

File 23059

CONTRACT DOCUMENTS AND SPECIFICATIONS

FOR

FORT GORDON RECREATION AREA SEWER SYSTEM UPGRADES

Augusta, Georgia

The Honorable Deke S. Copenhaver, Mayor

Commissioners:

William Fennoy

Corey Johnson

Mary Davis

Alvin Mason

Bill Lockett

Joe Jackson

Donnie Smith

Wayne Guilfoyle

Marion Williams

Grady Smith

Tom D. Wiedmeier

Director, Augusta Utilities Department

Augusta Utilities Department

360 Bay Street, Suite 180

Augusta, GA 30901

March 2013

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IB-01 GENERAL

All proposals must be presented in a sealed envelope, addressed to the OWNER. The proposal must be filed with the OWNER on or before the time stated in the invitation for bids. Mailed proposals will be treated in every respect as though filed in person and will be subject to the same requirements.

Proposals received subsequent to the time stated will be returned unopened. Prior to the time stated any proposal may be withdrawn at the discretion of the bidder, but no proposal may be withdrawn for a period of sixty (60) days after bids have been opened, pending the execution of contract with the successful bidder.

IB-02 EXAMINATION OF WORK

Each bidder shall, by careful examination, satisfy himself as to the nature and location of the work; the conformation of the ground; the character, quality and quantity of the facilities needed preliminary to and during the prosecution of the work; the general and local conditions; and all other matters which can in any way affect the work or the cost thereof under the contract. No oral agreement or conversation with any officer, agent, or employee of the OWNER, either before or after the execution of the contract, shall affect or modify any of the terms or obligations therein.

IB-03 ADDENDA AND INTERPRETATIONS

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

Every request for such interpretation should be in writing addressed to the Geri A. Sams, Director of Procurement; Procurement Department; Room 605; 530 Greene Street; Augusta, GA 30901 and to be given consideration must be received at least ten days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be sent by facsimile or U.S. mail to all prospective bidders (at the respective addresses furnished for such purposes), not later than five days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

IB-04 PREPARATION OF BIDS

Bids shall be submitted on the forms provided and must be signed by the bidder or his authorized representative. Any corrections to entries made on bid forms should be initialed by the person signing the bid.

Bidders must quote on all items appearing on the bid forms, unless specific directions in the advertisement, on the bid form, or in the special specifications allow for partial bids. Failure to quote on all items may disqualify the bid. When quotations on all items are not required, bidders shall insert the words "no bid" where appropriate.

Alternative bids will not be considered unless specifically called for.

Telegraphic bids will not be considered. Modifications to bids already submitted will be allowed if submitted by telegraph prior to the time fixed in the Invitation for Bids. Modifications shall be submitted as such, and shall not reveal the total amount of either the original or revised bids.

Bids by wholly owned proprietorships or partnerships will be signed by all OWNERS. Bids of corporations will be signed by an officer of the firm and his signature attested by the secretary thereof who will affix the corporate seal to the proposal.

NOTE: A 10% Bid Bond is required in all cases.

IB-05 BASIS OF AWARD

The bids will be compared on the basis of unit prices, as extended, which will include and cover the furnishing of all material and the performance of all labor requisite or proper, and completing of all the work called for under the accompanying contract, and in the manner set forth and described in the specifications.

Where estimated quantities are included in certain items of the proposal, they are for the purpose of comparing bids. While they are believed to be close approximations, they are not guaranteed. It is the responsibility of the CONTRACTOR to check all items of construction. In case of error in extension of prices in a proposal, unit bid prices shall govern.

IB-06 BIDDER'S QUALIFICATIONS

No proposal will be received from any bidder unless he can present satisfactory evidence that he is skilled in work of a similar nature to that covered by the contract and has sufficient assets to meet all obligations to be incurred in carrying out the work. He shall submit with his proposal, sealed in a separate envelope, a FINANCIAL EXPERIENCE AND EQUIPMENT STATEMENT, giving reliable information as to working capital available, plant equipment, and his experience and general qualifications. The OWNER may make such investigations as are deemed necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to him all such additional information and data for this purpose as may be requested. The OWNER reserves the right to reject any bid if the evidence submitted by the bidder or investigation of him 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. Part of the evidence required above shall consist of a list of the names and addresses of not less than five (5) firms or corporations for which the bidder has done similar work.

IB-07 PERFORMANCE BOND

At the time of entering into the contract, the CONTRACTOR shall give bond to the OWNER for the use of the OWNER and all persons doing work or furnishing skill, tools, machinery or materials under or for the purpose of such contract, conditional for the payment as they become due, of all just claims for such work, tools, machinery, skill and terms, for saving the OWNER harmless from all cost and charges that may accrue on account of the doing of the work specified, and for compliance with the laws pertaining thereto. Said bond shall be for the amount of the contract satisfactory to the OWNER and authorized by law to do business in the State of Georgia.

Attorneys-in-fact who sign bonds must file with each copy thereof a certified and effectively dated copy of the power of attorney.

IB-08 REJECTION OF BIDS

These proposals are asked for in good faith, and awards will be made as soon as practicable, provided satisfactory bids are received. The right is reserved, however to waive any informalities in bidding, to reject any and all proposals, or to accept a bid other than the lowest submitted if such action is deemed to be in the best interest of the OWNER.

SECTION P
PROPOSAL

Date: November 21, 2013

Gentlemen:

In compliance with your invitation for bids, the undersigned hereby proposes to furnish all labor, equipment and material, and perform all work for the project referred to herein as:

FORT GORDON NEW WATER AND SEWAGE CONNECTIONS PROJECT

In strict accordance with the Contract Documents and in consideration of the amounts shown on the bid schedule attached hereto and totaling:

One Million Seven Hundred Sixteen Thousand Seven Hundred Ninety Six
and Forty /100 Dollars (\$1,716,796.40).

The undersigned hereby agrees that, upon written acceptance of this bid, he will within 10 days of receipt of such notice execute a formal contract agreement with the Owner, and that he will provide the bond or guarantees required by the contract documents.

The undersigned hereby agrees that, if awarded the contract, he will commence the work within 10 days after the date of written notice to proceed. The undersigned hereby also agrees that the work will be completed within two hundred forty (240) calendar days after the date of such notice.

The undersigned acknowledges receipt of the following addenda:

Addendum No.	Addendum Date
<u>1</u>	<u>11/8/13</u>

Enclosed is a bid guarantee consisting of a bid Bond from the Western Surety Company in the Amount of 10% of the bid amount (\$ 171,679.64)

Respectfully Submitted,
Blair Construction, Inc.
Firm
P.O. Box 770 Evans, GA 30809
Address

By: William R. Mathews

TITLE: President



Item	Description	Estimated Quantity	Units	Unit Price	Total Price
SANITARY SEWER					
S-1A	8" diameter PVC sanitary sewer pipe SDR 35, Depth 0' to 6', including Type II (No. 67 stone) bedding material	588	LF	32 ⁸⁵	19315 ⁸⁰
S-2A	8" diameter PVC sanitary sewer pipe SDR 35, Depth 6' to 8', including Type II (No. 67 stone) bedding material	2686	LF	32 ⁸⁵	88235 ¹⁰
S-3A	8" diameter PVC sanitary sewer pipe SDR 35, Depth 8' to 10', including Type II (No. 67 stone) bedding material	1752	LF	32 ⁸⁵	57553 ²⁰
S-4A	8" diameter PVC sanitary sewer pipe SDR 35, Depth 10' to 12', including Type II (No. 67 stone) bedding material	574	LF	32 ⁸⁵	18855 ⁹⁰
S-5A	8" diameter PVC sanitary sewer pipe SDR 35, Depth 12' to 14', including Type II (No. 67 stone) bedding material	230	LF	32 ⁸⁵	7555 ⁵⁰
S-9A	8" diameter ductile iron sanitary sewer pipe Class 350, Depth 0' to 6', including Type II (No. 67 stone) bedding material	2250	LF	57 ⁹⁵	130387 ⁵⁰
S-9B	10" diameter ductile iron sanitary sewer pipe Class 350, Depth 0' to 6', including Type II (No. 67 stone) bedding material	35	LF	64 ⁸⁴	2269 ⁴⁰
S-10A	8" diameter ductile iron sanitary sewer pipe Class 350, Depth 6' to 8', including Type II (No. 67 stone) bedding material	1365	LF	57 ⁹⁵	79101 ⁷⁵
S-11A	8" diameter ductile iron sanitary sewer pipe Class 350, Depth 8' to 10', including Type II (No. 67 stone) bedding	864	LF	57 ⁹⁵	50048 ⁸⁰
S-12A	8" diameter ductile iron sanitary sewer pipe Class 350, Depth 10' to 12', including Type II (No. 67 stone) bedding	27	LF	57 ⁹⁵	1564 ⁶⁵
S-18	Select backfill, GA DOT Type I, Class I & II (Sand/Clay) - Measured by in-place volume.	40	CY	18 ⁵⁰	740 ⁰⁰
S-19	Miscellaneous pipe fittings and connections	100	LB	37 ⁶²	3762 ⁰⁰
S-20A	Pre-cast sanitary manhole, GA DOT STD 1011A, Type 1, Depth 0' to 6' (48" Diameter)	67	EA	1523 ⁵⁴	102077 ¹⁸
S-21A	Additional sanitary manhole depth, Type 1, Depth Class 1 (48" Dia.)	114	VF	71 ³⁹	8138 ⁴⁰
S-22A	Additional sanitary manhole depth, Type 1, Depth Class 2 (48" Dia.)	84	VF	71 ³⁹	5996 ⁷⁶
S-29	Doghouse/Connector Manhole, including base, cone, and ring and cover	1	EA	2971 ¹⁰	2971 ¹⁰
S-30	6" sanitary sewer service, complete	10	EA	1557.93	15579.30
S-30A	4" sanitary sewer service, complete	40	EA	1233.70	49348.00
S-31	Cut and plug existing sanitary sewer, diameter varies	10	EA	838 ⁷⁵	8387 ⁵⁰
S-32	Cut and plug existing manhole, diameter and depth varies	10	EA	1300 ⁰⁰	13000 ⁰⁰
S-33	Tie new sanitary sewer to existing manholes, diameter varies	1	EA	1200 ⁰⁰	1200 ⁰⁰
S-37	3" diameter HDPE sanitary sewer pipe SDR 17, Depth 0' to 6', including Type II (No. 67 stone) bedding material.	1450	LF	9 ⁰⁰	13050 ⁰⁰
S-38	4" diameter HDPE sanitary sewer pipe SDR 17, Depth 0' to 6', including Type II (No. 67 stone) bedding material.	2795	LF	11 ⁹⁰	33260 ⁵⁰

PAVEMENT STRUCTURES					
P-1	Asphalt overlay, type F, 1 1/2" thick, minimum	6000	SY	646	38760.00
P-2	Graded aggregate base, 10 1/2" thick, 7' wide and asphalt patch 2 1/2" thick, including removal of 2 1/2" GAB and placement of bituminous tack coat	6000	SY	3151	189060.00
P-5	4" thick concrete sidewalk, 3000 psi mix	100	SY	45.00	4500.00
P-6	6" thick concrete driveway replacement, replace in kind, 3000 psi mix	20	SY	55.00	1100.00
P-7	2" asphalt pavement driveway replacement	5	SY	30.00	150.00
MISCELLANEOUS					
M-3	Rock excavation	10	CY	137.50	1375.00
M-4	Foundation backfill, GA DOT Type II, for additional unclassified excavation	1	CY	38.50	38.50
M-5	Clearing and Grubbing/Remove undergrowth from the 5.2 acre sewage lagoon	1	LS	14300.00	14300.00
M-7	Lift Station Construction, including equipment, fencing and 2" water line	4	LS	95112.00	380448.00
ALTERNATE BID ITEMS					
AB-1	Alternate Bid Item 1: All Electrical	1	LS	47750.00	47750.00
LUMP SUM					
LS-1	Lump sum construction: Includes but is not limited to the listing continued below.	1	LS	326896.50	326896.50

LUMP SUM CONSTRUCTION

- Mobilization, Demobilization
- Bonds, Insurance
- Remove and reset fences, All types
- Remove and reset gates, All types
- Remove and reset storm sewer, lengths & sizes vary
- Remove and reconnect water services
- Remove and reset signs, type varies
- Remove and reset water sprinkler systems, complete
- Remove and reset water valve and/or meters, size varies
- Remove and replace gravel
- Erosion and sediment control (temporary grassing, construction exits, Silt Fence, Type "C")
- Traffic control
- Miscellaneous grading
- Permanent Grassing

BID BOND

KNOW ALL BY THESE PRESENTS, That we, Blair Construction, Inc.

of P.O. Box 770, Evans, Georgia 30809 (hereinafter called the Principal),

as Principal, and Western Surety Company

(hereinafter called the Surety), as Surety are held and firmly bound unto Augusta, GA Commission

530 Greene Street - Room 605 Augusta, GA 30901

(hereinafter called the Obligee) in the penal sum of Ten Percent (10%) of Bid Amount

Dollars (\$ 10% Bid Amount)

for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, That WHEREAS, the Principal has submitted or is about to submit a proposal to the Obligee on a contract for

Sewer System Upgrade for Fort Gordon Recreation Area @ Thurmond Lake

NOW, THEREFORE, If the said Contract be timely awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing, and give bond, if bond is required, with surety acceptable to the Obligee for the faithful performance of the said Contract, then this obligation shall be void otherwise to remain in full force and effect.

Signed and sealed this 21st day of November, 2013

R. S. Dicks

Witness

Blair Construction, Inc.

By *William R. Mutimer*
William R. Mutimer

Principal

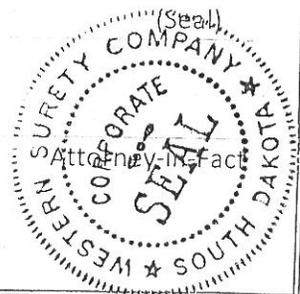


Dale Moody

Witness

Western Surety Company

By *Buck Leigh*
Buck Leigh



Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Buck Leigh, Individually

of Columbia, SC, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 9th day of October, 2012.



WESTERN SURETY COMPANY

Paul T. Bruflat

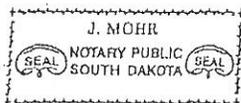
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 9th day of October, 2012, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2015



J. Mohr

J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force: In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 21st day of November, 2013



WESTERN SURETY COMPANY

L. Nelson

L. Nelson, Assistant Secretary

PROJECT Fort Gordon Rec Area Sewer Upgrade (Bid Item # 3-219)

**LOCAL SMALL BUSINESS OPPORTUNITY PROGRAM
LETTER OF INTENT TO PERFORM AS A SUBCONSULTANT/SUBCONTRACTOR/SUPPLIER**

TO: ~~Blade Trucking~~ Blair Construction, Inc.
(Name of Proposer)

A. The undersigned intends to perform work in connection with the above project in the following capacity (check one):

- Individual
- Corporation
- Partnership
- Limited Liability Company (LLC)
- Joint Venture

B. The Local Small Business Opportunity Program (LSBOP) status of the undersigned is confirmed as follows:

- By attachment of a current Certificate of Certification issued by the Department of Transportation
- By attachment of a current letter issued by the Disadvantaged Business Enterprise (DBE)

C. The undersigned is prepared to perform the following work in connection with the above project:
Hauling of bedding stone; GABC; and/or asphalt

D. The undersigned states that they will be performing 1 % of the total project.

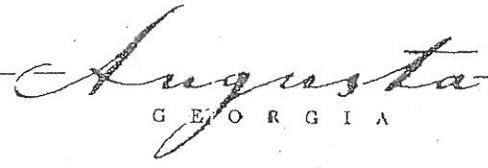
E. The undersigned will subcontract and/or award 0 % of this subcontract to local Small Business Opportunity Program contractors and/or suppliers.

The undersigned will enter into a formal agreement for the above described work with the Proposer cited above conditioned upon the execution of a contract for the project offered herein between the Proposer and Augusta-Richmond County.

Blade Trucking
(LSBOP Contractor Firm Name)

Date 11-19-2013

By: Brenda Spedrick
(Signature of Authorized Representative)



Disadvantaged Business Enterprise Department

Yvonne Gentry
DBE Director

October 25, 2013

Blade Trucking, Inc.
3893 Grape Avenue
Augusta, Georgia 30909

Dear Ms. Shedrick:

Your firm has been registered as a **Local Small Business Opportunity Program (LSBOP)** with the Augusta-Richmond County Disadvantaged Business Enterprise Department (DBE). Your company's registration will last for a period of two (2) years beginning **October 25, 2013**. Registration entitles your firm to be included on the LSB website directory and your firm information will be submitted to all contractors bidding on the Augusta-Richmond County projects.

Placement on the LSB Directory's list is no guarantee of solicitation for informal or formal invitation to bids/proposals. This is a service of convenience for the vendor and Augusta-Richmond County and not a binding assurance of solicitation. To insure maximum bid participation, vendors should register with DemandStar Service which will allow you to receive the appropriate bid specifications as they are issued. Please call toll-free 1-800-711-1712 or visit www.demandstar.com for more information.

As a registered firm, you are required to notify the Disadvantaged Business Enterprise Department of any changes in ownership and/or control of your firm. Failure to provide this notification, in writing, may result in your firm being removed from the Local Small Business Opportunity Program register.

We welcome you to the Augusta-Richmond County Local Small Business Opportunity Program.

Sincerely,
Yvonne Gentry
Yvonne Gentry
DBE Director

YG:el

cc: Vendor File

PROJECT Fort Gordon Rec Area Sewer Upgrade (Bid Item #13-219)

LOCAL SMALL BUSINESS OPPORTUNITY PROGRAM
LETTER OF INTENT TO PERFORM AS A SUBCONSULTANT/SUBCONTRACTOR/SUPPLIER

TO: Jeffery Harris Construction, Inc. - Blair Construction, Inc.
(Name of Proposer)

A. The undersigned intends to perform work in connection with the above project in the following capacity (check one):

Individual



Corporation

Partnership

Limited Liability Company (LLC)

Joint Venture

B. The Local Small Business Opportunity Program (LSBOP) status of the undersigned is confirmed as follows:



By attachment of a current Certificate of Certification issued by the Department of Transportation
By attachment of a current letter issued by the Disadvantaged Business Enterprise Office

C. The undersigned is prepared to perform the following work in connection with the above project:

Hauling of bedding stone, GABC, and/or asphalt

D. The undersigned states that they will be performing 1 % of the total project.

E. The undersigned will subcontract and/or award 0 % of this subcontract to non-Local Small Business Opportunity Program contractors and/or suppliers.

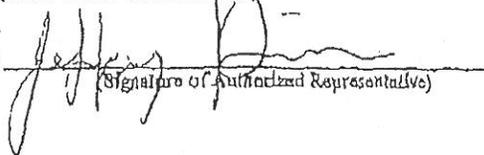
The undersigned will enter into a formal agreement for the above described work with the Proposer offered above conditioned upon the execution of a contract for the project cited herein between the Proposer and Augusta-Richmond County,

Jeffery Harris Construction, Inc.

(LSBOP Contractor Firm Name)

Date: 11-19-13

By:


(Signature of Authorized Representative)

LOCAL SMALL BUSINESS UTILIZATION

The undersigned bidder/offerer has satisfied the requirements of the bid specification in the following manner (please check the appropriate space):

The bidder/offerer is committed to a minimum of 4 % LSBOP utilization on this contract.

The bidder/offerer if unable to meet the LSBOP goal of _____% will submit documentation demonstrating good faith efforts.

Name of bidder/offerer's firm: Blair Construction, Inc.

By William R. Mutimer
(Print Name)

William R. Mutimer
(Signature)

11-21-13
(Date)

AUGUSTA, GEORGIA LOCAL SMALL BUSINESS OPPORTUNITY PROGRAM GOOD FAITH EFFORTS FORM

Attention Bidder/Proponent: List all subcontractors or suppliers that were contacted regarding this project. Use additional sheets as necessary.

Failure to complete this form, in its entirety with supporting documentation, will result in the bid being considered non-responsive to bid specification.

If you have failed to secure Local Small Business participation and you have subcontracting and/or supplier opportunities or if your participation is less than the City's Project Goal, you must complete this form.

