

CONTRACT DOCUMENTS AND SPECIFICATIONS

DIVISION OF FACILITIES AND FLEET MANAGEMENT

FOR

Black & Williams Center Roof Replacement & Repairs

Bid No. 18-2017

Prepared by Tate Hill Jacobs Architects

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PART 1

ADVERTISEMENT FOR BIDS

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ADVERTISEMENT FOR BIDS

1. INVITATION

Sealed proposals for the following work will be received by the Lexington-Fayette Urban County Government (LFUCG) until 2:00 p.m., local time, February 22, 2017, for furnishing all labor and/or materials and performing all work as set forth by this advertisement, conditions (general and special), specifications, and/or the drawings prepared by Tate Hill Jacobs Architects for Lexington-Fayette Urban County Government, Division of Facilities and Fleet Management. Immediately following the scheduled closing time for reception of bids, all proposals which have been submitted in accordance with the above will be publicly opened and read aloud.

2. DESCRIPTION OF WORK

Consisting of the construction and/or furnishing of items as listed in the Bid Schedule beginning on page P-6, Part III, Form of Proposal, of this document, for the Black & Williams Center Roof Replacement & Repairs, 498 Georgetown Street, Lexington-Fayette County, Kentucky.

3. OBTAINING PLANS, SPECIFICATIONS, AND BID DOCUMENTS

Plans, Specifications, and Contract Documents may be obtained from the official bid document distributor, LYNN IMAGING, 328 Old Vine Street, Lexington, KY 40507, (859) 255-1021 or (www.lynnimaging.com) and click on plan room for a non-refundable price of reproduction for each full set of plans and documents.

Specifications, Plans, and Bid Documents may be examined at the following places:

LFUCG Division of Central Purchasing 200 East Main Street, Third Floor, Rm 338 Lexington, Kentucky 40507 (859) 258-3320 Builder's Exchange 1035 Strader Drive, Ste 100 Lexington, Kentucky 40505

LFUCG
Division of Facilities and Fleet Management
200 East Main Street, Fourth Floor

Lexington, Kentucky

McGraw-Hill/F W Dodge 2321 Fortune Drive, Ste 112-A Lexington, Kentucky 40509

4. METHOD OF RECEIVING BIDS

Bids will be received from Prime Contracting firms on a **Lump Sum** for total Project. The Bidder must include a price for all bid items to be considered. Bids shall be submitted in the manner and subject to the conditions as set forth and described in the Instruction to Bidders and Special Conditions.

Sealed bids shall be clearly marked on the outside of the container as follows: Company Name and Address, Bid Invitation Number, and the Project Name. Bids are to remain sealed until official Bid closure time.

Mailed bids/proposals should be sent to the Director, Division of Central Purchasing, 200 East Main Street, Lexington, KY 40507.

5. METHOD OF AWARD

The Contract, if awarded, will be to the lowest, qualified responsible bidder for the total project whose qualifications indicate the award will be in the best interest of the OWNER and whose bid/proposal complies with all the prescribed requirements. No Notice of Award will be given until the OWNER has concluded such investigation as deemed necessary to establish the responsibility, qualifications and financial ability of Bidders to do the work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER's satisfaction. In analyzing Bids, the OWNER may take into consideration alternate and unit prices, if requested by the Bid forms.

6. BID WITHDRAWAL

No bidder may withdraw his bid for a period of sixty (60) calendar days after the closing date for receipt of bids. Errors and omissions will not be cause for withdrawal of bid without forfeit of bid bond. Bids may be withdrawn in person prior to the closing date of receipt of bids.

7. BID SECURITY

If the bid is \$50,000 or greater, bid shall be accompanied by a certified /cashier's check or bid bond payable to the Lexington-Fayette Urban County Government in an amount not less than Five Percent (5%) of the base bid. Bid bond shall be executed by a Surety Company authorized to do business in the Commonwealth of Kentucky and countersigned by a licensed Kentucky Resident Agent, representing the Surety Company. Bid Bonds are not required for bids under \$50,000. A certified check or cashier's check is also acceptable forms of bid security.

