



JACKSON COUNTY FLORIDA

LAKEPOINT DRIVE EMERGENCY CULVERT REPLACEMENT

BID # - 1819-Eng- 02

**Jackson County
Board of County Commissioners
2864 Madison Street
Marianna, FL 32448**

County Commissioners

District 1 - Willie Spires, PHD

District 2 - Clint Pate, Chairman

District 3 - Chuck Lockey

District 4 - Eric Hill

District 5 - Jim Peacock, Vice Chairman

Wilanne Daniels, County Administrator

**County Engineer
Larry Alvarez, P.E.
2828 Owens Street
Marianna, FL 32446
Phone (850) 482-9677
Fax (850) 482-9063
Email lalvarez@jacksoncountyfl.com**

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**SECTION 00010
ADVERTISEMENT FOR BIDS**

PROJECT NAME: Lakepoint Drive Emergency Culvert Replacement Project

Sealed bids, submitted in triplicate, will be received by the Board of County Commissioners of Jackson County, Florida, (Owner), until 1:00 p.m. (Central Time) March 7, 2019 at the County Engineer's Office (County Engineer, Larry Alvarez), at the Environmental Health Office, 4979 Healthy Way, Marianna, Florida 32448, Marianna, FL 32446 for the construction of the following described Project:

Lakepoint Drive Emergency Culvert Replacement Project

The Work includes the removal of Old 12' Diameter Pipe, Asphalt and debris. The replacement of the existing 12' diameter pipe or 2 new 8' diameter pipes, Pipe(s) must be asphalt coated. Pour in place or pre-casts headwalls, suitable structural fill material, Limerock, guardrails and road markings.

A **Non-Mandatory Pre-Bid Meeting** will be held on February 21, 2019 at 9:00 AM central time at the Jackson County Engineering Department,), at the Environmental Health Office, 4979 Healthy Way, Marianna, Florida 32448. Potential bidders are encouraged to attend.

The deadline for receipt of questions will be February 28, 2019 at 2:00 PM Central Time. Questions must be submitted in writing to the County Engineer (email lalvarez@jacksoncountyfl.com: with a copy to the Jeannie Bean email jbean@jacksoncountyfl.com).

Bids will be opened and recorded at 1:10 PM (or immediately thereafter) on March 7, 2019 at the Jackson County Board of County Commissioners Board Room at 2864 Madison Street. Bids may also be submitted to the County Engineer at the Board Room from 12:50 PM until 1:10 PM Central Time.

Plans, specifications, and contract documents will be open for public inspection after noon on February 20, 2019 at the Road and Bridge office at 2828 Owens Street. Bid documents must be obtained from:

County Engineer
Attn: Larry Alvarez
Environmental Health Office
4979 Healthy Way
Marianna, Florida 32448
(850) 573-7491

upon payment of \$ No Charge per set which amount constitutes the cost of reproduction and handling. This payment will not be refunded.

The Owner reserves the right to waive any informality or to reject any or all bids. Each Bidder must deposit with his/her bid, security in the amount, form and subject to the conditions provided in the Information for Bidders. Sureties used for obtaining bonds must appear as acceptable according to the Department of Treasury Circular 570. Bidders must be Pre-approved by FDOT or Jackson County and in good standing with FDOT and the County.

No bid may be withdrawn for a period of sixty days after the scheduled closing time for receipt of bids.

To the extent applicable to this project, attention of Bidders is particularly called to the requirements of the Special Provisions, conditions of employment to be observed, and minimum wage rates to be paid under the Contract (if applicable), Section 3, Segregated Facilities, Section 109 Executive Order 11246, and all applicable laws and regulations of the Federal government and State of Florida, and bonding and insurance requirements.

Minorities and female contractors and subcontractors are encouraged to bid.

IN PARTICULAR, BIDDERS SHOULD NOTE THE REQUIRED ATTACHMENTS AND CERTIFICATIONS TO BE EXECUTED AND SUBMITTED WITH THE FORM OF BID PROPOSAL.

DATE: _____

**EQUAL OPPORTUNITY EMPLOYER
HANDICAP ACCESSIBLE/FAIR HOUSING JURISDICTION**

SECTION 00020

**INFORMATION FOR BIDDERS
(GRANT PROJECTS)**

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1.0 RECEIPT AND OPENING OF BIDS

Bid Proposals will be received by the **Board of County Commissioners of Jackson County**, Florida, (herein called the "Owner") until time and place indicated in the "Advertisement for Bids", and then at said office publicly opened and read aloud.

Bids shall be submitted on the forms attached hereto, all blanks of which must be appropriately completed. The Bid shall be submitted in triplicate with original signatures on all forms and shall be enclosed in a sealed envelope clearly marked:

SEALED BID ENCLOSED
Attention: LARRY ALVAREZ, COUNTY ENGINEER
Environmental Health Office
4979 Healthy Way
Marianna, Florida 32448
Lakepoint Emergency Culvert Repair Project
March 7, 2019 at 1:10PM (CT) Jackson County BCC

The Owner may consider informal any Bid not prepared and submitted in accordance with the provisions thereof and may waive any informalities or reject any and all Bids. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No Bidder may withdraw a Bid within 60 days after the actual date of the opening thereof.

2.0 PREPARATION OF BID

Each Bid Proposal must be submitted on the prescribed form and accompanied by all forms contained in sections 00300 through 00370. Photocopies of these forms are acceptable; however, each copy must contain an original (wet) ink signature. See Paragraph 3.0 concerning subcontractor certification requirements. All blank spaces for Bid prices must be completed in ink or typewritten, in both words and figures, and the Certifications and forms must be fully completed and executed when submitted.

Each must be submitted in a sealed envelope bearing on the outside the name of the Bidder, his/her address, contractor's license number and the name of the project for which the Bid is submitted. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope addressed to the office indicated above.

3.0 SUBCONTRACTS

The Bidder is specifically advised that any person or other party to whom it is proposed to award a subcontract under this Contract:

- A. Must be acceptable to the Owner after verification by the Department of Community Affairs of the current eligibility status; and
- B. Must submit a Certification by Proposed Subcontractor Regarding Equal Employment Opportunity, Form 950.2; Certification by Proposed Subcontractor Concerning Labor Standards and Prevailing Wage Requirements, Form 1422; and Certification of Proposed Subcontractor Regarding Section 3 and Segregated Facilities. Approval of the proposed subcontract award cannot be given by the Owner unless and until the proposed subcontractor has submitted the Certifications and/or other evidence showing that it has fully complied with any reporting requirement to which it was subject. Although the Bidder is not required to attach such Certifications by proposed subcontractors to his/her Bid, the Bidder is hereby advised of this requirement so that appropriate action can be taken to prevent subsequent delay in subcontract awards.

4.0 TELEGRAPHIC MODIFICATION

Any Bidder may modify his/her Bid by telegraphic communication at any time prior to the scheduled closing time for receipt of Bids, provided such telegraphic communication is received by the Owner prior to the closing time, and, provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the Bidder was mailed prior to the closing time. The telegraphic communication should not reveal the Bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed Bid is opened.

If written confirmation is not received within two days from the closing time, no consideration will be given the telegraphic modification.

5.0 QUALIFICATIONS OF BIDDERS

The Owner may make such investigations as is deemed necessary to determine that the Bidder/Contractor has the necessary facilities, ability and financial resources to perform the work in a satisfactory manner within the time specified; that he has had experience in construction work of the same or similar nature and complexity; and that he has the financial capability, past history, and references which will serve to satisfy the Owner beyond any doubt as to his qualifications for doing the work.

The Bidder or his subcontractor at the time of bid opening must have a current and valid state and/or local licenses for each type of work contemplated under this contract.

The Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. Conditional Bids may not be accepted.

6.0 BID GUARANTEE

(Applicable if Total Bid with All Alternates is \$50,000 or more).

Each Bid shall be accompanied by a Bid Guarantee in the sum of not less than five (5) percent of the total amount Bid, including all additive alternates but excluding all deductive alternates, which shall be a certified check (certified checks offered as Bid Guarantees must have Florida documentary stamps attached), or cashier's check, or a bank draft made payable to the Owner, or a Bid Bond prepared and submitted on a copy of the form included with the Contract Documents. The Surety Company on said Bond shall be a duly authorized Surety Company satisfactory to the Owner. A Bid Bond must be signed or countersigned by a Florida Resident Insurance Agent. Such check or Bid Bond shall be submitted with the understanding that it shall guarantee that the Bidder will not withdraw his Bid for a period of sixty (60) days after the scheduled closing time for the receipt of Bids, that if his Bid is accepted, he will enter into a formal Contract with the Owner in accordance with the form of agreement included as a part of the Contract Documents, and that the required Bond will be given; furthermore, in the event of the withdrawal of said Bid within said period, or failure to enter into said Contract and give said Bond within ten (10) days after he has received notice of acceptance of his Bid, the Bidder shall be liable to the Owner for the full amount of the Bid Guarantee as representing the damage to the Owner on account of the default of the Bidder in any particular thereof. The Bid Guarantees shall be returned to all except the three lowest Bidders within fifteen (15) days after the formal opening of Bids. The Owner reserves the right to hold the Bid Guarantee of the three lowest Bidders until the Owner and the accepted Bidder have executed the Contract and the Performance and Payment Bond has been approved by the Owner. If the required Contract and the Bond have not been executed within sixty (60) days, or the length specified in the Proposal, if longer, after the date of the opening of the Bids, then the Bid Guarantee of any Bidder will be returned upon his request, provided he has not been notified of the acceptance of his Bid prior to the date of such request.

7.0 LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful Bidder, upon failure or refusal to execute and deliver the Contract and Bonds required within 10 days after receipt of notice of the acceptance of the Bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with the Bid.

8.0 TIME AND COMPLETION OF LIQUIDATED DAMAGES

Bidder must agree to commence work within 10 days after the date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within time indicated in the "Proposal and Bid Form". Bidder must also agree to pay as liquidated damages, the amount indicated in the "Proposal and Bid Form" for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

9.0 CONDITIONS OF WORK

Each Bidder must inform himself/herself fully of the conditions relating to the construction of the project and the employment labor thereon. Failure to do so will not relieve a successful Bidder of his obligation to furnish all material and labor necessary to carry out the provisions of this Contract. Insofar as possible, the Contractor, in carrying out the work, must employ such methods or means as will not cause any interruption of our interference with the work of any other Contractor.

10.0 ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the plans, specification or other pre-Bid Documents will be made to any Bidder orally. All questions about the meaning or intent of the Contract Documents shall be submitted to the Engineer in writing. Replies will be issued by Addenda emailed or delivered to all parties recorded by the Engineer as having received the Bidding Documents. Questions received after the date indicated in the advertisement will not be answered.

11.0 CONTRACT SECURITY AND INSURANCE

Upon execution of a Contract for work covered by this project or parts of this project, the Contractor shall furnish a Surety Bond in an amount not less than 200 percent of the Contract price (100% Performance Bond and 100% Payment Bond) as set forth in Paragraph 29, General Conditions, of this Specification. The Surety Bond must remain valid for one year beyond the date of acceptance of the completed construction project. The Contractor(s) shall furnish the Owner with proof of carriage of insurance. The Contractor(s) will maintain Insurance as set forth in Paragraph 28 of the General Conditions and Paragraph 4 of the Supplemental General Conditions.

12.0 POWER OF ATTORNEY

Attorneys-in-fact who sign Bid Bonds or Contract Bonds must file with each Bond a certified and effectively dated copy of their power of attorney.

13.0 NOTICE OF SPECIAL CONDITIONS

Attention is particularly called to those parts of the Contract Documents and Specifications which deal with the following:

- A. Inspection and testing materials
- B. Insurance requirements.
- C. Wage rates.
- D. Inspection and testing of materials.
- E. Minimum wage rates.
- F. Section 3 requirements.
- G. Section 109 requirements.
- H. Segregated facilities.

14.0 LAWS AND REGULATIONS

The Bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

15.0 SAFETY STANDARDS AND ACCIDENT PREVENTION

With respect to all work performed under this Contract, the Contractor shall:

- A. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No. 75, Saturday, April 17, 1971.
- B. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
- C. Maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

16.0 CONDITIONS OF WORK AND VISIT TO SITE

Each Bidder shall visit the site of the proposed work and fully acquaint himself with conditions relating to construction and labor so that he may fully understand facilities, difficulties and restrictions attending the execution of work under the Contract and the employment of labor thereon. Bidder shall thoroughly examine and be familiar with specifications. The failure or omission of any Bidder to receive or examine any form, instrument, addendum or other documents, or to visit the site and acquaint himself with conditions there existing, shall in no way relieve any Bidder from any obligation with respect to his Bid or to the Contract(s). The submission of a Bid shall be taken as prima facie evidence of compliance with this Section. The Bidder has not relied on and will not rely on any statement, disclosure, representation or warranty with respect to any matter affecting the Bid or any failure (alleged or actual) of the Owner to make any disclosure of any latent or other site conditions.

17.0 SUBSOIL AND GROUNDWATER CONDITIONS

Each Bidder is expected to take his or her own soil investigations at the site(s) to determine and satisfy himself / herself of the actual site conditions and types of the subsoil quality and groundwater that exists and will be required to work in and prepare their Bid accordingly.

18.0 QUANTITIES

Quantities shown in the Proposal and Bid Form are approximately only and are subject to either increase or decrease. The quantities indicated are based on the actual scope of the project as shown on the drawings. Should the quantities of any of the items of the work be increased, the Contractor(s) proposes to do the additional work at the unit Bid prices; and should the quantities of any item be decreased, the Contractor(s) understands that payment will be made on actual quantities constructed and accepted at the unit Bid price, and will make no claim for anticipated profits for any decrease in quantities.

19.0 BASIS OF BID

Bids shall be submitted on the Base Bid, Additive Alternates, and Deductive Alternates as indicated. No Proposal shall contain limitations regarding the award of the Contract in which the limitations are at the option of the Bidder.

20.0 AWARD OF CONTRACT

The Contract will be awarded to the lowest, responsive, responsible Bidder, provided the Bid is reasonable and it is in the interest of the Owner to accept. The Owner reserves the right to reject any or all Bids and to waive informalities. If at the time of Award of Contract funds for construction exceed the lowest Base Bid submitted by a responsible Bidder, the award will be for the Base Bid, plus Additive Alternates determined for inclusion by the Owner; however, if the Base Bid exceeds the estimated funds for construction, the Base Bid combined with such Deductive Alternates applied in numerical order as listed in the Proposal and Bid Form to produce a net amount which is within the available funds.

21.0 DEDUCTIVE OR ADDITIVE ALTERNATES

The prices Bid in the Base Bid portion of the Bid and Proposal Form shall be utilized in preparing the Deductive or Additive Alternate portions of the Bid and Proposal Form.

22.0 PAYMENTS

Payment for all work or equipment will be made by the Owner in accordance with the terms set out in the Contract(s). Estimates will be made by the Contractor(s) and checked by the Engineer.

23.0 CERTIFICATIONS

Before any payments, either partial or final, may be made to the Contractor(s) for work performed, written certification must be filed with the Owner by the Contractor(s) that the items for which requisition for payment is made have not been paid and that there are no vendors', mechanics' or other liens or rights to

lien or conditional sale Contracts which should be satisfied or discharged before such payment is made.

24.0 PLANS AND SPECIFICATIONS

The Contractor(s) will be furnished three sets of plans and technical specifications by the Owner for use in construction. Additional sets may be obtained by the Contractor(s), on request, at the cost of reproduction and distribution listed in "Advertisement for Bids".

26.0 LIMITATION OF DAMAGES

The Bidder agrees and acknowledges that the Owner shall not be liable to Bidder or to any other person, firm, corporation, or company for any general, special, consequential or other damages (including, but not limited to, loss of profits) arising out of the Bidding process and the awarding or failure to award of the Project to the Bidder or to any other person, firm, corporation or company.

END OF SECTION

BIDDERS NAME _____

SECTION 00300

PROPOSAL AND BID FORM
(Submit in triplicate)

Proposal of: _____ (hereinafter called "Bidder" or "Contractor"), organized and existing under the laws of the State of _____ doing business as a partnership (), corporation (), individual ().

To: COUNTY OF JACKSON, FLORIDA (hereinafter called "Owner").

Gentlemen/Ladies:

The proposal contemplates performing the Work necessary to have a complete and operational system in accordance with all applicable codes and requirements governing the work. Items not specifically listed in the Bid Proposal or Contract Documents, but necessary for proper construction and operation of the system shall be considered to be included in the bid price of the item for which they are associated. No additional compensation will be paid for such items.

The Bidder, in compliance with your invitation for bids for the construction of:

Lakepoint Drive Emergency Culvert Replacement

having examined the Contract Documents and the site of the proposed work, and being familiar with all the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth herein and at the prices stated below.

Bidder hereby agrees to commence Work under this contract within ten (10) days after the date stated in written "Notice to Proceed" from the Owner.

The work will be substantially completed within 60 calendar days after the date when the Contract Times commence to run as provided in the General Conditions, and completed and ready for Final Payment in accordance with the General Conditions within 90 calendar days after the date when the Contract Times commence to run.

The Owner and the Contractor recognize that time is of the essence and that the Owner will suffer financial loss if the work is not completed within the times specified in the paragraph above, plus any extensions thereof allowed in accordance with the General Conditions. It shall be specifically noted that time extensions are granted only for abnormal weather conditions as it relates to rain days. They also recognize the delays, expenses and difficulties involved in proving the actual loss suffered by Owner if the work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner Four Hundred and Fifty no/100 Dollars (\$450.00) for each day that expires after the time specified above for Substantial Completion until the work is substantially complete. In addition, the Owner may also identifiable special, consequential, and/or incidental damages. After Substantial Completion, if Contractor shall neglect, refuse or fail to complete the remaining work within the time specified above for completion and readiness for final payment of any proper extension thereof granted by Owner, Contractor, shall also pay Owner Four Hundred Dollars and no/100 Dollars (\$ 400.00) for each day that expires after the time specified for completion and readiness for final payment.

The unit prices contained in the Bid Schedules shall include all labor, materials, equipment, overhead, profit, insurance, taxes, etc., to cover the finished work of the several kinds called for.

The Bidder understands that the Owner reserves the right to reject any or all bids and to award part(s) of the Contract, if applicable, separately, in combination, or as one Contract. The Owner reserves the right to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this Bid, Bidder will execute the formal contract attached within 15 days

BIDDERS NAME _____

and deliver a Surety Bond or Bonds as required by the Contract Documents. The Bid Security attached in the sum of Five (5) Percent of the total amount of the Bid is to become the property of the OWNER in the event the Contract and Bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the OWNER caused thereby.

By submission of this Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his/her own organization, that this Bid has been arrived at independently, without consultation, communication or agreement as to any matter relating to this Bid with any other Bidder or with any competition.

Respectfully submitted,

Company Name (Typed)

Address (Typed)

City State Zip (Typed)

Business Telephone Number

Business Fax Number

By: _____
Signature

Name & Title (Typed)

Contractor's License Number

Federal Tax I.D. Number

Acknowledgement is hereby made of receipt of the following addenda, if any:

No. _____ Dated _____

No. _____ Dated _____

No. _____ Dated _____

CORPORATE SEAL

BIDDERS NAME _____

Lakepoint Drive Culvert Replacement					
Item	Pay Item Description	Unit	Quantity	Unit Price	Item Total
1	Mobilization and Gen. Cond.	LS	1	\$	\$
2	Prevention of Erosion and Water Pollution	LS	1	\$	\$
3	Traffic Control	LS	1	\$	\$
4	144" Dia. Asphalt Coated CMP (double 2 - 40')	LF	80	\$	\$
5	Stone or Crushed Concrete for Bedding	CY	45	\$	\$
6	Headwall	Each	2	\$	\$
7	Wing Walls	Each	4	\$	\$
8	Structural Fill	LS	1	\$	\$
9	Limerock Base 12" Thick	LS	1	\$	\$
10	Prime Coat	LS	1	\$	\$
11	2" Asphalt Layer	LS	1	\$	\$
12	1" Asphalt Layer	LS	1	\$	\$
13	Guardrail	LF	300	\$	\$
14	Flared End Section – includes build out shoulder	Each	4	\$	\$
15	Sod All Disturbed Areas	LS	1	\$	\$
	Total Base Bid				\$
	Alternate 1				
Alt 1	96" Dia. Asphalt Coated CMP (double 2 - 40')	LF	80	\$	\$
Alt 1	Double Headwall for 8' Diameter Pipe	Each	2	\$	\$
Note:	Alternates 1 will replace items 4 & 5				

TRENCH EXCAVATION SAFETY CERTIFICATION

Pursuant to Florida Statutes 553.63, the Contractor or Subcontractor when performing trench excavation in excess of five feet (5') will comply with the following requirements:

- (1) The Contract bid submitted by the contractor who will perform such excavation shall include:
 - a. A reference to the trench safety standards that will be in effect during the period of construction of the project.
 - b. Written assurance by the contractor performing the trench excavation that such contractor will comply with the applicable trench safety standards.

- (2) A contractor perform trench excavation shall:
 - a. As a minimum, comply with the excavation safety standards which are applicable to a project.
 - b. Adhere to any special shoring requirements, if any, of the state or other political subdivisions which may be applicable to such a project.
 - c. If any geotechnical information is available from the owner, the contractor, or otherwise, the contractor performing trench excavation shall consider this information in the contractor's design of the project. This paragraph shall not require the owner to obtain geotechnical information.

- (3) The separate item identifying the cost of compliance with trench safety standards shall be based on the linear feet of trench to be excavated. The separate item for special shoring requirements, if any, shall be based on the square feet of shoring used. Every separate item shall indicate the specific method of compliance as well as the cost of that method.