Name of Subcontractor/Supplier	Address and Phone Number	Email	Person Contacted and Date	Scope of Work Solicited	Method of Communication	Results of Contact
D.J. Construction	Augusta, GA 706-836-3869	none	Dewight Johnson 11/20/13	Concrete Forming/Finishing	Telephone	Will Use
Blade Trucking	Augusta, GA 706-627-9099	bbshedrick@yahoo.com	Brenda Blade 11/18/13	Hauling	Telephone	Will Use
Harris Trucking	Augusta, GA 706-667-9903	jbarristrucking@yahoo.com	Jeffery Harris 11/18/13	Hauling	Telephone	Will Use

Blair Construction, Inc. Fort Gordon Rec Area Sewer Upgrade 13-219
 Bidder/Proponent's William R. Williams Project Name Bid #
 Signature November 21, 2013 Date 4% on Total Project
Project Goal



AUGUSTA UTILITIES DEPARTMENT
SANITARY SEWER PROJECT - MEASUREMENT AND PAYMENT

SANITARY SEWER

ITEMS S-1A through S-16I - All piping line items shall be measured in linear feet and shall include costs for piping and installation, trench excavation, trench box, dewatering, asphalt cutting, normal joints and gaskets, normal backfill, infiltration and exfiltration testing, mandrel pulling, and CCTV camera inspection as required. Camera inspection shall include all costs for closed circuit camera inspection of the sanitary sewer system, including mobilization, demobilization, inspection, video tape copies, and field reports. No additional payment shall be made for these items.

ITEM S-17 - Jack and bore line items shall be measured in linear feet and shall include costs for casing piping, carrier piping, installation, blasting, asphalt cutting, restrained joints and gaskets, end seals, and normal backfill. No additional payment shall be made for these items.

ITEM S-18 - Select backfill shall be measured in cubic yards for both Types I and II and shall include costs for the backfill and installation as well as all transportation and stockpiling charges. The volume of material included shall be the actual measured "in-place" volume. The standard trench width used to calculate the volume will be 7 feet. No additional payment shall be made for these items.

ITEM S-19 - Miscellaneous pipe fittings and connections shall be measured in pounds and include costs for all fittings and installation except normal joints and gaskets regardless of material. No additional payment shall be made for these items.

ITEMS S-20A through S-20F and S-23 - Pre-cast manholes shall be measured individually (each) and shall include costs for manholes, excavation, dewatering, asphalt cutting, collars and boots, grouting and/or other connections, installation, normal backfill, and vacuum testing as specified. Manhole vacuum testing shall include all costs for testing equipment, testing labor, mobilization, demobilization, and reporting. Manholes failing testing shall be re-tested at Contractor's expense. Repairs to failing manholes shall be made external to the manhole utilizing a method approved by the Augusta Utilities Department. No additional payment shall be made for these items.

ITEMS S-21A through S-21F, S-22A through S-22F, S-24 through S-25 - Additional sanitary manhole depth line items shall be measured by vertical foot and shall include costs for excavation, dewatering, and backfill as specified by type and class. No additional payment shall be made for these items.

ITEMS S-26A through S-26F - Sanitary sewer exterior manhole joint wrapping shall be measured individually and shall include the costs for wrapping material and installation. No additional payment shall be made for these items.

ITEMS S-27A through S-27F - Sanitary sewer interior protective coating shall be measured by the vertical foot of manhole and shall include the costs for coating material and installation. No additional payment shall be made for these items.

ITEM S-28 - Outside drop piping shall be measured individually (each) and shall include the costs for all items associated with the drop manhole detail, exclusive of the manhole or manhole extensions. No additional payment shall be made for these items.

ITEM S-29 - Dog house/connector manholes shall be measured individually (each) and shall include the costs for excavation, dewatering, asphalt cutting, pipe cutting, collars and boots, grouting and / or other connections, installation, and normal backfill. The costs for the base section, first riser, cone section, and ring and cover shall be included within this line item. Additional depth manhole sections shall be included within the appropriate manhole line item. No additional payment shall be made for these items.

ITEM S-30 - Sanitary sewer connections shall be measured individually (each) and shall include costs for 6-inch PVC piping, precast concrete valve ring with rebar, PVC twist-off plug, mainline tee, fitting, cleanout, excavation, dewatering, asphalt/concrete cutting (including service markings), installation, normal backfill, aggregate base and asphalt pavement repair, and property restoration. No additional payment shall be made for these items.

ITEM S-31 - Cut and plug sewers shall be measured individually (each) and shall include costs for cutting of existing pipelines, plugging of existing pipelines, excavation, dewatering, asphalt/concrete cutting, and normal backfill. No additional payment shall be made for these items.

ITEM S-32 - Cut and plug manholes shall be measured individually (each) and shall include costs for cutting of existing manholes, plugging of existing manholes, excavation, dewatering, asphalt/concrete cutting, and normal backfill. No additional payment shall be made for these items.

ITEM S-33 - Sanitary sewer manhole tie-ins shall be measured individually (each) and shall include costs for cutting/coring of existing manholes, collars, rubber boots, any required gaskets, excavation, dewatering, soil stabilization, asphalt cutting, and normal backfill. No additional payment shall be made for these items.

ITEM S-34 - AC water main crossings shall be measured individually (each) and shall include costs for AC pipe cutting, excavation, ductile iron piping, sleeves, backfill, and property restoration. No additional payment shall be made for these items.

ITEM S-35 - Ductile iron pipe polyethylene pipe encasement shall be measured in linear feet and shall include costs for pipe wrap materials and installation. No additional payment shall be made for these items.

ITEM S-36 - Concrete pipe encasement shall be measured in cubic yards and shall include costs for concrete, installation, excavation, dewatering, soil stabilization, pipe stabilization, asphalt cutting, and normal backfill. No additional payment shall be made for these items.

PAVEMENT STRUCTURES

ITEM P-1 - Asphalt overlay shall be measured in square yards and shall include costs for asphalt materials and installation, temporary striping and permanent striping (replaced in kind), and markers (both temporary and permanent). No additional payment shall be made for these items.

ITEM P-2 - Items associated with asphalt pavement repair and patching, including aggregate base (10 ½" thick) and asphalt patch (2 ½" thick) shall be measured in square yards and shall include costs for all aggregates (regardless of type), 2 ½" graded aggregate base removal and disposal, bituminous tack coat, asphalt, installation, excavation, striping (both temporary and permanent), and markers (both temporary and permanent). The square yardage calculation shall be based upon a standard width of seven (7) feet for payment purposes. No additional payment shall be made for these items.

ITEM P-3 - Asphalt pavement leveling shall be measured in tons and shall include costs for all asphalt (regardless of type) used to create a level road surface prior to asphalt overlay as authorized by the project representative. The payment shall be based upon confirmed delivery tickets. No additional payment shall be made for these items.

ITEM P-4 - Milling shall be measured in square yards and shall include all materials, labor, equipment, and material removal and disposal costs. No additional payment shall be made for these items.

ITEMS P-5 through P-6 - Concrete sidewalk and driveways shall be measured in square yards and shall include costs for 3000 psi concrete, installation, site preparation, formwork, and finishing. Existing concrete shall be removed to the nearest joint as directed by the project representative. Payment shall included all removal and disposal costs. No additional payment shall be made for these items.

ITEM P-7 - Asphalt driveway replacement shall be measured in square yards and shall include costs for asphalt, installation, and site preparation, including necessary subgrade preparation, base removal, and base installation. Existing asphalt shall be removed to the nearest joint as directed by the project representative. No additional payment shall be made for these items.

ITEM P-8 - Curb and/or gutter placement shall be measured in linear feet and shall include costs for concrete, installation, site preparation, formwork, and finishing. Payment shall included all removal and disposal costs. No additional payment shall be made for these items.

ITEM P-9 - Curb and gutter removal and replacement shall be measured in linear feet and shall include costs for removal and disposal of existing concrete curb and gutter, concrete, installation, site preparation, formwork, and finishing. Payment shall included all removal and disposal costs. No additional payment shall be made for these items.

ITEM P-10 - Raised edge asphalt curb shall be measured in linear feet and shall include costs for removal and disposal of existing asphalt curb, site preparation and installation. Payment shall include all removal and disposal costs. No additional payment shall be made for these items.

MISCELLANEOUS

ITEM M-1 - Flowable fill shall be measured in cubic yards and shall include costs for all materials, labor, equipment, and excess materials. No additional payment shall be made for these items.

ITEM M-2 - Class A Concrete shall be measured in cubic yards and shall include costs for excavation, labor, equipment, and concrete material placement. No additional payment shall be made for these items.

ITEM M-3 - Rock excavation shall be measured in cubic yards and shall include costs for blasting, labor, equipment, and material removal and disposal. No additional payment shall be made for these items.

ITEM M-4 - Foundation backfill shall be measured in cubic yards and shall include costs for the backfill and installation as well as all transportation and stockpiling charges. Quantities shall be verified by trench volume calculation. No additional payment shall be made for these items.

ITEM M-5 - Clearing and grubbing shall be measured in acres and shall include costs for vegetation removal, stockpiling, disposal and any required permitting. No additional payment shall be made for these items.

ITEM M-6 - Fence removal and replacement shall be measured in linear feet and shall include all costs associated with removal and replacement of the existing fence with new materials of like quality as necessary for sanitary sewer installation. No additional payment shall be made for these items.

LUMP SUM CONSTRUCTION

ITEM LS-1 - Lump sum construction includes, but is not limited to, the items described in the bid schedule. No separate or additional payment shall be made for these items. Lump sum items will be addressed per each task order.

THIS AGREEMENT, made on the ___ day of _____, ___ by and between AUGUSTA, GEORGIA, BY AND THROUGH THE AUGUSTA, GEORGIA COMMISSION, party of the first part, hereinafter called the OWNER, and Blair Construction, Inc. _____, party of the second part, hereinafter called the CONTRACTOR.

WITNESSETH, that the CONTRACTOR and the OWNER, for the considerations hereinafter named, agree as follows:

ARTICLE I - SCOPE OF THE WORK

The CONTRACTOR hereby agrees to furnish all of the materials (when specified in each Task Order), equipment and labor necessary to perform all of the work shown for each individual Task Order as a part of the:

FORT GORDON RECREATION AREA SEWER SYSTEM UPGRADES PROJECT

and, in accordance with the requirements and provisions of the General and Supplemental General Conditions attached, which are hereby made a part of this agreement. In addition, the unit price by which Task Orders are negotiated shall be considered valid for 365 calendar days from contract approval.

CONTRACTOR shall be compensated in accordance with the compensation provisions below and in accordance with the rates established in Bid Item 13-219 or as may be amended and approved by OWNER.

ARTICLE II - TIME OF COMPLETION/LIQUIDATED DAMAGES

The work to be performed for each Task Order shall be reviewed with the CONTRACTOR prior to OWNER issuing notice to proceed. Once both parties have agreed, in writing, to the work described in the Task Order, a written notice to proceed shall be issued by OWNER. Work on the Task Order shall be commenced within 10 calendar days after the date of notice to proceed with each Task Order. All work shall be completed within the calendar days specified in the Task Order with all such extensions of time as are provided for in the Task Order documents. All task orders for this contract will be issued within the 12 month contract period.

It is hereby understood and mutually agreed, by and between the CONTRACTOR and the OWNER, that the date of beginning, rate of progress and the time for completion of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract. CONTRACTOR agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. It is expressly understood and agreed by and between the CONTRACTOR and the OWNER, that the time for completion of the work described in each authorized Task Order is a reasonable time for completion of the same, taking into consideration the average climatic range and construction conditions prevailing in this locality.

IF THE CONTRACTOR SHALL NEGLECT, FAIL, OR REFUSE TO COMPLETE THE TASK ORDER WITHIN THE TIME HEREIN SPECIFIED, then the CONTRACTOR does hereby agree, as a part of the consideration for the awarding of this contract, to pay the OWNER the sum of Five Hundred and no/100s (\$500.00) Dollars, not as a penalty, but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the work.

The said amount is fixed and agreed upon by and between the CONTRACTOR and the OWNER because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER would, in such event, sustain, and said amounts shall be retained from time to time by the OWNER from current periodical estimates.

It is further agreed that time is of the essence for each and every Task Order to be assigned under this Contract, and the specifications wherein a definite portion and certain length of time is fixed, if additional time is allowed for the completion of any work, the new time limit fixed by extension shall be the essence of this contract.

Points of Contact and Direction

All administrative deliverables including notices, certificates and permits required under this Agreement shall be submitted to the OWNER. All technical deliverables required by the Task Order shall be submitted to OWNER technical point of contact (POC) noted below. Any administrative or technical direction received from these individuals, unless received in the form of a revision to this Agreement, shall be considered informational only and shall not be binding by the parties. All notices and actions by OWNER under this Agreement shall be submitted to the CONTRACTOR POC identified below.

OWNER Technical POC: AUD assigned project engineers
CONTRACTOR POC:

ARTICLE III - PAYMENT

(A) The Contract Sum

The OWNER shall pay to the CONTRACTOR for the performance of the Contract the amount as stated in the Task Order based upon rates stated in the Bid Item 13-219 with a guaranty of TASK ORDERS EQUALING, at least, the minimum of 20% of the total CONTRACT amount for the duration of the contract. Fixed Unit Rate Services - Compensation for services rendered on the basis of fixed unit rates shall be at the rates established as specified in the Bid Item 13-219. Unless otherwise stated, these rates are firm for the period of performance and include all elements of labor, overhead, other direct costs and profit. Total compensation under this Agreement currently is \$ 1,716,796.40.

(B) Progress Payment

On no later than the fifth day of every month, the Contractor shall submit to the OWNER an estimate covering the quantities used toward completion of Task Order which has been completed from the start of the Task Order to and including the last working day of the preceding month, together with such supporting evidence as may be required by the OWNER. This estimate shall include only the unit prices as set forth in the Bid Schedule.

On the vendor run following approval of the invoice for payment, the OWNER shall after deducting previous payments made, pay to the CONTRACTOR 90% of the amount of the estimate on units accepted in place. The 10% retained percentage may be held by the OWNER until the final completion and acceptance of all work under the Contract.

ARTICLE IV - ACCEPTANCE AND FINAL PAYMENT

(A) Upon receipt of written notice that the work for a given Task Order is ready for final inspection and acceptance, the OWNER's designated representative shall within 10 days make such inspection, and when he finds the work acceptable under the Contract and the authorized Task Order fully performed, he will promptly issue a final certificate for that Task Order, over his own signature, stating that the work required by this Task Order has been completed and is accepted by him under the terms and conditions thereof, and the entire balance found to be due the CONTRACTOR, including the retained percentage, shall be paid to the CONTRACTOR by the OWNER within 15 days after the date of said final certificate.

(B) Before final payment is due, the CONTRACTOR shall submit evidence satisfactory to the OWNER that all payrolls, material bills, and other indebtedness connected with work have been paid, except that in case of disputed indebtedness of liens of evidence of payment of all such disputed amounts when adjudicated in cases where such payment has not already been guaranteed by surety bond.

(C) The making and acceptance of the final payment for each Task Order shall constitute a waiver of all claims by the OWNER regarding the work done as part of that Task Order, other than those arising from unsettled liens, from faulty work appearing within 12 months after final payment, from requirements of the specifications, or from manufacturer's guarantees. It shall also constitute a waiver of all claims by the CONTRACTOR except those previously made and still unsettled.

(D) If after the work has been substantially completed, full completion thereof is materially delayed through no fault of the CONTRACTOR, and the OWNER Representative so certifies, the OWNER shall upon certification of the OWNER representative, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted.

Each payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Entire Agreement

This Agreement supersedes all prior agreements and understandings and may only be changed by written revision executed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in three (3) counterparts, each of which shall be deemed an original, in the year and day first mentioned above.

OWNER: AUGUSTA, GEORGIA

By: [Signature]
The Honorable Deke Copenhaver
Mayor
Date: 2/19/14

ACM
2/11/14

ATTEST: SEAL
By: Nancy W. Morawski
Lena J. Bonner NANCY W. MORAWSKI
Dep. Clerk of the Commission
Date: 2-19-14

APPROVED AS TO FORM:

By: Andrew G. Mackenzie
Attorney
Date: 2/11/14

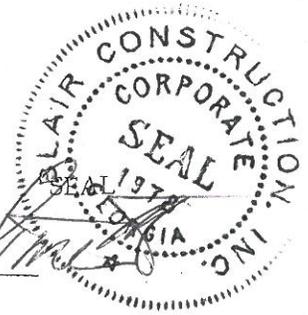
DEPARTMENT APPROVAL:

By: Thomas D. Wiedmeier
Thomas D. Wiedmeier
Director, Augusta Utilities Department
Date: 2/6/14

CONTRACTOR: Blair Construction, Inc.

By: William R. Mutimer
Name: William R. Mutimer
Title: President
Date: 1/16/14

ATTEST:
By: Blair L. Mutimer
Name: Blair L. Mutimer, III
Title: Vice President / Corp. Secretary
Date: 1/16/14





- **Temporary suspension or delay of performance of contract.**

To the extent that it does not alter the scope of this agreement, Augusta, GA may unilaterally order a temporary stopping of the work, or delaying of the work to be performed by CONSULTANT under this agreement.

- **Defective pricing.**

To the extent that the pricing provided by CONSULTANT is erroneous and defective, the parties may, by agreement, correct pricing errors to reflect the intent of the parties.

- **Specified excuses for delay or non-performance.**

CONSULTANT is not responsible for delay in performance caused by hurricanes, tornadoes, floods, and other severe and unexpected acts of nature. In any such event, the contract price and schedule shall be equitably adjusted.

- **Hold harmless.**

Except as otherwise provided in this agreement, CONSULTANT shall indemnify and hold harmless Augusta, GA, and its employees and agents from and against all liabilities, claims, suits, demands, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from the performance of its Work.

- **Georgia Prompt Pay Act not applicable.**

The terms of this agreement supersede any and all provisions of the Georgia Prompt Pay Act.

- **Right to inspect premises.**

Augusta, Georgia may, at reasonable times, inspect the part of the plant, place of business, or work site of CONSULTANT or any subcontractor of CONSULTANT or subunit thereof which is pertinent to the performance of any contract awarded or to be awarded by Augusta, Georgia.

- **E-Verify**

All contractors and subcontractors entering into contracts with Augusta, Georgia for the physical performance of services shall be required to execute an Affidavit verifying its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with Augusta, Georgia has registered with and is participating in a federal work authorization program. All contractors and subcontractors must provide their *E-Verify number* and must be in compliance with the electronic verification of work authorized programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91 and shall continue to use the federal authorization program throughout the contract term. All contractors shall further agree that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to its contract with Augusta, Georgia the contractor will secure from such subcontractor(s)



each subcontractor's *E-Verify* number as evidence of verification of compliance with O.C.G.A. § 13-10-91 on the subcontractor affidavit provided in Rule 300-10-01-.08 or a substantially similar form. All contractors shall further agree to maintain records of such compliance and provide a copy of each such verification to Augusta, Georgia at the time the subcontractor(s) is retained to perform such physical services.

- **Local Small Business Language:**

In accordance with Chapter 10B of the AUGUSTA, GA. CODE, Contractor expressly agrees to collect and maintain all records necessary to for Augusta, Georgia to evaluate the effectiveness of its Local Small Business Opportunity Program and to make such records available to Augusta, Georgia. The requirements of the Local Small Business Opportunity Program can be found at www.augustaga.gov. In accordance with AUGUSTA, GA. CODE § 1-10-129(d)(7), for all contracts where a local small business goal has been established, the contractor is required to provide local small business utilization reports. Contractor shall report to Augusta, Georgia the total dollars paid to each local small business on each contract, and shall provide such payment affidavits, regarding payment to subcontractors as may be requested by Augusta, Georgia. Such documents shall be in the format specified by the Director of minority and small business opportunities, and shall be submitted at such times as required by Augusta, Georgia. Failure to provide such reports within the time period specified by Augusta, Georgia shall entitle Augusta, Georgia to exercise any of the remedies set forth, including but not limited to, withholding payment from the contractor and/or collecting liquidated damages.

- **Acknowledgement**

"Consultant acknowledges that this contract and any changes to it by amendment, modification, change order or other similar document may have required or may require the legislative authorization of the Board of Commissioners and approval of the Mayor. Under Georgia law, Consultant is deemed to possess knowledge concerning Augusta, Georgia's ability to assume contractual obligations and the consequences of Consultant's provision of goods or services to Augusta, Georgia under an unauthorized contract, amendment, modification, change order or other similar document, including the possibility that the Consultant may be precluded from recovering payment for such unauthorized goods or services. Accordingly, Consultant agrees that if it provides goods or services to Augusta, Georgia under a contract that has not received proper legislative authorization or if the Consultant provides goods or services to Augusta, Georgia in excess of the any contractually authorized goods or services, as required by Augusta, Georgia's Charter and Code, Augusta, Georgia may withhold payment for any unauthorized goods or services provided by Consultant. Consultant assumes all risk of non-payment for the provision of any unauthorized goods or services to Augusta, Georgia, and it waives all claims to payment or to other remedies for the provision of any unauthorized goods or services to Augusta, Georgia, however characterized, including, without limitation, all remedies at law or equity." This acknowledgement shall be a mandatory provision in all Augusta, Georgia contracts for goods and services, except revenue producing contracts.