8. SUBMISSION OF BIDS

CONTRACTORS shall submit their bids to the Lexington-Fayette Urban County Government, Division of Purchasing, Third Floor, 200 East Main Street, Lexington, Kentucky 40507. Bids shall be submitted in a sealed envelope not later than 2:00 p.m. local

time, <u>February 22, 2017</u>. Sealed proposals shall be clearly marked on the outside of the container as follows: Company Name and Address, Bid Invitation Number, and Project Name to be opened at 2:00 p.m. local time <u>February 22, 2017</u>. Bids are to remain sealed until official Bid closure time. Bids received after the scheduled closing time for receipt of bids will not be considered and will be returned unopened.

9. RIGHT TO REJECT

The Lexington-Fayette Urban County Government reserves the right to reject any and all bids and to waive all informalities and/or technicalities where the best interest of the Lexington-Fayette Urban County Government may be served.

10. NOTIFICATION TO THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT FOR AFFIRMATIVE ACTION PLAN AND CURRENT WORKFORCE

The successful bidder must submit with their bid the following items to the Lexington-Fayette Urban County Government:

- 1. Affirmative Action Plan for his/her firm.
- 2. Current Workforce Analysis Form.

Failure to submit these items as required herein may result in disqualification of the Bidder from the award of the contract.

All submissions should be directed to:

Lexington-Fayette Urban County Government Division of Purchasing 200 East Main Street, 3rd Floor, Room 338 Lexington, Kentucky 40507

11. NOTICE CONCERNING MWDBE GOAL

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE) and Woman-Owned Business Enterprises (WBE).

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The goal for the utilization of Disadvantaged Business Enterprises as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the

recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor, Room 338 Lexington, Kentucky 40507 859-258-3323 smiller@lexingtonky.gov

12. PRE-BID MEETING

A non-mandatory pre-bid meeting will be held at 10:30 AM local time on February 10, 2017 at 498 Georgetown Street, Lexington, KY.

END OF SECTION

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PART II

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PART II

INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS

The Lexington-Fayette Urban County Government (herein called the OWNER) invites bids from firms on the project described in the Advertisement for Bids. The OWNER will receive bids at the Division of Purchasing, at the time and in the manner set forth in the Advertisement for Bids, and the Bids will then be publicly opened and read aloud. The OWNER may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days after the actual time and date of the bid opening, but OWNER may, in its sole discretion, release any bid and return the Bid Security prior to that date.

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

2. PREPARATION OF BID

Each bid must be submitted on the prescribed Form of Proposal. All blank spaces for the bid prices must be filled in, either in ink or typewritten, for both unit prices and extensions. Totals for each bid item must be added to show the total amount of the bid. Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, their address, the name of the project, the invitation number and time and date for which the bid is submitted. Bids must be addressed to the Director of Purchasing, Lexington-Fayette Urban County Government, Third Floor, 200 East Main Street, Lexington, Kentucky 40507. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified above.

3. SUBCONTRACTS

The bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this Contract must be acceptable to the OWNER. All proposed subcontractors must be identified on the Form of Proposal. Prior to the award of Contract, the OWNER or the OWNER'S representative will advise the CONTRACTOR of the acceptance and approval thereof or of any action necessary to be taken. Should any Subcontractor be rejected by the OWNER, the CONTRACTOR shall present a new name and/or firm to the OWNER at no change in the Contract Price.

4. QUALIFICATION OF BIDDER

The OWNER may make such investigations as the OWNER deems necessary to determine the ability of the bidder to perform the Work, and the bidder shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the OWNER that such bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein. Conditional bids will not be accepted.

In evaluating Bids, OWNER shall consider the qualifications of the BIDDERS, whether or not the Bids comply with the prescribed requirements, and alternatives and unit prices, as requested. OWNER may consider maintenance requirements, performance data, and disruption or damage to private property. It is OWNER'S intent to accept alternatives, if requested by the bid forms, in the order in which they are listed in the Bid Form but OWNER may accept or decline them in any order or combination. The contract, if awarded, will be awarded to the lowest, qualified, responsible BIDDER based upon OWNER'S evaluation which indicates that the award will be in the best interest of OWNER and the general public.

In the event there is any question as to the bidder's qualifications and ability to complete the work, a final determination will be made in accordance with a fair evaluation by the Urban County Government of the above listed elements.

