Specifications for

PINE KNOLL SHORES PUBLIC SAFETY ROOF REPLACEMENT

Pine Knoll Shores, North Carolina



15 September, 2023



Coastal Architecture

4206 Bridges Street, Suite C Morehead City, North Carolina 28557 Phone: 252-247-2127

Email: <u>Lee@CoastalArchitecture.net</u> www.coastalarchitecture.net

Project No. 22038

Project Manual

including

Contract Documents & Specifications

for the Construction of

PINE KNOLL SHORES PUBLIC SAFETY ROOF REPLACEMENT PINE KNOLL SHORES, NORTH CAROLINA

PREPARED BY:

Coastal Architecture 4206 Bridges Street, Suite C Morehead City, NC 28557 252-247-2127 –phone Lee@coastalarchitecture.net www.coastalarchitecture.net

Architect's Project Number: 22038 Date of Issue: 15 September, 2023



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PINE KNOLL SHORES PUBLIC SAFETY ROOF REPLACEMENT PROJECT # 22038

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Pine Knoll Shores

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INVITATION TO BIDS

BIDS for the construction of the Pine Knoll Shores Public Safety Roof Replacement will be received by the Town at the Town Hall, 31 October 2023 until 2:00 pm.

At the Town Hall the proposals will be opened and read aloud. All bids must be in sealed envelopes reflecting on the outside thereof the bidder's name and "Bid for Pine Knoll Shores Public Safety Roof Replacement." The Town will consider all bids properly submitted at its scheduled opening in the PKS Town Hall Town Board room.

A pre-bid conference will be held at 2:00PM on site 19 October, 2023.

The CONTRACT DOCUMENTS may be obtained free from Architects website, www.coastalarchitecture.net or purchased from the Architect for a sum of \$150.00 per set. (Non Refundable)

The Owner reserves the unqualified right to reject any and/or all bids.

Bids are to be delivered to:

Coastal Architecture 4206 Bridges Street, Suite C Morehead City, NC 28557

A 5% Bid Bond will be required, and a 100% Performance and Payment Bond will be required.

Minority participation is encouraged.

AWARDING OF CONTRACT

1		For a	ny bi	d to	be co	nsidere	ed or	a	ccepted	by the	Town, a	at the	time of	filing,	a bic	l bond	wil
be require	ed in th	e am	ount (of 59	% of th	e total	bid p	ri	ce. The b	oid bor	nd must	be ex	ecuted	by a c	orpo	rate su	rety
licensed	under	the	laws	of I	North	Carolin	na to)	execute	such	bonds,	cond	itioned	that	the	surety	wil
immediat	ely upo	n der	mand	mal	ke pay	ment to	the	ol	blige upo	n said	bond if	bidde	r fails to	exec	ute th	ne cont	rac
in accord	ance w	ith th	e bid	bon	ıd.				•								

	2.	To be considered a complete bid, all of the following documents must be properly
complete	ed, sign	ned, and delivered as part of the bid:
		Proposal Form
		Bid Bond
_		Anti-Collusion Statement
_		E-Verify Compliance Certification
_		Certification Regarding Lobbying
_		Iran Divestment Act Certification
_		Certification of No Debarment or Suspension
		Conflict of Interest Disclosure
		Minority Business Participation Forms

- 3. The Town intends to award the contract to the lowest responsible bidder taking into consideration quality, performance, and the time specified in the proposals for performance of the contracts. While price will be the determinative factor if all other factors in proposals are equal, there is no obligation on the part of the Town to award the contract to the proposer with the lowest price when proposals contain different specifications or terms. The Town reserves the right to award the contract to the bidder submitting a responsive proposal which is most advantageous and in the best interest of the Town. The Town shall be the sole judge of the proposal that is in its best interest and its decision shall be final.
- 4. PKS will adhere to all federal procurement guidelines in this project. The following federal provisions apply pursuant to 2 C.F.R. § 200.327 and 2 C.F.R. Part 200, Appendix II (as applicable), and are contained in Appendix I Federal Contract Clauses. Thes provisions will be included in the contract.
 - 5. Right to Waive and Reject.
- a. The Town, in its absolute discretion, may waive any non-compliance, material or otherwise, with the requirements in the request for bids for documentation, information or other matters and to enter negotiations for a contract with the bidder who can best complete the Project in a cost effective and timely fashion and best serve the interests of the Town.
- b. The Town, in its absolute discretion, may reject any and all bids, in whole or part, and request new bids, or abandon the project.
- c. The Town, in its sole discretion, may reject any bid of a bidder that has failed, in the opinion of the Town, to complete or perform a Town contracted project in a timely fashion or has failed in any other way, in the opinion of the Town, to perform a prior contract with any other person or entity in a satisfactory manner.

6. Bid Protest

The Town Clerk shall post a tabulation of proposals received along with the intended award recommendations or a short list of proposers on the bulletin board in the Pine Knoll Shores Town Hall. Any person allegedly adversely affected by the decision or intended decision of award must file a written notice of protest within three (3) business days after posting of the award recommendation.

This notice must be delivered to the Town Clerk and must contain the following:

- 1. The protestant's business name, address & phone #.
- 2. The solicitation involved.
- 3. A clear statement as to the grounds of protest (applicable statutes, ordinances, laws, etc.
- 4. Specifically request the relief to which the protestant deems itself entitled.

Failure to file a written notice of protest within the specified time period specified shall result in relinquishment of all rights of protest by the vendor.

The Town Clerk shall review all protests within five (5) business days. If necessary, the Town Manager shall schedule a hearing for appropriate action to be determined. The proposal protester will be notified, in writing, of their final findings.

SINGLE PRIME	
FORM OF PROPOSAL FOR	:

Date:	
Bid: Single Prime	
Contractor:	
License #:	
Addenda Received:	

Pine Knoll Shores Public Safety Roof Replacement Pine Knoll Shores

Indicate your firm's name and date by filling in the above blanks and note the same items on your Proposal envelope or email transmittal.

The undersigned, as Bidder, hereby declares that the only person or persons interested in this Proposal as Principal or Principals is or are named herein and that no other person than herein mentioned has any interest in this Proposal or in the Contract to be entered into; that this Proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done; that he has examined the Specifications for the work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed. The Bidder proposes and agrees if this Proposal is accepted to contract with the Owner in the form of Contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the construction of The Pine Knoll Shores Public Safety Roof Replacement as defined in these Contract Documents, in full and in complete accordance with the plans and specifications of the Owner and the Architect/Engineer, with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and Contract Documents for the sum of:

Base Bid	SINGLE PRIME C	CONTRACT:		
(Written Amou	nt)			Dollars \$(Number Amount)
******	*******	*******	******	********
specified in a consecutive ca	written order of the	ne Architect/Engine and including said	eer and shall fully	er his Contract on a date to be complete all work within 120 quidated damages shall be as
The Bidder furt	thermore agrees to h	nold all prices for a	period of 60 days fro	om bid date.
Respectfully su	ubmitted this	day of	, 202	3.

WITNESS:	
	(Name of Firm or Corporation Making Bid)
	Ву:
(Proprietorship or Partnership)	Title: (Owner, Partner, or Corporate President or Vice President only)
ATTEST:	Address:
Ву:	
Title: (Corporate Secretary or Assistant Secretary Only)	License No.:(Corporate Seal)
Addenda Received and Used in Computing B	Bids: (Initial as Appropriate)
Addendum No.1	
Addendum No.2	
Addendum No.3	
Addendum No 4	

End of Proposal Form

ANTI-COLLUSION STATEMENT:

The below signed Bidder has not divulged to, discussed or compared his proposal with other proposers and has not colluded with any other proposer or parties to a proposal whatever. (Note: No premiums, rebates, or gratuities are permitted either with, prior to, or after any delivery of materials. Any such violation will result in the cancellation and/or return of material (as applicable) and the removal from proposal list(s).

Bidder's Company Nan	ne:	
Authorized Signature:		
	Printed Name	
Title:		
Address		
Federal ID # or SS #		

E-VERIFY COMPLIANCE CERTIFICATION

Public Safety Roof Replacement

Bidder hereby certifies that the U.S. Department of Homeland Security's E-Verify system will be used to verify the employment eligibility of all new employees hired by the contractor during the contract term, and shall expressly require any subcontractors performing work or providing services pursuant to the contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term; and shall provide documentation of such verification to the TOWN upon request.

provide documentation of such verification to the TO\	WN upon request.
As the person authorized to sign this statement, I cer the above requirements.	tify that this company complies/will comply fully with
Contractor's name	
Signature Contractor's Authorized Official	_
Name and Title of Authorized Official	_
Date:	
Emal:	

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

APPENDIX A, 44 C.F.R. PART 18 -

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. The Contractor, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Contractor's name
Signature of Contractor's Authorized Official
Name and Title of Authorized Official
Date:

IRAN DIVESTMENT ACT CERTIFICATION

Public Safety Roof Replacement

Bidder hereby certifies that he, and all subcontractors, are not on the Iran Final Divestment List ("List") created by the North Carolina State Treasurer pursuant to N.C.G.S. 147-86.58. If awarded the contract, Proposer shall not utilize any subcontractor that is identified on the List.

Contractor's name	
Signature of Contractor's Authorized Official	
Name and Title of Authorized Official	-
Date:	

CERTIFICATION OF NO DEBARMENT OR SUSPENSION

Public Safety Roof Replacement

Bidder acknowledges that a contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Bidder certifies that at the time of making his proposal, and if selected as the contractor, at the time of contract execution, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency.

Contractor's name	
Signature Contractor's Authorized Official	
Name and Title of Authorized Official	_
Date:	

CONFLICT OF INTEREST DISCLOSURE FORM

Public Safety Roof Replacement

For purposes of determining any possible conflict of interest, all bidders must disclose if any Commissioner, the mayor, employee, or member of any appointed board, of the Town of Pine Knoll Shores, or their spouses, is a corporate officer, director, employee, consultant, or subcontractor of the proposer.

Indicate either "yes" or "no". If yes, give person(s) name(s) and position(s) with your business.

YES______NO____

NAME(S)

POSITION(S)

Contractor's name

Signature Contractor's Authorized Official

Name and Title of Authorized Official

Date: ______

Small and Minority Business, Women's Business Enterprises (SMWBE), and Labor Surplus Area Firms Utilization Plan

Company Name (Proposer):	
Project Name:	
business, women's busines requires that proposers, if Small and Minority Busine Firms Opportunity Program	ocal governments to take all necessary affirmative steps to assure that minority as enterprises, and labor surplus area firms are used when possible. The Town subcontracts are to be let, to take affirmative steps as cited in RFP Section 7. esses, Women's Business Enterprises (SMWBE), and Labor Surplus Area in Requirements. Please describe your firm's plan for identifying and potential Surplus Area Firms. Additional pages may be attached, as necessary.
If no subcontracts are to be	e let, please certify by signature below.
performance of this work.	(Contractor Name) certifies that no subcontracts are to be used in the
Print Name	
Signature	-
Date	

GUIDELINES FOR RECRUITMENT AND SELECTION OF MINORITY BUSINESSES FOR PARTICIPATION IN STATE CONSTRUCTION CONTRACTS

In accordance with G.S. 143-128.2 (effective January 1, 2002) these guidelines establish goals for minority participation in single-prime bidding, separate-prime bidding, construction manager at risk, and alternative contracting methods, on State construction projects in the amount of \$300,000 or more. The legislation provides that the State shall have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of work for each project for which a contract or contracts are awarded. These requirements are published to accomplish that end.

SECTION A: INTENT

It is the intent of these guidelines that the State of North Carolina, as awarding authority for construction projects, and the contractors and subcontractors performing the construction contracts awarded shall cooperate and in good faith do all things legal, proper and reasonable to achieve the statutory goal of ten percent (10%) for participation by minority businesses in each construction project as mandated by GS 143-128.2. Nothing in these guidelines shall be construed to require contractors or awarding authorities to award contracts or subcontracts to or to make purchases of materials or equipment from minority-business contractors or minority-business subcontractors who do not submit the lowest responsible, responsive bid or bids.

SECTION B: DEFINITIONS

- 1. <u>Minority</u> a person who is a citizen or lawful permanent resident of the United States and who is:
 - a. Black, that is, a person having origins in any of the black racial groups in Africa;
 - b. Hispanic, that is, a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race;
 - c. Asian American, that is, a person having origins in any of the original peoples of the Far East, Southeast Asia and Asia, the Indian subcontinent, the Pacific Islands;
 - d. American Indian, that is, a person having origins in any of the original peoples of North America; or
 - e. Female
- 2. Minority Business means a business:
 - a. In which at least fifty-one percent (51%) is owned by one or more minority persons, or in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one or more minority persons or socially and economically disadvantaged individuals; and
 - b. Of which the management and daily business operations are controlled by one or more of the minority persons or socially and economically disadvantaged individuals who own it.
- 3. Socially and economically disadvantaged individual means the same as defined in 15 U.S.C. 637. "Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities". "Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged".
- 4. Public Entity means State and all public subdivisions and local governmental units.
- 5. Owner The State of North Carolina, through the Agency/Institution named in the contract.
- 6. <u>Designer</u> Any person, firm, partnership, or corporation, which has contracted with the State of North Carolina to perform architectural or engineering, work.
- 7. <u>Bidder</u> Any person, firm, partnership, corporation, association, or joint venture seeking to be awarded a public contract or subcontract.

