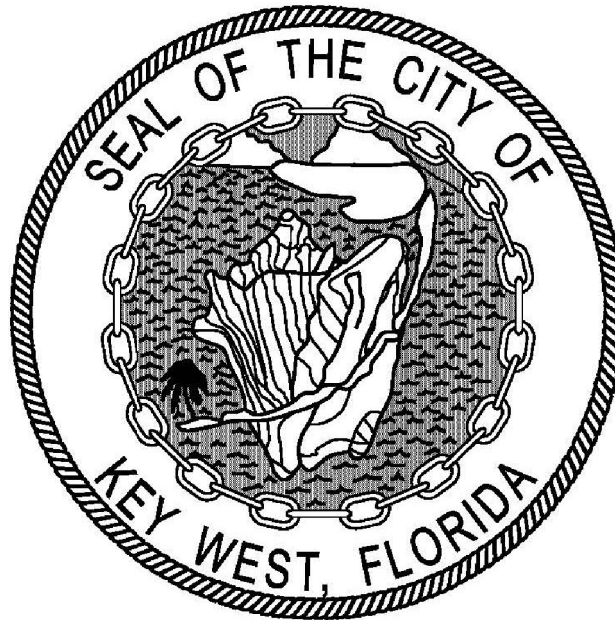


CONTRACT DOCUMENTS FOR THE REHABILITATION OF STORMWATER DRAINAGE WELLS



PREPARED FOR
CITY OF KEY WEST
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BID DOCUMENTS

For information regarding
this project, contact:

ANDREW SMYTH P.E.
6410 5th Street, Suite 2-A
Key West, FL 33040
305/294-1645

CH2MHILL

CH2M HILL Project No. 405136

Key West Bid No. 10-017

JULY 2010

CITY OF KEY WEST

Key West, Florida

BID DOCUMENTS

**FOR REHABILITATION OF
STORMWATER DRAINAGE WELLS**

CONSISTING OF:
BIDDING REQUIREMENTS
CONTRACT FORMS
CONDITIONS OF THE CONTRACT
TECHNICAL SPECIFICATIONS
DRAWINGS

CH2M HILL

Key West, FL
July 2010

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Project No. 405136

Copy No. _____

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PART 1
PROCUREMENT REQUIREMENTS

INVITATION TO BID

Sealed Bids for the **Rehabilitation of Stormwater Drainage Wells**, , addressed to the City of Key West, will be received at the office of the City Clerk, City of Key West, 525 Angela St., Key West Florida 33040 until **3:00 p.m., local time, on the 16th day of September 2010**, and then will be publicly opened and read. Any bids received after the time and date specified will not be considered.

Please submit three originals and three CD-ROMs or USB drives with one single PDF file of the entire bid package on each CD-ROM or USB drive. Bid package is to be enclosed in a sealed envelope, clearly marked on the outside **“BID FOR THE REHABILITATION OF SOTRMWATER DRAINAGE WELLS”** addressed and delivered to the City Clerk at the address noted above.

The City retains the right to award bid to the bidder that best meet the needs of the City

This contract is an indefinite quantities contract for well rehabilitation. The project contemplated consists of items of work required for a contract time of three years with an option for two 1-year extensions. Unit prices stated in the proposal can vary in accordance with the Consumer Price Index published by the Bureau of Labor Statistics. Unit prices can be adjusted on an annual basis, with the first adjustment occurring on October 1, 2011. The City of Key West will establish the locations and scope of work, as stormwater drainage well rehabilitation becomes necessary. Individual Work Orders will identify the scope for each specific project.

Drawings and Specifications may be obtained from Demand Star by Onvia. Please contact Demand Star at www.demandstar.com or call 1-800-711-1712.

A Mandatory Pre-bid Conference will be held in at **1:30 p.m. on September 2, 2010**, at City of Key West, City Hall Conference Room at Habana Plaza, 3140 Flagler Avenue, Key West, Florida 33040.

Each Bid must be submitted on the prescribed form and accompanied by bid security as prescribed in the Instructions to Bidders, payable to the City of Key West, Florida, in an amount not less than 5 percent of the amount bid.

At the time of bidding, the Bidder must demonstrate that he holds a valid Water Well Contractor license in the State of Florida.

The successful Bidder will be required to furnish the necessary additional bond(s) for the faithful performance of the Contract, as prescribed in the Bidding Documents. Within 10 days after the Notice of Award, the successful Bidder will also be required to furnish documentation showing that he is in compliance with the licensing requirements of the state and that the provisions of Chapter 66 Section 87 of the Code of Ordinances of the City of Key West. Compliance with these provisions is required before he can enter into the agreement contained in the Contract Documents. Specifically, within 10 days after the Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:

- A. City of Key West License, as defined in Code of Ordinances, Chapter 33, enabling the Contractor to perform the work stated herein.
- B. A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida.
- C. A valid occupational license issued by the City of Key West, Florida.

All bid bonds, contract bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida.

Before a Contract will be awarded for the work contemplated herein, the OWNER will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such information as deemed necessary by the OWNER to evaluate the Bidder's qualifications.

For information concerning the proposed work, or for appointment to visit the sites within the City for work that may be issued, contact Jay Gewin, Utilities Manager, telephone: (305) 809-3902.

At the time of the award, the successful Bidder must show satisfactory document of such State, County, and City licenses as would be required. Any permit and/or license requirement and subsequent costs are located within the bid documents. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the Bid in question. The City may reject bids for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bid does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the bid is conditional, or (5) if a change of circumstances occurs making the purpose of the bid unnecessary to the City. The City may also waive any minor formalities or irregularities in any bid.

Dated this ____ day of _____, 2010.

CITY OF KEY WEST

By _____
Jim Scholl, City Manager

* * * * *

STATEMENT OF NO BID #

REHABILITATION OF STORMWATER DRAINAGE WELLS

NOTE:IF YOU DO NOT INTEND TO BID, PLEASE RETURN THIS FORM ONLY

CITY OF KEY WEST
CITY CLERK
525 ANGELA STREET
KEY WEST, FLORIDA 33041-1409

We, the undersigned have declined to bid on the above-noted Invitation to Bid for the following reason(s)

- Insufficient time to respond to Invitation to Bid
- Do not offer this product
- Our schedule will not permit us to perform
- Unable to meet specifications
- Specifications unclear (please explain below)
- Remove us from your "Bidder Mailing List"
- Other (Please specify below)

We understand that if a "No Bid" statement is not returned, our name may be removed from the Bidder's list of the City of Key West.

COMPANY
NAME: _____

AUTHORIZED
AGENT: _____

COMPANY
ADDRESS: _____

DATE: _____ TELEPHONE: _____

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. FORMAT

The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the Specification sections into work performed by the various building trades, work by separate Subcontractors, or work required for separate facilities in the project.

B. DOCUMENT INTERPRETATION

The separate sections contained within these Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work.

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the Owner (or Owner's Representative), in writing (at least 6 working days prior to bid opening) an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing in the form of Addenda to the Documents, which will be furnished to all registered holders of Contract Documents. Bidders shall submit with their Proposals, or indicate receipt of, all Addenda. The Owner will not be responsible for any other explanation or interpretations of said Documents.

C. DRAWINGS

A map depicting the general locations of the stormwater drainage wells, typical completion diagrams, and a table of well depths and diameters are bound herein. Drawings and/or details applicable to each project will accompany each work order.

2. GENERAL DESCRIPTION OF THE PROJECT

A general description of the work to be done is contained in the Invitation to Bid. The scope is specified in applicable parts of these Contract Documents.

3. QUALIFICATION OF CONTRACTORS

The prospective Bidders must meet the statutorily prescribed requirements before award of Contract by the Owner.

Bidders must hold or obtain all Licenses as required by Florida State Statutes in order to bid and perform the work specified herein.

4. BIDDER'S UNDERSTANDING

Each Bidder must inform himself of the conditions relating to the execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction all information concerning site and subsurface conditions.

The Owner will make available to prospective Bidders upon request and at the office of the Owner (or Owner's Representative), prior to bid opening, any information that he may have as to subsurface conditions and surface topography at the worksite.

Investigations conducted by the Owner's Representative of subsurface conditions were made for the purpose of study and design and neither the Owner nor the Owner's Representative assumes any responsibility whatever in respect to the sufficiency or accuracy of borings or of the logs of test borings or of other investigations that have been made or of the interpretations made thereof and there is no warranty or guarantee either expressed or implied that the conditions indicated by such investigations are representative of those existing throughout such area or any part thereof or that unforeseen developments may not occur.

Logs of test borings, geotechnical reports, or topographic maps showing a record of the data obtained by the Owner's Representative investigations of surface and subsurface conditions that are made available shall not be considered a part of the Contract Documents, said logs representing only the opinion of the Owner's Representative as to the character of the materials encountered by him in his investigations and are available only for the convenience of the Bidders.

Information derived from inspection of logs of test borings, or pits, geotechnical reports, topographic maps, or from Drawings showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the site and making such additional investigations as he may elect or from properly fulfilling all the terms of the Contract Documents.

Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection, the protection of natural resources, fire protection, burning and nonburning requirements, permits, fees, and similar subjects.

5. TYPE OF PROPOSAL

A. LUMP SUM

Bidders shall submit a Bid on lump sum basis as set forth in the Bid Form.

The Lump Sum Bid price shall include such amounts as the Bidder deems proper for overhead bonds, and profit on account of cash allowances, if any, named in the Contract Documents as provided in paragraph 11.02 of the General Conditions. The lump sum for this Contract shall be based on the total of all extended unit price items.

B. UNIT PRICE

The Proposal for the work is to be submitted on a unit price basis. Unit prices shall be submitted for all items of work set forth in the Proposal. All items required to complete the work specified or shown on the Drawings but not included in the Proposal shall be considered incidental to those set forth in the Proposal. The estimate of quantities of work to be done is tabulated in the Proposal and although stated with as much accuracy as possible is approximate only and is assumed solely for the basis of calculation upon which the award of Contract shall be made. Payment to the Contractor will be made on the measurement of the work actually performed by the Contractor as specified in the Contract Documents.

6. PREPARATION OF PROPOSALSA. GENERAL

All blank spaces in the Proposal form must be filled in, as required, preferably in BLACK ink. All price information shall be shown in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between unit prices and extended totals, unit prices shall prevail.

Any Proposal shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid.

Only one Proposal from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the Owner that any Bidder is interested in more than one Proposal for work contemplated; all Proposals in which such Bidder is interested will be rejected.

B. SIGNATURE

The Bidder shall sign his Proposal in the blank space provided therefore. If Bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the Owner prior to opening of Proposals or submitted with the Proposal otherwise the Proposal will be regarded as not properly authorized.

C. INDEFINITE QUANTITIES

This is an "Indefinite Quantities" Contract with no fixed Contract price. The estimated quantities shown in the Proposal are only for bid evaluation purposes. The amount of work ordered for each item may be less than or exceed the estimated quantities and could vary by an indefinite amount. The actual amount of work to be performed and the time of such performance will be determined by the Owner or his properly authorized representative who will issue written Work Orders to the Contractor. The only work authorized under this Contract is that which is performed upon receipt of such a Work Order.

The Bidder shall not plead misunderstanding or deception because such listed quantities do not correspond with actual quantities. It is understood that the quantities may be increased or decreased as required to fulfill the Owner's needs for installation, repair, and replacement of infrastructure throughout the 2-year term of this Contract.

D. SPECIAL BIDDING REQUIREMENTS

The Bidder's attention is brought to the hiring practices and licenses and permits of the City of Key West. These are defined in the addition to Article 38, Ordinances, Permits and Licenses, as set forth in the Supplementary Conditions.

The Bidder shall submit with his Bid his experience record showing his experience and expertise in the rehabilitation of water and/or stormwater drainage wells. Such experience record shall provide at least five current or recent projects of similar work preferably within Florida or the southeastern United States. For each project the following information shall be provided:

1. Description and location of work.
2. Contract amount.
3. Dates work was performed.
4. Owner.
5. Name of Owner's contact person and phone number.

6. Engineer.
7. Name of Engineer's contact person and phone number.

E. ATTACHMENTS

Bidder shall complete and submit the following forms with his bid:

1. Anti-Kickback Affidavit
2. Public Entity Crimes Form
3. Key West Indemnification Form
4. Local Vendor Certification Pursuant to City of Key West Ordinance, 09-22 Section 2-798.

F. PUBLIC ENTITY CRIMES FORM

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

- G. The Bidder shall submit a signed and notarized Anti-Kickback Affidavit with Bid on the form provided herein.

7. STATE AND LOCAL SALES AND USE TAXES

Unless the Supplementary Conditions contains a statement that the Owner is exempt from state sales tax on materials incorporated into the work due to the qualification of the work under this Contract, all state and local sales and use taxes as required by the laws and statutes of the state and its political subdivisions shall be paid by the Contractor. Prices quoted in the Proposal shall include all nonexempt sales and use taxes unless provision is made in the Proposal form to separately itemize the tax.

8. LOCAL PREFERENCE

Under a competitive bid solicitation, when a responsive, responsible non-local business submits the lowest price bid, and the bid submitted by one or more responsive, responsible local businesses is within five percent (5%) of the price submitted by the non-local business, then the local business with the apparent lowest bid offer may have the opportunity to submit an offer to match the price(s) offered by the lowest, qualified and responsive non-local bidder within three working days of the notice of the intent to award. If the lowest local bidder submits a bid that fully matches the lowest bid from the

lowest non-local bidder tendered previously, then the award shall be made to such local bidder. If the lowest local bidder declines or is unable to match the lowest non-local bid price(s), then the award shall be made to the non-local business.

8. SUBMISSION OF PROPOSALS

All Proposals must be submitted not later than the time prescribed, at the place, and in the manner set forth in the Invitation to Bid. Proposals must be made on the Proposal forms provided herewith and submitted intact with the volume containing the Bidding Requirements, Contract Forms, Specifications, Drawings and Conditions of the Contract.

Each Proposal must be submitted in a sealed envelope, so marked as to indicate the Bidder's name and its contents without being opened, and addressed in conformance with the instructions in the Invitation to Bid. One original and six copies of the bid must be submitted.

Please submit three originals and three CD-ROMs or USB drives with one single PDF file of the entire bid package on each CD-ROM or USB drive. Bid package is to be enclosed in a sealed envelope, clearly marked on the outside “**BID FOR THE REHABILITATION OF SOTRMWATER DRAINAGE WELLS**” addressed and delivered to the City Clerk at the address noted above.

9. MODIFICATION OR WITHDRAWAL OF PROPOSALS

Prior to the time and date designated for receipt of Proposals, any Proposal submitted may be withdrawn by notice to the party receiving Proposals at the place designated for receipt of Proposals. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Proposals. No Proposal may be withdrawn after the time scheduled for opening of Proposals unless the time specified in paragraph AWARD OF CONTRACT of these Instructions to Bidders shall have elapsed.

10. BID SECURITY

Proposals must be accompanied by cash, a certified check, or cashier's check drawn on a bank in good standing or a bid bond issued by a Surety authorized to issue such bonds in the state where the work is located in the amount of 5 percent of the total amount of the Proposal submitted. This bid security shall be given as a guarantee that the Bidder will not withdraw his Proposal for a period of 60 days after bid opening and that if awarded the Contract the successful Bidder will execute the attached Contract and furnish properly executed Performance and Payment Bonds, each in the full amount of the Contract price within the time specified.

The Attorney-in-Fact that executes this bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

If the Bidder elects to furnish a Bid Bond, he shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

11. RETURN OF BID SECURITY

Within 15 days after the award of the Contract the Owner will return the bid securities to all Bidders whose Proposals are not to be further considered in awarding the Contract. Retained bid securities will be held until the Contract has been finally executed after which all bid securities, other than Bidders' bonds and any guarantees, which have been forfeited, will be returned to the respective Bidders whose Proposals they accompanied.

12. AWARD OF CONTRACT

Within 60 calendar days after the opening of Proposals the Owner will accept up to three of the Proposals or will act in accordance with the following paragraphs. The acceptance of a Proposal will be by written notice of award mailed to the office designated in the Proposal or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract and provide an acceptable Performance Bond, Payment Bond, insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within 75 days after the opening of Proposals.

The Owner reserves the right to accept or reject any or all Proposals and to waive any informalities and irregularities in said Proposals.

13. BASIS OF AWARD

The award will be made by the Owner on the basis of that Proposal from the lowest three responsive, responsible Bidders which, in the Owner's sole and absolute judgment will best serve the interest of the Owner.

If, at the time this Contract is to be awarded, the total of the lowest bid is deemed unbalanced with 1 or more items or the bid exceeds the Owner's estimate by 20% on 2 or more items the Owner may reject all Proposals or take such other action as best serves the Owner's interests.

14. EXECUTION OF CONTRACT

Each successful Bidder shall, within 10 working days after receiving Notice of Award, sign and deliver to the Owner a Contract in the form hereto attached together with the insurance certificate examples of the bonds as required in the Contract Documents and evidence of holding required licenses and certificates. Within 10 working days after receiving the signed Contract from the successful Bidder the Owner's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

15. CONTRACT BONDS

A. PERFORMANCE AND PAYMENT BONDS

The successful Bidder shall file with the Owner, at the time of delivery of the signed Contract, a Performance Bond and Payment Bond on the form bound herewith, each in the full amount of the Contract price in accordance with the requirements of Florida Statutes Section 255.05 or 713.23, as applicable, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the construction of the work and to cover all guarantees against defective workmanship or materials, or both, during the warranty period following the date of final acceptance of the work by the Owner. The Surety furnishing this bond shall have a sound financial standing and a record of service satisfactory to the Owner, shall be authorized to do business in the State of Florida, and shall be listed on the current U.S. Department of Treasury Circular Number 570 or amendments thereto in the Federal Register of acceptable Sureties for federal projects. The Contractor shall supply the Owner with phone numbers, addresses, and contacts for the Surety and their agents.

B. POWER-OF-ATTORNEY

The Attorney-in-Fact (Resident Agent) who executes this Performance and Payment Bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

All Contracts, Performance and Payment Bonds, and respective powers-of-attorney will have the same date.

C. UNIT PRICES FOR BONDS

Because of the nature of this Contract the Contractor shall provide unit prices in the Proposal for providing the Performance and Payment Bonds. When a specific Work Order is authorized the unit price for providing the Performance and Payment Bonds will be considered in the total cost of that Work Order.

The Bidder shall provide unit prices for each bond item in the Proposal as all work performed within the Contract time could exceed \$500,000, even though the Bidder's total of extended unit price items in the Proposal may be less than \$500,000.