[SIGNATURES ON FOLLOWING PAGE]



IN WITNESS WHEREOF, said parties have hereunto set their seals the day and year written below:

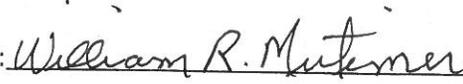
CITY:

CONSULTANT:

AUGUSTA, GEORGIA (CITY)

Blair Construction, Inc.

BY: 

BY: 

PRINTED NAME: DAVID S. COPENHAVER

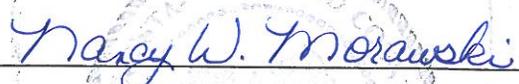
PRINTED NAME: William R. Mutimer

AS ITS: MAYOR

AS ITS: President

ATTEST CLERK:

ATTEST:





PRINTED NAME: NANCY W. MORAWSKI

PRINTED NAME Blair L. Mutimer, III

AS ITS: DEP. CLERK OF COMMISSION

AS ITS: Corporate Secretary

DATE: FEBRUARY 21, 2014

DATE: February 3, 2014

Copy To:

DIRECTOR
AUGUSTA UTILITIES DEPARTMENT
360 Bay Street, Suite 180
Augusta, GA 30901



NOTICE OF AWARD

DATE: January 6th, 2014

CONTRACTOR: Blair Construction, Inc.

ADDRESS: P.O. Box 770

Evans Georgia 30809
City State Zip Code

PROJECT: Fort Gordon Rec Area Sewer Upgrades PROJECT NO: _____

At a meeting of the _____ held on (Date) _____
you were awarded the Contract for the following Project:

Enclosed please find 5 copies of the Contract Documents for your execution. Please complete the pages, affixing signatures, dates, notary and/or corporate seals, etc. where necessary and return to this office within 10 days from the date of this letter, excluding Legal Holidays.

The Certificate of Insurance must be complete.

Power of Attorney must be submitted in triplicate; an original and two copies is permissible.

Very truly yours,

Augusta Program Management Team

Project Engineer
Receipt of this NOTICE OF AWARD is hereby acknowledged this, 16th day of January, 2014
the
Blair Construction, Inc. William R. [Signature] President
Contractor By Title

Please sign and return one copy of this Notice of Award Acknowledgement to:

Augusta Utilities Department

Attn: Program Managers

360 Bay Street, Suite 180

Augusta, GA 30901



NOTICE TO PROCEED

DATE: _____

TO: Name _____

Attn:Firm Contact _____

Address1 _____

City, State 30901 _____

PROJECT: Name _____ PROJECT NO: _____

You are hereby notified to commence WORK in accordance with the Agreement dated _____
on or before _____, and you are to complete the WORK within _____
consecutive calendar days thereafter. The date of completion of all WORK is therefore _____

Very truly yours,
Augusta Program Management Team

Project Engineer

Receipt of this NOTICE TO PROCEED is hereby acknowledged

This, the _____ day of _____, 2003

Contractor: _____

By: _____

Title: _____

Please sign and return one copy of this Notice to Proceed Acknowledgement to:

Augusta Utilities Department

Attn: Program Managers

360 Bay Street, Suite 180

Augusta, GA 30901

CONSTRUCTION CONTRACT CHANGE ORDER

CO NUMBER	
BID ITEM	
DATE	

PROJECT TITLE _____

ORIGINAL CONTRACT DATE _____

PROJECT NUMBER _____

OWNER AUGUSTA, GEORGIA

PO NUMBER _____

The following change is hereby made to the contract for the above project:

Description of Change (for a more detailed description see attached proposal):

PAYEE

TOTAL AMOUNT OF THIS CHANGE ORDER \$ _____

The contract time will be INCREASED by 0 calendar days as a result of this change.

ORIGINAL CONTRACT AMOUNT \$ _____

PREVIOUS CHANGE ORDER (INCREASE) \$ _____

THIS CHANGE ORDER (INCREASE) \$ _____

TOTAL REVISED CONTRACT AMOUNT WITH CHANGE ORDER \$ _____

FUNDING NUMBER/ACCOUNT NUMBER

PROPOSED BY: _____	DATE: _____
CONTRACTOR	
REQUESTED BY: _____	DATE: _____
ENGINEER	
SUBMITTED BY: _____	DATE: _____
DEPARTMENT HEAD	
FINANCE ENDORSEMENT: _____	DATE: _____
COMPTROLLER	
RECOMMENDED BY: _____	DATE: _____
ADMINISTRATOR	
APPROVED BY: _____	DATE: _____
MAYOR	

General Purpose Rider

TO BE ATTACHED TO and form part of 586 16145 effective January 13, 2014 issued by the Western Surety Company as Surety, in the amount of One Million Seven Hundred Sixteen Thousand Seven Hundred Ninety Six and 40/100ths-----(\$1,716,796.40), DOLLARS, on behalf of Blair Construction Inc. hereinafter referred to as the Principal, and in favor of Augusta-Richmond County Commission hereinafter referred to as the Obligee

NOW THEREFORE, it is agreed that:

The bond number is changed

From: 587 16145

To: 587 10145

IT IS FURTHER UNDERSTOOD AND AGREED that all other terms and conditions of this bond shall remain unchanged.

THIS RIDER IS TO BE EFFECTIVE the 13th day of January 2014

SIGNED, SEALED AND DATED this 13th day of January 2014

Blair Construction, Inc.
(Principal)

By: William R. Muttrick
Vice President

Accepted By:

Western Surety Company
(Surety)

By: Buck Leigh
Buck Leigh - Attorney-In-Fact

Bond No. 587 16145

PERFORMANCE BOND

Conforms with The American Institute of Architects
A.I.A. document No. A-311

KNOW ALL BY THESE PRESENTS: that **Blair Construction, Inc.**, PO Box 770, Evans, Georgia 30809
(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called Contractor, and, **Western Surety Company**, 333 S. Wabash Avenue, 41st Floor, Chicago, Illinois
60604
(Here insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto **Augusta-Richmond County Commission**, 530 Greene St.,
Room 605, Augusta, GA 30911
(Here insert full name and address or legal title of Owner)

as Obligee, hereinafter called Owner, in the amount of One Million Seven Hundred Sixteen Thousand Seven Hundred Ninety
Six and 40/100 ----- Dollars (\$ 1,716,796.40).

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly
and severally, firmly by these presents.

WHEREAS,

Contractor has by written agreement dated _____, 2014, entered into a contract
with Owner for Fort Gordon Recreation Area Sewer System Upgrades, Augusta, Georgia
(Here insert full name, address and description of project)

in accordance with Drawings and Specifications prepared by **Khafra Engineering**, P.O.Box 6643, North Augusta, SC 29861
(Here insert full name and address or legal title of Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

PERFORMANCE BOND 587 16145

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Owner.

Whenever Contractor shall be, and declared by Owner to be in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly

- 1) Complete the Contract in accordance with its terms and conditions, or
- 2) Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the Owner elects, upon determination by the Owner and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as Work progresses (even though there should be a default or a succession of defaults under the

contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to Contractor.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of the Owner.

Signed and sealed this 16TH day of January, 2014

[Signature]

(Witness)

Blair Construction, Inc., PO Box 770, Evansville, Georgia 30809

(Principal)



[Signature]

Vice President (Title)

Western Surety Company, 333 S. Wabash Avenue, 41st Floor, Chicago, Illinois 60604

(Surety)



[Signature]

(Witness)

[Signature]

Buck Leigh, Attorney-in-Fact (Title)

LABOR AND MATERIAL PAYMENT BOND

Bond No. 587 16145

Conforms with The American Institute of Architects
A.I.A. Document No. A-311

THIS BOND IS ISSUED SIMULTANEOUSLY WITH PERFORMANCE BOND IN FAVOR OF THE
OWNER CONDITIONED ON THE FULL AND FAITHFUL PERFORMANCE OF THE CONTRACT

KNOW ALL BY THESE PRESENTS: that **Blair Construction, Inc.**, PO Box 770, Evans, Georgia 30809
(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called Principal, and, **Western Surety Company**, 333 S. Wabash Avenue, 41st Floor, Chicago, Illinois
60604
(Here insert full name and address or legal title of Surety)

as Surety, hereinafter called Surety, are held and firmly bound unto **Augusta-Richmond County Commission**, 530 Greene St.,
Room 605, Augusta, GA 30911
(Here insert full name and address or legal title of Owner)

as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the amount of **One Million Seven
Hundred Sixteen Thousand Seven Hundred Ninety Six and 40/100 ----- Dollars (\$ 1,716,796.40 .).**

for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and
severally, firmly by these presents.

WHEREAS,

Principal has by written agreement dated _____, 2014, entered into a contract
with Owner for **Fort Gordon Recreation Area Sewer System Upgrades, Augusta, Georgia**
(Here insert full name, address and description of project)

in accordance with Drawings and Specifications prepared by **Khafra Engineering**, P.O. Box 6643, North Augusta, SC 29861
(Here insert full name and address or legal title of Architect)

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

LABOR AND MATERIAL PAYMENT BOND

587 16145

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.

3. No suit or action shall be commenced hereunder by any claimant:

a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials

were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.

b) After the expiration of one (1) year following the date on which Principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this 16TH day of January, 2014.

[Signature] (Witness)

Blair Construction, Inc., PO Box 770, Evans, Georgia 30809 (Seal) (Principal)

[Signature] Vice President (Title)

Western Surety Company, 333 S. Wabash Avenue, 41st Floor, Chicago, Illinois 60604 (Seal) (Surety)

[Signature] (Witness)

[Signature] Buck Leigh, Attorney-in-Fact (Title)

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Buck Leigh, Individually

of Columbia, SC, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 17th day of December, 2013.



WESTERN SURETY COMPANY

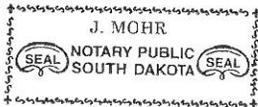
Paul T. Bruflat
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 17th day of December, 2013, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2015



J. Mohr
J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 16TH day of January, 2014.



WESTERN SURETY COMPANY

L. Nelson
L. Nelson, Assistant Secretary



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
1/9/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Sutter, Mclellan, & Gilbreath, Inc. 1424 North Brown Road Suite 300 Lawrenceville GA 30043-8107	CONTACT NAME: Linda Mitchell CIC
	PHONE (A/C, No. Ext): (770) 246-8300 FAX (A/C, No): (770) 246-8301
	E-MAIL ADDRESS: lmitchell@smginsurance.com
	INSURER(S) AFFORDING COVERAGE
	INSURER A: National Trust Insurance
	INSURER B: FCCI Insurance Co.
	INSURER C: Hanover Insurance Co. 22292
	INSURER D:
	INSURER E:
	INSURER F:

COVERAGES CERTIFICATE NUMBER: 2013-2014 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Pollution Liability # 793-00-05-67-0001 GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			CPP0004476 7	2/14/2013	2/14/2014	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS			CA 0005458 8	2/14/2013	2/14/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Medical payments \$ 5,000
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED <input checked="" type="checkbox"/> RETENTION \$ 10,000 <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE			UMB0002841 8	2/14/2013	2/14/2014	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N N	010-WC13A-54981	2/14/2013	2/14/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Leased & Rented Equipment			IHA4999540-03	2/14/2013	2/14/2014	Any One Item \$310,000 Policy Limit \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Project: Fort Gordon Recreation Area Sewer Upgrades
Contract amount: \$1,716,796.40

CERTIFICATE HOLDER (706) 821-2811 Augusta GA Commission 530 Greene Street Augusta, GA 30911	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE M Jaynes CSP/LINDAM

GENERAL CONDITIONS

ARTICLE I--DEFINITIONS

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

Addenda-Any changes, revisions or clarifications of the Contract Documents which have been duly issued by OWNER to prospective Bidders prior to the time of opening of Bids.

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

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

Bid-The offer or proposal of the bidder submitted on the prescribed form setting forth the price(s) for the Work to be performed.

Bonds-Bid, performance and payment bonds and other instruments of security furnished by CONTRACTOR and its Surety in accordance with the Contract Documents.

Change Order-- A document recommended by PROFESSIONAL, 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 Time, issued on or after the Effective Date of the Agreement.

Contract Documents-The Agreement; Addenda (which pertain to the Contract Documents); CONTRACTOR's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement; the Bonds; these General Conditions; the Supplementary Conditions; the Plans, Specifications and the Drawings as the same are more specifically identified in the Agreement; Certificates of Insurance; Notice of Award; and Change Order duly delivered after execution of Contract together with all amendments, modifications and supplements issued pursuant to paragraphs 3.3 and 3.5 or after the Effective Date of the Agreement.

Contract Price-The moneys payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

Contract Time-The number of days (computed as provided in paragraph 17.2.1) or the date stated in the Agreement for the completion of the Work.

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

COUNTY-Richmond County, Georgia, or Augusta, Georgia, political subdivisions of the State of Georgia, the Augusta, Georgia Commission, and its authorized designees, agents, or employees.

Day-Either a working day or calendar day as specified in the bid documents. If a calendar day shall fall on a legal holiday, that day will be omitted from the computation. Legal Holidays: New Year's Day, Martin Luther King Day, Memorial Day, 4th of July, Labor Day, Veterans Day, Thanksgiving Day and the following Friday, and Christmas Day.

Defective-An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty or deficient, 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 PROFESSIONAL's recommendation of final payment, unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion (in accordance with paragraph 14.8 or 14.10).

Drawings-The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by PROFESSIONAL and are referred to in the Contract Documents.

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 by the Mayor of Augusta, Georgia.

Field Order-A written order issued by PROFESSIONAL that modifies Drawings and Specifications, but which does not involve a change in the Contract Price or the Contract Time.

General Requirements-Sections of Division I of the Specifications.

Laws or Regulations-Laws, rules, regulations, ordinances, codes and/or orders.

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

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

OWNER- Augusta, Georgia, and the Augusta, Georgia Commission.

Partial Utilization-Placing a portion of the Work in service for the purpose for which it is intended or for a related purpose) before reaching Substantial Completion for all the Work.

PROFESSIONAL-The Architectural/Engineering firm or individual or in-house licensed person designated to perform the design and/or resident engineer services for the Work.

PROGRAM MANAGER – The professional firm or individual designated as the representative or the OWNER who shall act as liaison between OWNER and both the PROFESSIONAL and CONTRACTOR when project is part of an OWNER designated program.

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

Project Area-The area within which are the specified Contract Limits of the improvements contemplated to be constructed in whole or in part under this Contract.

Project Manager-The professional in charge, serving OWNER with architectural or engineering services, his successor, or any other person or persons, employed by said OWNER, for the purpose of directing or having in charge the work embraced in this Contract.

Resident Project Representative-The authorized representative of PROFESSIONAL as PROGRAM MANAGER who is assigned to the site or any part thereof.

Shop Drawings-All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and

submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

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

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

Substantial Completion-The Work (or a specified part thereof) has progressed to the point where, in the opinion of PROFESSIONAL as evidenced by PROFESSIONAL's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be used for the purposes for which it is intended, or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

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

Supplier-A manufacturer, fabricator, supplier, distributor, materialman or vendor.

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

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

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

Work Change Directive-A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by PROFESSIONAL, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.22. A *Work Change Directive* may not change the Contract Price or the Contract Time but is evidence that the parties expect that the change directed or documented by a *Work Change Directive* will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time as provided in Article 10.

Written Amendment-A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly Work-related aspects of the Contract Documents.

ARTICLE 2-PRELIMINARY MATTERS

Delivery of Bonds:

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

Copies of Documents:

2.2. After the award of the Contract, OWNER shall furnish CONTRACTOR, at no cost, one (1) complete set of the Contract Documents for execution of the work. Additional sets of the project manual and drawings and/or individual pages or sheets of the project manual or drawings will be furnished by COUNTY upon CONTRACTOR's request and at CONTRACTOR's expense, which will be OWNER's standard charges for printing and reproduction.

Commencement of Contract Time, Notice to Proceed:

2.3. The Contract Time shall commence as established in the Notice to Proceed. A Notice to Proceed may be given at any time after the Effective Date of the Contract.

Starting the Project:

2.4. CONTRACTOR shall begin the Work on the date the Contract Time commences. No Work shall be done prior to the date on which the Contract Time commences. Any Work performed by CONTRACTOR prior to date on which Contract Time commences shall be at the sole risk of CONTRACTOR.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to PROFESSIONAL any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from PROFESSIONAL before proceeding with any Work affected thereby. CONTRACTOR shall be liable to OWNER for failure to report any conflict, error, ambiguity or discrepancy in the Contract Documents, if CONTRACTOR knew or reasonably should have known thereof.

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

2.6.1. an estimated progress schedule indicating the starting and completion dates of the various stages of the Work:

2.6.2. a preliminary schedule of Shop Drawing and Sample submissions, and

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

2.7. Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with copies to

each additional insured identified in the Supplementary Conditions, an original policy or certified copies of each insurance policy (and other evidence of insurance which OWNER may reasonably request) which CONTRACTOR is required to purchase and maintain in accordance with Article 5.

Pre-construction Conference:

2.8. Before any Work at the site is started, a conference attended by CONTRACTOR, OWNER, PROFESSIONAL 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 2.6 as well as procedures for handling Shop Drawings and other submittals, processing applications for payment and maintaining required records.

Finalizing Schedules:

2.9. At least ten days before submission of the first Application for Payment, a conference attended by CONTRACTOR, PROFESSIONAL and OWNER and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. CONTRACTOR shall have an additional ten (10) calendar days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until the schedules are submitted and acceptable to OWNER and PROFESSIONAL as provided below. The finalized progress schedule will be acceptable to OWNER and PROFESSIONAL as providing an orderly progression of the Work to completion within any specified Milestones and the Contract Time, but such acceptance will neither impose on PROFESSIONAL responsibility for the sequencing, scheduling or progress of the Work nor interfere with or relieve CONTRACTOR from full responsibility therefor. The finalized schedule of Shop Drawing submissions and Sample submissions will be acceptable to PROFESSIONAL as providing a workable arrangement for reviewing and processing the submissions. CONTRACTOR's schedule of values shall be approved by PROFESSIONAL as to form and substance.

CONTRACTOR, in addition to preparing an initially acceptable schedule, shall be responsible for maintaining the schedule, including updating schedule. Schedule updates shall include progression of work as compared to scheduled progress on work. Schedule updates shall accompany each pay request.

ARTICLE 3-CONTRACT DOCUMENTS; INTENT, AMENDING, REUSE

Intent:

3.1. The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary: what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the State of Georgia.

3.2. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be supplied whether or not specifically called for. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with that meaning.

3.3. Except as otherwise specifically stated in the Contract Documents or as may be provided by amendment or supplement thereto issued by one of the methods indicated in 3.6 or 3.7, 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 such standard, specification, manual, code or instruction (whether or not specifically incorporated by reference in the Contract Documents) and the provisions of any such 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). Clarifications and interpretations of the Contract Documents shall be issued by PROFESSIONAL as provided in paragraph 9.4.

3.4. Reference to standards, specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest 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.

3.5. 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 such Law or Regulation applicable to the performance of the Work or of any such standard, specification, manual or code or of any instruction of any Supplier referred to in 6.7, CONTRACTOR shall so report to PROFESSIONAL in writing at once and before proceeding with the Work affected thereby and shall obtain a written interpretation or clarification from PROFESSIONAL; however, CONTRACTOR shall not be liable to OWNER or PROFESSIONAL for failure to report any conflict, error, ambiguity or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

Amending and Supplementing Contract Documents:

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

3.6.1. a formal Written Amendment,

3.6.2. a Change Order (pursuant to paragraph 10.3), or

3.6.3. a Work Change Directive (pursuant to paragraph 10.4).

As indicated in paragraphs 11.2 and 12.1, Contract Price and Contract Time may only be changed by a Change Order or a Written Amendment.

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

3.7.1. a Field Order (pursuant to paragraph 9.5).

3.7.2. PROFESSIONAL's approval of a Shop Drawing or sample (pursuant to paragraphs 6.24 and 6.26), or

3.7.3. PROFESSIONAL's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of documents:

3.8. Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER shall 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 PROFESSIONAL or PROFESSIONAL's consultant; and they shall not reuse such Drawings, Specifications or other documents (or copies of any thereof) on extensions of the Project or any other project without written consent of OWNER and PROFESSIONAL and specific written verification or adaptation by PROFESSIONAL.

ARTICLE 4-AVAILABILITY OF LANDS, PHYSICAL CONDITIONS; REFERENCE POINTS

Availability of Lands:

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Necessary easements or rights-of-way will be obtained and expenses will be borne by OWNER. If CONTRACTOR and OWNER are unable to agree on entitlement to or the amount or extent of any adjustments in the Contract Price or the Contract Times as a result of any delay in OWNER's furnishing these lands, rights-of-way or easements, the CONTRACTOR may make a claim therefor as provided in Articles 11 and 12. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Physical Conditions:

4.2.1. *Explorations and Reports:* Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at or contiguous to the site that have been utilized in preparing the Contract Documents and those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) that have been utilized in preparing the Contract Documents.

