



WithersRavenel

Our People. Your Success.

PROJECT MANUAL

Part 1 of 1

for the

GRANITE FALLS BLVD RESURFACING PROJECT

TOWN OF ROLESVILLE WAKE COUNTY, NORTH CAROLINA

August 2025

WithersRavenel Project No.25-0207-001

WithersRavenel

115 MacKenan Drive | Cary, NC 27511

Office: 828.255.0313 | Fax: 919.467.6008 | www.withersravenel.com | License No. C-0832

Asheville | Cary | Greensboro | Pittsboro | Raleigh | Southern Pines | Wilmington

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CERTIFICATION

I HEREBY CERTIFY THAT THE SPECIFICATIONS CONTAINED HEREIN AND THE ACCOMPANYING PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

SIGNED, SEALED, AND DATED THIS 18th DAY OF AUGUST 2025



Vladimir G. Mitchev

08-19-2025

Vlad Mitchev, PE
Director of
Pavement
Operations

Prepared in the Office of:
WithersRavenel.
115 MacKenan Drive
Cary, NC 27511

Project Name: Granite Falls Blvd Resurfacing Project

Technical Specification Section: 21000

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GRANITE FALLS BLVD RESURFACING PROJECT

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STANDARD GENERAL CONDITIONS

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT EJCDC 2013 (*under separate cover*)

MAP BOOK

GRANITE FALLS BLVD RESURFACING MAP BOOK (*under separate cover*)

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SECTION 00200
INVITATION TO BID

TOWN OF ROLESVILLE
Rolesville, North Carolina

Sealed bids must be submitted no later than 12:00 p.m. on Wednesday, September 17th, 2025, to the Town of Rolesville, Town Hall, 502 Southtown Circle, Rolesville, North Carolina. Bids will be opened and read publicly for the furnishing of materials, labor, and equipment for the construction of Granite Falls Blvd Resurfacing Project Work is to be completed in calendar year 2025. ***Electronic bids will not be accepted.***

Approximate quantities involved are as follows:

ESTIMATED PROJECT QUANTITIES

± 2,568 TN Asphalt Surface Course S9.5C
± 924 TN Asphalt Intermediate Course I19.0C
± 17,790 SY Asphalt Pavement Milling

Including but not limited to: adjustment of manholes and water valves, concrete flatwork, pavement markings, and all other associated work. **The quantities displayed above are estimates.**

Plans, Specifications and Contract documents may be viewed electronically **after August 25th, 2025** at:

<http://ftp2.withersravenel.com>
Your username is: RolesvilleGraniteFallsBlvd
Your password is: 7PStTu

A Non-mandatory pre-bid meeting will be held on September 9th, 2025, at 10:30 am to discuss the project requirements and expectations via Microsoft Teams Meeting as shown here:

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 274 119 146 715 6

Passcode: Zu3tU2gn

Join on a video conferencing device
Tenant key: withersravenel@m.webex.com
Video ID: 111 620 569 1
[More info](#)

If the meeting link above does not work, please email Vladimir Mitchev at the email address provided below: vmitchev@withersravenel.com

Town of Rolesville is not responsible for bidders relying on incomplete bid documents.

Contractors offering a proposal on this project must be licensed to do the specified type of contracting in the State of North Carolina. All bids must include a non-collusive affidavit. Contractors offering a proposal on this project must comply, and must ensure that their subcontractors comply, with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes, "Verification of Work Authorization," and must provide documentation or sign affidavits or any other documents requested by the Town of Rolesville demonstrating such compliance.

Each proposal shall be accompanied by a bid deposit in the amount of not less than five percent (5%) of the amount of the bid in the form and subject to the conditions provided in the Instruction to Bidders.

The Town of Rolesville reserves the right to reject any or all proposals.

**Eric Marsh
Town Manager**

SECTION 00250 INSTRUCTIONS TO BIDDERS

Each proposal shall be submitted in a sealed envelope, upon blank forms provided in the Project Manual. These proposals shall be plainly marked:

“Granite Falls Blvd Resurfacing Project “.

The envelope shall also be marked with the Bidder’s name, address, North Carolina contractor license number, and name and phone number of a contact person.

Each bid proposal shall be accompanied by a Bid Bond payable to the Town of Rolesville for an amount of not less than five percent (5%) of the total amount of bid; or in lieu of the Bid Bond, the bidder may offer the bid deposit in the form of a cashier’s check, or a certified check on a bank or trust company insured by the FDIC. The bid bond must be executed by a corporate surety licensed in North Carolina. The bid deposit may be held for a period of sixty (60) days pending award of the contract. Notification of award of contract shall be evidence of intent to contract and shall extend time for holding the contractor's bid surety for a time mutually agreed between the Town of Rolesville and the bidder.

The award of the Contract, if it is awarded, will be to the lowest responsive, responsible bidder whose qualifications indicate the award will be in the best interest of the Town of Rolesville (Owner). The Town of Rolesville reserves the right to waive technicalities and/or reject any or all bids.

A Performance Bond and a Payment Bond, each in the amount of one hundred percent (100%) of the contract price, with a corporate surety approved by the Town of Rolesville, will be required for the faithful performance of the contract. Bidders shall provide certification that performance and payment bond sureties are licensed in North Carolina.

All questions about the meaning or intent of the Contract documents shall be submitted in writing to Vlad Mitchev, by email at vmitchev@withersravenel.com by **September 12th, 2025 5:00pm**. Replies will be issued by Addenda, mailed or delivered to all parties recorded by the Engineer as having received the Bidding Documents.

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SECTION 00300
BID PROPOSAL ("Proposal")

TO: THE TOWN OF ROLESVILLE, NORTH CAROLINA ("Owner")

FROM: "BIDDER" _____

ADDRESS _____

DATE OF BID _____, 20____

The Bidder hereby signifies that it is his/her/its intention and purpose to enter into a formal Contract with the Town of Rolesville, North Carolina, to furnish all labor, materials, tools, equipment, apparatus, supplies, and the like required, and to do all the work necessary, for and because of the construction, erection, and/or installation of the proposed "Project":

Granite Falls Blvd Resurfacing Project

For the Town of Rolesville, North Carolina in accordance with the Contract Documents, including Addenda thereto.** There is deposited, herewith, a certified check in the amount of: _____ Dollars (\$_____), or a Bid Bond in the amount of five percent (5%) of the total aggregate amount of the Bid, made payable to the Owner, the same to be refunded to the Bidder under the conditions of and in accordance with the terms of this Proposal, which are as follows:

THAT: The Bidder has carefully examined the Plans and Specifications and all other Contract Documents and fully understands them.

THAT: The Bidder has carefully examined the site of the Project and is familiar with the conditions under which the work or any part thereof, is to be performed and the conditions which must be fulfilled in furnishing and/or installing, erecting or constructing any or all items of the Project.

THAT: The Bidder shall provide all necessary tools, machinery, equipment, apparatus, and all other means necessary to do all the work and shall furnish all labor, materials and all else required to complete such Contract as may be entered into, in the manner prescribed in and in accordance with the terms of the Specifications and the Contract and in accordance with the true intent and meaning thereof, and in accordance with the Plans and/or Drawings and the requirements of the Consulting Engineers under them, in a first class manner.

** Fill in appropriate Addenda number(s): _____

[Terms continued on the following page.]

THAT: The rights of the Owner and the recommendations of the Engineer shall not be questioned in the Award of the Contract.

THAT: It is the intention of the Owner to let contracts on the basis of the Bids received in accordance with G.S. 143-129 and in such manner as the Owner may deem to be for the best interests of the Owner.

THAT: The Owner reserves the right to reject any or all proposals.

THAT: The work under each Section will be awarded under one Contract and that the Owner shall have the right to include such item or items as the Owner may deem to be in the best interests of the Owner.

THAT: On being awarded the Contract, the Bidder shall execute a Performance Bond and a Payment Bond, on the forms included herein, each equal to one hundred percent (100%) of the Contract Price (Contract Sum), as security for the faithful performance of the Contract.

THAT: The Bidder shall submit, in the blank spaces provided, all data, guarantees and other information called for.

THAT: This Proposal shall be signed and submitted in the manner prescribed in the Instructions to Bidders.

THAT: Should this Proposal not be accepted by the Owner, the certified check, in the amount of:

_____ Dollars (\$_____) or the five percent (5%) Bid Bond, as applicable, deposited herewith shall be returned to the Bidder.

THAT: Should this Proposal be accepted by the Owner and the Bidder fail or neglect to execute the Contract and furnish the required Bonds within ten (10) business days after receiving notifications of the acceptance of the Proposal and/or receipt of the formal Contract and Bond forms, the certified check, in the amount of: _____ Dollars (\$_____), or the Bid Bond, deposited herewith shall be retained by the Owner as liquidated damages, it being understood that the Owner reserves the right to extend the time allowed for executing the Contract and/or furnishing the Bond in its sole discretion.

THAT: The Bidder shall complete such Contract as may be entered into within the number of consecutive calendar days specified in the Contract from the date of the Notice to Proceed.

THAT: The Bidder proposes to enter into a Contract in accordance with this Proposal, the Plans and Specifications and the Contract Documents included herein, for the prices shown on the following pages.

THAT: The successful bidder shall be required to submit a complete detailed cost breakdown of the Lump Sum Bid Price amount (if project is a lump sum bid) for payment purposes, for approval by the Engineer, prior to the Award of the Contract.

[Terms continued on the following page.]

THAT: It is the intent of these Contract Documents to obtain a Contract based on a Lump Sum Price except where Unit Prices are specifically requested. Where a discrepancy exists between words and numbers in the Bid amount, the written words shall govern. Where a discrepancy exists between unit prices and mathematical computations in the Itemized Proposal, the unit prices and quantities in the Itemized Proposal shall govern.

THAT: The successful bidder shall have all proper Bidder licenses and other applicable licenses required under North Carolina state laws governing their respective trade(s).

THAT: The successful bidder and all subcontractors shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes, "Verification of Work Authorization," and shall provide documentation or sign affidavits or any other documents requested by the Town of Rolesville demonstrating such compliance.

THE FOLLOWING FORMS AND DOCUMENTATION SHALL BE COMPLETELY FILLED OUT AND SUBMITTED WITH THE BIDS:

1. Bid Bond (using forms provided on pages 00300-16 and 00300-17) or other allowable bid security;
2. Photocopy of Bidder's North Carolina Contractors License;
3. Enter Contractor's License Number where called for in proposal and on the outside of sealed envelope containing the proposal;
4. Statement of Compliance with requirement of the General Conditions that the Bidder will ensure that at least half of the Work is performed with the Bidder's employees (provide statement on bidder's letterhead);
5. Certified List of Major Subcontractors;
6. Certified List of Equipment/Material Manufacturers;
7. Bidder's Certificate as to Organization and Authority;
8. Equal Employment Opportunity Addendum;
9. Qualifications of Bidders;
10. Non-Collusive Affidavit;
11. Nondiscrimination Clause.

BID PROPOSAL
GENERAL CONSTRUCTION FOR THE
Granite Falls Blvd Resurfacing Project
Town of Rolesville, North Carolina (the "Project")

BASE BID

Item No.	Item Description	UNIT	Quantity	Unit Price	Amount Estimated
1	Mobilization	LS	1		
2	Milling Asphalt Pavement, 3" Depth	SY	11,470		
3	Milling Asphalt Pavement, 4" Depth	SY	6,320		
4	Asphalt Concrete Surface Course, Type S9.5C	TN	2,568		
5	Asphalt Concrete Intermediate Course, Type I19.0C	TN	924		
6	Subgrade patch	TN	150		
7	Adjustment of Manhole	EA	2		
8	Adjustment of Meter Boxes or Valve Box	EA	11		
9	New Water Valve Structure	EA	2		
10	Inductive Loop Sawcut	LF	410		
11	Remove & Replace - Concrete Curb Ramps (Yellow Domes)	EA	20		
12	Remove Concrete Curb Ramp; Replace with Sidewalk and Curb & Gutter	EA	6		
13	Retrofit Existing Concrete Curb Ramps (Yellow Domes)	EA	3		
14	Remove & Replace - Concrete Sidewalk	LF	160		
15	Remove & Replace - Concrete Curb and Gutter	LF	100		
16	Thermoplastic Pavement Marking Lines, 4" , 90 mils	LF	11,300		
17	Thermoplastic Pavement Marking Lines, 24" White, 90 mils	LF	740		

Item No.	Item Description	UNIT	Quantity	Unit Price	Amount Estimated
18	Thermoplastic Pavement Marking Symbols, 90 mils	EA	26		
19	Thermoplastic Pavement Marking Characters, 90 mils	EA	12		
20	Traffic Control	LS	1		
Total Bid					

Bidder _____
(Print)

The Town reserves the right to add or delete street segments from the street list at its discretion. The Town shall determine its final street listing post bid.

NOTE: PROPOSAL SIGNATURE REQUIRED ON PAGE 00300-16. ALL PROPOSALS MUST BE PROPERLY EXECUTED TO BE CONSIDERED A VALID BID.

CERTIFIED LIST OF MAJOR SUBCONTRACTORS

The Bidder, as part of the procedure for the submission of Bids on the Project, submits the following list of Major Subcontractors to be used in the performance of work to be done on said Project. Changes to this list after the Bid opening shall only be as approved by the Owner upon request by the Bidder or as required by the Owner based upon review of Bidder's submittals:

<u>SUBCONTRACTOR</u>	<u>SUBCONTRACTOR'S NAME AND ADDRESS</u>
UTILITY & CONCRETE FLATWORK	
TEMPORARY TRAFFIC CONTROL	

It is understood and agreed that, if awarded a Contract, the Bidder shall not make any additions, deletions or substitutions to this certified list without the consent of the Owner.

CERTIFICATION AFFIDAVIT

THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER UNDERSTAND AND AGREE THAT, IF AWARDED A CONTRACT, THIS CERTIFICATION SHALL BE ATTACHED THERETO AND BECOME A PART THEREOF.

[If Bidder is not an individual, enter entity name here]

By: _____
(Signature)

NAME OF SIGNER: _____
(Please Print or Type)

TITLE OF SIGNER: _____
(Please Print or Type)

DATE: _____

CERTIFIED LIST OF EQUIPMENT/MATERIAL MANUFACTURERS

The Bidder, as part of the procedure for the submission of Bids on the Project, submits the following list of Equipment/Materials Manufacturers to be used in the performance of work to be done on said Project. The list of Manufacturers and all equipment/materials furnished shall be based on requirements of the Contract Documents. Changes to this list after the Bid opening shall only be as approved by the Owner upon request by the Bidder or as required by the Owner based upon review of Bidder's submittals:

<u>EQUIPMENT/MATERIALS</u>	<u>MANUFACTURER</u>
_____	_____
_____	_____
_____	_____
_____	_____

It is understood and agreed that, if awarded a Contract, the Bidder shall not make any additions, deletions or substitutions to this certified list without the consent of the Owner. Failure to identify a manufacturer for any or all of the items listed shall constitute an entry of one of the manufacturers listed in its respective technical specification.

CERTIFICATION AFFIDAVIT

THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER UNDERSTAND AND AGREE THAT, IF AWARDED A CONTRACT, THIS CERTIFICATION SHALL BE ATTACHED THERETO AND BECOME A PART THEREOF.

[If Bidder is not an individual, enter entity name here]

By: _____
(Signature)

NAME OF SIGNER: _____
(Please Print or Type)

TITLE OF SIGNER: _____
(Please Print or Type)

DATE: _____

BID SECURITY:

Accompanying this Proposal is a (1) _____ in the amount of
(2) _____ Dollars
(\$ _____).

NOTE: (1) Insert the words "bank draft," "certified check," "bid bond", or "cashiers check", as the case may be.

(2) Amount must be equal to at least five percent (5%) of the total Bid.

BIDDER'S LICENSE:

The Bidder certifies that (he/she/it) is licensed as a Bidder under the specific North Carolina state law regulating his/her/its particular trade and that the number of the license under which he/she/it now operates is_____.

BIDDER'S CERTIFICATION AS TO ORGANIZATION AND AUTHORITY:

The Bidder certifies that the Affidavit of Organization and Authority, like the other documents attached hereto, form an integral part of the Proposal, and the Bidder acknowledges that the Owner will rely on the information provided therein in reviewing the Proposal and awarding a Contract.

LIQUIDATED DAMAGES:

The Bidder agrees, further, that the Owner may retain those amounts indicated in the Contract from the amount of compensation due the Bidder, under the terms of the Contract, for each and every day that the work remains incomplete and/or unsatisfactory beyond the completion date(s) specified in the Notice to Proceed. This amount is agreed upon as the proper measure of liquidated damages the Owner will sustain, per day, by the failure of the Bidder to complete the work within the stipulated time, and it is not to be construed in any sense as a penalty.

The Bidder shall not have or bring a claim against the Owner, or raise as a defense against the imposition of liquidated damages, other construction purportedly impeding Bidder's progress or timely project completion.

(SIGNATURE PAGE)

Dated _____, 20____.

_____(SEAL)
Bidder—Legal Entity

By: _____(SEAL)
(SIGN HERE)

SEAL-if corporation

Printed Name

Address

() _____
Telephone No.

Subscribed and sworn to before me this _____ day of _____, 20____

Notary Public

My Commission Expires:

BID BOND

This is a Bid Bond that is subject to the provisions of Article 3 of Chapter 44A of the North Carolina General statutes.

This Bid Bond is executed on _____, 20 .

The name of the PRINCIPAL is _____(1)

_____(2)

The name of the SURETY is _____

The TOWN OF ROLESVILLE, NORTH CAROLINA is the OWNER.

The amount of the Bond is _____

_____(Dollars) (\$_____)

KNOW BY ALL MEN BY THESE PRESENTS, the Principal and Surety above named are hereby held and firmly bound unto the above named OWNER hereinafter called the OWNER in the penal sum of the amount stated above in lawful money of the United States, for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

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

NOW, THEREFORE

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

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

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

ATTEST:

(Principal) Secretary
(SEAL)

Principal

BY: _____(3)

(Address)

Witness as to Principal

(Address)

ATTEST:

Surety

N.C. Resident Agent
(SEAL)

By: _____

_____(4)

(Name)

(Address)

(Phone Number)

Witness as to Surety

(Address)

- (1) Insert the correct name of Principal.
- (2) Insert whether the Principal is a corporation, a partnership, a limited liability company or an individual.
- (3) If Principal is a partnership, all partners should execute the Bid Bond. If Bidder is a limited liability company, all managers (or all members, if the company is member-managed) should execute the Bond.
- (4) Provide contact name, address and phone number for bid bond surety.

**POWER OF ATTORNEY
(Attach)**

BIDDER'S CERTIFICATES
AFFIDAVIT OF ORGANIZATION AND AUTHORITY SWORN
STATEMENT

STATE OF _____)

COUNTY OF _____)

_____ being first duly sworn on oath
deposes and says that the Bidder on the attached Bid Proposal is organized as indicated below and that all
statements herein made are made on behalf of such Bidder and that this deponent is authorized to make them.