The contractor shall complete this form and submit it to the owner as a part of the bidding proposal package.

The undersigned, herein called "Bidder", has determined to his/her own complete satisfaction that all portions of the Florida Trench Safety Act (90-96, Laws of Florida) as the OSHA Excavation Safety Standards 29, CFR part 1926.650 Subpart P, will be fully complied with and executed properly on this project.

BIDDERS NAME _____

Bidder acknowledges that included in the various items of the proposal and in the Total Bid Price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida) effective October 1, 1990. The bidder further identifies the costs to be summarized below:

	Trench Safety Measure Measure (Description)	Units of (Quantity) (LF, SY)	Unit Cost	Unit Cost	Extended
A.	_____	_____	_____	_____	_____
B.	_____	_____	_____	_____	_____
C.	_____	_____	_____	_____	_____
D.	_____	_____	_____	_____	_____
				Total \$	_____

In witness whereof, the Bidder has hereunto set his signature and affixed his seal this _____ day of _____, 20____.

Firm: _____

By: _____

Title: _____

(SEAL)

Sworn to and subscribed before me this _____ day of _____, 20____.

Notary Public

BIDDERS NAME _____

STATEMENT OF EXPERIENCE

Bidder: _____

How Long in Business: _____ At Current Address _____

Principals: _____ Title _____
_____ Title _____
_____ Title _____

Number of Personnel Currently Employed: _____

Number of Personnel Available for Project: _____

Gross Construction Revenue for Previous Year \$ _____

Type of Work Normally Performed: _____

Bidder must list largest 10 projects completed or currently under construction within the past 18 months, performed either as general contractor or sub contractor. List projects in order of dollar value from greatest to least. Do not omit any projects. Failure to include project may result in determination of non-responsive bid.

1. Project Name: _____
_____ Amount \$ _____
Project Begin Date: _____ Project Completion Date: _____
Engineer: _____ Telephone No. _____
Owner: _____ Telephone No. _____

2. Project Name: _____
_____ Amount \$ _____
Project Begin Date: _____ Project Completion Date: _____
Engineer: _____ Telephone No. _____
Owner: _____ Telephone No. _____

3. Project Name: _____
_____ Amount \$ _____
Project Begin Date: _____ Project Completion Date: _____

BIDDERS NAME _____

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No. _____

4. Project Name: _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date: _____

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No. _____

5. Project Name: _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date: _____

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No. _____

6. Project Name: _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date: _____

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No. _____

7. Project Name: _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date: _____

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No. _____

8. Project Name: _____

BIDDERS NAME _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date:

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No.

9. Project Name: _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date:

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No.

10. Project Name: _____

_____ Amount \$ _____

Project Begin Date: _____ Project Completion Date:

Engineer: _____ Telephone No. _____

Owner: _____ Telephone No.

BIDDERS NAME _____

SUBCONTRACTOR LISTING

The Bidder has fully investigated each subcontractor listed and has in his/her files evidence that each subcontractor fully complies with the requirements of these specifications, has engaged successfully in the line of work for a reasonable period of time, that it maintains a fully equipped organization capable, technically and financially, of performing the work required, and that he/she had made similar installations in a satisfactory manner.

<u>Name of Subcontractor</u>	<u>Description of Work</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

EQUIPMENT AND MATERIAL LISTING

The Bidder will furnish the following items of equipment and materials:

<u>Name of Manufacturer</u>	<u>Description of Material and Equipment</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

SECTION 00310

BID BONDS

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____
_____ as Principal, and _____
_____ as Surety, are hereby held and firmly bound unto the COUNTY OF JACKSON,
STATE OF FLORIDA, as Owner in the penal sum of 5% of the Accompanying Bid for the payment of which,
well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators,
successors and assigns.

Signed, this _____ day of _____, 20_____.

The condition of the above obligation is such that whereas the Principal has submitted to the
Owner a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing for the:

NOW, THEREFORE,

a. If said Bid shall be rejected, or in the alternate,

b. If said Bid shall be accepted and the Principal shall execute and deliver a contract in the
Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond
for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing
materials in connection therewith, and shall in all other respects perform the agreement created by the
acceptance of said Bid then this obligation shall be void, otherwise the same shall remain in force and effect;
it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall,
in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and
its bond shall be in no way impaired or affected by any extension of the time within which the Owner may
accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal
By: _____

Surety
By: _____

[SEAL]

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

SECTION 00320

CERTIFICATION BY BIDDER

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

NAME AND ADDRESS OF BIDDER (include ZIP Code):

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes () No ()
2. Compliance reports were required to be filed in connection with such contract or subcontract. Yes () No ()
3. Bidder has filed all compliance reports due under applicable instructions, including SF 100. Yes () No ()
4. Have you ever been or are you being considered for sanction due to violation of Executive Order 112246, as amended? Yes () No ()

NAME AND TITLE OF SIGNER (Please Type):

_____ Name	_____ Title
_____ (Signature)	_____ (Date)

SECTION 00330

**CERTIFICATION OF BIDDER REGARDING SECTION 3
AND SEGREGATED FACILITIES**

Lakepoint Drive Emergency Culvert Repair Project

Name of Prime Contractor: _____

The undersigned hereby certifies that:

- (a) Section 3 provisions are included in the Contract.
- (b) A written Section 3 plan was prepared and submitted as part of the bid proceedings (if bid equals or exceeds \$10,000). See page 00330-2.
- (c) No segregated facilities will be maintained.

Print Name and Title of Signer:

Print Name

Print Title

Signature

Date

CONTRACTOR

Section 3 Plan Format

_____ agrees to implement the following specific affirmative action steps directed at increasing the utilization of lower income residents and businesses within Jackson County, Florida.

- A. To ascertain from the locality's CDBG program official the exact boundaries of the Section 3 covered project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.
- B. To attempt to recruit from within the city the necessary number of lower income residents through: Local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan or the U.S. Employment Service.
- C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.
- *D. To insert this Section 3 plan in all bid documents, and to require all bidders on subcontracts to submit a Section 3 affirmative action plan including utilization goals and the specific steps planned to accomplish these goals.
- *E. To insure this Section 3 plan in all bid documents, and to require all bidders on subcontracts to submit a Section 3 affirmative action plan including utilization goals and the specific steps planned to accomplish these goals.
- F. To formally contact unions, subcontractors, and trade associations to secure their cooperation for this program.
- G. To insure that all appropriate project area business concerns are notified of pending subcontractual opportunities.
- H. To maintain records, including copies of correspondence, memoranda, etc., which document that all of the above affirmative action steps have been taken.
- I. To appoint or recruit an executive official of the company or agency as Equal Opportunity Officer to coordinate the implementation of this Section 3 plan.
- J. To list on Table A, information related to subcontracts to be awarded.
- K. To list on Table B, all projected workforce needs for all phases of this project by occupation, trade, skill level, and number of positions.

* Loans, grants, contracts, and subsidies for less than \$10,000 will be exempt.

As officers and representatives of _____
(Name of Contractor)

We, the undersigned, have read and fully agree to this Affirmative Action Plan, and become a party to the full implementation of this program.

Signature

Title

Date

Signature

Title

Date

ESTIMATED PROJECT WORKFORCE BREAKDOWN

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
JOB CATEGORY	TOTAL ESTIMATE POSITIONS	NO. POSITIONS CURRENTLY OCCUPIED BY PERMANENT EMPLOYEES	NO. POSITIONS NOT CURRENTLY OCCUPIED	NO. POSITIONS TO BE FILLED WITH L.I.P.A.R.
OFFICERS/ SUPERVISORS				
PROFESSIONALS				
TECHNICIANS				
HOUSING SALES/ RENTAL/MANGMT				
OFFICE CLERICAL				
SERVICE WORKER				
OTHER				

TRADE:

JOURNEYMEN				
HELPERS				
APPRENTICES				
MAXIMUM NO. TRAINEES				
OTHERS				

TRADE:

JOURNEYMEN				
HELPERS				
APPRENTICES				
MAXIMUM NO. TRAINEES				
OTHERS				

TRADE:

JOURNEYMEN				
HELPERS				
APPRENTICES				
MAXIMUM NO. TRAINEES				
OTHERS				

*Lower Income Project Area residents.
 Individuals residing within Jackson
 County, Florida, whose family
 income does not exceed 80% of the
 median income in the State.

_____ Company

TABLE B
ESTIMATED PROJECT WORKFORCE BREAKDOWN
CERTIFICATION BY PROPOSED CONTRACTOR REGARDING
EQUAL EMPLOYEMENT OPPORTUNITY

NAME OF CONTRACTOR

PROJECT NUMBER

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the subcontractors has not filed a compliance report due under applicable instructions, such subcontractor shall be required to submit a compliance report before the owner approves the subcontract or permits work to begin under the subcontract.

SUBCONTRACTOR'S CERTIFICATION

NAME AND ADDRESS OF SUBCONTRACTOR (Include ZIP Code)

-
1. Bidder has participated in previous contract subject to the Equal Opportunity Clause.
Yes () No ()
-
2. Compliance reports were required to be filed in connection with such contract or subcontract.
Yes () No ()
-
3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
Yes () No () NA ()
-
4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?
Yes () No ()
-

NAME AND TITLE OF SIGNER (Please Type):

Signature

Date

CERTIFICATION OF PROPOSED SUBCONTRACTOR REGARDING
SECTION 3 AND SEGREGATION FACILITIES

NAME OF SUBCONTRACTOR

PROJECT NAME AND NUMBER

The undersigned hereby certifies that:

- (a) Section 3 provisions are included in the Contract.
- (b) A written Section 3 plan was prepared and submitted as part of the bid proceedings (if bid equals or exceeds \$10,000). See page 00330-2.
- (c) No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.

NAME AND TITLE of Signer (Print or Type):

Signature

Date

BIDDERS NAME _____

**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 OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Proposal, or Contract No. for _____
2. This sworn statement is submitted by _____ whose business address is _____ and (if applicable) its Federal Employers 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 _____ 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 any agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or any agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b) means a finding of guilt or a conviction of a public entity crime, with or without adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or 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 a controlling interest in another persons, 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)(e), 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 a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of any 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.)

BIDDERS NAME _____

- _____ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- _____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has 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 officer 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 was 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 attached a copy of the final order.)
- _____ The person or affiliate has not been placed on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

Date:

STATE OF _____
COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority, _____, who, after first providing _____ for identification and being sworn by me, affixed his signature in the space provided above on this ____ day of _____, 20__.

Notary Public

BIDDERS NAME _____

SECTION 00360

**CERTIFICATION REGARDING
DEBARMENT, SUSPENSION,
AND OTHER RESPONSIBILITY MATTERS
PRIMARY COVERED TRANSACTIONS**

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principal:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name

Lakepoint Emergency Culvert Repair Project
Project Name

Title

1819-ENG-2
Project Number

Firm

Street Address

City, State, Zip

BIDDERS NAME _____

**CERTIFICATION REGARDING
DEBARMENT, SUSPENSION, INELIGIBILITY
AND VOLUNTARY EXCLUSION**

Lower Tier Covered Transactions

- (1) The prospective lower tier participant certifies, by submission of this document, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to the above statement, the prospective participant shall attach an explanation to this form.

Name

Local Government

Title

Firm

Street Address

City, State, Zip

Date

SECTION 00500

CONTRACT

THIS AGREEMENT, is dated as of the ____ day _____, in the year 20____, by and between JACKSON COUNTY, a political subdivision of the State of Florida (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR).

WITNESSETH: That for and in consideration of the payments and agreements hereinafter set forth, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction generally described as follows:

Lakepoint Drive Emergency Culvert Repair Project

hereinafter called the project, for the sum of (in words and figures): _____ dollars and _____ cents (\$ _____) and all extra work in connection therewith, under the terms as stated in the General and Special Conditions of the Contract; and at the CONTRACTOR's own proper cost and expense to furnish all the materials, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Bid Proposal, General Conditions, Supplemental General Conditions and Special Conditions of the Contract; the plans, which include all maps, plats, blueprints and other drawings, all addenda and printed or written explanatory matter thereof; the specifications and contract documents therefore as prepared by Larry Alvarez, County Engineer, herein entitled the Architect/Engineer; and as numbered in the Information for Bidders and Table of Contents, all of which are made a part hereof and collectively evidence and constitute the contract.

The Work will be substantially completed within 60 days after the date when the Contract Times commence to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions within 90 days after the date when the Contract Times commence to run.

Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in the paragraph above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. It shall be specifically noted that time extensions are granted only for abnormal weather conditions as it relates to rain days. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Four Hundred Fifty and no/100 dollars (\$ 450.00) for each day that expires after the time specified above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified above for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER Four Hundred and no/100 dollars (\$ 400.00) for each day that expires after the time specified for completion and readiness for final payment.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions, as provided in the General Conditions of the Contract, and to make payments on account thereof as provided in the General Conditions.

The OWNER and the CONTRACTOR shall also be bound by and comply with each of the provisions included in Attachment A which is incorporated herein and made a part hereof.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate, each of which shall be deemed an original. This agreement will be effective in the year and day first above mentioned.

Jackson County, Florida, Owner
2864 Madison Street, Marianna, FL 32448

Contractor

Address

License No. _____

Fed. Tax I.D. No. _____

By: _____
Signature

By: _____
Signature

_____, Chairman BCC
Name and Title

Name and Title

Attest: _____

Attest: _____

[CORPORATE SEAL]

[CORPORATE SEAL]

ATTACHMENT A

1. Termination (Cause or Convenience)

- a. This contract may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this contract through no fault of the terminating party, provided that no termination may be effected unless the other party is given (1) not less than ten (10) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate and (2) an opportunity for consultation with the terminating party prior to termination.
- b. This contract may be terminated in whole or in part in writing by the owner for its convenience, provided that the other party is afforded the same notice and consultation opportunity specified in 1a above.
- c. If termination for default is effected by the owner, an equitable adjustment in the price for this contract shall be made, but (1) no amount shall be allowed for anticipated profit on unperformed services or other work, and (2) any payment due to the contractor at the time of termination may be adjusted to cover any additional costs to the owner because of the contractor's default.

If termination for convenience is effected by the owner, the equitable adjustment shall include reasonable profit for services or other work performed for which profit has not already been included in an invoice.

For any termination, the equitable adjustment shall provide for payment to the contractor for services rendered and expenses incurred prior to receipt of the notice of intent to terminate, in addition to termination settlement costs reasonably incurred by the contractor relating to commitments (e.g. suppliers, subcontractors) which had become firm prior to receipt of the notice of intent to terminate.

- d. Upon receipt of a termination action under paragraphs a or b above, the contractor shall (1) promptly discontinue all affected work (unless the notice directs otherwise) and (2) deliver or otherwise make available to the owner all data, drawings, reports specifications, summaries and other such information, as may have been accumulated by the contractor in performing this contract, whether completed or in process.
- e. Upon termination, the owner may take over the work and may award another party a contract to complete the work described in this contract.
- f. If, after termination for failure of the contractor to fulfill contractual obligations, it is determined that the contractor had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the contractor. In such event, adjustment of the contract price shall be made as provided in paragraph c above.

2. Remedies

Unless otherwise provided in this contract, all claims, counter-claims, disputes and other matters in question between the owner and the contractor, arising out of or relating to this contract, or the breach of it, will be decided by arbitration if the parties mutually agree or in a Florida court of competent jurisdiction.

3. Compliance

The contractor shall comply with all of the following:

- a. Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented in Department of Labor regulations (41 CFR Chapter 60).
- b. The Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 5).
- c. Compliance with the Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by Department of

Labor regulations (29 CFR part 5).

- d. Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR part 5).

4. Access to Records

The owner, the Florida Department of Community Affairs, the U.S. Department of Housing and Urban Development, the Comptroller General of the United States, and any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the contractor which are directly pertinent to this contract for the purpose of making audit, examination, excerpts, and transcriptions.

5. Retention of Records

The contractor shall retain all records relating to this contract.

6. Environmental Compliance

If this contract exceeds \$100,000, the contractor shall comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and U.S. Environmental Protection Agency regulations (40 C.F.R. Part 15). The contractor shall include this clause in any subcontracts over \$100,000.

7. Energy Efficiency

The contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).

8. Conflicts with Other Clauses

If this contract contains any clause(s) which conflict with the above clauses, then this contract will be governed by the clause(s) contained in this Attachment A. In the event of conflict between the contract documents, the following order of precedence shall apply to resolve any conflict with smaller item numbers taking precedence over larger numbered items:

- 1.1. *CONTRACT AGREEMENT*
- 1.2. *SPECIAL PROVISIONS*
- 1.3. *PLANS, NOTES, AND QUANTITIES*
- 1.4. *SPECIAL CONDITIONS*
- 1.5. *GENERAL CONDITIONS*
- 1.6. *FDOT STANDARDS AND SPECIFICATIONS*

Any provisions of the Contract Documents related to conditions of payment or performance of the Work by the Contractor may be waived by the Owner. Nothing in these conditions or any other Contract Documents shall be deemed to give any rights or remedies to any person or entity, other than the Contractor or the Owner (or as otherwise may be required by statutory law). There are no intended third party beneficiaries of the Contract Documents

9. Hold Harmless FDOT and Jackson County - the following language shall be included in all contracts and subcontracts:

Contractor shall indemnify, defend, save, and hold harmless the DEPARTMENT, COUNTY, and all of their officers, agents, consultants or employees from all suits, actions, claims, demands, liability of any nature whatsoever arising out of, because of, or due to any negligent act or occurrence of omission or commission of the contractor, its officers, agents, or employees.

**SECTION 00510
PERFORMANCE AND PAYMENT BONDS**

CONSTRUCTION PAYMENT BOND

CONTRACTOR (Name and Address): _____

SURETY (Name and Principal Place of Business): _____

OWNER: Jackson County, a political subdivision of the State of Florida, 2864 Madison Street, Marianna, FL, 32446, 850-482-9633

CONSTRUCTION CONTRACT: (Date) _____ (Amount) _____

(Description - Name and Location) _____

BOND: (Date - not earlier than Construction Contract Date) _____

(Amount) _____ Modifications to this Bond Form) _____

CONTRACTOR AS PRINCIPAL
Company:

Signature: _____

Name and Title: _____

(Corporate Seal)

SURETY
Company:

Signature: _____

Name and Title: _____

(Corporate Seal)

CONTRACTOR AS PRINCIPAL
Company:

Signature: _____

Name and Title: _____

(Corporate Seal)

SURETY
Company:

Signature: _____

Name and Title: _____

(Corporate Seal)

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
2. With respect to the Owner, this obligation shall be null and void if the Contractor:
 - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2 Defends, indemnifies and holds harmless the Owner from all claims, demands, liens, or suits by any person or entity who furnished labor, materials, or equipment for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Contractor Default.
3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
4. The Surety shall have no obligation to Claimants under this Bond until:
 - 4.1 Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
 - 4.2 Claimants who do not have a direct contract with the Contractor:
 - a. Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and
 - b. Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
 - c. Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.
6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
 - 6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
 - 6.2 Pay or arrange for payment of any undisputed amounts.
7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2 (iii) or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
12. Notice to the Surety, the Owner of the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and the provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.
14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS:

- 15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 15.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 15.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

CONSTRUCTION PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable:

CONTRACTOR (Name and Address): _____

SURETY (Name and Principal Place of Business): _____

OWNER Jackson County, a political subdivision of the State of Florida, 2864 Madison Street, Marianna, FL, 32446, 850-482-9633

CONSTRUCTION CONTRACT: (Date) _____ (Amount) _____

(Description - Name and Location) _____

BOND: (Date - not earlier than Construction Contract Date) _____

(Amount) _____ (Modifications to this Bond Form) _____

CONTRACTOR AS PRINCIPAL
Company: _____
Signature: _____
Name and Title: _____
(Corporate Seal)

SURETY
Company: _____
Signature: _____
Name and Title: _____
(Corporate Seal)

CONTRACTOR AS PRINCIPAL
Company: _____
Signature: _____
Name and Title: _____
(Corporate Seal)

SURETY
Company: _____
Signature: _____
Name and Title: _____
(Corporate Seal)

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
 - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below, that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
 - 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
 - 4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
 - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 on excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 - a. After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
 - b. Deny liability in whole or in part and notify the Owner citing reasons therefor.
5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
 - 6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
 - 6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.
8. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent of this Bond shall be construed as a statutory bond and not as a common law bond.
12. Definitions:
 - 12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and property payments made to or on behalf of the Contractor under the Construction Contract.
 - 12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
 - 12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
 - 12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms hereof.

SECTION 00610
NOTICE OF AWARD

TO: _____

PROJECT: Lakepoint Drive Emergency Culvert Replacement Project
FDOT FM NO. _____
ENGINEER'S NO: Bid # 1819 Eng-2

Owner has considered the Bid submitted by you on _____, 2019 for the above described Work.

You are hereby notified that your Bid has been accepted in the amount of \$_____.

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Labor and Materials Payment Bond, Performance Bond and Certificates of Insurance within fifteen (15) calendar days from the date of this Notice to you. **Please note that all contract documents will be dated at the pre-construction conference.**

If you fail to execute said Agreement and to furnish said Bonds within fifteen (15) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this _____ day of _____, 2019.

County of Jackson, State of Florida
OWNER

By: _____

Larry Alvarez, County Engineer
Name & Title

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged

This the _____ day of _____, 20____

By _____

Name and Title

SECTION 00620
NOTICE TO PROCEED

DATE: _____

TO: _____

PROJECT: **Lakepoint Drive Emergency Culvert Replacement Project**

ENGINEER'S NO.: 1819-Eng 2 FDOT FM NO: _____

You are hereby notified to commence Work in accordance with the Agreement dated _____, 20____, on or before _____, 20____, and you are to be substantially complete with the Work within _____ consecutive calendar days thereafter, and you are to be **complete with all work** within consecutive calendar days thereafter. The date of substantial completion is therefore _____, 20____, and the date of **completion of all work** is therefore _____, 20____.