16. FAILURE TO EXECUTE CONTRACT AND FURNISH BOND

The Bidder who has a Contract awarded to him and who fails to promptly and properly execute the Contract or furnish the required Bonds shall forfeit the bid security that accompanied his bid and the bid security shall be retained as liquidated damages by the Owner and it is agreed that this said sum is a fair estimate of the amount of damages the Owner will sustain in case the Bidder fails to enter into a Contract or furnish the required Bonds. Bid security deposited in the form of cash, a certified check, or cashier's check shall be subject to the same requirement as a Bid Bond.

17. PERFORMANCE OF WORK BY CONTRACTOR

The Contractor shall perform on the site and with his own organization labor equivalent to at least 40 percent of the total amount of the work to be performed under this Contract. If, during the progress of the work hereunder, the Contractor requests a reduction of such percentage and the Owner or Owner's Representative determines that it would be to the Owner's advantage the percentage of the labor required to be performed by the Contractor's own organization may be reduced; PROVIDED prior written approval of such reduction is obtained by the Contractor from the Owner or Owner's Representative.

Each Bidder must furnish with his Proposal a list of the items that he will perform with his own forces and the estimated total cost of these items. Attach additional pages if necessary.

18. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions stated in the General Conditions. The time allowed for the completion of the work authorized by a Work Order will be stated in that particular Work Order.

When the Contractor receives a Notice to Proceed with the work authorized by each Work Order he shall commence work as soon as possible and shall complete all work within the number of calendar days stipulated in that particular Work Order.

Should the Contractor disagree with the time of completion for a specific Work Order he shall, within five calendar days of the receipt of the Work Order, make a written claim to the Owner or Owner's Representative for an extension in the time of completion. If, in the opinion of the Owner or Owner's Representative, the Contractor presents sufficient evidence to justify the claim an extension in the time of completion will be allowed for the period determined by the Owner or Owner's Representative.

19. MANDATORY PRE-BID CONFERENCE

A mandatory Pre-Bid Conference will be held by the City of Key West at **1:30 p.m. on September 2, 2010**. The meeting will take place at City of Key West, City Hall Conference Room at Habana Plaza, 3140 Flagler Avenue, Key West, Florida 33040. The City of Key West requires attendance by all prospective bidders. The purpose of the meeting will be to discuss particular requirements and answer questions of the prospective bidders relative to completing this project. Bids from bidders that do not attend this Pre-bid Conference will be considered non-responsive and not accepted for consideration of this work by the City of Key West.

* * * * *

NOTE TO BIDDER: Use preferably BLACK ink for completing this Bid form.

PROPOSAL

To: The City of Key West

Address: 525 Angela Street, Key West, Florida 33041

Project Title: Rehabilitation of Stormwater Drainage Wells

Bid No.: 10-017

Bidder's person to contact for additional information on this Proposal:

Name: _____

Telephone: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the OWNER, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents, that he has personally inspected the City, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal.

The Bidder further agrees that he has exercised his own judgment regarding the interpretation of subsurface information and has utilized all data which he believes pertinent from the Owner and other sources in arriving at his conclusions.

The Bidder further agrees, as evidenced by signing the Proposal, which if awarded a Contract, the Florida Trench Safety Act and applicable trench safety standards will be complied with.

405136A.GN1

The Bidder understands and agrees that if a Contract is awarded, the Owner may elect to award all schedules under one Contract, separately, or in any combination that best serves the interests of the Owner.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Proposal is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Public Construction Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Proposal, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder further agrees to begin work within 10 calendar days after the date of the Notice to Proceed for a particular Work Order and to complete the construction, in all respects for that particular Work Order, within the number of calendar days set forth in that Work Order.

This Contract will automatically expire and be terminated 3 years after the date of the execution of the Contract by the Owner, unless the Owner and Contractor mutually agree to up to two 1-year time extensions. Unit prices set forth in the proposal will be adjusted annually on October 1st, beginning October 1, 2011, according to Consumer Price Index published by the Bureau of Labor Statistics. If the contract is extended, it will expire and be terminated 1- year after the date of the execution of the contract extension by the Owner.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract and fails to complete the work authorized by a Work Order within the time limit or extended time limit agreed upon in that Work Order, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner at the rate of \$500 per day (or as otherwise modified in the issuance of a Work Order) for all work authorized under the Work Order until the work has been satisfactorily completed as provided by the Contract Documents. Sundays and legal holidays shall be included in determining days in default. Liquidated damages shall be assessed individually against each Work Order.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's. ____, ____, ____, ____.

(Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Proposal(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated bid prices for the work.

UNIT PRICE ITEMS

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.

WORK ORDER

Each Work Order will consist of a summary of extended unit prices derived from units contained in the Lump Sum Bid. The Contractor shall provide bond based on the total of each Work Order.

PUBLIC CONSTRUCTION AND PAYMENT BONDS

Bidder shall obtain Performance and Payment Bonds worth \$100,000 upon award of Contract. Contractor shall bond each Work Order for the amount of the Work Order. Unit prices below shall include the cost of all bonds.

<u>Item</u>	<u>Quant.</u>	<u>Unit</u>	<u>UP (Fig)</u>	<u>PU (Words)</u>	<u>Extended Total Amt.</u>
1. Mobilize well rehabilitation equipment to stormwater drainage well site, restore well to original depth, airlift for a minimum of 12 hours, operate temporary disposal system, demobilize and restore site.					
5	EA	\$	_____	_____	\$ _____
2. Additional work on pump-assisted stormwater drainage well required to remove wellhead and isolate well from pump station.					
1	EA	\$	_____	_____	\$ _____
3. Video survey of well in accordance with 33 21 13.12 Water Well Video Inspection					
5	EA	\$	_____	_____	\$ _____
4. Additional airlift development in excess of 12 hours (if necessary).					
40	HR	\$	_____	_____	\$ _____
5. Acidize well in accordance with 33 21 13.14 Water Well Rehabilitation					
1000	GAL	\$	_____	_____	\$ _____
TOTAL OF ALL EXTENDED UNIT PRICE ITEMS LISTED ABOVE					\$ _____

NOTE: THIS TOTAL WILL BE THE BASIS FOR EVALUATING LOW BIDDER AND BASIS OF AWARD

Payment for materials and equipment authorized by the Owner or Owner's Representative in a written Work Order but not listed in the above Proposal will be provided at the suppliers invoice plus shipping plus 25 % for overhead and profit.

List items to be performed by Contractor's own forces and the estimated total cost of these items.

(Use additional sheets if necessary.)

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work in the event that the Bidder is awarded the Contract:

Name

_____, _____, _____, _____
Street City State Zip

Name

_____, _____, _____, _____
Street City State Zip

Name

_____, _____, _____, _____
Street City State Zip

Name

_____, _____, _____, _____
Street City State Zip

SURETY

_____ whose
address is

_____, _____, _____, _____
Street City State Zip

BIDDER

The name of the Bidder submitting this Proposal is _____

_____ doing
business at

_____, _____, _____, _____
Street City State Zip

which is the address to which all communications concerned with this Proposal and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Proposal, or of the partnership, or of all persons interested in this Proposal as principals are as follows:

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this ____ day of _____ 2010.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this ____ day of _____ 2010.

(SEAL)

Name of Corporation

By _____

Title _____

Attest _____
Secretary

EXPERIENCE OF BIDDER

The Bidder states that he is an experienced CONTRACTOR and has completed similar projects within the last 5 years.

(List similar projects, with types, names of Owners, construction costs, Engineers, and references with phone numbers. Use additional sheets if necessary.)

BID BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that _____

hereinafter called the PRINCIPAL, and _____

a corporation duly organized under the laws of the State of _____

having its principal place of business at _____

_____ in the State of _____

and authorized to do business in the State of Florida, as SURETY, are held and firmly bound

unto _____

hereinafter called the OBLIGEE, in the sum of _____

DOLLARS (\$ _____) for the payment for which we bind ourselves,
our
heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by
these presents.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his or its Bid Proposal for
Rehabilitation of Stormwater Drainage Wells, Key West, Florida said Bid Proposal, by
reference thereto, being hereby made a part hereof.

WHEREAS, the PRINCIPAL contemplates submitting or has submitted a bid to the OBLIGEE for the furnishing of all labor, materials (except those to be specifically furnished by the OWNER), equipment, machinery, tools, apparatus, means of transportation for, and the performance of the work covered in the Proposal and the detailed Drawings and Specifications, entitled:

Rehabilitation of Stormwater Drainage Wells, Key West, Florida.

WHEREAS, it was a condition precedent to the submission of said bid that a cashier's check, certified check, or bid bond in the amount of 5 percent of the base bid be submitted with said bid as a guarantee that the Bidder would, if awarded the Contract, enter into a written Contract with the OWNER for the performance of said Contract, within 10 working days after written notice having been given of the award of the Contract.

NOW, THEREFORE, the conditions of this obligation are such that if the PRINCIPAL within 10 consecutive calendar days after written notice of such acceptance, enters into a written Contract with the OBLIGEE and furnishes the Performance and Payment Bonds, each in an amount equal to 100 percent of the base bid, satisfactory to the OWNER, then this obligation shall be void; otherwise the sum herein stated shall be due and payable to the OBLIGEE and the Surety herein agrees to pay said sum immediately upon demand of the OBLIGEE in good and lawful money of the United States of America, as liquidated damages for failure thereof of said PRINCIPAL.

Signed and sealed this _____ day of _____, 2010.

PRINCIPAL _____

By _____

SURETY _____

By _____

Attorney-In-Fact

* * * * *

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
 : SS
COUNTY OF MONROE)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: _____

Sworn and subscribed before me this _____ day of _____, 2010

NOTARY PUBLIC, State of Florida at Large

My Commission Expires:

* * * * *

SWORN STATEMENT UNDER SECTION 287.133(3)(A)
FLORIDA STATUTES, ON **PUBLIC ENTITY CRIMES**

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

1. This sworn statement is submitted with Bid or Proposal for _____

2. This sworn statement is submitted by _____
(name of entity submitting sworn statement)

whose business address is _____

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

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement _____)

3. My name is _____
(please print name of individual signing)

and my relationship to the entity named above is _____

4. I understand that a “public entity crime” as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that “convicted” or “conviction” as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

- 6. I understand that an “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 - 1. A predecessor or successor of a person convicted of a public entity crime; or
 - 2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
- 7. I understand that a “person” as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
- 8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies).

____Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

____There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

____The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

____The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

 (signature)

 (date)

STATE OF _____

COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

_____ who, after first being sworn by me, affixed his/her
(name of individual signing)

signature in the space provided above on this ____ day of _____ 2010.

My commission expires:

NOTARY PUBLIC

CITY OF KEY WEST INDEMNIFICATION FORM

The CONTRACTOR shall indemnify and hold harmless the City of Key West, its officers, and employees, from liabilities, damages, losses and costs, including, but not limited to reasonable attorney’s fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of CONTRACTOR and persons employed or utilized by CONTRACTOR in the performance of this agreement. Except as specifically provided herein, this agreement does not require CONTRACTOR to indemnify the City of Key West, its employees, officers, directors, or agents from any liability, damage, loss, claim, action or proceeding.

These indemnifications shall survive the term of this agreement. In the event that any action or proceeding is brought against the City of Key West by reason of such claim or demand, CONTRACTOR shall, upon written notice from the City of Key West, resist and defend such action or proceeding by counsel satisfactory to the City of Key West.

The indemnification provided above shall obligate CONTRACTOR to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at the City of Key West’s option, any and all claims of liability and all suits and actions of every name and description covered above which may be brought against the City of Key West whether performed by CONTRACTOR, or persons employed or utilized by CONTRACTOR.

The CONTRACTOR’s obligation under this provision shall not be limited in any way by the agreed upon Contract Price as shown in this agreement, or the CONTRACTOR’s limit of or lack of sufficient insurance protection.

CONTRACTOR: _____

SEAL:

Address

Address

Signature

Print Name

Title

DATE: _____

CITY OF KEY WEST BUSINESS LICENSE TAX RECEIPT

1. A City of Key West Business License Tax Receipt is required for this Project. Contractor must be general contractor or building contractor or engineering contractor.

2. A City of Key West Business License Tax Receipt also is required as for sub-contracting landscaping contractor, engineering services, and professional surveying.

3. A Business License Tax Application can be found on the City's web site.

<http://www.keywestcity.com/egov/docs/1162843921181.htm>

Business License Tax Application

City of Key West
City Hall Annex
PO Box 1409
Key West, FL 33041

Date Applied _____

License # _____
Phone 305-809-3955
Fax 305-809-3978

Business Type: _____

Business Name: _____

Business Location: _____

Business Owner: _____

State Licensed Qualifier (if applicable): _____

Mailing Address: _____

EIN / SS # _____ Phone # _____

Applicant name (printed) Applicant signature Date

State of Florida
County of Monroe

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

Signature of Notary Public (stamp or seal). Personally known ____
Produced id _____

- ____ Sales Tax number 3106 Flagler Ave 292-6735 City utility acct _____
- ____ Commercial garbage Waste Mgmt 296-8297 _____
- ____ Lease or deed
- ____ State License DBPR 850-487-1395 / Dept Ag 305-470-6900
- ____ Home occupation application
- ____ Fictitious Name registration Previous use _____
- ____ Corporate or LLC registration
- ____ Liability / Worker's Comp Zoning _____
- ____ Fire Inspector 292-8179
- ____ CO / final inspection on any permits Category _____ Fee \$ _____
- ____ Monroe County or local licensing

Licensed in accordance with Chapter 66, Key West Code of Ordinances

____ Approved Denied / Reason _____

Licensing Official Date

BIDDER'S CHECKLIST

(Note: The purpose of this checklist is to serve as a reminder of major items to be addressed in submitting a bid and is not intended to be all inclusive. It does not alleviate the Bidder from the responsibility of becoming familiar with all aspects of the Contract Documents and proper completion and submission of his bid.)

1. All Contract Documents thoroughly read and understood
2. All blank spaces in Proposal filled in, preferably in black ink
3. Total and unit prices added correctly
4. Addenda acknowledged
5. Subcontractors are named as indicated in the Proposal
6. Experience record included
7. Proposal signed by authorized officer
8. Bid Bond completed and executed, including power-of-attorney dated the same date as Bid Bond
9. Bidder familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of the work
10. Bidder, if successful, able to obtain and/or demonstrate possession of required licenses and certificates within 10 days after receiving a Notice of Award
11. Proposal submitted intact with the volume containing the Bidding Requirements, Contract Forms, and Conditions of the Contract
12. Bid Documents submitted in sealed envelope and addressed and labeled in conformance with the instructions in the Invitation to Bid

Bidder Acknowledgment

Name _____

Title _____

Signature _____

* * * * *

**NON-COLLUSION DECLARATION AND
COMPLIANCE WITH 49 CFR §29.**

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

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

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

I further declare that:

1. The prices(s) and amount of this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition with any other contractor, bidder or potential bidder.
2. Neither the price(s) nor the amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder on this project, and will not be so disclosed prior to the bid opening.
3. No attempt has been made or will be made to solicit, cause or induce any other firm or person to refrain from bidding on this project, or to submit a bid higher than the bid of this firm, or any intentionally high or non-competitive bid or other form of complementary bid.
4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary bid.
5. My firm has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any firm or person, or offered, promised or paid cash or anything of value to any firm or person, whether in connection with this or any other project, in consideration for an agreement or promise by any firm or person to refrain from bidding or to submit a complementary bid on this project.
6. My firm has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any firm or person, and has not been promised or paid cash or anything of value by any firm or person, whether in connection with this or any other project, in consideration for my firm's submitting a complementary bid, or agreeing to do so, on this project.
7. I have made a diligent inquiry of all members, officers, employees, and agents of my firm with responsibilities relating to the preparation, approval or submission of my firm's bid on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion, act or other conduct inconsistent with any of the statements and representations made in this Declaration.

8. As required by Section 337.165, Florida Statutes, the firm has fully informed the Department of Transportation in writing of all convictions of the firm, its affiliates (as defined in Section 337.165(l)(a), Florida Statutes), and all directors, officers, and employees of the firm and its affiliates for violation of state or federal antitrust laws with respect to a public contract or for violation of any state or federal law involving fraud, bribery, collusion, conspiracy or material misrepresentation with respect to a public contract. This includes disclosure of the names of current employees of the firm or affiliates who were convicted of contract crimes while in the employ of another company.

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

(a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR §29.110(a), by any Federal department or agency;

(b) has within a three-year period preceding this certification been convicted of or had a civil judgment rendered against him or her for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, State or local government transaction or public contract; violation of Federal or State antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) is presently indicted for or otherwise criminally or civilly charged by a Federal, State or local governmental entity with commission of any of the offenses enumerated in paragraph 9(b) of this certification; and

(d) has within a three-year period preceding this certification had one or more Federal, State or local government public transactions terminated for cause or default..

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

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

EXCEPTIONS:

(Any exception listed above will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate to whom it applies, initiating agency and dates of agency action.

Providing false information may result in criminal prosecution and/or administrative sanctions.)

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

CONTRACTOR: (Seal)

BY: _____ WITNESS: _____
NAME AND TITLE PRINTED

BY: _____ WITNESS: _____
SIGNATURE

Executed on this _____ day of _____, _____

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

PART 2
CONTRACTING REQUIREMENTS

AGREEMENT

This Agreement, made and entered into this _____ day of _____ 2010,

by and between the City of Key West, hereinafter called the "OWNER", and _____

hereinafter called the "CONTRACTOR";

WITNESSETH:

The CONTRACTOR, in consideration of the sum to be paid him by the OWNER and of the covenants and agreements herein contained, hereby agrees at his own proper cost and expense to do all the work and furnish all the materials, tools, labor, bonds, overhead, profit, and all appliances, machinery, and appurtenances for the Rehabilitation of Stormwater Drainage Wells, Key West, Florida to the extent of the Proposal made by the CONTRACTOR, dated the ____ day of _____ 2010, all in full compliance with the Contract Documents referred to herein.

The BIDDING REQUIREMENTS, including the signed copy of the Proposal, the CONTRACT FORMS, the PERFORMANCE AND PAYMENT BONDS, the CONDITIONS OF THE CONTRACT, the SPECIFICATIONS, and the DRAWINGS, for the Rehabilitation of Stormwater Drainage Wells, dated July 2010, are hereby referred to and by reference made a part of this Contract as fully and completely as if the same were fully set forth herein and are mutually cooperative therewith.

In consideration of the performance of the work as set forth in these Contract Documents, the OWNER agrees to pay to the CONTRACTOR an amount using the prices in the bid as adjusted in accordance with the Contract Documents, or as otherwise herein provided, and to make such payments in the manner and at the times provided in the Contract Documents. OWNER does not guarantee that the total price will be utilized through individual Work Orders.

The CONTRACTOR agrees to complete the work within the time specified in the Work Orders and to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said Proposal.

The CONTRACTOR agrees to remedy all defects appearing in the work or developing in the materials furnished and the workmanship performed under this Contract during the warranty period after the date of final acceptance of the work by the OWNER, and further agrees to indemnify and save the OWNER harmless from any costs encountered in remedying such defects.