4.2.2. CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings. 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, PROFESSIONAL, or any of PROFESSIONAL's Consultants with respect to:

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

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

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

4.2.3. If conditions are encountered, excluding existing utilities, at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then CONTRACTOR shall give OWNER notice thereof promptly before conditions are disturbed and in no event later than 48 hours after first observance of the conditions.

4.2.4. The OWNER and PROFESSIONAL shall promptly investigate such conditions, and, if they differ materially and cause an increase or decrease in CONTRACTOR's cost of, or time required for, performance of any part of the Work, the OWNER and PROFESSIONAL shall recommend an equitable adjustment in the Contract Price or Contract Time, or both. If the OWNER and PROFESSIONAL determine that the conditions at the Site are not materially different from those indicated in the Contract Documents or are not materially different from those ordinarily found and that no change in the terms of the Contract is justified, the PROFESSIONAL shall notify CONTRACTOR of the determination in writing. The Work shall be performed after direction is provided by the PROFESSIONAL.

Physical Conditions-Underground Facilities:

4.3.1. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or PROFESSIONAL by OWNER'S of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

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

4.3.1.2. The cost of all of the following will be included in the Contract Price and CONTRACTOR shall have full responsibility for reviewing and checking all such information and data for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the OWNER'S of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

4.3.2. *Not Shown or Indicated.* If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby except in an emergency as permitted by paragraph 6.22, identify the OWNER of such Underground Facility and give written notice thereof to that OWNER and to OWNER and PROFESSIONAL. PROFESSIONAL will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of. If the parties are unable to agree as to the amount or length thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

Reference Points:

4.4. OWNER shall provide Engineering surveys to establish reference points for construction which in PROFESSIONAL's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to PROFESSIONAL whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

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

4.5 OWNER shall be responsible for any Asbestos, PCBs, Petroleum, Hazardous Waste or

Radioactive Material uncovered or revealed at the site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work and which may present a substantial danger to persons or property exposed thereto in connection with the Work at the site. OWNER shall not be responsible for any such materials brought to the site by CONTRACTOR, Subcontractor, Suppliers or anyone else for whom CONTRACTOR is responsible.

4.6 CONTRACTOR shall immediately: (i) stop all work in connection with such hazardous condition and in any area affected thereby (except in an emergency as required by 6.22), and (ii) notify OWNER and PROFESSIONAL (and thereafter confirm such notice in writing). OWNER shall promptly consult with PROFESSIONAL concerning the necessity for OWNER to retain a qualified expert to evaluate such hazardous condition or take corrective action, if any. CONTRACTOR shall not be required to resume Work in connection with such hazardous condition or in any such affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR special written notice (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of such Work stoppage or such special conditions under which Work is agreed by CONTRACTOR to be resumed, either party may make a claim therefor as provided in Articles 11 and 12.

4.7 If after receipt of such special written notice, CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then CONTRACTOR may order such portion of the Work that is in connection with such hazardous conditions or in such affected area to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a claim therefor as provided in Articles 11 and 12. OWNER may have deleted such portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

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

ARTICLE 5-BONDS AND INSURANCE

Performance and Other Bonds:

5.1. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as Security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds, and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

Licensed Sureties and Insurers; Certificates of Insurance

5.2.1 All bonds and insurance required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the State of Georgia to issue bonds or insurance policies for the limits and coverages so required. All bonds signed by an agent must be accompanied by a certified copy of authority to act. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.2.2. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in 5.3, an original or a certified copy of the complete insurance policy for each policy required, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain in accordance with 5.3.

5.2.3. 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 5.1, CONTRACTOR shall within five days thereafter substitute another Bond and Surety, both of which must be acceptable to OWNER.

CONTRACTOR's Liability Insurance:

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

5.3.1. Claims under workers' or workmen's compensation, disability benefits and other similar employee benefit acts;

5.3.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other

than CONTRACTOR's employees;

5.3.4. Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (b) by any other person for any other reason;

5.3.5. 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;

5.3.6. Claims arising out of operation of Laws or Regulations for damages because of bodily injury or death of any person or for damage to property; and

5.3.7. Claims for damages because of bodily injury or death of any person or property damage arising out of the OWNERSHIP, maintenance or use of any motor vehicle.

The insurance required by this paragraph 5.3 shall include the specific coverage's and be written for not less than the limits of liability and coverage's provided in the Supplementary Conditions, or required by law, whichever is greater. The comprehensive general liability insurance shall include completed operations insurance. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall 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, PROGRAM MANAGER, and PROFESSIONAL by certified mail. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing defective Work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

Contractual Liability Insurance:

5.4. The comprehensive general liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.32 and 6.33.

OWNER's Liability Insurance:

5.5. OWNER shall be responsible for purchasing and maintaining OWNER's own liability insurance, and/or Risk Retention Program, and, at OWNER's option, may purchase and maintain such insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

Property Insurance:

5.6. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of OWNER, CONTRACTOR, Subcontractors, PROGRAM MANAGER, PROFESSIONAL and PROFESSIONAL's consultants in the Work, all of whom shall be listed as insureds or additional insured parties, shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges

of PROFESSIONALS, architects, attorneys and other PROFESSIONALS). If not covered under the "all risk" insurance or otherwise provided in the Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment.

5.7. 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, PROFESSIONAL AND PROFESSIONAL's consultants in the Work, all of whom shall be listed as insured or additional insured parties.

5.8. All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least thirty days prior written notice has been given to CONTRACTOR by certified mail and will contain waiver provisions in accordance with paragraph of 5.11.2.

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

5.10. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policy, 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.

Waiver of Rights:

5.11.1. OWNER and CONTRACTOR waive all rights against each other for all losses and damages caused by any of the perils covered by the policies of insurance provided in response to paragraphs 5.6 and 5.7 and other property insurance applicable to the Work, and also waive all such rights against the Subcontractors, PROFESSIONAL, PROFESSIONAL's consultants and all other parties named as insureds in such policies for losses and damages so caused. As required by paragraph 6.11, each subcontract between CONTRACTOR and a Subcontractor will contain similar waiver provisions by the Subcontractor in favor of OWNER, CONTRACTOR, PROFESSIONAL, PROFESSIONAL's consultants and all other parties named as insureds. None of the above waivers shall extend to the rights that any of the insured parties may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

5.11.2. OWNER and CONTRACTOR intend that policies provided in response to paragraphs 5.6 and 5.7 shall protect all of the parties insured and provide primary coverage for all losses and damages caused by the perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any of the parties named as insureds or additional insureds, and if the insurers require separate waiver forms to be signed by PROFESSIONAL or PROFESSIONAL's consultant, OWNER will obtain the same, and if such waiver forms are required of any Subcontractor, CONTRACTOR will obtain the same.

Receipt and Application of Proceeds:

5.12. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 will be adjusted with OWNER and made payable to OWNER as trustee for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.13. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no 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.

Receipt and Application of Insurance Proceeds

5.13. OWNER, as trustee, shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER, as trustee, shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If required in writing by any party in interest, OWNER as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of such duties.

Acceptance of Insurance:

5.14. If OWNER has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.3 and 5.4 on the basis of its not complying with the Contract Documents, OWNER shall notify CONTRACTOR in writing thereof within ten days of the date of delivery of such certificates to OWNER in accordance with paragraph 2.7. If CONTRACTOR has any objection to the coverage afforded by or other provisions of the policies of insurance required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 on the basis of their not complying with the Contract Documents, CONTRACTOR shall notify OWNER in writing thereof within ten days of the date of delivery, of such certificates to CONTRACTOR in accordance with paragraph 2.7. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided by each as the other may reasonably request. Failure by OWNER or CONTRACTOR to give any such notice of objection within the time provided shall constitute acceptance of such insurance purchased by the other as complying with the Contract Documents.

Partial Utilization-Property Insurance:

5.15. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10 provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the 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 lapse on account of any such partial use or occupancy.

Indemnification

5.16.1. CONTRACTOR shall indemnify and hold harmless OWNER, PROGRAM MANAGER, and its employees and agents from and against all liabilities, claims, suits, demands, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from the performance of its Work, provided that any such liability, claim, suit, demand, damage, loss, or expense (a) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, including the loss of use resulting therefrom and (b) is caused in whole or in part by an act or omission of CONTRACTOR, any Subcontractor, anyone directly or

indirectly employed by any of them, or anyone for whose acts any of them may be liable, whether or not it is caused in whole or in part by the negligence or other fault of a party indemnified hereunder.

5.16.2. In any and all claims against OWNER or any of its agents or employees by any employee of CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under the previous paragraph shall not be limited in any way as to the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts, or other employee benefit acts.

5.16.3. CONTRACTOR shall indemnify and hold harmless OWNER and anyone directly or indirectly employed by it from and against all claims, suits, demands, damages, losses expenses (including attorneys' fees) arising out of any infringement on patent or copyrights held by others and shall defend all such claims in connection with any alleged infringement of such rights.

ARTICLE 6--CONTRACTOR'S RESPONSIBILITIES

6.1. CONTRACTOR shall supervise 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 others in the design or specification of a specific means, method, technique, sequence or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work, at all times during its progress, a competent resident superintendent, who shall not be replaced without written notice to OWNER and PROFESSIONAL except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications to the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3. CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit evening work or the performance of Work on Saturday, Sunday or any legal holiday without OWNER's written consent given after prior written notice to PROFESSIONAL.

6.4. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals whether temporary or permanent necessary for the execution, testing, initial operation, and completion of the Work as required by the Contract Documents.

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by PROFESSIONAL, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to PROFESSIONAL, or any of PROFESSIONAL's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.14 or 9.15.

Adjusting Progress Schedule:

6.6. CONTRACTOR shall submit to PROFESSIONAL for acceptance to the extent indicated in paragraph 2.9 adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

Substitutes or "Or-Equal" Items:

6.7.1. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by PROFESSIONAL if sufficient information is submitted by CONTRACTOR to allow PROFESSIONAL to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by PROFESSIONAL will include the following as supplemented in the General Requirements. Requests for review of substitute items of material and equipment will not be accepted by PROFESSIONAL from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to PROFESSIONAL for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by PROFESSIONAL. In evaluating the proposed substitute, PROFESSIONAL may require CONTRACTOR to furnish, at CONTRACTOR's expense, additional data about the proposed substitute.

6.7.2. If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to PROFESSIONAL, if CONTRACTOR submits sufficient information to allow PROFESSIONAL to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by PROFESSIONAL will be similar to that provided in paragraph 6.7.1 as applied by PROFESSIONAL and as may be supplemented in the General Requirements.

6.7.3. PROFESSIONAL will be allowed a reasonable time within which to evaluate each proposed substitute. PROFESSIONAL will be the sole judge of acceptability and no substitute will be ordered, installed or utilized without PROFESSIONAL's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish, at CONTRACTOR's expense, a special performance guarantee or other surety with respect to any substitute. PROFESSIONAL will record time required by PROFESSIONAL and PROFESSIONAL's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not PROFESSIONAL accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of PROFESSIONAL and PROFESSIONAL's consultants for evaluating each proposed substitute.

Concerning Subcontractors, Suppliers and Others:

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

6.8.2. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers or

other persons or organizations including those who are to furnish the principal items of materials and equipment to be submitted to OWNER prior to the Effective Date of the Agreement for acceptance by OWNER and PROFESSIONAL and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's or PROFESSIONAL's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute, the Contract Price will be increased by the difference, and the cost occasioned by such substitution and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER or PROFESSIONAL of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or PROFESSIONAL to reject defective Work.

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

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

6.11. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and PROFESSIONAL and contains waiver provisions as required by paragraph 5.11. CONTRACTOR shall pay each Subcontractor a just share of any insurance moneys received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.6 and 5.7.

Patent Fees and Royalties:

6.12. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. CONTRACTOR shall indemnify and hold harmless OWNER and PROFESSIONAL and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses including attorneys' fees and court and arbitration costs arising out of any infringement on 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, and shall defend all such claims in connection with any alleged infringement of such rights.

Permits:

6.13. CONTRACTOR shall obtain and pay for all construction permits, licenses, governmental charges and inspection fees, and all public utility charges which are applicable and necessary for the execution of the Work. All permit costs shall be included in the base bid. Permits, if any, that are provided and paid for by OWNER are listed in the Supplementary Conditions. Any delays associated with the permitting process will be considered for time extensions only and no damages or additional compensation for delay will be allowed.

Laws and Regulations:

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

6.14.2. If CONTRACTOR observes that any of the Contract Documents are contradictory to such laws, rules, and regulations, it will notify the Project Manager promptly in writing. Any necessary changes shall then be adjusted by an appropriate Change Order. If CONTRACTOR performs any Work that it knows or should have known to be contrary to such laws, ordinances, rules, and regulations and without such notice to the Project Manager, it shall bear all related costs.

Taxes:

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

Use of Premises:

6.16. CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements. CONTRACTOR shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Any loss or damage to CONTRACTOR's or any Subcontractor's equipment is solely at the risk of CONTRACTOR. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the OWNER or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or PROFESSIONAL by any such OWNER or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of PROFESSIONALS, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER to the extent based on a claim arising out of CONTRACTOR's performance of the Work.

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

6.18. CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger them.

Record Documents:

6.19. Contractor shall keep at the site and in good order one record copy of the Contract Documents and all Drawings and Specifications. These documents shall be annotated on a continuing basis to show all changes made during the construction process. These shall be available to PROFESSIONAL and the Project Manager and shall be submitted with the Application for Final Payment.

Safety and Protection:

6.20. CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall assume all risk of loss for stored equipment or materials, irrespective of whether CONTRACTOR has transferred the title of the stored equipment or materials to OWNER. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.20.1. all employees on the Work and other persons and organizations who may be affected thereby;

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

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

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify OWNERS of adjacent property and of Underground Facilities and utility OWNERS when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.20.2 or 6.20.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or PROFESSIONAL or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR). CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and PROFESSIONAL has issued a notice to OWNER and CONTRACTOR in accordance, with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.21. CONTRACTOR shall designate a responsible member of its organization whose duty shall be the prevention of accidents at the site. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to the Project Manager.

Emergencies:

6.22. In emergencies affecting the safety or protection of persons or the Work or property at the site

or adjacent thereto, CONTRACTOR, without special instruction or authorization from PROFESSIONAL or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give PROFESSIONAL prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If PROFESSIONAL determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Change Directive or Change Order be issued to document the consequences of the changes or variations.

6.22.1. CONTRACTOR shall immediately notify PROFESSIONAL of all events involving injuries to any person on the Site, whether or not such person was engaged in the construction of the Project, and shall file a written report on such person(s) and any other event resulting in property damage of any amount within five (5) days of the occurrence.

6.22.2. If PROFESSIONAL determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Change Order will be issued to document the consequences of such action.

Shop Drawings and Samples:

6.23. After checking and verifying all field measurements, CONTRACTOR shall promptly submit to PROFESSIONAL for approval, in accordance with the accepted schedule of submittals, all submittals and samples required by the Contract Documents. All submittals and samples shall have been checked by and stamped with the approval of CONTRACTOR and identified as PROFESSIONAL may require. The data shown on or with the submittals will be complete with respect to dimensions, design criteria, materials and any other information necessary to enable PROFESSIONAL to review the submittal as required. At the time of each submission, CONTRACTOR shall give notice to PROFESSIONAL of all deviations that the submittal or sample may have from the requirements of the Contract Documents.

6.24. PROFESSIONAL shall review and approve submittals and samples. Professional's review and approval shall be only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR will make any corrections required by PROFESSIONAL and resubmit the required number of corrected copies until approved. CONTRACTOR's stamp of approval on any submittal or sample shall constitute its representation to PROFESSIONAL and OWNER that CONTRACTOR has determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, and that each submittal or sample has been reviewed or coordinated with the requirements of the Work and the Contract Documents.

6.24.1. No Work requiring a submittal or sample submission shall commence until the submission has been approved by PROFESSIONAL. A copy of each approved submittal and each approved sample shall be kept in good order by CONTRACTOR at the site and shall be available to PROFESSIONAL and OWNER. Any delays associated with the submittal process will be considered for time extensions only, and no damages or additional compensation for delay will be allowed.

6.24.2. Before submission of each Shop Drawing or sample, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

6.24.3. At the time of each submission, CONTRACTOR shall give PROFESSIONAL specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to

PROFESSIONAL for review and approval of each such variation.

6.26. PROFESSIONAL will review and approve with reasonable promptness Shop Drawings and samples, but PROFESSIONAL's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required 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.

6.27. PROFESSIONAL's approval of submittals or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has, in writing, called PROFESSIONAL's attention to each such variation at the time of submission and the OWNER has given written approval to the specific deviation; any such approval by PROFESSIONAL shall not relieve CONTRACTOR from responsibility for errors or omissions in the submittals.

6.28. Where a shop drawing or sample is required by the Contract Documents or the schedule of shop drawings and sample submissions accepted by PROFESSIONAL as required, any related work performed prior to PROFESSIONAL's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

Continuing the Work:

6.30. 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 15.6 or as CONTRACTOR and OWNER may otherwise agree in writing.

Cleaning Up:

6.31. CONTRACTOR shall maintain the site free from accumulations of waste materials, rubbish, and other debris or contaminants resulting from the work on a daily basis or as required. At the completion of the work, CONTRACTOR shall remove all waste materials, rubbish, and debris from the site as well as all tools, construction equipment and machinery, and surplus materials and will leave the Site clean and ready for occupancy by OWNER. All disposal shall be in accordance with applicable Laws and Regulations. In addition to any other rights available to OWNER under the Contract Documents, CONTRACTOR's failure to maintain the site may result in withholding of any amounts due CONTRACTOR. CONTRACTOR will restore to original condition those portions of the site not designated for alteration by the Contract Documents.

Indemnification:

6.32. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, PROGRAM MANAGER and PROFESSIONAL and their consultants, agents and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including but not limited to fees and charges of PROGRAM MANAGER, PROFESSIONALS, architects, attorneys and other PROFESSIONALS and court and arbitration costs) arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) 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 (b) is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable,

regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by Law and Regulations regardless of the negligence of any such party.

6.33. In any and all claims against OWNER, PROGRAM MANAGER or PROFESSIONAL or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.32 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 or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

6.34. The obligations of CONTRACTOR under paragraph 6.32 shall not extend to the liability of PROFESSIONAL, PROFESSIONAL's consultants, agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications.

ARTICLE 7---OTHER WORK

Related Work at Site:

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

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

7.2. If any part of CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor or utility OWNER (or OWNER), CONTRACTOR shall inspect and promptly report to PROFESSIONAL in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure so to report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or nonapparent defects and deficiencies in the other work.

Coordination:

7.4. If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary Conditions, and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided in the Supplementary Conditions. Unless otherwise provided in the Supplementary Conditions, neither OWNER nor PROFESSIONAL shall have any authority or responsibility in respect of such coordination.

ARTICLE 8--OWNER'S RESPONSIBILITIES

8.1. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through the PROGRAM MANAGER or PROFESSIONAL.

8.2. In case of termination of the employment of PROFESSIONAL, OWNER shall appoint a PROFESSIONAL against whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former PROFESSIONAL. Any dispute in connection with such appointment shall be subject to arbitration.

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

8.4. OWNER's duties in respect of providing lands and easements and providing Engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and in existing structures which have been utilized by PROFESSIONAL in preparing the Drawings and Specifications.

8.5. OWNER's responsibilities in respect of purchasing and maintaining liability and property insurance are set forth in paragraphs 5.5 through 5.8.

8.6. OWNER is obligated to execute Change Orders as indicated in paragraph 10.3.

8.7. OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 13.4.

8.8. In connection with OWNER's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 9---PROFESSIONAL'S STATUS DURING CONSTRUCTION

OWNER's Representative:

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

Visits to Site:

9.2. PROFESSIONAL will make visits to the site at intervals appropriate to the various stages of construction to observe the premises and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. PROFESSIONAL will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. PROFESSIONAL's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design PROFESSIONAL, PROFESSIONAL will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

Project Representation:

9.3. If OWNER and PROFESSIONAL agree, PROFESSIONAL will furnish a Resident Project Representative to assist PROFESSIONAL in observing the performance of the Work. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions. If OWNER designates another agent to represent OWNER at the site who is not PROFESSIONAL's agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Supplementary Conditions.

Clarifications and Interpretations:

9.4. PROFESSIONAL shall issue such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as may be determined necessary, or as reasonably requested by CONTRACTOR, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification and interpretation entitles it to an increase in the Contract Price and/or Contract Time, CONTRACTOR may make a claim as provided for in Articles 11 or 12.