(Fill Out Applicable Paragraph)

CORPORATION:

The Bidder is a corporation organized and existing under the laws of the State of
_____, it operates under the legal name of
_____, and the full names of its officers
are as follows:

President _____
Secretary _____
Treasurer _____

and it does _____ have a corporate seal. The _____ is/are authorized to sign
construction proposals and contracts for the company by action of its Board of Directors taken _____,
a certified copy of which is hereto attached. (Strike out this last phrase if not applicable.)

PARTNERSHIP:

The Bidder is a [limited/general] partnership consisting of individual/corporate partners as follows: General Partners

Limited Partners

The partnership does business under the name of : _____

LIMITED LIABILITY COMPANY:

The bidder is a [member-managed/manager-managed] limited liability company consisting of the following
individual/corporate members/managers:

Managers

Members

INDIVIDUAL:

The Bidder is an individual whose full name is:

and if operating under a trade name, said trade name is as follows:

The business address of the Bidder is:

Its phone number is: _____

The contact person for this Proposal is:

Bidder

By: _____

Subscribed and sworn to before me this _____ day of _____, 20 .

Notary Public

County

My Commission Expires:

EQUAL EMPLOYMENT OPPORTUNITY ADDENDUM ("ADDENDUM")

During the performance of the Contract the Bidder agrees as follows:

- a. The Bidder shall not discriminate against any employee or applicant because of race, color, religion, sex, or national origin. The Bidder shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Bidder agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of the nondiscrimination clause.
- b. The Bidder shall, in all solicitations or advertisements for employees placed by or on behalf of the Bidder, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- c. The Bidder shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract understanding, a notice, to be provided, advising the labor union or worker's representative of the Bidder's commitments under the Equal Employment Opportunity Section of the Contract, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. In the event of the Bidder's noncompliance with the nondiscrimination clauses of the Contract or with any of such rules, regulations, or orders, the Contract may be canceled, terminated, or suspended in whole or in part and the Bidder may be declared ineligible for further OWNER contracts.
- e. The Bidder will include the provisions of this Addendum in every subcontract or purchase order unless exempted by rules, regulations, or orders of the OWNER so that such provisions will be binding upon each Subcontractor or vendor.

(Use the following form for execution by a CORPORATION):

ATTEST:

(Assistant) Secretary

(CORPORATE SEAL)

Corporate Name

BY: _____
(Vice) President

(Use the following form for execution by a PARTNERSHIP):

_____(SEAL)
Partnership Name

BY: _____(SEAL)
General Partner (Use

the following form for execution by a LIMITED LIABILITY COMPANY):

_____(SEAL)
Company Name

BY: _____(SEAL)
Manager/Member

(Use the following form for execution by an INDIVIDUAL):

BY: _____(SEAL)

WITNESS:

Subscribed and sworn to before me this _____ day of _____, 20 .

Notary Public

County

My Commission Expires:

QUALIFICATIONS OF BIDDERS

In order to assist the Owner in determining whether the Bidder is qualified to perform the Work, as set forth in the Contract Documents, the Bidder shall furnish the following information.

1. List of references who are qualified to judge as to his financial responsibility and his experience in work of similar nature to that bid upon:
2. List of previous contracting experience, including dollar values of contracts:
3. List of facilities or equipment that is available for use:
4. Name, residence, and title of the individual who will give personal attention to the work:
5. Financial Statement:

ASSETS

CURRENT ASSETS:

Cash \$ _____

Notes and Accounts Receivable _____

Inventories _____

PLANT ASSETS:

Real Estate \$ _____

Machinery _____

Good Will, Patents, etc. _____

\$ _____
Total Assets

LIABILITIES:

Notes Payable	\$ _____	
Accounts Payable	_____	
Accrued Wages	_____	
Other Liabilities	_____	\$ _____
		Total Liabilities
	EXCESS OF ASSETS OR	
	NET WORTH	\$ _____

6. List all Claims, prior and pending, against the Bidder by the Town of Rolesville, including the resolution of such Claims, if any:

<u>Claim</u>	<u>Date of Claim</u>	<u>Resolution, if any</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

The existence of unresolved claims against Bidder may disqualify the Bidder from making a Bid Proposal and entering into a Contract with the Town of Rolesville.

Notes:

- A. The above is a suggested form for the Financial Statement, but the Bidder is not required to follow the form explicitly. The Financial Statement submitted must clearly show to the satisfaction of the Owner the Bidder's current financial condition. The Owner reserves the privilege of requiring additional information as to financial responsibility of the Bidder prior to awarding Contract.
- B. Bidder shall attach additional pages, if necessary, in order to complete the required information.
- C. The Bidder shall submit detailed information required for above Items 1 through 4 with his Bid Proposal package. The information required under Items 5 and 6 may be furnished after Bid Proposals are received if required by the Owner and Engineer to evaluate the qualifications of a prospective Bidder.

NON-COLLUSIVE AFFIDAVIT

State of _____)
) ss.
County of _____)

_____ being first duly sworn,
deposes and says that:

- (1) He/she is the _____
(Owner, Partner, Officer, Representative or Agent)
of _____, the BIDDER that has
submitted the attached BID PROPOSAL;
- (2) He is fully informed respecting the preparation and contents of the attached BID PROPOSAL and of all
pertinent circumstances respecting such BID PROPOSAL;
- (3) Such BID PROPOSAL is genuine and is not a collusive or sham BID PROPOSAL;
- (4) Neither the said BIDDER nor any of its officers, partners, owners, agents, representatives, employees or
parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or
indirectly, with any other BIDDER, firm, or person to submit a collusive or sham BID PROPOSAL in connection
with the Contract for which the attached BID PROPOSAL has been submitted; or to refrain from bidding in
connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or
collusion, or communication, or conference with any BIDDER, firm, or person to fix the price or prices in the
attached BID PROPOSAL or of any other BIDDER, or to fix any overhead, profit, or cost elements of the BID
PROPOSAL price or the BID PROPOSAL price of any other BIDDER, or to secure through any collusion,
conspiracy, connivance, or unlawful agreement any advantage against The Town of Rolesville, or any
person interested in the proposed Contract;
- (5) The price or prices quoted in the attached BID are fair and proper and are not tainted by any collusion,
conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents,
representatives, owners, employees or parties in interest, including this affidavit.

BIDDER

BY _____

ITS _____
(Title)

Subscribed and sworn to before me this _____ day of _____, 20 .

Notary Public

County

My commission expires _____

END OF AFFIDAVIT

NONDISCRIMINATION CLAUSE

It is specifically agreed as part of the consideration of the signing of this Bid Proposal, and the resulting execution of a Contract, that the parties hereto, their agents, officials, employees or servants shall not discriminate in any manner on the basis of age, handicap, race, color, creed, or national origin with reference to the subject matter of the Contract, no matter how remote.

This provision, being incorporated for the benefit of the Town of Rolesville and its residents, may be enforced as set out in the ordinances of the Town of Rolesville, enforcement of this provision shall be by action for specific performance, injunctive relief, or other remedy as by law provided.

This provision shall be binding on the successors and assigns of the parties hereto with reference to the subject matter of the Contract.

(Use the following form for signatures by a CORPORATION):

ATTEST:	_____ Corporate Name
_____ (Assistant) Secretary	BY: _____ (Vice) President
_____ (Printed Name)	_____ (Printed Name)
(Corporate Seal)	

(Use the following form for signatures by a PARTNERSHIP):

_____ WITNESS	_____(SEAL) Partnership Name
_____ (Printed Name)	BY: _____(SEAL) General Partner

(Use the following form for signatures by a LIMITED LIABILITY COMPANY):

_____	_____ (SEAL)
WITNESS	Company Name
_____	BY: _____ (SEAL)
(Printed Name)	Manager/Member

(Use the following form for signatures by an INDIVIDUAL):

_____	_____ (SEAL)
_____	_____
	(Printed Name)

WITNESS	

(Printed Name)	

Subscribed and sworn to before me this _____ day of _____, 20 .

_____	_____
Notary Public	County

My Commission Expires:

NOTICE OF AWARD

TO: CONTRACTOR/BIDDER: _____

ADDRESS: _____

FROM: _____

OWNER: Town of Rolesville
Rolesville, North Carolina

PROJECT: _____

You are hereby notified that the Owner has considered the Bid Proposal submitted by you for the above-described project in response to its Notice to Bidders dated _____.

It appears that it is to the best interest of said Owner to accept your Bid Proposal in the amount of: _____ Dollars (\$ _____). You are therefore hereby notified that your Bid Proposal has been accepted.

The Bidder is required by as a condition of its Award of the Contract to execute and deliver the formal Contract with the Owner and to furnish the required Bidder's Performance and Payment Bonds within ten (10) business days from the date of the delivery of this Notice to you.

If you fail to execute said Contract and to furnish said Bonds within ten (10) business days from the date of delivery of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid Proposal as abandoned and to award the work covered by your Bid Proposal to another bidder, or to readvertise the work or otherwise dispose thereof as the Owner may see fit.

Dated this _____ day of _____, 20_____.

Town of Rolesville, North Carolina

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged this _____ day of _____, 20_____.

Bidder

By: _____

Title: _____

- END OF SECTION -

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SECTION 00500
AGREEMENT (CONTRACT)

INSTRUCTIONS TO CONTRACTORS AND REQUIREMENTS FORM FOR TOWN OF ROLESVILLE, NC AGREEMENTS
DO NOT REMOVE FROM AGREEMENT

Contractor has been provided two (2) duplicates of the Agreement (or shall create two copies of the electronic version if Contractor has received that from the Town). Each of the two copies shall be signed and returned to the Engineer or Architect for signature by the Owner. One counterpart will be returned to the Contractor after Owner has executed the Agreement and all initial submittals due with the Agreement have been made to Owner. The other counterpart of the Agreement will be retained for the Owner and Engineer or Architect. If the Contractor requires additional copies, he shall notify the Owner, Engineer or Architect upon his Acknowledgement of the Notice of Award.

Please observe the following in executing the attached Agreement:

1. The Owner may contract with four types of legal entities.
 - (a) If the Agreement is with an individual, that individual should sign the Agreement exactly as his/her name is set out. If the Agreement is with an individually-owned business, the Agreement should be with the individual owner, and not the named business.
 - (b) Execution on behalf of a corporation should be by the president or a vice president, attested by the corporate secretary, with the corporate seal affixed. An official other than president or vice president should attach documentation of his/her authority to execute and bind the corporation.
 - (c) If the Agreement is with a partnership, all general partners of the partnership should execute the Agreement unless an authorized partner is designated to execute, in which case documentation of such authorization should be attached.
 - (d) If the Agreement is with a limited liability company, all managers of the limited liability company should execute the Agreement. If the limited liability company is member-managed, all members should sign the Agreement. If only certain manager(s) or member(s) of the limited liability company are authorized to execute the Agreement, documentation of such authorization should be attached.
2. After signing the Agreement, the appropriate notary's acknowledgement, in the individual, corporate or partnership form should be completed.
3. The Agreement will already be dated as of a certain date when Contractor receives it, which date will aid the Contractor in obtaining the Performance and Payment Bonds. The date of the Bonds must not be prior to the date of the Agreement. The Performance Bond and Payment Bond shall correctly reference the Agreement, including the date assigned to it. The Bonds shall be signed by the Contractor, and its signature shall be acknowledged with the appropriate acknowledgement form. Next, the Bonds, in approved form, must be signed by the authorized agent of the Surety Company issuing the Bonds, and an executed Power of Attorney document authorizing the agent to sign must accompany the Bond Documents.

4. The Bid Form and all other documents submitted with the Bid shall be included with the Agreement. Complete the Acceptance of Notice of Award section on the last page of the Bid Proposal.
5. Page 00500-3: Fill in the Contractor name and address.
6. Pages 00500-9 through 00500-12: Choose the appropriate signature page and complete it in its entirety.
7. Pages 00500-13 through 00500-19: Complete in their entirety.
8. Page 00500-20: Attach the Certificate of Insurance. All parties required to be named as additional insured parties by the Contract Documents in connection with the attached Agreement shall be named on the Certificate of Insurance for each policy.
9. Page 00500-21: The Town shall execute the page evidencing compliance with the Fiscal Control Act prior to sending a counterpart of the Agreement to the Contractor.
10. Pages 00500-22 through 00500-24: Schedule 1 – Identification of Parties and Their Authorized Representatives. The names of all parties intended to act on behalf of the parties in the roles specified in Schedule 1 should be clearly specified in such Schedule by the Contractor and the Town.
11. Once the Town has received and approved the Agreement, the Payment and Performance Bonds and all other required documents, it will send a counterpart of the fully-executed Agreement to the Contractor. Failure to fully complete both required sets of the Agreement and timely provide all the Payment and Performance Bonds will cause delays in the approval by the Owner and therefore delay the issuance of the Notice to Proceed.

AGREEMENT

This Agreement (the "Agreement") is made as of the ____ day of ____, in the year 2023, by and between the Town of Rolesville, North Carolina, (the "Owner") and _____ of _____, (the "Contractor").

WITNESSETH

THAT, WHEREAS, an Award of Contract (the "Award") for:

**Granite Falls Blvd Resurfacing Project Construction
Single-Prime Contract**

as prepared by WithersRavenel, has recently been awarded to the Contractor by the Owner.

AND WHEREAS, the work to be performed by the Contractor or its subcontractors, and the labor, materials, equipment, apparatus, and supplies to be provided in connection therewith (collectively, the "Work") is more particularly described in the Proposal (the "Proposal") attached hereto.

AND WHEREAS, the aggregate cost of the Work (referred to as either the "Contract Price" or the "Contract Sum") and the individual prices and rates of the various components of the Work that together comprise the Contract Price, are more particularly described in the Proposal.

AND WHEREAS, it was one of the conditions of said Award that a formal contract should be executed by and between the Owner and the Contractor, evidencing the terms of said Award.

NOW THEREFORE, THIS AGREEMENT FURTHER WITNESSETH THAT the Owner and the Contractor represent, warrant, covenant and agree as follows:

It is agreed and understood that the terms and conditions of the following documentation of are a part of and parcel to this Agreement to the same extent as if incorporated herein in full [check the applicable documentation]:

 X Standard General Conditions of the Construction Contract (EJCDC Document No. C-700, 2007 edition), as supplemented with forms for use under this Agreement by the Supplementary Conditions (as so supplemented, the "General Conditions").

 General Conditions of the Contract for Construction (AIA Document A201-2007), as supplemented with forms for use under this Agreement by the Supplementary Conditions (as so supplemented, the "General Conditions").

The Contractor hereby covenants and agrees with the Owner that it will, for a sum equal to the Contract Price, well and faithfully perform, provide and execute the Work in accordance with each and every one of the conditions, covenants, stipulations, terms and provisions contained in the Notice to Bidders/Invitation to Bid, the Instructions to Bidders, the Proposal, the Plans, the Specifications, the General Conditions and the Contract Documents (as that term is defined in the General Conditions), all of which are a part of and parcel to this Agreement to the same extent as if incorporated herein in full.

And the Owner does hereby covenant and agree with the Contractor that it will pay to the Contractor, when due and payable under the terms of the Contract Documents and the Award, the Contract Price, and that it will well and faithfully comply with and perform each and every obligation imposed upon it by said Contract Documents and the terms of said Award.

The Contractor shall commence the Work on the commencement date specified in a written order of the Owner (the "Notice to Proceed"). The Work shall be **finally and fully completed**, so that it is ready for final payment, as evidenced by the Engineer's or the Architect's written recommendation, within **40** CONSECUTIVE CALENDAR DAYS of the commencement date specified in the Notice to Proceed (such deadlines being referred to herein and in the Contract Documents as the "Contract Time" or the "Contract Times"). In the event that the Work is not completed to the standards and degrees required by the Contract Times, or either of them, liquidated damages shall be assessed against the Contractor for each day of delay as described herein below.

LIQUIDATED DAMAGES

The parties recognize and acknowledge that Owner will suffer financial losses if the Work is not completed as required within the Contract Times. They also recognize and acknowledge the delays, expense, and difficulty to both parties that would be involved in proving or contesting the amounts of those losses. Instead of requiring proof of those amounts, it is agreed that if the Contractor shall fail to complete the Work to the standard and degree required within the Contract Times, or either of them, and within any extension of time granted by the Owner in accordance with the General Conditions, then the Contractor shall pay to the Owner **\$1,000/day** for each calendar day after the Contract Times, or after a relevant extended time if applicable, that the Work remains incomplete to the standard or degree required by the Contract Documents.

The Contract Notice to Proceed shall be on or following _____.

INTERMEDIATE CONTRACT TIME NUMBER 1

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall maintain a minimum of one lane open for traffic at all times. The Contractor shall not close or narrow a lane of traffic on **any State maintained route or street classified as either a thoroughfare** during the following time restrictions:

Day and Time Restrictions

MONDAY – THURSDAY, 7:00AM TO 8:00PM

FRIDAY 7:00AM TO SUNDAY 8:00PM

All areas milled in a shift must be paved back before traffic opening in the morning.

In addition, the Contractor shall not close or narrow a lane of traffic on **any State maintained route or Town Street** during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAYS AND HOLIDAY WEEKENDS:

1. Labor Day - September 1, 2025
2. Veteran's Day - November 11, 2025
3. Thanksgiving and Day after Thanksgiving - November 27 & 28, 2025

OTHER:

1. Any **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated above and place traffic in the existing traffic pattern.

The liquidated damages are **\$500 per 15 minutes**.

PROSECUTION OF THE WORK

The Contractor will be required to prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance of the project. The Contractor will not be permitted to suspend his operations except for reasons beyond his control or except where the Engineer has authorized a suspension of the Contractor's operations in writing.

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of **\$1,000** will be charged the Contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages due to extra engineering and maintenance costs and due to increased public hazard resulting from a suspension of the work. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work on time.

Payment of the charges described herein shall not excuse or relieve the Contractor for any other liability under the Contract Documents for delay in the progress schedule of the Work, and all other penalties imposed on the Contractor and remedies available to the Owner under the Contract Documents shall remain in full force and effect.

IDENTIFICATION OF PARTIES AND AUTHORIZED REPRESENTATIVES

Various parties to the Contract, and parties who will be acting on another party's behalf from time to time, are identified in Schedule 1 attached hereto. Although certain parties may act on another party's behalf from time to time under the Contract Documents in certain respects (issuing directives, for instance), with respect to most documentation issued under the Contract Documents, the set of people that may bind each party is limited. The proper identification of those specific individuals (through name or title identification) that are entitled and authorized to bind the parties to the various Contract Documents that exist or may be created in connection with this Agreement is critical to the proper administration of this Agreement, and those individuals are specified in Schedule 1 attached hereto.

The parties agree that the persons (specified by names or titles/roles) of signatories to the Contract Documents that are specified on Schedule 1 attached hereto are the only appropriate parties to execute such documentation and bind the parties listed for each such Contract Document to all obligations incurred or acknowledged, and all representations and warranties made, in such documents. To that end, for example, although the Owner is the Town of Rolesville, as described in Schedule 1, the proper specific individuals (indicated by name or by title) to execute various documents on behalf of the Owner are specified on Schedule 1 attached hereto.