It is agreed that the Contract, based upon the Proposal, shall be fully complete within the stated number of consecutive calendar days from the date the Notice to Proceed is issued for each Work Order.

In the event that the CONTRACTOR shall fail to complete the work within the time limit or the extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid at the rate of \$500 per day. Sundays and legal holidays shall be included in determining days in default.

This Contract will automatically expire and be terminated three (3) years after the date of the execution of the Contract by the OWNER, unless the OWNER and CONTRACTOR mutually agree to up to two 1-year time extensions at the unit prices set forth in the Proposal and adjusted according to the Consumer Price Index on an annual basis beginning on October 1, 2011.

IN WITNESS WHEREOF, we, the parties hereto, each herewith subscribe the same this

_____ day of _____, A.D., 2010.

CITY OF KEY WEST

By _____

Title _____

CONTRACTOR

By _____

Title _____

* * * * *

PUBLIC CONSTRUCTION BOND

Bond No. _____

BY THIS BOND, We _____, as Principal (Contractor) and _____, a corporation, as Surety, are bound to the City of Key West herein called Owner, in the sum of \$ _____, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS Bond is that if Principal:

1. Performs the contract dated _____, 2010 between principal and Owner for the Rehabilitation of Stormwater Drainage Wells, the contract being made part of this bond by reference, at the times and in the manner prescribed in the contract; and
2. Promptly makes payment to all claimants, as defined in Section 255.05 (1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
3. Pays Owner all losses, damages, expenses, costs, and attorney’s fees, including appellate proceedings, that owner sustains because of a default in the contract; and
4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provision in Section 255.05 (2), Florida Statutes.

405136A.GN1

Any change in or under the Contract Documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety's obligation under this bond.

DATED ON _____, 2010

(Name of Principal)

By: _____
(As Attorney in Fact)

(Name of Surety)

PAYMENT BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05, _____ with offices at _____ hereinafter called the CONTRACTOR, (Principal), and with offices at _____

_____ a corporation duly organized and existing under and by virtue of the laws of the State of _____ hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound CITY OF KEY WEST, hereinafter called the City (Obligee), in the sum of:

_____ DOLLARS (\$ _____), lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, and the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract hereto attached, with the CITY, dated, _____ 2010, to furnish at his own cost, charges, and expense the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the Contract Documents as defined therein, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein;

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR shall in all respects comply with the terms and conditions of said Contract and his obligation thereunder, including the Contract Documents and further that if said CONTRACTOR shall promptly make payments to all claimants as defined in Section 255.05(1), Florida Statutes, supplying CONTRACTOR with labor, materials, equipment, or supplies used directly or indirectly by said CONTRACTOR or Subcontractors in the prosecution of the work provided for in said Contract, then this obligation shall be void; otherwise, to remain in full force and effect for the term of said Contract, including any and all guarantee periods as specifically mentioned in said Contract Documents.

AND, the said SURETY for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract or to the work to be performed, or materials to be furnished thereunder, or in the Contract Documents shall affect said obligation of said SURETY on this Bond, and the said SURETY does hereby waive notice of any such changes, extension of time, alternations, or additions of the terms of the Contract, or to the work, or to the Contract Documents.

Any action instituted under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument this _____ day of _____, 2010, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____

(SEAL)

ATTEST

SURETY

By: _____

(SEAL)

ATTEST



City of Key West
P.O. Box 1409
Key West, FL 33041

Notice of Award

Date

Bid Number: 10-017

Owner City of Key West
Company City of Key West
Address Office of the City Clerk
Address City of Key West P.O. Box 1409
Key West, FL 33041-1409

Project Name: **Rehabilitation of Stormwater Drainage Wells, City of Key West**

Dear:

At a meeting of the City of Key West Commission held on_____, 20____, **COMPANY NAME** was awarded the contract for **Rehabilitation of Stormwater Drainage Wells, City of Key West**. The total Contract amount shall not exceed \$ _____.

Enclosed please find three copies of the Contract Documents for your execution. Please complete the necessary pages, affixing signatures, notary and / or corporate seals, etc. where necessary and return to this office by **DATE**

The Certificate of Insurance must be attached to the documents; one original and two copies are acceptable.

Powers – of – Attorney must be submitted in each bond document, an original and two copies are permissible.

A copy of your City of Key West Business License Tax Receipt must be attached, (subcontractors City Of Key West Business License Tax Receipt) and one copy in PDF on disc.

Sincerely,

Jay Gewin
General Services Director
cc: Cheri Smith, City Clerk
Project File

CERTIFICATE OF SUBSTANTIAL COMPLETION

Project: **Rehabilitation of Stormwater Drainage Wells**
Bid No. **10-017**

DATE OF ISSUANCE _____

CITY _____

CITY'S CONTRACT NO. _____

CONTRACTOR _____ OWNER'S REPRESENTATIVE _____

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

TO: _____
1 CITY

And To _____
2 CONTRACTOR

The Work to which this Certificate applies has been inspected by authorized representatives of CITY, CONTRACTOR, and OWNER'S REPRESENTATIVE and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does no alter the responsibility of the CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within ____ days of the above date of Substantial Completion.

EJCDC No. 1910-8-D (1990 Edition)
Prepared by the Engineers Joint Contract Documents Committee and endorsed by the Associated General Contractors of America

CERTIFICATE OF FINAL COMPLETION

Project: **Rehabilitation of Stormwater Drainage Wells**
Bid No. **10-017**

Date of Issuance: _____

CITY _____

Contractor

Owner's Representative

This Certificate of Completion applies to all Work under the Contract Documents.

.....

The Work to which this Certificate applies has been inspected by authorized representatives of CITY and OWNER'S REPRESENTATIVE, and that Work is hereby declared to be complete in accordance with the Contract Documents on

DATE OF COMPLETION

Executed by OWNER'S REPRESENTATIVE on _____ , (Date)

OWNER'S REPRESENTATIVE

By: _____
(Authorized Signature)

CONTRACTOR accepts this Certificate of Completion on _____,
(DATE)

CONTRACTOR

By: _____

CITY accepts this Certificate of Completion on _____,
(DATE)

CITY

By: _____
(Authorized Signature)

NOTICE TO PROCEED

Date: _____, 20__

Bid No: 10-017

Contractor: _____

Address: _____

**Project Rehabilitation of Stormwater Drainage Wells
Bid No. 10-017**

You are hereby notified to commence work on _____, 20__ for the rehabilitation of stormwater drainage wells and all related work, as designated by the City in accordance with the Contract made with the City of Key West on the ____ day of _____, 20__. The amount of time to complete the work is one thousand eight hundred twenty five (1,825) consecutive calendar days and should be fully completed on or before_____.

Sincerely,

Project Manager

Receipt of this NOTICE TO PROCEED is hereby acknowledged this, the ____ day of _____, 20__.

CONTRACTOR: _____

By: _____

TITLE: _____

DATE: _____

Please return one (1) copy of this notice to:

CH2M HILL.
6410 5th Street
Suite 2A
Key West, FL 33040

PAYMENT APPLICATION AND CERTIFICATE

Application No.: _____ of _____
Period From: _____ to _____, 20__.

Date: _____
Sheet: ____ of ____

Project: **Rehabilitation of Stormwater Drainage Wells**

Bid No.: **10-017**

Contractor: _____

1. Original Contract Sum	\$ _____
2a. Contract Additions approved in Previous Applications	\$ _____
2b. Contract Deductions approved in Previous Applications	\$ _____
3a. Contract Additions approved this Period (List Contract Modification Nos.____)	\$ _____
3b. Contract Deductions approved this Period (List Contract Modification Nos.____)	\$ _____
4. Net Change by Contract Modifications (sum of lines 2 and 3)	\$ _____
5. Revised Contract Amount (Sum of Lines 1 and 4)	\$ _____
6. Total Value of Work to Date (Estimate Attached)	\$ _____
7. Percent Project Complete (Line 6 / Line 5 x 100) =	_____ %
8. Total Materials on Hand (Listing Attached)	\$ _____
9. Subtotal – Work Completed and Stored (Sum of Lines 6 and 8)	\$ _____
10. Total Retainage (_____% x Line 9)	\$ _____
11. Total Earned to Date, Less Retainage (Line 9 less Line 10)	\$ _____
12. Less Previous Certificates for Payments (item 11 from Previous Application)	\$ _____
13. Current Payment Due (Line 11 less Line 12)	\$ _____
14. Amount paid to Subcontractors Previous Pay Application	\$ _____

The undersigned Contractor certifies that the Work covered by this Application for Payment has been completed in accordance with the Contract Documents that the current payment shown herein is now due, and that title for all Work, materials, and equipment covered in this Application will pass to the CITY free and clear of all liens at the time of payment.

Contractor By Date

I hereby acknowledge that the material and labor involved on the above estimate is correct to the best of my knowledge, information and belief, and payment on same is due Contractor.

Project Manager Date

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



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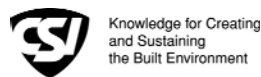
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The Associated General Contractors of America



Construction Specifications Institute

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract

Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and

14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and

easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating

all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of

insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended

result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

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

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor

shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

- a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;
2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all

of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed

by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous

Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous

Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an

agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to

the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct

physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order .

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5

on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary

circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. "*Or-Equal*" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require

a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or-equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. *Engineer's Cost Reimbursement*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as

Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs,

losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of

or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

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

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

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

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples:* Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular

means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will

constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by

or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract

Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper

execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status

under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques,

sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be

performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each

applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,
2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or

10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and

returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or

for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

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

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will

be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract

Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be

uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but

not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction

period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefore as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action,

Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to

Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under

Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or

d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;

c. there are other items entitling Owner to a set-off against the amount recommended; or

d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and

guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

- a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
- b. consent of the surety, if any, to final payment;
- c. a list of all Claims against Owner that Contractor believes are unsettled; and
- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. Engineer's Review of Application and Acceptance

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and, will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04

are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other

provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

REVISIONS AND ADDITIONS TO THE GENERAL CONDITIONS

The General Conditions are hereby revised as follows:

ARTICLE 1.01.A.19 "Engineer"

Add the following:

Wherever in these Documents the word "Engineer" appears, it shall be understood to mean the Owner or the Owner's authorized agent and their authorized representatives, acting either directly or indirectly as authorized agents of the Owner.

ARTICLE 1.01.A.30 "Owner"

Add the following:

Wherever in these Documents the word "Owner" appears, it shall be understood to mean the City of Key West whose address is 525 Angela Street, Key West, Florida 33040.

SC-1.01.A.51. Add a new paragraph immediately following paragraph 1.01.A.50 of the General Conditions as follows:

1.01.A.51. *Specialist*—The term Specialist refers to a person, partnership, firm, or corporation of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the Contract Documents, or otherwise performing Work required by the Contract Documents. Where the Specifications require the installation by a Specialist, that term shall also be deemed to mean either the manufacturer of the item, a person, partnership, firm, or corporation licensed by the manufacturer, or a person, partnership, firm, or corporation who will perform the Work under the manufacturer's direct supervision.

SC-2.03.A. Delete the third sentence of paragraph 2.03.A *Commencement of Contract Times: Notice to Proceed* of the General Conditions in its entirety.

ARTICLE 5.04 "CONTRACTOR'S LIABILITY INSURANCE"

Add the following:

Provide Employer's Liability Insurance in an amount not less than \$300,000.

ARTICLE 5.04 "CONTRACTOR'S LIABILITY INSURANCE"

Add the following:

Before commencing work as specified in the contract Contractor shall obtain at its own cost and expense the following insurance in insurance companies authorized in the State of Florida, with an A.M. Best rating of A-:VI or higher and shall provide evidence of such insurance to the City. The policies or certificates shall provide thirty (30) days prior to cancellation notices of same shall be given to the City by registered mail, return receipt requested, for all of the required insurance policies stated below. All notices shall name the Contractor and identify the agreement or contract number. The City of Key West, all Departments, Agencies, Boards and Commissions, its officers, agents, servants and employees are to be added as "additional insureds" as respects liability arising out of activities performed by or on behalf of the Contractor.

Contractor shall maintain limits no less than those stated below, and shall include a waiver of subrogation as to the Owner, Contractor, and their respective officers, agents, employees, and subcontractors:

- A. **Worker's Compensation** – Statutory – in compliance with the Compensation law of the State of Florida. The coverage must include Employer's Liability with a limit of One Million (\$1,000,000.00) Dollars each accident.

- B. **Commercial General Liability** Insurance with a minimum limit of liability per occurrence of One Million (\$1,000,000.00) Dollars for bodily injury and property damage. This insurance shall include the following coverage:
 - Premises-Operations
 - Broad Form Contractual Liability
 - Products and Completed Operations
 - Use of Independent Contractors and Subcontractors
 - Personal Injury
 - Broad Form Property Damage

- C. **Business Automobile Liability** Insurance with a minimum limit of liability per occurrence of One Million (\$1,000,000.00) Dollars for bodily injury and property damage. This insurance shall include for bodily injury and property damage the following coverage:
- Owned automobiles
 - Hired automobiles
 - Non-owned automobiles
- D. Excess/Umbrella Liability shall have a minimum limit of Two Million (\$2,000,000.00) per occurrence/aggregate.
- E. It shall be the responsibility of the Contractor to ensure that all subcontractors comply with the same insurance requirements as is required of Contractor.
- F. Certificates of Insurance meeting the required insurance provisions shall be forwarded to Owner or Owner's Representative.

The following **Indemnification Agreement** shall be made a provision of the contract:

Contractor agrees to protect, defend, indemnify, save and hold harmless The City of Key West, all Departments, Agencies, Boards and Commissions, its officers, agents, servants and employees, including volunteers, from and against any and all claims, debts, demands, expense and liability arising out of injury or death to any person or the damage, loss of destruction of any property which may occur or in any way grow out of any act or omission of the Contractor, its agents, servants, and employees, or any and all costs, expense and/or attorney fees incurred by the Contractor as a result of any claim, demands, and/or causes of action except of those claims, demands, and/or causes of action arising out of the negligence of The City of Key West, all Departments, Agencies, Boards and Commissions, its officers, agents, servants and employees. The Contractor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false or fraudulent. This shall not in anyway abrogate the City's right to the defense of sovereign immunity.

In addition, it is understood if at any time any of the policies required by City shall become unsatisfactory to the City as to form or substance, or if a company issuing any such policy shall become unsatisfactory to the City, the Contractor shall obtain a new policy, submit the same to the City for approval and submit a certificate of insurance as which may be required by the contract. It is understood that upon failure of the Contractor to furnish, deliver and maintain such insurance as above provided, the contract at the election of the City may be declared suspended, discontinued or terminated. Further, failure of the Contractor to take out and/or maintain any required insurance shall not relieve the Contractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor concerning indemnification.

ARTICLE 5.04 "CONTRACTOR'S LIABILITY INSURANCE"

Add the following Article:

SURETY AND INSURER QUALIFICATIONS

All bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company, having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or insurance company shall be duly licensed and qualified to do business in the State of Florida.

ARTICLE 5.04 "CONTRACTOR'S LIABILITY INSURANCE"

Include the City of Key West and CH2M HILL as additional insureds.

6.03. Add the following new paragraphs immediately after Paragraph 6.03.C:

6.03.D. Domestic Products:

6.03.D.1. Contractor agrees to use materials, supplies, and products manufactured, mined, processed, or produced in the United States or its territories, if products are available at reasonable and competitive prices and are not contrary to any sole source specification. If Agreement to use domestic products is breached and domestic products are not used, there shall be a downward adjustment in Contract price equal to any realized savings or benefits to Contractor.

6.03.D.2. Contractor agrees to use steel produced within the United States when specifications require the use of steel and do not limit its supply to a sole source specification. Owner has right to waive this requirement in the event of national emergency, national strike, or other cause. If Agreement to use domestic steel is breached and domestic steel is not used, there shall be a downward adjustment in Contract price equal to any realized savings or benefits to Contractor.

6.03.E. Grant Requirements:

6.03.E.1. The Contractor shall assist the grants administrator in meeting the reporting requirements set forth in Section 1512 and all other applicable provisions of the American Recovery and Reinvestment Act of 2009 (ARRA), also referred to as the Recovery Act, by providing information requested by the grants administrator in a timely manner. Other applicable provisions include, but are not limited to, Section 1605 Buy America and Section 1606 Davis-Bacon Prevailing Wage Rates.

ARTICLE 6.08 "PERMITS"

Add the following:

PERMIT FOR WORK WITHIN LOCAL RIGHTS-OF-WAY

The Contractor shall obtain from the City of Key West or Monroe County, as appropriate, the necessary permits for work within the rights-of-way. The Contractor shall abide by all regulations and conditions, including maintenance of traffic.

The Owner will obtain the utility installation permit for any improvements to be constructed within Florida Department of Transportation rights-of-way. The Contractor shall abide by all regulations and conditions of this permit including maintenance of traffic, restoration, etc.

PUBLIC WORKS COMPLIANCE ACT

GENERAL

If the Contract amount exceeds \$25,000, the Contractor shall abide by the requirements of the State Public Works Compliance Act, Section 446.101 Florida Statutes. The Act generally requires the Contractor to:

Participate in registered training programs with the State of Florida.

Hire for the duration of the Contract, a ratio of at least one registered apprentice or trainee to every five journeymen working on the project.

Prior to the commencement of the work, submit a letter of intent to the Bureau of Apprenticeship and to others as required by the Act.

Prepare and submit quarterly to the Bureau of Apprenticeship, records of employment on report form BAP-500.

ADMINISTRATION

Administration of the apprenticeship program for this Contract will be under the designated area field office of the Bureau of Apprenticeship.

ARTICLE 6.09 "LAWS AND REGULATIONS"

Add the following:

The Contractor shall comply with the City of Key West Noise Ordinance.

ARTICLE 6.09 "LAWS AND REGULATIONS"

Add the following subarticles:

Within 10 days of Notice of Award, the successful Bidder must represent that he holds all applicable state, county, and City of Key West licenses and permits required to do business as a contractor with respect to the work described in the Contract Documents.

Further, the successful Bidder must, within 10 days of Notice of Award, furnish documentation showing that, as a minimum, he has complied with the provisions of Chapter 91 of the Code of Ordinances of the City of Key West in order to enter into the Agreement contained in the Contract Documents.

Specifically, within 10 days after Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:

- A. All licenses or certificates required by federal, state, or local statutes or regulations.
- B. Holds a valid Certificate of Competency issued by the Public Service Director of the Building and Zoning Department which shall be valid throughout the Contract time.
- C. Holds a valid occupational license issued by the City of Key West.

