONTRACTOR shall obtain warranties executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten (10) days after completion of the applicable item of Work. Except for items put into use with

OWNER's permission, the CONTRACTOR shall leave date of beginning of time of warranty until the Date of Completion is determined.

- B. The CONTRACTOR shall verify that documents are in proper form, contain full information, and are notarized.
- C. The CONTRACTOR shall co-execute submittals when required.
- D. The CONTRACTOR shall retain warranties until time specified for submittal.

1.04 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during construction with OWNER's permission, the CONTRACTOR shall submit documents within ten (10) days after acceptance.
- B. The CONTRACTOR shall make other submittals within ten (10) days after Date of Substantial Completion, prior to final Application for Payment.
- C. For items of Work for which acceptance is delayed beyond Date of Completion, the CONTRACTOR shall submit within ten (10) days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 02750

WASTEWATER FLOW CONTROL

PART 2 - GENERAL

2.01 WORK INCLUDED

- A. The work specified in this Section includes all labor, materials, accessories, equipment and tools for performing all operations required to bypass pump sewage around a manhole or sewer section in which work is to be performed. The CONTRACTOR shall be prepared to bypass pump sewage as a part of his operations.
- B. The CONTRACTOR shall provide all pumps, piping, and other equipment to accomplish this task; perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities to equal or better condition to the satisfaction of the OWNER.

2.02 SUBMITTALS

- A. The CONTRACTOR shall submit a complete and detailed wastewater flow control plan to the OWNER for review, prior to commencing wastewater flow control work.

PART 3 - PRODUCTS

3.01 PIPE FOR FLOW DIVERSION

- A. Ductile Iron Pipe: Ductile Iron Pipe and Fittings is acceptable for use for flow diversion during construction.
- B. Polyethylene Pipe: Polyethylene material shall comply with the requirement for Type III polyethylene, C-5 and P-34 as tabulated in ASTM D-1248 and have the Plastic Pipe Institute recommended designation pe3406. The material shall also have an average specific base resin density of between 0.94 g/cc and 0.955 g/cc (ASTM D-1505). Pipe made from these resins must have a long-term strength (50 years) rating of 1,250 psi or more per hydrostatic design basis categories of ASTM d-2837. The polyethylene resin shall have an environmental stress crack resistance, condition C as shown in ASTM D-1693, to be greater than 500 hours 20% failure. All pipe shall be made from the manufacturer's own production of the same formulation shall be used. The polyethylene resin shall have an average melt flow index, condition E as shown in ASTM D-1238, not in excess of 0.25 g/10 min. Pipe shall be homogeneous throughout, and free of visible cracks, holes, foreign material, blisters, or other deleterious faults. Diameters and wall thickness shall be measured in accordance with ASTM D-2122. Pipe joining will be done by thermal butt fusion method in accordance with ASTM D-2657.

- C. Acrylonitrile-Butadiene-Styrene (ABS): ABS pipe shall comply with requirements of ASTM D-2751.

PART 4 - EXECUTION

4.01 GENERAL

- A. All materials used for wastewater flow control shall be pre-approved by the Engineer prior to commencing wastewater flow control activities.
- B. When wastewater flow at the upstream manhole of the sewer section being repaired are above the maximum allowable requirements for television survey, or do not allow the proper sewer or manhole repair, the flows shall be reduced to the levels required by one of the following methods: manual operation of pumping stations by OWNER forces, by the CONTRACTOR plugging/blocking of the flows, or the CONTRACTOR pumping/bypassing of the flows as acceptable to the OWNER.
- C. In some applications, the wastewater flow may be plugged and contained within the capacity of the collection system. This shall only be done when it has been determined, that the system can accommodate the surcharging without any adverse impact.
- D. For the initial television inspection, before a liner is installed, the CONTRACTOR shall plug the sewer line completely. No flow, except infiltration/inflow, will be allowed through the respective sewer line being televised on the pre-repair television survey or the post-repair television survey.
- E. When sewer flow at the upstream manhole of the line being repaired, in the opinion of the OWNER, are too excessive to plug while the rehabilitation is being performed; the CONTRACTOR shall submit a written plan and pump/bypass the flow as acceptable to the OWNER.
- F. When existing storm or sanitary sewers are required to be taken up, moved, or rebuilt, the CONTRACTOR, at his own expense, shall provide and maintain temporary outlets and connections for all private or public drains, sewer, and sewer outlets connected to or served by the sewers to be rebuilt, and where necessary, shall provide adequate pumping facilities; and shall maintain these services until such time as the permanent sewers and connections are built and in service at no cost to the owner.
- G. During construction, flows in sections of the existing sewer being rehabilitated by removal and replacement shall be accommodated by temporary flow diversion. Wastewater flow diversion shall be accomplished as specified in this section, unless otherwise shown on the Plans.
- H. In sections of the existing sewer being rehabilitated by laying a new line parallel to the existing sewer, the existing sewer may be used to accommodate the existing