VERIFICATION OF WORK AUTHORIZATION

Contractor represents and warrants that now and continuing for the term of Agreement, Contractor, and all subcontractors, will comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes, "Verification of Work Authorization," and will provide documentation or sign affidavits or any other documents requested by Town demonstrating such compliance.

ELECTRONIC VERSION OF CONTRACT DOCUMENTS

Owner may convert a signed original of the Contract Documents to an electronic record pursuant to a North Carolina Department of Cultural Resources approved procedure and process for converting paper records to electronic records for record retention purposes. Such electronic record of the Contract shall be deemed for all purposes to be an original signed Contract.

IN WITNESS WHEREOF, said Contractor and Owner, being duly authorized, have caused these presents to be signed in their names as of the day and year first above written.

Owner:

TOWN OF ROLESVILLE,
a North Carolina municipality

By: _____

Name: Eric Marsh

Title: Town Manager

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public in the County and State aforesaid, do hereby certify that _____ personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the _____ day of _____, 20____.

Notary Public

[OFFICIAL SEAL]

Printed name of Notary Public

My Commission Expires: _____

[Contractor's Signature, if individual(s)]

CONTRACTOR:

_____(SEAL)

_____(SEAL)

_____(SEAL)

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public of _____ County, State
of _____, do hereby certify that _____
personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the _____ day of _____, 20 .

Notary Public

My Commission expires: _____

[OFFICIAL SEAL]

IMPORTANT

NOTE: If Contractor is an individual, his/her signature shall be placed above. The signature of the Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

[OR: Contractor's Signature, if a corporation]

CONTRACTOR:

a _____ corporation

ATTEST:

Secretary
(SEAL)

By: _____
Name: _____
Title: _____ President

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public of _____ County, State of _____, do hereby certify that _____ personally came before me this day and acknowledged that he/she is _____ Secretary of _____, a _____ corporation, and that, by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____ President, sealed with its corporate seal, and attested by himself/herself as its _____ Secretary.

Witness my hand and official seal, this the _____ day of _____, 20 .

Notary Public

My Commission Expires: _____

[OFFICIAL SEAL]

IMPORTANT

NOTE: If the Contractor is a Corporation, the legal name of the Corporation shall be set forth above, together with the signature of the officer or officers authorized to sign Contracts on behalf of the Corporation. If the signature is by an agent other than an authorized officer of the Corporation, a Resolution must be attached hereto. The signature of the Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

[OR: Contractor's Signature, if a partnership]

CONTRACTOR:

a [general/limited] partnership (SEAL)

By: _____ (SEAL)

Name: _____

Title: General Partner

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public of _____ County, State of _____, do hereby certify that _____, General Partner of _____, a _____ [general/limited] partnership,

personally appeared before me this day and acknowledged the due execution of the foregoing instrument as his/her act and deed and as the act and deed of the partnership.

Witness my hand and official seal, this the _____ day of _____, 20 .

Notary Public

My Commission Expires: _____

[OFFICIAL SEAL]

IMPORTANT

NOTE: If Contractor is a partnership, the true name of the firm shall be set forth above, together with the signatures of all the general partners (add more "by/name/title" signature lines beneath the partnership name if there is more than one general partner). If the signature is by an agent other than all general partners, a Resolution must be attached hereto. The signature of the Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

[OR: Contractor's Signature, if a limited liability company]

CONTRACTOR:

a limited liability company (SEAL)

By: _____ (SEAL)

Name: _____

Title: Member/Manager

STATE OF _____

COUNTY OF _____

I, _____, a Notary Public of _____ County, State
of _____, do hereby certify that _____ a
[Member/Manager] of _____, a _____ limited liability

company, personally appeared before me this day and acknowledged the due execution of the foregoing
instrument as his/her act and deed and as the act and deed of the company.

Witness my hand and official seal, this the _____ day of _____, 20_____.

Notary Public

My Commission Expires: _____

[OFFICIAL SEAL]

IMPORTANT

NOTE: If Contractor is a limited liability company, the true name of the firm shall be set forth above, together with the signatures of all the managers (add more "by/name/title" signature lines beneath the company name as necessary). If the signature is by an agent other than all of the managers of the limited liability company (or all of the members, if the company is member-managed), a Resolution must be attached hereto. The signature of the Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

PERFORMANCE BOND

This Bond is executed on _____, 20 ____ The

name of the PRINCIPAL is _____(1)

a _____(2)

The name of the SURETY is _____

The TOWN OF ROLESVILLE, NORTH CAROLINA is the CONTRACTING BODY.

The amount of the Bond is _____

_____ Dollars (\$ _____)

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the above named CONTRACTING BODY, hereinafter called the "Contracting Body", in the penal sum of the amount stated above in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas, the Principal entered into a certain Agreement with the Contracting Body, dated as of the _____ day of _____, 20 ____ for work described _____ by _____ Plans _____ and _____ Specifications _____ prepared by _____, herein called and referred to as the "Engineers", a copy of said Agreement is hereto attached and made a part hereof for the construction of:

Granite Falls Blvd Resurfacing Project

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said Agreement during the original term of said Agreement and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the Agreement, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said Agreement that may hereafter be made, notice of which modifications to the SURETY being hereby waived, then, this obligation is to be void; otherwise it shall remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

(Principal) Secretary
(SEAL)

Principal

By: _____(3)

(Address)

Witness as to Principal

(Address)

Surety

By: _____(4)

(Name)

ATTEST:

(Address)

By: _____[N.C. Resident Agent]
(SEAL) (Phone Number)

Witness as to Surety

(Address)

NOTE: Date of Bond must not be prior to date of Agreement.

- (1) Insert the correct name of Contractor.
- (2) Insert whether the Contractor is a corporation, a partnership, a limited liability company or an individual.
- (3) If Contractor is a partnership, all general partners should execute the Bond. If Contractor is a limited liability company, all managers (or all members, if the company is member-managed) should execute the Bond.
- (4) Provide contact name, address and phone number for performance bond surety.

PAYMENT BOND

This Bond is executed on _____, 20 .

The name of the PRINCIPAL is _____(1)

a _____(2)

The name of the SURETY is _____

The TOWN OF ROLESVILLE, NORTH CAROLINA is the CONTRACTING BODY.

The amount of the Bond is _____ Dollars (\$ _____)

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the above named CONTRACTING BODY, hereinafter called the "Contracting Body", in the penal sum of the amount stated above in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas, the Principal entered into a certain Agreement with the Contracting Body, dated as of the _____ day of _____, 20 _____ for work described _____ by _____ Plans _____ and _____ Specifications _____ prepared _____ by _____ herein called and referred to as the "Engineers", a copy of said Agreement is hereto attached and made a part hereof for the construction of:

- Project No. _____

NOW THEREFORE, if the Principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said Agreement, and any and all duly authorized modifications of said Agreement that may hereafter be made, notice of which modifications to the SURETY being hereby waived, then this obligation is to be void; otherwise it shall remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

ATTEST:

(Principal) Secretary
(SEAL)

Principal

By: _____(3)

(Address)

Witness as to Principal

(Address)

Surety

By: _____(4)

(Name)

(Address)

ATTEST:

By: _____

[N.C. Resident Agent]
(SEAL)

(Phone Number)

Witness as to Surety

(Address)

NOTE: Date of Bond must not be prior to date of Agreement.

- (1) Insert the correct name of the Contractor.
- (2) Insert whether the Contractor is a corporation, a partnership, a limited liability company or an individual.
- (3) If Contractor is a partnership, all general partners should execute the Bond. If Contractor is a limited liability company, all managers (or all members, if the company is member-managed) should execute the Bond.
- (4) Provide contact name, address and phone number for payment bond surety.

AFFIDAVIT

(To be attached to all Agreements)

STATE OF)
) SS
COUNTY OF)

_____being first duly sworn on oath deposes and says that
s/he is _____ (attorney-in-fact or agent) of
_____(bonding company) surety on the attached Agreement on
_____executed by
_____(Contractor).

Affiant further deposes and says that no officer, official or employee of the Owner has any interest directly or indirectly, or is receiving any premium, commission fee or other thing of value on account of the same or furnishing of the Bond, undertaking or Contract of Indemnity, Guaranty, Suretyship in connection with the above mentioned Agreement.

Signed_____

Subscribed and sworn to before me this_____day of_____, 20____.

(Notary Public, _____ County, _____)

My Commission Expires_____

RESOLUTION OF CONTRACTOR'S PARTNERS, MANAGERS OR MEMBERS
(Fill in and attach if necessary)

[CORPORATION/PARTNERSHIP/LIMITED LIABILITY COMPANY NAME]

CERTIFICATE OF AUTHORITY

KNOW ALL MEN BY THESE PRESENTS:

That at a meeting of the [board of directors/partners/all members/managers] of [Contractor] a
[business corporation/partnership/limited liability company] duly organized under the laws of the State of
_____, held on _____, 20____ the following Resolution was adopted, which
Resolution is still in effect:

RESOLVED, that [any of] the following: [insert
individual name and title]

be, and they hereby are, authorized to execute any and all documents, including contracts, on behalf of
[Contractor] and further that Certificates of Authority setting out this Resolution be prepared and certified by [the
Secretary of [Contractor]/all partners/all members/managers] to be used to evidence such authority.

[For a corporation, use the following certification of the Secretary:]

That I am the duly elected and qualified Secretary of [Contractor] and the keeper of records of said
company; that the foregoing is a true and correct copy of a Resolution duly adopted at the meeting described above
and held in accordance with its charter and bylaws, and that the same is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto affixed by name as Secretary by order of the _____ this
__ day of _____, _____.

_____, Secretary

STATE OF _____
COUNTY OF _____

Subscribed and sworn to before me this the _____ day of _____, 20____.

[SEAL]

Notary Public

[For partnership or limited liability company, use the following certification of all partners/members/managers, whose signatures should all appear below or otherwise attached:]

That the following consist of all [partners/members/managers] of [Contractor]; that the foregoing is a true and correct copy of a Resolution duly adopted at a meeting described above and held in accordance with its charter and bylaws, and that the same is now in full force and effect.

Partner/Member/Manager's name

Partner/Member/Manager's signature

Partner/Member/Manager's name

Partner/Member/Manager's signature

[List all partners/members/managers and include signatures for each. Use additional pages as attachments if necessary.]

STATE OF _____

COUNTY OF _____

Subscribed and sworn to before me this the _____ day of _____, 20____.

[SEAL]

Notary Public

CERTIFICATE OF INSURANCE/INSURANCE ENDORSEMENTS

(Attach)

[See the Appendix C for specific requirements.]

CERTIFICATE OF PAYMENTS

I hereby certify that I am the legal and duly appointed Financial Officer for the Owner of this project and that provision for the payment of the moneys to fall due under this Agreement has been made by appropriation duly made or by bonds or notes duly authorized, as required by the Local Government and Fiscal Control Act.

BY: _____

TITLE: _____

DATE: _____

SCHEDULE 1

IDENTIFICATION OF PARTIES AND THEIR AUTHORIZED REPRESENTATIVES

USE THIS FORM WHEN REVIEWING CONTRACT DOCUMENTATION TO ENSURE THAT PROPER AUTHORIZATION HAS BEEN GRANTED BY EACH PARTY TO SUCH DOCUMENTATION.

The "Owner" is the **Town of Rolesville**, a municipal corporation in North Carolina, and its successors and assigns, and is the party for whom the Work is to be performed. Except as otherwise specifically stated in the Contract Documents, neither the Architect nor the Engineer has authority to bind the Owner. Except as otherwise specified below for various contract documentation, the Owner is represented by and may be bound by the Project Manager or the Project Engineer with respect to day-to-day issues and correspondence.

The "Resident Project Representative" is **Medhat Baselious – Town of Rolesville Capital Projects Manager.**

The "Architect" is the Architect or the Architect's authorized representative as identified in Contract Documents. The Architect is **N/A** and/or any other party identified by the Owner as the Architect for the Work from time to time. In its sole discretion, the Owner may act in the stead of the Architect, exercising any of the rights or responsibilities of the Architect provided under the Contract Documents, so long as the Owner provides notice to the Contractor of its intent to do so. In its sole discretion, the Owner may delegate any of the rights or responsibilities of the Architect to a third party, who, for the purposes of the rights and responsibilities so delegated, shall be governed by the Contract Documents, so long as the Owner provides notice to the Contractor of its intent to do so.

The "Engineer" is **WITHERSRAVENEL (WITHERSRAVENEL) 115 MacKenan Drive, Cary, NC 27511** and/or any other party identified by the Owner as the Engineer for the Work from time to time. In its sole discretion, the Owner may act in the stead of the Engineer, exercising any of the rights or responsibilities of the Engineer provided under the Contract Documents, so long as the Owner provides notice to the Contractor of its intent to do so. In its sole discretion, the Owner may delegate any of the rights or responsibilities of the Engineer to a third party, who, for the purposes of the rights and responsibilities so delegated, shall be governed by the Contract Documents, so long as the Owner provides notice to the Contractor of its intent to do so.

The Engineer's Consultant is **N/A** and any other party to a subcontract with Engineer in connection with the Work.

The parties hereby agree that, notwithstanding any provision in the Contract Documents that appears to or in fact grants one party the right to act on behalf of another party, with respect to the documentation below, those individuals named below, personally or by role or title (or any person at a position "higher" than the individual or role named below) (in either event, an "Authorized Party") shall be the only people entitled to execute the documentation for which that individual or role is named. A position is "higher" than another position in a company if the position is an office authorized by law to bind the entity or the latter position reports (directly or through other parties) to the position in question. When an Authorized Party executes a Contract Document for which it is specified as an Authorized Party, such Authorized Party shall be deemed to be acting on behalf of the party for whom it is executing such document, binding such party as to obligations acknowledged and representations and warranties made in such documentation, and no other proof of agency, authority or delegation of power is necessary to so bind such party by the execution of the document by the Authorized Party.

<u>Document</u>	<u>Party to Execute</u>	<u>Person/Role Having Capacity to Sign</u>
Agreement	Owner	<u>Eric Marsh</u> Town Manager
Contractor		_____ [President or Vice-President]
Application for Payment	Contractor	_____
	Resident Project Representative	<u>Medhat Baselious</u> Capital Projects Manager
	Engineer/Architect	<u>Vladimir Mitchev, PE</u> WITHERSRAVENEL Director of Pavement Operations
	Owner	<u>Eric Marsh</u> Town Manager
Field Order	Engineer/Architect	<u>Vladimir Mitchev, PE</u> WITHERSRAVENEL Director of Pavement Operations
	Owner	<u>Medhat Baselious</u> Capital Projects Manager
	Contractor	_____

<u>Document</u>	<u>Party to Execute</u>	<u>Person/Role Having Capacity to Sign</u>
Work Change Directive	Engineer/Architect	<u>Vladimir Mitchev, PE</u> WITHERSRAVENEL Director of Pavement Operations
	Owner	<u>Medhat Baselious</u> Capital Projects Manager
	Contractor	_____
Change Order (Recommendation and Contract Amendment)	Engineer/Architect	<u>Vladimir Mitchev, PE</u> WITHERSRAVENEL Director of Pavement Operations
	(Recommend)	
	Owner (Review [not approve])	<u>Medhat Baselious</u> Capital Projects Manager
	Contractor (Accept recommendation)	_____
	Contractor (Amend Contract Sum or Price and/or Contract Time or Times)	_____
[Any other documentation]	Owner Amend Contract Sum or Price and/or Contract Time or Times)	
	Engineer/Architect	<u>Vladimir Mitchev, PE</u> WITHERSRAVENEL Director of Pavement Operations
	Owner	<u>Eric Marsh</u> Town Manager
	Contractor	_____

This Schedule 1 may be revised, amended and/or replaced by a new Schedule 1 identifying other individuals or roles entitled to execute the documentation described herein if the replacement Schedule 1 is signed by each of the parties below. The revised Schedule 1 shall be dated and attached to the Contract Documents, and a copy shall be given to all affected parties. To the extent possible, prior versions of Schedule 1 shall be removed from the Contract Documents when a replacement Schedule 1 is approved.

Town of Rolesville:

Contractor:

By: _____
Town Manager

By: _____
[President or Vice-President or Owner]

NOTICE TO PROCEED

TO: CONTRACTOR: _____

ADDRESS: _____

FROM: **Eric Marsh**
Town Manager
502 Southtown Circle
Rolesville, North Carolina 27571

OWNER: Town of Rolesville
Granite Falls Blvd Resurfacing Project

CONTRACT PRICE/SUM: \$ _____

You are hereby notified to commence Work on the referenced project on or before _____, 20____
(the "Commencement Date"), and are to finally and fully complete the Work within **40 CONSECUTIVE CALENDAR DAYS** of the Commencement Date. Your Contract final completion date is therefore
_____, 20____.

The Agreement provides for assessment of liquidated damages for each consecutive calendar day after the above established completion date that the Work remains incomplete to the standard and degree required.

OWNER:

TOWN OF ROLESVILLE, NORTH CAROLINA

By: _____

Name: Eric Marsh

Title: Town Manager

DATE: _____

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SUPPLEMENTARY CONDITIONS

These Supplementary Conditions supplement either [*Specifier shall check one*]:

_____ the "General Conditions of the Contract for Construction", AIA Document A201-2007 (the "AIA"),
or

 X the "Standard General Conditions of the Construction Contract", EJCDC Document No. C-700,
2013 edition (the "EJCDC"),

whichever is applicable (the "General Conditions"), in connection with the Agreement between the Town of Rolesville as Owner and _____ as Contractor, as such General Conditions may have already been amended, revised and supplemented by other Contract Documents (as defined in the General Conditions). The attached forms supplement the General Conditions and the Contract Documents by providing forms of documentation to use in connection with the provisions in the General Conditions and Contract Documents regarding written communication among project team members and regarding memorializing Contract Document changes and changes to the Project or the Work. All capitalized terms used but not defined herein shall have the meanings ascribed to them in the General Conditions.

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APPLICATIONS FOR PROGRESS PAYMENT

Each Application for progress payment must include, as a minimum, the following information:

1. Progress payment cover letter as included on page 00600-4.
2. Town of Rolesville Cover Sheet as included on page 00600-5.
3. Itemized quantity sheet(s) as included on page 00600-6.
4. A Certificate of Sales Tax Paid as included on page 00600-7.
If no sales tax has been paid in the period, then a certificate should be included stating that no sales tax was paid.

ONLY THOSE PARTIES AUTHORIZED by Section 00500, Schedule 1, of the Contract Documents to execute these forms on behalf of the parties listed in each form may execute the attached forms.

*** * * PUT ON CONTRACTOR'S LETTERHEAD * * ***

DATE: _____

TO: Town of Rolesville

RE: _____

We hereby certify that the labor and materials listed on this request for payment have been used in the construction of this Work, or that all materials included in this request for payment and not yet incorporated into the construction are now on the site or stored at an approved location with proper insurance to protect these stored materials; and that all lawful charges for labor, materials and the like, covered by previous Certificates of Payment have been paid and that all other lawful charges on which this request for payment is based have been paid for in full or will be paid for in full from the funds received in payment of this request within ten (10) calendar days from receipt of this partial payment from the OWNER; and that all setoffs, fines owed by Contractor (to third parties or to Owner), Liquidated Damages and other reductions in the amount due to Contractor have been properly accounted for in the attached Application for Payment.