Authorized Variations in Work:

9.5. PROFESSIONAL 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 Time and are consistent with the overall intent of 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 CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Article 11 or 12.

Rejecting Defective Work:

9.6. PROFESSIONAL will have authority to disapprove or reject Work which PROFESSIONAL believes to be defective and will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with PROFESSIONAL's responsibility for Shop Drawings and samples, see paragraphs 6.23 through 6.29 inclusive.

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

9.9. In connection with PROFESSIONAL's responsibilities in respect of Applications for Payment, etc., see Article 14.

Determinations for Unit Prices:

9.10. PROFESSIONAL will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. PROFESSIONAL will review with CONTRACTOR PROFESSIONAL's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). PROFESSIONAL's written decisions thereon will be final and binding upon OWNER and CONTRACTOR, unless, within ten days after the date of any such decision, either OWNER or CONTRACTOR delivers to the other party to the Agreement and to PROFESSIONAL written notice of intention to appeal from such a decision.

Decisions on Disputes:

9.11. PROFESSIONAL will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 11 and 12 in respect of changes to the Contract Price or Contract Time will be referred initially to PROFESSIONAL in writing with a request for a formal decision in accordance with this paragraph, which PROFESSIONAL will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to PROFESSIONAL and the other party to the Agreement promptly (but in no event later than thirty days after the occurrence of the event giving rise thereto) and written supporting data will be submitted to PROFESSIONAL and the other party within sixty days after such occurrence unless PROFESSIONAL allows an additional period of time to ascertain more accurate data in support of the claim.

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

matter.

Limitations on PROFESSIONAL's Responsibilities:

9.13. Neither PROFESSIONAL's authority to act under this Article or elsewhere in the Contract Documents nor any decision made in good faith to exercise such authority shall give rise to any duty or responsibility of PROFESSIONAL to CONTRACTOR, any Subcontractor, any of their agents or employees.

9.14. PROFESSIONAL shall not be responsible for the construction means, methods, techniques, sequences, or procedures or the safety precautions and programs used. PROFESSIONAL shall not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

9.15. PROFESSIONAL shall not be responsible for the acts or omissions of CONTRACTOR, any Subcontractors, any agents or employees, or any other persons performing any of the Work.

ARTICLE 10--CHANGES IN THE WORK

10.1. Without invalidating the Contract, OWNER may at any time or from time to time order additions, deletions, or revisions in the Work. The OWNER shall provide CONTRACTOR with a proposal request, identifying the Work to be added, deleted or revised. Upon receipt, CONTRACTOR shall promptly submit a written proposal for the changed work prepared in accordance with Articles 11 and 12. If the proposal request calls only for the deletion of Work, the OWNER may order the partial suspension of any Work related to the proposed deletion, in which case CONTRACTOR must cease performance as directed; CONTRACTOR shall not be entitled to claim lost profits on deleted work. All changed Work shall be executed under the applicable conditions of the Contract Documents.

10.2. Additional Work performed by CONTRACTOR without authorization of a Change Order will not entitle CONTRACTOR to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency as provided in Article 6. The effect of this paragraph shall remain paramount and shall prevail irrespective of any conflicting provisions contained in these Contract Documents.

10.3. Upon agreement as to changes in the Work to be performed, Work performed in an emergency as provided in Article 6, and any other claim of CONTRACTOR for a change in the Contract Time or the Contract Price, PROFESSIONAL will prepare a written Change Order to be signed by PROFESSIONAL and CONTRACTOR and submitted to OWNER for approval.

10.4. In the absence of an agreement as provided in 10.3, OWNER may, at its sole discretion, issue a Work Change Directive to CONTRACTOR. Pricing of the Work Change Directive will be in accordance with Section 11.3. The Work Change Directive will specify a price, and if applicable a time extension, determined to be reasonable by OWNER. If CONTRACTOR fails to sign such Work Change Directive, CONTRACTOR may submit a claim in accordance with Articles 11 and 12, but CONTRACTOR shall nevertheless be obligated to fully perform the work as directed by the Work Change Directive.

10.5. CONTRACTOR shall proceed diligently with performance of the Work as directed by OWNER, regardless of pending claim actions, unless otherwise agreed to in writing.

10.6. 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 Time) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 11-CHANGE OF CONTRACT PRICE

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

11.2. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to PROFESSIONAL promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days after such occurrence (unless PROFESSIONAL allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Price shall be determined by PROFESSIONAL in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

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

11.3.1. Designated Unit Price (Field Measure). CONTRACTOR and OWNER recognize and acknowledge that the quantities shown for those items designated in the Bid Proposal as unit price items are approximations prepared by OWNER for bid purposes and that the actual compensation payable to CONTRACTOR for the utilization of such items is based upon the application of unit prices to the actual quantities of items involved as measured in the field and required to complete the Work as originally defined in the Contract Documents.

11.3.2. When it is determined by OWNER that an addition, deletion, or revision to the Work, as defined in these Contract Documents, is required and affects the quantities required for items designed in the Bid Proposal as unit price items, CONTRACTOR and OWNER agree that the compensation payable to CONTRACTOR for such unit price items shall be adjusted accordingly by a Change Order based upon the application of the appropriate unit prices shown in the Bid Proposal to the quantity of the unit price item required to complete the Work as defined in the Contract Documents.

11.3.3. Other Unit Prices. For items not designated in the bid proposal as unit prices, OWNER and CONTRACTOR may establish unit prices as agreed on by Change Order.

11.3.4. Lump Sum. When it is determined by OWNER that an addition, deletion or revision to the Work is required which results in a change in Work designated in the Bid Proposal as a lump sum item, the amount of increase or decrease in the lump sum price shall be established by mutual agreement of the parties.

11.3.5. If the pricing methods specified in 11.3 are inapplicable, or if the parties are unable to agree on a price for the changed work, a reasonable price for the same shall be established by OWNER in accordance with 11.4 and 11.5. OWNER shall then process a unilateral Change Order, specifying the said reasonable price, in accordance with 11.4 through 11.6. CONTRACTOR shall perform the Work as directed in the Change Order.

11.3.6. Failure on the part of CONTRACTOR to construct any item to plan or authorized dimensions within the specification tolerances shall result in: reconstruction to acceptable tolerances at no additional costs to OWNER; acceptance at no pay; or acceptance at reduced final pay quantity or reduced unit price, all at the discretion of OWNER. Determinations of aggregate monetary change for items identified as lump sum quantities shall be made by OWNER based upon an analysis of the scope of CONTRACTOR's failure to construct to plan or authorized dimensions.

Cost of the Work:

11.4. 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. 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 11.5:

11.4.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. 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' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

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

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who then determines, with the advice of PROFESSIONAL, which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

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

11.4.5. Supplemental costs including the following:

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

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

consumed which remain the property of CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of PROFESSIONAL, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof-all in accordance with 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.

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

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

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER in accordance with paragraph 5.6) provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them 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. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

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

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

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work and premiums of property insurance coverage within the limits of the deductible amounts established by OWNER in accordance with paragraph 5.6.

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

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4-all of which are to be considered administrative costs covered by CONTRACTOR's Fee.

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

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR'S capital used for the Change Order Work and charges against CONTRACTOR for delinquent payments.

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

11.5.5. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly, employed by any of them or for whose acts any of them 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.

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

CONTRACTOR's Fee:

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

11.6.1. a mutually acceptable fixed fee, or if none can be agreed upon;

11.6.2. a fee based on the following percentages of the various portions of the Cost of the Work:

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

11.6.2.2. for costs incurred under paragraph 11.4.3, CONTRACTOR's Fee shall five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent,

11.6.2.3. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.3,

11.6.2.4. the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's Fee by an amount equal to ten percent of the net decrease, and

11.6.2.5. 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 11.6.2.1 through 11.6.2.4, inclusive.

11.7. For all changes, CONTRACTOR shall submit an itemized cost breakdown, together with supporting data in such detail and form as prescribed by the Project Manager. When a credit is due, the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease in direct cost as determined by the Project Manager, plus the applicable reduction in overhead and profit. When both additions and credits are involved in any change, the combined overhead and profit shall be calculated on the basis of the net change, whether an increase or decrease. In any event, the minimum detail shall be an itemization of all man-hours required by discipline/trade with the unit cost per man-hour and total labor price, labor burden, equipment hours and rate

for each piece of equipment, material by units of measure and price per unit, other costs specifically itemized, plus the overhead and profit markup.

Cash Allowances:

11.8. 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 done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to PROFESSIONAL CONTRACTOR agrees that:

11.8.1. 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

11.8.2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

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

Unit Price Work:

11.9.1. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices 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 PROFESSIONAL in accordance with Paragraph 9.10.

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

11.9.3. Where 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 there is no corresponding adjustment with respect to any other item of Work and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 11 if the parties are unable to agree as to the amount of any such increase.

ARTICLE 12--CHANGE OF CONTRACT TIME

12.1. The Contract Time may only be changed by a Change Order. Any request for an extension in the Contract Time shall be made in writing and delivered to PROFESSIONAL and OWNER within seven (7) calendar days of the occurrence first happening and resulting in the claim. Written supporting data will be submitted to PROFESSIONAL and OWNER within fifteen (15) calendar days after such occurrence unless the OWNER allows additional time. All claims submitted by CONTRACTOR for adjustments to the Contract Time must set forth in detail the reasons for and causes of the delay and clearly indicate why the subject delay was beyond CONTRACTOR's control or fault.

12.2. If CONTRACTOR is delayed at any time in the performance, progress, commencement, or completion of the Work by any act or neglect of OWNER or PROFESSIONAL, or by an employee of either, or by any separate CONTRACTOR employed by OWNER, or by changes ordered in the Work, or by labor disputes, fire, unavoidable casualties, utility conflicts which could not have been identified or foreseen by CONTRACTOR using reasonable diligence, or any causes beyond CONTRACTOR's control or fault, then the Contract Time shall be extended by Change Order for such reasonable time as OWNER may determine. CONTRACTOR shall be entitled to an extension of time for such causes only for the number of days of delay which OWNER may determine to be due solely to such causes and only to the extent such occurrences actually delay the completion of the Work and then only if CONTRACTOR shall have strictly complied with all the requirements of the Contract Documents. Provided, however, notwithstanding anything in the Contract Documents to the contrary, no interruption, interference, inefficiency, suspension or delay in the performance, progress, commencement or completion of the Work for any cause whatsoever, including those for which OWNER or PROFESSIONAL may be responsible in whole or in part, shall relieve CONTRACTOR of its duty to perform or give rise to any right to damages or additional compensation from OWNER. CONTRACTOR's sole and exclusive remedy against OWNER for interruption, interference, inefficiency, suspension or delay of any aspect of the Work shall be the right to seek an extension to the Contract Time in accordance with the procedures set forth herein.

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

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER that all materials and equipment will be new unless otherwise specified and that all work will be of good quality, performed in a workmanlike manner, free from faults or defects, and in accordance with the requirements of the Contract Documents and any inspections, tests, or approvals referred to in this Article. All unsatisfactory Work, all faulty Work and all Work not conforming to the requirements of the Contract Documents or such inspections, tests, approvals, or all applicable building, construction and safety requirements shall be considered defective. Notice of all defects shall be given to CONTRACTOR by PROFESSIONAL. All defective work, whether or not in place, may be rejected, corrected, or accepted as provided in this Article.

Access to Work:

13.2. For the duration of the Work, PROFESSIONAL and its representatives, other designated representatives of OWNER, and authorized representatives of any regulatory agency shall at all times be given access to the Work. CONTRACTOR shall provide proper facilities for such access and observation of the Work and also for any inspection or testing by others.

Tests and Inspections:

13.3. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested, or approved by someone other than CONTRACTOR, CONTRACTOR shall give PROFESSIONAL timely notice of readiness therefore.

13.4. The testing firm(s) (if assigned by OWNER to this Work) and all such inspections, tests, or approvals provided for by OWNER shall be identified in writing by PROFESSIONAL to CONTRACTOR. All other inspections, tests or approvals shall be at CONTRACTOR's expense including additional expenses for inspection and tests required as a result of delays by CONTRACTOR or hours worked in excess of 40 hours per week. For all required inspections, tests, and approvals on any Work prepared, performed, or assembled away from the site, CONTRACTOR will furnish PROFESSIONAL with the required Certificates of Inspection, testing, or approval. All such tests will be in accordance with the methods prescribed by the American Society for Testing and Materials or such other applicable organizations as may be required by law or the Contract Documents. Materials or Work in place that fail to pass acceptability tests shall be retested at the direction of PROFESSIONAL and at CONTRACTOR's expense.

13.5. All inspections, tests or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by PROFESSIONAL if so specified).

13.6. If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of PROFESSIONAL, it must, if requested by PROFESSIONAL, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense unless CONTRACTOR has given PROFESSIONAL timely notice of CONTRACTOR's intention to cover the same and PROFESSIONAL has not acted with reasonable promptness in response to such notice.

13.7. Neither observations by PROFESSIONAL or Project Manager nor inspections, tests, or

approvals by persons other than CONTRACTOR shall relieve CONTRACTOR of its obligations to perform the Work in accordance with the requirements of the Contract Documents.

Uncovering Work:

13.8. If any Work required to be inspected, tested or approved is covered prior thereto without the prior written approval of PROFESSIONAL, or if any Work is covered contrary to the request of PROFESSIONAL, the Work shall, if requested by PROFESSIONAL, be uncovered for observation, inspection, testing or approval and replaced at CONTRACTOR's expense.

13.9. If PROFESSIONAL considers it necessary or advisable that covered Work be observed by PROFESSIONAL or inspected or tested by others, CONTRACTOR, at PROFESSIONAL's request, shall uncover, expose or otherwise make available for observation, inspection or testing as PROFESSIONAL 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 bear all direct and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction (including but not limited to fees and charges of PROFESSIONALS, architects, attorneys and other PROFESSIONALS), and OWNER shall be entitled to an appropriate decrease in the Contract Price and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. If, 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 Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction, and, if the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

OWNER May Stop the Work:

13.10. When Work is defective or when CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment or make prompt payments to Subcontractors for labor, materials, or equipment or if CONTRACTOR violates any provisions of these Contract Documents, OWNER may order CONTRACTOR to stop the Work until the cause for such order has been eliminated. However, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party. CONTRACTOR shall have no right to claim an increase in the Contract Price or Contract Time or other damages for a stop work order under this paragraph.

Correction or Removal of Defective Work:

13.11. When directed by PROFESSIONAL, CONTRACTOR shall promptly, without cost to OWNER and as specified by PROFESSIONAL, either correct the defective Work whether fabricated, installed, or completed, or remove it from the site and replace it with non-defective Work. If CONTRACTOR does not correct such defective Work or remove and replace such defective Work within a reasonable time, as specified in a written notice from PROFESSIONAL, OWNER may have the deficiency corrected. All direct and indirect costs of such correction shall be paid by CONTRACTOR or deducted from payment to CONTRACTOR. CONTRACTOR will also bear the expense of correcting or removing and replacing all Work of others destroyed or damaged by the correction, removal, or replacement of the defective Work.

One Year Correction Period:

13.12. If, after approval of final payment and prior to the expiration of one year after the date of substantial completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work or materials are found to be defective, incomplete, or otherwise not in accordance with the Contract Documents, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such defective Work or if it has been rejected by OWNER, remove it from the Site and replace it with non-defective Work. If CONTRACTOR does not promptly comply with the terms of such instructions, OWNER may have the defective Work corrected, removed, or replaced. All direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to PROFESSIONAL's recommendation of final payment, PROFESSIONAL) prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by PROFESSIONAL as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to PROFESSIONAL's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails within a reasonable time after written notice of PROFESSIONAL to proceed to correct defective Work or to remove and replace rejected Work as required by PROFESSIONAL in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously, to the extent necessary to complete 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 such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by PROFESSIONAL, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. Such direct, indirect and consequential costs will include, but not be limited to, fees and charges of engineers, architects, attorneys and other professionals, all court costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of

OWNER's rights and remedies hereunder.

Neglected Work by CONTRACTOR

13.15. If CONTRACTOR neglects to execute the Work in accordance with the Contract Documents, including any requirements of the progress schedule, PROFESSIONAL may direct CONTRACTOR to submit a recovery plan and take specific corrective actions including, but not limited to, employing additional workmen and/or equipment, and working extended hours and additional days, all at no cost to OWNER in order to put the Work back on schedule. If CONTRACTOR fails to correct the deficiency or take appropriate corrective action, OWNER may terminate the contract or CONTRACTOR's right to proceed with that portion of Work and have the Work done by others. The cost of completion under such procedure shall be charged against CONTRACTOR. A Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including an appropriate reduction in the Contract Price. If the payments due CONTRACTOR are not sufficient to cover such amount, CONTRACTOR shall pay the difference to OWNER.

13.16. Should CONTRACTOR work overtime, weekends or holidays to regain the schedule, all costs to OWNER of associated inspection, construction management and resident engineers shall be identified to CONTRACTOR and the Contract Price reduced by a like amount via Change Order.

ARTICLE 14-PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in 2.9 will serve as the basis for progress payments and will be incorporated into a form of application for Payment acceptable to Project Manager. Progress payments on account of Unit Price Work will be based on the number of units completed.

Application for Progress Payment:

14.2. At least twenty (20) calendar days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to PROFESSIONAL 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 and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. Payment is subject to a ten percent (10%) retainage that will be held until the final payment or acceptance by OWNER. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

CONTRACTOR's Warranty of Title:

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

Review of Applications for Progress Payment:

14.4. PROFESSIONAL will, within ten (10) calendar 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 PROFESSIONAL's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the application. OWNER shall, within thirty-one calendar days of presentation to him of the application for payment with PROFESSIONAL's recommendation of the amount for payment, pay CONTRACTOR amount recommended.

14.5. PROFESSIONAL's recommendation of any payment requested in an Application for Payment will constitute a representation by PROFESSIONAL to OWNER, based on PROFESSIONAL's on-site observations of the Work in progress as an experienced and qualified design PROFESSIONAL and on PROFESSIONAL's review of the Application for Payment and the accompanying data and schedules, that the Work has progressed to the point indicated; that, to the best of PROFESSIONAL's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.10, and to any other qualifications stated in the recommendation; and that

CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment, PROFESSIONAL will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to PROFESSIONAL in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.

14.6. PROFESSIONAL's recommendation of final payment will constitute an additional representation by PROFESSIONAL to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment as set forth in paragraph 14.13 have been fulfilled.

14.7. PROFESSIONAL may refuse to recommend the whole or any part of any payment if, in PROFESSIONAL's opinion, it would be incorrect to make such representations to OWNER. PROFESSIONAL may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in PROFESSIONAL's opinion to protect OWNER from loss because:

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

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

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

14.7.4. of PROFESSIONAL's actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.9 inclusive.

OWNER may refuse to make payment of the full amount recommended by PROFESSIONAL because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work or Liens have been filed in connection with the Work or there are other items entitling OWNER to a off-set against the amount recommended, but OWNER must give CONTRACTOR immediate written notice (with a copy to PROFESSIONAL) stating the reasons for such action.

Substantial Completion:

14.8. When CONTRACTOR considers the entire Work ready for its intended use, CONTRACTOR shall notify OWNER and PROFESSIONAL in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that PROFESSIONAL issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and PROFESSIONAL shall make an inspection of the Work to determine the status of completion. If PROFESSIONAL does not consider the Work substantially complete, PROFESSIONAL will notify CONTRACTOR in writing giving the reasons therefor. If PROFESSIONAL considers the Work substantially complete, PROFESSIONAL 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 PROFESSIONAL as to any provisions of the certificate or attached list. If, after considering such objections, PROFESSIONAL concludes that the Work is not substantially complete, PROFESSIONAL will, within fourteen days after submission of the

tentative certificate to OWNER notify CONTRACTOR in writing stating the reasons therefor. If, after consideration of OWNER's objections, PROFESSIONAL considers the Work substantially complete, PROFESSIONAL will within said fourteen days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as PROFESSIONAL believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion, PROFESSIONAL will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform PROFESSIONAL prior to PROFESSIONAL's issuing the definitive certificate of Substantial Completion, PROFESSIONAL's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

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

Partial Utilization:

14.10. Use by OWNER at OWNER's option of any substantially completed part of the Work which (i) has specifically been identified in the Contract Documents, or (ii) OWNER, PROFESSIONAL, 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:

14.10.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and PROFESSIONAL that said part of the Work is substantially complete and request PROFESSIONAL to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and PROFESSIONAL in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request PROFESSIONAL to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and PROFESSIONAL shall make an inspection of that part of the Work to determine its status of completion. If PROFESSIONAL does not consider that part of the Work to be substantially complete, PROFESSIONAL will notify OWNER and CONTRACTOR, in writing, giving the reasons therefor. If PROFESSIONAL considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.10.2. OWNER may at any time request CONTRACTOR, in writing, to permit OWNER to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to PROFESSIONAL and, within a reasonable time thereafter, OWNER, CONTRACTOR and PROFESSIONAL shall make an inspection of that part of the Work to determine its status of completion, and PROFESSIONAL will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and PROFESSIONAL that such part of the Work is not ready for separate operation by OWNER, PROFESSIONAL will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and

CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed PROFESSIONAL). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

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

14.10.4. OWNER, may at its discretion, reduce the amount of retainage subject to Beneficial Occupancy.

Final Inspection:

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

Final Application for Payment:

14.12. After CONTRACTOR has completed all such corrections to the satisfaction of PROFESSIONAL and OWNER and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by 5.2, certificates of inspection, marked-up record documents and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required, (ii) consent of the surety, if any, to final payment, and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all liens arising out of or filed in connection with the Work. In lieu of such releases or waivers of liens and as approved by OWNER, CONTRACTOR may furnish receipts or release 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.

