

**PROPOSAL
CONTRACT DOCUMENTS AND SPECIFICATIONS**

**FOR MASS GRADING
AT THE
NORTH FLOYD RAIL SITE**

FLOYD COUNTY, GEORGIA

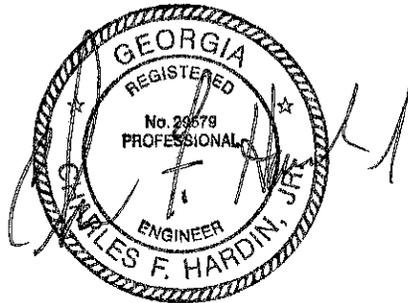
FLOYD COUNTY COMMISSION

Larry Maxey – Chairman
Rhonda Wallace – Vice Chairman
Irwin Bagwell – Commissioner
Garry Fricks – Commissioner
Scotty Hancock – Commissioner

Jamie McCord – County Manager

OWNER

Development Authority of Floyd County /
Rome-Floyd County Development Authority
P.O. Box 6221
Rome, Georgia 30162-6221



E368A

ISSUED FOR BID: 2/19/2016



Southern Engineering & Surveying, Inc.
201 Broad Street, Suite 300
Rome, Georgia 30161
Office: (706)235-4143
Fax: (706)235-4191
WWW.SouthernEandS.com

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**NOTICE OF LETTING
CONTRACT AND INVITATION FOR BIDS
FOR CONSTRUCTING
MASS GRADING AT THE NORTH FLOYD RAIL SITE
FOR
FLOYD COUNTY, GEORGIA
BID # 16-0404**

To Whom It May Concern:

Notice is hereby given that Floyd County, Georgia proposes to let a Contract to the lowest responsible bidder, upon sealed proposals, for the furnishing of all labor, material, equipment and other things necessary for the constructing Mass Grading at the North Floyd Rail Site for Floyd County, Georgia.

Sealed proposals will be received until 2:00 p.m. (local time), on April 4, 2016 in the office of the Floyd County Purchasing Department: 12 East 4th Avenue, Suite 106, Rome, Georgia. Sealed bids will then and there be publicly opened and read aloud in the Purchasing Department Conference Room.

The work is to be let in one contract, and shall conform in all respects to the Specifications of Southern Engineering & Surveying, Inc., Rome, Georgia which are made out and posted conspicuously in the office of the Floyd County Purchasing Department, which is also the office of the undersigned, and said specifications, general conditions and drawings, are open to the inspection of the public.

The extent and character of the work to be done in general, consists of the construction of and supplying the following approximate quantities:

CONTRACT NO. 1
MASS GRADING AT THE NORTH FLOYD RAIL SITE

Perform necessary earthwork including clearing and grubbing, stripping, stockpiling and replacing top soil, erosion and sediment control, excavation, embankment, plus associated work items, all as drawn and specified.

All above as more specifically shown by the plans and specifications of the Engineer as aforesaid. Reference is made to the specifications in the Floyd County Purchasing Department, for a more particular description of the work. Said work shall begin upon the written order of the Floyd County Board of Commissioners, after the formal execution of the contract.

Request for payment for said work will be made through Floyd County not later than the fifteenth (15) day of each calendar month. The Owner shall make a progress payment to the contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under this Contract; but to insure the proper performance of this Contract, the owner

shall retain ten percent (10%) of the amount of each estimate of all work covered by this Contract. Floyd County's payment terms are net 30 days from invoice date.

Provided further, that on completion and acceptance of each separate building, public work or other division of the Contract on which the price is stated separately in the Contract, payment may be made in full including retained percentages thereon, less authorized deductions. In preparing estimates of material delivered on the site, preparatory work done may be taken into consideration, and upon the final completion and acceptance of all work covered by the Contract and the filing of a certificate of completion and approval thereof by the Engineers as aforesaid---all retained sums will be paid.

The Information for Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Forms of Bid Bond, Performance Bond, and other Contract Documents may be examined at the following:

Southern Engineering & Surveying Inc., Rome, Georgia
Floyd County Purchasing Department, 12 East 4th Avenue, Suite 106, Rome, Georgia

Complete sets of contract documents, construction specifications and drawings may be obtained at the office of Southern Engineering & Surveying, 201 Broad Street, Suite 300, Rome, Georgia 30161, upon non-refundable payment of **\$100.00** per set.

The Contract, if awarded, will be on a unit price and lump sum basis. No bid may be withdrawn for a period of sixty (60) days after time has been called on the date of opening. **Bids must be accompanied by a Bid Bond in an amount of not less than five percent (5%) of the base bid. All bonds must be signed or countersigned by a Georgia Resident Agent.**

A faithful Performance Bond in the amount of one hundred percent (100%) of the amount of the bid, and a Labor Materials Payment Bond in the amount of not less than the amount of said Bid, one hundred percent (100%) as provided by Georgia Code Section 23-1704 and 23-1705, shall be furnished by the successful bidders.

The right is reserved to Floyd County, Georgia to delay the award of the Contract for a period not to exceed sixty (60) days from the date of opening of bids, during which time bids shall remain open and not subject to withdrawal. The right is also reserved to Floyd County to reject any and all bids and to waive any and all technicalities or informalities. Any contract executed pursuant to this notice shall be binding upon Floyd County, as such, but will not create a liability expressed or implied, against any members of Floyd County, the County Manager, or any officer or employee of said County, in his or her individual capacity.

FLOYD COUNTY, GEORGIA

By: Nancy Lam, CPPB, CPPO
 Director of Purchasing

INFORMATION FOR BIDDERS

1. Receipt and Opening of Bids

Floyd County, Georgia, (herein called the "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. The Owner will receive bids at the office of The Floyd County Purchasing Department: 12 East 4th Avenue, Suite 106, Rome, Georgia until 2:00 p.m. (local time), April 4, 2016. Bids will then and there be publicly opened and read aloud in the Purchasing Department Conference Room. The envelopes containing the bids must be sealed, addressed to the Floyd County Purchasing Department, 12 East 4th Avenue, Suite 106, Rome, Georgia 30161, and designated as Bid for the MASS GRADING AT THE NORTH FLOYD RAIL SITE.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informality 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 sixty (60) days after the actual date of the opening thereof.

2. Preparation of Bid

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, with ink or typewritten.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, his address, 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 as specified in the bid form.

For utility construction projects, the utility construction license number of the person who will perform the utility work must be written on the face of the bid envelope.

3. Subcontracts

The Bidder is specifically advised that any person, firm or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the Owner and the Engineer.

The successful Bidder will be required to furnish a full time qualified superintendent on the job who is empowered to act in all matters on behalf of the subcontractor.

4. Method of Bidding

The Owner invites the following bids:

CONTRACT NO. 1 – MASS GRADING AT THE NORTH FLOYD RAIL SITE

5. Qualification of Bidder

The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the work, and 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 will not be accepted.

6. Bid Security

Each bid must be accompanied by cash, certified check of the Bidders, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the Bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of five percent (5%) of the bid. Such cash, checks or bid bonds will be returned to all except the three lowest Bidders within three days after the opening of bids, and the remaining cash, checks, or bid bonds will be returned promptly after the Owner and the accepted Bidder have executed the Contract, or, if no award has been made within sixty days after the date of the opening of bids, upon demand of the Bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid. Bid Bonds must be signed or countersigned by a Georgia Resident Agent.

7. Liquidated Damages for Failure to Enter into Contract

The successful Bidder, upon his failure or refusal to execute and deliver the contract and bonds required within ten days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

8. Time of Completion and Liquidated Damages

The Bidder hereby agrees to commence work on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the work within the following consecutive calendar days from said date:

CONTRACT NO. 1 – 300 CALENDAR DAYS

The Bidder further agrees to pay as liquidated damages the sum of \$100.00 for each consecutive day thereafter for each contract. The parties understand and agree that a determination of the damages, which could be incurred by the Owner, is difficult to measure and that the amount of damages is fixed and agreed upon by the parties, not as a penalty, but as an amount which reflects the probable and foreseeable damages due to late performance by the Bidder. Payment of such damages shall not constitute a limitation or waiver of any rights or remedies of the Owner.

9. Conditions of Work

Each Bidder must inform himself fully of the conditions relating to the construction of the project and the employment of the 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 his contract. Insofar as possible, the Contractor in carrying out his work must employ such methods or means as will not cause any interruption of, or interference with the work of any other Contractor.

10. Addenda and Interpretations

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any Bidder orally.

All addenda and additional information will be posted on line at www.romefloyd.com and it is the responsibility of interested parties to visit the site regularly to insure the receipt of any new information that may be posted.

All questions should be submitted via e-mail simultaneously to Nancy Lam at lamn@floydcountyga.org and Chuck Hardin at chardinses@bellsouth.net. All questions and answers will be posted on our website.

Questions and answers not submitted in writing will be considered general commentary and not to serve as addenda nor as an official response.

Failure of any Bidder to receive any such addendum or interpretation shall not relive such Bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

11. General Bond Requirements

Bids must be accompanied by a Bid Bond in an amount of not less than five percent (5%) of the base bid.

A faithful Performance Bond in the amount of one hundred percent (100%) of the amount of the bid, and a Labor Material Payment Bond in the amount of not less than the amount of said bid, one hundred percent (100%), shall be furnished by the successful Bidder. All bonds must be signed or countersigned by a Georgia Resident Agent.

12. Power of Attorney

Attorneys-in-fact who sign or countersign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

13. 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 of materials
- (b) Insurance requirements

14. 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.

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under Occupational and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54). It is required that the Contractor and all Sub-Contractors comply with the requirements as set forth.

Utility work 5 feet or more underground, which cost over \$100,000, must be performed by a Georgia licensed Utility Contractor. A certified foreman holding a state certificate must be present at the utility job site.

15. Method of Award – Lowest Qualified Bidder

If at the time this contract is to be awarded, the lowest bid schedule submitted by a responsible Bidder does not exceed the amount of funds then estimated by the Owner as available to finance the contract, the contract will be awarded to the lowest qualified Bidder.

If such bids exceed such amount, the Owner may take one of the following actions, at his discretion:

- (a) All bids will be rejected, and project re-bid at a later date.
- (b) The funds available may be augmented in an amount sufficient to enable award to the lowest resulting net bid.

16. Obligation of Bidder

At the time of the opening of bids each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any Bidder to examine any form, instrument or document shall in no way relieve any Bidder from any obligation in respect of his bid.

17. Non-Discrimination and Non-Segregation

Bidders must comply with the President's Executive Orders No. 11246 and 11375, which prohibit discrimination in employment regarding race, creed, color, sex, or national origin.

Bidders must certify that they do not, and will not, maintain or provide for their employees any facilities that are segregated on a basis of race, color, creed or national origin.

18. Erosion and Sediment Control

The Bidder should familiarize himself with the State of Georgia Rules and Regulations, Best Management Practices, and Paragraph 39 of the Supplemental General Conditions (Special Conditions), as they relate to erosion and sediment control that will be required during this project.

PROPOSAL

BID FOR UNIT PRICE CONTRACT

Place: _____

Date: _____

Proposal of _____
(hereinafter called "Bidder") *a corporation, organized and existing under the laws of the State of _____; *a partnership; or *an individual doing business as _____, to Floyd County, Georgia (hereinafter called "Owner").

The Bidder, in compliance with your invitation for bids for the constructing Mass Grading at the North Floyd Rail Site, having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all of 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 therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents, of which this proposal will become a part.

*Insert corporation, partnership, or individual as applicable.