FOLLOWING ARTICLE 6.09 "LAWS AND REGULATIONS"

Add the following Article:

HISTORIC PRESERVATION

The Contractor shall comply with Florida's Archives and Historic Act (Florida Statutes, Chapter 267) and the regulations of the local historic preservation board as applicable and protect against the potential loss or destruction of significant historical or archaeological data, sites, and properties in connection with the project.

ARTICLE 6.13 "SAFETY AND PROTECTION"

Add the following Subarticle:

OCCUPATIONAL SAFETY AND HEALTH

The Contractor shall observe and comply with all applicable local, state, and federal occupational safety and health regulations during the prosecution of work under this Contract. In addition, full compliance by the Contractor with the U.S. Department of Labor's Occupational Safety and Health Standards, as established in Public Law 91-596, will be required under the terms of this Contract.

ARTICLE 6.20 "INDEMNIFICATION"

Add the following:

The obligation of the Contractor under this Article shall be limited to the contractual liability as specified in the Supplementary Conditions, Article Insurance and Liability.

ARTICLE 13.03 "TESTS AND INSPECTIONS"

SC-13.03.B Delete 13.03.B in its entirety and insert the following:

Contractor shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents.

SC-13.03.D. Supplement paragraph 13.03.D of the General Conditions as follows:

Tests required by Contract Documents to be performed by Contractor that require test certificates be submitted to Owner or Owner's Representative for acceptance shall be made by an independent testing laboratory or agency licensed or certified in accordance with Laws and Regulations and applicable state and local statutes. In the event state license or certification is not required, testing laboratories or agencies shall meet following applicable requirements:

13.03.D.1. "Recommended Requirements for Independent Laboratory Qualification," published by the American Council of Independent Laboratories.

13.03.D.2. Basic requirements of ASTM E329, "Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction" as applicable.

13.03.D.3. Calibrate testing equipment at reasonable intervals by devices of accuracy traceable to either the National Bureau of Standards or accepted values of natural physical constants.

13.07 Correction Period

13.07.A. Change the first sentence from "If within one year after the date of Substantial Completion..." TO "If within five years after the date of Substantial Completion..."

13.07.D. Change the sentence from "...will be extended for an additional period of one year after such corrections or removal..." TO "...will be extended for an additional period of five years after such correction or removal..."

ARTICLE 14 "PAYMENTS TO CONTRACTOR AND COMPLETION"

Add the following to the end of Subarticle 14.02.B.1:

Add the following subarticles:

14.02.B1.1 The Owner will deduct from the estimate, and retain as part security, 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of material delivered to and properly stored at the jobsite but not incorporated into the work.

14.02.B1.2 After deducting the retainage and the amount of all previous partial payments made to the Contractor from the amount earned, the amount due will be made payable to the Contractor. Recommendations for payment received by the Owner less than 40 days prior to the scheduled day for payment will not be processed or paid until the following month.

ARTICLE 17 “MISCELLANEOUS”

Add the following new Article 18, Federal Grant Requirements to the end of Subarticle 17.5:

“ARTICLE 18 FEDERAL GRANT REQUIREMENTS”

This Project may be funded in part by federal grant money. The Contractor shall comply with the federal grant requirements.

18.1 Access to Records: Authorized representatives of the Owner, the Florida Department of Environmental Protection, other state agencies associated with the grant and the United States Agency responsible for this grant shall have access to, for the purpose of inspection, any books, documents, papers, and records of the Contractor that are pertinent to this Agreement/Contract. The Contractor shall retain all books, documents, papers, and records pertinent to this Agreement/Contract for a period of three years after receiving and accepting final payment under his Agreement/Contract.

18.2 Access to Work Sites: Authorized representatives of the Owner, the Florida Department of Environmental Protection (FDEP), other state agencies associated with this grant, and the United States Agency responsible for this grant shall have access to the Work site(s) at any reasonable time. The Contractor shall cooperate (including making available working copies of documents and supplementary materials) during Work site inspections conducted by the Owner and state and federal agencies.

18.3 Debarment and Suspension (Executive Order 12549):

18.3.1 If the price of this Agreement/Contract equals or exceeds \$25,000, the Owner shall not award this Agreement/Contract, nor permit any lower-tier goods or services (including construction) subcontract with a price equaling or exceeding \$25,000 to be awarded, to any party that is debarred or suspended or is otherwise excluded from, or ineligible for participation in, Federal assistance programs under Executive Order 12549 (Debarment and Suspension).

18.3.2 The attention of all bidders or prospective contractors (including the Contractor) is directed to the certification/clause entitled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions,” which has been extracted from Appendix B to 40 CFR Part 32 and included as Appendix A to these Supplementary Conditions. The certification/clause entitled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions,” is applicable to this Agreement/Contract if the price of this Agreement/Contract equals or exceeds \$25,000.

18.3.3 If bidders or prospective contractors (including the Contractor), or any prospective subcontractors at any tier, intend to let any lower-tier goods or services (including construction) subcontracts for any portion of the Work, they shall physically include the certification/clause entitled Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions, which is included as Appendix A to these Supplementary Conditions, in all lower-tier goods and services (including construction) subcontracts with a price equaling or exceeding \$25,000 and in all solicitations for such subcontracts.

18.4 Minority Owned Business Enterprise: Utilization of minority and Women-Owned firms and enterprises is encouraged.”

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTIONS

Note: This certification/clause has been extracted from Appendix B to 40 CFR Part 32 and is applicable to all goods and services (including construction) contracts and subcontracts with a price equaling or exceeding \$25,000 and in all solicitations for such contracts and subcontracts.

Instructions for Certification:

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

3. The prospective lower tier participant shall provide immediate written notice to the person to which this Proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participant,” “person,” “primary covered transaction,” “principal,” “proposal,” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this Proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this Proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this Proposal that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

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

END OF SECTION

PART 3
SPECIFICATIONS

**SECTION 01 01 00
GENERAL REQUIREMENTS**

PART 1 PROJECT DESCRIPTION

1.01 GENERAL

- A. A brief description of the work is stated in the Invitation to Bid. To determine the full scope of the project or, any particular part of the project, coordinate the applicable information in the several parts of these Contract Documents.
- B. The work under this Contract shall be performed by the Contractor as required by the Owner. Work will be authorized in the form of a Work Order issued to the Contractor. The Work Order will include a description of the project and may include Drawings and other data to define the scope and details of the work. The Contractor will receive a Notice to Proceed with the work authorized by each Work Order. The Contractor shall complete all work in the Work Order within the number of calendar days stipulated in that particular Work Order unless an extension in the time of completion is granted by the Owner or Owner's Representative, as stated in the Instructions to Bidders. Upon completion of the work in each Work Order and compliance with applicable provisions in the Contract Documents the Contractor will receive final payment for all work done under that Work Order.
- C. The following additional information, though not all-inclusive, is given to assist Contractors in their evaluation of the work required to meet the project objectives.
- D. This project will provide the Owner with: Stormwater drainage well rehabilitation work, as directed by the Owner over the period of three (3) years. Typical projects that may be authorized are listed below. The list is only representative of possible projects. The Owner is not limited to authorize only projects in this list. Likewise, any project listed below may not be authorized.
- E. Possible Projects include:
 - 1. Rehabilitation of gravity stormwater drainage wells.
 - 2. Rehabilitation of pump-assisted stormwater drainage wells.
- F. The work is likely to be influenced by the tides. The tides can have an effect on the timing and work schedule. No extra claims shall be made for the tides or for other natural causes.

- G. The Contractor shall become familiar with the existing operating conditions of the Owner's storm and sewage collection system and pumping stations, roads and facilities and take such into consideration in planning and scheduling work. No extra claims shall be made for work required to achieve conditions beyond those obtainable under normal operation of the existing collection and pumping facilities necessary to accomplish the work.

1.02 FDOT SPECIFICATIONS

- A. Portions of The Florida Department of Transportation Standard Specifications for Road and Bridge Construction and their Roadway and Traffic Design Standards, hereinafter referred to as the FDOT Specifications, are referred to herein and amended, in part, and the same are hereby made a part of this Contract to the extent of such references and shall be as binding upon the Contract as though reproduced herein. Such reference shall mean the current edition, including all supplements. In case of a conflict in the requirements of the FDOT Specifications and the requirements stated herein, the requirements herein shall prevail.

PART 2 SEQUENCE OF OPERATIONS

2.01 MOBILIZATION AND DEMOBILIZATION

- A. Contractor shall be responsible for mobilization and demobilization of labor, materials and equipment. Payment for mobilization and demobilization will be based on the unit price indicated in the Proposal for mobilization and demobilization for each Work Order.

2.02 SCHEDULING

- A. Plan the work and carry it out with minimum interference to the operation of the existing facilities. Prior to starting the work confer with the Owner and Owner's Representative to develop an approved work schedule which will permit the facilities to function normally as practical. It may be necessary to do certain parts of the work outside normal working hours in order to avoid undesirable conditions. The Contractor shall do this work at such times and at no additional cost to the Owner.
- B. In order to meet the overall objectives of a project certain elements of work may have to be completed or substantially completed in a given sequence that will be identified in the applicable Work Order.
- C. No work shall be started until the Contractor has sufficient manpower, equipment, and material to complete the project. No work shall commence without express consent of the Owner or Owner's Representative.

2.03 COORDINATION

- A. Contractors shall cooperate in the coordination of their separate activities in a manner that will provide the least interference with the Owner's operations and other Contractors and utility companies working in the area and in the interfacing and connection of the separate elements of the overall project work.
- B. If any difficulty or dispute should arise in the accomplishment of the above, the problem shall be brought immediately to the attention of the Owner or Owner's Representative.
- C. All Contractors working on the site are subject to this requirement for cooperation and all shall abide by the Owner's or Owner's Representative's decision in resolving project coordination problems without additional cost to the Owner.

2.04 SHUTDOWN OF EXISTING OPERATIONS OR UTILITIES

- A. Continuous operation of the Owner's existing sewer system is of critical importance. The Contractor's operation shall not result in the interruption of sewage, water, or solid waste service to any customers.
- B. Connections to existing services or utilities or other work that requires the temporary shutdown of any existing operations or utilities shall be planned in detail with appropriate scheduling of the work and coordinated with the Owner or Owner's Representative. Advance notice shall be given in order that the Owner or Owner's Representative may witness the shutdown, tie-in, and startup. The temporary shutdown must be approved by the Owner.
- C. All materials and equipment (including emergency equipment) necessary to expedite the tie-in shall be on hand prior to the shutdown of existing services or utilities.

2.05 OPERATION OF EXISTING SYSTEM PROHIBITED

- A. At no time undertake to close off any lines or open valves or take any other action which would affect the operation of the existing system except as specifically required by the Drawings and Specifications and after approval is granted by the Owner. Request approval 5 working days in advance of the time that interruption of the existing system is required.

PART 3 SITE CONDITIONS

3.01 SITE INVESTIGATION AND REPRESENTATION

- A. The Contractor acknowledges satisfaction as to the general nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, availability of labor, water, electric power, roads, and uncertainties of weather, or similar physical conditions, the character of

equipment and facilities needed preliminary to and during the prosecution of the work, and all other matters which can in any way affect the work or the cost thereof under this contract.

- B. Failure by the Contractor to become acquainted with the physical conditions and all the available information will not relieve the Contractor from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The Contractor warrants that as a result of examination and investigation of all the aforesaid data, the Contractor can perform the work in a good and workmanlike manner and to the satisfaction of the Owner. The Owner assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the Owner.

3.02 INFORMATION ON SITE CONDITIONS

- A. General: Any information obtained by the Owner's Representative regarding site conditions, subsurface information, groundwater elevations, existing construction of site facilities as applicable and similar data will be available for inspection at the office of the Owner's Representative upon request. Such information is offered as supplementary information only. Neither the Owner's Representative nor the Owner assumes any responsibility for the completeness or interpretation of such supplementary information.

3.03 SUBSURFACE INVESTIGATION

- A. No test holes or borings have been made by the Owner; however, any information the Owner may have concerning subsurface conditions will be made available to the Contractor upon request.
- B. The Contractor shall examine the applicable site upon receipt of each Work Order and may make arrangements with the Owner to conduct his own subsurface investigation.

3.04 UTILITIES

- A. The Contractor shall be responsible for determining, at his cost, the locations and elevations of all utilities in each project area and shall be responsible for contacting each utility for location and notification prior to commencing work.

3.05 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Where the Contractor's operations could cause damage or inconvenience to telephone, television, power, water, or sewer systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the Contractor.
- B. Notify all utility offices which are affected by the construction operation at least 48 hours in advance. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities. Hand digging is required in the tolerance zone. If the Contractor fails to adhere to State Statutes and the Florida Administrative Code the appropriate law enforcement agencies will be contacted
- C. The Contractor shall be solely and directly responsible to the Owner and operators of such properties for any damage, injury, expense, loss inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.
- D. Neither the Owner nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.
- F. In the event the Contractor encounters water service lines that interfere with the trenching he may, by obtaining prior approval of the property Owner, Florida Keys Aqueduct Authority or Fire Department, as applicable, and the Owner's Representative cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense.
- G. The Contractor shall replace, at his own expense, all existing utilities or structures removed or damaged during construction unless otherwise provided for in these Contract documents or ordered by the Owner or Owner's Representative.

3.06 INTERFERING STRUCTURES

- A. Take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground.

- B. Protect underground and above ground existing structures from damage, whether or not they lie within the limits of the easements obtained by the Owner. Where such existing fences, gates, sheds, buildings, or any other structure must be removed in order to properly carry out the construction, or are damaged during construction, restore to their original condition to the satisfaction of the property Owner involved at the Contractor's own expense. Notify the Owner or Owner's Representative of any damaged underground structure and make repairs or replacements before backfilling.
- C. Without additional compensation the Contractor may remove and replace in a condition as good as or better than original such small miscellaneous structures as fences, mailboxes, and signposts that interfere with the Contractor's operations.

PART 4 TEMPORARY CONSTRUCTION UTILITIES AND FACILITIES

4.01 TEMPORARY WATER

- A. The Contractor shall make his own arrangements to obtain suitable water and shall pay all costs.

4.02 TEMPORARY ELECTRIC POWER

- A. The Contractor shall make arrangements to obtain and pay for electrical power used.

4.03 SAFETY REQUIREMENTS FOR TEMPORARY ELECTRIC POWER

- A. Temporary electric power installation shall meet the construction safety requirements of OSHA, state and other governing agencies.

4.04 SANITARY FACILITIES

- A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractors' employees that will comply with the regulations of the local and state departments of health and as directed by the Owner or Owner's Representative.

4.05 STORAGE OF MATERIALS

- A. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the Owner or lessee.
- B. Delicate instruments and materials subject to vandalism shall be placed under locked cover and, if necessary, provided with temperature control as recommended by the manufacturer.

PART 5 SAFETY AND CONVENIENCE**5.01 SAFETY EQUIPMENT**

- A. The Contractor shall do all work necessary to protect the general public from hazards, including but not limited to, surface irregularities or unramped grade changes in pedestrian sidewalk or walkway and trenches or excavations in roadway. Barricades, lanterns, and proper signs shall be furnished in sufficient amount to safeguard the public and the work. All barricades and signs shall be, in the opinion of the Owner or Owner's Representative, clean and serviceable.
- B. During construction the Contractor shall construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railing, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards in streets sidewalks, floors, roofs, and walkways. All such barriers shall have adequate warning lights as necessary, or required, for safety. All lights shall be regularly maintained and in a fully operational state at all times.

5.02 ACCIDENT REPORTS

- A. In addition, the Contractor must promptly report in writing to the Owner or Owner's Representative all accidents whatsoever arising out of or in connection with the performance of the work whether on or adjacent to the site, giving full details and statements of witness. If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner or Owner's Representative.
- B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident the Contractor shall promptly report the facts in writing to the Owner or Owner's Representative, giving full details of the claim.

5.03 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

- A. Authorized representatives of the state, federal, or local governmental agencies shall at all times have safe access to the work and the Contractor shall provide proper facilities for such access and inspection. (i.e. hard hats, safety glasses, hearing protection)

5.04 TRAFFIC MAINTENANCE AND SAFETY

- A. Provide traffic maintenance plans where required by federal, state, county, or local agencies having jurisdiction.
- B. Comply with all rules and regulations of the state, county, and city authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the Owner. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways

by installing approved signs, barricades, and lights where necessary for the safety of the public. The convenience of the general public and residents adjacent to the project and the protection of person and property are of prime importance and shall be provided for in an adequate and satisfactory manner.

- C. Where traffic will pass over trenches after they are backfilled and before they are paved, the top of the trench shall be maintained in a condition that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Cleanup operations shall follow immediately behind backfilling and the worksite shall be kept in an orderly and clean condition at all times.
- D. When flaggers and guards are required by regulation or when deemed necessary for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic-control devices in accordance with FDOT provisions.

5.05 TRAFFIC CONTROL

- A. Traffic control on all city, county and state highway rights-of-way shall meet the requirements of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, as well as FDOT Standard Details for Maintenance of Traffic, in accordance with The Manual for Uniform Traffic Control and Safe Practices.
- B. The Contractor shall provide an 11 x 17 engineered drawing of his intended maintenance of traffic scheme to the Owner or Owner's Representative for approval prior to commencement of work. This shall include barrier details, barricade type, and location.

5.06 PROTECTION OF PROPERTY

- A. Protect stored materials located adjacent to the proposed work. Notify property Owners affected by the construction at least 48 hours in advance of the time construction begins. During construction operations construct and maintain such facilities as may be required to provide access by all property Owners to their property. No person shall be cut off from access to his residence or place of business for a period exceeding 8 hours unless the Contractor has made special arrangements with the affected persons.
- B. The Contractor shall identify and isolate his work zone in such a manner as to exclude all personnel not employed by him, the Owner or Owner's Representative.

5.07 FIRE PREVENTION AND PROTECTION

- A. The Contractor shall perform all work in a fire-safe manner. He shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. The Contractor shall comply with applicable federal, state, and local fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

5.08 ACCESS FOR POLICE, FIRE, AND POSTAL SERVICE

- A. Notify the City Engineer and City Liaison a minimum of 48 hours before closing any street or portion thereof. No closing shall be made without the Owner's approval. Notify said departments when the streets are again passable for emergency vehicles. Do not block off emergency vehicle access to consecutive arterial crossings or dead-end streets in excess of 300 linear feet without special written permission from City Engineer. Conduct operations with the least interference to fire equipment access, and at no time prevent such access.
- B. The Contractor shall leave a night emergency telephone number or numbers with the police department, the Owner's Representative and the Owner, so that contact may be made easily at all times in case of barricade and flare trouble or other emergencies.
- C. Maintain postal service facilities in accordance with the requirements of the U.S. Postal Service. Move mailboxes to temporary locations designated by the U.S. Postal Service, and at the completion of the work in each area, replace them in their original location and in a condition satisfactory to the U.S. Postal Service.