14.12.1. No application for final payment will be accepted by OWNER until approved as-built documents by CONTRACTOR are accepted and approved by PROFESSIONAL.

14.12.2. Notwithstanding any other provision of these contract documents to the contrary, OWNER and PROFESSIONAL are under no duty or obligation whatsoever to any vendor, materials provider, Subcontractor, laborer or other party to ensure that payments due and owing by CONTRACTOR to any of them are or will be made. Such parties shall rely only on CONTRACTOR's surety bonds for remedy of nonpayment by him. CONTRACTOR agrees to defend and resolve all claims made by Subcontractors, indemnifying OWNER and PROFESSIONAL for all claims arising from or resulting from Subcontractor or supplier or material men or laborer services in connection with this project.

14.12.3. General Indemnity: CONTRACTOR shall indemnify OWNER and PROFESSIONAL for any damages sustained, including lost profits, resulting from CONTRACTOR's failure or refusal to perform the work required by these contract documents.

Final Payment and Acceptance:

14.13. If, on the basis of PROFESSIONAL's observation of the Work during construction and final inspection and PROFESSIONAL's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, PROFESSIONAL is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, PROFESSIONAL will, within ten (10) working days after receipt of the final Application for Payment, indicate in writing PROFESSIONAL's recommendation of payment and present the Application to OWNER for payment. At the same time PROFESSIONAL will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of 14.6. Otherwise, PROFESSIONAL will return the application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. After the presentation to OWNER of the application and accompanying documentation, in appropriate form and substance and with PROFESSIONAL's recommendation and notice of acceptability, the amount recommended by PROFESSIONAL will become due and will be paid by OWNER to CONTRACTOR.

14.14. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if PROFESSIONAL so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of PROFESSIONAL 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 Contract and if bonds have been furnished as required in Article 5, 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 PROFESSIONAL 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.

CONTRACTOR's Continuing Obligation:

14.15. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by PROFESSIONAL, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by PROFESSIONAL pursuant to paragraph 14.13, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of

CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 14.16).

Waiver of Claims:

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

14.16.1. A waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled liens, from defective Work appearing after final inspection pursuant to 14.11, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

14.16.2. A waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15--SUSPENSION OF WORK AND TERMINATION

OWNER May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and PROFESSIONAL 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 Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

Termination For Cause:

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

15.2. 1. if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.2. if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.3. if CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.4. if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;

15.2.5. if CONTRACTOR admits in writing an inability to pay its debts generally, as they become due;

15.2.6. if CONTRACTOR fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.9 as revised from time to time);

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

15.2.8. if CONTRACTOR disregards the authority of PROFESSIONAL; or

15.2.9. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents,

OWNER may, after giving CONTRACTOR (and the surety, if there be one) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances,

construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which 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 the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of PROFESSIONALS, architects, attorneys and other PROFESSIONALS and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by PROFESSIONAL and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph, OWNER shall not be required to obtain the lowest price for the Work performed.

15.3. In the event OWNER terminates the contract for cause and it is subsequently judicially determined that there was no cause for termination, the termination for convenience provision will be the means for disposition of the balance of the contract obligations.

Termination for Convenience

15.4. Upon seven working days' written notice to CONTRACTOR and PROFESSIONAL, 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):

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

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

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

15.4.4. For reasonable expenses directly attributable to termination.

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

15.5. 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.

CONTRACTOR May Stop Work or Terminate:

15.6. If through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety calendar days by OWNER or under an order of court or other public authority, or PROFESSIONAL fails to act on any Application for Payment within thirty days after it is submitted or OWNER fails for thirty-one days

to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may upon seven working days' written notice to OWNER and PROFESSIONAL and provided OWNER or PROFESSIONAL did not remedy such suspension or failure within that time, terminate the Agreement and recover from OWNER payment on the same terms as provided in 15.2. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if PROFESSIONAL has failed to act on an Application for Payment within thirty days after it is submitted or OWNER has failed for thirty-one calendar days after it is submitted to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may upon seven days' written notice to OWNER and PROFESSIONAL stop the Work until receipt of payment of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph are not intended to preclude CONTRACTOR from making claim under Articles 11 and 12 for an increase in Contract Price or Contract Time or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping Work as permitted by this paragraph. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 6.30 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

ARTICLE 16--DISPUTE RESOLUTION

16.1. All disputes arising under this Contract or its interpretation whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten (10) working days of the commencement of the dispute be presented by CONTRACTOR to OWNER for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime, CONTRACTOR shall proceed with the Work as directed. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) working days of its commencement, the claim will be considered only for a period commencing ten (10) working days prior to the receipt by OWNER of notice thereof. Each decision by OWNER will be in writing and will be mailed to CONTRACTOR by registered or certified mail, return receipt requested, directed to his last known address.

16.2 All claims, disputes and other matters in question between OWNER and CONTRACTOR arising out of, or relating to, the Contract Documents or the breach thereof shall be decided under Georgia Law in the Superior Court of Richmond County, Georgia. CONTRACTOR by execution of the Contract consents to jurisdiction and venue in the Superior Court of Richmond County, Georgia, and waives any right to contest same.

ARTICLE 17-MISCELLANEOUS

Giving Notice:

17.1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

17.2.1. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day 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.

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

General:

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

17.4. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.32, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and PROFESSIONAL thereunder, 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. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Agreement.

17.5. CONTRACTOR shall keep adequate records and supporting documentation applicable to this Work and Contract. Said records and documentation shall be retained by CONTRACTOR for a minimum of five (5) years from the date of final completion or termination of this Contract. OWNER shall have the right to audit, inspect, and copy all such records and documentation as often as OWNER deems necessary during the period of the Contract and for a period of five (5) years thereafter provided, however, such activity shall be conducted only during normal business hours. OWNER, during this period of time, shall also have the right to obtain a copy of and otherwise inspect any audit made at the direction of CONTRACTOR as concerns the aforesaid records and supporting documentation.

17.6. The Contract Documents are intended by the Parties to, and do, supersede any and all

provisions of the Georgia Prompt Pay Act, O.C.G.A. Section 13-11-1, et seq. In the event any provision of the Contract Documents are inconsistent with any provision of the Prompt Pay Act, this provision of the Contract Documents shall control.

17.7. Notwithstanding any provision of the law to the contrary, the parties agree that no interest shall be due Contractor on any sum held as retainage pursuant to the Contract Documents and CONTRACTOR specifically waives any claim to same.

Substitutions:

17.8. Notwithstanding any provision of these general conditions, there shall be no substitutions of materials that are not determined to be equivalent to those indicated or required in the contract documents without an amendment to the contract.

Sanitary Sewer Overflow Prevention:

17.9. Procedures to Prevent Overflows During Sanitary Sewer Construction:

17.9.1 The CONTRACTOR is hereby notified that the discharge of any untreated wastewater to waters of the State is a violation of Georgia Water Quality Regulations and is prohibited.

17.9.2 The CONTRACTOR will submit an Emergency Response Plan prior to beginning work. This plan will include a list of key personnel with 24-hour contact information who will respond during an emergency situation. The ERP will include estimates of mobilization time for a response crew to arrive onsite. Any changes to the Emergency Response Plan will be submitted to the RESIDENT PROJECT REPRESENTATIVE prior to implementation.

17.9.3 In the event bypass pumping is required to facilitate new sewer construction, bypassing plans and supporting calculations must be submitted to the Augusta Utilities Department for review prior to establishment of the bypass. All bypass systems will include complete redundancy in pumping systems, if failure of the primary pumping system could result in a discharge of untreated wastewater to waters of the State.

17.9.4 Bypass pumping will be monitored continuously by a person knowledgeable in pump operation and maintenance if the failure of the bypass pump could result in the discharge of untreated wastewater to waters of the State.

17.9.5 In the event of a discharge of untreated wastewater, the CONTRACTOR will take the following actions:

1. Take immediate steps to eliminate or minimize the discharge of untreated wastewater.
2. Immediately notify the Utilities Department dispatcher (706.796.5000) and the RESIDENT PROJECT REPRESENTATIVE (contact information will be provided at the preconstruction conference).
3. Maintain a chronicle of relevant information regarding the incident including specific actions taken by the CONTRACTOR and estimates of the discharge volume.

17.9.6 The RESIDENT PROJECT REPRESENTATIVE will coordinate notification of the Georgia Environmental Protection Division (800.241.4113) and the Augusta Emergency Management Agency if appropriate.

17.9.7 If, in the opinion of the RESIDENT PROJECT REPRESENTATIVE and the OWNER, the CONTRACTOR is not responding to an emergency situation in an appropriate manner, the Utilities Department will undertake necessary actions to abate an overflow situation. The cost of these actions will be the responsibility of the CONTRACTOR.

17.9.8 Following a discharge of untreated wastewater, a downstream inspection will be conducted by the Utilities Department to assess potential mitigation measures that may be required of the CONTRACTOR.

PROGRAM MANAGER:

17.10 The PROGRAM MANAGER for the project is CH2M HILL, 360 Bay Street, Suite 100 Augusta, GA 30901.

The presence or duties of PROGRAM MANAGER's personnel at the construction site, whether as onsite representatives or otherwise, do not make PROGRAM MANAGER or PROGRAM MANAGER's personnel in any way responsible for those duties that belong to OWNER and / or the CONTRACTOR or other entities, and do not relieve the CONTRACTOR or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction Contract Documents and any health and safety precautions required by such construction work.

PROGRAM MANAGER and PROGRAM MANAGER's personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions and have no duty of inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of the CONTRACTOR(s) or other entity or any other persons at the site except PROGRAM MANAGER's own personnel.

The presence of PROGRAM MANAGER's personnel at the construction site is for the purpose of providing to OWNER a greater degree of confidence that the completed construction work will conform generally to the construction documents and that the integrity of the design concept as reflected in the construction documents has been implemented and preserved by the construction contractor(s). PROGRAM MANAGER neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.

For this AGREEMENT only, construction sites include places of manufacture for materials incorporated into the construction work, and construction contractors include manufacturers of materials incorporated into the construction work

CONTRACTOR'S Liability Insurance

Insurance shall be written with limits of liability shown below or as required by law, whichever is greater:

• Commercial General Liability (per occurrence)	Each Occurrence	\$ 1,000,000
• General Aggregate		\$ 2,000,000
• Products		\$ 2,000,000
• Personal & Adv Injury		\$ 1,000,000
• Fire Damage		\$ 500,000
• Automobile Liability (any auto)	Combined Single Limit	\$1,000,000
• Excess Liability (Umbrella)	Each Occurrence	\$5,000,000
• Workers Compensation		Statutory Limits
• Employer Liability		\$ 1,000,000

1Part 1 General

1.01 Description

- A. The Work to be performed under this Contract shall consist of furnishing all labor, materials, tools, equipment and incidentals and performing all Work required to construct complete in place and ready to operate the following sewer mains, force mains, and lift stations:
1. Main Line along Pike Avenue
 - a. From the intersection of Deer Drive and Pike Avenue, install approximately 3,000 LF of 8-inch sewer main (P-1~TP-1).
 - b. From the Treatment Facility on Pike Avenue to the Whispering Pines Lift Station, install approximately 1450 LF of 4" force main and construct a new lift station (SPS-01).
 - c. From the intersection of Pike Avenue and Army Road, install approximately 300 LF of 8-inch sewer main (CG-2B~CG-2).
 - d. From a point east of the intersection of Pike Avenue and Army Road, install approximately 2000 LF of cross country 8-inch sewer main (CG-1~SSMH Whispering Pines and Campground Spur).
 - e. From the new lift station SPS-01, construct approximately 1750 LF of cross country 8-inch sewer main (C-1~SSMH Whispering Pines).
 - f. From the new lift station SPS-01, construct approximately 1450 LF of 4-inch sewer force main (SPS-01~P-12).
 2. Branch Line along Deer Drive
 - a. Construct a new lift station (SPS-03) adjacent to the existing lift station and construct approximately 1300 LF of 4-inch force main from that point to the intersection of Pike Avenue and Deer Drive (SPS-03~P-1).
 - b. Construct approximately 600 LF of new 8-inch sewer main and associated service laterals to service 5 existing cabins located at the east end of Deer Drive (DD-E5~DD-1 and DD-W5~DD-2).
 3. Branch Line along Trout Road
 - a. From the intersection of Pike Avenue and Trout Drive, install approximately 300 LF of 8-inch sewer main (T-3~P-9).
 - b. Install a new lift station (SPS-04) adjacent to the existing station and construct approximately 1000 LF of new 3-inch force main with approximately 950 feet of 8-inch interceptor (TD-1~TD-5 and Spur (TD-3A~TD-3)).
 4. Branch Line along Bass Drive
 - a. From the intersection of Bluegill Road and Bass Drive, install new sewer lift station SPS-02 and approximately 550 LF of 3-inch force main (PE-1~SPS-02).

- b. On the northern end of Bass Drive, install approximately 1150 LF of 8-inch sewer main (BD-C2A~BD-C2, BD-C3~BD-5, BD-1~BD-4, and BD-4B~BD-4A).
 - c. From the intersection of Bluegill Road and Bass Drive, install approximately 525 LF of 8-inch sewer main (PE-1~CG-5).
5. Install sanitary lift stations SPS-01, SPS-02, SPS-03, SPS-04 with associated waterlines, fences, gates, pumps, controllers, and other items as shown on the plans.
 6. Restore all disturbed pavement and ground surfaces in accordance with the plans.
 7. Prepare and submit traffic control plans to the City's Construction Manager.
 8. Install sedimentation and erosion control devices as required. Remove after control of sediment and erosion runoff has been established.
 9. Make provisions for central construction worksite field office and storage area.
 10. Perform all duties necessary for construction cleanup and project close out.
 11. Maintain and produce record as-built drawings.
 12. Locate all underground utilities prior to excavation activities.
 13. Provide services for testing of soil, and asphalt and cementitious concrete as required.
 14. Provide construction surveying as necessary.
- B. All Work described above shall be performed as shown on the Drawings and as specified.

1.02 Project Location

The project location is along inside the Fort Gordon Recreation Area at Thurmond Lake off Washington Road in the City of Augusta, GA.

1.03 Quantities

The Owner reserves the right to alter the quantities of work to be performed or to extend or shorten the improvements at any time when and as found necessary, and the Contractor shall perform the work as altered, increased or decreased. Payment for such increased or decreased quantity will be made in accordance with the Instructions to Bidders. No allowance will be made for any change in anticipated profits nor shall such changes be considered as waiving or invalidating any conditions or provisions of the Contract and Bond.

END OF SECTION

Part 1 General

1.01 Scope

- A. The work covered under this Section includes furnishing all labor, equipment and material required to remove, handle, store and dispose of all materials from existing structures and piping as shown on the Drawings, directed by the Engineer or required for the completion of the work, including all necessary excavation and backfilling.
- B. The Contractor shall remove from existing structures and store as directed or dispose of in an approved manner, all valves and piping, mechanical equipment, plumbing, heating, electrical and ventilating fixtures, pipes, ducts, wires and equipment, doors and windows, floor grating and cover plates, steel stairs, pipe railing and the like which are not to remain in service in the finished work, whether or not shown on the Drawings and/or specified herein.
- C. The work specified herein and shown on the Drawings is intended to give a general idea of the scope of this work but must not be construed as covering it entirely. The Contractor shall visit the site and judge the amount of work required and the problems Contractor might encounter in the performance of the work.

1.02 Equipment and Piping to be Removed

- A. The existing equipment and piping to be removed and disposed of shall include, but not be limited to, the following:
 - 1. Provide demolition of an existing lift station on Bass Drive near the six-plexes.
 - 2. Provide demolition of an existing lift station on Pike Avenue near Whispering Pines Lodge.
 - 3. Provide demolition of an existing lift station on Deer Drive.
 - 4. Provide demolition of an existing lift station near Trout Drive behind the RV hookups.

Part 2 Products

2.01 Materials

- A. All concrete, mortar, grout, steel reinforcement and backfill used in patching, plugging or repairing shall comply in all respects with the applicable material requirements of these Specifications.

Part 3 Execution

3.01 Removal

- A. The Contractor shall exercise full care and shall use such methods and equipment during removal as will maintain the usefulness of the various materials and equipment removed. The sequence and order of removal and the method of storing and disposal of removed equipment and piping shall be at all times subject to the direction and approval of the Engineer.
- B. Any damage done to structures or equipment during removal and any patching, plugging of holes or repairs necessitated because of removal of equipment and piping shall be repaired as directed by, and to the satisfaction of, the Engineer and the cost thereof shall be included in the Contract Price.
- C. Equipment specified to be removed shall be removed completely, including all related accessories and concrete bases. Any embedded items such as anchor bolts, steel reinforcement, conduit and piping shall be cut off 1-inch below adjacent finished surfaces. The surface shall then be repaired to match adjacent surfaces in finish and appearance.
- D. Prior to removing any electrical equipment, all power to the equipment shall be shut off and properly locked out. All power and control wiring for the equipment shall then be disconnected at the starter or circuit breaker, as applicable, and removed from the conduit. Unused conduits shall be plugged.
- E. Blemishes or unsightly areas on walls and floors left after removal of equipment shall be cleaned and refinished as necessary to match adjacent surfaces.
- F. All holes and openings left after removal of equipment shall be filled or plugged to provide a neat and workmanlike appearance.
- G. Where piping designated for removal passes through concrete walls, the openings shall be suitably plugged or capped. Wall pipes and wall sleeves shall be sealed with blind flanges or mechanical joint plugs. Steel pipe sleeves shall be filled with non-shrink grout.
- H. Where equipment or piping designated for removal serves to support other equipment or piping designated to remain in service, the Contractor shall provide permanent supports in place of the removed equipment and piping. Where it is necessary to temporarily remove other equipment, piping or electrical work in order to gain access to an item of equipment or piping designated for removal, the Contractor shall restore all such equipment, piping or electrical work to its original condition.
- I. Abandoned Piping: Existing vitrified clay, concrete, PVC, cast iron and steel piping to be abandoned shall be cut and plugged or capped at each end. Where existing piping interferes with new piping or construction, it shall be removed beyond the limits required for the proper completion of the work and the open ends plugged or capped unless otherwise shown.

- J. Piping and Valve Reinstallation: The Contractor shall include in the Contract Price the cost of removing, refitting, and reinstalling certain pipe, fittings and valves as shown on the Drawings or as deemed by the Engineer to be satisfactory for reuse.
- K. Removal of Existing Concrete and Masonry: Existing concrete and masonry shall be removed and disposed of in accordance with the requirements of Section 02075 of these Specifications
- L. Storage: All salvageable materials removed shall remain the property of the Owner and shall be carefully moved and stored on the plant site where directed by the Engineer. Mechanical and electrical equipment shall be stored indoors. If the equipment is too large to store indoors, it shall be stored outdoors above ground and under cover.
- M. Disposal: The Engineer will direct the Contractor to assume ownership of and dispose of off site any removed equipment, piping and materials which the Engineer deems worthless and 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 with written consent of the property owner. In no case shall any material or debris be left on the Project, shoved onto abutting private properties or buried on the Project.
- L. The cost of disposing of any or all of the removed equipment, piping and materials shall be included in the lump sum price bid and no separate payment will be made therefore.

END OF SECTION

Part 1 General

1.01 Scope

- A. The work to be performed under this Section shall consist of removing and replacing existing pavement, sidewalks and curbs in paved areas where necessary for construction of water lines, sewer lines and all other appurtenances and structures.
- B. Existing pavement, sidewalks and curbs shall be replaced to the current City standards or to match existing, whichever is more stringent.