CONTRACT NO. 1MASS GRADING AT THE NORTH FLOYD RAIL SITE

Item No.	Description	Unit	Approx. Quantity	Unit Price	Amount
1.	Grading Complete, including clearing and grubbing, stripping, stockpiling and replacing topsoil, excavation and embankment	L.S.	Job	_____	_____
2.	Initial Phase Erosion & Sediment Control measures and BMPs	L.S.	Job	_____	_____
3.	Intermediate Phase Erosion & Sediment Control measures and BMPs	L.S.	Job	_____	_____
4.	Final Phase Erosion & Sediment Control measures and BMPs	L.S.	Job	_____	_____
5.	Additional Type "A" Silt Fence (if Required)	L.F.	250	_____	_____
6.	Additional Type "C" Silt Fence (if Required)	L.F.	250	_____	_____
7.	Storm Drain Pipe w/ Type II Backfill, G.D.O.T. STD. 1030D, H1-10				
a.	48" C.M.P.	L.F.	80	_____	_____
8.	Storm Drain Pipe w/ Type II Backfill, G.D.O.T. STD. 1030D, H15-20				
b.	60" C.M.P.	L.F.	128	_____	_____
9.	Concrete Headwall G.D.O.T. STD. 1001-B				
a.	60" C.M.P.	Ea.	2	_____	_____

10. Mass Rock Excavation
(if Required) C.Y. 1,500 _____

TOTAL BID CONTRACT NO. 1 \$ _____

NOTES:

- 1) The Contractor shall strip the entire area within cut, fill and graded areas to remove all topsoil and vegetative matter. No separate payment will be made for stripping within 12" of the existing ground surface, but shall be included in the price bid for "Grading Complete".
- 2) No separate payment will be made for the excavation, embankment and grading of drainage ditches where shown on the plans. Payment for this work shall be included in the price bid for "Grading Complete".
- 3) The Contractor is responsible for all material testing, including soil compaction testing and all other related testing required by Floyd County. The testing must be performed by a qualified technician acceptable to Floyd County. The Contractor shall be familiar with the frequency and number of tests required.
- 4) The Contractor shall visit the site and become familiar with all conditions of the work. No additional claim will be allowed by the Contractor for conflicts, extra work or unforeseen conditions associated with any subsurface condition encountered, whether they are shown on the drawings or not.
- 5) No claim will be allowed for unanticipated working conditions associated with, but not limited to, existing and abandoned utility lines and resulting poor trench conditions, trench collapse, underground structures, etc. The Contractor shall furnish and install sufficient sheeting, shoring and bracing to allow for construction of the work under all conditions, both anticipated and unanticipated, at no additional cost to the owner.
- 6) No claim will be allowed by the Contractor for cost of downtime of men and equipment associated with any type of unforeseen condition associated with the project; project shutdown by the Engineer, Owner or any governing authority that has jurisdiction over the work; or with any change or additions to the project made by the owner.
- 7) The Contractor shall become familiar with and abide by all rules, regulations and Best Management Practices as they relate to erosion and sediment control for this project. The cost of additional erosion and sediment control measures and devices that may be required due to the negligence of the Contractor and/or his failure to adhere to the approved Erosion and Sediment Control Plan in a timely manner shall be borne by the Contractor. The Engineer, Owner and the governing authority who has jurisdiction over the work shall have the right to stop work when erosion and sediment control measures are not being implemented in accordance with Best Management Practices. The Contractor will allow no claim for cost of downtime of men and equipment associated with any shutdown of the Contractor's operations.
- 8) No separate payment will be made for construction stakeout. The Contractor will furnish their construction stakeout for each phase of the project.
- 9) Final payment will not be distributed until final acceptance has been made by Floyd County. The Contractor is responsible for providing final As Constructed Drawings if the plans are modified during construction.

THE OWNER RESERVES THE RIGHT TO DEDUCT FROM OR ADD TO ANY PART OF THE CONTRACT AT THE UNIT PRICES GIVEN IN THE PROPOSAL.

The above prices shall include all labor, materials, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informality in the bidding.

The Bidder hereby agrees to commence work under this contract on a date to be specified in written "NOTICE TO PROCEED" of the Owner and to fully complete the work within 300 consecutive calendar days for Contract No. 1 from said date.

The Bidder further agrees to pay liquidated damages in the amount of \$100.00 for each consecutive calendar day thereafter, as hereinafter provided in the General Conditions.

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 10 days and deliver a Surety Bond or Bonds, as required by the General Conditions. The bid surety attached in the sum of _____ \$ _____ 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.

Respectfully submitted:

(SEAL – if bid is by a corporation)

By: _____

(Title)

(Address)

BID BOND

KNOWN ALL MEN BY THESE PRESENTS that we, the undersigned, _____, as Principal, and _____, as Surety, are hereby held and firmly bound unto _____ as **OWNER** in the penal sum of _____ for the payment which, well and truly to be made, we hereby jointly and severally bind successors, assigns and ourselves. Signed, this _____ day of _____, 20___. The condition of the above obligation is such that whereas the Principal has submitted to _____ a certain **BID** attached hereto and hereby made a part hereof to enter into a contract in writing for the *NORTH FLOYD RAIL SITE MASS GRADING, FLOYD COUNTY, GEORGIA.*

NOW, THEREFORE,

- (a) If said **BID** shall be rejected, or
- (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 **BOND** for 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 (L.S.)

Surety

By: _____

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.

PERFORMANCE BOND

KNOWN ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal, and

(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

hereinafter called **OWNER**, in the penal sum of _____

_____ dollars, (\$ _____) in lawful money of

the United States, for the payment of which sum will and truly be made; we bind ourselves, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the **OWNER**, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of the *NORTH FLOYD RAIL SITE MASS GRADING, FLOYD COUNTY, GEORGIA.*

NOW THEREFORE, if the Principal shall well, truly and faithful perform its duties, all the undertakings, covenants, terms, conditions and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the **OWNER**, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the **OWNER** from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse

and repay the **OWNER** all outlay and expense which the **OWNER** may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDE, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to **WORK** to be performed thereunder or the **SPECIFICATIONS** accompanying the same shall in any wise affect its obligation on this **BOND**, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the **WORK** or to the **SPECIFICATIONS**.

PROVIDED, FURTHER, that no final settlement between the **OWNER** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

ATTEST:

 (Principal) Secretary
 (SEAL)

 Witness as to Principal

 Address

 Principal

BY: _____

 Address

 Surety

ATTEST:

(Surety) Secretary
(SEAL)

Witness to Principal

Address

BY: _____
Attorney-in-Fact

Address

NOTE: Date of **BOND** must not be prior to date of Contract. If **CONTRACTOR** is Partnership, all partners should execute **BOND**.

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

PAYMENT BOND

KNOWN ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

hereinafter called **OWNER**, in the penal sum of _____

_____ dollars, (\$ _____) in lawful money of the United States, for the payment of which sum will and truly be made, we bind ourselves, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the **OWNER**, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of the *NORTH FLOYD RAIL SITE MASS GRDING, FLOYD COUNTY, GEORGIA.*

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, **SUBCONTRACTORS**, and corporations furnishing materials for or performing labor in the prosecution of the **WORK** provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the

construction of such **WORK**, and all insurance premiums on said **WORK**, and for all labor performed in such **WORK** whether by **SUBCONTRACTOR** or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the **WORK** to be performed thereunder or the **SPECIFICATIONS** accompanying the same shall in any wise affect its obligation on this **BOND**, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the **WORK** or to the **SPECIFICATIONS**.

PROVIDED, FURTHER, that no final settlement between the **OWNER** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

ATTEST:

Principal

(Principal) Secretary
(SEAL)

BY: _____

Witness as to Principal

Address

Address

Surety

ATTEST:

Witness as to Surety

Address

BY: _____
Attorney-in-Fact

Address

NOTE: Date of **BOND** must not be prior to date of Contract. If **CONTRACTOR** is Partnership, all partners should execute **BOND**.

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

FLOYD COUNTY BOARD OF COMMISSIONERS
PURCHASING DEPARTMENT
12 EAST 4TH AVE. SUITE 106
ROME, GA 30161

(706) 291-5118

FAX (706) 290-6099

BIDDERS INFORMATION

Date of Bid: _____

Bid Name: _____

The undersigned agrees, if this bid is accepted within Sixty (60) calendar days after date of opening, to furnish all supplies and/or services in strict accordance with provisions of this Invitation for Bid at the price in the **BID SCHEDULE**.

Time Discounts: Discounts allowed for prompt payment as follows: Discounts of less than Fifteen (15) days will not be used in determining the award of a bid but may be used when paying invoices.

_____ % Discount _____ Calendar Days net _____ (discounts will apply if Procurement Card is accepted).

Procurement Card: Will you accept the VISA Procurement Card for this order? _____

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I understand that collusive bidding is a violation of State and Federal law and can result in fines, prison sentences, and Civil Damage Awards. I agree to abide by all Conditions of this bid and certify that I am authorized to sign this bid for the bidder.

This _____ Day of _____, 201_____

Prices to remain firm for Sixty (60) calendar days or _____ calendar days after date of opening. Vendor MUST initial here: _____.

Bidder Information
(Type or Print)

Name and Mailing Address
of where to send payments

Name of Company

Name of Company

Address

Address

City, State Zip Code

City, State Zip Code

(_____) _____
Phone Number

(_____) _____
Phone Number

(_____) _____
Fax Number

Federal ID #

Email _____

Name and Title of Person
authorized to Sign

Name

Title

Signature

Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of Floyd County Georgia has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Numer

Date of Authorization

Name of Contractor

Address of Contractor

Name of Project

FLOYD COUNTY GEORGIA
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.
Executed on _____, ____ in 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

(Notary Seal or Stamp Required)

Subcontractor Affidavit under O.C.G.A. § 13-10-91(b)(3)

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with _____ (name of contractor) on behalf of FLOYD COUNTY, GA has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91(b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five business days of receipt. If the undersigned subcontractor receives notice that a sub-subcontractor has received an affidavit from any other contracted sub-subcontractor, the undersigned subcontractor must forward, within five business days of receipt, a copy of the notice to the contractor. Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Number

Date of Authorization

Name of Contractor

Address of Contractor

Name of Project

FLOYD COUNTY GEORGIA

Name of Public Employer

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

Executed on _____, ____ in 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

(Notary Seal or Stamp Required)

Sub-subcontractor Affidavit under O.C.G.A. § 13-10-91(b)(4)

By executing this affidavit, the undersigned sub-subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract for _____ (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract) and _____ (name of contractor) on behalf of FLOYD COUNTY, GA has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned sub-subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned sub-subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the sub-subcontractor with the information required by O.C.G.A. § 13-10-91(b). The undersigned sub-subcontractor shall submit, at the time of such contract, this affidavit to (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Additionally, the undersigned sub-subcontractor will forward notice of the receipt of any affidavit from a sub-subcontractor to (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Sub-subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization User Identification Numer

Date of Authorization

Name of Contractor

Address of Contractor

Name of Project

FLOYD COUNTY GEORGIA
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.
Executed on _____, ____ in 201__ in _____ (city), _____ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____, 201__.

NOTARY PUBLIC

My Commission Expires:

(Notary Seal or Stamp Required)

ATTACHMENT

**FLOYD COUNTY BOARD OF COMMISSIONERS
DRUG-FREE WORKPLACE CERTIFICATE**

By signature on this certificate, the Vendor certifies that the provisions of O.C.G.A. Section 50-24-1 through 50-24-6 related to the "Drug-Free Workplace Act" have been complied with in full. The Vendor further certifies that:

1. A drug-free workplace will be provided for the Vendor's employees during the performance of the contract; and
2. Each Vendor who hires a subVendor to work in a drug-free workplace shall secure from that subVendor the following written certification: "As part of the subcontracting agreement with (Vendor's name), (subVendor's name) certifies to the Vendor that a drug-free workplace will be provided for the subVendor's employees during the performance of this contract pursuant to O.C.G.A. Section 50-24-3(b)(7)."

By signature on this certificate, the Vendor further certifies that it will not engage in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of this contract.

Vendor: _____

By: _____

Name Printed: _____

Title: _____

Date: _____



CERTIFICATE OF NON-COLLUSION

By responding to this solicitation, the supplier understands and agrees to the following:

1. That the submitted response constitutes an offer, which when accepted in writing by Floyd County, and subject to the terms and conditions of such acceptance, will constitute a valid and binding contract between the undersigned and Floyd County; and
2. That the supplier has read the specifications and requirements shown or referenced in the solicitation and that the supplier's response is made in accordance with the provisions of such specifications and requirements except as expressly stated otherwise in the supplier's response; and
3. That the supplier guarantees and certifies that all items included in the supplier's response meet or exceed any and all such stated specifications and requirements of the solicitation except as expressly stated otherwise in the supplier's response; and
4. That, if awarded a contract, the supplier will deliver goods and/or services that meet or exceed the specifications and requirements of the solicitation except as expressly stated otherwise in the supplier's response; and
5. That the response submitted by the supplier shall be valid and held open for a period of **one hundred and twenty (120) days (or such other time period as identified in the solicitation)** from the final solicitation closing date and that the response may be held open for an additional period of time subject to the supplier's consent; and
6. That the supplier's response is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a response for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. The supplier understands and agrees that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards; and
7. That the provisions of the Official Code of Georgia Annotated, Sections 36-91 have not been violated and will not be violated in any respect.

DO NOT MODIFY THE BID/PROPOSAL CERTIFICATION TERMS IN ANY WAY. THIS FORM MUST BE COMPLETED, SIGNED AND SUBMITTED WITH YOUR RESPONSE.

Contractor's Full Legal Name: (PLEASE TYPE OR PRINT)	
Authorized Signature:	
Printed Name and Title of Person Signing:	
Date:	
Company Address:	
FAX Number:	
Email Address:	
*This table must be completed in its entirety by the supplier.	

CERTIFICATE OF NON-DISCRIMINATION

In connection with the performance of work under this contract, the bidder agrees as follows:

The bidder agrees not to discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, ancestry or disability. The vendor shall take affirmative action to insure that employees are treated without regard to their race, creed, color, sex, national origin, ancestry or disability. Such action shall include, but not be limited to the following: employment, upgrading, demotion, transfer, recruiting, or recruitment, advertising, lay-off or termination, rates of pay or other compensation and selection for training, including apprenticeship.