flow and no temporary flow diversion will be necessary if the existing sewer is not damaged or its use restricted by the CONTRACTOR'S operations.

- I. All pipe material utilized in wastewater flow diversion during construction shall be in good condition, and free of defects, and leaks. The CONTRACTOR at no cost to the owner shall replace any defective material. Upon completion of the job, pipe materials shall be removed from the site.

4.02 DEPTH OF FLOW

- A. In performing television inspection, joint testing, and/or sealing and other sewer rehabilitation work, the CONTRACTOR shall control the depth of flow in the sewer within the following guideline:

MAXIMUM FLOW DEPTH			
TELEVISION INSPECTION		JOINT TESTING AND SEALING	
PIPE SIZE	% PIPE DIA.	PIPE SIZE	% PIPE DIA.
6" - 10"	20	6" - 12"	25
12" - 24"	25	15" - 24"	30
27" or larger	30	27" or larger	35

- B. When sewer line flow, as measured in the first manhole upstream of the sewer segment being rehabilitated, exceed the maximum depth listed above or inspection of the complete pipe periphery is necessary for effective testing, sealing, or line work, the CONTRACTOR shall implement wastewater flow control methods at no additional cost to the OWNER.

4.03 PLUGGING AND BLOCKING

- A. The CONTRACTOR shall insert a sewer line plug into the line at a manhole upstream from the section being inspected or repaired. The plug shall be so designed that all or any portion of the flow can be released. During the survey portion of the operation, flows shall be shut off or reduced to within the maximum flow limits specified. During repairs, the flow shall be shut off or

pumped/bypassed, as approved by the OWNER. Wastewater flow shall be restored to normal following completion of work within the subject sewer section.

4.04 PUMPING AND BYPASSING

- A. When pumping/bypassing is required, as determined by the OWNER, the CONTRACTOR will supply the necessary pumps, conduits and other equipment to divert the flow of sewage around the manhole section in which work is to be performed. The bypass system shall be of sufficient capacity to handle existing flows plus additional flow that may occur during periods of rain storms. The CONTRACTOR will be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system. A “setup” consists of the necessary pumps, conduits and other equipment to divert flow of sewage around a manhole section, from the start to finish of work performed in the manhole section.
- B. Pumps and equipment shall be continuously monitored by a maintenance person capable of starting, stopping, refueling and maintaining these pumps during the rehabilitation. If pumping is required on a 24-hour basis, engines shall be equipped in a manner to keep noise to a minimum.

4.05 FLOW CONTROL PRECAUTIONS

- A. Surcharging Sewers. Where the raw sewage flow is blocked or plugged, sufficient precautions must be taken to protect the public health. No septic conditions shall be allowed due to CONTRACTOR’S operations. The sewer lines shall also be protected from damage. The following occurrences shall not be allowed:
 - 1. No wastewater shall be allowed to back up into any home or buildings.
 - 2. No wastewater shall overflow any manholes, cleanouts, or any other access to the sewers.
 - 3. Users upstream of the repair area shall be able to use all their water and sewer utilities without interruption.
- B. If any of the above occur or are expected to occur, the CONTRACTOR shall provide bypass pumping to alleviate one or all of the conditions. Additionally, the CONTRACTOR shall observe the conditions upstream of the plug and be prepared to immediately start bypass, if needed. It is the CONTRACTOR’S responsibility to pay for all damage claims.
- C. Any sump pumps, bypass pumps, trash pumps, or any other type of pump which pulls wastewater or any type of material out of the manhole or sewer shall discharge the material into another manhole, or appropriate vehicle or container approved by the OWNER. Under no circumstance shall this material be discharged, stored, or deposited on the ground, swale, road, or open environment.