PART 6 PRESERVATION, RESTORATION, AND CLEANUP

6.01 SITE RESTORATION AND CLEANUP

- A. At all times during the work keep the premises clean and orderly. Upon completion of the day's work repair all damage caused by equipment and leave the project clean and free of rubbish or excess materials of any kind.
- B. Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences, regardless of whether these are on private property or on state, county, or city rights-of-way. Remove all excavated materials from grassed and planted areas and leave these surfaces in a condition equivalent to their original condition.
- C. All existing drainage ditches and culverts shall be reopened and graded and natural drainage restored. Restore culverts broken or damaged to their original condition and location.

6.02 FINISHING OF SITE, BORROW, AND STORAGE AREAS

- A. Upon completion of the project all areas used by the Contractor shall be properly cleared of all temporary structures, rubbish, and waste materials and properly graded to drain and blend in with the abutting property. Areas used for the deposit of waste materials shall be finished to properly drain and blend with the surrounding terrain.

6.03 STREET CLEANUP DURING CONSTRUCTION

- A. Thoroughly clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day's operation. Sidewalks, unless under construction, shall be kept clear of material and available for pedestrian use at all times.

PART 7 SUBMITTALS DURING CONSTRUCTION

7.01 GENERAL

- A. Requirements in this section are in addition to any specific requirements for submittals specified in other sections of these Contract Documents. The Contractor is required to provide a submittal log at the pre-construction conference.
- B. Submittals to the Owner and/or Owner's Representative shall be addressed to:
 - 1. Attn: Jay Gewin, Utilities Manager
City of Key West
P.O. Box 1409
Key West, Florida 33041-1409.
- C. Submitted data shall be fully sufficient in detail for determination of compliance with the Contract Documents.
- D. Review, acceptance, or approval of substitutions, schedules, shop drawings, lists of materials, and procedures submitted or requested by the Contractor shall not add to the Contract amount and all additional costs which may result there from shall be solely the obligation of the Contractor.
- E. It shall not be the responsibility of the Owner to provide Engineering or other services to protect the Contractor from additional costs accruing from such approvals.
- F. No equipment or material for which listings, drawings, or descriptive material is required shall be installed until the Owner or Owner's Representative has on hand copies of such approved lists and the appropriately stamped final Shop Drawings.

- G. The review of Drawings by the Owner or Owner's Representative will be limited to general design requirements only and shall in no way relieve the Contractor from responsibility for errors or omissions contained therein.
- H. Submittals will be acted upon by the Owner or Owner's Representative as promptly as possible and returned to the Contractor not later than 20 working days.
- I. A sample of requirements for submittals are:
 - 1. All MSDS data forms.
 - 2. Complete manufacturer's specifications, including materials description and paint system.
- J. The submittals shall include satisfactory identification of items, units and assemblies in relation to the specification section number and the system shown on the Work Order drawings or as provided in the applicable specification section.
- K. Should the Contractor propose any item on his shop drawings or incorporate an item into the work and that item should subsequently prove to be defective or otherwise unsatisfactory, (regardless of the Owner's or Owner's Representative's preliminary review), the Contractor shall, at his own expense replace the item with another item that will perform satisfactorily.

7.02 SUBMITTALS FOR WORK ORDERS

- A. Submittals required for specific Work Orders shall be provided within 15 days of Work Order.

PART 8 PAYMENT

8.01 GENERAL

- A. Payment for the work in this section will be included as part of the applicable unit prices stated in the Proposal.

END OF SECTION

**SECTION 01 11 00
SUMMARY OF WORK**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. This section describes the Project and the Work to be performed under this Contract. Detailed requirements and extent of work are stated in applicable Specification sections and shown on the Drawings.

1.02 ORGANIZATION AND INTERPRETATION OF CONTRACT DOCUMENTS

- A. Specifications and Drawings included in these Contract Documents establish the performance quality requirements, location and general arrangement of materials and equipment, and establish the minimum standards for quality of workmanship and appearance.
- B. Specification sections have not been divided into groups for work of subcontractors or various trades. Should there be questions concerning the applicability or interpretation of a particular section or part of a section or Drawing, direct questions to the Owner or Owner's Representative.
- C. Piping and electrical work shown on the Drawings is intended to be depictive and may not be an exact and complete representation of the actual finished work. Include fittings, joints, supports, nuts, bolts, and other accessories required to provide complete and satisfactory piping and electrical systems, as specified, even though some items may not be specifically shown on the Drawings.
- D. A part of the Work that is necessary or required to make each installation satisfactory and operable for its intended purpose, even though it is not specifically included in the Specifications or on the Drawings, shall be performed as incidental work as if it were described in the Specifications and shown on the Drawings.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- A. Rehabilitation of gravity and/or pump-assisted stormwater drainage wells.

1.04 SEQUENCE OF WORK

- A. Plan the work and carry it out with minimum interference to the operation of the existing facilities. Prior to starting the work, confer with the Owner and Owner's Representative to develop an approved work schedule which will permit the facilities to function as normally as practical. It may be necessary to do certain parts of the work at times outside normal working hours in order to avoid conflicting conditions. The Contractor shall do this work at such times, and at no additional cost to the Owner. Contractor shall notify the Owner 3 working days prior to the commencement of well rehabilitation.

- B. To meet the overall objectives of this Project, certain elements of work must be completed or substantially completed following the suggested sequence of construction and testing:
 - 1. Proposed Sequence of Rehabilitation of gravity stormwater drainage wells:
 - a. Mobilize well rehabilitation equipment to site, set up temporary disposal system in accordance with Section 33 21 13.14 Water Well Rehabilitation; coordinate activities with the Owner or Owner's Representative.
 - b. Measure and record the depth of the well from land surface.
 - c. Conduct airlift rehabilitation in accordance with Section 33 21 13.14, Water Well Rehabilitation or re-drill the well to its original depth in accordance with Section 33 21 13.03, Water Well Drilling.
 - d. Brush the well in accordance with Section 33 21 13.14, Water Well Rehabilitation.
 - e. Airlift to remove debris from brushing.
 - f. Measure the depth of the well.
 - g. Perform additional well rehabilitation activities as included in Section 33 21 13.14, Water Well Rehabilitation as directed by the Owner or Owner's Representative.
 - h. De-mobilize from site.
 - 2. Proposed Sequence for Rehabilitation for pump-assisted stormwater drainage wells.
 - a. Mobilize well rehabilitation equipment to site, remove existing wellhead, install temporary header, isolate well to be rehabilitated using installed valve (Patricia and Ashby or White Street) or inflatable isolation plug (North Simonton), set up temporary disposal system in accordance with Section 33 21 13.14, Water Well Rehabilitation.
 - b. Rehabilitate well as listed in items b through g above.
 - c. De-mobilize from site.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

**SECTION 01 29 00
PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 SUBMITTALS

- A. Informational Submittals:
 - 1. Schedule of Values: Submit on Contractor's standard form.
 - 2. Schedule of Estimated Progress Payments:
 - a. Submit with initially acceptable Schedule of Values.
 - b. Submit adjustments thereto with Application for Payment.
 - 3. Application for Payment.
 - 4. Final Application for Payment.

1.02 ALLOWANCES

- A. Consult with Owner or Owner's Representative in selection of products or services. Obtain proposals from Suppliers and offer recommendations.
- B. Allowances will be administered in accordance with Paragraph 11.02 of General Conditions.
- C. Submit, with application for payment, invoice showing date of purchase, from whom the purchase was made, the date of delivery of the product or service, and the price, including delivery to the Site and applicable taxes.

1.03 SCHEDULE OF VALUES

- A. Prepare a separate Schedule of Values for each schedule of the Work under the Agreement.
- B. Upon request of Owner or Owner's Representative, provide documentation to support the accuracy of the Schedule of Values.
- C. Lump Sum Work:
 - 1. Reflect specified contingency allowances and alternates, as applicable.
 - 2. List bonds and insurance premiums, mobilization, demobilization, preliminary and detailed progress schedule preparation, equipment testing, facility startup, and contract closeout separately.
- D. An unbalanced or front-end loaded schedule will not be acceptable.
- E. Summation of the complete Schedule of Values representing all the Work shall equal the Contract Price.

1.04 SCHEDULE OF ESTIMATED PROGRESS PAYMENTS

- A. Show estimated payment requests throughout Contract Times aggregating initial Contract Price.
- B. Base estimated progress payments on initially acceptable progress schedule. Adjust to reflect subsequent adjustments in progress schedule and Contract Price as reflected by modifications to the Contract Documents.

1.05 APPLICATION FOR PAYMENT

- A. Transmittal Summary Form: Attach one Summary Form with each detailed Application for Payment for each schedule and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.
- B. Use detailed Application for Payment Form provided by Owner.
- C. Provide separate form for each schedule as applicable.
- D. Include accepted Schedule of Values for each schedule or portion of lump sum Work and the unit price breakdown for the Work to be paid on a unit priced basis.
- E. Include separate line item for each Change Order and Work Change Directive executed prior to date of submission. Provide further breakdown of such as requested by Owner or Owner's Representative.
- F. Preparation:
 - 1. Round values to nearest dollar.
 - 2. Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form(s) for each schedule as applicable, a listing of materials on hand for each schedule as applicable, and such supporting data as may be requested by Owner or Owner's Representative.

1.06 PAYMENT

- A. Payment for all Lump Sum Work shown or specified in Contract Documents is included in the Contract Price. Payment will be based on a percentage complete basis for each line item of the accepted Schedule of Values.

1.07 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS**A. Payment will not be made for following:**

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.
5. Defective Work not accepted by Owner.
6. Material remaining on hand after completion of Work.

1.08 PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

- A. **Partial Payment:** No partial payments will be made for materials and equipment delivered or stored unless Shop Drawings and preliminary operation and maintenance data is acceptable to Owner or Owner's Representative.
- B. **Final Payment:** Will be made only for products incorporated in Work; remaining products, for which partial payments have been made, shall revert to Contractor unless otherwise agreed, and partial payments made for those items will be deducted from final payment.

PART 2 PRODUCTS (NOT USED)**PART 3 EXECUTION (NOT USED)****END OF SECTION**

SECTION 01 31 19
PROJECT MEETINGS

PART 1 GENERAL

1.01 GENERAL

- A. Owner or Owner's Representative will schedule physical arrangements for meetings throughout progress of Work, prepare meeting agenda with regular participant input and distribute with written notice of each meeting, preside at meetings, record minutes to include significant proceedings and decisions, and reproduce and distribute copies of minutes within 5 days after each meeting to participants and parties affected by meeting decisions.

1.02 PRECONSTRUCTION CONFERENCE

- A. Contractor shall be prepared to discuss the following subjects, as a minimum:

1. Required schedules (Preliminary Construction Schedule, Schedule of Values, Submittal).
2. Status of Bonds and insurance.
3. Payment procedures.
4. Project changes and clarification procedures.
5. Use of site, access, office and storage areas, security and temporary facilities.
6. Contractor's safety plan and representative.
7. Preliminary Hurricane Evaluation Plan.

- B. Attendees will Include:

1. Owner's representatives.
2. Contractor's office representative.
3. Contractor's resident superintendent.
4. Contractor's quality control representative.
5. Subcontractors' representatives whom Contractor may desire or Owner may request to attend.
6. Others as appropriate.

1.03 PROGRESS MEETINGS

- A. Owner or Owner's Representative will schedule regular progress meetings at Site, conducted as necessary to review Work progress, and other matters needing discussion and resolution.

B. Attendees will Include:

1. Owner's representative(s), as appropriate.
2. Contractor, Subcontractors, and Suppliers, as appropriate.
3. Others as appropriate.

1.04 QUALITY CONTROL AND COORDINATION MEETINGS

A. Scheduled by Owner or Owner's Representative on regular basis and as necessary to review test and inspection reports, and other matters relating to quality control of Work and work of other contractors.

B. Attendees will Include:

1. Contractor.
2. Contractor's designated quality control representative.
3. Subcontractors and Suppliers, as necessary.
4. Owner's representatives.

1.05 OTHER MEETINGS

A. In accordance with Contract Documents and as may be required by Owner and Owner's Representative.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 00
SUBMITTALS

PART 1 GENERAL

1.01 GENERAL

- A. Inquiries: Direct to Owner or Owner's Representative regarding procedure, purpose, or extent of Submittal.
- B. Timeliness: Schedule and make submissions in accordance with requirements of individual Specification sections and in such sequence as to cause no delay in Work or in work of other contractors.
- C. Identification of Submittals:
 - 1. Complete, sign, and transmit with each Submittal package, one Transmittal of Contractor's Submittal Form attached at end of this Section.
 - 2. Identify each Submittal with the following numbering and tracking system:
 - a. Sequentially number each Submittal.
 - b. Resubmission of a Submittal will have original number with sequential alphabetic suffix.
 - 3. Format: Orderly, indexed with labeled tab dividers.
 - 4. Show date of submission.
 - 5. Show Project title and Owner's contract identification and contract number.
 - 6. Show names of Contractor, Subcontractor or Supplier, and manufacturer as appropriate.
 - 7. Identify, as applicable, Contract Document section and paragraph to which Submittal applies.
 - 8. Identify Submittal type; submit only one type in each Submittal package.
 - 9. Identify and indicate each deviation or variation from Contract Documents.
- D. Resubmissions: Clearly identify each correction or change made.
- E. Incomplete Submittal Submissions:
 - 1. Owner or Owner's Representative will return entire Submittal for Contractor's revision/correction and resubmission.
 - 2. Submittals which do not clearly bear Contractor's specific written indication of Contractor review and approval of Submittal or which are transmitted with an unsigned or uncertified submission form or as may otherwise be required will be returned to Contractor unreviewed.

- F. Nonspecified Submissions: Submissions not required under these Contract Documents and not shown on submissions will not be reviewed and will be returned to Contractor.
- G. Owner's Review: to Owner or Owner's Representative will act upon Contractor's Submittal and transmit response to Contractor not later than 20 working days after receipt, unless otherwise specified. Resubmittals will be subject to same review time.
- H. Schedule Delays:
 - 1. No adjustment of Contract Times or Price will be allowed due to Owner's review of Submittals, unless all of the following criteria are met:
 - a. Contractor has notified to Owner or Owner's Representative in writing that timely review of Submittal in question is critical to progress of Work, and has received to Owner or Owner's Representative written acceptance to reflect such on current accepted submissions and progress schedule. Written agreement by the to Owner or Owner's Representative to reduce Submittal review time will be made only for unusual and Contractor-justified reasons. Acceptance of a progress schedule containing Submittal review times less than specified or less than agreed to in writing by to Owner or Owner's Representative will not constitute to Owner's or Owner's Representative's acceptance of review times.
 - b. to Owner or Owner's Representative has failed to review and return first submission of a Submittal within agreed time indicated on current accepted schedule of submissions or, if no time is indicated thereon, within 30 days after receipt.
 - c. Contractor demonstrates that delay in progress of Work is directly attributable to Owner's or Owner's Representative's failure to return Submittal within time indicated and accepted by to Owner or Owner's Representative.
 - 2. No adjustment of Contract Times or Price will be allowed due to delays in progress of Work caused by rejection and subsequent resubmission of Submittals, including multiple resubmissions.

1.02 SHOP DRAWINGS AND SAMPLES

- A. Copies:
1. Shop Drawings and Product Data: Submit four copies, plus whatever the Contractor requires to be returned, maximum eight.
 2. Samples: Two, unless otherwise specified in individual Specification sections.
- B. General: Submit to Owner or Owner's Representative as required by individual Specification sections.
- C. Identify and Indicate:
1. Pertinent Drawing sheet(s) and detail number(s), products, units and assemblies, and system or equipment identification or tag numbers.
 2. Critical field dimensions and relationships to other critical features of Work.
 3. Samples: Source, location, date taken, and by whom.
 4. Each deviation or variation from Contract Documents.
 5. Proper storage and maintenance requirements.
- D. Design Data: When specified, provide Project-specific information as required and as necessary to clearly show calculations, dimensions, logic and assumptions, and referenced standards and codes upon which design is based.
- E. Foreign Manufacturers: When proposed, include following additional information:
1. Names and addresses of at least two companies closest to Project that maintain technical service representatives.
 2. Complete inventory of spare parts and accessories for each piece of equipment.
- F. Preparation:
1. Format: Whenever possible, schedule for and combine Shop Drawings and Samples required for submission in each Specification section or division into a single Submittal package. Also combine product data for like items into a single Submittal package.
 2. Present in a clear and thorough manner and of sufficient detail to show kind, size, arrangement, and function of components, materials, and devices and compliance with Contract Documents. Identify details by reference to sheet and detail, and schedule or room numbers shown on Drawings.

3. Reproducible Copy:
 - a. Preferred Minimum Sheet Size: 8-1/2- by 11-inch and 11- by 17-inch pages, suitable for photocopying.
 - b. Larger than 11- by 17-Inch Sheets: 22-inch by 34-inch preferred, mylar or sepias suitable for copying in a blueprint machine.
 4. Piping Systems: Drawn to scale.
 5. Product Data: Clearly mark each copy to identify pertinent products or models and show performance characteristics and capacities, dimensions and clearances required, wiring or piping diagrams and controls, and external connections, anchorage, and supports required.
 6. Equipment and Component Titles: Identical to title shown on Drawings.
 7. Manufacturer's Standard Schematic Drawings and Diagrams as Follows:
 - a. Modify to delete information that is not applicable to Work.
 - b. Supplement standard information to provide information specifically applicable to Work.
- G. Shop Drawing Disposition: Owner or Owner's Representative will review, mark, and stamp as appropriate and distribute marked-up copies as noted:
1. Approved as Submitted (for Incorporation in Work):
 - a. Two copies furnished Owner.
 - b. One copy furnished Resident Project Representative.
 - c. One copy retained in Owner's or Owner's Representative's file.
 - d. Remaining copies returned to Contractor appropriately annotated.
 - e. Contractor may begin to implement activities to incorporate specific product(s) or Work covered by Submittal.
 2. Approved as Noted (for Incorporation in Work):
 - a. Two copies furnished Owner.
 - b. One copy furnished Resident Project Representative.
 - c. One copy retained in Owner's or Owner's Representative's file.
 - d. Remaining copies returned to Contractor appropriately annotated.
 - e. Contractor may begin to implement activities to incorporate product(s) or Work covered by Submittal, in accordance with Owner's or Owner's Representative's notations.
 3. Disapproved:
 - a. One copy furnished Resident Project Representative.
 - b. One copy retained in Owner's or Owner's Representative's file.
 - c. Remaining copies returned to Contractor appropriately annotated.
 - d. Contractor shall make corrections or develop replacement and resubmit (in same manner and quantity as specified for original submission).
 - e. Submittal is not approved.