In the event of the bidder's non-compliance with this non-discrimination clause, the contract may be canceled or terminated by Floyd County Board of Commissioners. The bidder may be declared, by Floyd County, ineligible for further contracts with Floyd County until satisfactory proof of intent to comply shall be made by the vendor.

The bidder agrees to include this non-discrimination clause in any sub-contracts connected with the performance of this agreement.

BIDDER

SIGNATURE

TITLE

BIDDERS DECLARATION

The bidder understands, agrees and warrants:

That the bidder has carefully read and fully understands the full scope of the specifications.

That the bidder has the capability to successfully undertake and complete the responsibilities and obligations in said specifications.

That this bid may be withdrawn by requesting such withdrawal in writing at any time prior to _____ at _____ but may not be withdrawn after such date and time.

That Floyd County reserves the right to waive compliance by any applicant with any provision contained in this request whenever the County in its sole discretion believes such waiver is in the County's best interests

That by submission of this quote the bidder acknowledges that Floyd County has the right to make any inquiry or investigation it deems appropriate to substantiate or supplement information supplied by the bidder.

That the accompanying bid is not the result of or affected by, any act of collusion with another person or company engaged in the same line of business or commerce, or any other fraudulent act punishable under Georgia or United States law.

BIDDER:

Company Name: _____

Phone: _____

Authorized Representative: _____

Signature: _____

Date: _____

STATE OF GEORGIA,
COUNTY OF _____:

NOTICE OF COMMENCEMENT

TO: CLERK OF SUPERIOR COURT OF _____ COUNTY, GEORGIA

Pursuant to O.C.G.A. § 13-10-62(a), not later than fifteen (15) days after physically commencing work on the property, the undersigned gives Notice of Commencement of improvements to property including the following information:

1. The name, address and telephone number of the contractor;

2. The name and location of the public work being constructed or a general description of the improvement;

3. The name and address of the state or the agency or the authority of the state that is contracting for the public works construction;

4. The name and address of the surety for the performance and payment bonds, if any; and

5. The name and address of the holder of the security deposit provided, if any.

Contractor: _____

By: _____

Name: _____

Title: _____

THIS DOCUMENT MUST BE FILED WITH THE CLERK OF THE SUPERIOR COURT FOR THE COUNTY IN WHICH THE PROJECT IS LOCATED AND A COPY OF THIS DOCUMENT MUST BE POSTED AT THE PROJECT SITE NOT LATER THAN FIFTEEN (15) DAYS AFTER THE CONTRACTOR PHYSICALLY COMMENCES WORK ON THE PROPERTY.

WITHIN TEN (10) CALENDAR DAYS OF THE RECEIPT OF A WRITTEN REQUEST, GIVE A COPY OF THIS NOTICE OF COMMENCEMENT TO ANY SUBCONTRACTOR, MATERIALMAN OR PERSON MAKING THE REQUEST.

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type
 See Specific Instructions on page 2.

Name (as shown on your income tax return)	
Business name, if different from above	
Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ <input type="checkbox"/> Exempt payee <input type="checkbox"/> Other (see instructions) ▶	
Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code	Floyd County Board of Commissioners P.O. Box 946 Rome, GA 30161
List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number
or
Employer identification number

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here

Signature of U.S. person ▶

Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

**AGREEMENT BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between FLOYD COUNTY, GEORGIA, A POLITICAL SUBDIVISION OF THE STATE OF GEORGIA (“Owner”) and _____ (“Contractor”). Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows.

ARTICLE 2 – THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

ARTICLE 3 – CONTRACT TIMES

3.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Days to Achieve Substantial Completion and Final Payment*

A. The Work will be substantially completed within 300 calendar days after the Notice to Proceed is issued, and completed and ready for final payment within 300 calendar days after the date the Notice to Proceed is issued. Calendar days do not include documented inclement weather delays, which will be calculated prior to the end of the project and may result in an extension.

4.03 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding 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 \$100 for each day that expires after the time specified in Paragraph 4.02 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 Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$100 for each day that expires after the time specified in Paragraph 4.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraph 5.01.A below:

A. For all Work included in base bid, a sum of: \$ _____

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

A. Contractor shall submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by Owner as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 20th day of each month during performance of the Work as provided herein. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements. Floyd County's normal payment cycle is 30 days from invoice date. A retainage of 10% will be withheld from each payment.

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 90 percent of the Work completed, less such amounts as Owner shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 100 percent of Owner's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

6.03 *Final Payment*

A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as provided in said Paragraph 14.07.

ARTICLE 7 – CONTRACTOR’S REPRESENTATIONS

- 7.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor’s safety precautions and programs.
 - E. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - F. Contractor has given Owner written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Owner is acceptable to Contractor.
 - G. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 8 – CONTRACT DOCUMENTS

8.01 *Contents*

- A. The Contract Documents consist of the following:
 - 1. This Agreement
 - 2. Invitation to Bid # _____
 - 3. Performance and Payment bond
 - 4. General and Supplemental Conditions

5. Addenda
 6. Contractor's Bid Package
 7. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Work Change Directives.
 - b. Change Orders.
- B. There are no Contract Documents other than those listed above in this Article 8.
- C. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 9 – MISCELLANEOUS

9.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

9.02 Assignment of Contract

- A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

9.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

9.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.05 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on _____ (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR:

FLOYD COUNTY, GEORGIA

By: _____

By: _____

Larry Maxey
Printed or Typed Name

Printed or Typed Name

Title: Chairman

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: Clerk

Title: _____

Jamie Armstrong (Interim County Clerk)
Printed or Typed Name

Printed or Typed Name

Address for giving notices:

Address for giving notices:

Floyd County Board of Commissioners
12 East 4th Ave., Suite 209
Rome, GA 30161

License No.: _____

(Where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Agent for service of process:

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



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These General Conditions have been prepared for use with the Owner-Contractor Agreements (No. 1910-8-A-1 or 1910-8-A-2) (1996 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC User's Guide (No. 1910-50). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17) (1996 Edition).



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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

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.

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

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

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

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

6. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

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

8. *Bonds*--Performance and payment bonds and other instruments of security.

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

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

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

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

12. *Contract Documents*--The Contract Documents establish the rights and obligations of the parties and include 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 interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

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

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

15. *CONTRACTOR*--The individual or entity with whom OWNER has entered into the Agreement.

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

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

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

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

20. *ENGINEER's Consultant*--An individual or entity 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.

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

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

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

24. *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.

25. *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.

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

27. *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.

28. *Notice of Award*--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

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

30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

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

32. *PCBs*--Polychlorinated biphenyls.

33. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

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

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

36. *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.

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

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

39. *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.

40. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

41. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

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

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

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

45. *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.

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

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

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

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

50. *Written Amendment*--A written statement modifying the 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.

1.02 Terminology

A. Intent of Certain Terms or Adjectives

1. Whenever in the Contract Documents the terms "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination 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 performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. *Day*

1. The word “day” shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. *Defective*

1. The word “defective,” 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 recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. *Furnish, Install, Perform, Provide*

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

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

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

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

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

ARTICLE 2 - PRELIMINARY MATTERS

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2.01 *Delivery of Bonds*

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 *Copies of Documents*

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

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

2.04 *Starting the Work*

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

2.05 *Before Starting Construction*

A. CONTRACTOR’s Review of Contract Documents: Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the

Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; 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.

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

1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and
3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

C. Evidence of Insurance: Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 *Preconstruction Conference*

A. Within 20 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 in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. 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 2.05.B. 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 acceptable schedules are submitted to ENGINEER.

1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.

3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

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

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof)

to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

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

3.02 Reference Standards

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

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

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction 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 performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once.

CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; 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.

B. Resolving Discrepancies

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

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

3.04 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.05 Reuse of Documents

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing 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, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

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

4.01 *Availability of Lands*

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

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

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

4.02 *Subsurface and Physical Conditions*

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

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

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

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

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

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

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

4.03 *Differing Subsurface or Physical Conditions*

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

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

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

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

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

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

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

C. Possible Price and Times Adjustments

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

such condition must meet any one or more of the categories described in paragraph 4.03.A; and with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.

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

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 the submission of a Bid or becoming bound under a negotiated contract; or the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation,

exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

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

4.04 Underground Facilities

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

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

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

reviewing and checking all such information and data,

locating all Underground Facilities shown or indicated in the Contract Documents, coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and

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

B. Not Shown or Indicated

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

2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences.

An equitable adjustment shall be made in the Contract Price of Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05 Reference Points

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or

relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

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

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

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

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

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

G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition:

(i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

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

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

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

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

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies

Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch,

Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent’s authority to act.

If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

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

5.03 *Certificates of Insurance*

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

5.04 *CONTRACTOR’s Liability Insurance*

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

perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers’ compensation, disability benefits, and other similar employee benefit acts;
2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR’s employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR’s employees;
4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (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. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER’s Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 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 5.03 will so provide);

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

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

5.05 OWNER's Liability Insurance

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

5.06 Property Insurance

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

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

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

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

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

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

6. include testing and startup; and

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

B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any

other individuals 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.

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

D. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

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

5.07 Waiver of Rights

A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and their

respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and
2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for

the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach.

If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph

14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

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6.01 Supervision and Superintendence

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

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 Labor; Working Hours

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, 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.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CON-

TRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 Services, Materials, and Equipment

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

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (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.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments

may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 Substitutes and "Or-Equals"

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

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

in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

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

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

The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.

CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item 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 that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. *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 approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.

C. *Engineer's Evaluation:* ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs

1 and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

2 *Special Guarantee:* OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

3 *ENGINEER's Cost Reimbursement:* ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B 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 approves 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 substitute.

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

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CON-

TRACTOR shall not be required to employ any Sub-contractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

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

C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor 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 individual or entity except as may otherwise be required by Laws and Regulations.

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

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

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

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

6.07 Patent Fees and Royalties

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or 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) arising out of or relating to any infringe-

ment of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 Laws and Regulations

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

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

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

6.10 Taxes

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

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

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

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

3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, 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) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

B. Removal of Debris During Performance of the Work:

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

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

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

6.12 *Record Documents*

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

6.13 *Safety and Protection*

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

1. all persons on the Site or who may be affected by the Work;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons

or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or 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 or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of 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 in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

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

6.15 *Hazard Communication Programs*

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

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if

CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. 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 services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable 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 the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. Submittal Procedures

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

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

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

all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

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

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

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the 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 such variation.

E. ENGINEER's Review

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER.

ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or

programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. ENGINEER's review and approval 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 each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. Resubmittal Procedures

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

6.18 Continuing the Work

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 CONTRACTOR's General Warranty and Guarantee

A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants 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:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any

other individual or entity for whom CONTRACTOR is responsible; or

2. normal wear and tear under normal usage.

B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

1. observations by ENGINEER;

2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;

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

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

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

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

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

8. any correction of defective Work by OWNER.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. 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

2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.

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

C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

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

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

ARTICLE 7 - OTHER WORK

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7.01 *Related Work at Site*

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

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

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

B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other 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 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 properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and

proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

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

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

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

ARTICLE 8 - OWNER'S RESPONSIBILITIES

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8.01 Communications to Contractor

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

8.02 Replacement of ENGINEER

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 Furnish Data

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

8.04 Pay Promptly When Due

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

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

8.06 Insurance

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

8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 Inspections, Tests, and Approvals

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

8.09 Limitations on OWNER's Responsibilities

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

8.10 Undisclosed Hazardous Environmental Condition

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

8.11 Evidence of Financial Arrangements

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy

OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

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9.01 *OWNER'S Representative*

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

9.02 *Visits to Site*

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

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 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 other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Clarifications and Interpretations*

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 *Authorized Variations in Work*

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

9.06 *Rejecting Defective Work*

A. 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 inspec-

tion or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 Shop Drawings, Change Orders and Payments

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

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

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

9.08 Determinations for Unit Price Work

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

9.09 Decisions on Requirements of Contract Documents and Acceptability of Work

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, 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 this paragraph 9.09 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 14.07) 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 any such Claim, dispute, or other matter.

9.10 Limitations on ENGINEER's Authority and Responsibilities

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

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

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

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

E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. 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 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).

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

10.02 *Unauthorized Changes in the Work*

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

10.03 *Execution of Change Orders*

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

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

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

3. changes in the Contract Price or Contract Times which embody the substance of

any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 *Notification to Surety*

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

10.05 Claims and Disputes

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph

12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

B. *ENGINEER's Decision:* ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or
2. if no such dispute resolution procedures have been set forth in Article 16, 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 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), 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.

C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

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

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11.01 Cost of the Work

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

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

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

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

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

5. Supplemental costs including the following:

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

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.

Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accor

dance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

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

e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

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

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

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.

When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.

j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

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

1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph

11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

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

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

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

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

11.01.A and 11.01.B.

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

CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.

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

11.02 *Cash Allowances*

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

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

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.

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

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.