- 8. <u>Contract</u> A mutually binding legal relationship or any modification thereof obligating the seller to furnish equipment, materials or services, including construction, and obligating the buyer to pay for them.
- 9. <u>Contractor</u> Any person, firm, partnership, corporation, association, or joint venture which has contracted with the State of North Carolina to perform construction work or repair.
- 10. <u>Subcontractor</u> A firm under contract with the prime contractor or construction manager at risk for supplying materials or labor and materials and/or installation. The subcontractor may or may not provide materials in his subcontract.

SECTION C: RESPONSIBILITIES

1. Office for Historically Underutilized Businesses, Department of Administration (hereinafter referred to as HUB Office).

The HUB Office has established a program, which allows interested persons or businesses qualifying as a minority business under G.S. 143-128.2, to obtain certification in the State of North Carolina procurement system. The information provided by the minority businesses will be used by the HUB Office to:

- a. Identify those areas of work for which there are minority businesses, as requested.
- b. Make available to interested parties a list of prospective minority business contractors and subcontractors.
- c. Assist in the determination of technical assistance needed by minority business contractors.

In addition to being responsible for the certification/verification of minority businesses that want to participate in the State construction program, the HUB Office will:

- (1) Maintain a current list of minority businesses. The list shall include the areas of work in which each minority business is interested.
- (2) Inform minority businesses on how to identify and obtain contracting and subcontracting opportunities through the State Construction Office and other public entities.
- (3) Inform minority businesses of the contracting and subcontracting process for public construction building projects.
- (4) Work with the North Carolina trade and professional organizations to improve the ability of minority businesses to compete in the State construction projects.
- (5) The HUB Office also oversees the minority business program by:
 - a. Monitoring compliance with the program requirements.
 - b. Assisting in the implementation of training and technical assistance programs.
 - c. Identifying and implementing outreach efforts to increase the utilization of minority businesses.
 - d. Reporting the results of minority business utilization to the Secretary of the Department of Administration, the Governor, and the General Assembly.

2. State Construction Office

The State Construction Office will be responsible for the following:

- a. Furnish to the HUB Office a minimum of twenty-one days prior to the bid opening the following:
 - (1) Project description and location;
 - (2) Locations where bidding documents may be reviewed;
 - (3) Name of a representative of the owner who can be contacted during the advertising period to advise who the prospective bidders are;
 - (4) Date, time and location of the bid opening.
 - (5) Date, time and location of prebid conference, if scheduled.
- b. Attending scheduled prebid conference, if necessary, to clarify requirements of the general statutes regarding minority-business participation, including the bidders' responsibilities.

- c. Reviewing the apparent low bidders' statutory compliance with the requirements listed in the proposal, that must be complied with, if the bid is to be considered as responsive, prior to award of contracts. The State reserves the right to reject any or all bids and to waive informalities.
- d. Reviewing of minority business requirements at Preconstruction conference.
- e. Monitoring of contractors' compliance with minority business requirements in the contract documents during construction.
- f. Provide statistical data and required reports to the HUB Office.
- g. Resolve any protest and disputes arising after implementation of the plan, in conjunction with the HUB Office.

3. Owner

Before awarding a contract, owner shall do the following:

- a. Develop and implement a minority business participation outreach plan to identify minority businesses that can perform public building projects and to implement outreach efforts to encourage minority business participation in these projects to include education, recruitment, and interaction between minority businesses and non-minority businesses.
- b. Attend the scheduled prebid conference.
- c. At least 10 days prior to the scheduled day of bid opening, notify minority businesses that have requested notices from the public entity for public construction or repair work and minority businesses that otherwise indicated to the Office for Historically Underutilized Businesses an interest in the type of work being bid or the potential contracting opportunities listed in the proposal. The notification shall include the following:
 - 1. A description of the work for which the bid is being solicited.

 - The date, time, and location where bids are to be submitted.
 The name of the individual within the owner's organization who will be available to answer questions about the project.
 - 4. Where bid documents may be reviewed.
 - 5. Any special requirements that may exist.
- d. Utilize other media, as appropriate, likely to inform potential minority businesses of the bid being sought.
- e. Maintain documentation of any contacts, correspondence, or conversation with minority business firms made in an attempt to meet the goals.
- f. Review, jointly with the designer, all requirements of G.S. 143-128.2(c) and G.S. 143-128.2(f) (i.e. bidders' proposals for identification of the minority businesses that will be utilized with corresponding total dollar value of the bid and affidavit listing good faith efforts, or affidavit of self-performance of work, if the contractor will perform work under contract by its own workforce) - prior to recommendation of award to the State Construction Office.
- g. Evaluate documentation to determine good faith effort has been achieved for minority business utilization prior to recommendation of award to State Construction Office.
- h. Review prime contractors' pay applications for compliance with minority business utilization commitments prior to payment.
- i. Make documentation showing evidence of implementation of Owner's responsibilities available for review by State Construction Office and HUB Office, upon request

4. Designer

Under the single-prime bidding, separate prime bidding, construction manager at risk, or alternative contracting method, the designer will:

- a. Attend the scheduled prebid conference to explain minority business requirements to the prospective bidders.
- b. Assist the owner to identify and notify prospective minority business prime and subcontractors of potential contracting opportunities.
- c. Maintain documentation of any contacts, correspondence, or conversation with minority business firms made in an attempt to meet the goals.
- d. Review jointly with the owner, all requirements of G.S. 143-128.2(c) and G.S.143-128.2(f) (i.e. bidders' proposals for identification of the minority businesses that will be utilized with

- corresponding total dollar value of the bid and affidavit listing Good Faith Efforts, or affidavit of self-performance of work, if the contractor will perform work under contract by its own workforce) prior to recommendation of award.
- e. During construction phase of the project, review "MBE Documentation for Contract Payment" (Appendix E) for compliance with minority business utilization commitments. Submit Appendix E form with monthly pay applications to the owner and forward copies to the State Construction Office.
- f. Make documentation showing evidence of implementation of Designer's responsibilities available for review by State Construction Office and HUB Office, upon request.

5. <u>Prime Contractor(s), CM at Risk, and Its First-Tier Subcontractors</u> Under the single-prime bidding, the separate-prime biding, construction manager at risk and

alternative contracting methods, contractor(s) will:

- a. Attend the scheduled prebid conference.
- b. Identify or determine those work areas of a subcontract where minority businesses may have an interest in performing subcontract work.
- c. At least ten (10) days prior to the scheduled day of bid opening, notify minority businesses of potential subcontracting opportunities listed in the proposal. The notification will include the following:
 - (1) A description of the work for which the subbid is being solicited.
 - (2) The date, time and location where subbids are to be submitted.
 - (3) The name of the individual within the company who will be available to answer questions about the project.
 - (4) Where bid documents may be reviewed.
 - (5) Any special requirements that may exist, such as insurance, licenses, bonds and financial arrangements.

If there are more than three (3) minority businesses in the general locality of the project who offer similar contracting or subcontracting services in the specific trade, the contractor(s) shall notify three (3), but may contact more, if the contractor(s) so desires.

- d. During the bidding process, comply with the contractor(s) requirements listed in the proposal for minority participation.
- e. Identify on the bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit listing good faith efforts as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).
- f. Make documentation showing evidence of implementation of PM, CM-at-Risk and First-Tier Subcontractor responsibilities available for review by State Construction Office and HUB Office, upon request.
- g. Upon being named the apparent low bidder, the Bidder shall provide one of the following: (1) an affidavit (Affidavit C) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal; (2) if the percentage is not equal to the applicable goal, then documentation of all good faith efforts taken to meet the goal. Failure to comply with these requirements is grounds for rejection of the bid and award to the next lowest responsible and responsive bidder.
- h. The contractor(s) shall identify the name(s) of minority business subcontractor(s) and corresponding dollar amount of work on the schedule of values. The schedule of values shall be provided as required in Article 31 of the General Conditions of the Contract to facilitate payments to the subcontractors.
- i. The contractor(s) shall submit with each monthly pay request(s) and final payment(s), "MBE Documentation for Contract Payment" (Appendix E), for designer's review.
- j. During the construction of a project, at any time, if it becomes necessary to replace a minority business subcontractor, immediately advise the owner, State Construction Office, and the Director of the HUB Office in writing, of the circumstances involved. The prime contractor shall make a good faith effort to replace a minority business subcontractor with another minority business subcontractor.

- k. If during the construction of a project additional subcontracting opportunities become available, make a good faith effort to solicit subbids from minority businesses.
- 1. It is the intent of these requirements apply to all contractors performing as prime contractor and first tier subcontractor under construction manager at risk on state projects.

6. <u>Minority Business Responsibilities</u>

While minority businesses are not required to become certified in order to participate in the State construction projects, it is recommended that they become certified and should take advantage of the appropriate technical assistance that is made available. In addition, minority businesses who are contacted by owners or bidders must respond promptly whether or not they wish to submit a bid.

SECTION 4: DISPUTE PROCEDURES

It is the policy of this state that disputes that involves a person's rights, duties or privileges, should be settled through informal procedures. To that end, minority business disputes arising under these guidelines should be resolved as governed under G.S. 143-128(g).

<u>SECTION 5</u>: These guidelines shall apply upon promulgation on state construction projects. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: www.nc-sco.com

SECTION 6: In addition to these guidelines, there will be issued with each construction bid package provisions for contractual compliance providing minority business participation in the state construction program.

MINORITY BUSINESS CONTRACT PROVISIONS (CONSTRUCTION)

APPLICATION:

The Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts are hereby made a part of these contract documents. These guidelines shall apply to all contractors regardless of ownership. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: http://www.nc-sco.com

MINORITY BUSINESS SUBCONTRACT GOALS:

The goals for participation by minority firms as subcontractors on this project have been set at 10%.

The bidder must identify on its bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts <u>or</u> affidavit (Affidavit B) of self-performance of work, if the bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

The lowest responsible, responsive bidder must provide Affidavit C, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal.

OR

Provide Affidavit D, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, with documentation of Good Faith Effort, if the percentage is not equal to the applicable goal.

OR

Provide Affidavit B, which includes sufficient information for the State to determine that the bidder does not customarily subcontract work on this type project.

The above information must be provided as required. Failure to submit these documents is grounds for rejection of the bid.

MINIMUM COMPLIANCE REQUIREMENTS:

All written statements, affidavits or intentions made by the Bidder shall become a part of the agreement between the Contractor and the State for performance of this contract. Failure to comply with any of these statements, affidavits or intentions, or with the minority business Guidelines shall constitute a breach of the contract. A finding by the State that any information submitted either prior to award of the contract or during the performance of the contract is inaccurate, false or incomplete, shall also constitute a breach of the contract. Any such breach may result in termination of the contract in accordance with the termination provisions contained in the contract. It shall be solely at the option of the State whether to terminate the contract for breach.

In determining whether a contractor has made Good Faith Efforts, the State will evaluate all efforts made by the Contractor and will determine compliance in regard to quantity, intensity, and results of these efforts. Good Faith Efforts include:

- (1) Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed.
- (2) Making the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.
- (3) Breaking down or combining elements of work into economically feasible units to facilitate minority participation.
- (4) Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- (5) Attending any prebid meetings scheduled by the public owner.
- (6) Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.
- (7) Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- (8) Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- (9) Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- (10) Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

APPENDIX E

MBE DOCUMENTATION FOR CONTRACT PAYMENTS

Prime Contractor/Architect	t:			
Address & Phone:				
Project Name:				
Pay Application #:		Period:		
The following is a list of parentioned period.	ayments made to	Minority Business l	Enterprises on this pr	roject for the above
MBE FIRM NAME	* INDICATE TYPE OF MBE	AMOUNT PAID THIS MONTH	TOTAL PAYMENTS TO DATE	TOTAL AMOUNT COMMITTED
*Minority categories: American Indian (I), F				
Date:	Approved/Ce	ertified By:		ame
			T	itle
			Sig	nature

SUBMIT WITH EACH PAY REQUEST & FINAL PAYMENT

Identification of HUB Certified/ Minority Business Participation

nstruction subcontractors, vendors, suppl rm Name, Address and Phone #	Work Type	*Minority	**HUB
mi Name, Address and Phone #	work Type	Category	Certified (Y/N)

The total value of minority business contracting will be (\$)_____.

^{**} HUB Certification with the state HUB Office required to be counted toward state participation goals.

Attach to Bid At
County of
(Name of Bidder)
Affidavit of
I have made a good faith effort to comply under the following areas checked:
Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive. (1 NC Administrative Code 30 I.0101)
1 – (10 pts) Contacted minority businesses that reasonably could have been expected to submit a quote ar that were known to the contractor, or available on State or local government maintained lists, at least 10 da before the bid date and notified them of the nature and scope of the work to be performed.
2(10 pts) Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
3 – (15 pts) Broken down or combined elements of work into economically feasible units to facilitate minorit participation.