1.02 Submittals

- A. Certificates: Provide certificates stating that materials supplied comply with Specifications. Certificates shall be signed by the asphalt producer and the Contractor.
- B. Mix Design: Submit mix design for each course to the Engineer for acceptance.
- C. Asphalt spreader equipment shall be approved by the Engineer. Submit design and operational data.
- D. Traffic paint manufacturer's application instructions and a description and other data relative to the Contractor's application equipment and methods shall be submitted to the Engineer for approval.

1.03 Conditions

- A. Weather Limitations
 - 1. Apply bituminous prime and tack coats only when the ambient temperature has been at least 55 degrees F for 12 hours immediately prior to application.
 - 2. Do not conduct paving operations when surface is wet or contains excess of moisture which would prevent uniform distribution and required penetration.
 - 3. Construct asphaltic courses only when atmospheric temperature in the shade is above 40 degrees F, when the underlying base is dry and when weather is not rainy.
 - 4. Place base course when air temperature is above 35 degrees F and rising.
- B. Grade Control: Establish and maintain the required lines and grades for each course during construction operations.

1.04 Inspection and Testing

- A. Pavement and base testing will be performed by an independent testing laboratory selected by the Owner.

- B. The testing agency shall test in-place courses for compliance with specified density, thickness and surface smoothness requirements.
- C. The testing agency shall take two 4-inch diameter cores per 500 square yards of paved surface at locations selected by the Engineer for density and thickness tests. Repair holes resulting from coring to match existing paving.
- D. Compaction
 - 1. Aggregate Base: The maximum dry density will be determined from representative samples of the material being compacted by AASHTO T180, Method D.
 - 2. Asphaltic Concrete: Compare density of in-place material against laboratory specimen of same mixture, subjected to 50 blows of a Standard Marshall hammer on each side of specimen. Minimum acceptable density of in-place material shall be 97 percent of recorded laboratory specimen density. It is intended that acceptance density testing will be accomplished while the bituminous mixture is hot enough to permit further densification if such is shown to be necessary. If the density does not conform to the requirements stated herein above, the Contractor shall continue compactive effort until the required density is obtained.
- E. Concrete Strength: One set of acceptance and field cylinders (a total of four) from the same batch of concrete will be made for each 50 cubic yards or fraction thereof, not less than once for each 3,000 square feet of pavement in each day's placing for each class and mix design.
 - 1. Acceptance cylinders are compression test cylinders molded in the field, stored and cured in the field for the first 24 hours after molding and thereafter in the laboratory of the testing agency until time of testing. Average breaking strength at 28 days of a set of two acceptance cylinders will comprise a test.
 - 2. Field cylinders are compression test cylinders molded in the field, stored and cured on the work site in the same location and subject to the same exposure as job concrete of which it is a representative. Each set of two acceptance cylinders will have two matching field cylinders.
 - 3. One field cylinder will be broken at seven days and the remaining will be held in reserve.
- F. Allowable Variation in Thickness
 - 1. Base Course: $\pm 1/2$ -inch.
 - 2. Binder Course: $\pm 1/4$ -inch.
 - 3. Surface Course: $\pm 1/8$ -inch.

- G. Surface Smoothness: Test finished surface of each asphalt course for smoothness using a 16 foot straightedge. Intervals of tests shall be as directed by the Engineer. Surfaces will not be acceptable if exceeding the following:
 - 1. Base Course: 1/4-inch in 16 feet.
 - 2. Binder Course: 1/4-inch in 10 feet.
 - 3. Surface Course: 1/8-inch in 10 feet.
- H. Contractor's Duties Relative to Testing
 - 1. Notifying laboratory of conditions requiring testing.
 - 2. Coordinating with laboratory for field testing.
 - 3. Paying costs for additional testing performed beyond the scope of that required and for retesting where initial tests reveal non-conformance with specified requirements.

Part 2 Products

2.01 Materials and Construction

- A. Graded Aggregate Base Course: Graded aggregate base course shall be of uniform quality throughout and shall meet the requirements of Section 815.01 of the Georgia Department of Transportation Standard Specifications.
- B. Black Base: Black base course shall be of uniform quality throughout and shall conform to the requirements of Section 828 of the Georgia Department of Transportation Standard Specifications.
- C. Binder Course: The binder course of all paved roadways shall conform to the requirements of Section 400, Type "B" of the Georgia Department of Transportation Standard Specifications.
- D. Surface Course: The surface course for all pavement, including prime or tack coat when required by the Engineer, shall conform to the requirements of Section 400, Type "E" of the Georgia Department of Transportation Standard Specifications.
- E. Concrete: Provide concrete and reinforcing for concrete pavement or base courses in accordance with the requirements of the Georgia Department of Transportation Standard Specifications, Section 430. Concrete shall be of the strength classifications shown on the Drawings.
- F. Special Surfaces: Where driveways or roadways are disturbed or damaged which are constructed of specialty type surfaces, e.g., brick or stone, these driveways and roadways shall be restored utilizing similar, if not original, materials. Where the nature of these surfaces dictate, a specialty contractor shall be used to restore the surfaces to their previous or better condition. Special surfaces shall be removed and replaced to the limits to which they were disturbed.

2.02 Types of Pavements

- A. General: All existing pavement removed, destroyed or damaged by construction shall be replaced with the same type and thickness of pavement as that existing prior to construction, unless otherwise directed by the Engineer. Materials, equipment and construction methods used for paving work shall conform to the Georgia Department of Transportation specifications applicable to the particular type required for replacement, repair or new pavements.
- B. Aggregate Base: Aggregate base shall be constructed in accordance with the requirements of Section 310 of the Georgia Department of Transportation Standard Specifications. The maximum thickness to be laid in a single course shall be 6-inches compacted. If the design thickness of the base is more than 6-inches, it shall be constructed in two or more courses of approximate equal thickness. After the material placed has been shaped to line, grade and cross-section, it shall be rolled until the course has been uniformly compacted to at least 100 percent of the maximum dry density when Group 2 aggregate is used, or to at least 98 percent of maximum dry density when Group 1 aggregate is used.
- C. Concrete Pavement: Concrete pavement or base courses shall be replaced with concrete. The surface finish of the replaced concrete pavement shall conform to that of the existing pavement. The surface of the replaced concrete base course shall be left rough. The slab depth shall be equivalent to the existing concrete pavement or base course, but in no case less than 6-inches thick. Transverse and longitudinal joints removed from concrete pavement shall be replaced at the same locations and to the same types and dimensions as those removed. Concrete pavements or concrete base courses shall be reinforced.
- D. Asphaltic Concrete Base, Binder and Surface Course: Asphaltic concrete base, binder and surface course construction shall conform to Georgia Department of Transportation Standard Specifications, Section 400. The pavement mixture shall not be spread until the designated surface has been previously cleaned and prepared, is intact, firm, properly cured, dry and the tack coat has been applied. Apply and compact the base in maximum layer thickness by asphalt spreader equipment of design and operation approved by the Engineer. After compaction, the base shall be smooth and true to established profiles and sections. Apply and compact binder and the surface course in a manner approved by the Engineer. Immediately correct any high, low or defective areas by cutting out the course, replacing with fresh hot mix, and immediately compacting to conform and thoroughly bond to the surrounding area.
- E. Surface Treatment Pavement: Bituminous penetration surface treatment pavement shall be replaced with a minimum thickness of 1-inch conforming to Section 424, Georgia Department of Transportation Standard Specifications.
- F. Gravel Surfaces: Existing gravel road, drive and parking area replacement shall meet the requirements of graded aggregate base course. This surfacing may be authorized by the Engineer as a temporary surface for paved streets until replacement of hard surfaced pavement is authorized.
- G. Temporary Measures: During the time period between pavement removal and complete replacement of permanent pavement, maintain highways, streets and roadways by the use of steel running plates anchored to prevent movement. The

backfill above the pipe shall be compacted, as specified in Section 02225 of these Specifications, up to the existing pavement surface to provide support for the steel running plates. All pavement shall be replaced within seven calendar days of its removal.

Part 3 Execution

3.01 Locations for Pavement Replacement

Pavement shall be removed and replaced with similar type and thickness as the original pavement, for the entire length of pipe laying and up to required trench width as per details shown on drawings.

3.02 Removing Pavement

- A. General: Remove existing pavement as necessary for installing the pipe line and appurtenances.
- B. Marking: Before removing any pavement, mark the pavement neatly paralleling pipe lines and existing street lines. Space the marks the width of the trench.
- C. Breaking: Break asphalt pavement along the marks using pavement shearing equipment, jack hammers or other suitable tools. Break concrete pavement along the marks by scoring with a rotary saw and breaking below the score by the use of jack hammers or other suitable tools.
- D. Machine Pulling: Do not pull pavement with machines until the pavement is completely broken and separated from pavement to remain.
- E. 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.
- F. Sidewalk: Remove and replace any sidewalks disturbed by construction for their full width and to the nearest undisturbed joint.
- G. Curbs: Tunnel under or remove and replace any curb disturbed by construction to the nearest undisturbed joint.

3.03 Replacing Pavement

- A. Preparation of Subgrade: Upon completion of backfilling and compaction of the backfill, arrange to have the compaction tested by an independent testing laboratory approved by the Engineer. After compaction testing has been satisfactorily completed, replace all pavements, sidewalks and curbs removed.
 - 1. The existing street pavement or surface shall be removed along the lines of the work for the allowable width specified for the trench or structure. After the installation of the sewerage or water works facilities and after the backfill has been compacted suitably, the additional width of pavement to be removed, as shown on the Drawings, shall be done immediately prior to replacing the pavement.

2. Trench backfill shall be compacted for the full depth of the trench as specified in Section 02225 of these Specifications.
3. Temporary trench backfill along streets and driveways shall include 6-inches of crushed stone or cherty clay as a temporary surfacing of the trenches. This temporary surface shall be maintained carefully at grade and dust-free by the Contractor until the backfill of the trench has thoroughly compacted in the opinion of the Engineer and permission is granted to replace the street pavement.
4. When temporary crushed stone or chert surface is considered by the Engineer to be sufficient surface for gravel pavement, the surface shall be graded smooth and to an elevation that will make the final permanent surfacing level with the adjacent surfacing that was undisturbed.

B. Pavement Replacement

1. Prior to replacing pavement, make a final cut in concrete pavement 12-inches back from the edge of the damaged pavement with a concrete saw. Remove asphalt pavement 12-inches back from the edge of the damaged pavement using pavement shearing equipment, jack hammers or other suitable tools.
2. Replace all street and roadway pavement as shown on the Drawings. Replace driveways, sidewalks and curbs with the same material, to nearest existing undisturbed construction joint and to the same dimensions as those existing.
3. If the temporary crushed stone or chert surface is to be replaced, the top 6-inches shall be removed and the crushed stone surfacing for unpaved streets or the base for the bituminous surface shall be placed.
4. Following this preparation, the chert or crushed stone base shall be primed with a suitable bituminous material and surfaced with the proper type of bituminous surface treatment.
5. Where the paved surface is to be replaced with asphaltic concrete pavement, concrete pavement or with a concrete base and a surface course, the temporary chert or crushed stone surface and any necessary backfill material, additional existing paving and new excavation shall be removed to the depth and width shown on the Drawings. All edges of the existing pavement shall be cut to a straight, vertical edge. Care shall be used to get a smooth joint between the old and new pavement and to produce an even surface on the completed street. Concrete base slabs and crushed stone bases, if required, shall be placed and allowed to cure for three days before bituminous concrete surface courses are applied. Expansion joints, where applicable, shall be replaced in a manner equal to the original joint.
6. Where driveways or roadways, constructed of specialty type surfaces, e.g., brick or stone are disturbed or damaged, these driveways and roadways shall be restored utilizing similar materials. Where the nature of these surfaces dictate, a specialty contractor shall be used to restore

the surfaces to their previous or better condition. Special surfaces shall be removed and replaced to the limits to which they were disturbed.

- C. Pavement Resurfacing: Certain areas to be resurfaced are specified or noted on the Drawings. After all pipe line installations are complete and existing pavement has been removed and the trench route has been repaired, mill entire area to be resurfaced 1-1/2 inches, then apply tack coat and 1-1/2 inches of Type E surface course as specified. Where pavement to be resurfaced has been damaged with potholes, the Contractor shall remove all existing loose pavement material and fill the hole with black base, as specified, to the level of the existing pavement.
- D. Pavement Striping: Pavement striping removed or paved over shall be replaced with the same type, dimension and material as original unless directed otherwise by the Engineer.

3.04 Sidewalk and Curb Replacement

- A. Construction
 - 1. All concrete sidewalks and curbs shall be replaced with concrete.
 - 2. Preformed joints shall be 1/2-inch thick, conforming to the latest edition of AASHTO M59 for sidewalks and AASHTO M 123 for curbs.
 - 3. Forms for sidewalks shall be of wood or metal, shall be straight and free from warp, and shall be of sufficient strength, when in place, to hold the concrete true to line and grade without springing or distorting.
 - 4. Forms for curbs shall be metal and of an approved section. They shall be straight and free from distortions, showing no vertical variation greater than 1/8-inch in 10 feet and no lateral variation greater than 1/4-inch in 10 feet from the true plain surface on the vertical face of the form. Forms shall be of the full depth of the structure and constructed such to permit the inside forms to be securely fastened to the outside forms.
 - 5. Securely hold forms in place true to the lines and grades indicated on the Drawings.
 - 6. Wood forms may be used on sharp turns and for special sections, as approved by the Engineer. Where wooden forms are used, they shall be free from warp and shall be the nominal depth of the structure.
 - 7. All mortar and dirt shall be removed from forms and all forms shall be thoroughly oiled or wetted before any concrete is deposited.
- B. When a section is removed, the existing sidewalk or curb shall be cut to a neat line, perpendicular to both the centerline and the surface of the concrete slab. Existing concrete shall be cut along the nearest existing construction joints; if such joints do not exist, the cut shall be made at minimum distances shown on the Drawings.
- C. Existing concrete sidewalks and curbs that have been cut and removed for construction purposes shall be replaced with the same width and surface as the

portion removed. Sidewalks shall have a minimum uniform thickness of 4-inches. The new work shall be neatly jointed to the existing concrete so that the surface of the new work shall form an even, unbroken plane with the existing surfaces.

- D. The subgrade shall be formed by excavating to a depth equal to the thickness of the concrete, plus 2-inches. Subgrade shall be of such width as to permit the proper installation and bracing of the forms. Subgrades shall be compacted by hand tamping or rolling. Soft, yielding or unstable material shall be removed and backfilled with satisfactory material. Place 2-inches of porous crushed stone under all sidewalks and curbs and compact thoroughly, then finish to a smooth, unyielding surface at proper line, grade and cross section.
- E. Joint for Curbs
1. Joints shall be constructed as indicated on the Drawings and as specified. Construct joints true to line with their faces perpendicular to the surface of the structure and within 1/4-inch of their designated position.
 2. Thoroughly spade and compact the concrete at the faces of all joints filling all voids.
 3. Install expansion joint materials at the point of curve at all street returns. Install expansion joint material behind the curb at abutment to sidewalks and adjacent structures.
 4. Place contraction joints every 10 feet along the length of the curbs and gutters. Form contraction joints using steel templates or division plates which conform to the cross section of the structure. Leave the templates in place until the concrete has set sufficiently to hold its shape, but remove them while the forms are still in place. Contraction joint templates or plates shall not extend below the top of the steel reinforcement or they shall be notched to permit the reinforcement to be continuous through the joint. Contraction joints shall be a minimum of 1-1/2-inches deep.
- F. Expansion joints shall be required to replace any removed expansion joints or in new construction wherever shown on the Drawings. Expansion joints shall be true and even, shall present a satisfactory appearance, and shall extend to within 1/2-inch of the top of finished concrete surface.
- G. Finishing
1. Strike off the surface with a template and finish the surface with a wood float using heavy pressure, after which, contraction joints shall be made and the surface finished with a wood float or steel trowel.
 2. Finish the face of the curbs at the top and bottom with an approved finishing tool of the radius indicated on the Drawings.
 3. Finish edges with an approved finishing tool having a 1/4-inch radius.
 4. Provide a final broom finish by lightly combing with a stiff broom after troweling is complete.

5. The finished surface shall not vary more than 1/8-inch in 10 feet from the established grade.
- H. Driveway and Sidewalk Ramp Openings
1. Provide driveway openings of the widths and at the locations indicated on the Drawings and as directed by the Engineer.
 2. Provide sidewalk ramp openings as indicated on the Drawings, in conformance with the applicable regulations and as directed by the Engineer.
- I. Concrete shall be suitably protected from freezing and excessive heat. It shall be kept covered with burlap or other suitable material and kept wet until cured. Provide necessary barricades to protect the work. All damage caused by people, vehicles, animals, rain, the Contractor's operations and the like shall be repaired by the Contractor, at no additional expense to the Owner.

3.05 Maintenance

The Contractor shall maintain the surfaces of roadways built and pavements replaced until the acceptance of the Project. Maintenance shall include replacement, scraping, reshaping, wetting and rerolling as necessary to prevent raveling of the road material, the preservation of reasonably smooth surfaces and the repair of damaged or unsatisfactory surfaces, to the satisfaction of the Engineer. Maintenance shall include sprinkling as may be necessary to abate dust from the gravel surfaces.

3.06 Supervision and Approval

- A. Pavement restoration shall meet the requirements of the regulatory agency responsible for the pavement. Obtain agency approval of pavement restorations before requesting final payment.
- B. Obtain the Engineer's approval of restoration of pavement, such as private roads and drives, which are not the responsibility of a regulatory agency.
- C. 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.

3.07 Cleaning

The Contractor shall remove all surplus excavation materials and debris from the street surfaces and rights-of-way and shall restore street, roadway or sidewalk surfacing to its original condition.

END OF SECTION

SECTION 26 00 00
Electrical General Requirements

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including **DIVISION 1 - GENERAL CONDITIONS** and **Section – General Requirements**, apply to this Section.

1.02 SUMMARY

- A. This Section describes the scope of Work and General Requirements for and is a part of all related sections of **DIVISION 2 – TECHNICAL SPECIFICATIONS** of this Specification.
- B. Related Sections include the following:
1. This Section is coordinated with and complimentary to General Conditions and the Contract Drawings.
 2. Where items of the General Conditions are repeated in this section of the specifications, it is intended to call particular attention to or qualify them. It is not intended that any other parts of the General Conditions or General Requirements shall be assumed to be omitted if not repeated herein.
 3. It shall be the responsibility of each Contractor to examine the other sections of the specifications and drawings, in order to determine the extent of other work to be completed under his section. Failure to do so shall not relieve the Contractor of responsibility to perform all work required for a complete and satisfactory installation.

1.03 DEFINITIONS

- A. Specifications are intentionally abbreviated and include incomplete sentences. Intent as interpreted by the Owner or Owner's representative, rather than sentence structure, shall govern in case of doubt or dispute.
- B. Words and abbreviations which have well known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.
- C. "Provide" – means "furnish and install, completed and ready for use".
- D. "BOM" – means "Bill of Materials"
- E. "Directed" – means "directed by the Owner or the Owner's representative".
- F. "Indicated" – means "indicated in the contract documents".

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- G. “Concealed” – means “items referred to are hidden from normal sight”.
- H. “Exposed” – means “items are not concealed”.
- I. “TYP” – means “typical”.
- J. “OFE” – means “Owner Furnished Equipment”.
- K. Listed
 - 1. Equipment is listed if of a kind mentioned in a list which:
 - a. Is published by a nationally recognized laboratory, which makes periodic inspection of production of such equipment.
 - b. States that such equipment meets nationally recognized standards or has been tested and found safe for use in a specified manner.
- L. Labeled
 - 1. Equipment is labeled if:
 - a. It embodies a valid label, symbol, or other identifying mark of a nationally recognized testing laboratory such as Underwriters’ Laboratories, Inc.
 - b. The laboratory makes periodic inspections of the production of such equipment.
 - c. The labeling indicates compliance with nationally recognized testing laboratory to meet nationally recognized standards or tests to determine safe use in a specified manner.
- M. Certified
 - 1. Equipment is certified if:
 - a. Equipment has been tested and found by a nationally recognized testing laboratory to meet nationally recognized standards or to be safe for use in a specified manner.
 - b. Production is periodically inspected by a nationally recognized testing laboratory.
 - c. Equipment bears a label, tag, or other records of certification.
- N. Nationally Recognized Testing Laboratory
 - 1. A testing laboratory which is approved in accordance with OSHA regulations by the Secretary of Labor.

1.04 CODES AND STANDARDS

- A. These standards apply to and form a part of all electrical sections of the specifications.
- B. The current edition of the standards, organizations or societies listed below, insofar as they apply, form a part of these specifications, the same as if they were fully written and shall be followed as minimum requirements.