CONTRACTOR: _____

BY: _____

TITLE: _____

State of _____
County of _____

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

Notary Public (Seal)

My Commission Expires

APPLICATION FOR PAYMENT

Town of Rolesville, North Carolina Project _

Contractor Project No. _

Period Payment No. _

The undersigned Contractor certifies that to the best of its knowledge and belief, all items, units, quantities and prices of all work and material indicated on sheet(s) of this periodic estimate are correct; that all Work has been performed and Materials supplied in full accordance with the terms and conditions of the construction Contract Documents between the undersigned as Contractor and the Town of Rolesville as Owner, dated _ , _

and all authorized changes thereto; that the following is a true and correct statement of the Contract amount up to and including the last day of the period covered by this estimate; and that no part of the "Amount Due This Estimate" has been received.

Total Contract Amount, Including Change Orders	-	
Total Amount Earned, To Date	_____	- % Earned
Total Setoffs, Fines, Liquidated Damages, To Date	-	
Total Owed To Date Minus Setoffs, Etc. (Net Earned)	-	

(Proceed if positive; else Payment Application is to account for reduction in setoffs, fines Liquidated Damages and the like: _____)

Retainage	_____	
Total Net Earned Less Retainage	-	
Total Previously Approved	_____	
Amount Due This Estimate	_____	
(Equal to Amount Unpaid From Previous Estimate _		minus Current Amount Due
Balance to Finish, Including Retainage	-	

The Contractor further certifies that all claims outstanding as of this date against the undersigned as Contractor for labor, materials, and expendable equipment employed in the performance of said Contract up to the date of this estimate have been paid in full accordance with the requirements of this Contract.

CONTRACTOR BY TITLE DATE_

APPROVAL FOR PAYMENT: [Check Section 00500, Schedule 1, for parties authorized to execute below.]

Resident Project Representative Engineer/Architect Town of Rolesville

APPLICATION FOR PAYMENT
Town of Rolesville, North Carolina

PAYMENT NO. _
PROJECT _ PERIOD _
CONTRACTOR _

ITEM NO	DESCRIPTION OF ITEMS	UNIT	UNIT PRICE	BID QUANTITIES	CURRENT QUANTITY	QUANTITY TO DATE	CURRENT AMOUNT	CONTRACT AMOUNT	% COMP	AMOUNT EARNED TO DATE

TOTAL EARNED TO DATE

Minus TOTAL PAID TO DATE

Minus RETAINAGE

Minus OTHER REDUCTIONS

Equals AMOUNT DUE THIS ESTIMATE

-

-

CERTIFICATE OF SALES TAX PAID

PAYMENT NO. _____

PROJECT _____

OWNER - TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

CONTRACTOR _____

FOR PERIOD _____

TO _____

Note: Only items that become part of the building/project that the Town of Rolesville owns or leases are eligible to be listed. The contractor may not include in the statement items they purchased and used to fulfill the contract but did not become part of the actual constructed project. Items such as scaffolding, concrete forms, fuel for the operation of machinery and equipment, tools, equipment repair parts, equipment rentals and blueprints are not to be included in this statement.

As of January 1, 2017, Repair, Maintenance and Installation (RMI) projects are subject to tax for labor and materials.

VENDOR	MATERIAL PURCHASED	VENDOR'S ADDRESS	INVOICE # (MUST BE ATTACHED)	DATE	INVOICE AMOUNT (Pre-tax)	TAXES PAID						COUNTY NAME
						NC STATE TAX (4.75 %)	Other State Tax Paid	County Tax (2.00%)	County Tax (2.25%)	TRANSIT TAX (0.50%)	TOTAL TAX BILL	
											-	
											-	
											-	
											-	
											-	
											-	
											-	
											-	
											-	
TOTAL TAX						-	-	-	-	-	-	

I hereby certify that the above listed vendors were paid sales tax upon purchases of **building materials** during the period covered by this construction estimate and the property upon which such taxes were paid was or will be used in the performance of this contract. **No tax on purchases as listed above in yellow highlighted area is included in this certificate. All of the materials listed above became a part of or are annexed in the above referenced construction project.**

By _____
Signature

Title

_____, being duly sworn, certifies that the foregoing statement of sales taxes paid in connection with the referenced Contract is true to the best of his or her knowledge and belief.

Sworn to before me this _____ day of _____, 20 ____

Notary Public

My Commission expires _____, 20 ____

Example of filled in report

CERTIFICATE OF SALES TAX PAID

PAYMENT NO. 4

PROJECT Make an example

OWNER - TOWN OF ROLESVILLE, WAKE COUNTY, NORTH CAROLINA

CONTRACTOR Genesis

FOR PERIOD October 1, 2018

TO December 31, 2018

Note: Only items that become part of the building/project that the Town of Rolesville owns or leases are eligible to be listed. The contractor may not include in the statement items they purchased and used to fulfill the contract but did not become part of the actual constructed project. Items such as scaffolding, concrete forms, fuel for the operation of machinery and equipment, tools, equipment repair parts, equipment rentals and blueprints are not to be included in this statement.

As of January 1, 2017, Repair, Maintenance and Installation (RMI) projects are subject to tax for labor and materials.

						TAXES PAID						COUNTY NAME
VENDOR	MATERIAL PURCHASED	VENDOR'S ADDRESS	INVOICE # (MUST BE ATTACHED)	DATE	INVOICE AMOUNT (Pre-tax)	NC STATE TAX (4.75 %)	Other State Tax Paid	County Tax (2.00%)	County Tax (2.25%)	TRANSIT TAX (0.50%)	TOTAL TAX BILL	
Yuneedit	Duct work	1 Way St,YourCity, PA	9876	12/13/2018	100.00	4.75	-	2.00	-	0.50	7.25	Wake
Yordered	Steel	2 Way St, MyCity	6789	12/1/2018	10,000.00	-	600.00	-	-	-	600.00	Lancaster Co, Fla
More Store	Hardwood Flooring	1 Broad Rd., Durham, NC	4321	11/20/2018	1,200.00	57.00	-	-	27.00	6.00	90.00	Durham
Store IT	Thermostat	25 Moriah Rd, Durham, NC	3452	11/1/2018	50.00	2.38	-	-	1.13	0.25	3.75	Orange Co
Buzz Feed	Electrical Box	1 Pig Ln, Coates, NC	2436	12/5/2018	90.00	4.28	-	-	2.03	-	6.30	Harnett Co
											-	
											-	
											-	
											-	
TOTAL TAX						68.40	600.00	2.00	30.15	6.75	707.30	

I hereby certify that the above listed vendors were paid sales tax upon purchases of **building materials** during the period covered by this construction estimate and the property upon which such taxes were paid was or will be used in the performance of this contract. **No tax on purchases as listed above in yellow highlighted area is included in this certificate. All of the materials listed above became a part of or are annexed in the above referenced construction project.**

By _____
Signature

Title

_____, being duly sworn, certifies that the foregoing statement of sales taxes paid in connection with the referenced Contract is true to the best of his or her knowledge and belief.

Sworn to before me this _____ day of _____, 20 ____

My Commission expires _____, 20 ____

Notary Public

FIELD ORDER

FIELD ORDER NO.: _

DATE: _

PROJECT: _

RE: _

TO CONTRACTOR: This Field Order is issued to interpret/clarify the Contract Documents, order minor changes in the work, and/or memorialize trade-off agreements. Both parties hereby agree that the work described by this Field Order is to be accomplished without change in Contract Sum or Price, Contract Time or Times, and/or claims with other costs.

DESCRIPTION: _

ATTACHMENTS: _

REFERENCES: _

RECOMMENDED:

APPROVED:

ACCEPTED:

By: _

By: _

By: _

Engineer/Architect
(Authorized Signature*)

Owner
(Authorized Signature*)

Contractor
(Authorized Signature*)

Date: _

Date: _

Date: _

[Authorized Signature*: Check Section 00500, Schedule 1, for parties authorized to execute above.]

Distribution:

WORK CHANGE DIRECTIVE

WORK CHANGE DIRECTIVE NO.: _

DATE: _

Project: _

Contractor _

Engineer/Architect _

You are directed to proceed promptly with the following change(s): Description: _

Purpose of Work Change Directive: _

Attachments (List documents supporting change): _

If a claim is made that the above change(s) have affected the Contract Sum or Price or the Contract Time or Times, any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method of determining change in Contract
Sum or Price:

Unit Prices ()

Lump Sum

Other _

Method of determining change in Contract
Time or Times:

Contractor's records

Engineer's records

Other _____

Estimated (increase/decrease) in Contract Price:

Estimated (increase/decrease) in Contract
Times:

Substantial Completion: days;

Ready for final payment: days;

If the change involves an increase, the estimated price and times are not to be exceeded without further authorization.

RECOMMENDED:

By: _

Engineer/Architect
(Authorized Signature*)

Date: _

APPROVED:

By: _

Owner
(Authorized Signature*)

Date: _

ACCEPTED:

By: _

Contractor
(Authorized Signature*)

Date: _

[Authorized Signature*: Check Section 00500, Schedule 1, for parties authorized to execute above.]

WORK CHANGE DIRECTIVE INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed for use in situations involving changes in the Work which, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Sum or Price or the Contract Time or Times. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a possible change in the Contract Sum or Price or the Contract Time or Times a Field Order may be used.

B. COMPLETING THE WORK CHANGE DIRECTIVE FORM

Engineer or Architect initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer or Architect and Contractor, Engineer or Architect completes the following:

METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT SUM OR PRICE: Mark

the method to be used in determining the final cost of Work involved and the estimated net effect on the Contract Sum or Price. If the change involves an increase in the Contract Sum or Price and the estimated amount is approached before the additional or changed Work is completed, another Work Change Directive must be issued to change the estimated price or Contractor may stop the changed Work when the estimated price is reached. If the Work Change Directive is not likely to change the Contract Sum or Price, the space for estimated increase (decrease) should be marked "Not Applicable."

METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIME OR TIMES: Mark

the method to be used in determining the change in Contract Time or Times and the estimated increase or decrease in Contract Time or Times. If the changes involves an increase in the Contract Time or Times and the estimated times are approached before the additional or changed Work is completed, another Work Change Directive must be issued to change the times or Contractor may stop the changed Work when the estimated times are reached. If the Work Change Directive is not likely to change the Contract Time or Times, the space for estimated increase (decrease) should be marked "Not Applicable."

Once Engineer or Architect has completed and signed the form, all copies should be sent to Owner for authorization because neither Engineer nor Architect alone has the authority to authorize changes in the Contract Sum or Price or the Contract Time or Times. Once authorized by Owner, a copy should be sent by Engineer or Architect to Contractor. The Contract Sum or Price and the Contract Time or Times may only be changed by Change Order signed by Owner and Contractor with Engineer's or Architects' recommendations. *Furthermore, only those parties specified by Section 00500, Schedule 1, of the Contract Documents as being authorized to sign the Work Change Directive Form on behalf of each party may execute a valid Work Change Directive Form.*

Once the Work covered by this directive is completed or final cost and times are determined, Contractor should submit documentation for inclusion in a Change Order.

THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT SUM OR PRICE OR THE CONTRACT TIME OR TIMES. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.

CHANGE ORDER

CHANGE ORDER NO.: _

DATE: _

Project: _

Contractor: _

Engineer/Architect: _

CONTRACTOR is directed to make the following changes in the Contract Documents.

Description: _

Attachments: _

CHANGE IN CONTRACT SUM OR PRICE:	CHANGE IN CONTRACT TIME OR TIMES:
Original Contract Price	Original Contract Times
\$ _	Final Completion: __ days or dates
Net change from previous Change Orders No. _ to No. : \$ _	Net change from previous Change Orders No. _ to No. : days
Contract Sum or Price prior to this Change Order \$ _	Contract Times prior to this Change Order Final Completion: __ days or dates
Net Increase (decrease) of this Change Order \$ _	Net Increase (decrease) of this Change Order _____ days
Contract Sum or Price with all approved Change Orders \$ _	Contract Times with all approved Change Orders Final Completion: __ days or dates

RECOMMENDED:

REVIEWED:

ACCEPTED:

By: _

By: _

By: _

Engineer/Architect

Town of Rolesville Department

Contractor

Director Title

(Authorized Signature*)

(Authorized Signature*)

(Authorized Signature*)

Date: _

Date: _

Date: _

[Authorized Signature*: Check Section 00500, Schedule 1, for parties authorized to execute above.]

CHANGE ORDER NO.: _

Page _ of _

The adjustment in Contract Sum or Price and/or Contract Time or Times stated in this Change Order shall comprise the total price and/or time adjustment due or owed the CONTRACTOR for the work or changes defined in this Change Order. By executing the Change Order, the CONTRACTOR acknowledges and agrees that the stipulated price and/or time adjustments include the costs and delays for all work contained in the Change Order, including costs and delays associated with the interruption of schedules, extended overheads, delay, and cumulative impacts or ripple effect on all other non-affected work under this Contract. Signing of the Change Order constitutes full and mutual accord and satisfaction for the adjustment in Contract Sum or Price or Contract Time or Times as a result of increases or decreases in costs and time of performance caused directly and indirectly from the change, subject to the current scope of the entire work as set forth in the Contract Documents. Acceptance of the waiver constitutes an agreement between OWNER and CONTRACTOR that the Change Order represents an equitable adjustment to the Contract, and that CONTRACTOR waives all rights to file a claim on this Change Order after it is properly executed.

IN WITNESS WHEREOF, the undersigned have caused the execution hereof:

CONTRACTOR (shall be authorized to execute contract in accordance with Section 00500, Schedule 1):

ATTEST:

Secretary

[Corporate Seal]

By: _
Name:
Title: _
Address: _
Date: _

OWNER:

TOWN OF ROLESVILLE

By: _
Name: authorized signature per SP-34
Title: title
Date: _

CHANGE ORDER INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling Contract changes that affect the Contract Sum or Price or the Contract Time or Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect the Contract Sum or Price or the Contract Time or Times.

Changes that affect the Contract Sum or Price or the Contract Time or Times should be promptly covered by a Change Order. The practice of a cumulating change order items to reduce the administrative burden may lead to unnecessary disputes.

If milestones have been listed, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Sum or Price or the Contract Time or Times, a Field Order may be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer or Architect initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer or Architect has completed and signed the form, all copies should be sent to Contractor for approval. If the Contractor is a Corporation, an officer (President or Vice-President) of the corporation must sign the change order. If an agent other than an authorized officer of the Corporation signs, a Resolution giving authorization from the Board of Directors must be attached. *In any event, only those parties specified by the 00500 Agreement, Schedule 1, as being authorized to sign the Change Order Form on behalf of each party may execute a valid Change Order Form.* After approval by Contractor, all copies should be sent to Owner for approval. Engineer or Architect should distribute executed copies after approval by Owner.

If a change only applies to the Contract Sum or Price or to the Contract Time or Times, cross out the part of the tabulation that does not apply.

CONTRACTOR'S RELEASE OF OWNER PRIOR TO FINAL PAYMENT

The Contractor, known as _____

for the construction of Project: _____,

hereby and forever releases the Town of Rolesville (Owner), its officers, agents, and [Engineers/Architects]:
_____, from all past, present, and future claims and liability to
the Contractor for anything done or furnished for, relating to, or for any act of neglect of the Owner, its engineers,
or any persons relating to or affecting the work.

Contractor's Certification:

Contractor: _____

Authorized Representative: _____

Date: _____

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

PROJECT: _____

OWNER: _____

CONTRACTOR: _____

CONTRACT DATE: _____

TO: _____

In accordance with the provisions of the Contract between the Town of Rolesville (Owner), and the Contractor,
known as _____, the Surety Company, known as
_____, on bond of Contractor, hereby approves of the final
payment to Contractor, and agrees that final payment to Contractor shall not relieve the Surety Company
of any of its obligations to the Owner as set forth in said Surety Company's bond.

In witness whereof, the Surety Company has hereunto set its hand this _____ day of _____ in
the year _____.

Surety Company

Signature of Authorized Representative

[Seal]

Typed Name and Title of Authorized Representative

FINAL RECEIPT

Contract: _

Received this _ day of _ , 20 as full and final payment of the cost of all improvements provided for in the foregoing Contract the sum of _____ Dollars and _____ Cents, (\$ _____), in cash (directly or as setoff against fines, Liquidated Damages, or other amounts owed to the Owner), being the full amount accruing to the undersigned by virtue of said Contract, said cash covering and including full payment for all extra work and material furnished by the undersigned in the construction of said improvements, and all incidentals thereto, and the undersigned hereby releases the said _ from all claims whatsoever growing out of the said Contract.

These presents are to certify that all persons doing work upon or furnishing materials or supplies for said improvements under the foregoing Contract have been paid in full.

The undersigned further certifies that all taxes imposed by Chapter 212, North Carolina Statutes (Sales and Use Tax Act), as amended, have been paid and discharged.

CONTRACTOR

By: _____ (Seal)

(Typewritten Name)

STATE OF _
COUNTY OF _____

Subscribed and sworn to before me this _____ day of _____, 20 .
the

[SEAL]

Notary Public

E-Verify Requirements. Contractor shall comply with the requirements of Article 2 of Chapter 64 of the General Statutes of North Carolina. Further, if contractor utilizes a subcontractor, contractor shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the General Statutes of North Carolina.

Iran Divestment Act Certification. Contractor hereby certifies that Contractor, and all subcontractors, are not on the Iran Divestment List ("List") developed by the North Carolina State Treasurer pursuant to Article 6E of Chapter 147 of the General Statutes of North Carolina. Contractor shall not utilize any subcontractor that is identified on the List. The Divestment List can be found on the State Treasurer's website at the address:

<https://www.nctreasurer.com/office-state-treasurer/divestment-and-do-not-contract-rules#iran:-divestment-and-do-not-contract-resources>

Companies Boycotting Israel Divestment Act Certification. Contractor hereby certifies that Contractor, and all subcontractors, are not on the list of companies engaged in a boycott of Israel ("List") developed by the North Carolina State Treasurer pursuant to Article 6G of Chapter 147 of the General Statutes of North Carolina. Contractor shall not utilize any subcontractor that is identified on the List. The "List" can be found on the State Treasurer's website at the address:

<https://www.nctreasurer.com/office-state-treasurer/divestment-and-do-not-contract-rules#iran:-divestment-and-do-not-contract-resources>

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

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



These General Conditions have been prepared for use with the Agreement Between Owner and Contractor for Construction Contract (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC's Guide to the Preparation of Supplementary Conditions (EJCDC® C-800, 2013 Edition). The full EJCDC Construction series of documents is discussed in the Commentary on the 2013 EJCDC Construction Documents (EJCDC® C-001, 2013 Edition).