	I – (10 pts) Contacted minority businesses that reasonably could have been expected to submit a quote and hat were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
	2(10 pts) Made the construction plans, specifications and requirements available for review by prospective ninority businesses, or providing these documents to them at least 10 days before the bids are due.
	B – (15 pts) Broken down or combined elements of work into economically feasible units to facilitate minority participation.
	I – (10 pts) Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in ecruitment of minority businesses.
	5 – (10 pts) Attended prebid meetings scheduled by the public owner.
	5 – (20 pts) Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
	7 – (15 pts) Negotiated in good faith with interested minority businesses and did not reject them as inqualified without sound reasons based on their capabilities. Any rejection of a minority business based on ack of qualification should have the reasons documented in writing.
	B – (25 pts) Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
	9 – (20 pts) Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
	0 - (20 pts) Provided quick pay agreements and policies to enable minority contractors and suppliers to neet cash-flow demands.
Ide exe Fai The	undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the tification of Minority Business Participation schedule conditional upon scope of contract to be cuted with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) are to abide by this statutory provision will constitute a breach of the contract. undersigned hereby certifies that he or she has read the terms of the minority business mitment and is authorized to bind the bidder to the commitment herein set forth.
Dat	e:Name of Authorized Officer:
	Signature:
	Title:
	State of County of
	State of, County of Subscribed and sworn to before me thisday of20
	SEAL Notary Public
	My commission expires

Attach to Bid Attach to Bid

State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce

County of	with <u>own</u> workloice.
Affidavit of	
(Nar	me of Bidder) 0% of the work required for the
	contract.
(Name of Project)	
In making this certification, the Bidder states that of this type project, and normally performs and helements of the work on this project with his/her	
	rmation or documentation requested by the owner in ees to make a Good Faith Effort to utilize minority
The undersigned hereby certifies that he or she Bidder to the commitments herein contained.	has read this certification and is authorized to bind the
Determined Officers	
Date: Name of Authorized Officer:	
Signature:	
SEAL Title:	
State of, County of	
State of, County of, Subscribed and sworn to before me this Notary Public	day of20

My commission expires_____

State of North Performed by H	IUB Certified/I	AFFIDAV	IT C - I	Portion of the V	mit with bid Nork to be
County of [Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)					
If the portion of the w 128.2(g) and 128.4(a bidder must complete This affidavit shall be after notification of be	a),(b),(e) is <u>equal to</u> e this affidavit. e provided by the ap	or greater th	an 10% of th	ne bidders total cont	ract price, then the
Affidavit of				I do hereb	y certify that on the
	(Na	me of Bidder)			
Project ID#_	(Project		\maunt of Pi	id \$_	
I will expend a minim enterprises. Minority or providers of profe below.	y businesses will b essional services. Attach addi	of the total d	ollar amoun as construct will be subo	t of the contract with tion subcontractors, contracted to the fo	vendors, suppliers llowing firms listed
Name and Phone Nu	umber	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value
*Minority categories: B	lack African America	n (R) Hisnani	r (H) Asian A	American (A) American	lndian (I)
** HUB Certification v	Female (F) Soc	ially and Econ	omically Disa	dvantaged (D)	.,
Pursuant to GS143-work listed in this so this commitment may	chedule conditional	upon execut	tion of a cor	•	•
The undersigned her authorized to bind th				ns of this commitme	nt and is
Date:N	lame of Authorized	Officer:			
	Si	gnature:			
SEAL		Title:			
	State of	,	County of		
	Subscribed and sw Notary Public	orn to before n	ne this	day of20_	

My commission expires_____

State of North Carolina

AFFIDAVIT D - Good Faith Efforts

County of					
(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)					
If the goal of 10% participation by provide the following documentar				, the Bidder shall	
Affidavit of			I do here	by certify that on the	
	(Name of Bidd	er)			
Project ID#	(Project Name)	Amount	of Bid \$		
I will expend a minimum of	linority business of professional se	es will be en ervices. Suc	mployed as constructio	n subcontractors,	
Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value	

Examples of documentation that <u>may</u> be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- I. Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

^{*}Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

^{**} HUB Certification with the state HUB Office required to be counted toward state participation goals.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date:	Name of Authorized Officer:	
	Signature:	
	Title:_	
SEAL	State of Subscribed and sworn to before Notary Public	 <u>.</u>
	My commission expires	

ADDENDUM I

PINE KNOLL SHORES PUBLIC SAFETY ROOF REPLACEMENT

TOWN OF PINE KNOLL SHORES

Including Provisions for Federal Emergency Management Agency (FEMA) Assistance, Reimbursement Contracts

The Agreement is funded, in whole or in part, by Federal assistance in the form of grant, sub-grant, loan or reimbursement either directly to the Town of Pine Knoll Shores ("Town") as a recipient or to the Town as a subrecipient of funding provided from the Federal government to an agency of the State of North Carolina or to another pass-through agency. In the event of a conflict between the provisions of the Agreement to which this Addendum applies and this Addendum, the provisions of this Addendum shall control.

Additional Provisions for Contracts Funded Through Federal Assistance,

The parties shall comply with all federal laws and regulations applicable to the receipt of FEMA grants, including, but not limited to the contractual procedures set forth in Title 2 of the Code of Federal Regulations, Part 200 ("2 CFR 200"), including Appendix II to such Part ("Appendix II").

In addition, the Parties agrees as follows:

- 1. Town is entitled to exercise all administrative, contractual, or other remedies permitted by law to enforce Contractor's compliance with the terms of this Agreement, except to the extent expressly provided otherwise by this Agreement.
- 2. Town may, at its sole discretion, terminate this Agreement for cause or convenience in accordance with the procedures set forth in this Agreement.
- 3. This Agreement may be amended only by written document executed by a duly authorized representative of each of the parties.
- 4. Equal Employment Opportunity

Applicable to federally assisted construction contracts. The following clause shall be inserted.

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, 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 Contractor agrees to post in a conspicuous place, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or worker's representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provision of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the applicant so participating is a State or local government, the above equal

opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant furthers agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

5. Compliance with the Davis-Bacon Act and Copeland Anti-Kickback Act, as applicable, to the Contractor's performance pursuant to this Agreement.

The Davis Bacon Act is applicable to the Emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and the Transit Security Grant Program. It **DOES NOT** apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program. If the Davis-Bacon Act is not applicable, the Copeland Anti-Kickback Act is not applicable. In the event the two acts apply to a federal grant the required contract language can be found in at 29 CFR §5.5(a)(1)-(10).

6. Contract Work Hours and Safety Standards Act

Applicability. This requirement applies to all FEMA contracts awarded by the non-federal entity in excess of \$100,000 under grant and cooperative agreement programs that involve the employment of mechanics or laborers. It is applicable to construction work. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(1) Overtime requirements. No contractor or sub-contractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such work week.

- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. Town shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

7. Rights to Inventions Made Under a Contract or Agreement

This clause is <u>not applicable</u> to the FEMA Public Assistance Program, but may be applicable to other federal grant or cooperative agreement programs. The clause is required for funding agreements relative to performance of experimental, developmental or research on behalf of the federal government under a funding agreement as defined by 37 CFR §401.2(a).

8. Compliance with the Clean Air Act and the Federal Water Pollution Control Act.

a. Clean Air Act

- (i) Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, 42 U.S.C. §7401 et seq.
- (ii) Contractor agrees to report each violation to Town and understands and agrees that Town will, in turn, report each violation as required to assure notification to FEMA and the appropriate Environmental Protection Agency Regional Office.
- (iii) Contractor agrees to include these requirements in each subcontract exceeding \$150,000.00 financed in whole or in part with Federal assistance provided by FEMA.

b. Federal Water Pollution Control Act

(i) Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

- (ii) Contractor agrees to report each violation to the Town, the Contractor understands and agrees that the Town will, in turn, report each violation as required to assure notification to the State of North Carolina Emergency Management, Federal Emergency Management Agency (FEMA) and appropriate Environmental Protection Agency Regional Office.
- (iii) The contractor agrees to include these requirements in each subcontract exceeding \$150,000.00 financed in whole or in part with Federal assistance provided by FFM Δ

9. Suspension and Debarment

- a. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that neither the Contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- b. Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction related in any way to the performance of this Agreement.
- c. This certification is a material representation of fact relied upon by Town. If it is later determined that Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to Town, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- d. The Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this Agreement is valid and throughout the period of any contract that may arise from the performance of this agreement. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

10. Compliance with Byrd Anti-Lobbying Amendment

- a. Contractor hereby certifies to the best of its knowledge that:
- (i) No Federal appropriated funds have been paid or will be paid, by or on behalf of Contractor, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (ii) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, Contractor shall complete and submit Standard Form- LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- b. Contractor shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts

under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

- c. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000.00 and not more than \$100,000.00 for each such failure.
- d. By executing this Agreement, Contractor hereby certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

11. Procurement of Recovered Materials

- a. In the performance of this Agreement, Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired
 - (i) Competitively within a timeframe providing for compliance with the contract performance schedule;
 - (ii) Meeting contract performance requirements; or
 - (iii) At a reasonable price.
- b. Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.
- 12. Prohibition on certain telecommunications and video surveillance services or equipment.
 - (a) Definitions. As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause.
 - (b) Prohibitions.
 - (1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. 200.216 prohibit the head of an executive agency on or after Aug. 13, 2020, from obligating or expending grant, cooperative

- agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.
- (2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:
 - (i) Procure or obtain any equipment, system, or services that uses covered telecommunications equipment or services as substantial or essential component of any system, or as critical technology of any system;
 - (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system; or
 - (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, or as critical technology as part of any system; or
 - (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Exceptions.

- (1) This clause does not prohibit contractors from providing:
- (i) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
- (2) By necessary implication and regulation, the prohibitions also do not apply to:
- (i) Covered telecommunications equipment or services that:
 - i. Are not used as a substantial or essential component of any system; and
 - ii. Are not used as critical technology of any system.
- (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) Reporting Requirement.

- (1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this contract are established procedures for reporting the information.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:
 - (i) Within one business day from the day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
 - (ii) With 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered

telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

13. Domestic Preferences for Procurements

- (a) As appropriate and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.
- (b) For purposes of this section:
 - (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - (2) "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

14. Affirmative Socioeconomic Steps

If subcontracts are to be let, the prime contractor is required to take all necessary steps identified in 2 C.F.R. §200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus firms are used when possible. Those steps are outlined below:

- Placing qualified small and minority businesses and women's business enterprises on solicitation lists.
- Assuring that small and minority businesses, and women's business enterprises are solicited whenever there are potential sources.
- Dividing total requirements, when economically feasible, into smaller task or quantities to permit maximum participations by small and minority businesses, and women's business enterprises.
- Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.
- Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

15. Access to Records

The following access to records requirement applies to this Agreement:

- a. Contractor agrees to provide, the Town, the State of North Carolina Emergency Management, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- b. Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract
- d. In compliance with section 1225 of the Disaster Recovery Reform Act of 2018, Town and the Contractor acknowledge and agree that no language in this contract is intended to

prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

16. Use of DHS Seal

Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The contractor shall include this provision in any subcontract.

17. Compliance with Federal Law

This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion the Agreement only. The Contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

18. No Obligation of Federal Government

The Federal Government is not a party to this Agreement and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

19. Program Fraud and False or Fraudulent Statements or Related Acts

Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.

20. License and Delivery of Works Subject to Copyright and Data Rights

Applies to contracts related to producing copyrightable subject matter and/or data and provides the federal government certain rights as defined in 2 CFR §200.315(b) and (d).

The Contractor grants to the Town, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in performance of this contract, the Contractor will identify such data and grant to the Town or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. §102, for example, any written reports or literary works, software and/or source code, music choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the Contractor will deliver to the Town data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the Town.

- 21. Safeguarding of Sensitive Information and Information Technology Security and Privacy Training (reference Homeland Security Acquisition Regulation (HSAR 3052.204-71 Contractor Access)
 - (a) Sensitive Information, as used in this clause, means any information, which if lost, misused, disclosed, or, without authorization is accessed, or modified, could adversely affect the national or homeland security interest, the conduct of Federal programs, or the privacy to which individuals are entitled under section 552a of title 5, United States Code (the Privacy Act), but which has not been specifically authorized under criteria established by an Executive Order or

an Act of Congress to be kept secret in the interest of national defense homeland security or foreign policy. This definition includes the following categories of information:

- (1) Protected Critical Infrastructure Information (PCII) as set out in the Critical Infrastructure Information Act of 2002 (Title II, Subtitle B, of the Homeland Security Act, Pub. L. 107-296, 196 Stat. 2135), as amended, the implementing regulations thereto (Title 6, Code of Federal Regulations, part 29) as amended, the applicable PCII Procedures Manual, as amended, and any supplementary guidance officially communicated by an authorized official of the Department of Homeland Security (including the PCII Program Manager or his/her designee);
- (2) Sensitive Security Information (SSI), as defined in Title 49, Code of Federal Regulations, part 1520, as amended, "Policies and Procedures of Safeguarding and Control of SSI," as amended, and any supplementary guidance officially communicated by an authorized official of the Department of Homeland Security (including the Assistant Secretary for the Transportation Security Administration or his/her designee);
- (3) Information designated as "For Official Use Only," which is unclassified information of a sensitive nature and the unauthorized disclosure of which could adversely impact a person's privacy or welfare, the conduct of Federal programs, or other programs or operations essential to the national or homeland security interest; and
- (4) Any information that is designated "sensitive" or subject to other controls, safeguards or protections in accordance with subsequently adopted homeland security information handling procedures.
- (b) "Information Technology Resources" include, but are not limited to, computer equipment, networking equipment, telecommunications equipment, cabling, network drives, computer drives, network software, computer software, software programs, intranet sites, and internet sites.
- (c) Contractor employees working on this contract must complete such forms as may be necessary for security or other reasons, including the conduct of background investigations to determine suitability. Completed forms shall be submitted as directed by the Contracting Officer. Upon the Contracting Officer's request, the Contractor's employees shall be fingerprinted, or subject to other investigations as required. All Contractor employees requiring recurring access to Government facilities or access to sensitive information or IT resources are required to have a favorably adjudicated background investigation prior to commencing work on this contract unless this requirement is waived under Departmental procedures.
- (d) The Contracting Officer may require the Contractor to prohibit individuals form working on the contract if the Government deems their initial or continued employment contrary to the public interest for any reason, including, but not limited to, carelessness, insubordination, incompetence or security concerns.
- (e) Work under this contract may involve access to sensitive information. Therefore, the Contractor shall not disclose, orally or in writing, and sensitive information to any person unless authorized in writing by the Contracting Officer. For those Contractor employees authorized access to sensitive information, the Contractor shall ensure that these persons receive training concerning the protection and disclosure of sensitive information both during and after contract performance.