- D. The CONTRACTOR shall take appropriate steps to ensure that all pumps, piping, and hoses that carry raw wastewater are protected from traffic. Traffic control shall be performed in accordance with Section 01570 - Traffic Regulations and Maintenance of Traffic.
- E. In the event, during “Wastewater Flow Control,” that raw wastewater is spilled, discharged, leaked, or otherwise deposited in the open environment, due to the CONTRACTOR’S work, the CONTRACTOR shall be responsible for any cleanup of solids and stabilization of the area affected. This work shall be performed at the CONTRACTOR’S expense with no additional cost to the OWNER. The CONTRACTOR shall also be responsible for notifying the sewer system maintenance personnel and complying with any and all regulatory requirements for cleaning up the spill at no additional cost to the OWNER.
- F. During wastewater flow control operations, the CONTRACTOR shall take proper precautions to prevent damage to existing sanitary sewer facilities, flooding, or damage to public or private property.
- G. The CONTRACTOR shall be responsible for the removal of any debris sedimentation in the existing sewers, laterals, and manholes, etc., which is attributed to his work under this Contract.
- H. The CONTRACTOR shall perform all operations in strict accordance with OSHA regulations and any applicable local safety requirements. Particular attention is directed to safety regulations for excavations and entering confined spaces.
- I. It is the CONTRACTOR’S responsibility to notify in writing any property owner having a sewer service connection on the sewer being rehabilitated or replaced that such work is being performed. The CONTRACTOR shall notify property owner’s 48 hours prior to commencing sewer rehabilitation or replacement. The Contractor shall be solely responsible for any damage caused by property service connection and backups caused by the sewer rehabilitation operations.

END OF SECTION

SECTION 02767

SMOKE TESTING

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. It is the intent of this specification to provide for the smoke testing materials and procedures to be used in the investigation of the sanitary sewer facilities as shown on the Project Maps. All materials and procedures shall be consistent with these specifications, current industry standards, and as approved by the Engineer.
- B. The Contractor shall minimize the physical entry of personnel into the sanitary sewer facilities. If required, manhole entry shall be in accordance with Federal, State, and local regulations for confined space entry and other regulations that may apply. The Contractor shall provide all safety equipment required for manhole entry operations, including harnesses, ventilation equipment, etc.

1.02 SUBMITTALS WITH THIS SECTION.

- A. Work Permits from applicable local, state and federal agencies
- B. Notification Documents
- C. Method of Smoke Production
- D. Field Log Worksheets written or in DVD format if specified.
- E. Final Compiled Reports written or in DVD format if specified.
- F. Identification for all Employees on-site

1.03 PERSONNEL QUALIFICATIONS

- A. A single Crew performing the testing shall be no less than 3 persons. One supervisor and two helpers per crew. One person operates the blower and smoke device. The other two inspect the run for evidence of smoke.
- B. The Contractor's employees performing the smoke testing under the provisions of these specifications shall be properly trained and thoroughly experienced in the use of the equipment and procedures. The supervisor shall have at least two years of previous testing experience obtained in the last four years prior to the date of award. As a minimum, the helpers shall have at least five (5) days of verifiable, previous testing experience. The five (5) days of experience shall have been acquired within a

maximum of six (6) months prior to the date of award of this contract, unless specifically waived by the Engineer.

- C. A list of employees to be used shall be provided to the Engineer to keep on file at the Municipal Offices. The information provided shall include the name and a copy of the driver's license of each individual. Each employee shall be provided with a photo ID identifying him by name, the name and contact information for the company. All job supervisors will have cards with contact information for the supervisor and company to provide to residents if requested.
- D. The Contractor shall require all personnel to demonstrate good judgment, in performing the testing.
- E. The Contractor shall take appropriate action to ensure that his employees are polite to the public in all aspects of the work and that immediate assistance is provided to property owners if needed.

PART 2 – PRODUCTS

2.01 BLOWERS

- A. The Contractor shall provide a portable blower designed and built specifically for the use of smoke testing. The blower shall be self-contained and powered by a minimum three (3) horsepower (HP) gasoline engine and be capable of producing a minimum of 2000 cubic feet of air per minute when working as a blow-in ventilator and 4000 cfm when working as a suction ventilator.
- B. The base of the blower shall have appropriate adapters and seals to make a good connection to the manhole without excessive loss of air and smoke.

2.02 SMOKE PRODUCTION

- A. Smoke bombs shall produce a chemical reaction generating white to gray smoke, leaving no residue, and shall be non-toxic and non-explosive. Each bomb shall be capable of producing adequate volume of smoke when used alone or in combination with a number of bombs for the duration of the test.
- B. Smoke Fluid shall produce smoke when exposed to the heat of the exhaust system of the motor for the blower. The smoke generated shall be white to gray smoke, leaving no residue, and shall be non-toxic and non-explosive.