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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

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NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer

has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and

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

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

- A. *Reporting Discrepancies:*
 - 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

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

4.02 *Starting the Work*

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

4.03 *Reference Points*

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

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. 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, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. abnormal weather conditions;
 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

- 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
- 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part

by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
 - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 2. is of such a nature as to require a change in the Drawings or Specifications; or
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
 - d. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is

maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
 - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 - 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 2. claims for damages insured by reasonably available personal injury liability coverage.
 3. 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.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Broad form property damage coverage.
 4. Severability of interest.
 5. Underground, explosion, and collapse coverage.
 6. Personal injury coverage.
 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against 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 automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Contractor's pollution liability insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result

of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

- G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
 - 4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the

policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and

guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

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

7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and

- 2) available engineering, sales, maintenance, repair, and replacement services.
- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.

- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. 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.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.

O. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

7.09 *Taxes*

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

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

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

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
 - C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
 - D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
 - E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
 - F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
 - G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *Safety Representative*

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

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or

exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

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

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to

provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples:*

- a. Contractor shall submit the number of Samples required in the Specifications.
- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.

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

C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.

D. *Engineer's Review:*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.

- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

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

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

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

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

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

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during

or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

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

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

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

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable

thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes

other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

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

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.

E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

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

- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

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

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

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

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, 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, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 - 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
- C. *Review of Applications:*
 - 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
 - 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due:*

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

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
- 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

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

15.06 *Final Payment*

- A. *Application for Payment:*
 - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of

inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, 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, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation,

including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, 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 complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses,

and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. 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, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract 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.

18.03 *Cumulative Remedies*

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

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

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

18.07 *Controlling Law*

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

18.08 *Headings*

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

TOWN OF ROLESVILLE

GRANITE FALLS BLVD RESURFACING PROJECT

TECHNICAL SPECIFICATIONS

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SECTION 01000
DEFINITIONS, ABBREVIATIONS and REFERENCE STANDARDS

PART 1 - DEFINITIONS

- A. CONTRACTOR – The successful Bidder to whom a contract has been awarded and who has properly executed the contract documents.
- B. EASEMENT – An interest in land owned by another that entitles its holder to a specific use. Or a property right to use or control real property of another.
- C. ENGINEER – The Director of Engineering of the Town of Holly Springs or other representative duly authorized by the Director of Engineering.
- D. INSPECTOR – The Lead Development Inspector, a Construction Inspector, or other representative duly authorized by the Director of Engineering.
- E. ENGINEER’S CONSULTANT – Duly authorized representative from hired firm.
- F. INVERT - The lowest point in the internal cross section of a pipe or other culvert.
- G. OWNER – The Town of Holly Springs, a Municipal Corporation of the State of North Carolina.
- H. PLANS – The approved design drawings that show the work to be done.
- I. RIGHT OF WAY - The area that encompasses public streets, sidewalks and utility strips.
- J. SUBGRADE - That portion of the roadbed prepared as a foundation for the pavement structure.

PART 2 – ABBREVIATIONS The following is a partial list of abbreviations that may appear in the specifications, plans, and/or estimates and their definitions.

- 1. A.B.C. aggregate base course
- 2. A.B.S. Acrylonitrile Butadiene Styrene
- 3. A.F.F. above finished floor
- 4. AWG American Wire Gauge
- 5. B.C.Y bank cubic yard
- 6. BHP brake horsepower
- 7. BOC back of curb
- 8. BV butterfly valve
- 9. C/O sewer clean out
- 10. °C degrees Centigrade
- 11. C.F. cubic feet
- 12. CMP corrugated metal pipe
- 13. CV check valve
- 14. cy or cu. yd. cubic yard
- 15. DIP ductile iron pipe
- 16. EI or EIT Engineer Intern
- 17. EIP existing iron pipe
- 18. EOP edge of pavement
- 19. °F degrees Fahrenheit
- 20. FES flared end section (pipe)
- 21. ft. foot
- 22. gpd gallons per day

23. gpm	gallons per minute
24. GV	gate valve
25. HDPE	high density polyethylene
26. HP	horsepower
27. ID	internal diameter
28. in.	inches
29. inv	invert
30. lbs.	pounds
31. L.F.	Linear Feet
32. MH	manhole
33. max.	maximum
34. min.	minimum
35. M.S.F	thousand square feet
36. MSL	mean sea level
37. MUTCD	Manual on Uniform Traffic Control Devices
38. NCDENR	North Carolina Department of Environment and Natural Resources
39. NCDOT	North Carolina Department of Transportation
40. NPDES	National Pollutant Discharge Elimination System
41. O.C.	on center
42. OD	outside diameter
43. OHPL	overhead power line
44. OSHA	Occupational Safety and Health Act
45. oz.	ounce
46. PAM	Polyacrylamide
47. P.C.	point of curvature
48. P.E.	Professional Engineer, registered in North Carolina
49. pH	measure of the acidity or alkalinity of a solution
50. P.L.S.	Professional Land Surveyor, registered in North Carolina
51. ppm	parts per million
52. psi	pounds per square inch
53. PL	property line
54. P.T.	point of tangency
55. PVC	polyvinyl chloride
56. P.V.C.	point of curvature on vertical curve
57. P.V.T.	point of tangency on vertical curve
58. Qmax	maximum discharge
59. Qmin	minimum discharge
60. R. or Rad.	radius
61. RCP	reinforced concrete pipe
62. RH	relative humidity
63. SCS	Soil Conservation Service
64. sec.	second
65. S.F. or sq. ft.	square feet
66. S.Y. or sq. yd.	square yard
67. TDH	total dynamic head
68. Typ.	typical
69. UPL	underground power line
70. VAC	volts (alternating current)

- 71. VDC volts (direct current)
- 72. WM water meter
- 73. WV water valve
- 74. yd yard

PART 3 – REFERENCE STANDARDS

All materials, products and procedures incorporated into the work shall be in strict accordance with the following codes, standards and specifications. Wherever reference is made to any published standard, code or standard specification, it shall mean the latest edition in effect at the invitation for bids.

- A. American Association of State Highway and Transportation Officials (AASHTO)
- B. American National Standards Institute (ANSI)
- C. American Society of Testing and Materials (ASTM)
- D. American Water Works Association (AWWA)
- E. Ductile Iron Pipe Research Association (DIPRA)
- F. Manual on Uniform Traffic Control Devices for Streets and Highways, as prepared by the National Advisory Committee on Uniform Traffic Control Devices (MUTCD)
- G. North Carolina Department of Transportation (NCDOT), January 2024 “Standard Specifications for Roads and Structures”, may be obtained from NCDOT Design Services Unit, Manual Distribution, 1591 Mail Service Center Raleigh, NC 27699-1591, Telephone: (919) 707-6944, Website: <http://www.ncdot.gov>
- H. National Pre-Cast Concrete Association (NPCA)
- I. North Carolina Department of Environment Quality (NCDEQ)
- J. National Electrical Code (NEC)
- K. National Electrical Manufacturers Association (NEMA)
- L. Natural Resources Conservation Service (NRCS [formerly “SCS”])
- M. New York Department of Transportation (NYDOT)
- N. Occupational Safety and Health Act (OSHA)
- O. Soil Conservation Service (SCS)
- P. Underwriters Laboratories, Inc. (UL)

END OF SECTION 01000

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SECTION 02000 SUBMITTALS

PART 1 – SUBMITTALS

A. General Submittal Requirements

- i. Submittals shall meet the requirements of the General Conditions and Supplementary Conditions.
- ii. The following submittals will be required for this project:
 - Valve adjustment and replacement
 - Manhole adjustments and replacement
 - Catch Basin adjustments and replacement
 - Thermoplastic Pavement Markings
 - Asphalt & ABC (Aggregate Base Course) Per NCDOT Requirements
 - Concrete Curb & Gutter and Sidewalk
 - Truncated Domes
- iii. The Contractor shall transmit submittals in sufficient time to allow thorough review by the Engineer.
- iv. Submittals shall be accompanied by a letter of transmittal containing the date, project name, Contractor's name, supplier, manufacturer, number and title of submittal, notification of exceptions and/or deviations from the Contract requirements, and any other pertinent data to facilitate review.
- v. The Contractor shall thoroughly check all submittals for accuracy and conformance to the intent of the Contract Documents, and make any necessary changes, prior to submitting them to the Engineer. All submittals shall bear the Contractor's certification stating that they have been so checked. **This certification shall include the following statement: "By this Submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers, and similar data and I have checked and coordinated each item with other applicable approved shop drawings and all contract requirements." SUBMITTALS WITHOUT THE CONTRACTOR'S CERTIFICATION WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW.**
- vi. No material shall be ordered, fabricated or shipped or any work performed until the Engineer returns the required submittal to the Contractor with satisfactory review indicated.
- vii. The Engineer's review of the Contractor's submittals shall in no way relieve the Contractor of any responsibility under the Contract. An acceptance of a submittal shall be interpreted to mean that the Engineer has no specific objections to the submitted material, subject to conformance with the Contract Documents.

B. Shop Drawings

- i. The Contractor shall submit to the Engineer for review shop drawings for all fabricated work and for all manufactured items for which shop drawings are required elsewhere in the project manual.

- ii. Where manufacturer's publications in the form of catalogs, brochures, illustrations or other data sheets are submitted, items for which approval is requested shall be specifically indicated. Submittals showing only general information shall not be acceptable.
- iii. Within ten (10) days after notice to proceed, the contractor shall submit three (3) copies of his preliminary schedule of shop drawing submittals to the Engineer for approval.

C. Layout and Installation Drawings

- i. The Contractor shall submit to the Engineer, for review, layout and installation drawings for all pipes, valves, fittings, sewers, manholes, electrical, conduits, etc. to be provided under this contract.
- ii. Within ten (10) days after notice to proceed, the contractor shall submit three (3) copies of his preliminary schedule of layout and installation drawing submittals to the Engineer for approval

PART 2 – OTHER REQUIREMENTS

A. Progress Schedule

- i. The Contractor shall submit three (3) copies of its proposed progress schedule to the Engineer for review and approval, in accordance with the General Conditions.
- ii. Progress schedule shall be updated monthly, with three (3) copies submitted to the Engineer with the application for payment. The Engineer may withhold progress payments until such time as the schedule or revised schedule is received.
- iii. Progress schedule shall be prepared in the form of a horizontal bar chart showing in detail the proposed sequence of work. Schedule shall be time scaled showing start and completion dates for each stage of the work. The schedule shall account for all subcontractors. The schedule shall provide for proper sequence of construction considering various crafts, purchasing time, submittal review, material delivery, equipment fabrication and similar time-consuming factors. The schedule shall show as a minimum, earliest starting, earliest completion, latest starting, latest completion, and total float for each task or item.

B. List of Subcontractors

- i. The Contractor shall submit to the Engineer for review, prior to the preconstruction conference, a listing of all subcontractors. This submittal shall include a description of the work to be performed by each subcontractor, the estimated value of such work, and the subcontractor's experience performing similar work. This list shall be kept current throughout the project duration. All subcontractors shall be approved by the Owner

END OF SECTION 02000

SECTION 03000 ASPHALT CONCRETE

PART 1 - GENERAL

- A. The work covered by this section consists of the installation and/or removal of aggregate base course, asphalt concrete surface course, asphalt concrete intermediate course, asphalt concrete base course, asphalt tack coat, asphalt prime coat, Geotextile Interlayer, Asphalt Surface Treatments, and utility adjustments.
- B. No base material shall be placed on a roadway until the storm sewer, subgrade, utilities and all appurtenances have been inspected and approved by the Inspector.
- C. The latest revision of the "Standard Specifications for Roads and Structures" of the North Carolina Department of Transportation (NCDOT) shall apply to this project unless otherwise specified herein.
- D. Before the asphalt surface course is placed on the road, the aggregate base course shall be inspected and approved by the Inspector.

PART 2 - MATERIALS

- A. Aggregate Base Course:
 - i. This base course shall consist of an approved coarse aggregate produced in accordance with Section 520 in the NCDOT "Standard Specifications for Roads and Structures." All materials, construction requirements and other provisions in Section 520 shall apply. The subgrade for the coarse aggregate base course shall be constructed in accordance with the requirements of these Specifications.
 - ii. The subgrade shall be thoroughly compacted and constructed to the line, grade, and cross section on the plans or as directed by the Engineer. Before placing the base course, the subgrade shall be inspected and approved by the Inspector, and backfilling behind the curb shall be complete.
 - iii. The base course material shall be placed in lifts not to exceed eight (8) inches. Each layer shall be graded to the required section and compacted to at least one hundred percent (100%) of the density as determined by AASHTO T180. The base material shall be compacted at a moisture content which is approximately required to produce the maximum density.
 - iv. After final shaping and compacting, the Inspector will check the surface of the base for conformance to grade and typical section. The thickness of the base shall be within a tolerance of plus or minus 1/2 inch of the base thickness required by the plans.
 - v. Basis of Payment: Payment will be made under the contract unit price bid per square yard at the specified thickness for the actual amount of "Aggregate Base Course" used to construct the roadway base to the line, grade, and cross section indicated on the plans. The price of aggregate base course installed under curb and gutter shall be included in the price per linear foot for Curb and Gutter.
- B. Superpave - Asphalt Concrete Surface Course: Type S 4.75 A, S 9.5 B, S 9.5 C & S9.5D:
 - i. The Superpave surface course shall be Asphalt Concrete Surface Course, Type S 4.75 A, S 9.5 B, S 9.5 C, and S9.5D shall be produced, delivered, placed, tested, compacted, and accepted in accordance with Sections 609 and 610 of the most current version of the NCDOT "Standard Specifications for Roads and Structures."
 - ii. Sections of the newly finished pavement shall be protected from traffic until they have become properly hardened. Finished surfaces of the base shall be checked with a 10-foot straightedge, applied parallel to the center of the pavement, and any places that vary more than one-eighth (1/8) of an inch as measured from the bottom of the straightedge to the finished course shall be corrected.
- C. Superpave - Asphalt Concrete Intermediate Course: Type I 19.0 C, & I 19.0 D:

- i. The Superpave intermediate course shall be Asphalt Concrete Intermediate Course, Type I 19.0 C, or I 19.0 D shall be produced, delivered, placed, tested, compacted, and accepted in accordance with Sections 609 and 610 of the most current version of the NCDOT "Standard Specifications for Roads and Structures."
- D. Superpave - Asphalt Concrete Base Course: Type B 25.0 C:
- E. The Superpave base course shall be Asphalt Concrete Base Course, Type B 25.0 C shall be produced, delivered, placed, tested, compacted, and accepted in accordance with Sections 609 and 610 of the most current versions of the NCDOT "Standard Specifications for Roads and Structures." "Pavement Repair Patch"
 - i. Where it is necessary to open cut along or across streets with asphalt surfaces, the pavement shall be replaced with seven (7) inches of Superpave - Asphalt Concrete Intermediate Course: Type I 19.0 C and two (2) inches of Superpave - Asphalt Concrete Surface Course: Type S 9.5 B or S 9.5 C, as directed by the Engineer. The replacement surface and/or base shall extend a minimum of 1 foot on each side of the excavated opening. The thickness of the replacement material shall be sufficient to provide a base and surface of equivalent strength to the undisturbed base and surface. The replaced pavement shall meet all applicable material and installation specifications outlined elsewhere in the Contract Documents.
- F. Asphalt Tack Coat:
 - i. The tack coat shall be asphalt or asphalt cement and shall meet the general, material, and construction specifications as specified in Section 605 of the NCDOT "Standard Specifications for Roads and Structures." The tack coat shall be uniformly applied at a rate of three hundredths (0.03) gallons per square yard and shall be applied beneath each layer of asphalt plant mix base or pavement to be placed except where a prime coat has been applied, unless otherwise approved or specified by the Engineer. There will be no direct payment for the work covered by this section.
- G. Asphalt Prime Coat:
 - i. The prime coat shall be asphalt and shall meet the general, material, and construction specifications as specified in Section 600 of the NCDOT "Standard Specifications for Roads and Structures." The prime coat shall be uniformly applied, in accordance with the referenced specifications, on existing non-asphalt base courses prior to placement of asphalt pavement, unless otherwise approved or specified by the Engineer. There will be no direct payment for the work covered by this section.
- H. Asphalt Plant Mix:
 - i. The production, delivery, and placement of all types of asphalt plant mixed bases, intermediate, and surface courses shall conform to Sections 609 and 610 of the most current version of the NCDOT "Standard Specifications for Roads and Structures." There will be no direct payment for the work covered by this section.

PART 3 - PAYMENT FOR ASPHALT CONCRETES

- A. Basis of Payment:
 - i. Payment of Asphalt Concrete Surface Course (Type S 4.75 A, S 9.5 B, S 9.5 C, or S 9.5 D), Asphalt Concrete Intermediate Course (Type I 19.0 C, & I 19.0 D), and Asphalt Concrete Base course (Type B 25.0 C) shall be paid at the contract unit price bid per square yard at the thickness designated or as indicated in the Itemized Proposal. The bid price shall be full compensation for all furnishing, mixing, hauling, placing and compacting all materials, and for all labor, equipment and incidentals necessary to complete the work.
 - ii. Pavement repair patches shall be paid at the contract unit price bid per linear foot or per square yard for "Pavement Repair Patch" as indicated in the Itemized Proposal. The unit price for pavement repair shall be full compensation for all work necessary to repair the pavement and maintain the roadway. The unit price shall include all pavement repair(s) both temporary and permanent, furnishing, hauling, placing, and

shaping the asphalt pavement to produce a uniform, smooth driving surface. No additional payments will be issued to replace pavement damaged by the Contractor outside of the standard trench opening as defined by the Contract Documents.

- iii. If the thickness of the asphalt concrete is suspected to be less than specified on the plans and Itemized Proposal, the Engineer shall have corings performed to determine the thickness in place. Corings shall be made at five hundred (500) foot intervals or as determined by the Engineer. If the Contractor desires additional corings, the Engineer's material testing firm shall perform additional corings at the Contractor's expense. If the asphalt concrete is found to be thicker than specified, the Contractor shall not be compensated for asphalt concrete placed to a thickness above and beyond the specified thickness. If the asphalt concrete is found to be thinner than specified, the Engineer shall determine if: 1) more asphalt concrete must be placed to bring the thickness to the specified thickness or 2) the unit price shall be adjusted down to compensate the Owner for material which was not placed. The method of adjustment will be based on the ratio of thickness installed to the thickness specified.

PART 4 - CONSTRUCTION METHODS

A. Subgrade:

- i. Preparation of Subgrade: The subgrade shall be shaped to the lines, grades and typical sections established by the Owner. All unsuitable material, boulders and all vegetative matter shall be removed and replaced with suitable material. Suitable material shall come from sources approved by the Owner.
- ii. Compaction of Subgrade: The top one (1) foot of subgrade and the entire base course shall be compacted to a density of 100 PERCENT maximum dry density as determined by AASHTO method T99. For that portion of fill under roadways and extending beyond the back of curb, compact to a density of NO LESS THAN 95 PERCENT maximum dry density as determined by AASHTO method T99. Backfill material shall be placed in lifts of eight (8) inches or less of compacted soil.
 - a) The subgrade shall be compacted at a moisture content which is approximately that required to produce the maximum density indicated by the above test method.
 - b) The Contractor shall dry or add moisture to the subgrade when required to provide a uniformly compacted and acceptable subgrade.