The Contractor shall include the substance of this clause in all subcontracts at any tier where the subcontractor may have access to Government facilities, sensitive information, or resources.

SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS AND GENERAL REQUIREMENTS

SUPPLEMENTS TO AIA DOCUMENT A-201: 2017 Edition

The following supplements modify, delete from or add to the "General Conditions of the Contract for Construction", AIA Document A-201, 2007. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect. If in the event any articles of the Construction Contract are in direct conflict with Articles of the General Conditions, the Contract shall override for that portion that may be in conflict.

ARTICLE 1:

Add the following definitions:

- "Product" includes materials, systems, and equipment.
- "Provide" shall mean furnish and install complete in place, operational and ready for use.
- "Building Code" and "Code" refer to regulations of governmental agencies having jurisdiction
- "Or approved equal" and "equal to" shall mean substitute products by manufacturers other than those specified in the project manual, addenda, and on the drawings and which may be incorporated in the work after review and concurrence by the designer and the Owner.
- "Approved", "required", and "as directed" refer to and indicate the work or materials that may
 be approved, required or directed by the Architect acting as the agent for the "Owner
- "Indicated" and "shown" shall mean as detailed, or called for and reasonably implied in the contract documents.
- "Latest edition" shall mean the current printed document issued up to 30 calendar days prior to date of receipt of bids, unless specified otherwise.
- "Drawings" or "plans" mean the drawings enumerated in the contract documents, as well as all the information in the detail manual when applicable, addenda, and designer prepared field drawings and clarification drawings.
- "Specifications" mean this project manual and addenda thereto.
- "Similar" means in its general sense and not necessarily identical.
- "Shown", "indicated", "detailed", "noted", "scheduled" and terms of similar import, refer to the requirements contained in the Contract Documents.

ARTICLE 2:

2.2.5 Add: Drawings and Specification furnished to contractors:

Final Plans, Specifications and any Addendum will be posted on the Architect's website.

ARTICLE 3:

3.1.1 Add: The General Contractor shall be the "Project Expediter" and shall be responsible for proper coordination of all work.

- 3.12.11 Add: <u>Product Data, and Samples</u> Each contractor shall submit <u>electronic</u> copies of all shop drawings, and any required samples for approval.
- 3.12.12 Add: The contractor shall make any corrections required by the Architect and file with him <u>electronic</u>) copies, when requested. Additional copies shall be furnished to other trades and prime contractors where necessary to coordinate their work.
- 3.12.13 Add: The Contractor shall keep at the site a current set of shop drawings that bear the stamped approval of the Architect or Engineer.
- 3.15.1 Add: Prior to final inspection and acceptance of the building, the General Contractor shall clean the building, including but not limited to, glass, hardware, fixtures, equipment, masonry, clean floors as specified, and completely prepare the building for use by the Owner with no cleaning required by the Owner.

ARTICLE 5:

ARTICLE 7:

7.2.1 Add: The allowances for overhead and profit combined shall not exceed fifteen (15)% of net cost except where the change involves a subcontractor; allowances shall not exceed fifteen (15)% for the subcontractor and five (5)% for the prime contractor. No allowances shall be made for overhead and profit. In the case of deductible change orders, the contractor shall include not less than seven (7)% profit, but no allowance for overhead.

At the time of signing a change order, the contractor shall certify as follows, "I certify that my bonding company will be notified forthwith that my contract has been increased or decreased by the amount of this change order, and that a copy of the approved change order will be mailed upon receipt by me to my surety".

All requests for Change Orders must be in writing and be supported by a breakdown showing method of arriving at net costs. Breakdown shall include materials, labor, taxes, profit & overhead.

ARTICLE 8:

8.1.2 Add: The Contractor shall commence work to be performed under this agreement on a date to be specified in a written Notice to Proceed and shall fully complete work hereunder within **the amount of days submitted in the bid**.

ARTICLE 9:

9.2 Add: Schedule of Values shall separate labor and material for each phase of the work.

The phases of work shall be broken down per each section of the specifications. Where a section includes two or more major items of work, they shall also be broken out separately including labor and material.

Each item in the Schedule of Values and Application for Payment shall be complete including its total cost and proportionate share of general overhead and profit margin.

At the Contractor's option, temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown as separate line items in the Schedule of Values or distributed as general overhead expense.

Submit five (5) copies, within 10 days of Notice to Proceed.

9.3.1 Add: Type of Form: Application and Certificate for Payment AIA Document G 702 and Continuation Sheet G 702A, latest edition. (The contractor may purchase these certificates from the American Institute of Architects, 1735 New York Avenue, NW, Washington, D.C.).

Number of copies: Five (5) unless otherwise noted. Must have original signatures.

Cut off for each application shall be the 25th of each month.

Application shall be in Architect's office no later than the last day of each month and shall be signed and notarized.

Retainage: Each certificate shall show, and the Owner will retain 5% of the amount of each estimate until final completion and acceptance of all work covered by the contract.

9.6.1 Add: The Owner shall make payment of each certificate no later than the last day of the following month.

ARTICLE 11:

Add:

All Certificates of Insurance required by the Contract Documents shall contain a provision that coverage's afforded under the policies will not be canceled, reduced in amount or coverage's eliminated until at least thirty (30) days after mailing written notice, by certified mail, return receipt requested, to the insured and the Owner of such alteration or cancellation.

Full contract amount shall appear on each document as necessary.

Effective date on each document shall be the same as the contract document date.

Expiration date shall be sufficient to complete the project.

An authorized individual agent, licensed to do business in North Carolina, shall countersign each policy.

The title "Licensed Resident Agent" shall appear after the signature.

11.1 Add:

Shall be furnished and maintained by contractor as outlined with the following adjustments and additions.

General Liability shall include: Comprehensive forms, premises- operations, independent contractor's protective, products and completed operations broad form property damaged, and explosion and collapse hazard.

Automobile liability shall include: Comprehensive form, owned, hired, and non-owned.

Worker's Compensation and Employer's Liability in accordance with North Carolina Statutory requirements.

11.1.2 Limits shall be as follows:

Combined Single Limit
General Liability - For Bodily Injury and Property Damage
Each Occurrence = \$1,000,000
General Aggregate = \$2,000,000

<u>Auto Liability</u> - For Bodily Injury and Property Damage <u>Combined Single Limit</u> = \$300,000

Employer Liability for each accident = \$100,000

Subcontractor's Insurance Coverage - The Contractor shall either:

- Require each of his subcontractors to procure and to maintain during the life
 of his subcontract, Subcontractor's Comprehensive General Liability,
 Automobile Liability, and Property Insurance of the type and the same amount
 as specified in paragraph above; or
- 2. Insure the activity of his subcontractors in his own policy.
- 11.3 Owner to provide and Supply Builders Risk Insurance
- 11.4.1 Performance bond and payment bond will be required for 100% of the contract price.

ARTICLE 13: MISCELLANEOUS PROVISIONS

The Project Expediter shall provide temporary power required for construction for all trades and disciplines unless otherwise stated in the specifications.

The Contractor will pay for electricity and water usage. The Contractor shall assure that temporary power and water are used in a responsible manner.

ARTICLE 15:

- 15.1.5.1 Add: When Contract Time has been extended, as provided under this Paragraph 4.3.7.1, such extension of time shall not be considered as justifying extra compensation to the Contractor for Administrative costs or other such reasons.
- 15.1.2 Add: Mediation will be the first step in solving claims. Arbitration shall be used to settle disputes or claims only if both parties agree to arbitration, otherwise, all disputes and claims shall be settled by normal legal means.

If arbitration is agreed by both parties, then after appointment of the arbitrator or arbitrators, the parties to the arbitration shall have the right to take depositions and to obtain discovery regarding the subject matter of the arbitration and, to that end, to use and exercise all of the same rights, remedies, and procedures, and be subject to all of the same duties, liabilities, and obligations in the arbitration with respect to the subject matter thereof, as if the matter of the arbitration were pending in a civil action before a Superior Court of the State.

SECTION 00820 - SPECIAL CONDITIONS

- General: Preliminary site work has been done. All contractors shall conduct their
 operations so as to cause the least possible interference with the normal reminder of the site.
 All contractors shall limit use of the site for access and storage of materials to those areas
 approved by the Owner. All access to the area of work must be through designated areas
 approved by the Owner.
- 2. **On Site Parking:** Parking is not permitted on the Owner's property except for construction vehicles used in the performance of the work and only where approved by the Owner.
- 3. **Site Security:** The present level of security for the existing site shall not be reduced in any way, due to work of this contract.
- 4. **Personnel Safety:** Contractor shall provide barricades and similar types of safety items required to protect anyone in the area of work from the hazards of construction activities. Roadways, walks, paths, entrances, exits, etc. shall remain unobstructed and shall be maintained in a safe and satisfactory manner.
- 5. Site Protection: Contractor shall be responsible for and shall protect adjacent site features. Any damage shall be fully corrected to the satisfaction of the Architect. Sidewalks and paved areas shall be protected from damage prior to vehicular traffic use. If during the construction, public or private property is damaged or destroyed, during the course of the work, the responsible contractor shall, at his own expense, restore such property to a condition equal to that existing before such damage or injury was done, by repairing, rebuilding or replacing it, or otherwise making good such damage or destruction in an acceptable manner.
- 6. Access to the building and site shall be only between the hours of 7:00 am 8:00 pm, Monday through Saturday unless otherwise approved in advance.
- The Contractor shall be responsible for obtaining and paying for the building permit.
- 8. The building will remain occupied during construction. The contractor shall maintain the building dry and protected from the elements.
- 9. Interruptions to plumbing, mechanical, or electrical service to be coordinated with the owner as the building will remain occupied.

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION

A. The Contractor shall, unless otherwise specified, supply all labor, transportation, materials, apparatus, fuel, water, energy, light and tools necessary for entire, proper and substantial completion of his work and shall install, maintain, and remove all equipment for the construction, other utensils or things and shall be responsible for the safe, proper and lawful construction, maintenance and use of same and shall construct in the best and most workmanlike manner a complete structure and everything properly incidental thereto as shown on plans, stated in specifications or reasonably implied there from, all in accordance with the Contract Documents.

B. Contract type

The work will be accomplished under:

- 1. A single lump sum prime general contract covering general, mechanical, plumbing and electrical construction contract.
- C. Scope of Work scope of the work is, but not limited to as follows:
 - General Construction Roof Overbuild
 - 2. Plumbing System
 - 3. HVAC System
 - 4. Electrical work
 - 5. All related work

PART 2 & 3 - NOT USED.

SECTION 01020 - ALLOWANCES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. General: All allowances considered in the Contract Price shall be clearly identified in the Contract and approved before signing. If the actual cost is more than, or less than the allowance, the Contract Price will be adjusted up or down accordingly when the actual cost is determined. Adjustments in the Allowances will be made by Change Order. Unless specified otherwise, the allowance amounts include the net cost of materials, and shipping charges.
- B. Cash Allowance: The Contractor's overhead, profit and taxes shall be included in the Contract Price, but not in the allowance. All allowances agreed upon shall clearly indicate materials only or materials and labor included as the case may be. For allowance listed as materials only, the Contractor shall include labor and installation in his base bid price. The contractor shall submit to the Architect for approval all bills for materials under Cash Allowances.

1.2 SCHEDULE OF CASH ALLOWANCES

The Respective Bidder shall clearly identify allowances within the contract.

A. Contingency Allowance:

\$35,000.00 (Note: taxes, overhead, and profit are in base bid and are not part of allowance figure.)

PARTS 2 & 3 - NOT USED.

SECTION 01027 - APPLICATIONS FOR PAYMENT

PART 1 – GENERAL

1.1 DESCRIPTION

A. Work included: Comply with procedures described in this Section when applying for progress payment and final payment under the Contract.

B. Related work

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE

- A. Prior to start of construction, secure the Architect's approval of the Schedule of Values required to be submitted under Paragraph 9.2 of the General conditions, and further described in Section 01370 of these Specifications.
 Schedule of values to break out material and labor costs.
- B. During progress of the work the Schedule of Value are to remain unchanged as approved by the Architect. Changes in the Contract Sum due to Change Orders or other modifications of the Contract shall be added to the Schedule of Values as Change Orders.
- C. Base requests for payment on the approved schedule of values.