ANSI	American National Standards Institute, Inc.
ASTM	American Society for Testing Materials
ETL	Electrical Testing Laboratories, Inc.
IEEE	Institute of Electrical and Electronic Engineers
IPCEA	Insulated Power Cable Engineers Association
NEC	National Electrical Code
NECA	National Electrical Contractor's Association
NEMA	National Electrical Manufacturer's Association
NESC	National Electrical Safety Code
NETA	National Electrical Testing Association
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
UL	Underwriters Laboratories, Inc.

- C. Where standards are in apparent conflict, that standard with the more stringent requirement shall be followed. This shall not be construed as relieving the Contractor from providing the highest grade of material and workmanship as herein specified.
- D. The contractor shall include all items of labor and material required to comply with such standards and codes in accordance with the Contract Documents. Where quantities, sizes or other requirements indicated on the drawings or herein specified are in excess of the standard or code requirements, the specifications and/or drawings shall govern.
- E. All materials, whether Owner furnished or Contractor furnished, and all work installed shall comply with the rules and recommendations of the local utility companies and all government agencies having jurisdiction.
- F. All equipment and materials for which Underwriters Laboratories labeling service is available shall be UL labeled and listed. The label or listing of the Underwriter Laboratories, Inc. will be accepted as evidence that the materials or equipment conform to the applicable standards of that agency. In lieu of this listing, the Contractor shall submit a statement from a nationally and/or internationally recognized, adequately equipped testing agency indicating that the items have been tested in accordance with required procedures and that the materials and equipment comply with all contract requirements. Where no agency has procedures for testing,

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the equipment manufacturer shall be responsible for providing the required listing for the specific installation.

1.05 PERMITS AND FEES

- A. The Contractor shall give all necessary notice, obtain all permits and pay all taxes, fees and other costs, arrange and coordinate for all utility connections, in connection with his work and as defined in the General Requirements and General Conditions of the specifications.

1.06 SUBMITTALS

- A. The engineer's acceptance shall be obtained for all equipment and material prior to delivery to the jobsite. Delivery, storage, or installation of equipment or material, which has not had prior acceptance, shall not be permitted at the jobsite.
- B. Correction or comments made on the shop drawings during review do not relieve the contractor from compliance with requirements of the drawings and specifications. The engineer's check is only for review of general conformity to the design concept of the project and general compliance with requirements of the contract documents. The engineer's review notwithstanding, contractor's duties of performance are those required by the contract documents themselves, which requirements are not in any manner modified by this review or comments made on the shop drawings. The contractor is responsible for confirmation and correlation of quantities and dimensions, selection of fabrication processes, techniques of construction, coordination of work with that of all other trades, and performance of his work in a safe and satisfactory manner.
- C. All submittals shall include adequate descriptive literature, detailed specification, catalog cuts, wiring diagrams, shop drawings, and other data necessary for the engineer to ascertain that the proposed equipment and materials comply with specification requirements. Catalog cuts submitted for approval shall be legible and clearly identify equipment being submitted.
- D. The contractor shall prepare and submit five copies of submittals as required, unless otherwise directed by the Specification General Conditions, Section 1.
- E. Submittals for individual systems and equipment assemblies, which consist of more than one item or component, shall be made for the system or assembly as a whole. Partial submittals will not be considered for review.
- F. The submittals shall include the following.
1. Information that confirms compliance with contract requirements. Include the manufacturer's name, model or catalog numbers, catalog information, technical

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- data sheets, shop drawings, pictures, nameplate data, and test reports as required.
2. Elementary and interconnection wiring diagrams for communication and signal systems, control system and equipment assemblies. All terminal points and wiring shall be identified on wiring diagrams.
 3. Parts list which shall include those replacement parts recommended by the equipment manufacturer, quantity of parts, and current availability of each part.
 4. Acceptance will be based on complete submission of shop drawings.
- G. When equipment being submitted differs from that specified, the Contractor shall be responsible for any difference in quantity, size, or arrangement of ductwork, piping, insulation, structural supports, wiring, conduits, controllers, disconnect switches, circuit breakers, fuses of motor starters entailed by the use of that equipment.
- H. Failure by the Contractor to submit shop drawings in ample time for checking shall not entitle him to an extension of contract time, and no claim to extension by reason of such default will be allowed.
- I. If material or equipment is installed before it is accepted, the Contractor shall be liable for its removal and replacement at no extra charge to the Owner, if, in the opinion of the Owner or Owner's representative that material or equipment does not meet the intent of the drawings and specifications.

1.07 PRIOR APPROVAL OF SUBSTITUTIONS OR EQUALS

- A. Prior approval must be obtained on all substitutions of equipment. Equipment must be submitted to the Engineer for approval at least 10 days prior to bid opening. No substitutions will be allowed if prior approval is not obtained.
- B. Equipment, which is given prior approval, shall still be required to meet the intent of the contract documents. Prior approval by the engineer to provide a substitution does not relieve the contractor from meeting all of the requirements of the contract documents.
- C. The contractor shall provide submittals on the substituted equipment as required during the normal submittal process.

1.08 QUALITY ASSURANCE

- A. The scope of work included under this section of the specification shall include electrical systems, fully adjusted, tested, and ready for use as indicated on the drawings and as specified herein. The Contractor shall provide all supervision,

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labor, materials, machinery, and any other items necessary to complete the electrical systems, including all work associated with Owner furnished Equipment (OFE).

- B. Any apparatus, appliance, material or work, not shown on drawings but mentioned in the specifications, or vice versa, or any incidental accessories necessary to make the work complete and perfect in all respects and ready for operation, even if not particularly specified, shall be provided by the Contractor, without additional expense to the Owner.

1.09 CORRELATION OF CONTRACT DOCUMENTS

- A. Drawings and Specifications together shall constitute the Contract Documents and are complimentary and supplementary, and what is required by any one shall be as binding as if required by all. Portions of the work, which can be best illustrated by the drawings, may not be included in the specifications and portions, best described by specifications, may not be depicted on the drawings.
- B. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the work. The Contract Documents are complimentary, and what is required by any one shall be as binding as if required by all. However, it is understood that while not every detail of the work is shown on the drawings or specifications, the work includes items reasonably inferable from the Contract Documents. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable there from. The Owner shall not be held responsible for the absence of any detail the Contractor may require for any construction which may be found necessary as the work progresses. If an item or system is either shown or specified, all material and equipment normally furnished with such items or systems and needed to make a complete operation installation shall be provided whether mentioned or not, omitting only such parts as are specifically excepted.
- C. The completeness and correctness of the Contract Documents shall be verified before execution by the Contractor. The Contractor shall not proceed with the work if any error or disagreement appears to exist in the Drawings or Specifications, but shall immediately submit a written request for an explanation or decision to the Owner. Should the Contractor proceed without a written determination by the Owner, he shall be so doing at his own risk and expense. For cost purposes only, the following priorities shall prevail:
 - 1. The Specifications shall govern and take precedence over all drawings.
 - 2. Detail drawings shall have priority over other drawings.
 - 3. Large scale details and drawings shall have priority over small scale details and drawings.

1.10 PROJECT CONDITIONS

- A. Before submitting a proposal, the Contractor shall examine all drawings and specifications relating to work of all trades to determine scope and relation to other work.
- B. The Contractor shall examine all existing conditions affecting compliance with plans and specifications by visiting site and/or buildings.
- C. The Contractor shall ascertain access to site, available storage and delivery facilities.
- D. Before commencing work, the Contractor shall verify all governing dimensions at site and/or buildings, and inspect all adjacent work.

1.11 COORDINATION

- A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.
- B. Coordinate installation of roof curbs, equipment supports, and roof penetrations.

1.12 PROTECTION

- A. The Contractor shall protect the work and material of all other trades from damage by his work or workmen.
- B. The Contractor shall keep all conduit openings closed by means of plugs or caps to prevent the entrance of foreign matter, and cover all fixtures, equipment and apparatus as required to protect them against dirt, water, chemical or mechanical damage both before and after installation. Any such fixtures, equipment or apparatus damaged prior to final acceptance of the work shall be restored to its original condition or replaced.
- C. Equipment and material shall be protected during shipment and storage against physical damage, dirt, moisture, cold and rain.
- D. During installation, equipment, controls, controllers, circuit protective devices, etc., shall be protected against entry of foreign matter, and shall be vacuum cleaned both inside and outside before testing, operating, and painting.
- E. Damaged equipment, as determined by the Owner, shall be placed in first class operating condition or be returned to the source of supply for repair or replacement.
- F. Painted surfaces shall be protected with factory installed removable heavy kraft paper, sheet vinyl, or equal.

Electrical General Requirements

- G. Damaged paint on equipment and materials shall be refinished with the same quality of paint and workmanship as used by the manufacturer so repaired areas are not obvious.

1.13 EXCAVATING AND TRENCHING

- A. The Contractor shall be responsible for any excavating, trenching, and/or backfilling necessary for the completion of work required by the Contract Documents.
- B. Associated excavating and backfilling work shall be accomplished in accordance with Specification Division 2.

1.14 WARRANTY

- A. The Contractor warrants by his acceptance of the Contract that all work performed will be free of defects in workmanship and/or materials for a period of one (1) year from date of letter of substantial completion of work.
- B. Warranty will be as further defined by the general conditions and general requirements of this specification.

1.15 AS-BUILT DRAWINGS

- A. During performance of the work under the Contract Documents, the Contractor shall accurately record and delineate on one set of full-size copy of Contract Drawings all changes in such work which constitute departures from the original Contract Drawings. The set of drawings thus corrected, changed and delineated, usually referred to as "as-built" drawings, shall be delivered to the Owner at the earliest practicable date prior to completion of all work under the contract, and in any event, not later than the date of acceptance of the completed work by the Owner. All control schematics and elementary diagrams shall be updated to reflect all final connections (connections labeled) or other changes.

PART 2 PRODUCTS**2.01 EQUIPMENT**

- A. References to, or omission of reference to, particular types of equipment or conditions within this division of the specifications shall not be construed as indication the actual occurrence or omission of that particular type of equipment or condition of this project.
- B. The contractor shall note that all items of equipment are specified in the singular. However, the Contractor shall provide and install the number of items of equipment as indicated on the drawings, and as required for complete systems.

PART 3 EXECUTION

3.01 INTENT

- A. It is the intention of the specifications and drawings to call for finished work, tested, and ready for operation.
- B. Minor details not usually shown or specified, but necessary for the proper installation and operation, shall be included in the Contractor's work, the same as if herein specified or shown.

END OF SECTION

SECTION 26 05 00
Common Work Results for Electrical

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including **DIVISION 1 - GENERAL CONDITIONS** and **Section – General Requirements**, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
1. Supporting devices for electrical components.
 2. Electrical identification.
 3. Electricity-metering components.
 4. Concrete equipment bases.
 5. Electrical demolition.
 6. Cutting and patching for electrical construction.
 7. Touchup painting.

1.03 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. FMC: Flexible metal conduit.
- C. RGS: Rigid galvanized steel conduit.
- D. PRGS: PVC externally coated rigid galvanized steel conduit.
- E. IMC: Intermediate metal conduit.
- F. LFMC: Liquid tight flexible metal conduit.
- G. RNC: Rigid nonmetallic conduit.

1.04 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

- B. Comply with NFPA 70.

1.05 COORDINATION

- A. Coordinate chases, slots, inserts, sleeves, and openings with general construction work and arrange in building structure during progress of construction to facilitate the electrical installations that follow. Set inserts and sleeves in poured-in-place concrete, masonry work, and other structural components as they are constructed.
- B. Sequence, coordinate, and integrate installing electrical materials and equipment for efficient flow of the Work. Coordinate installing large equipment requiring positioning before closing in the building.
- C. Coordinate electrical service connections to components furnished by utility companies.
 - 1. Coordinate installation and connection of exterior underground and overhead utilities and services, including provision for electricity-metering components.
 - 2. Comply with requirements of authorities having jurisdiction and of utility company providing electrical power and other services.
- D. Coordinate location of access panels and doors for electrical items that are concealed by finished surfaces.
- E. Where electrical identification devices are applied to field-finished surfaces, coordinate installation of identification devices with completion of finished surface.
- F. Where electrical identification markings and devices will be concealed by acoustical ceilings and similar finishes, coordinate installation of these items before ceiling installation.

PART 2 PRODUCTS

2.01 SUPPORTING DEVICES

- A. Material: Cold-formed steel, with corrosion-resistant coating acceptable to authorities having jurisdiction.
- B. Metal Items for Use Outdoors or in Damp Locations: Hot-dip galvanized steel.
- C. Slotted-Steel Channel Supports: Flange edges turned toward web, and 9/16-inch-diameter slotted holes at a maximum of 2 inches o.c., in webs.
 - 1. Channel Thickness: Selected to suit structural loading.
 - 2. Fittings and Accessories: Products of the same manufacturer as channel supports.

- D. Nonmetallic Channel and Angle Systems: Structural-grade, factory-formed, glass-fiber-resin channels and angles with 9/16-inch- diameter holes at a maximum of 8 inches o.c., in at least one surface.
 - 1. Fittings and Accessories: Products of the same manufacturer as channels and angles.
 - 2. Fittings and Accessory Materials: Same as channels and angles, except metal items may be stainless steel.
- E. Raceway and Cable Supports: Manufactured clevis hangers, riser clamps, straps, threaded C-clamps with retainers, ceiling trapeze hangers, wall brackets, and spring-steel clamps or click-type hangers.
- F. Pipe Sleeves: ASTM A 53, Type E, Grade A, Schedule 40, galvanized steel, plain ends.
- G. Cable Supports for Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug for non armored electrical cables in riser conduits. Plugs have number and size of conductor gripping holes as required to suit individual risers. Body constructed of malleable-iron casting with hot-dip galvanized finish.
- H. Expansion Anchors: Carbon-steel wedge or sleeve type.
- I. Toggle Bolts: All-steel springhead type.
- J. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit.
 - 1. Comply with NEMA RN 1.
 - 2. Coating Thickness: 0.040 inch, minimum.
- K. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with that material. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer.
- L. Supports and fittings for PVC externally coated RGS shall be PVC coated steel and comply with NEMA RN-1.

2.02 ELECTRICAL IDENTIFICATION

- A. Identification Devices: A single type of identification product for each application category. Use colors prescribed by ANSI A13.1, NFPA 70, and these Specifications.
- B. Colored Adhesive Marking Tape for Raceways, Wires, and Cables: Self-adhesive vinyl tape, not less than 1 inch wide by 3 mils thick.

Basic Electrical Materials and Methods

- C. Underground Warning Tape: Permanent, bright-colored, continuous-printed, vinyl tape with the following features:
 - 1. Not less than 6 inches wide by 4 mils thick.
 - 2. Compounded for permanent direct-burial service.
 - 3. Embedded continuous metallic strip or core.
 - 4. Printed legend that indicates type of underground line.
- D. Tape Markers for Wire: Vinyl or vinyl-cloth, self-adhesive, wraparound type with preprinted numbers and letters.
- E. Color-Coding Cable Ties: Type 6/6 nylon, self-locking type. Colors to suit coding scheme.
- F. Engraved-Plastic Labels, Signs, and Instruction Plates: Engraving stock, melamine plastic laminate punched or drilled for mechanical fasteners 1/16-inch minimum thickness for signs up to 20 sq. in. and 1/8-inch minimum thickness for larger sizes. Engraved legend in black letters on white background.
- G. Fasteners for Nameplates and Signs: Self-tapping, stainless-steel screws or No. 10/32 stainless-steel machine screws with nuts and flat and lock washers.

2.03 EQUIPMENT FOR UTILITY COMPANY'S ELECTRICITY METERING

- A. Current-Transformer Cabinets: Comply with requirements of electrical power utility company.
- B. Meter Sockets: Comply with requirements of electrical power utility company.

2.04 CONCRETE BASES

- A. Concrete Forms: As specified in Division 3 Section "Cast-in-Place Concrete."

2.05 TOUCHUP PAINT

- A. For Equipment: Equipment manufacturer's paint selected to match installed equipment finish.
- B. Galvanized Surfaces: Zinc-rich paint recommended by item manufacturer.

PART 3 EXECUTION**3.01 ELECTRICAL EQUIPMENT INSTALLATION**

- A. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide the maximum possible headroom.
- B. Materials and Components: Install level, plumb, and parallel and perpendicular to other building systems and components, unless otherwise indicated.
- C. Equipment: Install to facilitate service, maintenance, and repair or replacement of components. Connect for ease of disconnecting, with minimum interference with other installations.
- D. Right of Way: Give to raceways and piping systems installed at a required slope.

3.02 WIRING INSTALLATION

- 1. Install splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- 2. Install wiring at outlets with at least 12 inches of slack conductor at each outlet.
- 3. Connect outlet and component connections to wiring systems and to ground. Tighten electrical connectors and terminals, according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A.

3.03 ELECTRICAL SUPPORTING DEVICE APPLICATION

- A. Damp Locations and Outdoors: Hot-dip galvanized materials or nonmetallic, U-channel system components.
- B. Dry Locations: Steel materials.
- C. Support Clamps for PVC Raceways: Click-type clamp system.
 - 1. Selection of Supports: Comply with manufacturer's written instructions.
 - 2. Strength of Supports: Adequate to carry present and future loads, times a safety factor of at least four; minimum of 200-lb design load.

3.04 SUPPORT INSTALLATION

- A. Install support devices to securely and permanently fasten and support electrical components.

Basic Electrical Materials and Methods

- B. Install individual and multiple raceway hangers and riser clamps to support raceways. Provide U-bolts, clamps, attachments, and other hardware necessary for hanger assemblies and for securing hanger rods and conduits.
- C. Support parallel runs of horizontal raceways together on trapeze- or bracket-type hangers.
- D. Size supports for multiple raceway installations so capacity can be increased by a 25 percent minimum in the future.
- E. Support individual horizontal raceways with separate, malleable-iron pipe hangers or clamps.
- F. Install 1/4-inch- diameter or larger threaded steel hanger rods, unless otherwise indicated.
- G. Spring-steel fasteners specifically designed for supporting single conduits or tubing may be used instead of malleable-iron hangers for 1-1/2-inch and smaller raceways serving lighting and receptacle branch circuits above suspended ceilings and for fastening raceways to slotted channel and angle supports.
- H. Arrange supports in vertical runs so the weight of raceways and enclosed conductors is carried entirely by raceway supports, with no weight load on raceway terminals.
- I. Simultaneously install vertical conductor supports with conductors.
- J. Separately support cast boxes that are threaded to raceways and used for fixture support. Support sheet-metal boxes directly from the building structure or by bar hangers. If bar hangers are used, attach bar to raceways on opposite sides of the box and support the raceway with an approved fastener not more than 24 inches from the box.
- K. Install metal channel racks for mounting cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices unless components are mounted directly to structural elements of adequate strength.
- L. Install sleeves for cable and raceway penetrations of concrete slabs and walls unless core-drilled holes are used. Install sleeves for cable and raceway penetrations of masonry and fire-rated gypsum walls and of all other fire-rated floor and wall assemblies. Install sleeves during erection of concrete and masonry walls.
- M. Securely fasten electrical items and their supports to the building structure, unless otherwise indicated. Perform fastening according to the following unless other fastening methods are indicated:
 - 1. Wood: Fasten with wood screws or screw-type nails.
 - 2. Masonry: Toggle bolts on hollow masonry units and expansion bolts on solid masonry units.

3. New Concrete: Concrete inserts with machine screws and bolts.
4. Existing Concrete: Expansion bolts.
5. Welding to steel structure may be used only for threaded studs, not for conduits, pipe straps, or other items.
6. Light Steel: Sheet-metal screws.
7. Fasteners: Select so the load applied to each fastener does not exceed 25 percent of its proof-test load.

3.05 IDENTIFICATION MATERIALS AND DEVICES

- A. Install at locations for most convenient viewing without interference with operation and maintenance of equipment.
- B. Coordinate names, abbreviations, colors, and other designations used for electrical identification with corresponding designations indicated in the Contract Documents or required by codes and standards. Use consistent designations throughout Project.
- C. Self-Adhesive Identification Products: Clean surfaces before applying.
- D. Identify raceways with color paint and circuit numbers as follows:
 1. Band: Pre-tensioned, snap-around, colored plastic sleeves or colored adhesive marking tape. Make each color band 2 inches wide.
 2. Band Locations: On all conduit entering all j-boxes.
 3. Marker: Black "magic marker" or "Sharpie"
 4. Marker Locations: Mark associated panel and circuit numbers inside all receptacle boxes and lighting j-boxes.
 5. Colors: As follows:
 - a. Fire Alarm System: Red.
 - b. Special Systems: Blue.
 - c. Power: Green.
 - d. Lighting: Yellow.
- E. Tag and label circuits designated to be extended in the future. Identify source and circuit numbers in each cabinet, pull and junction box, and outlet box. Color-coding may be used for voltage and phase identification.
- F. Install continuous underground plastic markers during trench backfilling, for exterior underground power, control, signal, and communication lines located