B. Proofrolling:

- i. Equipment: The equipment shall consist of a loaded tandem-axle dump truck or similar pneumatic-tired equipment of a minimum ten (10) ton static weight. The Contractor is responsible for providing the equipment necessary in order to perform proofrolling at no additional cost to the Owner.
- ii. Method: After the roadbed has been completed within five hundredths (0.05) feet of final grade, the roadbed shall then be compacted and tested with two (2) or more coverages unless otherwise directed by the Owner, using a heavy pneumatic-tired roller meeting the requirements listed above. A coverage is considered that stage in the rolling procedure when the entire width of the area being proofrolled has been in contact with the pneumatic tires of the roller. The roller shall be operated in a systematic manner so that the number of coverages over all areas to be proofrolled can be readily determined and recorded.
 - a) The equipment shall be operated at a speed between two and one-half (2-1/2) and three and one-half (3-1/2) miles per hour. All proofrolling procedures shall be followed to the satisfaction of the Inspector on site during the proofrolling.
- iii. Corrective Action: If it becomes necessary to take corrective action, such as, but not limited to, underdrain installation, undercut and backfill of unsuitable materials, and aeration of excessively wet material in areas that have been proofrolled, these areas shall be proofrolled again following the completion of the necessary corrections. If the corrections

are necessary due to the negligence of the Contractor or weather, the corrective work and additional proofrolling shall be performed by the Contractor at no cost to

the Owner.

C. Placing Asphalt Concrete Mixture:

- i. The mixture shall be spread by means of a mechanical self-contained, power-propelled paver, capable of spreading the mixtures, without segregation, to the required grade and confine the mixture to true lines without the use of stationary side forms.
- ii. The term "screed" includes any "strike-off" device operated by cutting, crowding or other practical action which is effective on the mixtures at workable temperature without tearing, shoving or gouging and which produces a finished surface of the evenness and texture specified.
- iii. Longitudinal and transverse joints shall be made in a careful manner. Well bonded and sealed joints are required. If necessary to obtain this result, joints shall be painted with hot asphalt cement and heated. After the base course mixture has been spread and before roller compaction is started, the surface shall be checked and all flat spots and irregular areas removed and replaced with satisfactory material. Irregularities in grade shall be corrected before compacting.
- iv. Contact surfaces of headers, curbing, gutters, manholes, etc. shall be painted with an approved asphalt cement just before the base mixture is placed against them. All exposed longitudinal edges of the surface course shall be "set up" by tamping with a rake or lute at proper height and level to receive the maximum compression under rolling.
- v. Asphalt mixture shall not be produced or placed during rainy weather, when the subgrade or base course shows excess moisture, or when the air temperature is less than 40° F. in the shade away from artificial heat, unless otherwise permitted by the Owner. In applications involving less than one inch of asphalt, the temperature shall be at least 50° F. Should rain begin during paving operations, the Owner assumes no responsibility for asphalt left on the trucks at the time that the paving operation is halted.

D. Protection of Material:

- i. The Contractor shall provide and have ready for use at all times enough tarpaulins or covers for use in case of rain, chilly wind, or other delay, for the purpose of covering or protecting any material dumped but not spread.

E. Compacting Asphalt Concrete Mixture:

- i. After placing, the mixture shall be thoroughly and uniformly compacted with tandem rollers of eight (8) or ten (10) ton model weighing not less than 250 pounds per inch width of roller tread. The number and weight of rollers shall be sufficient to compact the mixture to the required density while it is still in a workable condition.
- ii. Each roller shall be operated by a competent, experienced operator and must be kept in continuous operation as nearly as practicable. Rolling shall start longitudinally at the outer edges and proceed toward the center of the pavement, overlapping on successive trips by at least one half (1/2) the width of the roller.
- iii. The speed of the roller shall be at all times slow enough to avoid displacement of the hot mixture as a result of reversing. Any displacement shall be immediately corrected. Rolling shall proceed at a rate not in excess of 500 square yards per hour per roller and shall continue until no further visible compaction is obtainable and all roller marks have been eliminated. Rolling shall compact the mixture to at least ninety-four (94) percent of the laboratory density as determined by the Marshall test method.
- iv. The asphalt concrete mixture shall have a temperature at the time of delivery of between 250° F and 300° F and shall be rolled with a temperature of not less than 235° F.
- v. Rolling shall be started as soon as the mixture will bear the roller without undue misplacement or hairline cracking. Delays in rolling hand raked mixture will not be tolerated.
- vi. To prevent adhesion of the mixture to the roller, the wheels shall be kept moistened

with water. Places not accessible to the roller shall be thoroughly compacted with hot tamps.

F. Compacted Densities:

- i. Unless otherwise noted compaction and density control of Asphalt Pavements shall be in accordance with the requirements of Sections 609 and 610 of the most current version of the NCDOT "Standard Specifications for Roads and Structures." There will be no direct payment for the work covered by this section.
- ii. The Contractor shall allow time for the inspections and testing of areas as directed by the Engineer.

G. Plant Tickets:

- i. The number of batches and total weight of all loads of mixture shall be recorded in duplicate upon plant ticket forms. With each load delivered to the work, the truck driver shall present one copy of the plant ticket to the Inspector. The driver shall retain one copy for the Contractor. Should the Engineer decide to provide a plant inspector, he/she shall keep the stub copy. The weights to be included in the estimate shall be the total of the tickets delivered by the truck driver to the Inspector at the work site. At any time, for the purpose of checking the weighing equipment at the plant, the Owner may direct the Contractor to weigh or cause to be weighed on tested and approved platform scales at the Contractor's expense the contents of any truckload that is to be delivered to the work site.

H. Protection of Pavement:

- i. When edges are not protected, planks of the same thickness shall be placed adjacent to longitudinal or transverse joints until the surface course is completed. Sections of newly finished pavements shall be protected from traffic until they have become properly hardened by temperature cooling.

PART 5 - REMOVAL OF EXISTING PAVEMENT

- A. The work covered by this section consists of the removal and disposal of the portland cement concrete or bituminous components of an existing pavement structure, including paved shoulders, within the limits shown on the plans or as directed by the Engineer. This work shall also include the removal of any temporary roadway pavement structure placed during construction to serve as a detour. The work covered by this section shall not include the removal and disposal of sidewalks, driveways, and curb and gutter, which are covered in the "Unclassified Excavation" subsection.
- B. Where concrete pavement is to be removed, the Contractor shall provide a neat edge along the pavement being obtained by sawcutting the pavement at least two (2) inches deep or greater as required to provide a neat, clean break from the pavement to remain, before breaking the adjacent pavement away. The pavement shall be broken up and removed for its entire depth or milled to the specified depth as indicated in the Contract Documents. The disposal of all materials resulting from the pavement removal shall be done as provided herein.
- C. Insofar as possible, all materials shall be used in the construction of embankments, but such use shall be subject to the approval of the Engineer.
- D. Milling asphalt pavement shall be in accordance with Section 607 of the latest version of the NCDOT "Standard Specifications for Roads and Structures."
- E. All materials, which cannot be used in the work, shall be disposed of off site of the right of way in waste areas provided by the Contractor.
- F. Basis of Payment:
 - i. The quantity of pavement removed will be paid for at the contract unit price bid per square yard for "Milling Asphalt Pavement x" Depth" as indicated in the Itemized Proposal. Unless otherwise indicated the quantity of pavement to be removed will be determined by actual surface area measurement of the pavement prior to its removal. The unit price and payments shall be full compensation for all work covered by this

section, including but not be limited to the satisfactory sawcutting, breaking up, removal, hauling, and disposal of existing pavement.

- ii. The quantity of paving to be milled shall be paid for at the contract unit price bid per square yard at the specified depth for "Milling Asphalt Pavement" as indicated in the Itemized Proposal. Unless otherwise indicated the quantity of milling will be determined by actual surface area measurement of the pavement prior to its removal. The unit price and payments shall be full compensation for all work covered by this section, including but not be limited to the milling and/or remilling of the pavement, cleaning the milled surface, loading, hauling, and disposal of all milled material.

PART 6 - ASPHALT RESURFACING

A. General:

- i. Asphalt Resurfacing shall meet all applicable material and installation specifications outlined elsewhere in the Contract Documents.
- ii. Should construction take place near signalized intersections, the Contractor shall contact the NCDOT Division Traffic Engineer to schedule the field location of any traffic signal conflicts. The Contractor shall notify the Engineer of any potential conflict prior to construction. The Contractor shall be responsible for coordinating the conflict relocation with NCDOT during construction.
- iii. The Contractor shall prepare a weekly schedule detailing the construction activities planned for the following week. This schedule shall be presented to the Inspector before Friday, 12:00 noon of the week preceding the effective date of the schedule. Weekly meetings may be required to review construction activities as directed by the Engineer.
- iv. In the event that all vehicles are not removed from the construction area despite timely delivery of the construction notice letter, the Contractor shall attempt to contact vehicle owners by other means in an effort to find the vehicle's owner to have the vehicles relocated. If the Contractor is unsuccessful they shall contact the Engineer and provide the make, model, and license plate number of the vehicle as well as the vehicle location. The Engineer shall try contacting the vehicle owner and if unsuccessful shall contact a designated towing company to move the vehicle out of the construction area, to a neighboring area of the fairgrounds as directed by the Engineer, at the Contractors expense. The towing company shall attach a standard letter to the vehicle upon towing. The Engineer will provide the standard letter.
- v. Construction traffic control shall be provided on each street by the Contractor in strict conformance with NCDOT "North Carolina Supplement to the MUTCD," the MUTCD, the Contract Documents, or as directed by the Engineer. No work shall begin on any street without the proper traffic control measures in place.
- vi. Construction traffic control shall be installed and practiced as a means to inform drivers that asphalt tack coat is being placed on the road surface.
- vii. The Contractor shall be responsible for spraying or burning all weeds growing on and in the streets. The Contractor shall be responsible for removing and properly disposing of the dead weeds as carefully cleaning each street before beginning asphalt concrete construction operations.
- viii. Asphalt resurfacing projects shall have a maximum acceptable elevation difference, between the top of the resurfacing layer and the gutter, of 0.25 inch. The Owner shall not accept any newly resurfaced streets exceeding this maximum elevation difference. Should it be determined that the resurfacing layer is more than 0.25 inch higher than the gutter elevation the resurfacing shall be removed and replaced or remedied as directed by the Engineer at the Contractor's expense.
- ix. The Contractor shall allow time for the inspection of areas, as needed, by a qualified testing firm as directed by the Engineer.
- x. The Contractor shall construct all improvements so as to create and/or maintain positive drainage.
- xi. The above listed requirements of this sub-part are considered incidental to the cost of

the asphalt concrete surface course specified in the Itemized Proposal and Contract Documents.

B. Materials:

i. Geotextile Interlayer Installation:

- a) The geotextile interlayer shall be a needle punched, nonwoven engineering fabric made of polypropylene and staple fiber; calendared on one side. It shall be resistant to ultraviolet degradation and have the following properties:

	<u>Typical</u>	<u>Test</u>
Grab Tensile Strength (lbs)	101	ASTM D 4632
Grab Elongation (%)	50	ASTM D 4632
Puncture Strength (lbs)	65	ASTM D 4833
Mullen Burst (psi)	220	ASTM D 3786
Trapezoidal Tear (lbs)	45	ASTM D 4533
Mass Per Unit Area (oz/sq yd)	4.1	ASTM D 5261
Thickness (mils)	35	ASTM D 5199
Melting Point (°F)	Greater than 150	ASTM D 276
UV Resistance (%)	70 at 500 hrs	ASTM D 4355

- b) For the tack coat, uncut asphalt cements are preferred, however, cationic or anionic emulsions may be used. For asphalt cements the minimum temperature shall be 150°F C, but to avoid damage to the fabric the distributor tank temperatures shall not exceed 160°F C. When asphalt emulsions are used, the emulsion shall be cured prior to placing the fabric.
- c) The engineering fabric shall be placed onto the asphalt sealant, calendared side up, prior to the time the asphalt has cooled and lost tackiness. Wrinkles or folds in excess of 1 inch shall be slit and laid flat. In order to maximize fabric contact with the pavement surface, blooming or pneumatic rolling will be required. The fabric joints shall be overlapped sufficiently to ensure full closure of the joint, but should not exceed 6 inches. To prevent edge pickup by the paver, transverse joints shall be lapped in the direction of paving. A second application of sealant to the fabric overlaps will be required as directed by the Engineer.
- d) Quickly following the fabric installation, the hot-mix overlay should be placed evenly. Should the asphalt bleed through the fabric causing construction problems prior to overlay placement, the affected areas shall be blotted by spreading sand. Turning the paver and other vehicles shall be gradual and kept to a minimum to avoid movement of, or damage to the sealant saturated fabric.
- e) Basis of Payment: Payment shall be made under the contract unit price bid per square yard for the actual amount of "Geotextile Interlayer" as indicated in the Itemized Proposal and shall constitute full compensation for furnishing all labor, material, equipment, and performing all operations in connection with placing the geotextile interlayer as shown on the plans, Contract Documents, or as directed by the Engineer.

ii. Asphalt Surface Treatment:

- a) Chip seal shall be "straight seal" with 78M stone in accordance with Section 660 of the NCDOT "Standard Specifications for Roads and Structures." Careful attention shall be given to surface preparation (as specified in Section 660) under chip sealing.
- b) Cleanup: Excess aggregate resulting from straight seal shall be collected and removed from the construction site either before resurfacing occurs or one (1) week after the straight seal is applied, whichever occurs first.
- c) Basis of Payment: Payment shall be made under the contract unit price bid per square yard at the specified type of seal coat for the actual amount of "Asphalt

Surface Treatment” as indicated in the Itemized Proposal and shall constitute full compensation for furnishing all labor, material, equipment, and performing all operations in connection with the placement and cleanup of the asphalt surface treatment as shown on the plans, Contract Documents, or as directed by the Engineer.

iii. Leveling Course

- a) In asphalt resurfacing projects a leveling course of Superpave - Asphalt Concrete Surface Course (Type S 4.75 A, S 9.5 B, S 9.5 C), as directed by the Engineer, shall be hand-placed in areas where the pavement is depressed, sunken or uneven, and its surface grade varies from surrounding elevation by one (1) inch or greater. Leveling asphalt shall be placed prior to chip seal applications or as designated by the Engineer.
- b) Basis of Payment: Payment for this work shall be included in the unit price per ton for “Asphalt Leveling Course” as indicated in the Itemized Proposal. Plant tickets should be submitted with the pay request, and each ticket should include a date, time of delivery, signature of recipient and street name. Only those tickets with the above information will be approved.

PART 7 - SPEED HUMPS AND RAISED CROSSWALKS

- A. There are no Speed Humps or Raised Crosswalks apart of this project

PART 8 - UTILITY ADJUSTMENTS

A. General:

- i. No manholes or water valve boxes shall be raised and left for a period of time greater than seven (7) days before the area is resurfaced. Should this period of time be exceeded, all work shall be stopped until the resurfacing of such streets has been completed. Immediately after utility adjustments take place the sides of the utility shall be painted bright orange for visibility and if directed by the Engineer 36” (minimum) reflective orange traffic cones or other devices shall also be added for visibility. There will be no separate compensation for this work and shall be considered incidental to the cost of the items as defined under “Basis of Payment.”
- ii. Cast iron risers will not be allowed for adjustment of manholes and water valve boxes.
- iii. If any existing broken manholes or water valve boxes are discovered, the Contractor shall furnish new manhole rings and covers or new water valve boxes for replacement of the broken ones by the Contractor at no additional cost to the Owner. Replacements will be the same as stocked by the Owner or approved as acceptable alternate by the Engineer.

B. Basis of Payment:

- i. Payment for these items shall be at the respective contract unit prices for “Adjustment of-Water Valve Box” “Adjustment of Manholes”, “Adjust Structure – drop inlet” and “Adjust Structure – Meter Box” as indicated in the Itemized Proposal and shall be full compensation for all labor, equipment, materials, and incidentals necessary to complete the work. There shall be no separate compensation for the adjustment of manholes, water valves, and fire hydrants that are installed as a part of this Contract.

END OF SECTION 03000

SECTION 04000 CAST IN PLACE CONCRETE

PART 1 - MATERIALS

- A. Portland cement concrete for curb and gutter, driveways, driveway aprons, wheelchair ramps, sidewalks, traffic islands and other items as specified on the plans shall have a minimum 28 day compressive strength of 3,000 psi, a non-vibrated slump between 2.5 and 4 inches, a minimum cement content of 545 pounds per cubic yard, an air entrainment of 5 - 7%, and a maximum water-cement ratio of 0.545 in accordance with Class B concrete as described in the NCDOT "Standard Specifications for Roads and Structures" unless otherwise specified in the Contract Documents. Portland cement concrete for structures, culverts and other items as specified on the plans shall be Class A or Class AA in accordance with NCDOT "Standard Specifications for Road and Structures." Dyed concrete is not allowed in construction of driveway aprons or public sidewalks unless otherwise specifically required in the Contract Documents.
- B. Joint filler shall be a non-extruding joint material conforming to ASTM C1751.
- C. Aggregate for portland cement concrete shall meet the requirements for fine and course aggregate of Section 1014 of the NCDOT "Standard Specifications for Roads and Structures."
- D. Portland Cement and admixtures shall meet the requirements of Section 1000 of the NCDOT "Standard Specifications for Roads and Structures."
- E. Water for mixing or curing the concrete shall be free from injurious amounts of oil, salt, acid, or other products injurious to the finished product.

PART 2 - QUALITY ASSURANCE

- A. Concrete shall be only plant-mixed, transit-mixed or ready-mixed concrete. The time elapsing from mixing to placing the concrete shall not exceed ninety (90) minutes. Concrete shall not be deposited on frozen subgrade and shall not be poured when the air temperature is falling and below 40° F, and the predicted low temperature for the succeeding 24 hour period is less than 32° F.
- B. All concrete when placed in the forms shall have a temperature of between 50° F and 90° F and shall be maintained at a temperature of not less than 50° F for at least 72 hours for normal concrete and 24 hours for high early

strength concrete, or for as much time as is necessary to secure proper rate of airing and designed compressive strength. The use of admixture, retarders, and accelerators shall be used as directed by the Engineer.