1.3 SUBMITTALS

- 1. Make submittal of request for payment by filling in the agreed data on AIA Document G702, "Application and Certificate for Payment," plus continuation sheet or sheets.
- 2. Sign and notarize the Application and Certificate for Payment.
- 3. Submit (5) originals of the Application and Certificate for Payment (Electronic copies if agreed upon by all parties.)
- 4. Cut off period is the 25th of the month.
- 5. Submittals are due in Architect's office by the last day of each month.

SECTION 01045 – CUTTING AND PATCHING

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Work included: This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the work required to:
 - 1. Make the several parts fit properly.
 - 2. Uncover work to provide for installing, inspecting, or both, of ill-timed work.
 - Remove and replace work not conforming to requirements of the Contract Documents.
 - 4. Remove and replace defective work.

B. Related work

- Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. In addition to other requirements specified, upon the Architect's request uncover work to provide for inspection by the Architect of covered work, and remove samples of installed materials for testing.
- 3. Do not cut or alter work performed under separate contracts without the Architect's written permission.

1.2 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.3 SUBMITTALS

- A. Request for Architect's consent
 - 1. Prior to cutting which effects structural safety, submit written request to the Architect for permission to proceed with cutting.
 - 2. Should conditions of the work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Architect and secure his written permission and any required Change Order prior to proceeding.

B. Notices to the Architect

- Prior to cutting and patching performed pursuant to the Architect's instructions, submit cost estimate to the Architect. Secure the Architect's approval of cost estimates and type of reimbursement before proceeding with cutting and patching.
- 2. Submit written notice to the Architect designating the time the work will be uncovered, to provide for the Architect's observation.

PART 2 - PRODUCTS

2.1 MATERIALS

A. For replacement of items removed, use materials complying with pertinent Sections of these Specifications.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A. Inspection

- 1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, patching, and backfilling.
- After uncovering the work, inspect conditions affecting installation of new work.

B. Discrepancies

- 1. If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed directions.
- 2. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION PRIOR TO CUTTING

A. Provide required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the work.

3.3 PERFORMANCE

- A. Perform required excavating and backfilling as required under pertinent other Sections of these Specifications.
 - Perform cutting and demolition by methods, which will prevent damage to other portions of the work and provide proper surfaces to receive installation of repair and new work.
 - 2. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.

SECTION 01050 - FIELD ENGINEERING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide such field engineering services as are required for proper completion of the Work including, but not necessarily limited to:
 - 1. Establishing and maintaining lines and levels.
 - 2. Structural design of shores, forms, and similar items provided by the Contractor as a part of his means and methods of construction.
 - 3. Geotechnical Engineering Including Footings, Slabs, and Pavement subgrade compaction.

B. Related work:

- Additional requirements for field engineering also may be described in other Section of these Specifications.
- See also General Conditions.

1.2 SUBMITTALS

- A. Comply with pertinent provisions of Section 01340.
- B. Upon request of the Architect, submit:
 - 1. Certification, signed by the Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance or non-conformance with requirements of the Contract Documents.

1.3 PROCEDURES

- A. In addition to procedures directed by the Contractor for proper performance of the Contractor's responsibilities:
 - 1. Locate and protect control points before starting work on the site.
 - 2. Preserve permanent reference points during progress of the Work.
 - 3. Do not change or relocate reference points or items of the Work without specific approval from the Architect.
 - 4. Promptly advise the Architect when a reference point is lost or destroyed or requires relocation because of other changes in the Work.
 - a. Upon direction of the Architect, require the field engineer to replace reference stakes or markers.
 - b. Locate such replacements according to the original survey control.
- B. The General Contractor shall employ a locator service to locate and mark all underground utilities as required.

PART 2 & 3 - NOT USED.

SECTION 01090 - ABBREVIATIONS AND SYMBOLS

PART 1 - GENERAL

1.1 REFERENCE TO APPLICABLE STANDARDS

- A. Wherever reference is made to Codes, Standards Specifications or other data published by regulating agencies or accepted organizations, it shall be understood that such reference is made to the latest edition, (including addenda) published prior to the date of Contract Documents, except as noted specifically otherwise by date in the contract documents.
- B. Abbreviations and symbols used in the Specifications can be grouped into three (3) basic categories:
 - 1. Abbreviations of reference symbols.
 - 2. Abbreviations of words and phrases.
 - Symbols.
- C. Among those, which may be used in the Contract Documents, are the following (with respective abbreviation used):

AA Aluminum Association

AAMA Architectural Aluminum Manufacturers Association

AASHTO American Association of State Highway and Transportation

Officials

ABMA American Boiler Manufacturers Association

ACI American Concrete Institute

ACRI Air Conditioning and Refrigeration Institute

ADC Air Diffusion Council
AFI Air Filter Institute

AGA American Gas Association

AGCA Associated General Contractors of America, Inc.

AIA American Institute of Architects

AIMA Acoustical and Insulating Materials Association

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

AITC American Institute of Timber Construction

ALS American Lumber Standards

AMCA Air Moving and Conditioning Association
ANSI American National Standards Institute, Inc.

APA American Plywood Association
API American Petroleum Institute

ARI Air Conditioning and Refrigeration Institute

ASAHC American Society of Architectural Hardware Consultants

ASCE American Society of Civil Engineers

ASHRAE American Society of Heating, Refrigeration and Air

Conditioning Engineers

ASME American Society of Mechanical Engineers
ASTM American Society for testing and Materials

ATI Asphalt Tile Institute

AWI Architectural Woodwork Institute
AWPA American Wood Preservers Association

AWPI American Wood Preservers Institute

AWS American Welding Society

BHMA Builders Hardware Manufacturers Association

BIA Brick Institute of America
BRI Building Research Institute

CABRA Copper and Brass Research Association
CAGI Compressed Air and Gas Institute

Pine Knoll Shores

CE Corps of Engineers (Army)

CRSI Concrete Reinforcing Steel Institute
CSI Construction Specifications Institute

CTI Cooling Tower Institute

DFPA Douglas Fir Plywood Association
ETL Electrical Testing Laboratories
FGMA Flat Glass Marketing Association
FHA Federal Housing Administration

FM Factory Mutual Engineering Division, Association of Factory

Mutual Fire Insurance Companies

FPL Forest Products Laboratory
FS Federal Specifications
FTI Facing Tile Institute
GA Gypsum Association

GTA Glass Tempering Association

HPMA Hardwood Plywood Manufacturers Association
IBRM Institute of Boiler and Radiator Manufacturers
IEEE Institute of Electrical and Electronics Engineering

IES Illuminating Engineering Society
JAN Joint Army-Navy Specifications
MAC Masonry Advisory Council
MIA Marble Institute of America

MLMA Metal Lath Manufacturers Association

MS Military Specifications

MSS Manufacturers Standardization Society of the Valves and

Fitting Industries

MSTD Military Standard

NAAMM National Association of Architectural Metal Manufacturers

NAFM National Association of Fan Manufacturers
NAPF National Association of Plastic Manufacturers
NBHA National Builders Hardware Association

NBS National Bureau of Standards

NCMA National Concrete Masonry Association

NEC National Electric Code (NFPA Pamphlet No. 70)
NEMA National Electric Manufacturers Association
NEMI National Elevator Manufacturing Industry, Inc.

NFC National Fire Code

NFPA National Fire Protection Association
NFPA National Forest Products Association
NHLA National Hardwood Lumber Association

NHPMA Northern Hardwood and Pine Manufacturers Association

NPA National Particleboard Association
NPCA National Paint and Coatings Association
NRMCA National Ready Mixed Concrete Association

NSC National Safety Council NSF National Sanitation Foundation

NTMA The National Terrazzo and Mosaic Association, Inc.
NWMA National Woodwork Manufacturers Association
OSHA Occupational Safety and Health Administration

PCA Portland Cement Association
PCI Prestressed Concrete Institute
PEI Porcelain Enamel Institute, Inc.

PS Product Standard, U.S. Department of Commerce

RIS Redwood Inspection Service

RTI Resilient Tile Institute

SAE Society of Automotive Engineers

SBI Steel Boiler Institute

SCMA Southern Cypress Manufacturers Association

SDI Steel Deck Institute

Pine Knoll Shores

SDI Steel Door Institute
SJI Steel Joint Institute

SMACCNA Sheet Metal and Air Conditioning Contractors National

Association

SMFMA Sprayed Mineral Fiber Manufacturers Association, Inc.

SPIB Southern Pine Inspection Bureau SSPC Steel Structures Painting Council

SWFPA Structural Wood Fiber Products Association

TCA Tile Council of America

TEMA Tubular Exchange Manufacturing Association
TIMA Thermal Insulation Manufacturers Association

TPI Truss Plate Institute

UL Underwriter's Laboratories, Inc.
UPC Uniform Plumbing Code
WRI Wire Reinforcement Institute

WWPA Western Wood Products Association

1.2 ABBREVIATIONS OF WORDS AND PHRASES

A. Abbreviations of words and phrases applicable to this Project; other than listed above for reference standards, shall be as shown on the Drawings.

1.3 SYMBOLS

A. Symbols representing construction materials and the equipment applicable to this Project shall be as shown on the Drawings.

PART 2 & 3 - NOT USED.

SECTION 01200 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included: To enable orderly review during progress of the Work, and to provide for systematic discussion of problems, the Architect will conduct project meetings throughout the construction period.

B. Related work:

The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of project meetings content. If subcontractor's issues are of a concern, it can be communicated at this meeting, but management of the subcontractor will remain the responsibility of the Contractor.

1.2 SUBMITTALS

A. Agenda items: To the maximum extent practicable, advise the Architect at least 24 hours in advance of project meetings regarding items to be included in or added to the agenda.

B. Minutes:

- The Architect or Owner's representative will compile minutes of each project meeting and will furnish one copy to Contractor and required copies to the Owner.
- 2. Recipients of copies may make and distribute such other copies as they wish.

1.3 QUALITY ASSURANCE

A. For those persons designated by the Contractor to attend and participate in project meetings, provide required authority to commit the Contractor to solutions agreed upon in the project meetings.

PART 2 - PRODUCTS

(No products are required in this Section)

PART 3 - EXECUTION

3.1 GENERAL

- A. Except as noted below for Pre-Construction Meeting, project meetings will be held monthly, unless project dictates differently.
- B. Coordinate as necessary to establish a mutually acceptable schedule for meetings.

3.2 PRECONSTRUCTION MEETING

- A. Pre-construction Meeting will be held as soon as possible after the written Notice to Proceed.
 - Provide attendance by authorized representatives of the Contractors and major subcontractors.
 - 2. The Architect or Owner's representative will advise other interested parties, including the Owner, and request their attendance.

- B. Minimum agenda: Data will be distributed and discussed on at least the following items:
 - 1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and Architect.
 - 2. Channels and procedures for communication.
 - 3. Construction schedule, including sequence of critical work.
 - 4. Contract Documents, including distribution of required copies of original Documents and revisions.
 - 5. Processing of Shop Drawings and revisions.
 - 6. Processing of Bulletins, field decisions, and Change Orders.
 - 7. Rules and regulations governing performance of the Work
 - 8. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.

3.3 PROJECT MEETINGS

A. Attendance:

- 1. To the maximum extent practical, assign the same person or persons to represent the Contractor at project meetings throughout progress of the Work.
- 2. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the Work is involved.

B. Minimum agenda:

- Review progress of the Work since last meeting, including status of submittals for approval.
- 2. Identify problems, which impede planned progress.
- 3. Develop corrective measures and procedures to regain planned schedule.
- 4. Complete other current business.

SECTION 01310 - SCHEDULES AND REPORTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions and other Division 1 specifications sections, apply to work of this section.

1.2 DESCRIPTION

A. Post Award Requirements

- 1. Draft of Construction Schedule: Within two weeks of Date of Commencement of the Work, Contractor shall complete draft of time-scaled CPM Construction Schedule. (Bar chart is acceptable.)
- 2. Level of Detail: Except for procurement and General Conditions requirements, differentiate activities on schedule so that no single activity shown requires more than twenty-one (21) calendar days to complete.

B. Schedule of Values

Within seven (7) days after completion of CPM Construction Schedule and before first pay request, Contractor shall submit Schedule of Values (see Section 01370) for review by the Architect allocating a dollar value for each activity on Construction Schedule. Dollar value for each activity will include cost broken into labor, materials, and pro rata contribution to overhead and profit. Subcontract sums will be identified on the Schedule of Values and broken down as described above.

C. Approval

 Approval of Construction Schedule and Schedule of Values will be signified by the Architect and Contractor's joint signatures on one copy of each document. Thereafter, Project will be monitored with Construction Schedule, which Contractor shall use in planning, organizing, directing, coordinating, and executing the Work and which shall be the basis for evaluating the progress of the Work.

D. Schedule Revisions

- General: Revisions to approved Construction Schedule must be approved in writing by Architect and Contractor.
- Contractor: Submit requests for revisions to schedule to Architect together with written rationale and description of logic for rescheduling work to maintain Specific Contractual Milestone Dates.
 - a. Proposed revisions acceptable to the Architect will be incorporated into next update of the Construction Schedule by the Contractor.
- 3. Owner: Changes initiated by Owner and implemented by Change Orders which have potential to affect critical dates will require Contractor to prepare revised schedule for the Architect's concurrence. The Architect's approved revisions will be incorporated into the Construction Schedule. Adjustments in scheduled completion dates, either for intermediate activities or for Contract as a whole, will be considered only to extent that there is not sufficient float to absorb the revisions accepted.