4. Incomplete:
 - a. One copy furnished Resident Project Representative.
 - b. One copy retained in Owner's or Owner's Representative's file.
 - c. Remaining copies returned to Contractor appropriately annotated.
 - d. Contractor shall complete and resubmit or submit missing portions.
 - e. Submittal is not approved.

H. Sample Disposition: Same as Shop Drawing disposition; samples will not be returned.

1.03 ADMINISTRATIVE SUBMITTALS

- A. Copies: Submit four.
- B. Description: Submittals that are not Shop Drawings or Samples, or that do not reflect quality of product or method of construction. May include, but not limited to those Submittals identified below.
- C. Applications for Payment (and Cash Allowance Data and Values): Meet requirements of Section 01 29 00, Payment Procedures.
- D. Progress Reports and Quantity Charts: As may be required in Section 01 32 00, Progress Schedules.
- E. Hurricane Evaluation Plan: The Contractor shall prepare the Owner or Owner's Representative with a written plan and schedule describing how and when the Contractor will remove all unnecessary items from the work area and tie down all remaining supplies and barricades in the event that a hurricane warning is issued, identifying gussets in particular. If a warning is issued, the Contractor shall remove all unnecessary items from the work area(s) and will tie down all movable (under 200 pounds) objects. The Owner shall not be liable for any financial hardship or delays caused as a result of demobilization or remobilization due to the above.
- F. Schedules:
 1. Progress Schedule(s): Meet the requirements of Section 01 32 00, Progress Schedules.
 2. Schedule of Values: Meet requirements of Section 01 29 00, Payment Procedures.
 3. Schedule of Submittal Submissions:
 - a. Prepare and submit, preliminary list of submissions grouped by Contract Document article/paragraph number or Specification section number, with identification, numbering and tracking system as specified under Paragraph Identification of Submittals and as approved by Owner or Owner's Representative.

- b. Include Only the Following Required Submissions:
 - 1) Shop Drawings and Samples.
 - 2) Training plans.
 - 3) Test procedures.
 - 4) Operation and maintenance manuals.
 - 5) Record documents.
 - 6) Specifically required certificates, warranties, and service agreements.
- c. Coordinate with progress schedule and prepare submissions to show for each Submittal, at a minimum, the following:
 - 1) Estimated submission date to Owner or Owner's Representative.
 - 2) Specifically requested and clearly identified Owner review time if shorter than that set forth herein, with justification for such request and critical dates Submittals will be needed from Owner or Owner's Representative.
 - 3) For first 6-month period from the date the Contract Times commence or following any update or adjustment of the submissions, the estimated submission date shall be week, month, and year; for submissions beyond 6-month time period, show closest month and year.
- d. Submit to Owner or Owner's Representative Monthly:
 - 1) Updated list if changes have occurred. Otherwise, submit a written communication confirming existing list.
 - 2) Adjusted submissions reflecting submission activity planned for forthcoming 6-month time period and beyond. Coordinate with progress schedule updates.

G. Submittals Required by Laws, Regulations, and Governing Agencies:

- 1. Submit promptly notifications, reports, certifications, payrolls, and otherwise as may be required, directly to the applicable federal, state, or local governing agency or their representative.
- 2. Transmit to Owner records one copy of correspondence and transmittals (to include enclosures and attachments) between Contractor and governing agency.

H. Disposition: Owner or Owner's Representative will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:

- 1. Accepted:
 - a. Acceptance will indicate that Submittal conforms to intent of Contract Documents as to form and substance.
 - b. Contractor may proceed to perform Submittal related Work.
 - c. One copy furnished Owner.
 - d. One copy furnished Resident Project Representative.
 - e. One copy retained in Owner's or Owner's Representative's file.
 - f. Remaining copies returned to Contractor appropriately annotated.

2. Rejected as Noted:
 - a. One copy retained in Owner's or Owner's Representative's file.
 - b. Remaining copies returned to Contractor appropriately annotated.
 - c. Contractor shall revise/correct or develop replacement and resubmit.

1.04 QUALITY CONTROL SUBMITTALS

- A. Certificates: Certificates of Successful Testing or Inspection: Submit when testing or inspection is required by Laws and Regulations or governing agency or specified in the individual Specification sections.
- B. Statements of Qualification: Evidence of qualification, certification, or registration. As required in these Contract Documents to verify qualifications of professional land surveyors, engineers, materials testing laboratories, specialty Subcontractors, trades, specialists, consultants, installers, and other professionals. Reference paragraph 1.01.A.51 of Supplementary Conditions for the definition of Specialist.
- C. Field Samples: Provide as required by individual Specifications and as may be required by Owner or Owner's Representative during progress of Work.
- D. Written Test Reports of Each Test and Inspection: As a minimum, include the following:
 1. Date of test and date issued, Project title and number, testing laboratory name, address, and telephone number, and name and signature of laboratory inspector.
 2. Date and time of sampling or inspection and record of temperature and weather conditions.
 3. Identification of product and Specification section, location of Sample, test or inspection in the Project, type of inspection or test with referenced standard or code, certified results of test.
 4. Compliance with Contract Documents, and identifying corrective action necessary to bring materials and equipment into compliance.
 5. Provide an interpretation of test results, when requested by Owner or Owner's Representative.
- E. Disposition: Owner or Owner's Representative will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:
 1. Accepted:
 - a. Acceptance will indicate that Submittal conforms to intent of Contract Documents as to form and substance.
 - b. Contractor may proceed to perform Submittal related Work.
 - c. One copy furnished Owner.
 - d. One copy furnished Resident Project Representative.

- e. One copy retained in Owner's or Owner's Representative's file.
- f. Remaining copies returned to Contractor appropriately annotated.
- 2. Rejected as Noted:
 - a. One copy retained in Owner's or Owner's Representative's file.
 - b. Remaining copies returned to Contractor appropriately annotated.
 - c. Contractor shall revise/correct or develop replacement and resubmit.

1.05 CONTRACT CLOSEOUT SUBMITTALS

- A. General: In accordance with Section 01 77 00, Contract Closeout.
- B. Disposition: Owner or Owner's Representative will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:
 - 1. Accepted:
 - a. Acceptance will indicate that Submittal conforms to intent of Contract Documents as to form and substance.
 - b. Contractor may proceed to perform Submittal related Work.
 - c. One copy furnished to the Owner.
 - d. One copy furnished to the Resident Project Representative.
 - e. One copy retained in Owner's Representative's file.
 - f. Remaining copies returned to Contractor appropriately annotated.
 - 2. Rejected as Noted:
 - a. One copy retained in Owner's Representative's file.
 - b. Remaining copies returned to Contractor appropriately annotated.
 - c. Contractor shall revise/correct or develop replacement and resubmit.

1.06 SUPPLEMENTS

- A. The supplement listed below, following "END OF SECTION," is part of this Specification.
 - 1. Transmittal of Contractor's Submittal.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 42 13
ABBREVIATIONS

PART 1 GENERAL

1.01 REFERENCE TO STANDARDS AND SPECIFICATIONS OF TECHNICAL SOCIETIES

- A. Reference to standards and specifications of technical societies and reporting and resolving discrepancies associated therewith shall be as provided in paragraph 3.02 of the General Conditions, and as may otherwise be required herein and in the individual Specification sections.
- B. Work specified by reference to the published standard or specification of a government agency, technical association, trade association, professional society or institute, testing agency, or other organization shall meet the requirements or surpass the minimum standards of quality for materials and workmanship established by the designated standard or specification.
- C. Where so specified, products or workmanship shall also meet or exceed the additional prescriptive or performance requirements included within the Contract Documents to establish a higher or more stringent standard of quality than that required by the referenced standard.
- D. Where two or more standards are specified to establish quality, the product and workmanship shall meet or exceed the requirements of the most stringent.
- E. Where both a standard and a brand name are specified for a product in the Contract Documents, the proprietary product named shall meet or exceed the requirements of the specified reference standard.
- F. Copies of Standards and Specifications of Technical Societies:
 - 1. Copies of applicable referenced standards have not been bound in these Contract Documents.
 - 2. Where copies of standards are needed by the Contractor, obtain a copy or copies directly from the publication source and maintain in an orderly manner at the site as Work site records, available to the Contractor's personnel, Subcontractors, Owner, and Owner's Representative.

1.02 ABBREVIATIONS

A. Abbreviations for trade organizations and government agencies: Following is a list of construction industry organizations and government agencies to which references may be made in the Contract Documents, with abbreviations used.

1. AA Aluminum Association
2. AABC Associated Air Balance Council
3. AAMA American Architectural Manufacturers Association
4. AASHTO American Association of State Highway and Transportation Officials
5. ACI American Concrete Institute
6. AFBMA Anti-Friction Bearing Manufacturers' Association
7. AGA American Gas Association
8. AGMA American Gear Manufacturers' Association
9. AI Asphalt Institute
10. AISC American Institute of Steel Construction
11. AISI American Iron and Steel Institute
12. AITC American Institute of Timber Construction
13. ALS American Lumber Standards
14. AMA Acoustical Materials Association
15. AMCA Air Movement and Control Association
16. ANSI American National Standards Institute
17. APA American Plywood Association
18. API American Petroleum Institute
19. APWA American Public Works Association
20. AREA American Railway Engineering Association
21. ARI Air Conditioning and Refrigeration Institute
22. ASA American Standards Association
23. ASAE American Society of Agricultural Engineers
24. ASCE American Society of Civil Engineers
25. ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
26. ASNT American Society for Nondestructive Testing
27. ASME American Society of Mechanical Engineers
28. ASTM American Society for Testing and Materials
29. AWI Architectural Wood Work Institute
30. AWPA American Wood Preservers' Association
31. AWPB American Wood Preservers Bureau
32. AWPI American Wood Preservers' Institute
33. AWS American Welding Society
34. AWWA American Water Works Association
35. BHMA Builders Hardware Manufacturers' Association
36. CBMA Certified Ballast Manufacturers' Association

37. CDA Copper Development Association
38. CGA Compressed Gas Association
39. CIPRI Cast Iron Pipe Research Institute
40. CISPI Cast Iron Soil Pipe Institute
41. CMAA Crane Manufacturers' Association of America
42. CRSI Concrete Reinforcing Steel Institute
43. CS Commercial Standard
44. CSA Canadian Standards Association
45. CSI Construction Specifications Institute
46. CTSSCaltrans Standard Specification
47. EJCDC Engineers Joint Contract Documents'
Committee
48. ETL Engineering Test Laboratories
49. FCC Federal Communications Commission
50. FAA Federal Aviation Administration
51. FEMA Federal Emergency Management Agency
52. FGMA Flat Glass Marketing Association
53. FM Factory Mutual
54. Fed. Spec. Federal Specifications
55. FS Federal Specification
56. GA Gypsum Association
57. HI Hydraulic Institute
58. HMI Hoist Manufacturers' Institute
59. ICBO International Conference of Building Officials
60. ICEA Insulated Cable Engineers' Association
61. IEEE Institute of Electrical and Electronics Engineers, Inc.
62. IES Illuminating Engineering Society
63. IFI Industrial Fasteners Institute
64. ISA Instrument Society of America
65. ISO Insurance Service Office
66. JIC Joint Industry Conferences of Hydraulic Manufacturers
67. MIA Marble Institute of America
68. Mil. Sp. Military Specification or MIL
69. MS Military Specifications
70. MMA Monorail Manufacturers' Association
71. NAAMM National Association of Architectural Metal
Manufacturers
72. NACE National Association of Corrosion Engineers
73. NBHA National Builders' Hardware Association
74. NEBB National Environmental Balancing Bureau
75. NEC National Electrical Code
76. NECA National Electrical Contractor's Association
77. NEMA National Electrical Manufacturers' Association
78. NESC National Electric Safety Code
79. NFPA National Fire Protection Association
80. NHLA National Hardwood Lumber Association

81.	NHPMA	Northern Hardwood and Pine Manufacturer's Association
82.	NLMA	National Lumber Manufacturers' Association
83.	NRCA	National Roofing Contractors Association
84.	NSF	National Sanitation Foundation Testing Laboratory
85.	NSPE	National Society of Professional Engineers
86.	NTMA	National Terrazzo and Mosaic Association
87.	NWWDA	National Wood Window and Door Association
88.	OECI	Overhead Electrical Crane Institute
89.	OSHA	Occupational Safety and Health Act (both Federal and State)
90.	PCI	Prestressed Concrete Institute
91.	PEI	Porcelain Enamel Institute
92.	PPI	Plastic Pipe Institute
93.	PS	Product Standards Section-U.S. Department of Commerce
94.	RMA	Rubber Manufacturers' Association
95.	SAE	Society of Automotive Engineers
96.	SCPRF	Structural Clay Products Research Foundation
97.	SDI	Steel Deck Institute
98.	SDI	Steel Door Institute
99.	SIGMA	Sealed Insulating Glass Manufacturing Association
100.	SJI	Steel Joist Institute
101.	SMACNA	Sheet Metal and Air Conditioning Contractors National Association
102.	SPI	Society of the Plastics Industry
103.	SSPC	Steel Structures Painting Council
104.	SWI	Steel Window Institute
105.	TEMA	Tubular Exchanger Manufacturers' Association
106.	TCA	Tile Council of America
107.	UBC	Uniform Building Code
108.	UFC	Uniform Fire Code
109.	UL	Underwriters Laboratories Inc.
110.	UMC	Uniform Mechanical Code
111.	US	U.S. Bureau of Standards
112.	USBR	U.S. Bureau of Reclamation
113.	WCLIB	West Coast Lumber Inspection Bureau
114.	WWPA	Western Wood Products Association

PART 2 PRODUCTS (NOT USED)**PART 3 EXECUTION (NOT USED)****END OF SECTION**

SECTION 01 50 00
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01 REFERENCES

- A. The following is a list of standards which may be referenced in this Section:
1. NFPA, National Fire Prevention Standard for Safeguarding Building Construction Operations.

1.02 SUBMITTALS

- A. Shop Drawings: Fluid disposal plan.

1.03 MOBILIZATION

- A. Mobilization shall include, but not be limited to, these principal items:
1. Providing onsite sanitary facilities as specified and as required by Laws and Regulations, and governing agencies.
 2. Posting OSHA required notices and establishing safety programs and procedures.
 3. Having Contractor's superintendent at site full time.
- B. Areas designated for Contractor's temporary facilities shall be coordinated with Owner or Owner's Representative.

PART 2 PRODUCTS

PART 3 EXECUTION

3.01 TEMPORARY UTILITIES

- A. Fire Protection: Furnish and maintain on site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241).

3.02 TEMPORARY ELECTRIC POWER

- A. Temporary electrical power is not available on site.

3.03 TEMPORARY WATER

- A. Water is not available on-site.

3.04 SANITARY FACILITIES

- A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractors that will comply with the regulations of the local and state departments of health and as directed by the Owner or Owner's Representative.

3.05 PROTECTION OF WORK AND PROPERTY

- A. General: Reference the General Conditions.
- B. Site Security: Reference the General Conditions.

3.06 ROADS

- A. Maintain access to all roads. Do not block any roadways during construction. If road blockage is anticipated, Contractor shall receive approval from City prior to starting construction.

3.07 PARKING AREAS

- A. Parking cars on individual work sites shall be kept to a minimum. A parking plan shall be required for the Site.
- B. Control Vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, Owner's operations, or construction operations. No parking along roadways shall be allowed.

3.08 CLEANING DURING CONSTRUCTION

- A. In accordance with General Conditions, as may be specified in Specification sections, and as required herein.
- B. Provide approved containers for collection and disposal of waste materials, debris, and rubbish. At least at weekly intervals, dispose of such waste materials, debris, and rubbish offsite.
- C. At least weekly, brush sweep the entry drive and roadways, and all other streets and walkways affected by Work and where adjacent to Work.

3.09 NOISE CONTROL

- A. Comply with the City of Key West Sound Control Ordinance, which limits construction noise to the hours of 8:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 p.m. on Saturday.

END OF SECTION

**SECTION 33 21 13.03
WATER WELL DRILLING**

PART 1 GENERAL

1.01 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
1. American Petroleum Institute (API):
 - a. 13A, Specification for Drilling-Fluid Materials.
 - b. 13B-1, Recommended Practice Standard Procedure for Field Testing Water-Based Drilling Fluids.
 2. International Association of Drilling Contractors (IADC):
API-Approved Official Daily Drilling Report Form.

1.02 SUBMITTALS

- A. Information Submittals:
1. Description of drilling equipment and proposed methods.
 2. Daily Drilling Log.
- B. Submittals shall be made in accordance with Section 01 33 00, Submittals.

1.03 QUALITY ASSURANCE

- A. Regulatory Requirements:
1. Comply with applicable permits, laws, and regulations in disposing of drilling fluids, drill cuttings, and water generated during drilling and well construction. Permits, laws and regulations shall include, but not be limited to, the following:
 - a. Federal, state, and local laws, regulations, and ordinances related to disposing of materials generated in constructing wells.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

- A. Notify Owner and Owner's Representative at least 5 working days before drilling begins.
- B. Notify Owner and Owner's Representative of anticipated delays whenever they become apparent.

3.02 DRILLING EQUIPMENT

- A. Provide bucket rig drilling equipment and accessories required to re-drill wells to their original depths, as listed on the Drawings.

3.03 BOREHOLE DRILLING

- A. Drill wells by the bucket method.
- B. Drill boreholes to dimensions and depth as specified.

3.04 DAILY LOG

- A. General:
 - 1. Keep driller's log of borehole which carefully and accurately describes the materials encountered.
 - 2. Drilling log shall be available for inspection at Site at all times.
- B. Data:
 - 1. Include the following:
 - a. Materials encountered, indicating the depth of each change in material and including difficulties and unusual conditions met during drilling.
 - b. Other pertinent phenomena observed.

3.05 DRILL CUTTINGS DISPOSAL

- A. Contain drill cuttings while onsite in approved containers with prior approval from Owner or Owner's Representative.
- B. Separate suspended solids from drill fluids using appropriate equipment, including temporary tankage to allow sufficient settling time to meet discharge requirements for suspended solids and turbidity, if applicable.
 - 1. Solids separated from drill fluids shall be contained while onsite in approved containers.
 - 2. Discharge water remaining from drill fluids after solids separation in accordance with Section 33 21 13.14, Water Well Rehabilitation.
- C. Upon completion of drilling, remove and dispose cuttings from well in accordance with State and Local regulations.

END OF SECTION

SECTION 33 21 13.12
WATER WELL VIDEO INSPECTION

PART 1 GENERAL

1.01 SUBMITTALS

- A. Action Submittals: Product data for camera.
- B. Informational Submittals:
 - 1. Video Survey Data: Provide original video survey and two copies immediately upon completion of survey.
- C. The submittals shall be made in accordance with Section 01 33 00, Submittal Procedures

1.02 QUALITY ASSURANCE

- A. Survey Specialist Qualifications: Shall have been in the business of conducting video survey for a minimum of 5 years.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

- A. Perform color video survey to serve as a final inspection document for well.
- B. Notify Owner or Owner's Representative 48 hours prior to performing the video survey. Perform survey in the presence of Owner or Owner's Representative.
- C. Notify Owner or Owner's Representative of anticipated delays whenever they become apparent.
- D. Conduct Video Survey:
 - 1. Following completion of well discharge tests.
 - 2. After sediment accumulated in well from test pumping has been removed.
 - 3. After fresh water has been introduced from surface to clarify water standing in well.