B. 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.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

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

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

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

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

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12.01 *Change of Contract Price*

A. 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 submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

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

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

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead

and profit not necessarily in accordance with paragraph 12.01.C.2); or

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

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

1. a mutually acceptable fixed fee; or

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

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

for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;

where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and

and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

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

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

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

12.02 *Change of Contract Times*

A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

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

12.03 *Delays Beyond CONTRACTOR's Control*

A. 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 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 *Delays Within CONTRACTOR's Control*

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 *Delays Beyond OWNER's and CONTRACTOR's Control*

A. 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.

12.06 *Delay Damages*

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or 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:

1. delays caused by or within the control of CONTRACTOR; or

2. delays beyond the control of both OWNER and CONTRACTOR 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.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

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

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13.01 *Notice of Defects*

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

13.02 *Access to Work*

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

13.03 *Tests and Inspections*

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

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

1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and
3. as otherwise specifically provided in the Contract Documents.

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

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

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

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and

ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. 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. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 *OWNER May Stop the Work*

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

13.06 *Correction or Removal of Defective Work*

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by 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, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph

1 is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

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 Amendment.

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

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

13.08 *Acceptance of Defective Work*

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

13.09 *OWNER May Correct Defective Work*

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

B. In exercising the rights and remedies under this 14.02 *Progress Payments*

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 Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

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

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

—

14.01 *Schedule of Values*

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

A. *Applications for Payments*

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

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

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

B. *Review of Applications*

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

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

and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:

the Work has progressed to the point indicated; 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 9.08, and to any other qualifications stated in the recommendation); and the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.

3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (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 to CONTRACTOR.

4. Neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what

purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.

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

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

the Contract Price has been reduced by Written Amendment or Change Orders;

OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or

ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

C. Payment Becomes Due

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

D. Reduction in Payment

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

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

Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to

OWNER to secure the satisfaction and discharge of such Liens;

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

OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.

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

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

14.03 *CONTRACTOR's Warranty of Title*

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

14.04 *Substantial Completion*

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly 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 therefor. 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 objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

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

14.05 *Partial Utilization*

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

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 therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

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

14.06 *Final Inspection*

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

14.07 *Final Payment*

A. Application for Payment

1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance

certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and

(ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. Review of Application and Acceptance

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph

14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CON-

TRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. *Payment Becomes Due*

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 *Final Completion Delayed*

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

14.09 *Waiver of Claims*

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

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

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

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15.01 OWNER May Suspend Work

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be 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 a Claim therefor as provided in paragraph 10.05.

15.02 *OWNER May Terminate for Cause*

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

1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph

2.07 as adjusted from time to time pursuant to paragraph 6.04);

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

3. CONTRACTOR's disregard of the authority of ENGINEER; or

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

B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, 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 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 (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. 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.

15.03 OWNER May Terminate For Convenience

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

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;
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 for overhead and profit on such expenses;
3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in

settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. for reasonable expenses directly attributable to termination.

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

15.04 CONTRACTOR May Stop Work or Terminate

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

15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph

10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 Methods and Procedures

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS

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17.01 *Giving Notice*

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

17.02 *Computation of Times*

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

17.03 *Cumulative Remedies*

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

17.04 *Survival of Obligations*

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

17.05 *Controlling Law*

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

NOTICE OF AWARD

To: _____ DATE: _____

Project: NORTH FLOYD RAIL SITE MASS GRADING FOR FLOYD COUNTY, GEORGIA.

The OWNER has considered the BID submitted by you for the above-described WORK in response to its Advertisement for Bids dated _____, 20____ and Information for Bidders.

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 Performance BOND, Payment BOND and Certificates of Insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) 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 _____, 20____.

(Owner)

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____ this _____ day of _____, 20____.

By: _____

Title: _____

NOTICE TO PROCEED

To: _____ DATE: _____

Project: NORTH FLOYD RAIL SITE MASS GRADING FOR FLOYD COUNTY, GEORGIA.

YOU ARE HEREBY NOTIFIED TO COMMENCE **WORK** IN ACCORDANCE WITH THE
AGREEMENT DATED _____, 20____, ON
OR BEFORE _____, 20____, AND YOU ARE TO COMPLETE THE
WORK WITHIN 180 CONSECUTIVE DAYS THEREAFTER. THE DATE OF
COMPLETION OF ALL **WORK** IS THEREFORE _____, 20____.

(OWNER)

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by:

this _____ day of _____, 2016.

By: _____

Title: _____

F.E.I. No. _____



FLOYD COUNTY

CONTRACT CHANGE ORDER

ORDER NO.:

DATE:

STATE OF GEORGIA

FLOYD COUNTY

Contract For:

Owner:

TO:

(CONTRACTOR)

You are hereby requested to comply with the following changes from the contract plans and specifications:

DESCRIPTION OF CHANGES (Supplemental Plans and Specifications Attached)	DECREASE IN CONTRACT PRICE	INCREASE IN CONTRACT PRICE
TOTAL	\$	\$
NET CHANGE IN CONTRACT PRICE	\$	\$

JUSTIFICATION:

The Amount of the Contract will be (decreased) (increase) by the Sum of \$ _____

The Contract Total including this and previous Change Orders Will be: \$ _____

The Contract Period Provided for the Completion Will Be (decrease)(increase)(unchanged) _____ Days

New Completion Date: _____

This document will become a supplement to the contract and all provisions will apply hereto:

Requested

Owner

Date

Recommended

Engineer

Date

Accepted

Contractor

Date

SUPPLEMENTAL GENERAL CONDITIONS

(SPECIAL CONDITIONS)

1. CONTRACT DOCUMENTS:

The work shall conform to the following drawings, all of which form a part of these specifications, and are available at the office of Southern Engineering & Surveying, Inc., in Rome, Georgia.

MASS GRADING AT THE NORTH FLOYD RAIL SITE

(See Drawings E-368-1 through E-368-10, dated February 19, 2016)

2. TOOLS, PLANT AND EQUIPMENT:

If at any time before the commencement or during the progress of the work, tools, plant or equipment appear to the Engineer to be insufficient, inefficient or inappropriate to secure the quality of the work required or the proper rate of progress, the Engineer may order the Contractor to increase their efficiency, to improve their character, to augment their number, or to substitute new tools, plant or equipment as the case may be, and the Contractor must conform to such order; but the failure of the Engineer to demand such increase of efficiency, number or improvement shall not relieve the Contractor of his obligation to secure the quality of work and the rate of progress necessary to complete the work within the time required by this Contract to the satisfaction of the Owner.

3. INSPECTION AND TESTING OF MATERIALS:

(Add the following to Article 13.4 "Tests and Inspections" of the General Conditions).

The Owner "will pay for all Job Control Testing" (such as concrete cylinders, soil compaction, etc.). This does not include the normal samples and tests as specified in Section 1 (1-02) of these specifications.

4. INSPECTION AND RESIDENT PROJECT REPRESENTATIVE:

Add the following to Article 9 "Engineer's Status During Construction" of the General Conditions).

The Engineer's inspector and the Owner shall have access to the work wherever it is in progress, and the Contractor shall provide proper facilities for such access and inspection.

The Contractor shall furnish the Engineer with every reasonable facility for ascertaining whether or not the work performed and materials used are in accordance with the requirements and intent of the Specifications and Contract. No work shall be done or materials used without suitable review and observations by the Engineer or his representative. Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, or obligate the Owner to final acceptance.

(Duties, Responsibilities and Limitations of the Authority of the Resident Project Representative)

A. General

The Resident Project Representative is the ENGINEER's agent and shall act under the supervision and direction of the ENGINEER. He shall confer with the ENGINEER regarding his actions, and shall generally communicate with the Owner only through the ENGINEER.

B. Duties and Responsibilities

The Resident Project Representative shall:

1. Schedule: Review the progress schedule prepared by the CONTRACTOR for compliance with the contract and give written advice to the ENGINEER concerning its acceptability.

2. Conferences: Attend pre-construction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with the ENGINEER and notify those expected to attend in advance. Maintain and circulate copies of records of the meetings.

3. Liaison:

a. Serve as the ENGINEER's liaison with the CONTRACTOR working principally through the CONTRACTOR's superintendent. Alert the CONTRACTOR, through his superintendent, to the hazards involved in accepting and acting upon instructions from the OWNER or others, except such instructions transmitted through the ENGINEER.

b. Cooperate with the CONTRACTOR in his dealings with the various local agencies having jurisdiction over the Project in order to complete service connections to public utilities and facilities.

c. Assist the ENGINEER in obtaining from the OWNER additional details or information, when required at the job site for proper execution of the work.

4. Approvals: When required, assist the ENGINEER in obtaining from the CONTRACTOR a list of his proposed suppliers and subcontractors.

5. Samples: Assist the ENGINEER in obtaining field samples of materials delivered to the site which are required to be furnished, and keep record of actions taken by the ENGINEER.

6. Shop Drawings:

a. Receive approved shop drawings and other submissions from the ENGINEER; record data received, maintain a file of the drawings and submissions, and check construction for compliance with them.

b. Alert the CONTRACTOR's superintendent when he observes materials or equipment being installed before approval of shop drawings or samples, where such are required, and advise the ENGINEER when he believes it is necessary to disapprove work as failing to conform to the Contract Documents.

7. Review of Work, Inspections, and Tests:

a. Conduct on-site observations of the work in progress for the ENGINEER as a basis for determining that the Project is proceeding in accordance with the Contract Documents, and report to the ENGINEER whenever he believes that any work should be rejected or specially tested, or that the work should be stopped to insure that the completed project will comply with the requirements of the Contract Documents.

b. Verify that tests, including equipment and systems startup, which are required by the Contract Documents are conducted and that the CONTRACTOR maintains adequate records thereof; observe, record and report to the ENGINEER appropriate details relative to the test procedures and startups.

c. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the outcome of these inspections and report to the ENGINEER.

8. Interpretation of Contract Document: Transmit to the CONTRACTOR the ENGINEER's interpretations of the Contract Documents.

9. Modifications: Consider and evaluate the CONTRACTOR's suggestions for modifications in drawings or specifications and report them with recommendations to the ENGINEER.

10. Records:

a. Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and other submissions, reproductions of original contract documents including all addenda, change orders, field orders, and additional drawings issued subsequent to the award of the contract, the ENGINEER's interpretations of the Contract Documents, progress reports, and other project related documents.

b. Keep a diary or log book, recording hours on the job site, weather conditions, list of visiting officials, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures.

c. Record names, addresses and telephone numbers of all CONTRACTORS, subcontractors, and major material suppliers.

d. Maintain a set of drawings on which authorized changes are noted, and deliver to the ENGINEER at the completion of the project.

11. Reports:

a. Furnish the ENGINEER periodic reports, as required, of progress of the project and the CONTRACTOR's compliance with the approved progress schedule.

b. Consult with the ENGINEER in advance of scheduled major tests, inspections, or start of important phases of the project.

12. Payment Requisitions: Review applications for payment with the CONTRACTOR for compliance with the established procedure for their submission and forward them with recommendations to the ENGINEER, noting particularly their relation to the work completed and materials and equipment delivered at the site.

13. Guarantees, Certificates, Maintenance and Operation Manuals: During the course of the work, assemble guarantees, certificates, maintenance and operation manuals, and other required data to be furnished by the CONTRACTOR and upon acceptance of the project, deliver this material to the ENGINEER for his review and forwarding to the Owner.

14. Completion:

a. Prior to inspection for substantial completion, submit to the CONTRACTOR a list of observed items requiring correction.

b. Conduct final inspection in the company of the ENGINEER and the OWNER and prepare a final list of items to be corrected.

c. Verify that all items on final list have been corrected and make recommendations to the ENGINEER concerning acceptance.

C. Limitations of Authority

Except upon written instructions of the ENGINEER, the Resident Project Representative:

1. Shall not authorize any deviation from the Contract Documents.

2. Shall not undertake any of the responsibilities of the CONTRACTOR, the subcontractors, or the CONTRACTOR's superintendent.

3. Shall not expedite the work for the CONTRACTOR.

4. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.

5. Shall not authorize the OWNER to occupy the project in whole or in part.

5. EXTRAS:

(Add the following to Article 10 "Changes in the Work" of the General Conditions).

The Contractor shall consider the itemized quantities, as the quantities required completing the work for the purpose of bidding. Should actual quantities required in the construction of the work be greater or less than the quantities shown on the items, an amount equal to the difference in quantities at the unit prices bid for the items will be added to or deducted from the contract prices.

6. TIME FOR COMPLETION AND LIQUIDATED DAMAGES:

The Contractor shall not commence work under this contract until the Owner has issued him a written Notice to Proceed. The Contractor shall commence work within the ten calendar days after the date set in the Notice to Proceed and shall prosecute said work with faithfulness and energy to complete the entire work ready for use not later than the number of calendar days stipulated in the Proposal. In no case shall the time for completion exceed the following calendar days after the date set in the Notice to Proceed.