County of Jackson, State of Florida
OWNER

By Larry Alvarez

Title **County Engineer**

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed
is hereby acknowledged by:

Dated: _____, 20____

By _____

Name and Title

**SECTION 00630
CHANGE ORDER**

Change Order No.: _____
Date: _____

PROJECT: _____

DCA NO. (if applicable): _____

DESCRIPTION OF CHANGE: _____

CHANGES IN PRICE

- | | | |
|----|---|-----------------|
| 1. | Original Contract Price | \$ _____ |
| 2. | Total All Previous Change Orders
No. 1 thru No. __ | \$ _____ |
| 3. | Current Contract Price (1 + 2) | \$ _____ |
| 4. | Proposed by this Change Order
(see attached for breakdown) | \$ _____ |
| 5. | New Contract Price (4 + 5) | \$ _____ |

CHANGES IN TIME

- | | | |
|-----|--|------------|
| 6. | Original Contract Time | _____ days |
| 7. | Additional Days Approved
Change Order No. 1 thru No. __ | _____ days |
| 8. | Current Contract Time (6 + 7) | _____ days |
| 9. | Additional Days Proposed | _____ days |
| 10. | New Contract Time (8 + 9) | _____ days |
| 11. | Date of Notice to Proceed | |
| 12. | Original Completion Date | |
| 13. | New Completion Date | |

This change is acceptable to _____ **(Contractor)**

Signed _____ Title _____

This change is recommended by _____ **(County Engineer)**

Signed _____ Title _____

This change is acceptable to **County of Jackson, State of Florida (Owner)**

Signed _____ Title _____

(a cost breakdown will be attached if needed)

SECTION 00631
WORK CHANGE DIRECTIVE NO. _____

Date: _____

Project: _____

Bid Number: 1819-ENG-2

Contractor: _____

You are directed to proceed promptly with the following work changes to be paid under the Pay Items.

Brief Description of Work:	Pay Item	Description

Anticipate Change in Price No Change - subtracted from contingency

Anticipate Change in Contract Time _____

Method of Determining Contract Price Change: _____

Signed _____
Larry Alvarez

Title County Engineer

Received by Contractor:

Print Name _____

Signed _____
(Authorized Signature)

Title _____

SECTION 00640

CERTIFICATE OF SUBSTANTIAL COMPLETION

Project: _____

FDOT FM No: _____ Engineer's. Project No: _____

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

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

DATE OF SUBSTANTIAL COMPLETION

Notice to Proceed: _____ (DATE)

Original Contract Time: (CALENDAR DAYS)

Additional Contract Time
Approved by Change Order: _____ (CALENDAR DAYS)

Total Approved Contract Time: _____ (CALENDAR DAYS)

Actual Contract Time: _____ (CALENDAR DAYS)

Unapproved Construction Time: _____ (CALENDAR DAYS)

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 not alter the responsibility of 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.

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as follows:

RESPONSIBILITIES:

OWNER: _____

CONTRACTOR: _____

The following documents are attached to and made a part of this Certificate:

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents.

Executed by: **Larry Alvarez, County Engineer**
ENGINEER
By _____
Signature Date

Accepted by: _____
CONTRACTOR
By _____
Signature Date

Accepted by: **Jackson County, Florida (Name) , Chairman BCC**
OWNER
By _____
Signature Date

**SECTION 00641
CERTIFICATE OF FINAL COMPLETION**

Project: _____

DCA/FDOT No.: _____ EDA No.: _____ Engineer's No.: **1918-ENG-2**

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

The work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR, and ENGINEER, and that work is hereby declared to be complete in accordance with the Contract Documents on

_____ Date of Final Completion

Notice to Proceed: _____ (DATE)

Notice Contract Time: _____ (CALENDAR DAYS)

Additional Contract Time

Approved by Change Order: _____ (CALENDAR DAYS)

Total Approved Contract Time: _____ (CALENDAR DAYS)

Actual Contract Time: _____ (CALENDAR DAYS)

Unapproved Construction Time: _____ (CALENDAR DAYS)

A warranty inspection will be held on: _____

The Warranty will expire on: _____

The following documents are attached to and made a part of this Certificate: _____

This certificate constitutes an acceptance of work in accordance with the Contract Documents. However, this certification shall not release the Contractor or its sureties from any obligations under the Contract Documents. The Performance Bond remains in full force and effect through the one (1) year warranty period.

Executed by ENGINEER on _____, 20____

ENGINEER

By: _____

CONTRACTOR accepts this Certificate of Final Completion on _____, 20____

CONTRACTOR

By: _____

OWNER accepts this Certificate of Final Completion on _____, 20____

JACKSON COUNTY, FLORIDA, OWNER

By: _____

SECTION 00650

RELEASE OF LIEN

STATE OF FLORIDA
COUNTY OF JACKSON

I, _____, having been first duly sworn, do now depose and say: That all persons, firms, and corporations, who have furnished services, labor, or materials for use on the Jackson County, Florida, Project Contract No. 1819-Eng-2, Florida Department of Transportation (FDOT) FPID No. _____ have fully completed their respective work, and it has been accepted by the Owner of said real estate; and there are no bills for labor or materials or appliances in connection with such construction which have not been paid.

Contractor's Representative

(SEAL)

Subscribed and sworn to before the undersigned, a Notary Public for the State of Florida, this _____ day of _____, 20____.

Notary Public

My commission expires _____.

PERIODIC PAY ESTIMATE NO. _____

PERIOD _____ TO _____

OWNER: Jackson County

CONTRACTOR: _____

2864 Madison Street

Marianna, FL 32448

PROJECT: _____

PROJECT NO.: _____

ESTIMATE:

1. Original Contract	\$ _____
2. Change Orders (Approved)	\$ _____
3. Revised Contract (line 1 + line 2)	\$ _____
4. Work Completed	\$ _____
5. Stored Materials	\$ _____
6. Subtotal (4 +5)	\$ _____
7. Retainage (10%)	\$ _____
8. Previous Payments	\$ _____
9. Amount Due (6-7-8)	\$ _____

* Detailed breakdown attached.

CONTRACT TIME

Original Contract Calendar Days _____	Starting Date _____
Revised Contract Calendar Days _____	Completion Date _____
Remaining Contract Calendar Days _____	Project on Schedule _____ Yes _____ No

RELEASE OF LIEN AFFIDAVIT/CERTIFICATIONS

Certification of Contractor:

As authorized agent for the Contractor, I the undersigned, hereby certify that to the best of my knowledge and belief, this is a true and correct statement of work performed and materials delivered. I further certify that the Contractor has good title for all materials delivered under this Periodic Payment Estimate and there are no vendors' liens, mechanics' liens, or other liens or rights to liens against this job, and that all previous Periodic Payment Estimates received under this contract have been applied to discharge in full all of the contractor's obligations, reflected in prior Periodic Payment Estimates, and that hourly wages paid to all employees on the project for the period of this estimate are in accordance with the wage scale determination contained in the contract documents.

Signature: _____ Date: _____
Contractor Name and Title

Certification of Resident Inspector:

I certify that I have checked and verified the quantities of work performed and stored materials claimed on this Periodic Estimate and to the best of my knowledge and belief it is a true and correct representation by the Contractor.

Signature: _____ Date: _____

APPROVED FOR PAYMENT

Signature: _____ Date: _____
County Engineer

Signature: _____ Date: _____
County Administrator

Signature: _____ Date: _____
Chief Elected Official and Title
or Duly Authorized Representative

For local government use only (as local procedures require):

Reviewed: _____ Date: _____
Name and Title

Reviewed: _____ Date: _____
Name and Title

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GENERAL CONDITIONS

ARTICLE 1- DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

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

1.2. *Agreement*- The written contract between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

1.3. *Application for Payment*- The form accepted by ENGINEER which is used by CONTRACTOR in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

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

1.5. *Bid*- The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be done.

1.6. *Bidding Documents*- The advertisement or invitation to Bid, instructions to bidders, the Bid form, and the proposed Contract Document (including all Addenda issued prior to Receipt of Bids).

1.7. *Bidding Requirements*- The advertisement or invitation to Bid, instructions to the bidders, and the Bid form.

1.8. *Bonds*- Performance and Payment bonds and other instruments of security.

1.9. *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 Agreement.

1.10. *Contract Documents*- The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders and ENGINEER's written interpretation and clarifications issued pursuant to paragraphs 3.5, 3.61, and 3.63 on or after the Effective Date of Agreement. Shop Drawing submittals approved pursuant to paragraphs 6.26 and 6.27 and the reports and drawings

referred to in paragraphs 4.2.1.1 and 4.2.2.2 are not Contract Documents.

1.11. *Contract Price*- The money 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 11.91 in the case of Unit Price Work).

1.12. *Contract Times*- The numbers of days or the dates stated in the Agreement: (i) to achieve Substantial Completion, and (ii) to complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendations for final payment in accordance with paragraph 14.13.

1.13. *CONTRACTOR*- The person, firm or corporation with whom OWNER has entered into the Agreement.

1.14. *defective*- An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendations of final payments (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.8 or 14.10).

1.15. *Drawings*- The drawings which show the scope, extent and character of the Work to be furnished and performed by CONTRACTOR and which has been prepared or approved by ENGINEER and are referred to in the Contract Documents. Shop drawings are not Drawings as so defined.

1.16. *Effective Date of 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.

1.17. *ENGINEER*-The County Engineer, or his/her successor in office.

1.18. *ENGINEER's Consultant*- A person, firm or corporation having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.

1.19. *Field Order*- A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 9.5 but which does not involve a change in the Contract Price or the Contract Times.

1.20. *General Requirements*- Sections of Division 1 of the Specifications.

1.21. *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.

1.22. *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.

1.23. *Liens-* Liens, charges, security interests or encumbrances upon real property or personal property.

1.24. *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.

1.25. *Notice of Award-* The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

1.26. *Notice to Proceed-* A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the Contract Documents.

1.27. *OWNER-* Jackson County, a political subdivision of the State of Florida.

1.28. *Partial Utilization-* Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or related purpose) prior to Substantial Completion of all the Work.

1.29. *PCBs-* Polychlorinated biphenyl's

1.30. *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 Wastes and crude oils.

1.31. *Project-* The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

1.32. *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.

1.33. *Resident Project Representative-* The authorized representative of ENGINEER who may be assigned to the site or any part thereof.

1.34. *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.

1.35. *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.

1.36. *Specifications-* Those portions of the Contract Document consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

1.37. *Subcontractor-* An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of part of the Work at the site.

1.38. *Substantial Completion-* The Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certificate of Substantial Completion, the project is substantially complete in accordance with the Contract Documents. In general, substantial completion shall be considered the point at which ALL items of work have been completed lacking only the drafting of a final punch list of corrective work items discovered during the Substantial Completion inspection. Punch list items of work may include items that have previously received 100% payment but deficiencies, damage or erosion has occurred. Such items shall be corrected prior to final acceptance. If no such certificate is issued, when the Work is complete and ready for final payment in accordance with paragraph 14.13 The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

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

1.40. *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.

1.41. *Underground Facilities-* All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

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

1.43. *Work-* The entire completed construction or various separately identified parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

1.44. *Work Change Directive-* A written directive to CONTRACTOR, issued on or after the Effective Date of Agreement and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.23. A Work Change Directive will not change the Contract Price or the Contract Times, but is evidenced that the parties expect that the change directed 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 as provided in paragraph 10.2

1.45. *Written Amendment-* A written amendment of Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or

nontechnical rather than strictly construction-related aspects of the Contract Documents.

submittal and the times for submitting, reviewing and processing such submittals;

ARTICLE 2- PRELIMINARY MATTERS

Delivery of Bonds:

2.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2. OWNER shall furnish to CONTRACTOR up to ten copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Times; Notice to Proceed:

2.3. The Contract Times will commence to run on the thirtieth day after the Effective Date of 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 thirty 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 Agreement, whichever date is earlier.

Starting the Work:

2.4. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run, but no Work shall be done at the site prior to the date on which the Contract Times commence to run.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon 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; however, 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.

2.6. Within ten days after the Effective Date of Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for review:

2.6.1. 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;

2.6.2. a preliminary schedule of Shop Drawing and Sample submittals which list each required

2.6.3. a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.7. 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 paragraphs 5.4, 5.6 and 5.7.

Preconstruction Conference:

2.8. Within twenty days after the Contract Times start to run, but before any Work at the site is started, a conference attended by 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 paragraph 2.6 procedures for handling Shop Drawings and other submittals, processing Applications for Payment and maintaining required records.

Initially Acceptable Schedules:

2.9. Unless otherwise provided in the Contract Documents, at least ten 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 2.6. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until the schedules are submitted to and acceptable to ENGINEER as provided below. The progress schedule will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within any specified Milestones and the Contract Times, but such acceptance will neither impose on ENGINEER responsibility for the sequencing, scheduling or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's responsibility therefor. CONTRACTOR's schedule of Shop Drawing and Sample submissions will be acceptable to ENGINEER as providing a workable arrangement for reviewing and processing the required submittals. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance.

ARTICLE 3- CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1. The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if

called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

Any provisions of the Contract Documents related to conditions of payment or performance of the Work by the Contractor may be waived by the Owner. Nothing in these conditions or any other Contract Documents shall be deemed to give any rights or remedies to any person, other than the Contractor or the Owner (or as otherwise may be required by statutory law). There are no intended third party beneficiaries of the Contract Documents

3.2. 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 Work, materials or equipment that may reasonably be inferred from the Contract Document or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed whether or not specifically called for. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe Work, materials or equipment, such words or phrases shall be interpreted in accordance with that meaning. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in paragraph 9.4.

3.3 Reference to Standards and Specifications of Technical Societies; Reporting and Resolving Discrepancies:

3.3.1. Reference to standards, specifications, manuals or codes of any technical society, organization, or association, or to the Laws or Regulations in effect at the time of opening of Bids (or, on the Effective Date of Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

3.3.2. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity or discrepancies within the Contract Documents or between the Contract Documents and any provision of any such Law or Regulation applicable to the performance of the Work or of any such standard, specification, manual or code or of any instruction of any Supplier referred to in paragraph 6.5, CONTRACTOR shall report it to the ENGINEER in writing at once, and, CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as authorized by paragraph 6.23) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.5 or 3.6; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

3.3.3. Except as otherwise specifically stated in the Contract Documents or as may be provided by amendment or supplement thereto issued by one of the methods indicated in paragraph 3.5 or 3.6, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity or discrepancy between provisions of the Contract Documents and:

3.3.3.1. the provisions of any such standard, specification, manual, code or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

3.3.3.2. the provisions of any such Law 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).

No provision of any such standard, specification, manual, code or instruction shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to OWNER, ENGINEER or any of ENGINEER's Consultants, agents or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of paragraph 9.13 or any other provision of the Contract Documents.

3.4. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper" or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate, in general, the completed 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 shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.13 or any other provision of the Contract Documents.

Amending and Supplementary Contract Documents:

3.5. The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.5.1. a formal Written Amendment.

3.5.2. a Change Order (pursuant to paragraph 10.4), or

3.5.3. a Work Change Directive (pursuant to paragraph 10.1).

3.6. In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

3.6.1. a Field Order (pursuant to paragraph 9.5),

3.6.2. ENGINEER's approval of a Shop Drawing or Sample (pursuant to paragraphs 6.26 and 6.27), or

3.6.3. ENGINEER's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.7 CONTRACTOR, and any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER (i) shall not 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 Consultant, and (ii) shall not reuse any of such drawings, Specifications, other documents or copies on extensions of the Project or any other project without the written consent of OWNER and ENGINEER and specific verification or adaptation by ENGINEER.

ARTICLE 4- AVAILABILITY OF LANDS: SUBSURFACE AND PHYSICAL CONDITIONS: REFERENCE POINTS

Availability of Lands:

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a correct 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 lien against such lands in accordance with applicable Laws and Regulations. OWNER shall identify any encumbrances or restrictions not of general application but specifically related to use of lands so furnished with which CONTRACTOR will have to comply in performing the Work. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract of Documents. If CONTRACTOR and OWNER are unable to agree on entitlement to or the amount of extent of any adjustments in the Contract Price or the Contract Times as a result in any delay in OWNER's furnishing these lands, right-of-ways or easements. CONTRACTOR may make a claim therefor as provided in Articles 11 and 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary additional lands and access thereto that may be required for temporary construction facilities or storage materials and equipment.

4.2. Subsurface and Physical Conditions

4.2.1. *Reports and Drawings:* Reference is made to the Supplementary Conditions for identification of:

4.2.1.1. *Subsurface Conditions:* Those reports of explorations and tests of subsurface conditions at or contiguous to the site that have been utilized by ENGINEER in preparing the Contract Documents; and

4.2.1.2. *Physical Conditions:* Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) that have been utilized by ENGINEER in preparing the Contract Documents.

4.2.2. *Limited Reliance by CONTRACTOR Authorized: Technical Data:* 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, ENGINEER, or any of ENGINEER's Consultants with respect to:

4.2.2.1. 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 safely precautions and programs incident thereto, or

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

4.2.2.3 any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such data, interpretation, opinions or information.

4.2.3. *Notice of Differing Subsurface or Physical Conditions:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the site that is uncovered or revealed either:

4.2.3.1. is of such nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely on as provided in paragraphs 4.2.1 and 4.2.2 is materially inaccurate, or

4.2.3.2. is of such a nature as to require a change in the Contract Documents, or

4.2.3.3. differs materially from that shown or indicated in the Contract Documents, or

4.2.3.4. 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 conditions affected thereby or performing any Work in connection therewith (except in an emergency as permitted in paragraph 6.23), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such conditions or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

4.24 *ENGINEER's Review:* ENGINEER will promptly review the pertinent conditions, 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.

4.25 *Possible Contract Documents Change:* If ENGINEER concludes that a change in the Contract Documents is required as a result of a condition that meets one or more of the categories in paragraph 4.2.3. a Work Change Directive or a Change Order will be issued as provided in Article 10 to reflect and document the consequences of such change.

4.26 *Possible Price and Times Adjustments:* An equitable adjustment in the Contract Price or in the Contract Times, or both, will be allowed to the extent that the

existence of such uncovered or revealed condition causes an increase or decrease in CONTRACTOR's cost of, or time required for performance of, the Work: subject, however, to the following:

4.2.6.1. such conditions must meet any one or more of the categories described in paragraphs 4.2.3.1 through 4.2.3.4, inclusive;

4.2.6.2. a change in the Contract Documents pursuant to paragraph 4.2.5. will not be an automatic authorization of nor a condition precedent to entitlement to any such adjustment;

4.2.6.3. with any 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 9.10 and 11.9; and

4.2.6.4. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Times if;

4.2.6.4.1. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by submission of a bid or becoming bound under a negotiated contract; or

4.2.6.4.2. 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 area required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

4.2.6.4.3. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.2.3.

If OWNER and CONTRACTOR are unable to agree on entitlement to or as to the amount or length of any such equitable adjustment in the Contract Price or Contract Times, a claim may be made therefor as provided in Articles 11 and 12. However, OWNER, ENGINEER and ENGINEER's Consultant for any such claims, costs, losses or damages sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.3. Physical Conditions- Underground Facilities:

4.3.1. *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 or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

4.3.1.1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and

4.3.1.2. The cost of all of the following will be included in the Contract Price and CONTRACTOR shall have full responsibility for: (i) reviewing and checking all such information and data, (ii) locating all Underground Facilities shown or indicated in the Contract Documents, (iii) coordination of the Work with the owners of such Underground Facilities during construction, and (iv) the safety and protection for all such Underground Facilities as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work.

4.3.2. *Not Shown or Indicated:* If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated 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 6.23), 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 of the underground Facility. If ENGINEER concluded that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued as provided in Article 10 to reflect and document such consequences. During such time, CONTRACTOR shall be fully responsible for the safety and protection of the Underground Facility as provided in paragraph 6.20. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and that CONTRACTOR did not know of or could not reasonably have been expected to be aware of or to have anticipated. If OWNER, ENGINEER and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses or damages incurred or sustained by CONTRACTOR on or in connection with any other project or anticipated project.

Reference Points:

4.4 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 shall make no changes or relocations without the prior approval of OWNER, CONTRACTOR shall report to ENGINEER whenever any reference point 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 by professionally qualified personnel.

4.5. Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Material:

4.5.1. OWNER shall be responsible for any Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Material 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 and which may present a substantial danger to persons or property exposed thereto in connection with the Work at the site. OWNER shall not be responsible for any such materials brought to the site by CONTRACTOR,

Subcontractor, Suppliers or anyone else for whom CONTRACTOR is responsible.

accompanied by a certified copy of such agent's authority to act.

4.5.2. CONTRACTOR shall immediately: (i) stop all Work in connection with such hazardous condition and in any area affected thereby (except in an emergency as required by paragraph 6.23), and (ii) notify OWNER and ENGINEER (and thereafter confirm such in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such hazardous condition or take a corrective action, if any, CONTRACTOR shall not be required to resume Work in connection with such hazardous condition or in any such affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR special 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 such special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or to the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of such Work stoppage or such special conditions under which work is agreed by CONTRACTOR to be resumed, either party may make a claim therefor as provided in Articles 11 and 12.

5.2. If the surety on any Bond furnished by CONTRACTOR is declared a 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 5.1, CONTRACTOR shall within ten days thereafter substitute another Bond and surety, both of which must be acceptable to OWNER.