PART 3 - CONSTRUCTION METHODS - GENERAL

- A. Proportioning of Concrete: The concrete shall be mixed in proportions discussed herein and approved by the Engineer.
- B. Mixing Concrete: The concrete shall be mixed by machine on the job or at a central mixing plant. A batch mixer of any approved type may be used. The method of measuring the materials for the concrete, including water, shall be one which will insure separate and uniform proportions of each of the materials at all times. The mixing shall continue at least 1-1/2 minutes after all ingredients have been emptied before receiving material for the succeeding batch.
 - i. A central mixing plant shall not be used until approved by the Engineer and shall be certified by the NCDOT. The concrete from a central plant shall be delivered and deposited at the consistency specified without segregation. The time elapsing from mixing to placing the concrete shall not exceed ninety (90) minutes.
 - ii. Concrete shall be mixed only in such quantities as are required for immediate use and all such material shall be used while fresh and before initial set has taken place. Any concrete in which set has begun shall not be used in the work. Retempering of concrete

will not be allowed.

- C. Subgrade: The subgrade shall be excavated to the required depth below the finished surface in accordance with the plans to the lines and grades established by the Engineer. All soft yielding material or other unsuitable material shall be removed and replaced with suitable material and the subgrade shall be compacted thoroughly and finished to a firm, smooth surface. No curb and gutter, driveways, driveway aprons, wheelchair ramps, sidewalks, or traffic islands shall be poured until the subgrade is approved by the inspector.
- D. Forms: The forms shall be of metal and of the necessary dimensions to construct the combined curb and gutters specified in the plans. Wood forms may be used where conditions make the use of metal forms impractical. The use of wood forms must be approved by the Engineer. The forms shall be set true to the line and grade established by the Engineer and held rigidly in position, so as to prevent leakage of mortar and springing out of line when the concrete is placed in them. The forms shall be true in line, free from warping or bending. No concrete shall be placed until the forms and subgrades have been approved by the Inspector.
- E. Placing of Concrete: The subgrade shall be moistened and the concrete shall be placed in the forms and tamped sufficiently to bring the mortar to the surface, after which it shall be finished smooth and even by means of a wooden float.
 - i. The curb and gutter shall be constructed in place in uniform sections ten (10) feet in length. The joints between sections shall be formed by steel templates one-sixth (1/6) inch in thickness and of the width and depth of the curb and gutter. The templates shall be left in place until the concrete has set sufficiently to hold its shape, but shall be removed while the forms are still in place.
 - ii. Machine poured concrete curb and gutter will be scored at 15 feet intervals with expansion joints located at intervals no greater than 50 feet.
 - iii. Expansion joints shall be one-half (1/2) inch in width and shall be placed between all rigid objects at a distance of no more than fifty (50) feet apart and shall extend the full depth of the concrete with the top of the filler one-half (1/2) inch below the finished surface.
- F. Finishing: The edges of the curb and gutter shall be finished with an approved edging tool of one-half (1/2) inch radius. Joints shall be similarly finished immediately after the templates have been removed.
- G. Curing: Contractor may select method of curing provided that the method is approved by the Engineer and that the means and methods of curing conform to standards specified by current AASHTO or ASTM specifications.
- H. Removing Forms: Forms shall not be removed from freshly placed concrete until it has set for at least 12 hours. Forms shall be carefully removed in such a manner as to prevent damage to the edges of the concrete. Any honeycombed areas along the sides shall be filled promptly with mortar composed of one part cement and two parts of fine aggregate.
- I. Cold Weather and Night Concreting: Concreting shall be done when weather conditions are favorable unless otherwise directed by the Engineer. Concrete operations shall be discontinued when a temperature of 40° F is reached on a falling thermometer and may be continued when temperature reaches 35° F on a rising thermometer. No concreting shall be attempted when local weather bureau indicates temperature below freezing within the ensuing 24 hours unless proper precautions are made to protect the concrete by covering with straw or other thermal insulation satisfactory to the Engineer. The Contractor shall be responsible for the quality and strength of the concrete laid during cold weather and any concrete damaged by frost action or freezing shall be removed and replaced as directed by the Engineer at the Contractor's expense.
 - i. The Contractor may be permitted by the Engineer to proceed with concrete operations during cold weather in temperatures of not less than 25° F at placing time provided that the Contractor furnishes an approved admixture and uses an amount per batch not to

exceed two percent (2%) by weight of the total amount of cement, and further provided that he takes other precautions deemed necessary by the Engineer to prevent concrete from freezing during curing period.

- ii. No more concrete shall be laid than can be properly finished and covered during daylight, unless adequate artificial light satisfactory to the Engineer is provided.
- J. Protection of Concrete: Immediately after the forms have been removed and all honeycombed areas repaired, the back of the curb shall be backfilled to prevent underwash. Traffic shall be excluded from crossing the concrete for a period of approximately fourteen (14) days, by erection and maintenance of suitable barricades, unless otherwise specified in the Contract Documents or by the Engineer. Contractor shall be responsible for any damage resulting from traffic or vandalism until accepted by the Engineer, and he shall remove and replace any damaged concrete as directed by the Inspector.

PART 4 - CONSTRUCTION METHODS - CURB & GUTTER, DRIVEWAYS, DRIVEWAY APRONS, WHEELCHAIR RAMPS, SIDEWALKS, AND TRAFFIC ISLANDS

- A. Areas of concrete to be removed shall be sawcut before removing. The sawcut shall provide a smooth, straight edge approximately two (2) inches deep before breaking away the adjacent concrete. There will be no direct payment for the work covered by this section.
- B. Concrete shall be constructed in accordance with Section 825 of the NCDOT "Standard Specifications for Roads and Structures" and shall be given a "sidewalk finish," except as otherwise noted herein.
- C. Brooming of the concrete surface shall be done transverse to the direction of traffic. Joint spacing shall not be less than 5 feet. Where existing sidewalks are being widened, transverse joints shall be located so as to line up with existing joints in the adjacent existing sidewalk. Grooved joints shall not be sealed.
- D. No backfill shall be placed adjacent to the curb & gutter, driveways, driveway aprons, wheelchair ramps, or sidewalks until at least 3 curing days have elapsed, as defined in Section 825-9 of the NCDOT "Standard Specifications for Roads and Structures." However, all backfill shall be placed within 4 calendar days after the completion of this 3 curing day time period. Backfill shall clean earthen material free of all debris and shall be compacted to a degree comparable to the adjacent undisturbed material or as directed by the inspector.

PART 5 - PAYMENT

- A. Basis of Payment: Compensation for cast in place concrete items shall be as follows:
 - i. Payment for "Remove & Replace - Concrete Curb and Gutter" shall be paid at the unit price bid per linear foot for the type as indicated in the Itemized Proposal. The aggregate base course or asphalt concrete placed under the concrete curb and gutter shall be in accordance with the NCDOT Standard Details and shall be included in the unit price bid for curb and gutter. Unit price shall be full compensation for all labor, equipment and materials to furnish and install curb and gutter, and aggregate base course or asphalt concrete under the curb and gutter. Payment for this item shall not be made until work is complete, including backfilling and seeding & mulching, and has been inspected and accepted by the inspector.
 - ii. Payment for "Remove & Replace - Concrete Sidewalk" shall be paid at the unit price bid per linear foot at the width and thickness designated in the Itemized Proposal and in accordance with the NCDOT Standard Details. Unit price shall be full compensation for all labor, equipment and materials to furnish and

install concrete sidewalk. Payment for this item shall not be made until work is complete, including backfilling and seeding & mulching, and has been inspected and accepted by the inspector.

- iii. Payment for “Remove & Replace - Concrete Curb Ramps” shall be paid at the unit price bid per each item as designated in the Itemized Proposal and in accordance with the NCDOT Standard Details 848.06. Unit price shall be full compensation for all labor, equipment and materials to furnish and install concrete wheelchair ramps, depressed curb and gutter, and aggregate base course or asphalt concrete under the depressed curb and gutter or wheelchair ramp necessary for the construction of the concrete wheelchair ramp. Payment for this item shall not be made until work is complete, including backfilling and seeding & mulching, and has been inspected and accepted by the inspector.
- iv. Payment for “New Concrete Curb Ramp” shall be paid at the unit price bid per each as designated in the Itemized Proposal and in accordance with the NCDOT Standard Details 848.06. Unit price shall be full compensation for all labor, equipment and materials to remove existing material, furnish and install concrete wheelchair ramps, depressed curb and gutter, and aggregate base course or asphalt concrete under the depressed curb and gutter or wheelchair ramp necessary for the construction of the concrete wheelchair ramp. Payment for this item shall not be made until work is complete, including backfilling and seeding & mulching, and has been inspected and accepted by the inspector.
- v. Payment for “Remove Concrete Curb Ramp; Replace with Sidewalk and Curb & Gutter” shall be paid at the unit price bid per each as designated in the Itemized Proposal and in accordance with the NCDOT Standard Details. Unit price shall be full compensation for all labor, equipment and materials to remove existing material, furnish and install concrete curb and gutter, concrete sidewalk and aggregate base course or asphalt concrete under the depressed curb and gutter. Payment for this item shall not be made until work is complete, including backfilling and seeding & mulching, and has been inspected and accepted by the inspector.
- vi. Payment for “Retrofit Existing Concrete Curb Ramps” shall be paid at the unit price bid per each as indicated in the Itemized Proposal. Unit price shall be full compensation for all labor, equipment and materials to furnish and install the Truncated Dome. Truncated Domes are to be installed Cast in Place unless otherwise directed by the engineer.

END OF SECTION 04000

SECTION 05000
STORM DRAINAGE

PART 1 - GENERAL

- A. The work of furnishing and installing storm sewer shall consist of performing all work and services necessary to complete the construction of the storm sewer pipe and the catch basins in accordance with the provisions of the Contract Documents.
- B. Where proposed storm sewers are to be installed under existing roadways, the construction shall be performed in such a way that half of the roadway will be maintained and available to traffic in accordance with the plans, Contract Documents, the NCDOT "Roadway Standard Drawings," and the MUTCD.

PART 2 - SUBMITTALS

- A. The Contractor shall submit shop drawings to the Engineer for all storm drainage materials to be used on this project. Submittals shall be in accordance with Section 02000 of the Contract Documents.

PART 3 - QUALITY STANDARDS

- A. Procedures for handling, laying, protection and use of pipe shall be in accordance with the pipe manufacturer's recommendations and these specifications. Procedures for construction of drainage structures shall be in accordance with these specifications.
- B. Reinforced Concrete Pipes and Flared End Sections shall be as per ASTM C76, Table III or Table IV with a diameter as indicated on plans. The pipe shall be equal to that as furnished by N.C. Products or Adams Concrete. Joints shall be wiped with mortar or sealed with a plastic cement putty meeting Federal specification SS-S-00210, such as Ram-Nek or a butyl rubber sealant.
- C. Corrugated Steel Pipe shall conform to AASHTO M36 with pipe ends having no less than 2 round corrugations on each end. Bands for connecting pipe shall be corrugated with a minimum of 2 corrugations for each pipe. The pipe shall be fully bituminous coated in accordance with the requirements of AASHTO M190. The pipe shall have an asphalt-paved invert.
- D. Concrete Block or Brick shall be solid and conform to ASTM C139 in design and manufacture. The block or brick shall be embedded in a mortar bed to form a one-half (1/2) inch mortar joint. Mortar used in brick masonry and joints shall be composed of one (1) part Portland cement and hydrated lime (not more than 10 percent lime, based on the volume of cement, shall be used) and two (2) parts sand. Portland cement shall meet the requirements of the latest ASTM specifications C- 150, Type 1. The sand shall be composed of clean, hard and durable grains, and shall be of a quality and gradation approved by the Engineer. Hydrated lime shall meet the requirement of ASTM designation C-6. Mortar shall be mixed in a clean, tight mortar box or in an approved mechanical mixer and shall be used within 45 minutes after mixing.
- E. Precast Concrete Manholes shall meet ASTM C478 in design and manufacture holes and shall be in accordance with the NCDOT Standard Details. The standard manhole joint shall be sealed with a plastic cement putty meeting Federal specification SS-S-00210 such as Ram-Nek or a butyl rubber sealant.
- F. Manhole Frames and Covers shall be cast iron or ductile iron with "Storm Sewer" stamped on the cover and four 1 inch perforated holes and shall be in accordance with the NCDOT Standard Details. Castings shall be machined to give even and continuous bearing on the full length of the frame. Castings shall be free of porosity and blow holes, and shall receive one coat of Koppers Super Service Bitumastic black paint. Paint shall be kept off bolt threads, and surfaces shall be thoroughly wire brushed before painting.
- G. Manhole Steps shall be of composite plastic metal or steel reinforced polypropylene and shall be in accordance with the NCDOT Standard Details. Steps shall be placed at sixteen (16) inches O.C. for the full depth in all structures when they are greater than five (5) feet

in depth. Steps shall be designed for a vertical load of 400 pounds and a horizontal pull out load of 1,000 pounds.

- H. Yard Inlets, Catch Basins, and Curb Inlets shall be in accordance with the NCDOT Standard Details.
 - i. Frame, Grate, & Hood shall be cast iron and meet the ASTM requirements set forth in the latest edition of the NCDOT "Standard Specifications for Roads and Structures" and the dimensional requirements set forth in the latest edition of the NCDOT "Roadway Standard Drawings." Grates shall be stamped with the appropriate NCDOT specification number as evidence of satisfying the above requirements. Hoods shall be stamped with either "Drains to Neuse River" or "Drains to Cape Fear River" or other wording as confirmed by the Engineer. Lettering shall be ¾" height and shall be clean, crisp, and free of defects.

PART 4 - CONSTRUCTION

- A. All storm sewers shall be laid to provide a "true line" between manholes or structures, and they shall be installed at each deflection of line and/or grade.
- B. The mortar for brick masonry shall conform to the requirements herein set forth. Excavation shall be made to the required depth and the foundation on which the brick masonry is to be laid shall be approved by the Inspector. The brick shall be laid so that they will be thoroughly bonded into the mortar joints by means of the "shove joint" method: (buttered or plastered joints will not be permitted). The headers and stretchers shall be so arranged as to thoroughly bond the mass. Brickwork shall be of alternate headers and stretchers with consecutive courses in thickness. The joints shall be completely filled with mortar. No spalls or bats shall be used except for shaping round irregular openings or when unavoidable to finish out a course. Competent bricklayers shall be employed on the work and all details of construction shall be in accordance with approved practice and to the satisfaction of the Engineer.
- C. Manhole steps shall be set in the masonry as the work is built up, thoroughly bonded, and accurately spaced and aligned.
- D. Inverts in storm drainage structures shall be shaped to form a smooth and regular surface free from sharp or jagged edges. They shall be sloped adequately to prevent sedimentation.
- E. The castings shall be set in full mortar beds. All castings when set shall conform to the finished grade as established by the Engineer. Any castings not conforming shall be adjusted to the correct grade without extra compensation.
- F. All pipes entering catch basins or junction boxes shall enter through a wall and not through a corner of the structure. The pipe shall not project into the drainage structure, but shall be finished flush with the inside of the structure.
- G. When necessary, the contractor shall provide for the temporary diversion of water or dewatering in order to maintain the storm sewer foundations in a dry condition, and shall continue to maintain trenches in a dry condition until backfill and compaction activities are complete.
- H. The Contractor shall maintain all storm sewers in a condition such that they will function properly from the time the storm sewers are installed until the Owner accepts the project. The Contractor shall thoroughly clean out all storm sewers at no expense to the owner throughout construction.

PART 5 - PAYMENT

- A. Basis of Payment:
 - i. Payment to furnish, excavate, install, and backfill storm drainage pipe shall be paid at the unit price bid for the actual number of linear feet of the size and type of pipe installed as indicated in the Itemized Proposal and shall include any washed stone necessary for stabilization, required paved inverts, pipe coating and shall be full compensation for all labor, equipment, and materials necessary to install the pipe.

- ii. Payment to furnish, excavate, install and backfill around "Manholes," "Yard Inlets," "Catch Basins," "Curb Inlets," "Flared End Sections," "Headwalls," and other structures shall be paid at the contract unit price for each item installed as indicated in the Itemized Proposal and shall be full compensation for all labor, equipment, and material to furnish and install these structures including excavation and backfill.

END OF SECTION 05000

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SECTION 06000
PAVEMENT MARKINGS

PART 1 - GENERAL

- A. All work associated with the furnishing, installing and removing of pavement markings and pavement markers shall be performed in accordance with these contract documents and the latest publication of the North Carolina Department of Transportation "Standard Specifications for Roads and Structures" and "Roadway Standard Drawings." Permanent Pavement Markings shall be Thermoplastic Pavement Marking.
- B. All Pavement Markings will be Thermoplastic Pavement Marking. All proposed pavement markings shall be installed within One (1) week of completion of paving the final surface course of any Area.

PART 2 - PAYMENT

- A. Basis of Payment: Payment for pavement markings and pavement markers shall be as indicated on the Itemized Proposal in the Contract Documents. Payment for Thermoplastic Plastic pavement markings shall be inclusive of temporary markings as required by the Owner or Engineer.

END OF SECTION 06000

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SECTION 07000

CONSTRUCTION TRAFFIC CONTROL

PART 1 - GENERAL

- A. The work covered by this section consists of furnishing, erecting, maintaining, relocating, and removing traffic control devices in accordance with the Contract Documents as well as the latest versions of the NCDOT "Standard Specifications for Roads and Structures," NCDOT "Roadway Standard Drawings Manual," MUTCD, NCDOT Supplement to the MUTCD, or as directed by the Engineer.
- B. All traffic control devices furnished by the Contractor shall remain the property of the Contractor, unless otherwise specified by the contract. Traffic control devices shall include, but are not limited to signs, drums, barricades, barriers, electronic variable message boards, cones, delineators, flashing arrow panels, temporary guardrails, temporary concrete median barriers, vehicle-mounted temporary impact attenuators, pavement markings, raised reflective pavement markers, flaggers, and pilot vehicles.

PART 2 - MATERIALS - GENERAL

- A. Unless otherwise required, materials used in the fabrication and installation of construction traffic control devices shall be in accordance with the applicable provisions of the MUTCD. When traffic control devices are no longer required for traffic handling in the initial phase of construction requiring their use, they may be reused at various locations throughout the project provided the device is not defaced, is structurally sound, clean and otherwise conforms to the above requirements.
- B. All enclosed lens (Engineer's Grade) sheeting required for use on traffic control devices shall have an identification mark on the surface. This mark signifies that the sheeting meets the requirements of Federal Specification L-S-300C for Minimum Reflectivity 1 Sheeting and Tape. The identification mark shall not interfere with the function of the device but shall be visible both day and under illumination at night without the use of special devices. No work on the project shall start until all the traffic control devices required for the particular work activity are inspected and approved by the Engineer.
- C. Traffic control devices which do not meet the requirements of this section shall not be used. If a device ceases to meet the requirements of this section during the project, it shall be promptly removed and replaced with a conforming device at no additional compensation. The Engineer shall have the authority to determine the acceptability of the traffic control devices.