E. Recovery Schedule

 General: Should updated Construction Schedule show Contractor to be fourteen (14) or more days behind schedule at any time during construction, the Architect may require Contractor to prepare Recovery Schedule, displayed in

- CPM format, which will display Contractor's plan for returning to schedule within subsequent pay period.
- 2. Schedule Preparation: Within seven (7) days after notice from the Architect, prepare and submit to the Architect a Recovery Schedule, incorporating best available information from Subcontractors and others which will permit return to Construction Schedule within subsequent pay period. Prepare Recovery Schedule to same level of detail as Construction Schedule.
- 3. Schedule Assessment: Seven (7) days prior to expiration of Recovery Schedule, confer with the Architect to assess effectiveness of Recovery Schedule. As a result of this conference, the Architect will direct Contractor as follows:
- 4. Behind Schedule: If the Architect determines Contractor is still behind schedule, the Architect will direct Contractor to prepare another Recovery Schedule for subsequent pay period.
- 5. On Schedule: If the Architect determines Contractor has successfully complied with provisions of Recovery Schedule, the Architect will direct Contractor to return to use of Construction Schedule.

PARTS 2 & 3 - NOT USED.

SECTION 01340 - SUBMITTALS AND SUBSTITUTIONS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included: Make submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements.

B. Related work:

- Documents affecting work of this Section include but are not necessarily limited to General Conditions Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. Individual requirements for submittals also may be deceived in pertinent Sections of these Specifications.

C. Work not included:

- Unrequired submittals will not be reviewed by the Architect.
- The Contractor may require his subcontractors to provide drawings, setting diagrams, and similar information to help coordinate the Work, but such data shall remain between the Contractor and his subcontractors and will not be reviewed by the Architect.

1.2 SUBMITTALS

A. Make submittals of Shop Drawings, Samples, substitution requests, and other items in accordance with the provisions of this Section.

B. Coordination of Submittals:

- 1. Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
- Verify that each item and the submittal for it CONFORMS IN ALL RESPECTS to the specified requirements.
- 3. By affixing his signature to each submittal, the Contractor certifies that THIS COORDINATION HAS BEEN PERFORMED.
- 4. The Contractor shall stamp the shop drawings as "Approved" or "Approved as Noted" before submitting to Architect or Owner's representative for review.

1.3 QUALITY ASSURANCE

A. "Equals" and "Substitutions"

- 1. The Contract is based on the standards of quality established in the Contract Documents. Requests for substitutions will be considered when submitted according to the procedures set forth below.
 - a. Particularly with regard to MAJOR materials, equipment or methods proposed for the Work as set forth in the Contract Documents, Contractor's request(s) for approvals of "equals" not specifically named in the Contract Documents MUST BE SUBMITTED IN WRITING with supporting documentation, and in the hands of the Architect prior to contract award. Telephone requests for consideration of proposed "equals" will not be accepted.
 - b. On other items of Work, Contractor may request consideration of substitution, when submitted in writing with supporting documentation

- within thirty (30) days following the Notice to Proceed.
- B. Where the phrase "or equal" or "equal as approved by Architect" occurs in the Contract Documents, do not assume that the Contractor's choice of materials, equipment, or methods will be approved as equal unless the item has been specifically approved for this Work by the Architect.
- C. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved in writing for this Work by the Architect.

PART 2 - PRODUCTS

2.1 SHOP DRAWINGS

- A. Scale and Measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its methods of connection to the Work.
- B. Types of prints required:
 - 1. Submit Shop Drawings in electronic format.
- C. Review comments of the Architect will be shown in red on prints and returned to the Contractor. The Contractor may make and distribute such copies as are required for his purposes.

2.2 MANUFACTURER'S LITERATURE

- A. Where contents of submitted literature from the manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.
- B. Submit three copies of each which are required to be returned, plus one copy which will be retained by the Architect.

2.3 SAMPLES

- A. Provide Sample or Samples identical to the precise article proposed to be provided. Identify as described under "Identification of Submittals" below.
- B. Number of Samples required:
 - 1. Unless otherwise specified, submit one sample in the quantity, which is required to be returned, plus on which will be retained by the Architect.
 - By prearrangement in specific cases, a single Sample may be submitted for review and, when approved, be installed in the Work at a location agreed upon by the Architect.
 - 3. Except as noted in 2.3.B.2 above, no selections of color, texture or finish will be approved by the Architect until ALL substitutions have been approved by the Architect, and ALL necessary samples and color, texture, finish proposals have been submitted in their entirety by the Contractor, in order that a coordinated, total scheme may be developed by the Architect.

PART 3 - EXECUTION

3.1 IDENTIFICATION OF SUBMITTALS

A. Consecutively number all submittals. (i.e.: G-1, G-2.... etc. for General Construction, P-1, P-

- 2, etc. for Plumbing; M-1, M-2, etc. for Mechanical (HVAC); E-1, E-2, etc. for Electrical; SP-1, SP-2....etc for Sprinkler System; SU-1, SU-2, ... etc. for Site/Utilities.
 - 1. When material is resubmitted of any reason, transmit under a new letter of transmittal and with a shop drawing number. (G-1r)
 - 2. On resubmittals, cite the original submittal number for reference.
- B. Accompany each submittal with a letter of transmittal showing all information required for identification and checking.
- C. On at least the first page of each submittal, and elsewhere as required for positive identification, show the submittal number in which the item was included.
- D. Maintain an accurate submittal log for the duration of the Work, showing current status of all submittals at all times. Make the submittal log available to the Architect for his review upon request.

3.2 GROUPING OF SUBMITTALS

- A. Unless otherwise specified, make submittals in groups containing all associated items to assure that information is available for checking each item when it is received.
 - Partial submittals may be rejected as not complying with the provisions of the Contract.

3.3 TIMING OF SUBMITTALS

A. Make submittals far enough in advance of schedule dated for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery. All submittals shall be submitted within ninety (90) days of the notice to proceed.

3.4 ARCHITECT'S REVIEW

- A. Review by the Architect or Owner's representative does not relieve the Contractor from responsibility for errors, which may exist in the submitted data.
- B. Revisions
 - 1. Make revisions required by Architect or Owner's representative.
 - If the Contractor considers any required revision to be a change, he shall so notify the Architect or Owner's representative as provided in the General Conditions.
 - 3. Make only those revisions directed or approved by the Architect.

SECTION 01370 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included: Provide a detailed breakdown of the agreed Contract sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.

B. Related work:

- Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. Schedule of values may be described on the continuation sheet of AIA document G702 accompanying applications for payment.
- 3. Schedule of values is required under Paragraph 9.2 of the General Conditions.

1.2 QUALITY ASSURANCE

- A. Use required means to assure arithmetical accuracy of the sums described.
- B. When so required by the Architect or Owner's representative, provide copies of the subcontracts or other data acceptable to the Architect or Owner's representative, substantiating the sums described.

1.3 SUBMITTALS

- A. Prior to first application for payment, submit a proposed schedule of values to the Architect. See Section 01310.
 - 1. Meet with the Architect and determine additional data, if any, required to be submitted.
 - a. Mobilization, Submittal Review, Material Delivery, Execution of the Work, and Punchlisting shall be included in the schedule.
 - b. Mobilization shall be billed on a monthly basis equally distributed throughout construction contract time.
 - Materials and Labor breakdowns should be provided for each portion of work.
 - d. All General Conditions items shall be broken out separately.
 - e. All labor and materials are to be broken out separately.
 - 2. Secure the Architect or Owner's representative's approval of the schedule of values prior to submitting first application for payment.

PART 2 & 3 - NOT USED.

SECTION 01410 - TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Contractor shall select a testing laboratory qualified in accordance with ASTM E329.
- B. The Contractor shall pay for all testing and inspection services as are specified in this Section and/or elsewhere in the Contract Documents, except as otherwise noted.

C. Related work:

- 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. Requirements for testing may be described in various Sections of these Specifications.
- Where no testing requirements are described, but the Owner decides that testing is required, the Owner may require such testing to be performed under current pertinent standards for testing. Payment for such testing will be made as described in this Section.

D. Work not included:

- 1. Selection of testing laboratory: The Contractor will select a prequalified independent testing laboratory.
 - a. ECS
 - b. SM&E
- 2. Payment for initial testing: The Contractor will pay for all initial services of the testing laboratory as further described in Artcle 2.1 of this Section.

1.2 QUALITY ASSURANCE

- A. The testing laboratory will be qualified to the Owner's approval in accordance with ASTM E329.
- B. Testing, when required, will be in accordance with all pertinent codes and regulations, and with selected standards of the American Society for Testing and Materials.

1.3 PRODUCT HANDLING

A. Promptly process and distribute required copies of test reports and related instructions to assure necessary retesting and replacement of materials with the least possible delay in progress of the Work.

PART 2 - PRODUCTS

2.1 PAYMENT FOR TESTING

- A. The Contractor will pay for initial testing services required.
- B. When initial tests indicate non-compliance with the Contract Documents, subsequent retesting occasioned by the non-compliance shall be performed by the same testing agency, and costs shall be the sole responsibility of the Contractor.
- C. Where no testing requirements are described, but the Owner decides that testing is

required, the Owner may require such testing be performed under current pertinent standards for testing. If testing reveals the work to be in compliance with Contract requirements, Owner will pay for these testing services. If work is found to be in non-compliance with Contract requirements, Contractor shall pay for these testing services.

D. Inspections and tests required by codes or ordinances, or by a plan approval authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

2.2 CONTRACTOR'S CONVENIENCE TESTING

A. Inspecting and testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

PART 3 - EXECUTION

3.1 COOPERATION WITH TESTING LABORATORY

A. Representatives of the testing laboratory shall have access to the Work at all times and at all locations where the Work is in progress. Provide facilities for such access to enable the laboratory to perform its function properly. All testing shall be coordinated by the Architect.

3.2 TAKING SPECIMENS

A. All specimens and samples for testing, unless otherwise provided in the Contract Documents, shall be taken by the testing personnel. All sampling equipment and personnel will be provided by the testing laboratory. All deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.

3.3 SCHEDULES FOR TESTING

- A. Establishing schedule: (Contractor shall be responsible for scheduling Testing Laboratory.)
 - By advance discussion with the testing laboratory approved by the Owner, determine the time required for the laboratory to perform its tests and to issue each of its findings.
 - 2. Provide all required time within the construction schedule.
- B. Revising schedule: When changes of construction schedule are necessary during construction, coordinate all such changes with the testing laboratory as required.
- C. Adherence to schedule: When the testing laboratory is ready to test according to the established schedule but is prevented from testing or taking specimens due to incompleteness of the Work, all extra charges for testing attributable to the delay may be back-charged to the Contractor and shall not be borne by the Owner.

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide temporary facilities and controls needed for the Work including, but not necessarily limited to:
 - 1. Temporary utilities such as heat, water, electricity, email and telephone
 - Sanitary facilities
 - 3. Enclosures such as tarpaulins, barricades, and canopies
 - 4. Project sign
 - 5. Field office for the Contractor's personnel

B. Related work:

- 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. Except that equipment furnished by subcontractors shall comply with requirements of pertinent safety regulations, such equipment normally furnished by the individual trades in execution of their own portions of the Work are not part of this Section.
- 3. Permanent installation and hookup of the various utility lines are described in other Sections.

1.2 PRODUCT HANDLING

A. Maintain temporary facilities and controls in proper and safe condition throughout progress of the Work.

1.3 LOCAL REGULATIONS

A. Comply with all local ordinances including local and temporary facilities, parking and storage.

PART 2 - PRODUCTS

2.1 UTILITIES

A. Water:

- 1. The Contractor and his Plumbing Subcontractor to provide necessary temporary piping and water supply and, upon completion, remove such temporary facilities.
- 2. Contractor may use existing onsite water.

B. Electricity:

1. The Contractor and his Electrical Subcontractor to provide necessary temporary wiring and, upon completion of the Work, remove such temporary facility.

- 2. Provide area distribution boxes so located that the individual trades may furnish and use 100' maximum length extension cords to obtain power and lighting at points where needed for work, inspection, and safety.
- Existing electricity onsite can be used.
- C. Heating: Provide and maintain temporary heat necessary for proper conduct of operations needed in the Work.

D. Telephone:

1. Superintendent to have a mobile phone capable of photographs and email.

E. Temporary Fire Protection:

1. Contractor to provide any and all temporary construction fire extinguishers and standpipes required for the duration construction.

2.2 FIELD OFFICES AND SHEDS

A. Contractors facilities:

- 1. Provide a field office building and sheds adequate in size and accommodation for Contractors offices, supply and storage.
- 2. Within the Contractor's facilities, provide enclosed space adequate for holding project meetings. Furnish with table, chairs, and utilities.

B. Sanitary facilities:

- 1. Provide temporary sanitary facilities in the quantity required for use by all personnel.
- 2. Maintain in a sanitary condition at all times.

2.3 ENCLOSURES

- A. Provide and maintain for the duration of construction all scaffolds, tarpaulins, canopies, warning signs, steps, platforms, bridges, and other temporary construction necessary for proper completion of the Work in compliance with pertinent safety and other regulations.
 - 1. All apparatus, equipment, temporary and permanent construction shall meet all local and State labor laws and safety regulations applicable thereto.