CONTRACT

CALENDAR DAYS

1

300

The Bidder further agrees to pay liquidated damages the sum of \$100.00 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions. The parties understand and agree that a determination of the damages which could be incurred by the Owner is difficult to measure, and that the amount of damages is fixed and agreed upon by the parties, not as a penalty, but as an amount which reflects the probable and foreseeable damage due to late performance by the Bidder. Payment of such damages shall not constitute a limitation or waiver of any rights or remedies of the Owner.

7. **PAYMENTS AND COMPLETION:**

(Add the following to Article 14, "Payments to Contractor and Completion" of the General Conditions).

To insure the proper performance of this contract, the Owner shall retain ten percent (10%) of the amount of each estimate until final completion and acceptance of all work covered by this contract.

8. **BONDS AND INSURANCE:**

(Article 5 of the General Conditions is hereby amended by the provision that:)

(a) Contractor's Public Liability Coverage shall be as follows:

Bodily Injury Liability	-	\$2,000,000 single limit per occurrence
Property Damage Liability	-	\$100,000 each accident

By endorsement, coverage shall include liability arising as a result of explosion, collapse or underground hazards.

(b) Automobile Public Liability Coverage shall be as follows:

Bodily Injury	-	\$200,000 each person
	-	\$600,000 each accident
Property Damage Liability	-	\$100,000 each accident

(c) Builder's Risk Insurance Coverage shall be as follows:

Fire and extended coverage on a 100 percent basis (completed value form) on insurable portions of both structures and machinery and equipment located therein for the benefit of the Applicant, the prime contractor, and all subcontractors, as their interest may appear.

Coverage shall include vandalism and malicious mischief.

(d) Contractor shall furnish Statutory Workmen's Compensation.

(e) The Contractor shall either (1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractors Public Liability and Property Damage of the type and in the same amounts as specified herein, or (2) insure the activities of his subcontractors in his own policy.

- (f) The Contractor shall furnish a performance bond at least equal to one hundred percent (100%) of the contract price as a security for the faithful performance of this contract and also a payment bond in an amount not less than one hundred percent (100%) of the contract price (Bonds must be valid for one year beyond the date of acceptance of the completed project).

9. **COPIES OF DOCUMENTS:**

(Article 2.2 "Copies of Documents" of the General Conditions shall be revised to read as follows:)

OWNER shall furnish to CONTRACTOR up to five copies 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.

10. **EQUAL EMPLOYMENT OPPORTUNITY:**

The Contractor and Subcontractors agree to comply with provisions of Executive Order 11246. In addition, all Contractors and Subcontractors must comply with Executive Order No. 11375 which amends Executive order 11246 to provide for equal employment under federally assisted contracts regardless of race, creed, color, religion, sex, or national origin.

11. **"ANTI-KICKBACK ACT":**

All contracts for construction shall include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in the Department of Labor regulations (29 CFR, Part 3). This Act provides that each Contractor shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled.

12. **SAFETY AND HEALTH REGULATIONS:**

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54).

13. TABLE OF CONTENTS:

The table of contents and index is for the convenience of the users of the specifications. Whether the elements are properly placed, and the fact that any part of the work is not in the applicable section, shall not relieve the Contractor of his responsibility.

14. SILTATION:

The Contractor shall conduct his work so as to minimize siltation and bank erosion during construction.

15. USE AND DISPOSAL OF CHEMICALS:

All chemicals used during project construction or furnished for project operations, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

16. "OR EQUAL" CLAUSE:

Whenever a material, article or piece of equipment is identified on the Plans or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard, and any material, article, or piece of equipment of other manufacturers and vendors which corresponds in quality and kind, in the opinion of the Engineer, will be equally acceptable.

Manufacturers' or vendors' materials, articles or pieces of equipment not specifically mentioned will be considered by the Engineer if full technical information and installation history is submitted to the Engineer two weeks prior to opening of bids. All prospective bidders will be notified by addendum listing additional acceptable materials, articles, or pieces of equipment, which are approved.

17. CONTRACTOR'S AVAILABILITY:

The Contractor shall have a responsible representative on call at all times. The Contractor will also maintain a crew with necessary tools and equipment available on call after normal working hours, on weekends, during inclement weather, and other times when work is not in progress to perform any necessary emergency repair work which may occur as a result of the work under this Contract.

Negligence on the part of the Contractor, in the opinion of the Engineer, to satisfy such situations will be just cause for the Engineer to take whatever action necessary to remedy the situation at the expense of the Contractor.

18. MODIFICATION OF QUANTITIES:

The itemized quantities shall be considered by the Contractor as the quantities required to complete the work for the purpose of bidding. Should actual quantities required in the construction work be greater or less than the quantities shown on the items, an amount equal to the difference in quantities at the unit prices bid for the items will be added to or deducted from the contract price.

19. BROKEN MAINS:

If water mains under pressure are accidentally broken or ruptured due to the negligence or carelessness on the part of the Contractor, resulting in interrupted service to any customer, the Contractor shall immediately notify the Owner and proceed to make the necessary repairs at no additional cost to the Owner.

20. D.O.T. SPECIFICATIONS:

Any reference to D.O.T. Specifications on the plans or in these specifications, refer to the latest revision of the Georgia Department of Transportation Standard Specifications.

21. WATER SERVICE INTERRUPTION:

The Contractor shall not interrupt water service to any residential or commercial water customer for a period exceeding four (4) consecutive hours for any reason whatsoever while performing the work under this contract. Under any circumstances where water service will be interrupted for greater periods, the Contractor shall provide temporary water service in a manner approved by the Engineer or Owner. The work should be scheduled in such a manner that temporary service will not be required except in an emergency.

If the requirements of this section of the specifications are not met by the Contractor, the Owner reserves the right to take whatever steps are necessary to restore interrupted service and deduct the cost thereof from the payment due the Contractor provided the Engineer shall approve the amount charged to the Contractor.

22. WORK ON OR NEAR HIGHWAY:

Whenever work under this contract is performed on or near highway or road open to traffic, the Contractor shall use proper care and vigilance to avoid injury to persons or property. This shall

include warning signs or signals and flagmen where necessary, and as required by the Standard Specifications, Section 104, Paragraph 104.05.

23. ERRORS AND DISCREPANCEIS:

The Contractor shall promptly report to the Engineer any discrepancy or error which he may discover during the course of the work in the plans, specifications or contract. The location, size and type of existing utilities shown on the plans represent the best available information, but are not guaranteed to be correct.

24. ACCIDENTS:

The Contractor shall provide, at the site, such equipment and medical facilities as are necessary to supply first aid service to anyone who may be injured in connection with the work. The Contractor must report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work, whether on or adjacent to the site which causes death, personal injury, or property damages, giving full details and statement of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both Owner and the Engineer, if any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts to the Engineer, giving full details in writing of the claim.

25. SHANTIES:

Should the Contractor so desire, he may build shanties or other structures for housing men, tools, machinery, and supplies, but they will be permitted only at approved places, and their surroundings shall be maintained at all times in a sanitary and satisfactory manner. On or before the completion of the work, all such structures shall be removed, together with all rubbish and trash, at the expense of the Contractor.

26. GUARANTEE:

The Contractor guarantees that the work to be done under this contract and the workmanship performed and the materials used in the construction of the same shall be free from defects or flaws and that the performance test requirements of the specifications shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion of the work as stated in the final estimate. The Contractor shall repair or replace, as required, promptly and without charge, all work and materials, or parts thereof, which fail to meet the above guarantee during the one-year period. It is hereby, however, especially agreed and understood that this guarantee shall not include any repairs or replacements made necessary by any cause or causes other than improper, inadequate, or defective work, workmanship, materials or design by the Contractor or those employed directly or indirectly by him.

27. CIVIL RIGHTS:

The Contractor shall conform to all provisions of Title VI of the civil Rights Act of 1964.

28. USE AND POSSESSION PRIOR TO COMPLETION:

The Owner shall have the right to take possession of or use any completed or partially completed part of the work. Such possession or use shall not be deemed an acceptance of any work not completed in accordance with the Contract. While the Owner is in such possession, he shall be responsible for all loss or damage to the work except that resulting from the Contractor's fault, negligence, or delay.

29. PAYMENT:

Payment shall be made at the unit prices submitted in the proposal. These prices shall include the cost of all labor, material, equipment and services necessary to complete these units.

30. DISTURBED AREAS:

All areas disturbed by the operations of the Contractor will be restored by the Contractor to present or better conditions.

31. ENGINEER'S AUTHORITY:

The intent of Article 9 of the General Conditions is to specify the Engineer's authority and not to confer upon the Engineer the capacity of foreman or superintendent, which is a part of the Contractor's responsibility.

32. RIGHT OF ENTRY:

The Engineer's representative(s), Owner, and representatives from the Department of Natural Resources shall have access to the work wherever it is in progress, and the Contractor shall provide proper facilities for such access and inspection. The Contractor shall provide access to all records by State personnel.

33. SHOP AND SETTING DRAWINGS:

The Contractor shall furnish to the Engineer shop and erection drawings for approval. These drawings shall include those prepared on structural and reinforcing steel, fabricated metal items,

pipng, layout drawings of equipment and machinery, and all other drawings required by the Specifications or required in the prosecution of the work. Shop drawings shall be submitted in sufficient numbers to enable the Engineer to retain two copies for field and office reference.

The Engineer will check shop drawings for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes, or to techniques of construction, and for coordination of the work of all trades.

INFORMATION REQUIRED FOR APPROVAL: Each manufacturer furnishing equipment shall submit the following information for the Engineer's approval:

- (a) Shop Drawings: Six(6), unless otherwise specified, sets of certified drawings, guaranteed performance curves, wiring diagrams, lists of electrical controls, including manufacturer's name and catalog number, horsepower of motors, normal full load and maximum load ampere rating for each motor.
- (b) Weight: Estimated weight of each unit of equipment.

34. ORDER OF WORK:

Requests may be made by the Owner at the Preconstruction Conference.

35. LITIGATIONS:

Arbitration in accordance with General Conditions, Article 16 will not be allowed on this project. The Contractor should be apprised that he would have to use other legal remedies if problems, or disputes, arise on this project.

36. COORDINATION OF PLANS AND SPECIFICATIONS:

In resolving conflicts, errors, and discrepancies between the plans and specifications, the documents shall be given precedence in the following order:

- Change Order
- Addenda
- Agreement
- Special Conditions
- Information for Bidders
- Project Plans
- Standard General Conditions
- Standard Plan Details

37. POLICY AND PROCEDURE FOR ACCOMMODATION OF UTILITIES:

The Georgia Department of Transportation "Policy and Procedure for Accommodation of Utilities" will be considered a part of these specifications and will be adhered to at all times.

38. UTILITY LICENSURE REQUIREMENTS:

Utility contractors are required to hold a state utility contractor license. A certified utility manager or certified foreman must be present at the utility job site.

39. EROSION AND SEDIMENT CONTROL:

The Contractor shall be required to observe all local laws and ordinances in relation to erosion and sediment control as it pertains to this project. All erosion and sediment control plans and construction shall be completed in accordance with the publication entitled "Manual for Erosion and Sediment Control in Georgia" as amended in 1996 and published by the State Soil and Water Conservation Committee of Georgia, the State of Georgia Erosion and Sedimentation Control Act of 1975 as amended in 1995, and Best Management Practices. The Contractor shall construct and maintain all required erosion control measures throughout the duration of this project as part of the total job. All erosion and sediment control measures shall be designed for a 25-year storm event.

Prior to construction, all erosion and sediment control measures are to be in place.

The cost of additional erosion and sediment control measures and devices that may be required due to the negligence of the Contractor and/or his failure to adhere to Best Management Practices in a timely manner shall be borne by the Contractor.

The Engineer, Owner and the governing authority who has jurisdiction over the work shall have the right to stop work when erosion and sediment control measures are not being implemented in accordance with Best management Practices. No claim will be allowed by the Contractor for cost of downtime of men and equipment associated with any shutdown of the Contractor's operations.

40. COMPLIANCE WITH HIGHWAY REQUIREMENTS:

The Contractor shall comply with all requirements of the State Highway Department when work he is performing is within the limits of the highway right-of-way. No additional compensation shall be paid the Contractor for conforming to these requirements. The Contractor shall familiarize himself with all requirements and expenses associated with work within the highway rights-of-way, and shall bear the cost of all insurance, inspection, and other requirements specifically related to work within those rights-of-way. The Department of Transportation "Utility Accommodation Policy and Standards" will be considered a part of these specifications and will be adhered to at all times.

SECTION NO. 1

EARTHWORK

1-01 - SCOPE: This section of the Specifications describes materials and equipment to be utilized and requirements for their use in performing all site preparation, including, but not limited to, erosion control, clearing and grubbing, excavation, and placement of fill. The Contractor shall furnish all materials, equipment and labor necessary to complete the work.