5.3. Licensed Sureties and Insurers; Certificates of Insurance:

4.5.3. If after receipt of such special 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 such portion of the Work that is in connection with such hazardous condition or in such affected area to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or to the amount or extent of an adjustment, if any, 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 Articles 11 and 12. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

5.3.1. All Bonds and insurance required by 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.

5.3.2. 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 with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain in accordance with paragraph 5.6 and 5.7 hereof.

CONTRACTOR's Liability Insurance:

4.5.4. The provisions of paragraph 4.2 and 4.3 are not intended to apply to Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Material uncovered or revealed at the site.

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

ARTICLE 5- BONDS AND INSURANCE

Performance, Payment, and Other Bonds:

5.1. 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 CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date of final payment becomes due, except as provided otherwise by Law or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. 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 Audit Staff, Bureau of Government Financial Operations, US Treasury Department. All Bonds signed by an agent must be

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

5.4.2. claims of damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

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

5.4.4. claims for damages insured by customary personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;

5.4.5. 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

5.4.6. 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.

The policies of insurance so required by this paragraph 5.4 to be purchased and maintained shall:

5.4.7. with respect to insurance required by paragraphs 5.4.3 through 5.4.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants and other persons or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers and employees of all such additional insureds:

5.4.8. include the specific coverage 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;

5.4.9 include completed operations insurance;

5.4.10. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.12, 6.16, and 6.31 through 6.33;

5.4.11. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty 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 5.3.2 will so provide);

5.4.12. 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 13.12; and

5.4.13. 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 (and 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).

OWNER's Liability Insurance:

5.5. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.4, OWNER may maintain (but is not required to 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.

Property Insurance:

5.6. 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:

5.6.1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEERS, ENGINEER's Consultants and other persons or entities identified in the Supplementary Conditions;

5.6.2. be written on a Builder's Risk "all -risk" or open peril or special causes of loss of policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework and Work in transit and shall insure against at least the following perils fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils as may be specifically required by the Supplementary Conditions;

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

5.6.4. cover materials and equipment stored at the site or 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; and

5.6.5. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR and ENGINEER with thirty days written notice to each additional insured to whom a certificate of insurance has been issued.

5.7 OWNER shall purchase and maintain such boiler and machinery or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractor, ENGINEER, ENGINEER's Consultants and any other person or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

5.8. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least thirty 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 5.11.

5.9. OWNER shall not be responsible for purchasing and maintaining any property insurance to protect the interests of CONTRACTOR, Subcontractor 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 amounts will be borne by Contractor, Subcontractor, 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 expense.

5.10. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraphs 5.6 or 5.7, OWNER shall, if possible include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the site, OWNER shall in writing advise CONTRACTOR whether or not such insurance has been procured by OWNER.

5.11 Waiver of Rights

5.11.1. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraphs 5.6 and 5.7 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and all other persons or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds in such policies and will provide primary coverage for all losses and damages caused by the perils 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 right of recovery against any of the insureds or additional insureds thereunder. CONTRACTOR waives all rights against OWNER and its commissioners, attorneys, officers, directors, employees and agents for all losses and damages caused by such policies and any other property insurance applicable to the Work; and, in addition, waives all such rights against Subcontractor, ENGINEER, ENGINEER's Consultants and all other persons or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds 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 issued.

5.11.2. In addition, CONTRACTOR agrees and acknowledges that it has waived and does hereby waive any right to recover from OWNER, its employees, agents, commissioners, and attorneys any consequential, incidental, supplemental or any other damages (other than compensation due under the terms of this agreement), including, but not limited to, any damages for loss of profits or interruption of business or any other matter.

Receipt of Application of Insurance Proceeds:

5.12. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 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 5.13. 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 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 or Written Amendment.

5.13. 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 fifteen 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 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 proper performance of such duties.

Acceptance of Bonds and Insurance; Option to Replace:

5.14. If either party (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 ten days after receipt of the certificates (or other evidence requested) required by paragraph 2.7. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as others 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.

Partial Utilization- Property Insurance:

5.15. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10; provided that no such use or occupancy shall commence before the insurers providing the property insurance 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

Supervision and Superintendent:

6.1. 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, sequence and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others 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. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work at all times during its progress 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 to the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. 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 indicated in the Contract Documents, all Work at the site shall be performed during regular working hours and CONTRACTOR will not permit overtime work or performance of Work on Saturday, Sunday or any legal holiday without OWNER's written consent given after prior written notice to ENGINEER.

6.4. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all 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 furnishing, performance, testing, start-up and completion of the Work.

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of the OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

Progress Schedule:

6.6. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.9 as it may be adjusted from time to time as provided below:

6.6.1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.9) proposed adjustments in the progress schedule that will not change the

Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

6.6.2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of paragraph 12.1. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.7 Substitutes and "Or-Equal" Items:

6.7.1. 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 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 accepted by ENGINEER under the following circumstances:

6.7.1.1. "Or-Equal": 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 acceptance of proposed substitute items.

6.7.1.2. *Substitute Items*: If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under subparagraph 6.7.1.1, it will be considered a proposed substitute item. 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. The procedure for review by the ENGINEER will include the following as supplemented in the General Requirements and as ENGINEER may decide its appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall first make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as specified. The application will state the extent, if any, to which the evaluation and acceptance of the substitute will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a

change in any of the Contract Documents (or in the provisions of any other direct contract with the OWNER for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute.

6.7.1.3. *CONTRACTOR's Expense:* All data to be provided by CONTRACTOR in support of any proposed "or-equal" or substitute items will be CONTRACTOR's expense.

6.7.2. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to 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 procedure for review by ENGINEER will be similar to that provided in subparagraph 6.7.1.2.

6.7.3. *ENGINEER's Evaluation:* ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.7.1.2. and 6.7.2. ENGINEER will be sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any "or-equal" or substitutes. ENGINEER will record time required by ENGINEER and ENGINEER's Consultant in evaluating proposed or submitted by CONTRACTOR pursuant to paragraphs 6.7.1.2 and 6.7.2 and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER accepts a substitute item so proposed or submitted by CONTRACTOR. CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's consultants for evaluating each such proposed item.

Concerning Subcontractors, Suppliers, and Others:

6.8.1. CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and ENGINEER as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish

or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials or equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of Agreement for acceptance by OWNER and ENGINEER, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's or ENGINEER'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 person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute, the Contract Price will be adjusted by the difference in the cost occasioned by such substitution and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER or ENGINEER of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject *defective Work*.

6.9.1. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any Subcontractor, Supplier or other person or organization any contractual relationship between the OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it 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 persons or organization except as may otherwise by Laws and Regulations.

6.9.2. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors. Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR. CONTRACTOR shall require all Subcontractors, Suppliers, and such other persons and organizations performing or furnishing any of the Work to communicate with the ENGINEER through the CONTRACTOR.

6.10. 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.

6.11. 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 5.6 or 5.7, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain certain provisions whereby the Subcontractor or Supplier waives all rights against the OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants and all other additional insureds for all losses and damages caused by, arising out of or resulting from any of the perils covered by such policies and other property insurance applicable to the Work. If the insurers on any such policies require a separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

Patent Fees and Royalties:

6.12. 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

Permits:

6.13. 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 Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connection to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as plant investment fees.

Laws and Regulations:

6.14.1. CONTRACTOR shall give all notices and comply with all the Laws and Regulations applicable to furnishing and 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.

6.14.2. 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 caused by, arising out of or resulting therefrom; 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 3.3.2.

Taxes:

6.15. CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and

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. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants and the officers, directors, employees, agents and other consultants of each and any of them from and against all claims, costs, losses and damages arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents.

Regulations of the place of the Project which are applicable during the performance of the Work.

Use of Premises:

6.16. CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operation of workers to the site and land and areas identified in and permitted by the Contract Documents and other land areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises 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 any adjacent land or areas, resulting from the performance of the Work. 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. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant and anyone directly or indirectly employed by any of them from and against all claims, cost, losses and damages arising out of or resulting from 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.

6.17. During the progress of the Work, CONTRACTOR shall keep the premises free from accumulation of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials. CONTRACTOR shall leave the site clean and ready for occupancy by OWNER at Substantial Completion of the Work. Contractor shall restore to original condition all property not designated for alteration by the Contract Documents.

6.18. 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.

Record Documents:

6.19 CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all 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.

Safety and Protection:

6.20 CONTRACTOR shall be 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 necessary protection to prevent damage, injury or loss to:

6.20.1. all persons on the Work site or who may be affected by the Work;

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

6.20.3. 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.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for safety of persons or property or to protect them 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 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. All damage, injury or loss to any property referred to in paragraph 6.20.2 or 6.20.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish 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 ENGINEER's Consultant 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 of negligence by CONTRACTOR or any Subcontractor, Supplier or other person or organization directly or indirectly employed by them). 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 is accordance with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

Safety Representative:

6.21. 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.

Hazard Communication Program:

6.22. 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.

Emergencies:

6.23. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from OWNER or ENGINEER, 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. If Engineer determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such emergency, a Work Change Directive or Change Order will be issued to document the consequences of such action.

6.24 Shop Drawings and Samples:

6.24.1. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawings and Sample submittals (see paragraph 2.9). All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The 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 materials and equipment CONTRACTOR proposes to provide and enable ENGINEER to review the information for the limited purposes required by paragraph 6.26.

6.24.2. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with said accepted schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for limited purposes required by paragraph 6.26. The numbers of each Sample to be submitted will be as specified in the Specifications.

6.25. Submittal Procedures:

6.25.1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

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

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

6.25.1.3. all information relative to CONTRACTOR's sole responsibilities in respect of means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.

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

6.25.2. Each submittal will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

6.25.3. At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawings or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each variation.

6.26. ENGINEER will review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals accepted by ENGINEER as required by paragraph 2.9. 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. 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. 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 and revisions other than the correction called for by ENGINEER on previous submittals.

6.27. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission as required by paragraph 6.25.3 and ENGINEER has given notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.25.1.

6.28. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submissions accepted by ENGINEER as required by paragraph 2.9, any related Work performed prior to ENGINEER's review and approval of the pertinent submittals will be at the sole expense and responsibility of CONTRACTOR.

Continuing the Work:

6.29. 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 15.5 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.30. CONTRACTOR's General Warranty and Guarantee:

6.30.1. CONTRACTOR warrants and guarantees to OWNER, ENGINEER and ENGINEER's Consultant that all Work will be in accordance with the Contract Documents and will not be *defective*. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

6.30.1.1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors or Suppliers; or

6.30.1.2. normal wear and tear under normal usage.

6.30.2. 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 obligations to perform the Work in accordance with the Contract Documents:

6.30.2.1. observations by ENGINEER;

6.30.2.2. recommendations of any progress or final payments by ENGINEER;

6.30.2.3. the issuance of a certificate of Substantial Completion or any payment by OWNER to CONTRACTOR under the Contract Documents;

6.30.2.4. use or occupancy of the Work or any part thereof by OWNER;

6.30.2.5. any acceptance by OWNER or any failure to do so;

6.30.2.6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.13;

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

6.30.2.8. any correction of *defective* Work by OWNER.

Indemnification:

6.31. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant and the officers, directors, employees, agents and other consultants 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) caused by, arising out of or resulting from the performance of the Work, provided that any such claim, cost, loss or damage: (i) 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, and (ii) is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of a person or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of negligence of such person or entity.

6.32. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.31 shall not be limited in any way by any limitations on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any Subcontractor, Supplier or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

6.33. the indemnification obligations of CONTRACTOR under paragraph 6.31 shall not extend to the liability of ENGINEER and ENGINEER's Consultant, officers, directors, employees or agents caused by the professional negligence, errors or omissions of any of them.

Survival of Obligations:

6.34. All representatives, 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 and termination or completion of the Agreement.

ARTICLE 7- OTHER WORK

Related Work at Site:

7.1. OWNER may perform other work related to the Project at the site by OWNER's own forces, or let other direct contracts therefor which shall contain General Conditions similar to these, or have other work performed by utility owners. If the fact that such other work is to be performed was not noted in the Contract Documents, then: (i) written notice thereof will be given to CONTRACTOR prior to starting any such work, and (ii) CONTRACTOR may make a claim therefor as provided in Articles 11 and 12 if CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR or requires additional time and the parties are unable to agree as to the amount or extent thereof.

7.2. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly connect and coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and 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.

7.3. 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 so to report will constitute an acceptance of such work as fit and proper for integration with CONTRACTOR's Work except for latent or nonapparent defects and deficiencies in such other work.

Coordination:

7.4. If OWNER contracts with others for the performance of other work on the Project at the site, the following will be set forth in Supplementary Conditions:

7.4.1. the person, firm or corporation who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified;

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

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

Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility in respect of such coordination.

ARTICLE 8- OWNER'S RESPONSIBILITIES

8.1. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. In case of termination of the employment of ENGINEER, OWNER may (in its sole discretion) appoint a successor or substitute engineer, whose status under the Contract Documents shall be that of the former ENGINEER.

8.3. OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.4 and 14.13.

8.4. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and drawings of physical conditions in existing structures at or contiguous to the site that has been utilized by ENGINEER in preparing the Contract Documents.

8.5. 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 furnishing or performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

ARTICLE 9- ENGINEER'S STATUS DURING CONSTRUCTION

OWNER'S Representative:

9.1. 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 shall not be extended without the consent of OWNER and ENGINEER.

Visits to Site:

9.2. 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 will endeavor for the benefit of OWNER to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections 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 on-site observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against *defective* Work. ENGINEER's visits and on-site observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.13, and particularly, but without limitation, during or as a result of ENGINEER's on-site 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 furnishing or performance of the Work.

Project Representative:

9.3. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more continuous observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants as will be as provided in paragraph 9.13 and in the Supplementary Conditions. 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 person will be as provided in the Supplementary Conditions.

Classifications and Interpretations:

9.4. ENGINEER will issue with reasonable promptness such written clarification or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretation will be binding on OWNER and CONTRACTOR. IF OWNER or CONTRACTOR believes a written clarification or interpretation justifies an adjustment in the Contract Price or the Contract Times and the parties are unable to agree to the amount or extent thereof, if any, OWNER or CONTRACTOR may make a written claim therefor as provided in Article 11 or Article 12.

Authorized Variations in Work:

9.5. 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 the

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 the Contract Times and the parties are unable to agree as to the amount or extent thereof, OWNER or CONTRACTOR may make a written claim therefor as provided in Article 11 or 12.

Rejecting Defective Work:

9.6. ENGINEER will have authority to disapprove or 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 13.9, whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraphs 6.24 through 6.28 inclusive.

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

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

Determination of Unit Price:

9.10. 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). Upon 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 upon OWNER and CONTRACTOR, or unless, within ten days after the date of any such decision, either OWNER or CONTRACTOR delivers to other and to ENGINEER written notice of intention to appeal from ENGINEER's decision and: (i) an appeal from ENGINEER's decision is taken within the time limits and in accordance with the procedures set forth in Exhibit GC-A, "Dispute Resolution Agreement," entered into between OWNER and CONTRACTOR pursuant to Article 16, or (ii) if no such Dispute Resolution Agreement has been entered into, a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction to exercise such rights or remedies as the appealing party may have with respect to ENGINEER's decision, unless otherwise agreed in writing by OWNER and CONTRACTOR. Such appeal will not be subject to the procedures of paragraph 9.11.

Decision of Disputes:

9.11. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work

or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and Claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph. Written notice of each such claim, dispute or other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty days) after the start of the occurrence or event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within sixty days after the start of such occurrence or event unless ENGINEER allows an additional period of time for the submission of additional or more accurate data in support of such claim, dispute or other matter. The opposing party shall submit any response to ENGINEER and the claimant within thirty days after the receipt of the claimant's last submittal (unless ENGINEER allows additional time). ENGINEER will render a formal decision in writing within thirty days after the receipt of the opposing party's submittal, if any, in accordance with this paragraph. ENGINEER's written decision on such claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless: (i) an appeal from ENGINEER's decision is taken within the time limits and in accordance with the procedures set forth in EXHIBIT GC-A, "Dispute Resolution Agreement," entered into between OWNER and CONTRACTOR pursuant to Article 16, or (ii) if no such Dispute Resolution Agreement has been entered into, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within thirty days after the date of such decision and formal proceeding is instituted by the appealing party in a forum of competent jurisdiction to exercise such rights or remedies as the appealing party may have with respect to such claim, dispute or other matter in accordance with applicable Laws and Regulations within sixty days of the date of such decision, unless otherwise agreed in writing by OWNER and CONTRACTOR.

9.12. When functioning as interpreter and judge under paragraphs 9.10 and 9.11. 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. The rendering of a decision by ENGINEER pursuant to paragraphs 9.10 or 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.16) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of such claim, dispute or other matter pursuant to Article 16.

9.13. Limitations on ENGINEER's Authority and Responsibilities:

9.13.1. 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 undertaking, exercise or performance of any authority or responsibility by ENGINEER shall create, impose or give rise to any duty owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other person or

organization, or to any surety for or employee or agent of any of them.

9.13.2. 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 furnishing or performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

9.13.3. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

9.13.4. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals and Other documentation required to be delivered by paragraph 14.12 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.

9.13.5. The limitations upon authority and responsibility set forth in this paragraph 9.13 shall also apply to ENGINEER's Consultants, Resident Project Representative and assistants.

ARTICLE 10- CHANGES IN THE WORK

10.1. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work. Such additions, deletions or revisions will be authorized by a Written Amendment, 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).

10.2. If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an adjustment in the Contract Price or an adjustment of the Contract Times that should be allowed as a result of a Work Change Directive, a claim may be made therefor as provided in Article 11 or Article 12.

10.3. 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 and supplemented as provided in paragraphs 3.5 and 3.6 except in the case of an emergency as provided in paragraph 6.23 or in the case of uncovering Work as provided in paragraph 13.9.

10.4. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:

10.4.1. changes in the Work which are (i) ordered by OWNER pursuant to paragraph 10.1, (ii) required because of acceptance of *defective* Work under paragraph 13.13 or correcting *defective* Work under paragraph 13.14, or (iii) agreed to by parties;

10.4.2. changes in the Contract Price or Contract Times which are agreed to by the parties; and

10.4.3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by written decision rendered by ENGINEER pursuant to paragraph 9.11;

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 6.29.

10.5. If notice of any change affecting the general scope of the Work or 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, and the amount of each applicable Bond will be adjusted accordingly.

10.6. Notwithstanding anything to the contrary in this Article or elsewhere in the Contract or Contract Documents, no Change Order or other modification of the Contract shall be binding upon the Owner unless approved by the Owner's Board of Commissioners in an open public meeting, which approval may be granted or withheld by the Board in the sole discretion of the Board, for any reason.

ARTICLE 11- CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at CONTRACTOR's expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an adjustment in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the start of the occurrence or event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with the supporting data shall be delivered within sixty days after the start of such occurrence or event (unless ENGINEER allows additional time for the claimant

to submit additional or more accurate data in support of the claim) and shall be accompanied by claimants and written statement that the adjustment claimed covers all known amounts to which the claimant is entitled as a result of said occurrence or event. All claims for adjustment in the Contract Price shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

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

11.3.1. 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 paragraphs 11.9.1 through 11.9.3. inclusive);

11.3.2. 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 11.6.2.);

11.3.3. where the Work is involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 11.3.2, on the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 11.6).

Cost of the Work:

11.4 The term Cost of Work means the sums of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. 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 those following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1. 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 limitations superintendents, foremen and other personnel employees 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, exercise and payroll taxes, worker's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal

holidays, shall be included in the above to the extent authorized by OWNER.

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

11.4.3. Payments made by CONTRACTOR to the Subcontractors for the Work performed or furnished 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 advise of ENGINEER, which bids, if any, will be accepted. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a fee, the Subcontract's Cost of the Work and the fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in paragraphs 11.4, 11.5, 11.6 and 11.7. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. 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.

11.4.5. Supplemental costs including the following:

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

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the 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.

11.4.5.3. 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, installation, dismantling and removal thereof- all in accordance with the terms of said rental agreement. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

11.4.5.5. 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.

11.4.5.6. 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 and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER in accordance with paragraph 5.9), provided they 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 are liable. Such losses shall include settlement 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. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

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

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work.

11.5. The term Cost of Work shall not include any of the following:

11.5.1. Payroll costs and other compensations of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general 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 a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4- all of which are to be considered administrative cost covered by the CONTRACTOR's fee.

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

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquency.

11.5.4. Cost of premiums for all Bonds and for all insurance or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premium covered by subparagraph 11.4.5.9. above).

11.5.5. 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 are 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.

Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

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

11.6.1. a mutually accepted fixed fee; or

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

11.6.2.1. for costs incurred under paragraphs 11.4.1 and 11.4.2, the CONTRACTOR's fee shall be fifteen percent;

11.6.2.2. for costs incurred under paragraph 11.4.3, the CONTRACTOR's fee shall be five percent;

11.6.2.3. 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 paragraphs 11.4.1, 11.4.2, 11.4.3 and 11.6.2. is that the Subcontractor who actually performs or furnishes the Work, at whatever tier, will be paid a fee of fifteen percent of the costs incurred by such Subcontractor under paragraph 11.4.1 and 11.4.2 and that any higher tier Subcontractor and CONTRACTOR will be paid a fee of five percent of the amount paid to the next lower tier Subcontractor.

11.6.2.4. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.5. 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

11.6.2.6. 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 paragraph 11.6.2.1. through 11.6.2.5, inclusive.

11.7. Whenever the cost of any Work is to be determined pursuant to paragraphs 11.4 and 11.5, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8 It is understood that CONTRACTOR has included in the Contract Price all allowance so named in the Contract Documents and shall cause the Work so covered to be furnished and performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

11.8.1. the allowance 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

11.8.2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the 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.