2.03 OTHER EQUIPMENT

In addition to the blower, the Contractor shall provide all other equipment, tools, and incidentals required to perform smoke testing as required by these specifications and as directed by the Engineer including but not limited to sewer line stoppers, sand bags, cameras, confined space entry equipment, etc.

PART 3 – EXECUTION

3.01 WORK PROGRESS – The work shall generally progress as follows:

- A. The Contractor shall apply for and obtain work permits for all work to be performed in State and/or County Highways. All required insurances, traffic control measures, and other terms of the permit shall be provided to the satisfaction of the Agency Permit Engineer and/or Project Engineer.
- B. The Contractor shall have all submittals required reviewed, including the form of the field worksheet, etc, by the Engineer. Work shall not proceed until acceptance of all submittals by the Engineer.
- C. A Work Schedule shall be submitted for review and approval by the Engineer. No field testing or notification may proceed until the schedule has been approved by the Engineer. After approval of the WORK SCHEDULE by the Engineer, the Contractor shall not make any revisions or modifications to it without the written approval of the Engineer.
- D. Pre-notifications – With the first notification, the contractor shall notify all affected residents in the Municipality that smoke testing will occur no more than four days prior and not less than one day prior to the date of the testing. This notification will be by using a printed flyer hung on each door of affected homeowners and/or a press release in the Official newspaper of the Municipality. The flyer and/or press release notice shall include:
 1. Contact numbers for the Contractor and the Municipality, if residents want additional information. (*All persons who will be in contact with the public should be well versed in the smoke testing procedures, work schedule and content of all public notices*).
 2. Warnings to the homeowner that Individuals with respiratory, heart problems, or others who should never be exposed to smoke, should be removed from the premises prior to the tests. Others, such as house confined invalids, sleeping shift workers and locked in animals should be identified and evacuated before the test. The notice should also request that homes with these individuals be requested to be registered as “Homes of Special Concern.”

E. Regulatory Notifications – The Contractor shall notify the Local Police and Fire Departments, the County, the County Department of Health and the State Department of Environmental protection, just prior to distributing the flyers and publishing the Press Release to the General Public.

F. Daily Notifications – In the Area of Daily Testing, the Contractor shall notify:

1. All providers of emergency services by phone providing the area to be tested during the next day of work. Notification shall be 24 hours in advance of the testing.
2. The Contractor shall notify, by hand delivery of a notification letter, door knob hangtags or other acceptable methods to each address, all residences and businesses in the area to be tested 24 hours in advance of the testing. All notification letters or hangtags shall be bilingual in Spanish and English.
3. The day of the testing, the Contractor shall check with all homes of special concerns to be sure that all persons that may be sensitive to smoke will be out of the home prior to testing.

G. It shall be the Contractor's responsibility to keep adequate records of all notifications to emergency services and to produce them upon request by the Engineer. Failure to comply with this requirement may be cause to suspend the Contractor's operations until compliance is achieved.

H. Performing the Testing

I. Reporting the Data.

3.02 WORK SCHEDULE

A. Upon award of the Contract and prior to commencing any work, the Contractor shall provide a complete WORK SCHEDULE to the Engineer for review and approval. The Work Schedule shall be typed and shall indicate the planned progress for the proposed work.

B. The Work Schedule shall indicate the following:

1. Street Name (when in easements - the names of the abutting streets).
2. Street Limits (cross streets or property addresses).
3. Upstream and Downstream Manhole Numbers (from Project Maps).
4. Date of Testing.

5. Starting Time.

6. Ending Time.

C. Acceptable Periods of Work

1. The Contractor shall not commence testing before 8:00 a.m. and shall terminate testing no later than 5:00 p.m. each day.
2. If the Contractor wishes to test before 8:00 a.m. in commercial areas, such testing shall be shown on the submitted WORK SCHEDULE and is subject to the approval of the Engineer.
3. Work times in Commercial areas shall be scheduled to be prior to the opening of the majority of the businesses in that area.
4. Smoke testing shall not be performed on weekends or on holidays without the prior approval of the Engineer.

D. Contractor shall not perform smoke testing on days that, in the opinion of the Engineer, will hinder the results of the test. (For example, when high winds, heavy rains, or excessively high groundwater levels would interfere with the effectiveness of the testing).