1-02 - TEMPORARY EROSION AND SEDIMENTATION CONTROLS: The Contractor shall provide the necessary controls to ensure that storm water, other water, and drainage from jobsite areas which have been denuded, stripped or modified of its natural existing or artificially established stabilization or protection against erosion shall pass through some type of filter or removal system before being discharged to a stream or channel and that these areas shall be kept sufficiently moist to control dust.

The Contractor shall observe all local laws and ordinances in relation to erosion and sediment control as they pertain to this project. All erosion control plans and construction shall be in accordance with the "Manual for Erosion and Sediment Control in Georgia" latest revision, the State of Georgia Erosion and Sedimentation Control Act of 1975, as amended in 1995 and Best Management Practices. All erosion control measures shall be employed to effectively control erosion and sedimentation for all rainfall events up to and including the 25-year, 24-hour rainfall.

It shall be the full and complete responsibility of the contractor, which shall be considered the operator for this project, to permit and maintain this project in a manner to insure full and complete compliance with NPDES Permit No.GAR 100001. All documentation required by said permit shall be submitted along with monthly progress payments to the owner. Any pay request not accompanied by said documentation required by the permit (including but not limited to daily, weekly and monthly inspection reports, rainfall data, state required reports with confirmation of delivery) shall be considered incomplete.

The Contractor shall designate one individual to be responsible for implementation and maintenance of erosion and sedimentation controls on a 24-hour, every day basis. Said person shall possess a valid Level 1A Certified Personnel Certification Card issued by Georgia Soil and Water Conservation Commission. The Contractor shall furnish to the Engineer the individual's name, address and 24-hour telephone number and notify the Engineer of any updates as necessary.

All erosion and sedimentation control measures must be installed prior to the initiation of any construction activity. Additional erosion and sedimentation control devices shall be installed as needed, or as directed by the Engineer. Replacement and maintenance of erosion control devices shall be at the Contractor's expense.

The Engineer, or Owner, shall have the right to stop work when erosion and sediment control measures are not being implemented in accordance with Best Management Practices. No claim will be allowed by the Contractor for cost of downtime of men and equipment associated with any shutdown of the Contractor's operations for failure to maintain suitable erosion and sedimentation controls.

NOTE: If it is determined that additional silt fence not shown on the plans is necessary to prevent escape of sediment from the site, payment shall be made at the unit price bid for silt fence for that additional silt fence directed by the Engineer.

NOTE: No additional payment shall be made for installation of soil & erosion control devices not included as pay items in the Bid.

Silt dams, traps, barriers, and appurtenances shall be installed as indicated on the approved plans and working drawings, and shall be maintained in-place until no longer needed, and then removed. Hay bales which deteriorate, and filter stone which becomes dislodged shall be replaced with new materials.

Materials used in temporary erosion and sedimentation control shall meet the following requirements.

(a) Hay bales shall be clean, seed free cereal hay type.

(b) Commercial silt fence shall be of woven polypropylene construction which has been ultraviolet light (UV) stabilized. Silt fence shall be equal to Supac 4WS manufactured by Phillips Fibers Corp. Silt fence stakes shall be either steel rods not smaller than 1/2-inch diameter, fir, southern pine, or hemlock. All silt fence shall be constructed in accordance with Georgia Department of Transportation Standard Specifications section 171 for silt fence.

Type "A" silt fence shall be used at the toe of fill slopes greater than 10 feet high, parallel to streams, and for ditch checks. The fence should never run continuous; it should turn back into the fill or ground line to create small pockets to trap silt. When used as ditch checks the spacing is 100 feet for slopes of 1% to 2%; 50 feet for 2% to 3% slopes.

Type "C" silt fence may be used at the toe of fills of over 10 feet high. It should be used for ditch checks where slopes are 3% to 5% using 25' spacing. The fence should never run continuous; it should turn back into the fill or ground line to create small pockets to trap silt.

(c) Filter stone shall be crushed stone.

(d) Concrete block shall be hollow, non-load-bearing type.

(e) Silt retention barriers shall be constructed in accordance with Georgia Department of Transportation Standard Specifications Section 170.

1-03 - EXISTING UTILITIES AND OBSTRUCTIONS: The Drawings indicate underground utilities or obstructions that are known to exist according to the best information available to the Owner. Where these or unforeseen underground utilities are encountered, the location and alignment of new work may be changed, upon written approval of the Engineer, to avoid interference. The Contractor must contact the Georgia Utility Protection Center before beginning work on any portion of the project and comply with all rules and regulations applicable to utility protection.

(a) Electronic Pipe and Cable Finder: Furnish and have available at all times an electronic pipe detector, in good working order, to locate existing pipe lines or other obstructions.

(b) Relocation of Services: Before initiating any excavation, locate all utilities services to avoid interference with such services and to determine whether these services should be relocated. Repair any damage done to utilities services or pipe lines resulting from efforts to locate services or resulting from the construction operation.

NOTE: Any delay or extra cost due to encountering underground utilities or obstructions not shown on the Drawings or found in locations different from those shown on the Drawings shall not constitute a claim for additional payment, except as provided for payment for authorized additional depths.

1-04 - CONSTRUCTION ALONG HIGHWAYS, STREETS, AND ROADWAYS:

(a) General: Perform all work along highways, streets and roadways in accordance with the applicable regulations of the Georgia Department of Transportation and the City of Rome, with reference to construction operations, safety, traffic control, road maintenance and repair.

(b) Safety: Provide suitable signs, barricades and lights for protection of traffic, in locations where traffic may be endangered by construction operations. Replace all highway signs removed for construction as soon as possible. Do not close any highway, street or roadway without first obtaining permission from the proper authorities. Provide sufficient barricades and warning lights. Provide flagmen as required.

The Contractor shall provide a traffic control plan approved by Georgia Department of Transportation prior to any construction activities within D.O.T. right of way. All costs associated with the preparation, approval and implementation of this plan shall be the responsibility of the Contractor.

Backfill any portion of a trench excavated during the same work day. No trench shall remain open overnight.

(c) Construction Operations: Perform all work along highways, streets and roadways to least interfere with traffic.

(1) Stripping: Where earthwork or excavations occur along road shoulders, strip and stockpile all sod, topsoil and other material suitable for shoulder restoration.

(2) Trenching, Laying and Backfilling: In pipe laying operations, do not open the trench any further ahead of pipe laying than is necessary. Backfill and remove excess material immediately behind laying operations. Complete excavation and backfill for any portion of the trench in the same day.

(3) Shaping: Reshape damaged slopes, side ditches, and ditch lines immediately after completing backfilling operations. Replace topsoil, sod and any other materials removed from shoulders.

(d) Excavated Materials: Do not place excavated material along highways, streets and roadways in a manner which obstructs traffic. Sweep all scattered excavated material off of pavement.

(e) Drainage Structures: Keep all side ditches, culverts, cross drains, and other drainage structures clear of excavated material and free to drain at all times.

(f) Maintaining Highways, Streets, Roadways and Driveways: Maintain streets, highways, and roadways in suitable condition for movement of traffic until completion and final acceptance of the work.

Repair all driveways that are cut or damaged immediately. Maintain them in a suitable condition for use until completion and final acceptance of the work.

1-05 - CLEARING AND GRUBBING: Within the limits of disturbed area shown on the Drawings the site shall be cleared and grubbed to prepare for construction. Clearing and grubbing shall be performed in accordance with the following and Section 201 of the Georgia Department of Transportation Standard Specifications.

(a) Demolition of Existing Structures and Foundations: Existing structures, walls, foundations, and pavements shall be removed to the limits shown on the Drawings. Structures shall be removed to eliminate any conflicts with the proposed work. Removals shall provide a clearance of at least 24-inches from any new work, and at least 12-inches from the proposed finished grade, unless noted otherwise on the Drawings.

(b) Clearing and Grubbing: All vegetative growth such as trees, shrubs, brush, logs, upturned stumps and roots of down trees, and other similar items shall be removed and disposed of. When necessary, trees shall be felled completely. Where the tree limb structure interferes with utility wires, or where the trees to be felled are in close proximity to utility

wires, the tree shall be taken down in sections to eliminate the possibility of damage to the utility.

(c) Disposal of Refuse: The refuse resulting from the clearing and grubbing operation shall be hauled to a disposal site secured by the Contractor and shall be disposed of in accordance with all requirements of federal, state, county and municipal regulations. No debris of any kind shall be deposited in any stream or body of water, or in any street or alley. No debris shall be deposited upon any private property except by written consent of the owner. In no case shall any material be left on the project, shoved into embankments or trenches on the project.

When approved in writing by the Engineer and when authorized by the proper authorities, the Contractor may dispose of such refuse by burning on the site of the project provided all requirements set forth by the authorities are met. The authorization to burn shall not relieve the Contractor in any way from damages which may result from his operations.

The Contractor shall be responsible for all damages to existing improvements resulting from his operations.

1-06 - PRELIMINARY GRADING: Before beginning mass grading, the Contractor shall excavate and stockpile topsoil for use in preparation of the site for grassing.

1-07 - BORROW EXCAVATION: If necessary to complete the work, the Contractor shall excavate material from borrow areas, or pits, outside the right-of-way and Limits of Disturbed Area. Borrow excavation shall include hauling and placement of such material as required on the Drawings. Borrow excavation includes all necessary stripping, excavation and disposal of any unsuitable material from borrow areas. Borrow pits shall be secured by the Contractor and approved by the Engineer. Borrow material shall meet the requirements of Section 206.02 of the Georgia Department of Transportation Standard Specifications. Construction of all borrow pits shall meet the requirements of Section 206.03 of the Georgia Department of Transportation Standard Specifications.

NOTE: No additional payment will be made for Borrow Excavation. All costs for providing the source of borrow material and the excavation, hauling, placing and compacting the approved material shall be included in the amount bid for Grading Complete.

NOTE: The borrow site shall have an approved Soil & Erosion Control Plan. The Contractor shall be responsible for development, implementation and maintenance of said plan. No separate payment will be made for the installation and maintenance of soil & erosion control devices at the Borrow Site. The costs of all labor, materials, and equipment required to install and maintain proper soil & erosion control measures at the Borrow Site shall be included in the amount bid for Grading Complete.

1-08 - BACKFILLING AND EMBANKMENT: Fill materials shall be placed as required to provide compacted subgrade and produce finished grade elevations shown on the Drawings.

(a) Material: Fill materials shall be free of organic or other perishable material and shall not contain stones or rubble. No material shall be placed when frozen. If additional material, other than that to be obtained from excavation, is required for backfilling and grading, the Contractor shall obtain such additional material from sources on-site as identified by the Engineer or sources off the work site secured by the Contractor.

NOTE: There shall be no separate payment for backfilling and embankment. The costs of these items and all costs incidental thereto shall be included in the unit price bid for the item to which it pertains.

(b) Placement: Prior to placement of any material in embankments, the area within embankments limits shall be stripped of topsoil and all unsuitable materials removed as described under Excavation. The area shall then be scarified to a depth of at least six inches.

Fill material shall be placed in continuous approximately horizontal layers extending the full width of the embankment cross-section and the full dimension of the excavation where practicable and having a net compacted thickness of not over 8 inches.

Fill materials shall be placed at optimum moisture content within practicable limits (not less than 1% below optimum). Optimum moisture shall be maintained by sprinkling the layers as placed or by allowing materials to dry before placement.

(c) Compaction: Fill materials shall be compacted and tested in accordance with Section 208 and 209 of the Georgia Department of Transportation Standard Specifications. Fill materials shall be compacted for their full depth to 95% of the maximum dry density.

Compaction of embankments shall be by sheepsfoot rollers with staggered uniformly spaced knobs and suitable cleaning devices. The projected area of each knob and the number and spacing of the knobs shall be such that the total weight of the roller and ballast when distributed over the area of one row of knobs shall be 250 psi. Placement and compaction of materials shall extend beyond the final contours sufficiently to insure compaction of the material at the resulting final surface. Final contours shall then be achieved by a tracked bulldozer shaping the face of the embankment.

If tests indicate that density of fill is less than that specified, the area shall be either recompacted or undercut, filled, and compacted until specified density is achieved.

(d) Final Grading: Upon completion of construction operations, cut and fill slopes shall be graded to finish elevations and grades shown on the Drawings. Graded areas shall be made to blend into conformation with remaining ground surfaces. All surfaces shall be left smooth and free to drain.

(e) Excess Material: Any excess earth excavation and unsuitable materials may be placed on the site as approved by the Engineer. Surfaces and slopes of waste fills shall be left smooth and free to drain.

1-09 - ROCK EXCAVATION:

(a) Mass Rock as used herein shall be defined as follows:

Solid mineral material that cannot be broken and removed by power shovels of one (1) cubic yard capacity;

Solid mineral material which cannot be excavated except by drilling or blasting;

Solid mineral material which is hard enough to ring when struck by a hammer, and the amount of solid stone shall not be less than one (1) cubic yard in volume;

Solid mineral material which cannot be broken with a heavy single-toothed ripper pulled by the equivalent of a Caterpillar D-8 tractor with a minimum draw bar pull of 56,000 pounds, or by the equivalent of a Caterpillar 977 front end loader.