PART 3 - CONSTRUCTION METHODS - GENERAL

- A. Existing public streets or highways shall be kept open to traffic at all times by the Contractor unless permission to close these streets, or portions thereof, is granted by the Engineer.
- B. Traffic control devices shall be installed at the inception of construction operations, and shall be properly maintained, relocated as necessary, cleaned, and operated during the time they are in use. They shall remain in place only as long as they are needed and shall be immediately removed thereafter. Where operations are performed in stages, only those devices that apply to the conditions present shall be left in place.
- C. The location, legends, sheeting, dimension, number of supports, and horizontal and vertical placement of warning signs, barricades, and other traffic control devices shall be as required by the plans or the MUTCD or as directed by the Engineer. The Contractor may submit for the Engineer's consideration a method for handling traffic other than as shown on the plans. The alternate traffic control plans shall not be used until they are approved in writing by the Engineer. During periods when not warranted, warning signs and other devices shall be removed from the work area, covered with specified material, or otherwise positioned so that they do not convey their message to the traveling

public. If covered, the covering material shall be exterior plywood and shall cover the entire face of the sign panel. The covering material shall be installed in such a manner that the sign panel will not be defaced. Non-metal washers or other spacing devices shall be used to keep the plywood covering material from direct contact with the sign panel. Covering material shall be maintained in a neat manner during its use.

- D. Weeds, brush, trees, construction materials, equipment, etc. shall not be allowed to obscure any traffic control device in use. There will be no separate compensation for any trimming or cutting required for this purpose.
- E. Competent and properly trained flaggers, properly attired and equipped, shall be provided when directed by the Engineer or when the Contractor deems it necessary to safely handle traffic through the construction zone.
- F. The Contractor shall assume full responsibility for the continuous and expeditious maintenance of all construction warning signs, barricades, and other traffic control devices which in the opinion of the Engineer are damaged by traffic or other means or deteriorated beyond effectiveness.

Conditions covered under maintenance shall include but not be limited to replacement due to loss of reflectivity; replacement of broken supports; plumbing of leaning signs; cleaning of dirty signs, barricades, and other devices; repair of defaced sheeting and legend; and replacement of stolen or vandalized items. All items used for traffic control shall be maintained in a satisfactory condition. Failure to maintain all traffic control devices in a satisfactory condition may be cause for suspension of construction operations until proper traffic control is re-established.

- G. The Contractor shall follow the construction procedure and maintenance of traffic as shown on the Traffic Control Plan, unless a more workable plan is agreed to by the Engineer prior to or during the execution of the work. The Contractor shall complete each construction phase in the sequence shown (Example: Phase I-A must be completed before I-B).
- H. Work on the project shall not start until all the traffic control devices required for the particular work activity have been inspected and approved by the Engineer.
- I. The Contractor shall continuously review and maintain all traffic control measures to assure that adequate provisions have been made for the safety of the public and workers.
- J. The Contractor shall furnish a material certification for all new and used reflective sheeting.

PART 4 - PAYMENT

A. Basis of Payment:

- i. Payment for traffic control shall be made at the contract lump sum price for "Temporary Traffic Control" or as designated on the Itemized Proposal. Payment will include all work covered by this section. If no item is included for traffic control devices in the "Itemized Proposal," all traffic control devices must be placed, and no direct payment shall be made. Payment will be full compensation for all work of furnishing, erecting, relocating, maintaining and removing any and/or all temporary traffic control devices.
- ii. If traffic control measures are designated separately on the Itemized Proposal, measurement and payment shall be made as follows:
 - a) "Stationary Construction Signs" will be paid by the actual number of square feet of sign panels installed at each location required by the contract. Where a particular sign is used at more than one location, measurement will be made at each location.
 - b) "Non-Metallic Drums" shall be paid by the maximum number of drums acceptably placed at any one time during the life of the project as required by the contract.
 - c) "Portable Temporary Traffic Control Devices" shall include, but are not limited to portable signs, temporary guardrails, barricades, barriers, electronic variable message boards, cones, delineators, flaggers, pilot vehicles, and any other traffic control devices not covered by any other section included in this contract.
- iii. Payment for "Temporary Traffic Control," "Stationary Construction Signs," "Non-Metallic

Drums,” and “Portable Temporary Traffic Control Devices” shall be made as follows:

- a) Fifty percent (50%) of the total quantity of each item on the Itemized Proposal on the first partial payment estimate after which said item(s) have been placed into operation.
- b) Twenty-five percent (25%) of the total quantity of each item on the Itemized Proposal on the first partial payment estimate made after the project is 50% complete.
- c) Twenty-five percent (25%) of the total quantity of each item on the Itemized Proposal on the first partial payment after the project is one hundred percent (100%) complete.

END OF SECTION 09000

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SECTION 08000
TRAFFIC SIGNALS

PART 1 - GENERAL DESCRIPTION

- A. The work covered by this section consists of installing a permanent traffic signal or revising an existing signal at the intersection shown on the plans in Cary, North Carolina.
- B. Unless otherwise stated in this Section, the Contractor shall conform to the latest publications of the North Carolina Department of Transportation (NCDOT) "Standard Specifications for Roads and Structures", the NCDOT "Roadway Standard Drawings", the NCDOT "Traffic Signal Specifications" (including all addenda and supplements), the traffic signal plans, the latest version of the "Manual on Uniform Traffic Control Devices" (MUTCD), and the NCDOT "North Carolina Supplement to the MUTCD."
- C. Copies of the latest publication of the NCDOT "Standard Specifications for Roads and Structures" and "Roadway Standard Drawings" may be obtained by calling (919) 250-4128 or writing to the following address:

Special Services Engineer
NC Department of Transportation
P.O. Box 25201 Raleigh, NC
27611-5201

- D. Copies of the latest publication of the NCDOT "Traffic Signal Specifications" and NCDOT "North Carolina Supplement to the MUTCD" may be obtained by calling (919) 733-3915 or writing to following address:

Traffic Engineering Branch
N.C. Department of Transportation
P.O. Box 25201 Raleigh, NC
27611-5201

- E. Unless otherwise stated in this Section, the Contractor shall furnish, store, deliver, and install all equipment, material, tools, and incidental hardware necessary to complete the required traffic signal work.
- F. Unless otherwise stated in this Section, furnish new material meeting the requirements of the "Traffic Signal Specifications," the "Standard Specifications for Roads and Structures," and the traffic signal plans. In the event of a conflict between the Project Special Provisions and these documents, the Project Special Provisions shall govern.
- G. The NCDOT has a Qualified Products List (QPL) available for use by the Contractor. Products on the QPL may or may not meet all the requirements of individual projects in the City of Lexington. The QPL website is:
<http://www.doh.dot.state.nc.us/preconstruct/traffic/TMSSU/SMS/QPL/> Furnish the Engineer with three (3) copies of a materials list of the proposed materials for use on the project. Include three copies of the catalog cuts for all materials with the materials list. Identify by a reproducible means on the catalog cuts the proposed materials with the line code number. Material lists shall contain the material description, brand name, manufacturer's address and phone number, stock number, size, identifying trademark or symbol, and other appropriate ratings to sufficiently identify the material. Do not fabricate or order material until receipt of the Engineer's approval of the catalog cuts.

PART 2 - MAST ARMS

- A. The Contractor shall conform to the latest publications of the NCDOT "Standard Specifications for Roads and Structures" except as follows: **ALL MAST ARMS SHALL BE MONOCURVED TYPE MAST ARMS IN THE CITY OF LEXINGTON.** All shop drawings and signal plans shall reflect the exclusive use of monocurved mast arms.

PART 3 - CONTRACTOR'S LICENSE REQUIREMENTS

- A. If the successful bidder does not hold the proper license to perform the electrical work of this contract, he will be required to sublet such work to a Contractor properly licensed in accordance with Article 4 of Chapter 87 of the General Statutes (licensing of electrical contractors).

PART 4 - WORK TO BE DONE BY THE CONTRACTOR

- A. The Contractor shall install the traffic signal equipment and all other specified materials at the referenced intersection in order to complete the signal installation work at the intersection referenced in "General Description" within this section. The Contractor shall notify the Engineer at least one week in advance of the estimated date of the signal being placed in service and confirm the notification one (1) day prior to that date.
- B. The Contractor will be responsible for contacting the proper electrical utility company to provide power for the traffic signal.

PART 5 - ELECTRICAL REQUIREMENTS - GENERAL

- A. All Contractor supplied electrical materials and all work performed on the project shall meet the latest requirements of the National Electrical Code and all applicable City of Lexington ordinances.
- B. The Contractor shall comply with all applicable City of Lexington ordinances and regulations prior to beginning any electrical work. He shall obtain all permits and licenses required by the State and the City of Lexington. After completion of the work, all systems must be inspected. After receiving written approval by the electrical inspectors having jurisdiction in the locality, the Contractor shall furnish written certification to the Engineer that the installation meets the approval of the electrical inspector(s). Upon the Engineers' receipt of this written certification and the Contractor's written request for a final inspection of the signal installation, the Engineer will determine if a final inspection by the Engineer and a representative of the Traffic Engineering Branch of the Department of Transportation should be conducted. Inspection by the licensed electrical inspector shall neither eliminate nor take the place of inspections by Department of Transportation and City of Lexington personnel to insure compliance with the Contract Documents.

PART 6 - UTILITY LOCATION RESPONSIBILITY

- A. The Contractor's attention is called to the existence of underground utilities and structures, limited space on aerial facilities, and other obstructions within the project limits. The Contractor is advised to perform a field check of all physical conditions prior to submitting his cost proposal and to exercise extreme caution during construction. Neither the City of Lexington nor the State of North Carolina will assume any responsibility or honor any claims due to costs incurred to the Contractor as a result of damage to existing facilities.
- B. The Contractor will be provided a clear right of way for the signal installation. The Contractor shall contact One Call Center locating service at (800) 632-4949 and/or the affected local utility for immediate location of all underground utilities in the vicinity of the project. The Contractor shall be responsible for any damages to utilities resulting from work performed by the Contractor according to the latest version of the NCDOT "Standard Specifications for Roads and Structures."
- C. The Contractor shall maintain minimum clearance from existing utilities as required by the utility having jurisdiction over the pole to which conductors, conduit, etc. are attached by the Contractor. The Contractor shall install standoffs where necessary to maintain these distance requirements. No direct payment will be made for maintaining distance from utilities.

PART 7 - TIMING OF THE TRAFFIC SIGNALS

- A. The Contractor shall implement the timing values for the traffic signal controllers as shown on the plans. The Engineer shall reserve the right during the course of the project to make minor field timing changes necessary for pattern optimization and to eliminate identifiable potential hazards to the motoring public.

PART 8 - MAINTENANCE OF TRAFFIC

- A. The Contractor shall be responsible for maintaining traffic in a safe and efficient manner at all work sites. City of Lexington ordinances involving the time of day a Contractor may work are to be observed. The Contractor shall not narrow or close any lane of traffic between the hours of 7:00 AM through 9:00 AM and 4:00 p.m. through 6:00 p.m. Monday through Friday. Traffic control shall be in accordance with the latest version of the North Carolina Department of Transportation "Standard Specifications for Roads and Structures."
- B. The use of police and/or trained flagmen to control traffic through the intersection will be provided by the Contractor as required. The Contractor will be responsible for obtaining trained personnel to direct traffic and contracting with local authorities for the use of police for traffic control. Proper traffic control devices such as advance construction warning signs, flashing arrow panels, cones, etc., shall be used as prescribed by the NCDOT "Roadway Standard Drawings", the MUTCD, the NCDOT "North Carolina Supplement to the MUTCD," or as directed by the Engineer.
- C. All traffic control devices shall be in place before beginning work each day and removed at the end of the workday or during times of construction inactivity.
- D. The existing signal shall remain in operation until all new work is completed for a traffic signal upgrade. The controller and cabinet will be moved to their new locations at this time and placed in operation. City of Lexington Police will be needed to direct traffic during this time, which shall be limited to the hours of 9:00 a.m. to 3:00 p.m. The Contractor should give the Engineer 48 hours' notice prior to need for Police to direct traffic.

PART 9 - FINAL ACCEPTANCE AND TEN DAY OBSERVATION PERIOD

- A. Upon completion of all construction as defined in these Contract Documents and special provisions for the project and after the traffic signal installation has been approved, inspected, put into permanent operation and demonstrated to the Engineer to be totally operational, a 10-day observation period shall begin upon written notification to the Contractor by the Engineer. The purpose of this observation period is to assess the adequacy of the installation and operation of the equipment. During this 10-day observation period, the Contractor shall repair any defects in the installation work of the traffic signals performed by the Contractor, and make any adjustments deemed necessary by the Engineer. Should any failures occur during this observation period, the Contractor shall begin to make necessary repairs within four (4) hours of notification. Should such necessary repairs not be completed within twenty-four hours of notification, the observation period shall stop and resume only after such repairs and replacement of materials have been made, inspected and approved. During this observation period, the Contractor shall repair or replace any material and equipment furnished by him that becomes defective, lost, or damaged.
- B. The Contractor will repair, acceptable to the Engineer, scratches, dents, or other damage to the cabinets, which occur while the cabinets are under his responsibility. Unless otherwise noted, cabinets shall be unpainted natural aluminum.
- C. Completion and final acceptance of the project shall be contingent upon successful

completion of the Observation Period. The Observation Period shall be considered to be part of the work required to be completed by the final completion date specified herein.

- D. Upon completion of the project, and prior to final acceptance by the City of Lexington or NCDOT, the Contractor will furnish to the City one (1) signal inventory control sheet and one (1) set of plans showing “as-built” conditions.

PART 10 - METHOD OF MEASUREMENT

- A. All work covered in this Section shall be measured in accordance with the Methods of Measurement found in the NCDOT “Standard Specifications for Roads and Structures” unless otherwise indicated on the Itemized Proposal.

PART 11 - BASIS OF PAYMENT

- A. Payment will be full compensation for all work covered by this Section for all items included on the Itemized Proposal in the Contract Documents.

END OF SECTION 19000

SECTION 21000
PROJECT SPECIAL PROVISIONS

PART 1 - GENERAL

- A. The following items contained in Section 21000 are project-specific for **Granite Falls Blvd Resurfacing Project** and shall supersede any other conflicting portion of these Contract Documents.
- B. The areas listed on the construction drawings shall be improved in accordance with painted markings in the field or as directed by the Engineer.
- C. All quantities in this bid document are Engineer's Estimates only. Payments will be made based upon actual measurements as verified in the field.
- D. The mobilization (Line Code 1) is to be at a maximum of 5% of the total price of all other items within the total bid package. Failure to provide mobilization 5% or less of the total price of all other items within the total base bid package may result in the Owner rejecting the proposed bid.
- E. All improvements shall be constructed to facilitate positive drainage.
- F. There will be no fuel price adjustments.
- G. The Owner reserves the right to add or delete Areas from the Resurfacing lists at its discretion.
- H. **Cooperation Between Contractors:** The Contractor on this project shall cooperate with any and all Contractors or other entities performing construction working within or adjacent to the limits of this project to the extent that the work can be carried out to the best advantage of all concerned. This includes, but is not limited to, other Owner's Contractors, North Carolina Department of Transportation, private developments, and private utilities.

PART 2 – ASPHALT PAVEMENTS

- A. All asphalt materials shall meet or exceed NCDOT standard specifications. Where there are conflicting specifications, the most stringent shall apply.
- B. All asphalt production and placement shall be performed in accordance with NCDOT specifications and the current NCDOT QMS manual.
- C. Paving and asphalt surface treatment operations shall be structured to minimize tracking.
- D. All cleanup must be completed within **24 hours** after the final resurfacing course operations are complete. Work may not proceed the next day if clean-up is not performed.
- E. All streets are to be overlaid with Asphalt Concrete as shown in the construction drawings, in accordance with Section 03000. Specified asphalt types for the project include S9.5C and I19.0C.
- F. "Milling Asphalt Pavement" shall be constructed and paid for in accordance with section 607 in the NCDOT Standard Specifications. Furthermore, the contract unit bid price for "Milling Asphalt Pavement" at the respective depth shall include the cost of adjusting utilities down and up again to facilitate milling operations, if needed. The Contractor may elect to mill around utilities to avoid adjustments. Costs for adjustments for milling are incidental and no additional payment will be made.

- G. For Milled areas left unpaved overnight, there is not to be greater than 1.5 inch elevation difference left overnight.
- H. Asphalt plant mix with **up to 30% Reclaimed Asphalt Pavement (RAP)** may be incorporated into this project. Production, delivery, placement, testing, compaction, acceptance and all other criteria as noted within the current NCDOT QMS manual shall be met. Payment to be made as described in the General Requirements and Technical Specifications of these Contract Documents. Contractor shall submit asphalt mix designs to the Engineer for approval prior to beginning construction. **All asphalt pavements will be quantified and paid at the contract unit price per ton.** The contractor shall supply certified, weighmaster tickets with each load of asphalt delivered to the project.
- I. Sand or screenings shall be provided at the limits of construction to serve as blotting material. Effective coverage shall be maintained for the entire duration of the operation. This material is considered incidental to the work..
- J. Shrub and tree trimming and disposal in the right-of-way shall be performed by the Contractor as required to avoid conflict between existing shrubs and trees and paving equipment.
- K. The Contractor shall repair irrigation components if damaged during construction.
- L. Pavement Sections Calling for 4" of Asphalt Paving shall be placed in one layer of 2.5" I19.0C and one layer of 1.5" S9.5C.
- M. Pavement Sections Calling for 3" of Asphalt Paving shall be placed in 2 layers of 1.5" S9.5C.

PART 4 – CONCRETE

- A. All concrete flatwork to be completed prior to asphalt overlay.
- B. All Truncated Domes shall be Yellow in Color

PART 5 – MATERIALS

- A. All materials shall be in compliance with the most recent NCDOT Standard Specifications and approved products as stated by the NCDOT Approved Product List (APL).

PART 6 – TRAFFIC CONTROL

- A. Stopping traffic is limited to a total of five (5) minutes. This is two and one-half (2.5) minutes in each direction. A minimum of one travel lane **MUST** be maintained at all times.

PART 7 – UTILITY CONSTRUCTION

- A. The contractor shall be responsible for locating all utilities, public and private.
- B. All work associated with the utility adjustment, including site cleanup, shall be performed within the same day. Cones, barrels or other safety markers must be placed on the utilities until resurfacing is complete.
- C. Contractor shall be required to coordinate any private utility adjustments needed for paving operations. There will be no separate payment for private utility coordination efforts.

PART 8 – TRAFFIC SIGNAL WORK

- A. This project Includes Inductive Detection Loop work at the Granite Falls Blvd. intersection with Rogers Rd.
- B. All work Inductive Detection Loop work shall be in accordance with NCDOT Standard Specification Section 1725.

PART 9 – BASE REPAIR

- A. Upon completion of Milling Asphalt Pavement, before placing the first lift of Asphalt the existing base and/ or subgrade shall be inspected for areas unsuitable for the placement of Asphalt.
- B. For areas determined to be unsuitable the base and/ or subgrade is to be excavated to a 3-inch depth and backfilled with Asphalt Concrete. (Asphalt Concrete for base repair may be B25.0C or I19.0C at the Contractor's discretion)
- C. Basis of Payment: The contract unit bid price for "Base Repair; 3" depth. B25.0C or I19.0C (Contingency)", of specified item shall include, but not be limited to, all work required for the removal of existing material to the specified depth and the installation of specified item.

END OF SECTION 21000