Prior to final payment, an appropriate Change Order will be issued as recommended by 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.

11.9 Unit Price Work:

11.9.1. 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 established unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. 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. Determination of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER in accordance with paragraph 9.10.

11.9.2. 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.

11.9.3. OWNER or CONTRACTOR may make a claim for an adjustment in the Contract Price in accordance with Article 11 if:

11.9.3.1. 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

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

11.9.3.3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any increase or decrease.

ARTICLE 12- CHANGE OF CONTRACT TIMES

12.1. The Contract Times (or Milestones) may only be changed by a Change Order or a Written Amendment. Any claim for an adjustment of the Contract Times (or Milestones) shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Times (or Milestones) shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise

agree. No claim for an adjustment in the Contract Times (or Milestones) will be valid if not submitted in accordance with the requirements of this paragraph 12.1.

12.2. All time limits stated in the Contract Documents are the essence of the Agreement.

12.3. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) 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 12.1. 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. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.4. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. In no event shall OWNER be liable to CONTRACTOR, any Subcontractor, any Supplier, any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from (i) delays caused by or within the control of CONTRACTOR, or (ii) delays beyond the control of both parties including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

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

13.1. *Notice of Defects:* Prompt notice of all defective Work of which OWNER, or ENGINEER have actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected or accepted as provided in this Article 13.

Access to Work:

13.2. OWNER, ENGINEER, ENGINEER's Consultant, other representatives and personnel of OWNER, independent testing laboratories and governmental agencies with jurisdictional interests will have access to 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.

Tests and Inspection:

13.3. 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.

13.4. 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:

13.4.1. for inspections, tests or approvals covered by paragraph 13.4.5 below;

13.4.2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.9 below shall be paid as provided in said paragraph 13.9; and

13.4.3. as otherwise specifically provided in the Contract Documents.

13.5. 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. Contractor shall also 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 of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work.

13.6. 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.

13.7. Uncovering Work as provided in paragraph 13.6 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.

Uncovering Work:

13.8. 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 the CONTRACTOR's expense.

13.9. 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. If it is found that such Work is defective, CONTRACTOR shall pay all claims, costs, losses and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection and testing and of satisfactory replacement or reconstruction (including but not limited to all cost of repair or replacement of work of others); and OWNER shall be

entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefor as provided in Article 11. If, however, such 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 Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

OWNER May Stop the Work:

13.10. If the Work is *defective*, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop 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 or any surety or party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all *defective* Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with Work that is not *defective*. CONTRACTOR shall pay all claims, costs, losses and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.12. Correction Periods:

13.12.1. If within one year from the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or 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*, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) correct such *defective* Work, or, if it has been rejected by OWNER, remove it from the site and replace it with Work that is not *defective*, and (ii) satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cost serious risk of loss or damage, OWNER may have the *defective* Work corrected or the rejected Work removed and replaced, all claims, costs, losses and damages caused by or resulting from such removal or replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

13.12.2. 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 or by Written Amendments.

13.12.3. Where *defective* Work (and damage to other Work resulting therefrom) has been corrected, removed or replaced under this paragraph 13.12, 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.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of *defective* Work, OWNER (and, prior to ENGINEER's recommendation of final payment, also ENGINEER) prefers to accept it. OWNER may do so. CONTRACTOR shall pay all claims, costs, losses or damages attributable to OWNER's evaluation of and determination to accept such *defective* Work (such costs to be approved by ENGINEER as to reasonableness). 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, and, if the parties are unable to agree as to the amount thereof. OWNER may make a claim therefor as provided in Article 11. If the acceptance occurs after such a recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. 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 13.11, 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 and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of 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. All claims, costs, losses and damages incurred or sustained by OWNER in exercising such rights and remedies 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, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. 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.

CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

as an experienced and qualified professional and an 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:

ARTICLE 14- PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in paragraph 2.9 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.

Application for Progress Payment:

14.2. At least twenty days before the date established for each progress payment (but no 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 date of the Application and accompanied by 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 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 and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

CONTRACTOR's Warranty of Title:

14.3. 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.

Review of Applications for Progress Payment:

14.4. ENGINEER will, within ten days after the receipt of each Application, 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. Ten days after presentation of Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and when due will be paid by OWNER to CONTRACTOR.

14.5. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's on-site observations of the executed Work

14.5.1. the Work has progressed to the point indicated,

14.5.2. 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 9.10, and to any other qualifications stated in the recommendation), and

14.5.3. 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.

However, by recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or (ii) 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 from CONTRACTOR.

14.6. ENGINEER's recommendation of any payment, including final payment, shall not mean that ENGINEER is 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 furnishing or performance of Work, or for any failure of CONTRACTOR to perform or furnish Work in accordance with the Contract Documents.

14.7. 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 referred to in paragraph 14.5. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.7.1. the Work is *defective*, or completed Work has been damaged requiring correction or replacement,

14.7.2. the Contract Price has been reduced by Written Amendment or Change Order,

14.7.3. OWNER has been required to correct *defective* Work or complete Work in accordance with paragraph 13.14, or

14.7.4. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.4 inclusive.

OWNER may refuse to make payment of the full amount recommended by ENGINEER because:

14.7.5. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work,

14.7.6. 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 Liens,

14.7.7. there are other items entitling OWNER to a set-off against the amount recommended, or

14.7.8. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.7.1 through 14.7.3 or paragraphs 15.2.1 through 15.2.4 inclusive;

but OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and 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.

Substantial Completion:

14.8. 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. In general, substantial completion shall be considered the point at which ALL items of work have been completed lacking only the drafting of a final punch list of corrective work items discovered during the Substantial Completion inspection. Punch list items of work may include items that have previously received 100% payment but deficiencies, damage or erosion has occurred. Such items shall be corrected prior to final acceptance. Within a reasonable time thereafter, 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 therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and 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 objections 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 fourteen days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefore. If, after consideration of OWNER's objections, ENGINEER

considers the Work substantially complete, ENGINEER will within said fourteen 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. 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, 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.

14.9. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10. Use by OWNER at OWNER's option of any substantially completed part of the Work which: (i) has specifically been identified in the Contract Documents, or (ii) 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, may be accomplished prior to Substantial Completion of all Work subject to the following:

14.10.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If 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. 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. 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 therefore. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and division

of responsibility in respect thereof and access thereto.

14.10.2. No occupancy or separate operation of part of the Work will be accomplished prior to compliance with requirements of paragraph 5.15 in respect of property insurance.

Final Inspection:

14.11. Upon written notice from CONTRACTOR that the entire Work or agreed upon portion thereof is complete, ENGINEER will 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.

Final Application for Payment:

14.12. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance required by paragraph 5.4, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.4.13, (ii) consent of surety, if any, to final payment, and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu of such releases or waivers of Liens 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, materials 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, 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.

Final Payment and Acceptance:

14.13 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 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 14.15. Otherwise, ENGINEER will

return the Application 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. Thirty days after the presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and be paid by OWNER to CONTRACTOR.

14.14. 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 of Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment based on the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for 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 5.1, 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.

Waiver of Claims:

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

14.15.1. a waiver of all the claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from *defective* Work appearing after final inspection pursuant to paragraph 14.11, 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

14.15.2. a waiver of all claims by CONTRACTOR against the OWNER other than those previously made in writing and still unsettled.

**ARTICLE 15- SUSPENSION OF WORK
AND TERMINATION**

OWNER May Suspend Work:

15.1. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than ninety 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 allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

OWNER May Terminate:

15.2. Upon the occurrence of any one or more of the following events:

15.2.1. if CONTRACTOR persistently fails 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 2.9 as adjusted from time to time pursuant to paragraph 6.6);

15.2.2. if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.3. if Contractor disregards the authority ENGINEER; or

15.2.4. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if any) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, 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), incorporate in the Work all materials and equipment stored at the site or for which the OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses and damages sustained by OWNER arising out of or resulting from 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 approved by ENGINEER incorporated in a Change Order, provided that when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

15.3. 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.

15.4. Upon seven days' written notice to CONTRACTOR and ENGINEER, OWNER may without cause and without prejudice to any right or remedy of OWNER, elect to terminate the Agreement. In such case, the CONTRACTOR shall be paid (without duplication of any items):

15.4.1. for 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;

15.4.2. for 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 of overhead and profit on such expenses;

15.4.3. for all claims, costs, losses and damages incurred in settlement of terminated contracts with Subcontractors, Suppliers and others; and

15.4.4. for reasonable expenses directly attributable to termination.

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.

CONTRACTOR May Stop Work or Terminate:

15.5. If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for payment within thirty 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 Agreement and recover from OWNER payment on the same terms as provided in paragraph 15.4. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within thirty days after it is submitted, or OWNER has failed for thirty days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may upon seven days' written notice to OWNER and ENGINEER stop the Work until payment of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.5. are not intended to preclude CONTRACTOR from making claim under Articles 11 and 12 for an increase in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping Work as permitted by this paragraph.

ARTICLE 16- [INTENTIONALLY OMITTED]

ARTICLE 17- MISCELLANEOUS

Giving Notice:

17.1 Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if 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 if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Times:

17.2.1. 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 falls on a Saturday or Sunday or on a day made a legal holiday by the law of applicable jurisdiction, such day will be omitted from the computation.

17.2.2. A calendar day of twenty-four hours measured from midnight to the next midnight will constitute a day.

Notice of Claim:

17.3. Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or for any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observation of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

Cumulative Remedies:

17.4. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.12, 6.16, 6.30, 6.31, 6.32, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and ENGINEER thereunder, are in addition to, and are not construed in any way as a limitation of, any rights and remedies available to any and 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, and 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.

Professional Fees and Court Costs Included:

17.5. Whenever reference is made to "claims, costs, losses and damages," it shall include in each case, but not be limited to, all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs.

SUPPLEMENTAL GENERAL CONDITIONS

The Supplemental General Conditions contained in this Section are intended to cooperate with, to supplement, or to modify the General Conditions and other Specification and in case of disagreement, the intent of the supplemental General Conditions shall govern.

1. Special Hazards
2. Public Liability and Property Damage Insurance
3. Photographs of Project
4. Builder's Risk Insurance
5. Construction Office
6. Sanitation
7. Ordinances, Regulations, Standards, and Codes
8. Connecting to Work of Others
9. Cleaning Up
10. Hours of Work
11. Testing
12. Safety and Protection
13. Water
14. Electricity
15. Permits & Licenses
16. Lines and Grades
17. Salvage
18. Disruption of Utilities
19. Underground Obstructions
20. Labor Provisions
21. Use of Premises
22. Access to Property
23. Drawings
24. Contractor Services

1. SPECIAL HAZARDS

The Contractor's and his Subcontractor's Public Liability and Property Damage Insurance shall provide adequate protection against the following special hazards:

No known special hazards.

2. CONTRACTOR'S AND SUBCONTRACTOR'S PUBLIC LIABILITY, VEHICLE LIABILITY, AND PROPERTY DAMAGE INSURANCE

As required in the General Conditions, the Contractor's Public Liability Insurance and Vehicle Liability Insurance shall be in an amount not less than \$1,000,000 for injuries, including accidental death, to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000 on account of one accident, and Contractor's Property Damage Insurance in an amount not less than \$1,000,000. In addition, where project requires work within railroad right-of-way, contractor shall secure and maintain insurance in the amounts and types required by the railroad. In general, railroad companies require General Liability limits of \$3,000,000 with public liability and property damage liability of \$3,000,000 per occurrence. The railroad company shall be included as an additional insured.

The Contractor shall either: (1) require each of his subcontractors to procure and to maintain during the life of his subcontract: Subcontractor's Public Liability and Property Damage of the type and in the same amounts as specified in the preceding paragraph, (2) insure the activities of his subcontractors in his own policy.

3. PHOTOGRAPHS OF PROJECT

As provided in paragraph 49 of the General Conditions, the Contractor will furnish photographs the number, type and stage as enumerated below:

No Photographs Required

4. BUILDER'S RISK INSURANCE

The Contractor will maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portions of the project for the benefit of the Owner, the contractor, and all subcontractors, as their interests may appear.

5. CONSTRUCTION OFFICE

No construction office is required by this Contract, except as required in the Bid Proposal. If the Contractor wishes the use of office facilities, however, he/she shall provide his/her own as none will be made available by the Owner.

6. SANITATION

Sanitary conveniences for the use of persons employed on the work shall be erected and maintained free from nuisance by the Contractor in a manner and at locations satisfactory to the Owner and their use shall be strictly enforced. Upon completion of the work, they shall be removed, leaving the premises clean.

7. ORDINANCES, REGULATIONS, STANDARDS, AND CODES

A. The work shall conform with all State and local ordinances or regulations governing the installation of such improvements. If work as laid out, indicated, or specified is contrary to or conflicts with State and local ordinances or regulations, the Contractor shall report the same to the Engineer before submitting his/her bid. The Engineer will then issue instruction as to procedure.

B. If the Contractor fails to notify the Engineer of conflicts or omissions as noted above, all changes required to comply with the ordinances and regulations shall be made without additional expense to the Owner.

8. CONNECTING TO WORK OF OTHERS

Before starting his/her work and from time to time as his/her work progresses, the Contractor and each subcontractor shall examine the work and materials installed by others insofar as they apply to his/her own work and shall notify the Engineer immediately in writing if any conditions exist which will prevent satisfactory results in the installation of the system. Should the Contractor or Subcontractor start his/her work without such notification it shall be construed as an acceptance by him/her of all claims or questions as to the suitability of the work of others to receive his/her work. He/she shall remove and/or replace, at this/her own expense, all work under this Contract which may have to be removed on account of such defects.

9. CLEANING UP

A. The contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his/her employees or work, and at the completion of the work he/she shall remove all his/her rubbish from and about the work area and all surplus materials and shall leave his/her work "broom clean", "rake clean", or its equivalent, unless more exactly specified. In case of dispute, the Owner may remove the rubbish and charge the cost to the Contractor as the Engineer shall determine to be just.

B. On-site burning of waste material will not be permitted.

C. All damage to existing areas shall be restored as the Engineer directs. Payments may be withheld until such work is accomplished.

10. HOURS OF WORK

A. The Contractor shall submit to the Engineer for approval his/her proposed working hours.

B. The approved working hours shall be utilized by all the Contractor's personnel and all Subcontractor's personnel.

C. Any subsequent proposed changes in working hours shall be submitted for approval.

11. TESTING

Testing to determine compliance with the Plans and Specifications will be performed by a qualified testing laboratory as directed by the Engineer. All costs for testing shall be borne by the Contractor. Where re-testing is required due to the Contractor not having complied with Plans, Specifications, or the Engineer's instructions, the cost of such re-testing shall be borne by the Contractor.

12. SAFETY AND PROTECTION

A. To protect persons, including the workmen, from injury and to avoid property damage and damage to this work, adequate barricades, construction signs, torches, lanterns, and guards as required shall be placed and maintained by the Contractor during the progress of the construction work and in the case of work on or near traveled roadways until it is safe for traffic to use the highway. All materials, piles, equipment, pipe, excavations, and mounds of earth which may serve as obstruction to traffic shall be enclosed by fences or barricades and shall be protected by proper lights when the visibility is poor. The rules and regulations of the local authorities respecting safety provisions shall be observed.

B. The Contractor shall carry on work in a manner which will cause the least interruption to both vehicular and pedestrian traffic. Where applicable, not more than two (2) consecutive blocks shall be closed to through travel, including the cross street intersected.

C. The Contractor shall provide safe and proper means of ingress and egress to and from all public and private properties for the duration of construction. Where traffic must cross open trenches, suitable bridges shall be provided at all public and private crossings.

D. The Contractor shall be held liable for any property damage and/or personal injury resulting from his/her failure to take adequate safety precautions. He/she shall indemnify the Owner and Engineer from all claims arising from such negligence.

E. Temporary support, adequate protection and maintenance of all underground and surface structures, utilities, drains, sewers, and other obstructions encountered in the progress of the work shall be installed at no additional cost to the Owner. The structure which may have been disturbed shall be restored as soon as possible.

F. The Contractor shall be entirely responsible for all obstructions, regardless of whether or not shown on the Plans. Any obstructions encountered at any time and in any location shall be provided for in the most practical manner. In the case of utilities, they shall be kept in operation unless written permission from the Owner of the utilities allowing temporary interruption of service is obtained. Should it become necessary to install temporary lines, temporary pumps, temporary support, temporary protection, or other means be provided for the continuous operation of utilities, all this work shall be done, maintained, operated, and removed upon completion, at no additional cost to the Owner. No trees are to be removed, pruned, or have roots cut, except when approved by the Engineer. The Contractor shall be responsible for damage to trees, shrubs, grass, plants, etc., due to construction or related activity.

G. The Contractor will not be required to move or remove any privately owned utilities, such as gas mains and services, electric transmission lines and poles, telephone cables, etc., or to move or remove any publicly owned utilities except as specifically required in the Plans and Specifications.

13. WATER

Water for testing, sterilization, and other purposes connected with the work shall be secured and purchased by the Contractor.

14. ELECTRICITY

Electricity as may be required for construction and other purposes connected with this Project shall be secured and purchased by the Contractor.

15. PERMITS AND LICENSES

Permits and licenses will NOT be required by the City or County. The Contractor shall be required to be registered to do business in the State of Florida. The Contractor or his/her subcontractors shall be currently licensed by State and Local governments for all types of work required as a part of this contract. Contractor shall submit Notice of Intent (NOI) and Storm Water Pollution and Prevention (SWPPP) if applicable.

16. LINES AND GRADES

The Contractor shall furnish and set all necessary stakes to establish the line and grade as shown on the Drawings, and lay out each portion of the work of his/her Contract. The Contractor shall be responsible for the layout of all such lines and grades, which will be checked and verified by the Engineer. The Engineer will provide benchmark elevations and reference points for control of the work.

17. SALVAGE

A. All material salvaged from connections or cut-ins to existing systems, removal of existing facilities, etc., shall remain the property of the Owner. The Contractor shall remove all salvaged materials from the construction sites as work progresses and store them in a place designated by the Owner for this purpose.

B. Under no circumstances are salvaged materials to be re-used in this project unless indicated on the Drawings and/or specified herein or directed by the Owner for this purpose.

18. DISRUPTION OF UTILITIES

The Contractor is hereby notified that his/her work shall be so scheduled and performed as to provide a minimum of interference with any and all utility services. If, because of construction operations, it is necessary to interrupt such utility services, a designated representative of the owner of the utility involved shall be advised in writing not less than forty-eight (48) hours advance of such interruption. Work of this type shall be scheduled to be performed during periods of minimum demand on the utility involved and within the time limit established by the owner's representative. Periods of shutdown longer than those established as the maximum by the owner of the utility involved will not be permitted. If such shutdowns occur, the Contractor will be considered liable for damages resulting from this cause.

19. UNDERGROUND OBSTRUCTIONS

The Contractor shall anticipate all underground obstructions such as water lines, gas lines, sewer lines, utility lines, concrete, and debris. No extra payment will be allowed for the removal, replacement, repair of possible increased cost caused by underground obstructions. Any such lines or obstructions indicated on the map show only the approximate location and must be verified in the field by the Contractor. The Owner and Engineer will endeavor to familiarize the Contractor with all known underground utilities and obstructions, but this will not relieve the Contractor from full responsibility in anticipating all underground obstructions.

20. LABOR PROVISIONS

A. The Contractor and his/her Subcontractors shall discharge whenever ordered to do so by the Engineer, any employee who is disorderly or whose conduct in the opinion of the Engineer is detrimental to the prosecution of the work.

B. No person whose age or physical condition is such as to make his/her employment dangerous to his/her health and safety and to the health and safety of others shall be employed on the work, and in no event shall any person under the age of sixteen (16) years be employed.

C. Should the Contractor fail to remove such person or persons ordered discharged under the provisions of this Paragraph or fail to furnish suitable or sufficient machinery, equipment or force for the proper prosecution of the work the Engineer may withhold all estimates which are, or may become due, or may suspend the work until such orders are complied with.

D. The equipment used on any portion of the work shall be such that no injury to adjacent property, or

to streets or highways will result from its use; equipment shall be modern, in good condition, and adequate in size to perform the work in satisfactory time intervals. No item of machinery or equipment, after once being placed on the work, shall be removed without the consent of the Engineer.

21. USE OF PREMISES

A. The Contractor shall confine his/her apparatus, storage of materials, and construction operations to such limits as may be directed by the Owner and shall not unreasonably encumber the premises with his/her materials.

B. The Contractor shall not load or permit any part of any structure to be loaded to such an extent as to endanger its safety.

C. The Contractor shall conduct the work so as to insure the least obstruction to traffic practicable, and shall provide for the convenience of the general public and of residents along and adjacent to the work in a manner satisfactory to the Engineer. Materials and equipment stored on the work site shall be placed so as to cause as little obstruction to the public as possible and shall be lighted and barricaded as hereinafter provided.

D. Streets shall not be closed, except when and where approved by the Engineer, and whenever the street is not closed, the work must be so conducted that there shall at all times be a safe passageway for traffic. Whenever it is necessary to divert traffic from any part of the work the Contractor shall provide and maintain a passable driveway approved by the Engineer.

E. Suitable barricades, danger warnings, detour signs, etc., as hereinafter provided, shall be maintained by the Contractor in all cases and the Engineer and the Fire Department and Police Department having jurisdiction shall immediately be notified by telephone, or otherwise, upon the closing and/or opening of each street or section thereof.