3.03 PERFORMING THE TESTING

A. Procedure

1. Safety

- (a) The Contractor and his personnel shall be aware of and shall follow all Federal, State, and Local safety laws and regulations.
- (b) No entry into any part of the collection system shall be permitted until the Contractor has demonstrated that on-site personnel has been trained in applicable safety procedures and has the equipment on-site to allow those procedures to be followed.
- (c) Traffic Control. The area of work shall at all times be protected by means of an adequate number of cones, barricades, flags, or whatever means is necessary to properly and safely protect both vehicular and pedestrian traffic. Flag men shall be provided in all

streets. Further requirements for Traffic control may be imposed by the specific agency having jurisdiction.

- (d) Any condition deemed to be an unsafe condition shall be immediately corrected by the Contractor. The failure of the Engineer or his representatives to bring a potentially dangerous situation to the Contractor's attention shall not relieve the Contractor from his responsibility for providing a safe work area.
2. Unless otherwise approved by the Engineer, the sections of sewer subject to testing shall:
 - (a) Consist of a central manhole, where the blower will be positioned, and an upstream and downstream manhole and the sewer pipe between them. With three (3) manholes and two pipe sections, lengths should not exceed 800 feet.
 - (b) Consist of sections two (2) manholes and one pipe section. This allows a run of 400 to 800 ft of pipe.
 3. Flow Control - It is the intent of this specification that the smoke testing be accomplished without the need for bypass pumping. The Contractor shall provide temporary plugs, sandbags, or flow barriers as required to contain an adequate volume of smoke within the section of sewer being tested, or to limit the extent of sewer subjected to pressurized smoke. The Contractor shall monitor the resulting surcharged sewer at the manhole upstream of the section of sewer being tested, and prevent overflow conditions from occurring by removing the flow barriers.
 4. Prior to placing any smoke into a manhole, the Contractor shall first evacuate the system with a blower to ensure that any collection of explosive gas and any odor that may be introduced into the homes and businesses have been dispersed prior to pressurizing the sewer with smoke. Evacuation may be accomplished by removing the manhole covers of all manholes in the run, then placing a vacuum on the manhole where the blower is located, or, then blowing air into the manhole.
 5. All smoke testing information shall be accurately and neatly recorded on field worksheets and on 200 scale maps (1 in. = 200 ft.) or other maps of suitable scale as provided by the Engineer. The final report and information may be transferred to a computer generated log sheet together with related digital photographs taken during the project execution if specified in the contract.
 6. For each sewer main tested, the Contractor shall prepare a field log identifying each point of smoke exfiltration from:

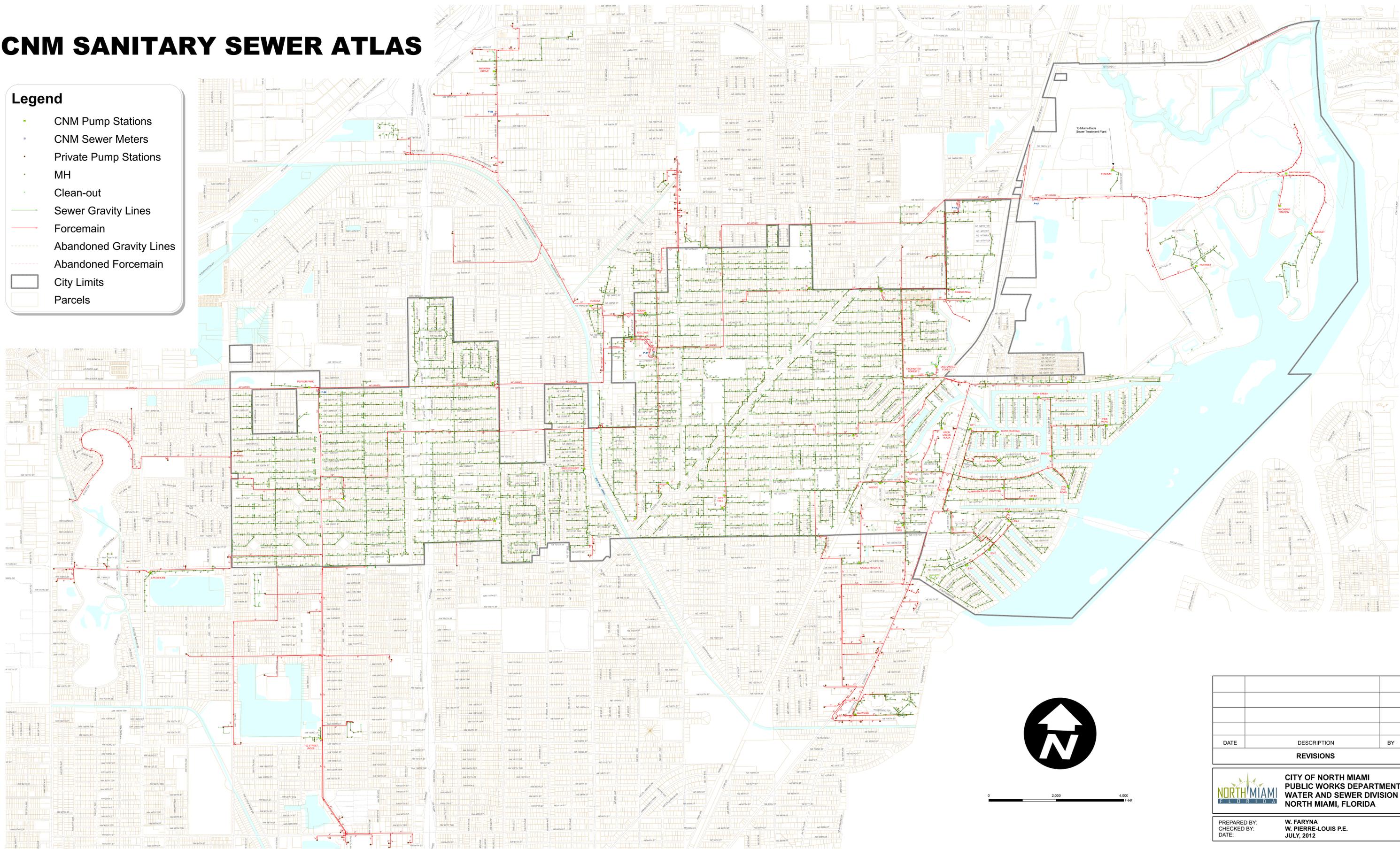
- (a) Roof gutters.
 - (b) Sewer cleanouts.
 - (c) Leakage in house laterals.
 - (d) Patio or area drains.
 - (e) Storm drain cross connections.
 - (f) Any other source not stated above
 - (g) Indicate if roof vents showed evidence of smoke or not.
7. The points of exfiltration, as identified above, shall be referenced and dimensioned to permanent landmarks or house or lot numbers.
8. A photograph of all leaks using a digital camera or approved substitute shall be included in the field log. Photographs of smoke evidence shall have a location indicated in the photograph using a heavy marker and heavy card stock and/or recorded on a DVD disk if specified. All photographs shall be clearly cross-referenced to the typed and/or computer generated log indicating the location of the leak.
9. The report shall reference the alphanumeric manhole numbers shown on the Project Maps.
10. The Contractor shall prepare a bound report and/or DVD record, if specified, of the smoke testing as specified. The report shall
- (a) Contain a typed log that clearly identifies each sewer main tested.
 - (b) Have all field data checked for accuracy and compiled into typewritten reports.
 - (c) Contain the digital data (i.e. photographs) at the end of the project.
 - (d) Contain copies of the materials used to make notifications and a log of the daily notifications to the emergency and safety personnel.
 - (e) Submit two (2) complete copies of the report and/or the DVD to the Engineer for review. Upon receiving the Engineer's review comments, the Contractor shall edit or revise the report and/or DVD as necessary and resubmit five copies of the final report and/or DVD to the Engineer.

END OF SECTION

CNM SANITARY SEWER ATLAS

Legend

-  CNM Pump Stations
-  CNM Sewer Meters
-  Private Pump Stations
-  MH
-  Clean-out
-  Sewer Gravity Lines
-  Forcemain
-  Abandoned Gravity Lines
-  Abandoned Forcemain
-  City Limits
-  Parcels



0 2000 4000 Feet

DATE	DESCRIPTION	BY
REVISIONS		

CITY OF NORTH MIAMI
PUBLIC WORKS DEPARTMENT
WATER AND SEWER DIVISION
NORTH MIAMI, FLORIDA

PREPARED BY: W. FARYNA
 CHECKED BY: W. PIERRE-LOUIS P.E.
 DATE: JULY, 2012