2.4 PROJECT SIGN

- A. Project signs shall only be installed where approved by Owner.
- A. Upon completion of the Work, demount the project signs.
- B. Except as otherwise specifically approved by the Architect, do not permit other signs or advertising on the job site.

PART 3 - EXECUTION

3.1 MAINTENANCE AND REMOVAL

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work.
- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Architect or Owner's representative.

3.2 TRAFFIC COORDINATION

A. Any construction related activities, such as receiving, loading, unloading, or other activities which may be an interruption to normal vehicular traffic flow on the site shall be coordinated in advance by the Contractor with the Owner or public authority having jurisdiction.

SECTION 01620 - PRODUCT HANDLING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work Included: Protect products scheduled for use in the Work by means including, but not necessarily limited to, those described in this Section.

B. Related work:

- 1. Documents affecting work of this Section include, but are not necessarily limited to the General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- Additional procedures also may be prescribed in other Sections of these Specifications.

1.2 QUALITY ASSURANCE

A. Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

1.3 MANUFACTURER'S RECOMMENDATIONS

A. Except as otherwise approved by the Architect, determine and comply with manufacturer's recommendations on product handling, storage and protection.

1.4 PACKAGING

- A. Deliver products to the job site in the manufacturer's original containers with labels intact and legible.
 - Maintain packaged materials with seals unbroken and labels intact until time of use.
 - Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements at no additional cost to the Owner.
- B. The Architect may reject as non-complying, material and products that do not bear identification satisfactory to the Architect as to manufacturer, grade, quality, and other pertinent information.

1.5 PROTECTION

- A. Protect finished surfaces, including jambs and soffits of openings used as passageways, through which equipment and materials are handled.
- B. Provide protection for finished floor surfaces in traffic are prior to allowing equipment or materials to be moved over such surfaces.
- Maintain finished surfaces clean, unmarred, and suitably protected until accepted by the Owner.

1.6 REPAIRS AND REPLACEMENTS

- A. In the event of damage, promptly make replacement sand repairs to the approval of the Architect, and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the Architect to justify an extension in the Contract Time of Completion.

SECTION 01710 - CLEANING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included: Throughout the construction period, maintain the building and site in a standard of cleanliness as described in this Section.

B. Related work:

- 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Amendments to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- 2. In addition to standards described in this Section, comply with requirements for cleaning as described in pertinent other Sections of these Specifications.

1.2 QUALITY ASSURANCE

- A. Conduct daily inspection to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section. Comply with pertinent requirements of governmental agencies having jurisdiction.

PART 2 - PRODUCTS

2.1 COMPATIBILITY

A. Use only the cleaning materials and equipment, which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

PART 3 - EXECUTION

3.1 PROGRESS CLEANING

A. General:

- 1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
- Do not allow accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
- 3. At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.
- 4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.
- 5. The building shall be cleaned daily of all debris and waste material resulting from the construction operations.

SECTION 01720 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RECORD DRAWINGS

- A. Contractors shall maintain a set of Record Drawings at the project site. These shall be kept legible and current and shall be available at all times for the inspection of the Architect. All differences or changes in the contract work, or work added, shall be recorded daily on these Record Drawings in a contrasting color.
- B. The Architect or Owner's representative shall approve the Record Drawings.
- C. Receipt and approval of Record Drawings are prerequisites for final payment.

1.2 MANUALS

A. Each Contractor shall submit to the Architect or Owner's representative before final acceptance three copies of all installation, operating instructions, and maintenance instructions on the equipment and materials furnished under his contract. Each set of copies shall be bound in a 3-ring, loose-leaf binder for 8-1/2" x 11 " paper. Label binder designating the name of the project, the names of the Owner, the name of the Contractor, and the equipment or materials included in the manual.

1.3 GUARANTEES AND WARRANTIES

A. Contractors shall submit to the Architect or Owner's representative before final acceptance three originals of all warranties, guarantees, and surety bonds. All such documents shall show the name and location of the project and the name of the Owner.

PART 2 & 3 - NOT USED.

SECTION 07600 - FLASHING AND SHEET METAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Amendments to General Conditions, and Supplementary Conditions and Sections in Division I of the Specifications apply to work of this section.

1.2 DESCRIPTION

- A. Extent of each type of flashing and sheet metal work is indicated on drawings and by provisions of this Section.
- B. Types of work specified in this Section include the following:
 - Metal counter flashing and base flashing.
 - 2. Exposed metal trim.
 - Miscellaneous sheet metal accessories.
- C. Related Work:
 - Section 07900 Joint Sealants

1.3 SUBMITTALS

- A. Comply with pertinent provisions of Section 01620.
- B. Product Data; Sheet Metal, Accessories: Submit manufacturer's product data, installation instructions and general recommendations for each specified sheet material and fabricated product.
- C. Samples; Flashing, Sheet Metal, Accessories: Submit 8" square samples of specified sheet materials to be exposed as finished surfaces.
 - 1. Submit 12" long, completely finished units of specified factory-fabricated products exposed as finished work.
- D. Shop Drawings; Flashing, Sheet Metal, Accessories: Submit shop drawings showing layout, joining, profiles, and anchorages of fabricated work, including major counter flashing, trim/fascia units, etc.; layouts at 1/4" scale, detail at 3" scale.

1.4 QUALITY ASSURANCE

A. Comply with industry standards and recommendations of SMACNA Architectural Sheet Metal Manual except as specifically indicated otherwise.

1.5 JOB CONDITIONS

- A. Coordinate work of this Section with interfacing and adjoining work for proper sequencing of each installation. Insure best possible weather resistance and durability of work and protection of materials and finishes.
- B. Surfaces to which flashing, and sheet metal are applied shall be even, smooth, sound, thoroughly clean and dry and free from all defects that might affect the application. Report any unsatisfactory surfaces to the General Contractor.
- C. Do not proceed with installation of sheet metal work until curb and substrate

construction, blocking, roofing, regrets, and other construction that will receive the work are completed. Proceeding with application of sheet metal work will be evidence of substrate acceptance by Installer.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Comply with pertinent provisions of Section 01620.
- B. Materials furnished by this Section, which are to be built-in by other trades, shall be delivered to the Site in time to avoid delays in construction schedule.

PART 2 - PRODUCTS

2.1 FLASHING AND SHEET METAL MATERIALS

- A. .032 Aluminum minimum
- B. Flashing exposed to view, color to be selected to match surrounding conditions.

2.2 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Fasteners: Same metal as flashing/sheet metal or other noncorrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.
- B. Bituminous Coating: SSPC-Paint 12, solvent type bituminous mastic, nominally free of sulfur, compounded for 15-mil dry film thickness per coat.
- C. Mastic Sealant: Polyisobutylene; nonhardening nonskinning, noncorrosive metal seam cementing compound, recommended by metal manufacturer for exterior/interior nonmoving joints including riveted joints.
- D. Adhesives: Type recommended by flashing sheet manufacturer for waterproof weather-resistant seaming and adhesive application of flashing sheet.
- E. Metal Accessories: Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation work, matching or comparable with material being installed. They shall be noncorrosive, in sizes and gauges required for proper performance.

PART 3 - EXECUTION

3.1 INSTALLATION REQUIREMENTS

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated. Provide for thermal expansion of metal units. Conceal fasteners where possible and set units true to line and level as indicated. Install work with laps, joints and seams, which will be permanently watertight and weatherproof.
- B. Underlayment: Where aluminum is to be installed directly on cementitious or wood substrates, apply a coating or other permanent separation as recommended by manufacturer/fabricator to concealed aluminum surfaces.

3.2 CLEANING AND PROTECTION

A. Clean exposed metal surfaces, removing substances, which might cause corrosion of metal or deterioration of finishes.

B. Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashing and sheet metal work during construction, to ensure that work be without damage or deterioration, other than natural weathering, at time of substantial completion.

SECTION 07840 - FIRE STOPPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes: Fire Stopping Materials.
- B. Related Documents: Division 0 Bidding & General Conditions; Division 1, General Requirements, all applicable provisions in the Technical Sections of Division 2 through 16 and applicable drawings apply to this Section.
- C. Related Sections:
 - 1. Section 07900 Joint Sealants.
 - 2. Section 09260 Gypsum Wallboard Systems.
- D. Description of Work in this Section: Only tested fire stop systems shall be used in specific locations as follows:
 - 1. Penetrations for the passage of duct, cable, cable tray, conduit, piping, electrical bus ways and raceways through fire-rated vertical barriers (walls and partitions), horizontal barriers (floor/ceiling assemblies), and vertical service shaft walls and partitions.
 - 2. Safing slot gaps between edge of floor slabs and curtain walls.
 - 3. Openings between structurally separate sections of wall or floors.
 - 4. Gaps between the top of walls and ceilings or roof assemblies.
 - 5. Expansion joints in walls and floors.
 - 6. Openings and penetrations in fire-rated partitions or walls containing fire doors.
 - 7. Openings around structural members which penetrate floors or walls.

1.2 SUBMITTALS

A. Product Data: Manufacturer's Specifications and Technical Data for each material including the composition and limitations, documentation of UL Fire Stop Systems to be submitted.

1.3 QUALITY ASSURANCE

A. Engage an experienced installer who is certified, licensed, or otherwise qualified by the fire stopping manufacturer as having been provided the necessary training to install the manufacturer's products per requirements.

1.4 REFERENCE STANDARDS

- A. Test Requirements: ASTM E-814, "Standard Method of Fire Tests of Through Penetration Fire Stops". (July 1997).
- B. Underwriters Laboratories (UL) of Northbrook, IL runs ASTM E-814 under their designation of UL 1479 and publishes the results in their "FIRE RESISTANCE DIRECTORY" that is updated annually.

- 1. UL Fire Resistance Directory:
 - a. Firestop Devices (XHJI).
 - b. Fire Resistance Ratings (BXUV).
 - c. Through-Penetration Firestop Systems (XHEZ).
 - d. Fill, Voids or Cavity Material (XHHW).
 - e. Forming Materials (XHKU).
- 2. Alternate "Omega Point Laboratories Directory" (updated annually).
- C. Test Requirements: UL 2079, "Tests for Fire Resistance of Building Joint Systems" (July 1998.)
- D. Test Requirements: ASTM E 1966, "Standard test method for Fire Resistive Joint Systems" (July 2000).
- E. Inspection Requirements: ASTM E 2174 01, "Standard Practice for On-site Inspection of Installed Fire Stops".
- F. International Fire Stop Council Guidelines for Evaluating Firestop Systems Engineering Judgments
- G. ASTM E-84, Standard Test Method for Surface Burning Characteristics of Building Materials.
- H. All major building codes: ICBO, SBCCI, BOCA, and IBC. (Note to Specifier: Retain or delete building codes listed above as applicable)
- I. NFPA 101 Life Safety Code
- J. NFPA 70 National Electric Code

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials undamaged in manufacturers clearly labeled, unopened containers, identified with brand, type, and UL label where applicable.
- B. Coordinate delivery of materials with scheduled installation date to allow minimum storage time at job-site.
- C. Store materials under cover and protect from weather and damage in compliance with manufacturer's requirements, including temperature restrictions.
- Comply with recommended procedures, precautions or remedies described in material safety data sheets as applicable.
- E. Do not use damaged or expired materials.

1.6 PROJECT CONDITIONS

- A. Do not use materials that contain flammable solvents.
- B. Schedule installation of firestopping after completion of penetrating item installation but prior to covering or concealing of openings.

- C. Verify existing conditions and substrates before starting work. Correct unsatisfactory conditions before proceeding.
- D. Weather conditions: Do not proceed with installation of firestop materials when temperatures exceed the manufacturer's recommended limitations for installation printed on product label and product data sheet.
- E. During installation, provide masking and drop cloths to prevent firestopping materials from contaminating any adjacent surfaces.

PART 2 - PRODUCTS

2.1 FIRE STOPPING - GENERAL

- A. Provide fire stopping composed of components that are compatible with each other, the substrates forming openings, and the items, if any, penetrating the fire stopping under conditions of service and application, as demonstrated by the firestopping manufacturer based on testing and field experience.
- B. Provide components for each firestopping system that are needed to install fill material. Use only components specified by the firestopping manufacturer and approved by the qualified testing agency for the designated fire-resistance-rated systems.
- C. Firestopping Materials are either "cast-in-place" (integral with concrete placement) or "post installed". Provide cast-in-place fire stop devices prior to concrete placement.

2.2 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with through penetration firestop systems (XHEZ) and joint systems (XHBN) listed in Volume 2 of the UL Fire Resistance Directory, provide products of the following manufacturers as identified below:
 - 1. Hilti, Inc., Tulsa, Oklahoma 1-800-879-8000.
 - 2. STI Fire Protection Products.
 - 3. Approved equal.

2.3 MATERIALS

- A. Use only fire stop products that have been UL 1479, ASTM E-814, or UL 2079 tested for specific fire-rated construction conditions conforming to construction assembly type, penetrating item type, annular space requirements, and fire-rating involved for each separate instance.
- B. Cast-in place fire stop devices for use with non-combustible and combustible plastic pipe (closed and open piping systems) penetrating concrete floors, the following products are acceptable:
 - 1. Hilti CP 680 Cast-In Place Firestop Device.
- C. Sealants, caulking materials, or foams for use with non-combustible items including steel pipe, copper pipe, rigid steel conduit and electrical metallic tubing (EMT), the following products are acceptable:
 - 1. Hilti FS-ONE Intumescent Firestop Sealant.
 - 2. Hilti CP 604 Self-leveling Firestop Sealant.
 - 3. Hilti CP 620 Fire Foam.