F. The Contractor shall provide, erect, and maintain, at his/her own expense, barricades, danger warnings, and detour signs whenever they may be necessary. He/she shall place sufficient lights on/or near the work and keep them burning from twilight to sunrise; shall erect suitable barricades, railings, fences, and/or other protections about the work; provide all watchmen by day or night and take all other precautions that may be necessary; he/she shall maintain proper guards and lights for the prevention of accidents, upon materials, supplies, and equipment, and take all other precautions that may be necessary for the proper protection of the work and public convenience and safety.

G. Streets closed to traffic shall be protected by effective barricades on which shall be placed acceptable warning signs. The Contractor shall provide and maintain acceptable warning and detour signs at all closures, intersections, and along the detour routes, directing the traffic around the closed portion or portions of the work, so that the temporary detour route or routes shall be indicated clearly throughout its or their entire length.

H. Fire hydrants on or adjacent to the work shall be kept accessible to the fire apparatus at all times and no material or obstructions shall be placed within ten (10) feet of any such hydrant. Adjacent premises must be given access as far as possible, and obstruction of sewer inlets, gutters, and ditches will not be permitted.

I. Unless otherwise expressly stipulated herein, the use of explosives is not contemplated in the prosecution of this Contract, and in no case will their use be permitted without the written permission of the City and/or County and a permit issued by the Chief of the Fire Department

J. Where such permission for the use of explosives is obtained, the Contractor shall use the utmost care so as not to endanger life or property, and whenever directed the number and size of the charges shall be reduced. All explosives shall be stored in a secure manner, and all such storage places shall be marked clearly, "**DANGEROUS EXPLOSIVES**", and shall be in care of competent watchmen.

K. It shall be the responsibility of the Contractor to contact in writing the Fire and Police Departments having jurisdiction in the area where the work is being performed to obtain from them a summary of the information which should be provided to them while work is in progress. It shall then be the Contractor's responsibility to provide them with all such data.

22. ACCESS TO PROPERTY

The Contractor shall maintain or provide access to property normally entered via the job site during progress of the work. Bridges or other suitable crossings over ditches shall be provided as required and subject to approval by the Engineer.

23. DRAWINGS

A. It is expressly understood that approval by the Engineer of the Contractor's working drawings does not relieve the Contractor of any responsibility for accuracy of dimensions and details. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of his/her working drawings with the approved Plans and Specifications. The Contractor shall not attempt to construct the parts of the work for which such detailed drawings are required until he/she has submitted the drawings and received them back with written approval of the Engineer.

1. The contract price shall include the cost of furnishing all working drawings and the Contractor will be allowed no extra compensation for such drawings.

B. Where the word "similar" occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical, and all details shall be worked out in relation to their locations and their connection to other parts of the work.

C. Where on any of the Drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other like portions of the work. Where ornament or other detail is indicated by starting only, or where the word typical or (typ) is used, such detail shall be continued throughout the courses or parts in which it occurs and shall also apply to all other similar parts in the work, unless otherwise indicated.

24. CONTRACTOR SERVICES

The Contractor shall provide qualified persons to assist the Engineer in making field checks, measurements, as-built checks, inspections, test runs, and the necessary work related to the project work.

SECTION 00715

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions specifically amend or supplement other provisions of the Contract Documents. In the event of a conflict between these conditions, and other conditions, the more stringent shall govern.

The limits of liability for the insurance required by paragraph 5.4 of the General Conditions shall provide the following coverages for not less than the following amounts or greater where required by Laws and Regulations.

5.4.1 and 5.4.2 Workers' Compensation, etc. under paragraphs 5.4.1 and 5.4.2 of the General Conditions.

- | | |
|--------------------------|------------------------------|
| (1) State: | Statutory |
| (2) Applicable Federal | Statutory |
| (3) Employer's Liability | \$100/100/500 (in thousands) |

5.4.3, 5.4.4, and 5.4.5 Contractor's Liability Insurance under paragraphs 5.4.3 through 5.5.5 of the General Conditions which shall also include completed operations and products liability coverages and eliminate the exclusion with respect to property under the care, custody, and control of Contractor:

- | | |
|--|-------------|
| (1) General Aggregate
(Expect Products - Completed Operations) | \$1,000,000 |
| (2) Products-Completed Operations Aggregate | \$1,000,000 |
| (3) Personal/Advertising Injury | \$ 500,000 |
| (4) Each Occurrence (Bodily Injury and
Property Damage) | \$1,000,000 |
| (5) Limit Per Person Medical Expense | \$ 10,000 |
| (6) Excess Liability, Umbrella Form
General Aggregate | \$2,000,000 |
| Each Occurrence | \$1,000,000 |
| (7) Personal Injury Liability Coverage will include Claims arising out of Employment. | |
| (8) Exclusion of Property in Contractor's Care, Custody or Control will be Eliminated. | |
| (9) Property Damage Liability Insurance will Provide Coverage for Explosion, Collapse and
Underground Damage. | |

5.4.6 Liability coverage for the following will be provided (subject to customary exclusions for professional liability) by a separate Protective Liability Policy issued by CONTRACTOR'S general liability carrier as additional insureds:

County of Jackson, State of Florida, Owner

5.4.10 The Contractual Liability coverage required by Paragraph 5.4.10 of the General Conditions shall provide coverage for not less than the following amounts:

- | | |
|---|-------------|
| (1) General Aggregate | \$1,000,000 |
| (2) Each Occurrence (Bodily Injury and Property Damage) | \$1,000,000 |

CONTRACTOR shall purchase and maintain property insurance upon the Work at the site in the amount of the full replacement cost thereof. This insurance shall:

5.6.1 include the interests of OWNER, CONTRACTOR, Subcontractors, and ENGINEER, ENGINEER's Consultants and any other persons or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an

insured;

5.6.2 be written on a Builder's Risk "all risk" or open peril or special causes of loss policy from that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework and Work in transit and shall insure against at least the following perils: fire, lighting, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils as may be specifically required by the Supplementary Conditions;

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

5.6.4 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; and

5.6.5 be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with thirty days written notice to each other additional insured to whom a certificate of insurance has been issued.

The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with this paragraph 5.6 shall comply with the requirements of Paragraph 5.8 of the General Conditions.

General Condition 6.13 is amended as follows: OWNER will obtain and pay for any permit required from the Florida Department of Environmental Protection covering the construction of the proposed project except for the Notice of Intent to Use Generic Permit (NOI), which if required Contractor must obtain.

END OF SECTION

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A.1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers or mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (ii)(a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits bears a reasonable relationship to the wage rates contained in the wage determination.
- (b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).
- (c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate) HUD or its designee shall refer the questions, including the views of any interested parties and the recommendation of HUD or its designee to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).
- (d) The wage rate (including fringe benefits where appropriately determined pursuant to subparagraphs (1)b or c of this paragraph) shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

(iv) If the contractor does not make payments to a trustee or other person, the contractor may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, that the Secretary of Labor has found, upon written request of the contractor that the applicable standards of the Davis-Bacon Act have been met, the Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers or mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of the wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract. HUD or its assignee may, after written notice to the contractor, sponsor or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during

the course of the contract and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act the contractor shall maintain records which show that the commitment to provide such benefits is enforceable that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all the information required to be maintained under 29 CFR Part 5.5(a)(3)(I). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149).

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

- (1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5 (a)(3)(I) and that such information is correct and complete.
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3.
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (4) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3(ii)(b) of this section.
- (5) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph A.3(I) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

(4)(I) Apprentices and Trainees. Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16 trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the

full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal Employment Opportunity.** The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246 as amended, and 29 CFR Part 30.

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

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

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

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1.3 and 5 are herein incorporated by reference in this contract.

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

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (not he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 4.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part "Whoever, for the purpose of ... influencing in any way the action of such Administration ... makes, utters or publishes any statement knowing the same to be false... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

- (1) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek, unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day which such individual was required or permitted to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.
- (3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.
- (4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

- (1) No laborer or mechanic shall be required to work in surrounding or under working conditions which are unsanitary, hazardous or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

- (2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).
- (3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

SECTION 01000

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

General

The unit price or lump sum bid items shall be compensation in full for furnishing all materials, labor, equipment and incidentals necessary to complete the item in place in every detail in accordance with the plans and specifications. There will be no direct compensation for clean-up, restoration of property, and incidentals not shown in the proposal, and such incidentals shall be included in the unit price for the related item of work.

Contractor shall notify Engineer in advance of exceeding 90% of any pay item quantity if it is anticipated that the quantity will be exceeded.

All pay items or details not described herein will be paid for based on the description in the Pay Item and the FDOT Standards for payment. If there is a conflict, the Pay Items in the Contract will prevail.

PART 2 – BID ITEMS

Mobilization and General Conditions

Perform preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities, record documents, and Contractor operating costs throughout the time of the Contract.

When the proposal includes a separate pay item for mobilization, partial payments will be made therefore in accordance with the following and prorated for in between percentages of work complete:

Percent of Original Contract Amount Earned (work complete)	Allowable Percent of the Lump Sum Price for Mobilization and General Conditions*
10	25
25	40
50	60
75	80
100	100

**Partial payments for any project will be limited to 10% of the original Contract amount for that project. Any remaining amount will be paid upon completion of all work on the project.*

The Contractor shall provide a breakdown of its lump sum bid for mobilization if requested by the Engineer/Owner. If the Engineer/Owner determines that the Contractor's bid for mobilization is erroneous, the entire bid will be rejected.

Prevention of Erosion and Water Pollution

The lump sum bid for this item shall be compensation in full for furnishing all labor equipment and materials for all erosion control, storm water control, pollution prevention, including hay bales, socks, turbidity curtains, Silt Fence, preparation and submittal of a SWPPP (if required), and all other items except silt fence.

Maintenance of Traffic

The lump sum bid for this item shall be compensation in full for furnishing all labor, equipment, signs,

Temporary Striping or Pavement Markings, and materials for all maintenance of traffic required by this contract, FDOT Standards, or as directed by Engineer for all FDOT, County, City or private roadways. This includes preparation and submittal of plans, signs, and markings for any detours needed for the work.

Clearing and Grubbing:

Incidental

Pavement Preparation

Incidental

Concrete

The contract unit price for this pay is per Lump Sum of concrete. The item shall be compensation in full for all labor, equipment, material, taxes, and incidentals to place and finish the concrete needed, including pumping and pump, and wire mesh or reinforcing steel as specified.

Suitable Fill Dirt

Fill Dirt will be paid per Lump Sum and includes hauling by truck and or barge to and from site or on site as needed and spreading compacting on site as needed to a minimum of 95% maximum density.

Contingency

This Lump Sum Item is for Owners use only and shall only be used when directed by County Engineer in writing by a Change Directive.

Stone or Crushed Concrete (Gravel Foundation):

The unit price for this item shall be compensation in full for furnishing, spreading, and compacting one (1) cubic yard of suitable material, complete and in place including placing and spreading. Stone and crushed concrete must be suitable for placing into the water.

Gravel shall be placed over the full width of trench, 1 foot thick. (No payment will be made for this item where the Contractor elects to use it for his own convenience or to fill over cuts.)

All other items see FDOT Standard Specifications.

END OF SECTION

SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.1 LOCATION OF WORK

All of the work of this Contract is located in Jackson County, Florida, at:

CR 278 (Peacock Bridge Road) from SR 73 to SR 71

1.2 WORK TO BE DONE

A. The Contractor shall furnish all labor, tools, materials, equipment, services, maintenance of traffic, and incidentals to complete all work required by these Contract Documents.

B. The Contractor shall perform the work complete, in place, disinfected where applicable and ready for continuous service, and shall include repairs, replacements and restoration required as a result of damages caused during this construction.

C. Furnish and install all materials, equipment and labor which is reasonably and properly inferable and necessary for the proper completion of the work, whether specifically indicated in the Contract Documents or not.

1.3 GENERAL DESCRIPTION OF CONTRACT

Lakepoint Drive Emergency Culvert Replacement Project

The Work includes the removal of Old 12' Diameter Pipe, Asphalt and debris. The replacement of the existing 12' diameter pipe or 2 new 8' diameter pipes, Pipe(s) must be asphalt coated. Pour in place or pre-casts headwalls, suitable structural fill material, Limerock, guardrails and road markings. The 7' Shoulders will be paved in the work area.

1.4 SUBSTANTIAL COMPLETION

Substantial completion will be determined by the Engineer and will be considered when all facilities and roadways are complete and ready for service.

1.5 DRAWINGS AND SPECIFICATIONS FURNISHED THE CONTRACTOR FOR CONSTRUCTION

Three (3) sets of Drawings and Specifications shall be furnished to the Contractor for construction at no charge. Additional sets may be purchased at the deposit amount contained in the Notice for Bids.

1.6 ABBREVIATIONS AND REFERENCES

A. Whenever reference is made to the furnishing of materials or testing thereof to conform to the standards of any technical society, organization or body, it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the date of advertisement for bids, even though reference has been made to an earlier standard. The following list of specifications is hereby made a part of the Contract the same as if herein repeated in full. In the event of any conflict between any of these specifications, standards, codes or tentative specifications, and the Specifications, the latter shall govern. In the event that one of the following conflict with another, the decision as to which shall govern will be decided by the Engineer, whose judgment will be final.

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

AASHTO	- The American Association of State Highway and Transportation Officials
ACI	- American Concrete Institute
AGA	- American Gas Association
AGMA	- American Gear Manufacturers Association
IEEE	- Institute of Electrical and Electronic Engineers
AISC	- American Institute of Steel Construction
AISI	- American Iron and Steel Institute
ANSI	- American National Standards Institute
API	- American Petroleum Institute
ASCE	- American Society of Civil Engineers
ASME	- American Society of Mechanical Engineers
ASTM	- American Society of Testing Materials
AWPA	- American Wood Preservers Association
AWS	- American Welding Society
AWWA	- American Water Works Association
FED. SPEC.	- Federal Specifications
CIPRA	- Cast Iron Pipe Research Association
DIPRA	- Ductile Iron Pipe Research Association
HI	- Standards of Hydraulic Institute
NCPI	- National Clay Pipe Institute
NEMA	- National Electrical Manufacturers Association
NFPA	- National Fire Protection Association
NEWWA	- New England Water Works Association
TCA	- Tile Council of America, Inc.
AWPA	- American Wood Preservation Association

NAVY SPEC.	- Navy Department Specification
NEC	- National Electric Code
NLMA	- National Lumber Manufacturers Association
PCA	- Portland Cement Association
SAE	- Society of Automotive Engineers Standards
SHBI	- Steel Housing Boiler Institute
SBCC	- Standard Building Code Congress International, Inc.
DOT	- Florida Department of Transportation
U.L., Inc.	- Underwriter's Laboratories, Inc.
OSHA	- Occupation Health and Safety Act
SSPC	- Steel Structures Painting Council

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

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

(Not Used)

END OF SECTION

GUIDE SPECIFICATION FOR PLANT-PRECAST CONCRETE PRODUCTS

PART 1: GENERAL

1.1 REFERENCES

1.2 GENERAL REQUIREMENTS

1.3 SUBMITTALS

- 1.3.1 Preconstruction Submittals
- 1.3.2 Shop Drawings
- 1.3.3 Precast Concrete Unit Data
- 1.3.4 Design Data
- 1.3.5 Test Reports
- 1.3.6 Certificates

1.4 DESIGN

- 1.4.1 Standard Precast Concrete Unit Design
- 1.4.2 Non-Standard Precast Concrete Unit Design
- 1.4.3 Franchise Precast Concrete Units
- 1.4.4 Joints and Sealants
- 1.4.5 Concrete Mix Design
 - 1.4.5.1 Concrete Proportions
 - 1.4.5.2 Durability and Performance Requirements
 - 1.4.5.2.1 Concrete Compressive Strength
 - 1.4.5.2.2 Water Cement Ratio
 - 1.4.5.2.3 Air Content

1.5 QUALITY ASSURANCE

- 1.5.1 NPCA Plant Certification
- 1.5.2 Qualifications, Quality Control and Inspection
 - 1.5.2.1 Qualifications
 - 1.5.2.2 Quality Control
 - 1.5.2.3 Inspection

1.6 HANDLING, STORAGE AND DELIVERY

- 1.6.1 Handling
- 1.6.2 Storage
- 1.6.3 Delivery
- 1.6.4 Final Acceptance

PART 2: PRECAST CONCRETE UNITS

2.1 MANUFACTURERS

2.2 MATERIALS

- 2.2.1 Cement
- 2.2.2 Silica Fume
- 2.2.3 Fly Ash and Pozzolans
- 2.2.4 Ground Granulated Blast-Furnace Slag
- 2.2.5 Water
- 2.2.6 Aggregates
 - 2.2.6.1 Aggregate Selection
 - 2.2.6.2 Aggregates for Lightweight Concrete

- 2.2.7 Admixtures
 - 2.2.7.1 Air-Entraining
 - 2.2.7.2 Accelerating, Retarding, Water Reducing [Moderate to High]
 - 2.2.7.3 Pigments
 - 2.2.7.4 Corrosion Inhibitors
- 2.2.8 Reinforcement
 - 2.2.8.1 Reinforcing Bars
 - 2.2.8.1.1 Deformed Billet-steel
 - 2.2.8.1.2 Deformed Low-alloy steel
 - 2.2.8.2 Reinforcing Wire
 - 2.2.8.2.1 Plain Wire
 - 2.2.8.2.2 Deformed Wire
 - 2.2.8.3 Welded Wire Reinforcement
 - 2.2.8.3.1 Plain Wire
 - 2.2.8.3.2 Deformed Wire
 - 2.2.8.4 Epoxy-Coated Reinforcement
 - 2.2.8.4.1 Reinforcing Bars
 - 2.2.8.4.2 Wire and Welded Wire Reinforcement
 - 2.2.8.5 Galvanized Reinforcement
- 2.2.9 Inserts and Embedded Metal
 - 2.2.9.1 Structural Steel Plates, Angles, etc.
 - 2.2.9.2 Hot-dipped Galvanized
 - 2.2.9.3 Proprietary Items
- 2.2.10 Joint Sealants and Joint Gaskets
 - 2.2.10.1 Rubber Gaskets for Circular Concrete Sewer Pipe and Culvert Pipe
 - 2.2.10.2 External Sealing Bands for Noncircular Sewer, Storm Drain and Culvert Pipe
 - 2.2.10.3 Preformed Flexible Joint Sealants for Concrete Pipe, Manholes, and Manufactured Box Sections
 - 2.2.10.4 Elastomeric Joint Sealants
- 2.2.11 Pipe Entry Connectors
- 2.2.12 Grout
 - 2.2.12.1 Nonshrink Grout
 - 2.2.12.2 Cementitious Grout

2.3 MANUFACTURE

- 2.3.1 Forms
- 2.3.2 Reinforcement
- 2.3.3 Embedded Items
- 2.3.4 Concrete
 - 2.3.4.1 Concrete Mixing
 - 2.3.4.2 Concrete Placing
 - 2.3.4.2.1 Cold Weather Concreting
 - 2.3.4.2.2 Hot Weather Concreting
 - 2.3.4.3 Concrete Curing
 - 2.3.4.3.1 Curing by Moisture Retention
 - 2.3.4.3.2 Curing with Heat and Moisture
 - 2.3.4.4 Surface Finish
 - 2.3.4.4.1 Formed Non-Architectural Surfaces
 - 2.3.4.4.2 Unformed Surfaces
 - 2.3.4.4.3 Special Finishes
 - 2.3.4.4.4 Architectural Finishes
 - 2.3.4.5 Stripping Precast Concrete Units From Forms
 - 2.3.4.6 Patching and Repair
 - 2.3.4.6.1 Repairing Minor Defects
 - 2.3.4.6.2 Repairing Honeycombed Areas
 - 2.3.4.6.3 Repairing Major Defects

2.3.4.7 Shipping Precast Concrete Units

PART 3: EXECUTION

3.1 INSTALLATION

- 3.1.1 Site Access
- 3.1.2 Installation
- 3.1.3 Watertightness

3.2 FIELD QUALITY CONTROL

- 3.2.1 Job Site tests
 - 3.2.1.2 Vacuum Testing
 - 3.2.1.2 Hydrostatic Testing

NOTE: This guide specification covers the requirements for plant manufactured precast concrete products.

Comments and suggestions regarding this specification are welcome and should be directed to the NPCA Technical Services Department.

Please visit the NPCA Web site at www.precast.org.

Brackets are used in the text to indicate designer choices or locations where text must be supplied by the designer.

PART 1: GENERAL

1.1 REFERENCES

Where applicable, the latest editions of the following standards shall form a part of this specification to the extent referenced. The publications are referenced to in the text of this guide specification by the basic designation only.