(b) When rock is encountered, clear away earth and notify Engineer. The Engineer will inspect the material and issue written instructions. No rock excavation shall be done without written instructions. No rock excavation shall be done prior to measurement.

(c) Measurement for Rock Excavation shall be as follows:

(1) Mass Rock

(I) Measurement for mass rock shall be made taking cross sections or by other appropriate means identifying the contours of rock before and after removal. All rock measurements shall be made and certified by an independent licensed surveyor or engineer approved by the Owner.

(II) Rock removed prior to measurement shall not receive compensation.

(III) The quantity of rock shall be calculated using the following limits:

(A) To top of rock

(B) To 1.0 feet below finished grade

(C) To finish grade in cut where rock is removed to finish grade. Where it is not so removed, to the finish rock surface.

(d) Blasting or explosives:

- (1) All blasting or use of explosives shall be done by a company with at least five years documented experience in use of explosives for disintegrating rock.
- (2) All blasting or use of explosives shall be done in strict accordance with the local authority having jurisdiction. The Contractor shall obtain all necessary permits or approvals prior to the use of explosives. The Contractor is responsible for all Federal, State and Local safety requirements, ordinances and laws regarding the use of explosives.
- (3) The Contractor shall conduct a survey with photographs to document existing conditions of buildings adjacent or near the location of rock removal prior to blasting. The Contractor shall advise and coordinate with all affected adjacent or nearby property owners in writing of the proposed blasting schedule. Obtain a seismic survey prior to rock excavation to determine maximum charges which may be used without damaging adjacent property, buildings or structures. Provide seismographic monitoring during all blasting operations.
- (4) Rock that is removed shall become the property of the Contractor and shall be removed from the site and disposed of in a legal manner.
- (5) When rock is encountered, the Contractor shall immediately notify the Engineer in writing. Classification of rock and volume calculations shall be done in accordance with the specifications and as directed by the Engineer. The Engineer will issue written instructions to the Contractor concerning rock work prior to any rock removal.
- (6) Payment will not be made for over excavated rock or for replacement materials.

1-10 - PAYMENT: No additional payment shall be made for work required in this Section of the Specifications except as specifically set forth in the Bid. The cost of all labor, materials, and equipment required by the work, and all costs incidental thereto, shall be included in the unit price bid for the work to which it pertains.

SECTION NO. 2

STORM DRAINAGE SYSTEM

2-01 - SCOPE: This section of the Specifications describes products and requirements for their use and installation in the storm drainage systems shown on the Drawings and/or Specified.

Furnish all materials and equipment and perform all labor necessary to fulfill the requirements of these Specifications.

2-02 - GENERAL: Supply all products and perform all work in accordance with applicable American Society for Testing and Materials (ASTM), American Water Works Association (AWWA), American National Standards Institute (ANSI) or other recognized standards. Latest revisions of all standards are applicable. If requested by the Engineer, submit evidence that manufacturer has consistently produced products of satisfactory quality and performance over a period of at least two years.

2-03 - PIPE, MATERIALS, AND ACCESSORIES:

(a) Reinforced Concrete Pipe: Reinforced concrete pipe shall be supplied in lengths of at least four feet.

(1) Pipe: Pipe shall be reinforced concrete conforming to ASTM C 76 for Class III pipe. Wall thickness design shall correspond to Wall B. Pipe shall have tongue and groove type joints.

(2) Acceptance: For pipe with a diameter of 30-inches or greater, acceptance shall be on the basis of material tests and inspection of manufactured pipe for defects and imperfections as defined in Paragraph 4.1.2 of ASTM C 76. Acceptance of smaller pipe shall be on the basis of plant load-bearing tests, material tests, and inspection of manufactured pipe for visual defects and imperfections as described in Paragraph 4.1.1 of ASTM C 76.

All pipe is subject to the inspection of the Engineer at the pipe plant, jobsite, or other point of delivery for the purpose of rejecting pipe not conforming to these Specifications.

Pipe shall be inspected after delivery for shape, cracks, uniformity, blisters and imperfect surfaces, and damaged ends. Repaired or patched pipe or pipe with repaired or patched joint ends or shoulders will be rejected.

(b) Manholes: Provide materials for construction of manholes in accordance with the following:

(1) Precast Concrete Sections: Precast concrete sections shall meet the requirements of ASTM C 478. The minimum compressive strength of the concrete in precast sections shall be 4,000 psi. The minimum shell thickness shall be one-twelfth of the inside diameter of the riser of the largest cone diameter. Each section shall be Georgia D.O.T. certified.

(2) Brick and Mortar: Brick shall be whole and hardburned, conforming to ASTM C 32 Grade MS. Mortar shall be made of one part Portland cement and two parts clean sharp sand. Cement shall be Type 1 and shall conform to ASTM C 150. Sand shall meet ASTM C 53.

(3) Iron Castings: Cast iron manhole frames, covers, and steps shall be gray iron, conforming to ASTM A 48 for Class 258 gray iron and all applicable local standards. All castings shall be tough, close grained, smooth and free from blow holes, blisters, shrinkage, strains, cracks, cold shots and other imperfections. No casting will be accepted which weighs less than 95% of the design weight. Shop drawings must indicate the design weight and provide sufficient dimensions to permit checking. All castings shall be thoroughly cleaned in the shop and given two coats of approved bituminous paint before rusting begins. All castings shall be made in the U.S.A.

Grate inlets shall be equal to East Jordan Iron Works 7510 with M3 vane type grate as shown on the Drawings.

Manhole frames and covers shall be equal to the following:

<u>Type</u>	<u>Design Weight</u>	<u>Manufacturer's Reference</u>
Non-Traffic (std.)	131#	EJIW G-1860
Heavy Duty (traffic)	318#	EJIW V-1480

All Heavy Duty Covers to have the following casting "STORM".

All frames and covers shall have machined horizontal bearing surfaces.

(4) Plastic Steps: Manhole steps of polypropylene molded around a steel rod, equal to products of M. A. Industries may be used.

(5) Pipe/Manhole Connector: Pipe connections to precast concrete manholes shall be made using a compression type rubber boot manufactured in accordance with ASTM C 923, and equal to Kor-N-Seal.

(e) Concrete: Concrete shall be composed of cement, fine aggregate, coarse aggregate, admixtures, and water proportioned and mixed to produce a plastic workable mix. Concrete shall have a minimum 28-day compressive strength of 3,000 psi.

(f) Grout: Grout which is required by the Drawings or Specifications, and is not otherwise specified, shall be composed of one part cement and three parts sand. Grout shall have a maximum water cement ratio of 5.0 U.S. gallons per 94 lb. bag of cement.

(g) Reinforcing Steel: Bar reinforcing steel shall conform to the requirements of ASTM A 615 Grade 40, as amended to date.

(h) Rip Rap: Provide rip-rap where shown on the Drawings or otherwise directed using only one method, either (1) or (2), throughout the job.

(1) Stone Rip-Rap: Use sound, tough, durable stones resistant to the action of air and water. Slabby or shaley pieces will not be acceptable. Specific gravity shall be 2.0 or higher. Minimum weight of individual stones shall be 50 pounds. The maximum allowable dimension for an individual stone is 24 inches. The minimum allowable dimension for an individual stone is 6 inches. At least 50% of the stones shall have a minimum dimension of 12 inches.

(2) Sand-Cement Bag Rip-Rap: Use cement sacks or burlap bags having a capacity of from 1 to 2 cubic feet. Do not use bags previously used for sugar or chemicals. Fill bags with a mixture of one part Portland Cement to five parts sand.

2-04 - LOCATION AND GRADE: The Drawings show the location and grade of catch basins, manholes, and drainage ditches. The grade line shown on the profile, or spot elevations in the plan view, corresponds to the invert of the pipe or ditch, respectively.

The Contractor shall protect the location and elevation of bench marks and reference points shown on the Drawings and shall provide all other control required to construct the drainage systems.

2-05 - EXCAVATION OF TRENCHES: Excavate all materials encountered, including rock, and dispose of excess excavated material not required for backfilling. Perform all excavation in accordance with the Occupational Safety and Health Act of 1970 (PL 91596).

(a) Dimensions: Excavate trenches to the depths shown on the drawings to accommodate the required bedding and for manholes and other structures.

Excavate the top portion of the trench to any width which will not cause unnecessary damage to adjoining structures, roadways, pavements, utilities, trees, or private property.

Excavate the lower portion of the trench to a width no greater than the outside diameter of the pipe plus 18 inches. Maintain this width up to two feet above the pipe.

(b) Earth Excavation: Excavate and prepare the trench bottom to support the pipe uniformly throughout its length.

NOTE: No additional payment will be made for improved bedding required to compensate for over excavation of the trench.

(c) Rock Excavation:

(1) Definition of Rock: Any material which cannot be excavated with a backhoe equal to a Caterpillar Model 426, Series II, and occupying an original volume of at least one-half cubic yard.

(2) Excavation: Where rock is encountered, excavate to the minimum depth and width which will provide 6 inches clearance beyond the outside diameter of the pipe.

(3) Blasting: Provide experienced workmen to perform blasting. Conduct blasting operations in accordance with all existing ordinances and regulations. Protect all structures from the effects of the blast. Repair any resulting damage.

NOTE: No additional payment will be made for repair of damage caused by blasting.

(4) Removal of Rock: Do not use excavated rock as backfill material. Dispose of rock which is surplus or not suitable for use as rip-rap.

NOTE: Rock excavation will be paid for as an extra in addition to payment for pipe provided for elsewhere in these Specifications. Payment will be made for the measured quantity of rock excavated, at the unit price bid. The Unit price for rock excavation shall include the cost of rock excavation, the cost of additional backfill material as specified and all costs incidental thereto. The allowable volume of rock excavation for payment shall be based on the width of trench specified above, (but not less than 36 inches), and depth of rock in the centerline, from the top of the rock to the specified bottom of the trench. The Owner must be given reasonable notice to measure all rock. No allowance shall be made for excavating to extra width for construction of appurtenances

and cost of all such additional rock excavation shall be included in the unit price bid for rock excavation.

(d) Bracing and Sheeting: When required by regulations, for safety of workers, or to prevent damage to adjoining structures, roadways pavements, utilities, trees, or private property which are specifically required to remain, provide bracing and sheeting.

(1) Timber: Timber for shoring, sheeting, or bracing shall be sound and free of large or loose knots and in good condition. Size and spacing shall be in accordance with OSHA regulations.

Remove bracing and sheeting in units when backfill reaches the point necessary to protect the pipe and adjacent property. Leave sheeting in place when in the opinion of the Engineer it cannot be safely removed. Cut off sheeting left in place at least two feet below the surface.

(2) Steel Sheet Piling: Continuous lockjoint steel sheet piling may be substituted for timber sheeting when approved by the Engineer. Steel piling may be removed, without cutting, provided the rate of removal is kept in pace with the tamping and backfilling operations to assure complete filling of the void created by the withdrawal of the piling. Complete withdrawal of the piling in advance of the tamping and backfilling will not be permitted. Piling, where ordered to be left in place by the Engineer for reasons of safety, will be cut off where directed.

(e) Dewatering and Trench Stabilization: Dewater excavation continuously to maintain a water level below the bottom of the trench.

Wherever the material at the bottom of the trench is unsuitable for the proper installation of the pipe, the Engineer will direct the removal and replacement of the unsuitable material.

When so directed, undercut the trench and backfill with crushed stone bedding material. Place and compact this material to bring the trench to the required grade.

NOTE: Trench stabilization will be paid for as an extra in the amount authorized by the Engineer and at the unit price bid in the Bid.

NOTE: The price bid for pipe, culverts and manholes shall include excavation for the depth below the grade line necessary to provide specified bedding, and to lay pipe or set structures to grade, but measurements for payment will be made only to the grade line.

NOTE: No additional payment shall be made for the use of steel piling in lieu of timber sheeting.

NOTE: All cost of equipment, labor, and materials required for dewatering shall be included in the price bid for pipe.

2-06 - BEDDING: Bed pipe and other storm drainage structures in accordance with the detail drawings and the following specifications.

(a) Materials: Bedding shall be crushed stone material unless shown or specified otherwise. Earth bedding materials may be substituted for crushed stone when authorized by the Engineer.

Earth bedding material shall be suitable materials selected from materials excavated from the trench. Materials shall be clean and free of rock, organics, and other unsuitable material.

Crushed stone bedding material shall meet the requirements of Georgia Department of Transportation Specification 800.01 for No. 57 stone.

(b) General: Prepare the trench bottom to support the pipe uniformly throughout its length. Compact stone bedding material by tamping or slicing with a flatblade shovel. If the trench is excavated to excessive width or depth, provide the next better class of bedding. In rock trenches, bed pipe in at least six inches of suitable bedding material.