- D. Sealants or caulking materials for use with sheet metal ducts, the following products are acceptable:
 - 1. Hilti CP 601s Elastomeric Firestop Sealant.
 - 2. Hilti CP 606 Flexible Firestop Sealant.
 - Hilti FS-ONE Intumescent Firestop Sealant.
 - 4. Hilti CP 604 Self-leveling Firestop Sealant.
- E. Sealants, caulking or spray materials for use with fire-rated construction joints and other gaps, the following products are acceptable:
 - 1. Hilti CP 672 Speed Spray.
 - 2. Hilti CP 601s Elastomeric Firestop Sealant.
 - 3. Hilti CP 606 Flexible Firestop Sealant.
 - Hilti CP 604 Self-leveling Firestop Sealant.
- F. Pre-formed mineral wool designed to fit flutes of metal profile deck; as a backer for spray material.
 - 1. Hilti CP 677 Speed Plugs.
- G. Intumesent sealants, caulking materials for use with combustible items (penetrants consumed by high heat and flame) including insulated metal pipe, PVC jacketed, flexible cable or cable bundles and plastic pipe, the following products are acceptable:
 - Hilti FS-ONE Intumescent Firestop Sealant.
- H. Foams, intumesent sealants, caulking or putty materials for use with flexible cable or cable bundles, the following products are acceptable:
 - 1. Hilti FS-ONE Intumescent Fire Stop Sealant.
 - 2. Hilti CP 618 Fire Stop Putty Stick.
 - 3. Hilti CP 620 Fire Foam.
- I. Non-curing, re-penetrable intumesent sealants, caulking or putty materials for use with flexible cable or cable bundles, the following products are acceptable:
 - 1. Hilti CP 618 Fire Stop Putty Stick.
- J. Wall opening protective materials for use with U.L. listed metallic and specified non-metallic outlet boxes, the following products are acceptable:
 - 1. Hilti CP 617 Firestop Putty Pad.
- K. Firestop collar or wrap devices attached to assembly around combustible plastic pipe (closed and open piping systems), the following products are acceptable:
 - 1. Hilti CP 642 Firestop Collar.
 - 2. Hilti CP 643 Firestop Collar.
 - Hilti CP 645 Wrap Strips.
- L. Materials used for complex penetrations made to accommodate cable trays, multiple steel and copper pipes, electrical busways in raceways, the following products are acceptable:
 - 1. Hilti CP 637 Trowelable Fire Stop Compound.
 - 2. Hilti FS 657 FIRE BLOCK.
 - 3. Hilti CP 620 Fire Foam.

- M. Non-curing, re-penetrable materials used for large size/complex penetrations made to accommodate cable trays, multiple steel and copper pipes, electrical busways in raceways, the following products are acceptable:
 - Hilti FS 657 FIRE BLOCK.
- N. Sealants or caulking materials used for openings between structurally separate sections of wall and floors, the following products are acceptable:
 - 1. Hilti CP 672 Speed Spray.
 - 2. Hilti CP 601s Elastomeric Fire Stop Sealant.
 - 3. Hilti CP 606 Flexible Fire Stop Sealant.
 - 4. Hilti CP 604 Self-Leveling Fire Stop Sealant.
- O. Provide a fire stop system with an "F" Rating as determined by UL 1479 or ASTM E814 which is equal to the time rating of construction being penetrated.
- P. Provide a fire stop system with an Assembly Rating as determined by UL 2079 which is equal to the time rating of construction being penetrated.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
 - Verify penetrations are properly sized and in suitable condition for application of materials.
 - 2. Surfaces to which firestop materials will be applied shall be free of dirt, grease, oil, rust, laitance, release agents, water repellents, and any other substances that may affect proper adhesion.
 - 3. Provide masking and temporary covering to prevent soiling of adjacent surfaces by firestopping materials.
 - 4. Comply with manufacturer's recommendations for temperature and humidity conditions before, during and after installation of firestopping.
 - 5. Do not proceed until unsatisfactory conditions have been corrected.

3.2 COORDINATION

- A. Coordinate location and proper selection of cast-in-place Firestop Devices with trade responsible for the work. Ensure device is installed before placement of concrete.
- B. Responsible trade to provide adequate spacing of field run pipes to allow for installation of cast-in-place firestop devices without interferences.

3.3 INSTALLATION

A. Regulatory Requirements: Install fire stop materials in accordance with UL Fire Resistance Directory or Omega Point Laboratories Directory.

- B. Manufacturer's Instructions: Comply with manufacturer's instructions for installation of through-penetration and construction joint materials.
 - Seal all holes or voids made by penetrations to ensure an air and waterresistant seal.
 - Consult with mechanical engineer, project manager, and damper manufacturer prior to installation of UL firestop systems that might hamper the performance of fire dampers as it pertains to duct work.
 - 3. Protect materials from damage on surfaces subjected to traffic.

3.4 FIELD QUALITY CONTROL

- A. Examine sealed penetration areas to ensure proper installation before concealing or enclosing areas.
- B. Keep areas of work accessible until inspection by applicable code authorities.
- C. Inspection of through-penetration fire stopping shall be performed in accordance with ASTM:
 - 1. E 2174, "Standard Practice for On-Site Inspection of Installed Fire Stops" or other recognized standard.
- D. Perform under this section patching and repairing of fire stopping caused by cutting or penetrating of existing fire stop systems already installed by other trades.

3.5 ADJUSTING AND CLEANING

- A. Remove equipment, materials and debris, leaving area in undamaged, clean condition.
- B. Clean all surfaces adjacent to sealed holes and joints to be free of excess firestop materials and soiling as work progresses.

SECTION 07900 - JOINT SEALANTS

PART 1- GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. The sealing of exterior and interior joints.

1.2 SUBMITTALS

- A. Product Data: Manufacturer's data on each joint sealer, with instructions for substrate preparation and installation.
- B. Samples for Color Selection: Cured samples of actual products showing manufacturer's full range of colors.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original containers or bundles with labels showing manufacturer, product name or designation, color, shelf life, and installation instructions.

1.4 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install sealers if any of the following conditions exist:
 - 1. Air or substrate temperature exceeds the range recommended by sealer manufacturer or is below 40 degrees F (4.4 degrees C).
 - 2. Substrate is wet, damp, or covered with snow, ice, or frost.
- B. Dimensional Limitations: Do not install sealers if joint dimensions are less than or greater than that recommended by sealer manufacturer; notify the architect and get sealer manufacturer's recommendations for alternative procedures.

PART 2 - PRODUCTS

2.1 MATERIALS - GENERAL

- A. General: Provide only products which are recommended and approved by their manufacturer for the specific use to which they are put and which comply with all requirements of the contract documents.
 - 1. For each generic product, use only materials from one manufacturer.
 - 2. Provide only materials which are compatible with each other and with joint substrates.
 - Colors of exposed sealers: As selected by the Architect from manufacturer's standard colors.

2.2 ELASTOMERIC SEALANTS

- A. Elastomeric Sealants General: Chemically curing elastomeric sealants of types indicated, complying with ASTM C 920, including specific Type, Grade, Class, and Uses indicated, as well as all other requirements specified.
 - 1. Exterior, Non-Traffic Areas: Type S, Grade NS, Class 25, Use NT. Provide of the following Polyurethane or Silicone Sealants or an approved substitution:
 - a. Polyurethane:
 - (1) Bostik/Chem-Calk 900.
 - (2) Pecora Corp./Dynatrol I.
 - (3) Sonneborn-ChemRex, Inc./Sonolast NPI.
 - (4) Tremco, Inc./Dymonic.

Pine Knoll Shores Public Safety Roof Replacement

one

- b. Silicone:
 - (1) Bostik/Chem-calk 2200.
 - (2) Pecora Corp./895 Silicone.
 - (3) Sonneborn-ChemRex, Inc./Sonolastic Omniseal.
 - (4) Tremco, Inc./Spectrum 2.
- 2. Exterior, Traffic Areas: Type S, Grade P, Class 25, Use T. Provide one of the following silicone sealants or an approved substitution:
 - a. Silicone:
 - (1) Bostik/Chem-calk 950.
 - (2) Pecora Corp./NR-201 Urexpan.
 - (3) Sonneborn-ChemRex, Inc./Sonolastic SLI.
- 3. Interior, Non-Traffic Areas: Type S, Grade NS, Class 12.5 or 25, Use NT. Provide one of the following polyurethane or silicone sealants or an approved substitution:
 - a. Polyurethane:
 - (1) Bostic/Chem-calk 915.
 - (2) Pecora Corp./Dynatrol I.
 - (3) Sonneborn-ChemRex, Inc./Sonolast NPI.
 - (4) Tremco, Inc./Dymonic.
 - b. Silicone:
 - (1) Bostik/Chem-calk 2200.
 - (2) Pecora Corp./895 Silicone.
 - (3) Sonneborn-ChemRex, Inc./Sonolastic Omniseal.
 - (4) Tremco, Inc./Spectrum 2.
- 4. Interior, Traffic Areas: Type S, Grade P, Class 25, Use T. Provide one of the following silicone sealants or an approved substitution:
 - a. Silicone:
 - (1) Bostik/Chem-calk 950.
 - (2) Pecora Corp./NR-201 Urexpan.
 - (3) Sonneborn-ChemRex, Inc./Sonolastic SLI.
- 5. Expansion/ Control Joints in Concrete walls: Pecora 890

2.2 LATEX SEALANTS

- A. Latex Sealant General: One-part, nonsag, mildew-resistant, paintable latex sealant complying with ASTM C 834.
 - 1. Exterior: Do not use for exterior applications.
 - 2. Interior: Use only on non-working joints. Provide one of the following or an approved substitution:
 - a. Pecora Corp./AC-20.
 - b. Sonneborn-ChemRex, Inc./Sonolac.
 - c. Tremco, Inc./Acrylic Latex 834.

2.3 SEALANT BACKERS

- A. Backers General: Nonstaining; recommended or approved by sealant manufacturer for specific use.
- B. Backer Rods: Flexible, nonabsorbent, compressible polyurethane foam, either open-cell or non-gassing closed-cell, unless otherwise restricted by sealant manufacturer; preformed to appropriate size and shape.
 - C. Bond-Breaker Tape: Self-adhesive, polyethylene or other plastic tape, unless otherwise electricted by sealant manufacturer; suitable for preventing sealant adhesion.

2.4 MISCELLANEOUS MATERIALS

A. Primers: As recommended by sealer manufacturer.

- B. Cleaners: As recommended by sealer manufacturer and not damaging to substrates.
- C. Masking Tape: Nonabsorbent, nonstaining.
- D. Tooling Agents: Approved by sealant manufacturer; nonstaining to sealant and substrate.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints for characteristics that may affect sealer performance, including configuration and dimensions.
- B. Do not begin joint sealer work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

adhesion

- A. Cleaning: Just before starting sealer installation, clean out joints in accord with recommendations of sealer manufacturers and as follows:
 - Remove all material that could impair adhesion, including dust, dirt, coatings, paint, oil, and grease. Exception: Materials tested to show acceptable and compatibility.
 - 2. Dry out damp and wet substrates thoroughly.
 - 3. Remove loose particles by vacuuming or by blowing with oil-free compressed air.
 - 4. Concrete: Remove laitance and form-release coatings.
 - Clean substrates with methods recommended by sealant manufacturer which will not damage the substrate.
 - 6. Use methods which will not leave residues that will impair adhesion.
- B. Priming: Prime substrates as recommended by sealer manufacturer.
- C. Masking Tape: Use masking tape to keep primers and sealers off of adjacent surfaces which would be damaged by contact or by cleanup. Remove tape as soon as practical.
- D. Install fillers where needed to provide proper joint depth or support for sealant backers.
- E. Provide caulk joints at all exterior exposed concrete construction/pour joints.

3.3 INSTALLATION

- A. Comply with sealer manufacturers' installation instructions and recommendations, except where more restrictive requirements are specified.
 - B. Gunnable and Pourable Sealants: Comply with recommendations of ASTM C 1193.
 - C. Backers:

sealant

- 1. Install backers at depth required to result in shape and depth of installed which allows the most joint movement without failure.
 - a. Make backers continuous, without gaps, tears, or punctures.
 - b. Do not stretch or twist backers.
- 2. If backers become wet or damp before installation of sealant, dry out thoroughly before proceeding.
- 3. Use bond-breaker tape where indicated and wherever it is necessary to keep sealant from adhering to back or third side of joint.

- D. Sealants: Use methods recommended by manufacturer; completely fill the joint; make full contact with bond surfaces; tool nonsag sealants to smooth surface eliminating air pockets.
 - Use concave joint shape shown in Figure 5A in ASTM C 1193, where not otherwise indicated.

3.4 PROTECTION AND CLEANING

- A. Clean surfaces adjacent to joints as work progresses and before sealants set using methods and materials approved by manufacturers of sealers and of surfaces to be cleaned.
 - B. Protect joint sealers from contamination and damage.
 - C. Remove and replace damaged sealers.

3.5 WARRANTY

A. Provide 20-year caulking warranty.