American Association of State Highway and Transportation Officials (AASHTO)

- Standard Specifications for Highway Bridges
- Guide Specifications for Structural Design of Sound Barriers
- Standard Specification for Transportation Materials and Methods of Sampling and Testing

ACI INTERNATIONAL (ACI)

- ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete
- ACI 211.2 Standard Practice for Selecting Proportions for Structural Lightweight Concrete

ACI 211.3	Guide for Selecting Proportions for No-Slump Concrete
ACI 304R	Guide for Measuring, Mixing, Transporting, and Placing Concrete
ACI 305R	Hot Weather Concreting
ACI 306R	Cold Weather Concreting
ACI 309R	Consolidation of Concrete
ACI 318	Building Code Requirements for Structural Concrete
ACI 350	Code Requirements for Environmental Engineering Concrete Structures and Commentary
ACI 517.2R	Accelerated Curing of Concrete at Atmospheric Pressure

AMERICAN CONCRETE PIPE ASSOCIATION (ACPA)

ACPA Concrete Pipe Handbook

ACPA Design Manual

ASTM INTERNATIONAL (ASTM)

ASTM A 36	Specification for Carbon Structural Steel
ASTM A 82	Specification for Steel Wire, Plain, for Concrete Reinforcement
ASTM A 184	Specification for Fabricated Deformed Steel Mats for Concrete Reinforcement
ASTM A 185	Specification for Steel Welded Wire Reinforcement, Plain, for Concrete
ASTM A 496	Specification for Steel Wire, Deformed, for Concrete Reinforcement
ASTM A 497	Specification for Steel Welded Wire Reinforcement, Deformed, for Concrete
ASTM A 615	Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement

ASTM A 706	Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement
ASTM A 767	Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement
ASTM A 775	Specification for Epoxy-Coated Reinforcing Steel Bars
ASTM A 884	Specification for Epoxy-Coated Steel and Welded Wire Fabric for Reinforcement
ASTM C 14	Standard Specification for Concrete Sewer, Storm Drain, and Culvert Pipe
ASTM C 31	Standard Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C 33	Specification for Concrete Aggregates
ASTM C 39	Test Method for Compressive Strength of Cylindrical Concrete Specimens
ASTM C 40	Test Method for Organic Impurities in Fine Aggregates for Concrete
ASTM C 42	Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
ASTM C 70	Standard Test Method for Surface Moisture in Fine Aggregate
ASTM C 76	Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe
ASTM C 78	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
ASTM C 94	Specification for Ready-Mixed Concrete
ASTM C 117	Standard Test Method for Materials Finer than 75- μm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C 123	Standard Test Method for Lightweight Particles in Aggregate

ASTM C 125	Standard Terminology Relating to Concrete and Concrete Aggregates
ASTM C 136	Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C 138	Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C 142	Standard Test Method for Clay Lumps and Friable Particles in Aggregates
ASTM C 143	Test Method for Slump of Hydraulic Cement Concrete
ASTM C 150	Specification for Portland Cement
ASTM C 172	Standard Practice for Sampling Freshly Mixed Concrete
ASTM C 173	Test Method for Air Content of Freshly Mixed Concrete by Volumetric Method
ASTM C 192	Practice for Making and Curing Concrete Test Specimens in the Laboratory
ASTM C 231	Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 260	Specification for Air-Entraining Admixtures for Concrete
ASTM C 330	Specification for Lightweight Aggregates for Structural Concrete
ASTM C 361	Specification for Reinforced Concrete Low-Head Pressure Pipe
ASTM C 403	Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance
ASTM C 443	Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets
ASTM C 478	Specification for Precast Reinforced Concrete Manhole Sections
ASTM C 494	Standard Specification for Chemical Admixtures for Concrete

ASTM C 497	Test Methods for Concrete Pipe, Manhole Sections, or Tile
ASTM C 506	Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
ASTM C 507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
ASTM C 566	Test Method for Total Evaporable Moisture Content of Aggregate by Drying
ASTM C 595	Specification for Blended Hydraulic Cements
ASTM C 617	Standard Practice for Capping Cylindrical Concrete Specimens
ASTM C 618	Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete
ASTM C 655	Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe
ASTM C 666	Test Method for Resistance of Concrete to Rapid Freezing and Thawing
ASTM C 685	Specification for Concrete Made by Volumetric Batching and Continuous Mixing
ASTM C 805	Test Method for Rebound Number of Hardened Concrete
ASTM C 822	Standard Terminology Relating to Concrete Pipe and Related Products
ASTM C 825	Specification for Precast Concrete Barriers
ASTM C 857	Practice for Minimum Structural Design Loading for Underground Precast Concrete Utility Structures
ASTM C 858	Specification for Underground Precast Concrete Utility Structures
ASTM C 877	Specification for External Sealing Bands for Concrete Pipe, Manholes and Precast Box Sections

ASTM C 890	Practice for Minimum Structural Design Loading for Monolithic or Sectional Precast Concrete Water and Wastewater Structures
ASTM C 891	Practice for Installation of Underground Precast Concrete Utility Structures
ASTM C 913	Specification for Precast Concrete Water and Wastewater Structures
ASTM C 915	Specification for Precast Reinforced Concrete Crib Wall Members
ASTM C 920	Specification for Elastomeric Joint Sealants
ASTM C 923	Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals
ASTM C 924	Practice for Testing Concrete Pipe Sewer Lines by Low-Pressure Air Test Method
ASTM C 979	Specification for Pigments for Integrally Colored Concrete
ASTM C 985	Standard Specification for Nonreinforced Concrete Specified Strength Culvert, Storm Drain, and Sewer Pipe
ASTM C 990	Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
ASTM C 1018	Test Method for Flexural Toughness and First-Crack Strength of Fiber-Reinforced Concrete (Using Beam with Third-Point Loading)
ASTM C 1037	Practice for Inspection of Underground Precast Concrete Utility Structures
ASTM C 1064	Standard Test Method for Temperature of Freshly Mixed Portland Cement Concrete
ASTM C 1107	Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)

ASTM C 1116	Standard Specification for Fiber-Reinforced Concrete and Shotcrete
ASTM C 1582	Standard Specification for Admixtures to Inhibit Chloride-Induced Corrosion of Reinforcing Steel in Concrete
ASTM C 1214	Standard Test Method for Concrete Pipe Sewerlines by Negative Air Pressure (Vacuum) Test Method
ASTM C 1227	Standard Specification for Precast Concrete Septic Tanks
ASTM C 1231	Standard Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
ASTM C 1240	Standard Specification for Use of Silica Fume for Use as a Mineral Admixture in Hydraulic-Cement Concrete, Mortar, and Grout
ASTM C 1244	Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill
ASTM C 1260	Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C 1293	Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction
ASTM C 1399	Test Method for Obtaining Average Residual-Strength of Fiber-Reinforced Concrete
ASTM C 1433	Standard Specification for Precast Reinforced Concrete Box Sections for Culverts, Storm Drains and Sewers
ASTM C 1478	Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes and Laterals
ASTM C 1504	Standard Specification for Manufacture of Precast Reinforced Concrete Three-Sided Structures for Culverts, Storm Drains
ASTM C 1550	Standard Test Method for Flexural Toughness of Fiber Reinforced Concrete (Using Centrally Loaded Round Panel)

ASTM C 1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM C 1603	Standard Test Method for Measurement of Solids in Water
ASTM C 1611	Standard Test Method for Slump Flow of Self-Consolidating Concrete
ASTM C1613	Standard Specification for Precast Concrete Grease Interceptors
ASTM D 2240	Standard Test Method for Rubber Property—Durometer Hardness
ASTM G 109	Standard Test Method for Determining the Effects of Chemical Admixtures on the Corrosion of Embedded Steel Reinforcement in Concrete Exposed to Chloride Environments

AMERICAN WELDING SOCIETY (AWS)

AWS D 1.1	Structural Welding Code - Steel
AWS D 1.4	Structural Welding Code - Reinforcing Steel

CONCRETE REINFORCING STEEL INSTITUTE (CRSI)

Manual of Standard Practice
Placing Reinforcing Bars

NATIONAL PRECAST CONCRETE ASSOCIATION (NPCA)

NPCA QC Manual	Quality Control Manual for Precast Concrete Plants
NPCA Selected ASTM Standards	ASTM Standards for Precast Concrete

PRECAST/PRESTRESSED CONCRETE INSTITUTE (PCI)

MNL-120	PCI Design Handbook
MNL-122	Architectural Precast Concrete

1.2 GENERAL REQUIREMENTS

Precast concrete units shall be designed and fabricated by an experienced and acceptable precast concrete manufacturer. The manufacturer shall have been regularly and continuously

engaged in the manufacture of precast concrete units similar to that indicated in the project specifications or drawings for at least [] years.

1.3 SUBMITTALS

The following items may be submitted upon request by the customer.

1.3.1 Preconstruction Submittals

Submit quality control procedures established by the precast manufacturer in accordance with the NPCA Quality Control Manual for Precast Concrete Plants.

1.3.2 Shop Drawings

Drawings for Standard Precast Concrete Units

The drawings for standard precast concrete units shall be shop drawings furnished by the precast concrete producer for approval by the customer. These drawings shall demonstrate that the applicable industry design standards have been met. Installation and construction information shall be included on shop drawings upon request. Details of steel reinforcement size and placement as well as supporting design calculations, if appropriate, shall be included. The precast concrete units shall be produced in accordance with the approved drawings. Drawings shall indicate assumptions used in the design of standard units. It is the responsibility of the project's engineer-of-record to verify that the design assumptions are suitable for the proposed application.

Drawings for Custom-Made Precast Concrete Units

The drawings for custom-made precast concrete units shall be shop drawings furnished by the precast concrete producer for approval by the customer. These drawings shall show complete design, installation, and construction information in such detail as to enable the customer to determine the adequacy of the proposed units for the intended purpose. Details of steel reinforcement size and placement as well as supporting design calculations, if appropriate, shall be included. The precast concrete units shall be produced in accordance with the approved drawings.

Drawings Submitted by the Customer

The customer or customer's agent (specifier) may provide the precast concrete manufacturer with drawings for custom-made precast concrete units. Drawings shall be prepared and stamped by a licensed professional engineer. The customer or customer's agent may consult the precast concrete manufacturer during the design process on relevant production practices that may affect the design, production, handling and installation of the custom-made precast concrete unit. The customer or customer's agent accepts all liability associated with the use of the provided drawings.

1.3.3 Precast Concrete Unit Data

Standard Precast Concrete Units

For standard precast concrete units, the precast concrete producer shall supply cut sheets showing conformance to project drawings and requirements and to applicable industry design standards listed in this specification.

Proprietary Precast Concrete Units

For proprietary precast concrete units, the precast concrete producer shall supply standard plans or informative literature. Supporting calculations and design details shall be available upon request. The precast concrete producer shall provide sufficient information as to demonstrate that such products will perform the intended task.

Anchorage, Lifting Inserts and Devices

For anchors, lifting inserts and other devices, the precast concrete producer shall provide product data sheets and proper installation instructions upon request. The Precast concrete unit dimensions and safe working load shall be clearly indicated.

Accessory Items

For items including, but not limited to sealants, gaskets, pipe entry connectors, steps, racks and other items installed before or after delivery, the precast concrete producer shall include proper installation instructions and relevant product data upon request.

1.3.4 Design Data

Upon request, the precast concrete producer shall supply precast concrete unit design calculations and concrete mix design proportions and appropriate mix design test data. Structural design calculations shall be signed by a licensed professional engineer.

1.3.5 Test Reports

Upon request, the precast concrete producer shall supply copies of material certifications and/or laboratory test reports, including mill tests and all other test data, for portland cement, blended cement, pozzolans, ground granulated blast-furnace slag, silica fume, aggregate, admixtures, and curing compound proposed for use on this project.

Upon request, the precast concrete producer shall submit copies of test reports showing that the mix has been successfully tested to produce concrete with the properties specified and will be suitable for the project conditions. Such tests may include compressive strength, flexural strength, plastic or hardened air content, freeze-thaw durability, abrasion and absorption. Special tests for precast concrete items shall be clearly detailed in the specifications.

Upon request, the precast concrete producer will supply copies of in-plant QA/QC inspection reports.

1.3.6 Certificates

Submit quality control procedures established in accordance with NPCA Quality Control Manual for Precast Concrete Plants or verification of current NPCA Plant Certification.

1.4 DESIGN

1.4.1 Standard Precast Concrete Unit Design

Design standard precast concrete units to withstand indicated design load conditions in accordance with applicable industry design standards [ACI 318, ACI 350, ASTM, ACPA Design Manual, PCI MNL-120, and AASHTO]. Design must also consider stresses induced during handling, shipping and installation in order to avoid product cracking or other handling damage. Design loads for precast concrete units shall be indicated on the shop drawings.

1.4.2 Non-Standard Precast Concrete Unit Design

Design calculations and drawings of non-standard precast units shall be prepared and signed by a licensed professional engineer, and submitted for customer approval prior to fabrication. Calculations shall include the analysis of units for lifting stresses and the sizing of lifting devices.

1.4.3 Franchise Precast Concrete Units

Products manufactured under franchise arrangements shall conform to all the requirements specified by the franchiser. Items not included in the franchise specification but included in this specification shall conform to the requirements in this specification.

1.4.4 Joints and Sealants

Joints and sealants between adjacent units shall be of the type and configuration indicated on shop drawings meeting specified design and performance requirements.

1.4.5 Concrete Mix Design

1.4.5.1 Concrete Proportions

Selection of proportions for concrete shall be based on the methodology presented in ACI 211.1 for normal weight concrete, ACI 211.2 for lightweight concrete and ACI 211.3 for no-slump concrete. The concrete proportions shall be developed using the same type and brand of cement, the same type and brand of pozzolan, the same type and gradation of aggregates, and the same type and brand of admixture that will be used in the manufacture of precast concrete units for the project. Accelerators containing calcium chloride shall not be used in precast concrete containing reinforcing steel or other embedded metal items.

Upon request, the precast concrete producer shall submit a mix design for each strength and type of concrete that will be used. Submitted mix designs shall include the quantity, type, brand and applicable data sheets for all mix design constituents as well as documentation indicating conformance with applicable reference specifications.

The use of self-consolidating concrete is permitted provided that mix design proportions and constituents meet the requirements of this specification.

1.4.5.2 Durability and performance requirements

1.4.5.2.1 Concrete Compressive Strength

Precast concrete units shall have a 28-day compressive strength (f'c) of [] MPa, [] psi.

1.4.5.2.2 Water-Cement Ratio

Concrete that will be exposed to freezing and thawing shall contain entrained air (see 1.4.5.2.3) and shall have water-cement ratios of 0.45 or less. Concrete which will not be exposed to freezing, but which is required to be watertight, shall have a water-cement ratio of 0.48 or less if the concrete is exposed to fresh water, or 0.45 or less if exposed to brackish water or sea water. For corrosion protection, reinforced concrete exposed to deicer salts, brackish water or seawater shall have a water-cement ratio of 0.40 or less.

1.4.5.2.3 Air Content

The air content of concrete that will be exposed to freezing conditions shall be within the limits given below.

Nominal Maximum Aggregate Size (in)	Air Content %	
	Severe Exposure	Moderate Exposure
3/8	6.0 to 9.0	4.5 to 7.5
1/2	5.5 to 8.5	4.0 to 7.0
3/4	4.5 to 7.5	3.5 to 6.5
1	4.5 to 7.5	3.0 to 6.0
1-1/2	4.5 to 7.0	3.0 to 6.0
* For specified compressive strengths greater than 5000 psi, air content may be reduced 1%		

1.5 QUALITY ASSURANCE

Precast concrete producer shall demonstrate adherence to the standards set forth in the NPCA Quality Control Manual for Precast Concrete Plants. The precast concrete producer shall meet requirements written in subparagraph [1.5.1 or 1.5.2.]

NOTE: The use of subparagraph 1.5.1 may limit competition. Verify the availability of NPCA Certified precast concrete producers in the bidding area. Visit www.precast.org for a list of NPCA Certified precast concrete producers in your area.

1.5.1 NPCA Plant Certification

The precast concrete producer shall be certified by the NPCA Plant Certification Program prior to and during production of the products for this project.

1.5.2 Qualifications, Quality Control and Inspection

1.5.2.1 Qualifications

The precast concrete producer shall have been in the business of producing precast concrete units similar to those specified for a minimum of [] years. The precast concrete producer shall maintain a permanent quality control department or retain an independent testing agency on a continuing basis. The agency shall issue a report, signed by a licensed professional engineer, detailing the ability of the precast concrete producer to produce quality units consistent with industry standards.

1.5.2.2 Quality Control

The precast concrete producer shall show that the following quality control tests are performed as required and in accordance with the ASTM International standards indicated.

- a. Slump: A slump test shall be performed for each 150 cu yd of concrete produced per mix design, or once a day, whichever comes first. Slump tests shall be performed in accordance with ASTM C 143. Slump flow tests on self-consolidating concrete mixes shall be performed in accordance with ASTM C 1611.
- b. Temperature: The temperature of fresh concrete shall be measured when slump or air content tests are made and when compressive test specimens are made in accordance with ASTM C 1064
- c. Compressive Strength: At least four compressive strength specimens shall be made for each 150 cubic yards of concrete of each mix design in accordance with the following applicable ASTM standards; C 31, C 39, C 192, C 497 [no-slump concrete].
- d. Air Content: Tests for air content shall be made on air-entrained, wet-cast concrete for each 150 cu yd of concrete, per mix design, but not less often than once each day when air-entrained concrete is used. The air content shall be determined in accordance with either ASTM C 231 or ASTM C 173 for normal weight aggregates and ASTM C 173 for lightweight aggregates.
- e. Density (Unit Weight): Tests for density shall be performed a minimum of once per week to verify the yield of batch mixes. Density tests shall be performed for each 100 cu yd of lightweight concrete in accordance with ASTM C 138. Density tests shall be performed for each 100 cu yd of concrete per mix design, but not less often than once per day when volumetric batch equipment is used.

NOTE: Producers utilizing self-consolidating concrete (SCC) shall conform to the quality control requirements established in the NPCA QC manual.

The precast concrete producer shall submit documentation demonstrating compliance with the above subparagraphs.

1.5.2.3 Inspection

The customer or customer's agent (specifier) may place an inspector in the plant when the units covered by this specification are being manufactured. The precast concrete producer shall give notice of [] days prior to the time the precast concrete units will be available for plant inspection.

1.6 HANDLING, STORAGE AND DELIVERY

1.6.1 Handling

Precast concrete units shall be handled and transported in a manner to minimize damage. Lifting devices or holes shall be consistent with industry standards. Lifting shall be accomplished with methods or devices intended for this purpose as indicated on shop drawings. Upon request, the precast concrete producer shall provide documentation on acceptable handling methods for the product.

1.6.2 Storage

Precast concrete units shall be stored in a manner that will minimize potential damage.

1.6.3 Delivery

Precast concrete units shall be delivered to the site in accordance with the delivery schedule to avoid excessive build-up of units in storage at the site. Upon delivery to the jobsite all precast concrete units shall be inspected by the customer or customer's agent for quality and final acceptance.

1.6.4 Final Acceptance

Upon final acceptance, the customer or customer's agent acknowledges and understands the appropriate methods for handling the accepted precast concrete unit(s). Upon acceptance by the customer or customer's agent, the precast concrete manufacturer is not responsible for replacing damaged product resulting from improper handling practices on the job site.

PART 2: PRECAST CONCRETE UNITS

2.1 MANUFACTURERS

The precast concrete manufacturer must meet the requirements established in section 1.5 Quality Assurance.

2.2 MATERIALS

Except as otherwise specified, material shall conform to the following section.

2.2.1 Cement

ASTM C 150 (Type I, II, III or V)

ASTM C 595 (for Blended Cements)

2.2.2 Silica Fume

ASTM C 1240

2.2.3 Fly Ash and Pozzolans

ASTM C 618

2.2.4 Ground Granulated Blast-Furnace Slag

ASTM C 989

2.2.5 Water

ASTM C1602

[The use of reclaimed/recycled process water shall be permitted.]

2.2.6 Aggregates

2.2.6.1 Aggregate Selection

NOTE: Select gradation(s) based on job requirements and constraints. The nominal maximum aggregate size should not exceed one-fifth the narrowest dimension between sides of forms, nor three-quarters the minimum clear spacing between individual reinforcing bars or wires.

Aggregates shall conform to ASTM C 33. Aggregates shall not contain any substance which may be deleteriously reactive with the alkalis in the cement. Upon request, the precast concrete producer shall provide documentation indicating the aggregates are not susceptible to alkali-aggregate reaction.

2.2.6.2 Aggregates for Lightweight Concrete

ASTM C 330

2.2.7 Admixtures

2.2.7.1 Air-Entraining

ASTM C 260

NOTE: Air-entraining requirements may be deleted when the project is located in a nonfreezing climate or will not be exposed to freezing and thawing. However, certain product-specific ASTM Standards require the use of air-entrainment regardless of the climate.

2.2.7.2 Accelerating, Retarding, Water Reducing [Moderate to High]

ASTM C 494

2.2.7.3 Pigments

ASTM C 979

2.2.7.4 Corrosion Inhibitors

ASTM C 1582

NOTE: ASTM C 1582 corrosion inhibitors may be specified in lieu of epoxy-coated reinforcement when corrosion protection is required.

2.2.8 Reinforcement

2.2.8.1 Reinforcing Bars

NOTE: Specify ASTM A 706 reinforcing steel when welding or bending of reinforcement bars is critical. In addition, ASTM A 775 epoxy-coated reinforcing may be specified where extra reinforcement corrosion protection is required.

2.2.8.1.1 Deformed Billet-Steel

ASTM A 615

2.2.8.1.2 Deformed Low-Alloy Steel

ASTM A 706

2.2.8.2 Reinforcing Wire

2.2.8.2.1 Plain Wire

ASTM A 82

2.2.8.2.2 Deformed Wire

ASTM A 496

2.2.8.3 Welded Wire Reinforcement

2.2.8.3.1 Plain Wire

ASTM A 185

2.2.8.3.2 Deformed Wire

ASTM A 497

2.2.8.4 Epoxy Coated Reinforcement

2.2.8.4.1 Reinforcing Bars

ASTM A 775

2.2.8.4.2 Wires and Welded Wire Reinforcement

ASTM A 884

2.2.8.5 Galvanized Reinforcement

ASTM A 767

2.2.9 Inserts and Embedded Metal

All items embedded in concrete shall be of the type required for the intended use and meet the following standards.