(c) Bedding Classification: Lay all pipe with Class "C" crushed stone bedding unless shown or specified otherwise.

(1) Class "A": Excavate the trench to a depth of one-fourth the nominal diameter of the pipe below grade and lay the pipe to line and grade on concrete block. Place concrete to the full width of the trench and to a height of one-fourth the outside diameter of the pipe above the invert.

(2) Class "B": Excavate the bottom of the trench flat at a minimum depth shown on the Drawings below the bottom of the pipe barrel. Place and compact bedding material to the proper grade. Bedding shall then be carefully placed by hand and compacted to provide full support under and up to the centerline of the pipe.

(3) Class "C": Excavate the bottom of the trench flat at a minimum depth shown on the Drawings below the bottom of the pipe barrel. Place and compact bedding material to the proper grade. Bedding shall then be carefully placed by hand and compacted to provide full support under and up to a height of one-fourth the outside diameter of the pipe above the invert.

(d) Manholes: Excavate to a minimum of 12 inches below the planned elevation of the base of the manhole. Place and compact stone bedding material to the required grade before constructing the manhole.

NOTE: No separate payment will be made for material used to provide specified bedding. The cost of all bedding materials shall be included in the unit price bid for the item to which it relates.

2-07 - LAYING PIPE AND PRECAST CULVERTS: Lay the pipe to conform accurately to the alignment and grade shown on the Drawings.

(a) Handling: Use suitable tools and equipment to handle and lay pipe. Prevent damage to the pipe. Examine all pipe for cracks and other defects as it is laid. Do not lay pipe or other materials which are known to be defective.

If any pipe or other material is discovered to be defective or damaged after being laid, remove and replace it.

NOTE: No additional payment will be made for replacement of defective materials.

(b) Sequence: Excavate, lay the pipe, and backfill as closely together as possible. Do not leave unjointed pipe in the trench overnight. Backfill and compact the trench as soon as possible after laying and jointing is completed. Cover the exposed end of the installed pipe each day at the close of work and at all other times when work is not in progress. If necessary to backfill over the end of an uncompleted pipe, close the end with a plug.

(c) Placing and Jointing: Clean pipe and fittings thoroughly before laying. Before making the joint, clean the sealing surfaces of dust, dirt, gravel, and other foreign substances. Apply joint lubricant recommended by the pipe manufacturer.

Center the tongue end in the groove of the preceding pipe and shove home. Apply moderate force to ensure proper seating.

Immediately after jointing bring the pipe to final alignment and grade.

NOTE: Measurement for payment at the unit price for storm drain pipe and culverts shall be made from centerline to centerline of manholes, catchbasins, junction boxes, or to the point of connection with headwalls or flared end sections. Depth of cut, if applicable, shall be measured from grade line to the invert of the pipe. Cut sheets prepared by the Contractor and approved by the Owner shall be the basis for payment.

NOTE: Full payment will not be made until inspection and clean-up are complete and the line is ready to be placed into service.

2-08 - CATCH BASINS AND MANHOLES: Construct catch basins and manholes as shown on the Drawings:

(a) Precast Concrete: Handle sections carefully to prevent cracking or chipping. Provide uniform bedding of the bottom section to prevent uneven loading. If preformed openings must be enlarged or altered, or if new openings must be made in the field, minimize the amount of material removed to provide closely matched surfaces for grouting. Install gaskets in accordance with manufacturer's recommendations to produce a watertight structure.

(b) Brick: Bed the bottom and sides of every brick in mortar. Apply a smooth coat of mortar, 3/4-inches thick, on the inside and outside.

(c) Inverts: Form channels as shown on the drawings, rounded, and troweled smooth. Maintain consistent grade through the invert. Seal the connection of pipes to the manhole with brick and mortar on the inside and outside.

(d) Top elevations: Build manholes outside of paved areas 18 inches above ground unless otherwise shown on the plans or directed by the Owner. Build manholes in paved areas to existing grades.

(e) Diamond Dowels: All catch basins shall have Diamond Dowel System (or equal) installed therein. Installation shall be in full and complete compliance with manufacturers' recommendations.

NOTE: Measurement for payment at the unit price for manholes shall be made from the invert to the base of the manhole frame.

NOTE: Payment for installation of Diamond Dowel System shall be included in the unit price for catch basins.

2-09 - CONCRETE COLLARS, HEADWALLS AND OTHER STRUCTURES: Provide concrete and reinforcement for collars, headwalls and other structures in accordance with the requirements of Section 3 - Concrete Work. Construct according to the details on the Drawings or D.O.T. standards where referenced.

2-10 - BACKFILLING: Backfill carefully to restore the ground surface to its original condition. Dispose of surplus material.

(a) Backfill Under Roads: Compact backfill underlying pavement and backfill under dirt and gravel roads to 95% of the maximum dry density as determined by the

Standard Proctor Compaction Test (ASTM D 698), except in the top 12 inches, which shall be to 100% of the maximum dry density. All other bedding and backfill shall be compacted to 85% of the maximum dry density.

(b) Initial: Place initial backfill material carefully around the pipe above bedding in uniform 6 inch layers to a depth of at least 18 inches above the pipe bell. Compact each layer thoroughly with suitable hand tools. Do not disturb or damage the pipe. Backfill on both sides of the pipe simultaneously to prevent side pressures. Initial backfill material is earth material excavated from the trench which is clean and free of rock, organics, and other unsuitable material. If materials excavated from the trench are not suitable for use as initial backfill material, obtain suitable materials elsewhere.

(c) Final: After initial backfill material has been placed and compacted, backfill with general excavated material. Final backfill material shall not contain more than 1/3 broken rock, of which no single stone or boulder shall weigh more than 50 pounds. Place backfill material in uniform layers and thoroughly compact with heavy power tamping tools of the "Wacker" type.

(d) Settlement: If trenches settle, refill and grade the surface to conform to the adjacent surfaces.

(e) Additional Material: Where final grades above the pre-existing grades are required to maintain minimum cover, additional fill material will be shown on the Drawings.

Utilize excess material excavated from the trench if the material is suitable. If excess excavated materials are not suitable, or if the quantity available is not sufficient, provide suitable additional fill material.

NOTE: No separate payment will be made for backfilling. The cost of all such work and all costs incidental thereto shall be included in the unit price bid for the item to which the work pertains.

2-11 - RIP-RAP: Where shown on the Drawings, carefully compact backfill and place rip-rap to prevent subsequent settlement and erosion.

(a) Imbed stone rip-rap by hand so as to form a compact layer at least 12 inches thick. Place rip rap in such a way that the smaller stones are not segregated by evenly distributed. Place chinking stones in the crevices between the larger stones so that a dense, well graded mass is produced.

(b) Imbed sand-cement bag rip-rap by hand to form a compact layer at least 12 inches thick. Place with overlapping joints. The finished surface shall not deviate from the specified by more than 3 inches at any point.

(c) Place a filter fabric between rip-rap and soil foundation. Fabric shall be a geotextile underliner as per ASSHTO M288-98.

NOTE: The cost of all Rip-Rap along with required filter fabric shown on the Drawings or specified shall be included in the unit price bid for pipe, headwalls, or flared end sections to which it pertains. Payment at the unit price bid for Rip-Rap along with required filter fabric shall be made only when such Rip-Rap is specifically authorized by the Engineer and not shown on the Drawings or specified. Said payment at the unit price bid for Rip-Rap shall include filter fabric.

2-12 - INSPECTION: Clean pipe lines before requesting final acceptance. Where any obstruction is met, clean the pipe by means of rods, swabs, or other instruments. When requested by the Owner flush out lines and other structures before final inspection.

Pipe lines shall be straight and show a uniform grade between manholes. Correct any discrepancies discovered during inspection.

2-13 - PAYMENT: No separate payment shall be made for work required in this Section of the Specifications except as specifically set forth in the Bid. The cost of all required work and all costs incidental thereto shall be included in the unit prices bid in the Bid for the items to which it pertains.

SECTION NO. 3

PROTECTION AND RESTORATION OF WORK AREA

3-01 - GENERAL: Return all items and all areas disturbed, directly or indirectly by work under these Specifications, to their original condition or better, as quickly as possible after work is started.

3-02 - MAN-MADE IMPROVEMENTS: Protect, or remove and replace with the Owner's approval, all fences, walkways, mail boxes, pipe lines, drain culverts, power and telephone lines and cables, and other improvements that may be encountered in the work.

3-03 - CULTIVATED GROWTH: Do not disturb cultivated trees or shrubbery unless approved by the Owner. Any such trees or shrubbery which must be removed shall be heeled in and replanted under the direction of an experienced nurseryman.

3-04 - CUTTING OF TREES: Do not cut trees for the performance of the work except as absolutely necessary. Protect trees that remain in the vicinity of the work from damage from equipment. Do not store spoil from excavation against the trunks. Remove excavated material stored over root system of trees within 30 days to allow proper natural watering of the root system. Repair any damaged tree over 3-inches in diameter, not to be removed, under the direction of an experienced nurseryman. All trees and brush that require removal shall be promptly and completely removed from the work area and disposed of by the Contractor. No stumps, wood piles, or trash piles will be permitted on the work site.

3-05 - REMOVING AND REPLACING PAVEMENT:

(a) Removing Pavement: Remove existing pavement as required or specified.

(1) Marking: Before removing any pavement, mark the pavement neatly paralleling pipe lines and existing street lines. Space the marks the width of the trench.

(2) Breaking: Break asphalt pavement along the marks using jack hammers or other suitable tools. Break concrete pavement along the marks by use of jack hammers or by scoring with a rotary saw and breaking below the score by the use of jack hammers or other suitable tools.

(3) Machine Pulling: Do not pull pavement with machines until completely broken and separated from pavement to remain.

(4) Damage to Adjacent Pavement: Do not disturb or damage the adjacent pavement. If the adjacent pavement is disturbed or damaged, remove and replace the damaged pavement.

NOTE: No additional payment will be made for removing and replacing damaged adjacent pavement.

(5) Sidewalk: Remove and replace sidewalks disturbed by construction for their full width and to the nearest undisturbed joint.

(6) Curb: Remove and replace to the nearest undisturbed joint, or tunnel under, any curb disturbed or encountered by construction.

(b) Replacing Pavement: Upon completion of backfilling and consolidation of the backfill, arrange to have the compaction tested by an independent testing laboratory approved by the Owner. After compaction testing has been satisfactorily completed, replace all pavement, sidewalks and curbs removed.

Prior to replacing pavement, make a final cut in concrete pavement nine inches back from the edge of damaged pavement. Make the cut using a rotary saw. Remove asphalt pavement nine inches back from the edge of damaged pavement using jack hammers or other suitable tools.

Replace all street and roadway pavement as shown on the Drawings. Replace driveways, sidewalks, and curbs with the same material and to the same dimensions as existing.

(c) Supervision and Approval: Pavement restoration shall meet the requirements of the regulatory agency responsible for the pavement. Obtain agency approval of pavement restorations before requesting final payment.

Obtain the Owner's approval of restoration of pavement not the responsibility of a regulatory agency, such as private roads and drives.

Complete pavement restoration as soon as possible after backfilling.

(d) Failure of Pavement: Should any pavement restoration or repairs fail or settle during the life of the Contract, including the bonded period, promptly restore or repair defects.

NOTE: No separate payment for removing and replacing pavement will be made. Payment for soils testing shall be made from the Soils Testing cash allowance. No payment shall be made for tests which fail to verify required results.

3-06 GRASSING: Prior to planting, top soil stockpiled from excavation, borrow areas, or obtained from other sources shall be placed on all areas to be grassed to a minimum depth of 4-inches. The finished surface shall present a smooth, uniform, loose, well-broken soil without large clods, rocks, roots, or other unsatisfactory materials. Top soil shall be defined as soil in its unaltered state as having a Ph range of 5.5 – 6.5 and containing more than 80 percent of the nutrients necessary for plants to produce sustainable growth.

NOTE: No separate payment shall be made for the placement of top soil but shall be included in the Bid Item for Grading Complete.

NOTE: No separate payment shall be made for the incorporation of lime into soil to bring it into the required Ph range for classification as top soil, but shall be included in the Bid Item for Grading Complete.

Grass surfaces by hydro seeding with a mixture of fertilizer, seed, mulch, and water at the following rates:

Fertilizer (12-12-12)	1500 lbs/acre
Bermuda Seed	60 lbs/acre
Fescue Seed	200 lbs/acre
Mulching Material	1500 lbs/acre

Mulching material shall be Conwed-2000, Weyerhauser Silva Fiber, or equal.

3-07 - DISPOSAL OF RUBBISH: Dispose of all materials cleaned and grubbed during the construction of the project in accordance with the applicable codes and rules of the appropriate regulatory agencies, county, state and federal.

3-08 - PAYMENT: No additional payment shall be made for work required in this Section of the Specifications except as specifically set forth in the Bid. The cost of all labor, materials, and equipment required by the work shall be included in the unit price bid for the work to which it pertains.