3.02 EQUIPMENT

A. Camera Features:

1. Color vertical down-hole and horizontal side-hole viewing capability with centralizers.
2. Horizontal side-hole viewing shall be controllable to allow viewing at angles within a 360-degree rotation.
3. Produce a video with an automatic on-screen depth indication to nearest 0.1 foot.

3.03 VIDEO SURVEY

A. Procedures:

1. Prior to conducting survey, allow well to settle for at least 24 hours.
2. Prior to and during survey, to satisfaction of Owner or Owner's Representative, introduce sufficient quantity of clear water into well to produce clear viewing conditions during survey.
3. Disinfect camera prior to placing in well.
4. Run a dynamic vertical down-hole view video from top of well to the bottom of well at a speed not exceeding 30 feet per minute.

- B. Owner or Owner's Representative may interrupt video camera during the dynamic vertical down-hole view run for periodic static horizontal side-hole viewing.

3.04 FIELD QUALITY CONTROL

- A. If survey fails to produce a clear picture of internal casing condition, introduce clear, potable water and conduct survey to Owner's or Owner's Representative's satisfaction until a clear video is obtained.

B. Defects:

1. Owner or Owner's Representative reserves the right to inspect video survey of the well for defects in well casing.
2. Correct defects found in casing caused by Contractor's actions and bear cost for repairs and cost of resurveying hole.

3.05 VIDEO SURVEY DATA

A. Features:

1. Original and copies of survey shall be in DVD format.
2. Beginning and end of video shall contain date and well name.
3. Clearly label exterior of DVD with Project name, date, and well name.

END OF SECTION

SECTION 33 31 13.14
WATER WELL REHABILITATION

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Works Association (AWWA): A100, Water Wells.

1.02 SUBMITTALS

A. Action Submittals:

1. Product Data:
 - a. General: Description of service rig including lift capacity.
 - b. Brush Equipment: Including type of brush (e.g., steel, nylon), type of tool used to brush the well.
 - c. Chemical Treatment:
 - 1) The Contractor is responsible for developing a written plan for chemical treatment, mechanical agitation, and spent chemical removal as part of the Well Rehabilitation Plan and shall be presented to the Owner or Owner's Representative for approval.
 - 2) The written plan shall include, at a minimum, the following information:
 - a) Description of chemicals to be used and application methods, concentrations, and rates.
 - b) Chemical product information for each chemical being used.
 - c) Materials Safety Data Sheets for each chemical being used.
 - d) Method of disposal of spent chemicals and written permission from agencies or entities involved in receiving spent material and water.
 - d. Airlift Tool:
 - 1) Description of airlift tool including dimensions, operating flow rates, and materials of construction.
 - 2) Air compressor capacity and flow rate.
 - e. Discharge System and Settling Tank: Product data and drawings, including dimensions and flow calculations.

- B. Informational Submittals: The Contractor shall keep well rehabilitation records including static water level, sand content, color of discharge water, interval being redeveloped, time spent in each interval, and estimated flow rate. Static water level shall be measured each day before the start of redevelopment. The other listed items shall be recorded at the beginning and end of surging or as directed by the Owner or Owner's Representative.
- C. The submittals shall be made in accordance with Section 01 33 00, Submittals.

1.03 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Comply with applicable permits, laws, and regulations in disposing of debris, and water generated during well rehabilitation. Permits, laws and regulations shall include, but not be limited to, the following:
 - a. Federal, state, and local laws, regulations, and ordinances related to disposing of materials generated from the wells.
 - 2. Demonstrate compliance with the applicable permits, laws, and regulations with the following:
 - a. If applicable, approved chain-of-custody form(s) demonstrating compliance with disposal of materials generated during well drilling.

PART 2 PRODUCTS

2.01 CHEMICAL TREATMENT

- A. Acids:
 - 1. Provide acids designed for well water applications to dissolve mineral and organic particulate present in the formation and on the well screens and the surrounding gravel pack and formation. All acids being used shall include some form of corrosion inhibitor to protect steel surfaces. Allowable acids include:
 - a. Provide commercial-grade hydrochloric acid (HCl) in strengths of 28 percent or greater as provided by Haliburton Services, Dowell, or equal.
 - b. Provide 99 percent sulfamic acid (N_2NSO_3H) in dry granular form to be mixed with freshwater to create a 20 percent strength solution before pumping into well to provide minimum concentrations as specified by the acid manufacturer. Sulfamic acid to be Johnson's Nu-Well, manufactured by Johnson Filtration Systems, or equal.
 - c. Provide 100 percent Citric acid (HO) $C-(CH_2)_2-(COOH)_3$ in crystalline powder form.

B. Polymer Dispersants:

1. Provide a polymer dispersant such as NW 310 as manufactured by U.S. Filter/Johnson Screen or equal to be combined with the acid treatments to enhance dispersion of minerals and divalent metals around the well screen.
2. Provide polymer dispersant in concentrations as recommended by the manufacturer and as approved by the Owner or Owner's Representative.

A. Wetting Agents:

1. Provide wetting agents such as NW 400 manufactured by U.S. Filter/Johnson Screen, Triton 100, or equal to reduce surface tension of the water.
2. Wetting agents, if recommended by the manufacturer, may be mixed with the acid prior to injection into the well.

B. Chlorine Products:

3. Provide stabilized liquid sodium hypochlorite at 10 percent to 12 percent available chlorine by weight in sufficient quantities to maintain 1,000 parts per million of free chlorine in the well for a period of 8 hours.
4. Provide granular inhibited calcium hypochlorite material at 65 percent available chlorine by weight in sufficient quantities to maintain 1,000 ppm of free chlorine in the well for a period of 8 hours.

C. Tremie Pipe and Wellhead Appurtenances:

1. Provide up to a 3-inch steel tremie pipe, Hydrill, or equal for injecting chemicals and freshwater to depths of up to 100 feet into the well below ground surface.
2. Provide a pump, fittings, and flowmeter to pump freshwater into the well during chemical treatment.
3. Provide up to a 3-inch ball valves and check valves for the chemicals and water tubing. Provide a flowmeter for measuring freshwater injection rates between 50 gallons per minute (gpm) and 100 gpm.

D. Additional Chemicals:

1. Freshwater and/or other products approved by the Owner or Owner's Representative shall be provided as necessary to buffer spent chemicals during well development as necessary.
2. All additional chemicals to be used in chemical treatment of the wells shall be approved by the Owner or Owner's Representative prior to use.

- E. Mechanical Agitation and Pumping Equipment:
 - 1. Provide a solid surge block for surging well and equally distributing the chemical solutions throughout the well bore and into the well screen gravel pack and surrounding formation in accordance with Section 33 21 13.09, Water Well Development.
 - 2. Furnish a pump and discharge piping for displacement of spent chemicals out of the well as specified in Section 33 21 13.09, Water Well Development.

PART 3 EXECUTION

3.01 GENERAL

- A. Notify Owner or Owner's Representative at least 5 working days before rehabilitation begins.
- B. Notify Owner or Owner's Representative of anticipated delays whenever they become apparent.

3.02 AIRLIFT DEVELOPMENT

- A. Develop the well by using the airlift pump with an air-line capable of reaching the bottom of the well and using an eductor pipe.
- B. The equipment shall be assembled and operated so that the air-line is capable of reaching the bottom of the well and may be placed inside of the casing. The bottom of the air-line and eductor pipe shall be capable of being moved the entire length of the well's open interval.
- C. The airlift development shall start with the bottom of the air-line (and eductor pipe) at the bottom of the casing and proceed downward until the entire well has been developed.
- D. After the specified period of airlift development, the Contractor shall sound the bottom of the well and if the well has filled with fines, the air-line shall be lowered to the bottom of the well and operated so a sufficient uphole velocity is achieved to remove the fines.
- E. Operate the airlift development equipment continuously at such rates of discharge and for such periods of time as determined by the Owner or Owner's Representative. The well shall be developed until the water is free from sand, silt, and turbidity as observed by the Owner or Owner's Representative. The Owner or Owner's Representative will determine when development is complete.

- F. The Contractor shall control, direct, and contain the water produced by development of the wells. Prevent flooding that might be caused by discharge.

3.03 BRUSHING

- A. Wire brush: use steel wire brushes when directed by Owner or Owner's Representative. The brushes shall be 1-inch larger than the inside diameter than the well being brushed.
- B. Nylon brush: use nylon wire brushes when directed by Owner or Owner's Representative. The brushes shall be 1-inch larger than the inside diameter than the well being brushed.
- C. Brush tool: assemble or purchase a tool fabricated of wire or nylon brushes (as directed by Owner or Owner's Representative), steel pipe, and cement or other Owner- or Owner's Representative-approved material to hold the brushes in place inside the tool. All brushing tools proposed for use by the Contractor shall be approved by the Owner or Owner's Representative prior to any work performed on the well.
- D. Alternately raise and lower the brush tool assembly through a 10-foot section of well casing or open hole (as directed by Owner or Owner's Representative) for several minutes. Lower the brush tool assembly to the next casing or open hole section and repeat the procedure. Continue brushing the well until directed to stop by the Owner or Owner's Representative.

3.04 CHEMICAL TREATMENT

- A. The Contractor shall maintain a copy of the health and safety plan and MSDS sheets at the job site. The Contractor shall ensure that employees working at the site during chemical treatment are qualified to work with the chemicals used. The Contractor shall ensure that all necessary safety equipment is on site. Such equipment may include, but is not limited to, proper respirators, latex gloves, rubber boots, Tyvex coveralls, goggles, and pressurized eyewash and shower.
- B. Prior to scheduling delivery of the chemicals, the method of emplacement, equipment, and timing of chemical emplacement shall be reviewed and approved by the Owner or Owner's Representative.
- C. All chemicals emplaced in the well shall be pre-mixed in suitable mixing tanks before being injected into the well. The Contractor shall provide suitable mixing tanks, transfer pumps, and agitators necessary to accurately prepare and inject the chemicals. Transfer pumps shall be capable of generating a minimum of 50 psi while injecting chemicals into the well.

- D. All chemicals emplaced in the well are to be injected through a tremie pipe of not less than 2 inches I.D. The bottom 10-foot section of the tremie pipe shall be perforated with two tight fitting swabs at each end. The swabs shall have an outside diameter not less than 1/8 of an inch smaller than the I.D. of the well open hole
- E. The chemicals shall be injected into the well and continuously surged over 20-foot intervals, starting at the top of the open borehole and moving downward. The volume of chemicals injected into each 20-foot section shall be proportional to volume to be injected over the entire open interval. During injection, the chemicals shall be continuously surged over the 20-foot interval for a minimum of 15 minutes before moving to the next section. The injection and surging shall be performed in a continuous operation of not more than 12 hours until complete.
- F. After completion of chemical emplacement, the entire open borehole shall be surged in 20-foot increments with the same double surge block used for injection. Each 20-foot section shall be continuously surged for a minimum of 15 minutes before moving to the next section. This procedure shall be performed twice over a 48-hour period.
- G. The Contractor shall airlift pump the acidified water from the well into one or more appropriate temporary storage containers, such as Baker tanks or equal. The temporary storage container(s) shall be able to contain a minimum of 15,000 gallons of water. Discharge from airlift pumping shall enter the storage container from the bottom. Final discharge water will be decanted off the top of the storage container at the point furthest from where inflow to the storage container occurs.
- H. Acidified water shall be neutralized by direct injection of a neutralizer into the temporary storage containers. The acidified water shall be neutralized to a pH of greater than 6.5 and less than 8.5 before disposal. The Contractor shall monitor and record the pH, turbidity, neutralization method, disposal of the water, and quantity of water disposed.

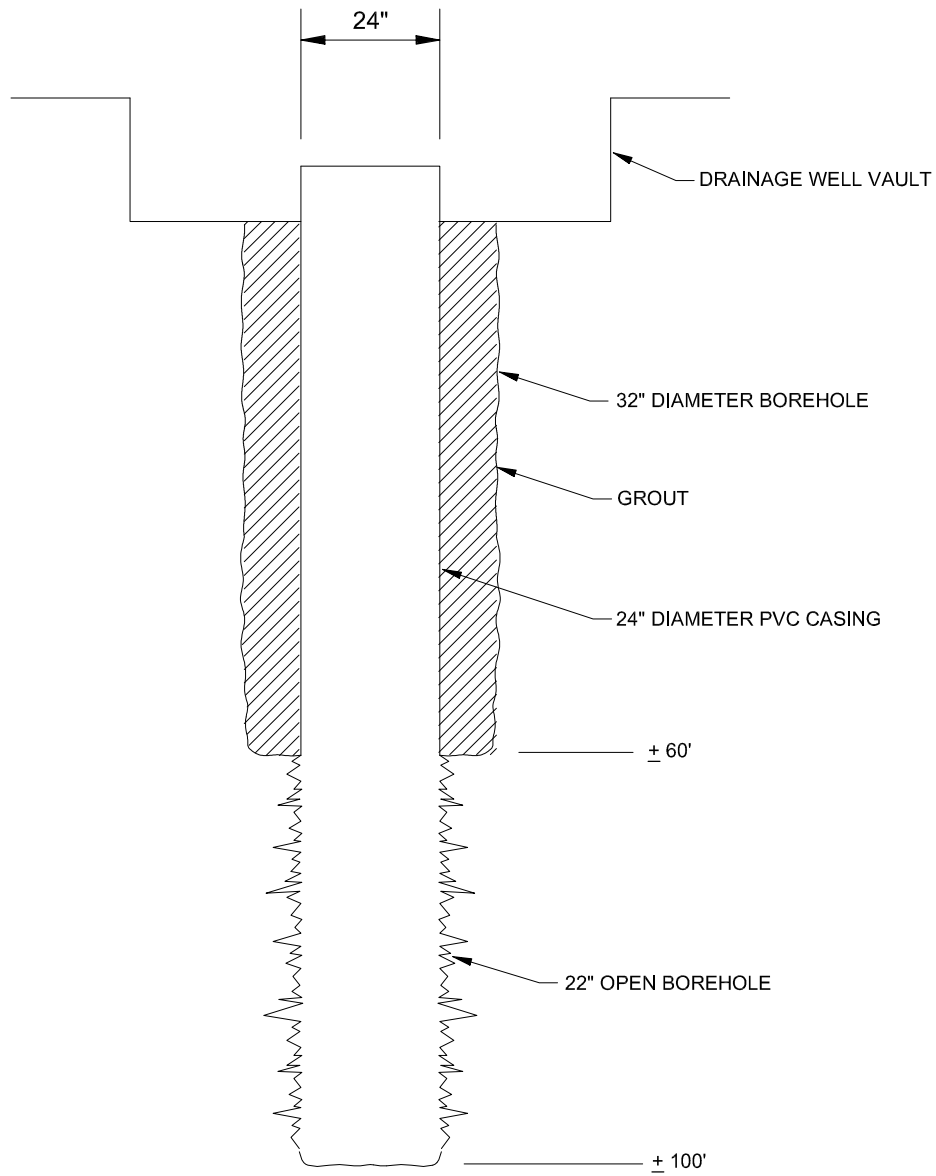
3.05 DEBRIS AND FLUIDS DISPOSAL

- A. All water produced during well development and rehabilitation shall be disposed of in an appropriate manner in accordance with all applicable regulations and requirements.

- B. Disposal of water shall be limited to:
1. Discharge to sanitary sewer. The allowable discharge rate to the sanitary sewer will vary at each location. Some locations have a maximum disposal rate of 500 gallons per minute.
 2. Other method to be determined by the Contractor and approved by the Engineer and Owner.
- C. For each of these methods of disposal, it is the Contractor's responsibility to obtain written permission or approval from the responsible agency or government entity to dispose of the water.
1. Disposal Offsite: Copies of manifest and/or written permission from hauling companies and disposal locations.
 2. Other: Contractor to provide written permission or approval from entity accepting disposal of the water.
- D. It is the Contractor's responsibility to examine each well site and develop a written plan for disposal of the water prior to pumping of any water. The plan shall include at a minimum well number(s), methods of disposal, quantity or rate limitations, location of disposal point, and written permission or approval from responsible agency or government or private entity. The plan shall be reviewed and approved by the Owner and Owner's Representative.
- E. The disposal method shall provide a means of settling out rocks, debris, and suspended solids so that they do not enter the sanitary sewer system.
- F. Provide all equipment and appurtenances necessary to dispose of the water in accordance with the requirements of the permits or appropriate responsible agency or government or private entity.
- G. Provide tank(s) of sufficient size and construction to accommodate discharge. Construct with baffles to promote sediment settlement prior to pumping from tank to designated discharge point.
- H. Provide pump of sufficient size and horsepower to continuously pump discharge water as required from tank(s) to discharge point.