2.2.9.1 Structural Steel Plates, Angles, etc.

ASTM A 36

2.2.9.2 Hot-Dipped Galvanized

ASTM A 152

2.2.9.3 Proprietary Items

In accordance with manufacturers published literature

2.2.10 Joint Sealants and Joint Gaskets

2.2.10.1 Rubber Gaskets for Circular Concrete Sewer Pipe and Culvert Pipe

ASTM C 443

2.2.10.2 External Sealing Bands for Noncircular Sewer, Storm Drain and Culvert Pipe

ASTM C 877

2.2.10.3 Preformed Flexible Joint Sealants for Concrete Pipe, Manholes, and Manufactured Box Sections

ASTM C 990

2.2.10.4 Elastomeric Joint Sealants

ASTM C 920

2.2.11 Pipe Entry Connectors

ASTM C 923

ASTM C 1478

2.2.12 Grout

2.2.12.1 Nonshrink Grout

ASTM C 1107

2.2.12.2 Cementitious Grout

Shall be of suitable mix design for the intended use, consisting of Portland cement, sand, and water. [Provide air entrainment for grout exposed to corrosive conditions or severe weather.]

NOTE: Air-entraining requirements may be deleted when the project is located in a nonfreezing climate or when freeze-thaw durability is not required.

2.3 MANUFACTURE

Manufacture shall conform to the NPCA Quality Control Manual for Precast Concrete Plants unless specified otherwise.

2.3.1 Forms

Forms for manufacturing precast concrete units shall be of the type and design consistent with industry standards and practices. They should be capable of consistently providing uniform products and dimensions. Forms shall be constructed so that the forces and vibrations to which the forms will be subjected cause no damage to the precast concrete unit.

Forms shall be cleaned of concrete build-up after each use.

Form release agents shall be applied according to the manufacturer's recommendations and shall not be allowed to build up on the form casting surfaces.

2.3.2 Reinforcement

Applicable ASTM International and/or ACI 318 standards for placement and splicing

Cages of reinforcement shall be fabricated either by tying the bars, wires or welded wire reinforcement into rigid assemblies or by welding, where permissible, in accordance with AWS D1.4. Reinforcing shall be positioned as specified by the design and so that the concrete cover conforms to requirements. The tolerance on concrete cover shall be one-third of that specified but not more than 1/2 in. Concrete cover shall not be less than 1/2 in., unless otherwise specified. Positive means shall be taken to assure that the reinforcement does not move significantly during the casting operations.

2.3.3 Embedded Items

Embedded items shall be positioned at locations specified in the design documents. Welding shall be performed in accordance with AWS D1.1 when necessary. Inserts,

plates, weldments, lifting devices and other items to be embedded in precast concrete units shall be held rigidly in place so that they do not move significantly during casting operations.

2.3.4 Concrete

2.3.4.1 Concrete Mixing

Mixing operations shall produce batch-to-batch uniformity of strength, consistency, and appearance.

2.3.4.2 Concrete Placing

Conventional concrete shall be deposited into forms as near to its final location as practical. Self-consolidating concrete shall be placed in a manner in which it flows and consolidates without segregation or air entrapment. The free fall of the concrete shall be kept to a minimum. Concrete shall be consolidated in such a manner that segregation of the concrete is minimized and honeycombed areas are kept to a minimum. Consolidation efforts are often not required when using self-consolidating concrete. Vibrators used to consolidate concrete shall have frequencies and amplitudes sufficient to produce well-consolidated concrete.

2.3.4.2.1 Cold Weather Concreting

Recommendations for cold weather concreting are given in detail ACI 306 R. Adequate equipment shall be provided for heating concrete materials and protecting concrete during freezing or near-freezing weather. All concrete materials and all reinforcement, forms, fillers, and ground with which concrete is to come in contact shall be free from frost. Frozen materials or materials containing ice shall not be used. In cold weather the temperature of concrete at the time of placing shall not be below 45° F. Concrete that freezes before its compressive strength reaches 500 psi shall be discarded.

2.3.4.2.2 Hot Weather Concreting

Recommendations for hot weather concreting are given in ACI 305 R.

During hot weather, proper attention shall be given to constituents, production methods, handling, placing, protection, and curing to prevent excessive concrete temperatures or water evaporation that could impair required strength or serviceability of the member or structure. The temperature of concrete at the time of placing shall not exceed 90° F.

2.3.4.3 Concrete Curing

Commence curing operations immediately following the initial set of the concrete and completion of surface finishing.

NOTE: Due to the immediacy of form removal, dry-cast products have a tendency to undergo undesirable accelerated drying. Consequently, early curing periods are most critical to ensure protection from extreme temperatures and dryness. Dry-cast products must be protected from drafts and wind to prevent plastic shrinkage cracking.

2.3.4.3.1 Curing by Moisture Retention

Moisture shall be prevented from evaporating from exposed surfaces until adequate strength for stripping the precast concrete unit from the forms is reached by one of the following methods:

- Cover with polyethylene sheets a minimum of 6 mils thick (ASTM C 171)
- Cover with burlap or other absorptive material and keep continually moist
- Use of a membrane-curing compound applied at a rate not to exceed 200 sq. ft. per gallon, or per manufacturers' recommendations (ASTM C 309)

[Surfaces that will be exposed to weather during service shall be cured as above a minimum of [] days. Forms shall be considered effective in preventing evaporation from the contact surfaces. If air temperature is below 50°F the curing period shall be extended.]

2.3.4.3.2 Curing with Heat and Moisture

Concrete shall not be subjected to steam or hot air until after the concrete has attained its initial set. Steam, if used, shall be applied within a suitable enclosure, which permits free circulation of the steam in accordance with ACI 517.2R. If hot air is used for curing, precautions shall be taken to prevent moisture loss from the concrete. The temperature of the concrete shall not be permitted to exceed 150° F. These requirements do not apply to products cured with steam under pressure in an autoclave.

2.3.4.4 Surface Finish

Unformed surfaces of wet-cast precast concrete products shall be finished as specified. If no finishing procedure is specified, such surfaces shall be finished using a strike-off to level the concrete with the top of the form.

2.3.4.4.1 Formed Non-Architectural Surfaces

Surfaces shall be cast against approved forms in accordance with standard industry practices in cleaning forms, designing concrete mixes, placing and curing concrete. Normal color variations, form joint marks, small surface holes caused by air bubbles, and minor chips and spalls will be accepted. Major imperfections, excessive honeycombing or other major defects shall not be permitted.

2.3.4.4.2 Unformed Surfaces

Surfaces shall be finished with a vibrating screed, or by hand with a float. Normal color variations, minor indentations, minor chips and spalls will be accepted. Major imperfections, excessive honeycombing or other major defects shall not be permitted.

2.3.4.4.3 Special Finishes

Troweled, broom or other finishes shall be according to the requirements of project documents and performed per industry standards or supplier specifications.

Precast concrete producers shall submit sample finishes for approval when required by the project documents. The sample finishes shall be approved prior to the start of production.

2.3.4.4.4 Architectural Finishes

Architectural finishes shall be according to the requirements of project documents and performed per industry standards or supplier specifications.

Precast concrete producers shall submit sample finishes for approval when required by the project documents. Full-size mockups are recommended for the approval of architectural finishes, because color variations and surface imperfections are not always apparent on small scale samples. The sample finishes shall be approved prior to the start of production.

2.3.4.5 Stripping Precast Concrete Units From Forms

Precast concrete units shall not be removed from the forms until the concrete reaches the compressive strength for stripping required by the design. If no such requirement exists, products may be removed from the forms after the final set of concrete provided that stripping damage is minimal. Stripping strengths shall be routinely measured to ensure product has attained sufficient strength for safe handling.

2.3.4.6 Patching and Repair

No repair is required to formed surfaces that are relatively free of air voids and honeycombed areas, unless the surfaces are required by the design to be finished.

2.3.4.6.1 Repairing Minor Defects

Defects that will not impair the functional use or expected life of a precast concrete unit may be repaired by any method that does not impair the product.

2.3.4.6.2 Repairing Honeycombed Areas

When honeycombed areas are to be repaired, all loose material shall be removed and the areas cut back into essentially horizontal or vertical planes to a depth at which coarse aggregate particles break under chipping rather than being dislodged. Proprietary repair materials shall be used in accordance with the manufacturer's instructions. If a proprietary repair material is not used, the area shall be saturated with water. Immediately prior to repair, the area should be damp, but free of excess water. A cement-sand grout or an approved bonding agent shall be applied to the chipped surfaces, followed immediately by consolidating an appropriate repair material into the cavity.

2.3.4.6.3 Repairing Major Defects

Defects in precast concrete products which impair the functional use or the expected life of products shall be evaluated by qualified personnel to determine if repairs are feasible and, if so, to establish the repair procedure.

2.3.4.7 Shipping Precast Concrete Units

Precast concrete units shall not be shipped until they are at least [] days old, unless it can be shown that the concrete strength has reached at least 75% of the specified 28-day strength, or that damage will not result, impairing the performance of the product.

PART 3: EXECUTION

3.1 INSTALLATION

3.1.1 Site Access

The general contractor shall be responsible for providing adequate access to the site to facilitate hauling, storage and proper handling of the precast concrete units.

3.1.2 Installation

- Precast concrete units shall be installed to the lines and grades shown in the contract documents or otherwise specified.
- Precast concrete units shall be lifted by suitable lifting devices at points provided by the precast concrete producer.
- Precast concrete units shall be installed in accordance with applicable industry standards. Upon request, the precast concrete producer shall provide installation instructions.
- Field modifications to the product shall relieve the precast producer of liability regardless if such modifications result in the failure of the precast concrete unit.

3.1.3 Watertightness

Where watertightness is a necessary performance characteristic of the precast concrete unit's end use, watertight joints, pipe-entry connectors and inserts should be used to ensure the integrity of the entire system.

3.2 FIELD QUALITY CONTROL

3.2.1 Job Site tests

When watertightness testing is required for a precast concrete structure, one of the following methods may be followed:

3.2.1.2 Vacuum Testing

Prior to backfill, vacuum test system according to [ASTM C1244 (for manholes)]
[ASTM C 1227 (for septic tanks)]

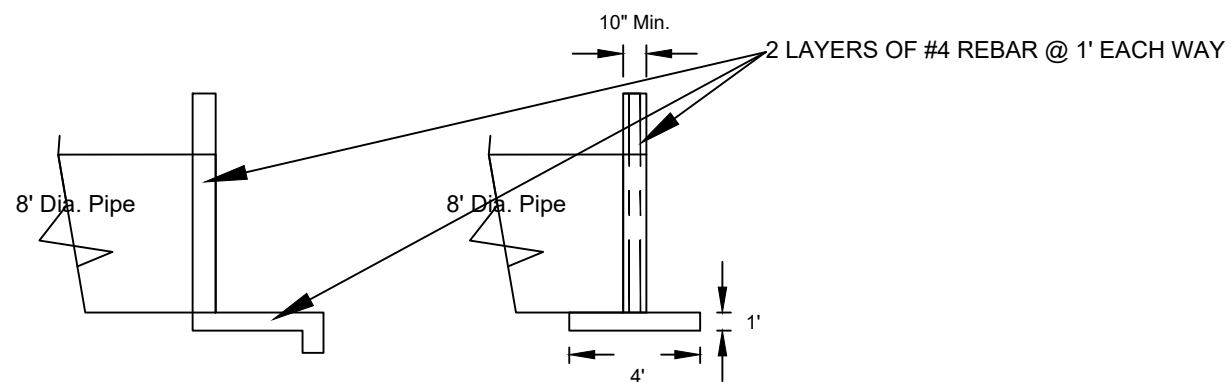
NOTE: Manholes and septic tanks should be tested prior to backfilling to verify the integrity of the installed product. Testing prior to backfilling facilitates quick and easy repair when required.

When vacuum testing a backfilled manhole, appropriate adjustments must be made to the testing procedure to account for site conditions such as high water tables as to avoid over loading boots and connectors. Prior to vacuum testing, calculations shall be made to ensure that connectors and boots are not loaded past the design limit as indicated in ASTM C 923.

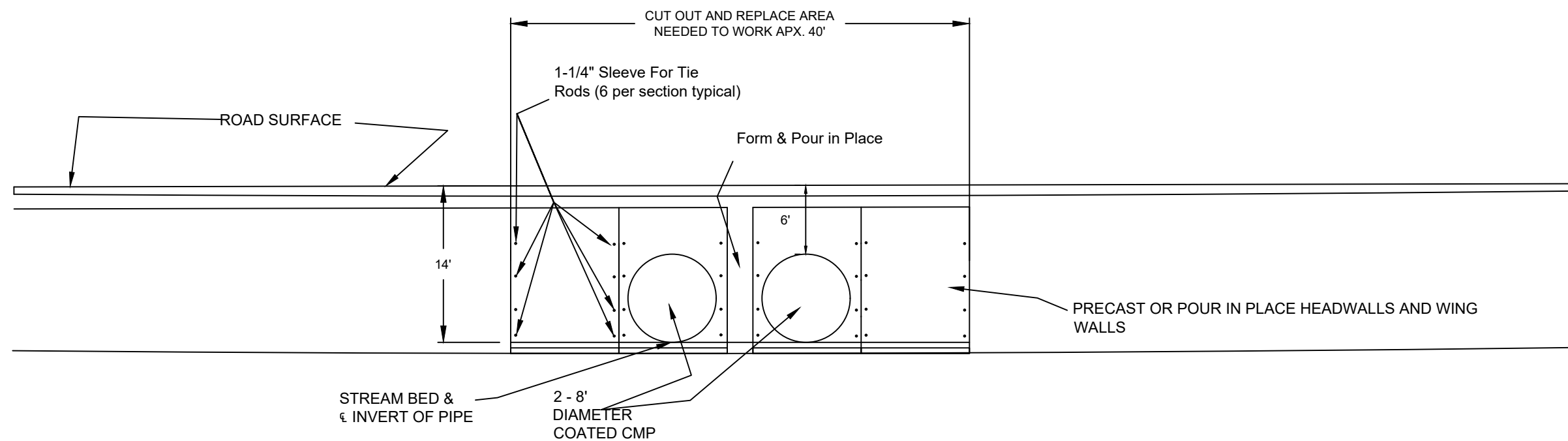
3.2.1.2 Hydrostatic Testing

According to contract documents and precast concrete producer's recommendations [or ASTM C 1227 (for septic tanks)].

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SECTION THRU HEADWALL



ROAD PROFILE

REVISIONS			
REVISION #	BY: INITIALS	DATE	DESCRIPTION
0	JEB	February 7, 2019	ORIGINAL ISSUE

ENGINEER OF RECORD

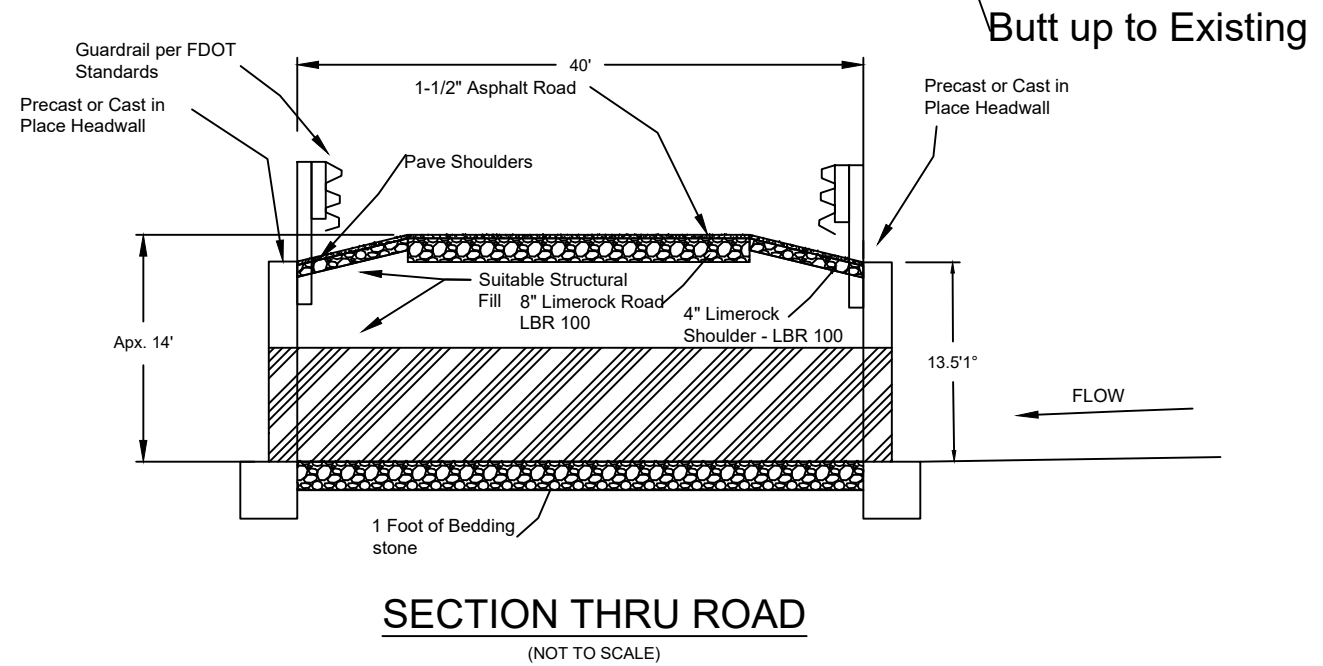
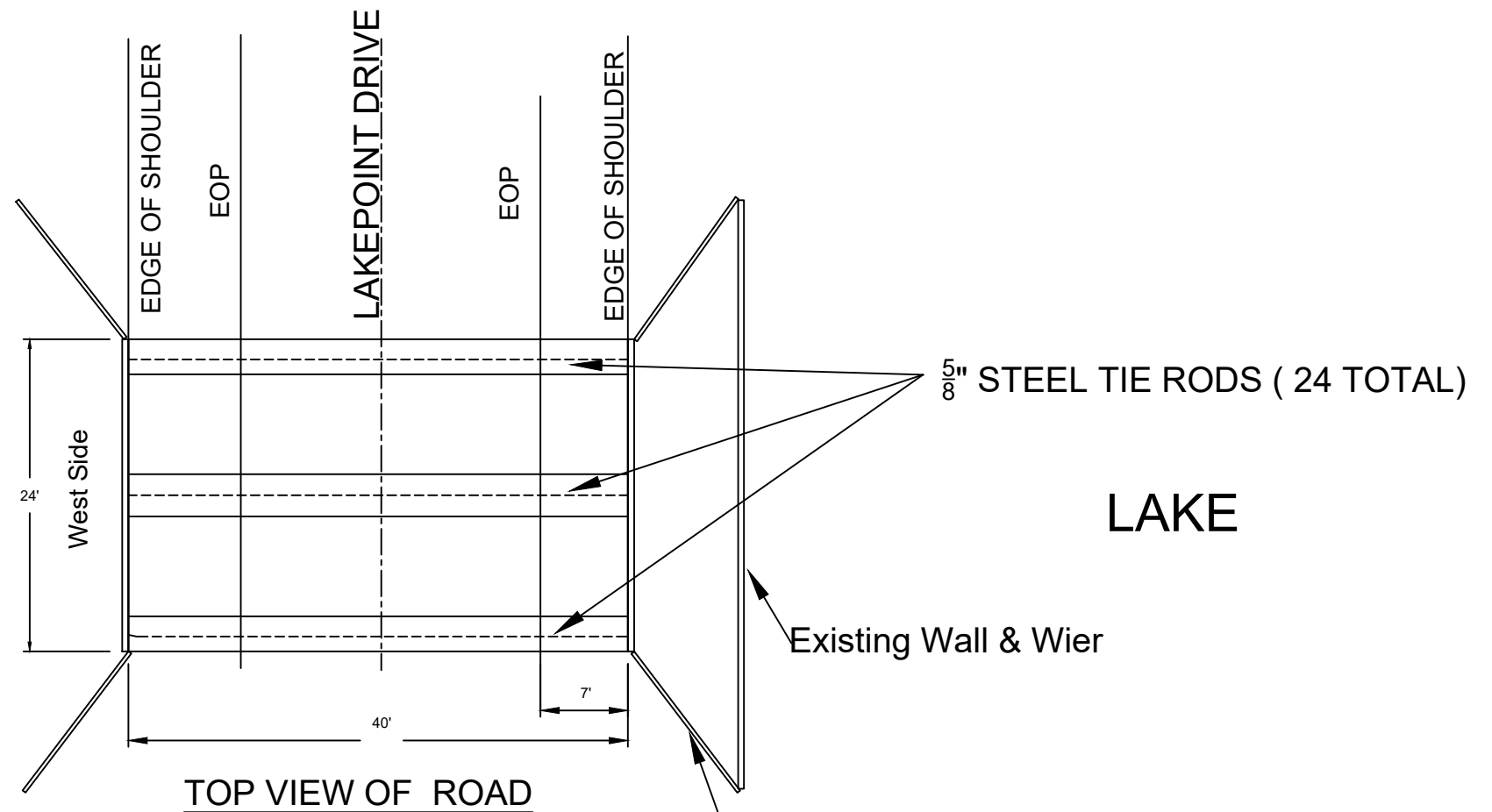
 LARRY ALVAREZ, P.E. #58542
 County Engineer
 Off. (850) 482-9677
 Cell (850)573-7491

JACKSON COUNTY
 BOARD OF COUNTY COMMISSIONERS

 PROJECT: Lakepoint Drive Culvert

Road Profile

C-1



SECTION THRU ROAD
(NOT TO SCALE)

REVISIONS

REVISION #	BY: INITIALS	DATE	DESCRIPTION
0	JEB	february 7, 2019	ORIGINAL ISSUE

ENGINEER OF RECORD

LARRY ALVAREZ, P.E. #58542
County Engineer
Off. (850) 482-9677
Cell (850)573-7491

JACKSON COUNTY
BOARD OF COUNTY COMMISSIONERS

PROJECT: Lakepoint Drive Culvert

Section thru Road
& Top View of Road