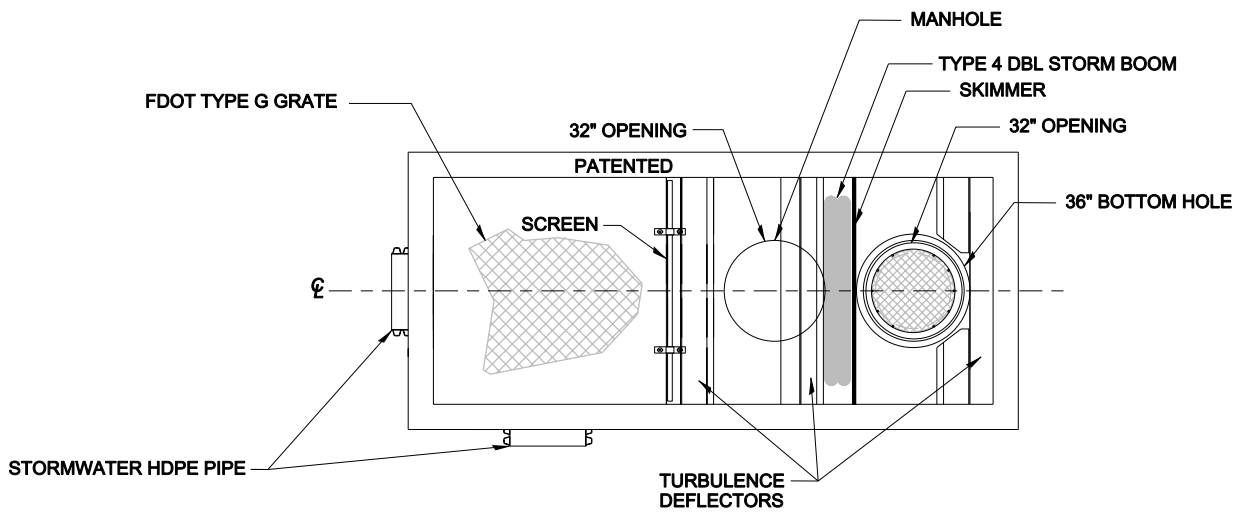
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**PART 4
DRAWINGS**

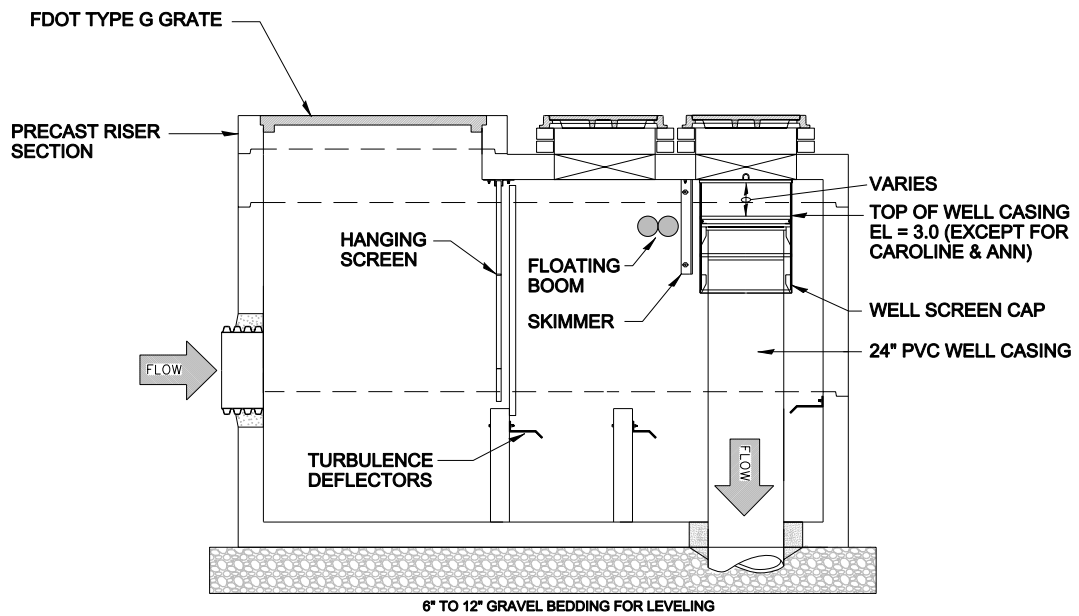


TYPICAL
STORMWATER DRAINAGE WELL
COMPLETION DIAGRAM

NTS



PLAN VIEW

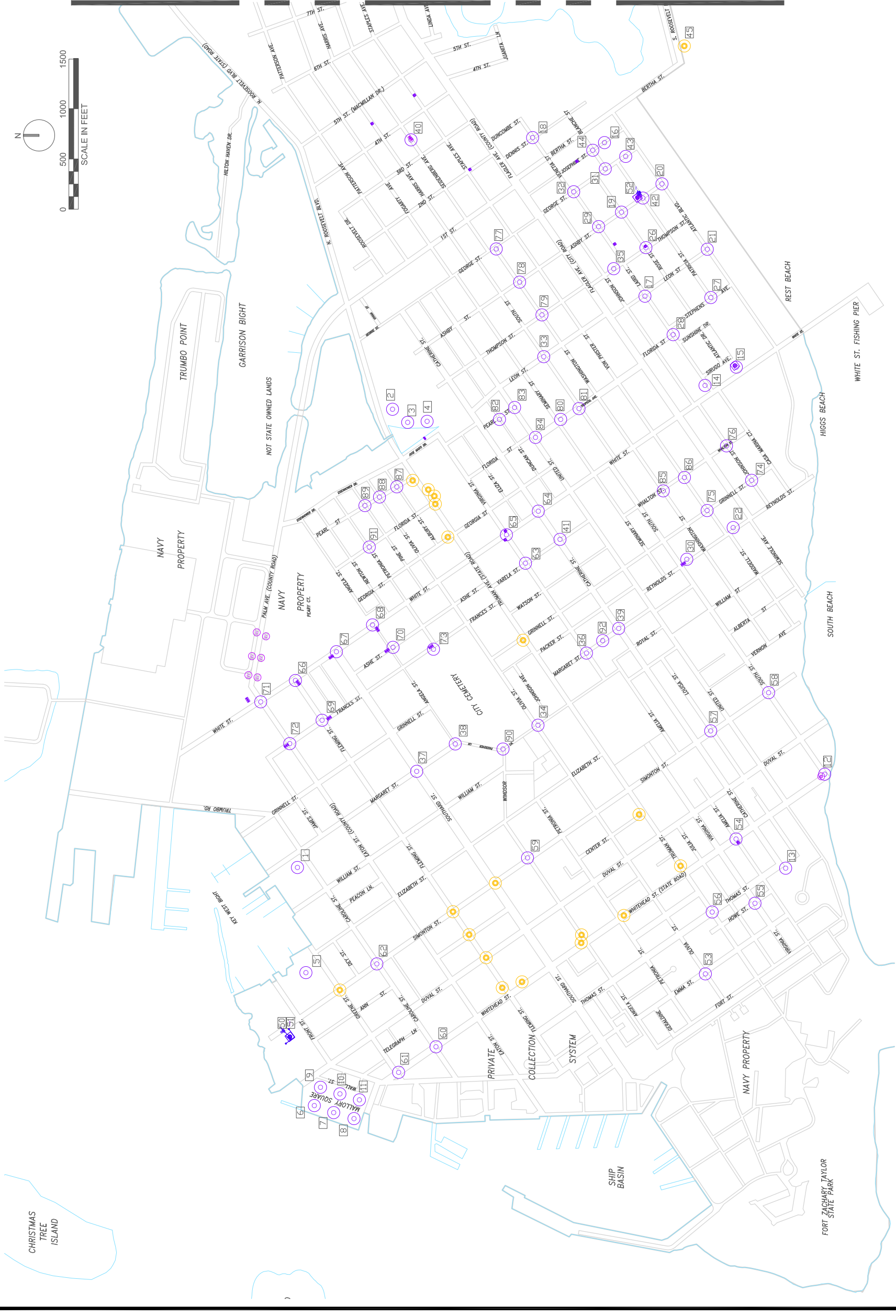


FRONT VIEW

GRAVITY STORMWATER DRAINAGE WELL VAULT

NTS

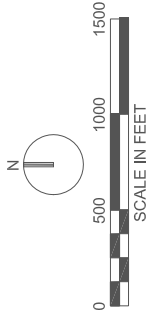
CITY OF KEY WEST STORMWATER DRAINAGE MAP EXISTING INJECTION WELLS SHEET 1



Injection Well Information

Site Location	DEP Permit #	Depth	Diameter	Notes
1. 1st and Market	44203125	88.00	24"	
2. Public Service / Fire Station	44203124	88.00	24"	
3. Public Service / Fire Station	44203125	91.00	24"	
4. Conch Farm / Greene and Elizabeth	143343-001	58.00	8"	NOT ACCESSIBLE BY TRUCK
5. Mallory Square	44-292991	104.00	24"	
6. Mallory Square	44-292992	104.00	24"	
7. Mallory Square	44-292993	104.00	24"	
8. Mallory Square	44-292994	111.00	24"	
9. Mallory Square	44-292995	104.00	24"	
10. Mallory Square	44-292996	104.00	24"	
11. Mallory Square	44-292997	102.00	24"	
12. Whitehead and South	141578010	88.00	24"	
13. Thomas and Catherine	141578023	97.00	24"	
14. White Street / Pump Asstkt	141578011			
15. White Street / Pump Asstkt	141578024			
16. Josephine Street	141578007	87.00	24"	
17. Laird and Leon	141578009	101.00	24"	
18. Row and Ashby	141578013	100.00	24"	
19. Row and Ashby	141578014	100.00	24"	
20. Atlantic and Ashby	141578017	76.00	24"	
21. Atlantic and Leon	141578018	92.00	24"	
22. Reynolds and Von Pfliser	141578019	96.00	24"	
23. Donald and 19th	141578020	84.00	24"	
24. Donald and 17th	141578021	101.00	24"	
25. Donald and 17th Terr	141578022	90.00	24"	
26. Ross and Thompson	141578014	88.00	24"	
27. Ross and Thompson	141578015	88.00	24"	
28. Laird and Florida	141578006	84.00	24"	
29. Ashby and Laird	44306832	88.00	24"	
30. Reynolds and South	44306824	95.00	24"	
31. Blanca and George	44306833	88.00	24"	
32. Venella and George	44306830	88.00	24"	
33. Leon and South	44306859	88.00	24"	
34. Windsor and Ollie	44306823	88.00	24"	
35. Virginia and Ursula	44306825	88.00	24"	
36. Virginia and Ursula	44306826	88.00	24"	
37. Southard and Margaret	44287617	85.00	24"	
38. Angela and Margaret	44287616	71.00	24"	
39. Catherine and Margaret	44284619	90.00	24"	
40. Saldenberg and 3rd Ave	44287620	90.00	24"	
41. Catherine and Venella	44287621	88.00	24"	
42. Patricia and Ashby Grvly Well	44287622	88.00	24"	
43. Patricia and George	44287623	88.00	24"	
44. Patricia and George	44287624	88.00	24"	
45. #1 Snathers Beach	141578007	86.00	24"	
46. #2 Snathers Beach	141578002	94.00	24"	
47. #3 Snathers Beach	141578003	97.00	24"	
48. #4 Snathers Beach	141578004	94.00	24"	
49. #5 Snathers Beach	141578005	95.00	24"	
50. Simonon #2 Pump Asstkt	63207-085	119.00	24"	
51. Simonon #1 Pump Asstkt	63207-084	120.00	24"	
52. Ollie Street and Whitehead	63207-086	92.00	24"	
53. Ollie Street and Whitehead	63207-088	92.00	24"	
54. Anella Street and Whitehead	63207-101	78.00	24"	
55. Howe Street and Virginia Street	63207-103	90.00	24"	
56. Truman Avenue and Thomas Street	63207-106	88.00	24"	
57. Louise Street and Simonon Street	63207-107	89.00	24"	
58. Simonon Street and South Street	63207-109	89.00	24"	
59. Angela Street and Simonon Street	63207-110	87.00	24"	
60. Carolina Street and Whitehead Street	63207-111	89.00	24"	
61. Carolina Street and Whitehead Street	63207-112	89.00	24"	
62. Carolina Street and Virginia Street	63207-113	79.00	24"	
63. Varella Street and Virginia Street	63207-117	87.00	24"	
64. Catherine Street and White Street	63207-120	87.00	24"	
65. Virginia Street and White Street	63207-121	86.00	24"	
66. Fleming Street and White Street	63207-122	88.00	24"	
67. Southard Street and White Street	63207-123	87.00	24"	
68. Angela Street and White Street	63207-124	75.00	24"	
69. Angela Street and White Street	63207-125	80.00	24"	
70. Angela Street and Ashby Street	63207-126	90.00	24"	
71. Eaton Street and White Street	63207-127	83.00	24"	
72. Eaton Street and White Street	63207-128	92.00	24"	
73. Frances Street and Penonka Street	63207-130	90.00	24"	
74. Ghnell Street and Johnson Street	63207-133	72.00	24"	
75. Ghnell Street and Von Pfliser Street	63207-135	88.00	24"	
76. Johnson Street and Von Pfliser Street	63207-136	77.00	24"	
77. Johnson Street and Von Pfliser Street	63207-137	77.00	24"	
78. Southard Street and Whitehead Street	63207-149	121.00	24"	
79. Thompson Street and Washington St	63207-151	118.00	24"	
80. Tropical Street and South Street	63207-152	120.00	24"	
81. Tropical Street and South Street	63207-153	121.50	24"	
82. Pearl Street and Duncant Street	63207-154	121.00	24"	
83. Pearl Street and United Street	63207-155	123.00	24"	
84. Florida Street and United Street	63207-156	105.00	24"	
85. Washington Street and Whalton Street	63207-157	120.00	24"	
86. Washington Street and Whalton Street	63207-158	120.00	24"	
87. Ollie Street and Peal Street	63207-169	134.00	24"	
88. Ollie Street and Peal Street	63207-170	122.50	24"	
89. Fine Street and Peal Street	63207-171	123.00	24"	
90. Windsor and Passover (Cemetery)	63207-172	101.00	24"	
91. Florida and Penonka	63207-173	125.00	24"	
92. Margaret Street (1100 Block)	Unknown*	77.00	14"	

- LEGEND**
- CLASS V INJECTION WELL, EXISTING
 - INJECTION WELL NUMBER DESIGNATION
 - PUMP ASSIST INJECTION WELL, EXISTING
 - COUNTY INJECTION WELL, EXISTING
 - FOOT INJECTION WELL, EXISTING



Injection Well Information

Site Location	DEP Permit #	Depth	Diameter	Notes
1. Public Services / Fire Station	44203125	88.00	24"	
2. Public Services / Fire Station	44203124	88.00	24"	
3. Public Services / Fire Station	44203125	88.00	24"	
4. Conch Farm / Greene and Elizabeth	143343-001	58.00	8"	NOT ACCESSIBLE BY TRUCK
5. Mallory Square	44-292992	104.00	24"	
6. Mallory Square	44-292994	111.00	24"	
7. Mallory Square	44-292995	104.00	24"	
8. Mallory Square	44-292997	102.00	24"	
9. Mallory Square	141578010	88.00	24"	
10. Whitehead and South	141578011	97.00	24"	
11. White Street / Pump Asst	141578024	87.00	24"	
12. Josephine Street	141578009	101.00	24"	
13. Leon and South	141578013	100.00	24"	
14. Atlantic and Ashby	141578017	76.00	24"	
15. Atlantic and Leon	141578018	92.50	24"	
16. Reynolds and Von Pfliser	141578019	96.00	24"	
17. Donald and 19th	141578020	84.00	24"	
18. Donald and 17th	141578022	90.00	24"	
19. Ross and Thompson	141578014	88.00	24"	
20. Laid and Florida	141578008	84.00	24"	
21. Ashby and Laid	44306832	88.50	24"	
22. Reynolds and South	44306824	95.00	24"	
23. Blanca and George	44306833	88.00	24"	
24. Venella and George	44306830	88.50	24"	
25. Leon and South	44306859	88.00	24"	
26. Windsor and Ollis	44306823	88.00	24"	
27. Virginia and Margaret	44306825	88.00	24"	
28. Virginia and Margaret	44306826	91.50	24"	
29. Southard and Margaret	44287617	85.00	24"	
30. Angela and Margaret	44287618	71.00	24"	
31. Catherine and Margaret	44284619	90.50	24"	
32. Seidenberg and 3rd Ave	44287620	90.00	24"	
33. Catherine and Venella	44287621	88.50	24"	
34. Patricia and Ashby / Grady Well	44287622	88.00	24"	
35. Patricia and George	44287623	88.00	24"	
36. Virginia and Margaret	141578007	86.00	24"	
37. #1 Smathers Beach	141578002	94.00	24"	
38. #2 Smathers Beach	141578003	97.00	24"	
39. #3 Smathers Beach	141578004	94.00	24"	
40. #4 Smathers Beach	141578005	95.00	24"	
41. #5 Smathers Beach	63207-085	118.00	24"	
42. Simonon #1 Pump Asst	63207-084	120.00	24"	
43. Simonon #2 Pump Asst	63207-086	120.00	24"	
44. Ollis Street and Emory Street	63207-088	97.00	24"	
45. Anella Street and Whitehead Street	63207-101	78.00	24"	
46. Howe Street and Virginia Street	63207-103	90.00	24"	
47. Truman Avenue and Thomas Street	63207-106	88.00	24"	
48. Louisiana Street and South Street	63207-107	89.50	24"	
49. Angela Street and South Street	63207-109	89.50	24"	
50. Angela Street and Simonon Street	63207-110	87.00	24"	
51. Carolina Street and Virginia Street	63207-111	89.00	24"	
52. Carolina Street and Virginia Street	63207-112	89.00	24"	
53. Carolina Street and Virginia Street	63207-113	79.00	24"	
54. Virginia Street and Virginia Street	63207-117	87.00	24"	
55. Virginia Street and White Street	63207-120	87.00	24"	
56. Virginia Street and White Street	63207-121	86.00	24"	
57. Fleming Street and White Street	63207-122	88.00	24"	
58. Angela Street and White Street	63207-124	75.00	24"	
59. Angela Street and White Street	63207-125	87.00	24"	
60. Angela Street and White Street	63207-126	87.00	24"	
61. Angela Street and White Street	63207-128	90.00	24"	
62. Eaton Street and White Street	63207-127	83.00	24"	
63. Francis Street and Frances Street	63207-128	92.00	24"	
64. Ghinnell Street and Penonka Street	63207-130	90.00	24"	
65. Ghinnell Street and Johnson Street	63207-133	72.00	24"	
66. Ghinnell Street and Von Pfliser Street	63207-135	88.00	24"	
67. Ghinnell Street and Von Pfliser Street	63207-136	77.00	24"	
68. Ghinnell Street and Von Pfliser Street	63207-137	77.00	24"	
69. Ghinnell Street and Von Pfliser Street	63207-139	123.00	24"	
70. Thompson Street and Washington St	63207-150	123.00	24"	
71. Thompson Street and Washington St	63207-151	118.50	24"	
72. Tropical Street and Seminary Street	63207-152	120.00	24"	
73. Tropical Street and South Street	63207-153	121.50	24"	
74. Pearl Street and Duncant Street	63207-154	121.00	24"	
75. Pearl Street and United Street	63207-155	123.00	24"	
76. Florida Street and United Street	63207-156	105.00	24"	
77. Washington Street and Whalton Street	63207-157	120.00	24"	
78. Washington Street and Whalton Street	63207-158	122.00	24"	
79. Ollis Street and Pearl Street	63207-169	124.00	24"	
80. Ollis Street and Pearl Street	63207-170	122.50	24"	
81. Fine Street and Pearl Street	63207-171	123.00	24"	
82. Windsor and Passover (Cemetery)	63207-172	101.00	24"	
83. Florida and Penella	63207-173	125.00	24"	
84. Margaret Street (1100 Block)	Unknown*	77.00	14"	

- LEGEND**
- CLASS VI INJECTION WELL - EXISTING
 - INJECTION WELL NUMBER DESIGNATION
 - PUMP ASSIST INJECTION WELL - EXISTING
 - COUNTY INJECTION WELL - EXISTING
 - FOOT INJECTION WELL - EXISTING

**CITY OF KEY WEST
STORMWATER DRAINAGE MAP
EXISTING INJECTION WELLS
SHEET 2**