- A. If the OWNER requires filling out a detailed financial statement, the bidder may provide its current certified financial statement(s) for the required time interval.
- B. Corporate firms are required to be registered and in good standing with the requirements and provisions of the Office of the Secretary of State, Commonwealth of Kentucky.
- C. Good standing with Public Works Act any CONTRACTOR and/or subcontractors in violation of any wage or work act provisions (KRS 337.510 to KRS 337.550) are prohibited by Statutory Act (KRS 337.990) from bidding on or working on any and all public works contracts, either in their name or in the name of any other company, firm or other entity in which he might be interested. No bid from a prime contractor in violation of the Act can be considered, nor will any subcontractor in violation of the Act be approved and/or accepted. The responsibility for the qualifications of the subcontractor is solely that of the prime contractor.
- D. Documents Required of CONTRACTOR (1) A sworn statement signed by the President or owner of the Company regarding all current work in progress anywhere; (2) A document showing the percent of completion of each project and the total worth of each project; and (3) Documentation showing the percentage of the DBE employment levels on each project of the Bidder's current work force, and DBE participation levels for Subcontractors.

E. Optional OWNER Requirements - The OWNER, at its discretion, may require the BIDDER/CONTRACTOR to provide: (1) a current detailed financial statement for a period including up to 3 prior years; (2) financial security or insurance in amounts and kinds acceptable to the OWNER to meet the financial responsibility requirements for the CONTRACTOR to indemnify the OWNER. (3) Additional information and/or DBE work force data, as well as DBE participation data.

Each bidder agrees to waive any claim it has or may have against the Owner, the Consultant, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

5. BID SECURITY

- A. Each bid must be accompanied by a bid bond prepared on a Form of Bid Bond and attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the OWNER, in the amount of 5% of the bid. Such bid bond will be returned to the unsuccessful bidder(s) only upon written request to the Director of Central Purchasing within seven (7) days of opening of bids. Bid bond shall be made payable to the Lexington-Fayette Urban County Government. Bid security is not required for projects under \$50,000.
- B. Bonds shall be placed with an agent licensed in Kentucky with surety authorized to do business within the state. When the premium is paid for such coverage, the full commission payable shall be paid to such local agent who shall not divide such commission with any person other than a duly licensed resident local agent.

6. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within ten (10) days after he has received notice of the acceptance of his bid, shall forfeit to the OWNER, as liquidated damages for such failure or refusal, the security deposited with his bid.

7. TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" from the OWNER and to fully complete the Project within the time as specified in the Contract. Bidder must agree also to pay \$250.00 per day as liquidated damages, or the sum as specified in the Contract for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

8. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- A. It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site(s) to become familiar with local conditions that may affect cost, progress, performance or furnishing of the work, (c) consider Federal, State and Local laws and regulations that may affect cost, progress, performance or furnishing of the work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Consultant of all conflicts, errors or discrepancies in the Contract Documents.
- Bidders should examine the requirements of section 4 of the General Conditions for В. information pertaining to subsurface conditions, underground structures, underground facilities, and availability of lands, easements, and rights-of-way. The completeness of data, presented in the Contract Documents, pertaining to subsurface conditions, underground structures, and underground facilities for the purposes of bidding or construction is not assured. The Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (surface and subsurface) which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents. On request in advance, OWNER will provide access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.
- C. The submission of a Bid will constitute an incontrovertible representation by the Bidder that Bidder has complied with every requirement of this paragraph 8; that without exception the Bid is premised upon furnishing and performing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents; and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

9. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Contract Documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to the Director of Central Purchasing, who in turn will have an Addendum issued for the Lexington-Fayette Urban County Government, and to be given consideration must be received prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications. Acknowledgement of the receipt of addenda must be included with all submitted bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

10. SECURITY FOR FAITHFUL PERFORMANCE

- A. Simultaneously with his delivery of the executed Contracts, the CONTRACTOR shall furnish a surety bond or bonds as security for the faithful performance of this Contract and for payment of all persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract, as specified in the General Conditions. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the OWNER and authorized to do business in the Commonwealth of Kentucky.
- B. All bonds required by this Contract and laws of this State shall be placed with agents licensed in the State of Kentucky. When the premium is paid for such coverage's, the full commission shall be paid to such local agent who shall not divide such commission with any person other than a duly licensed resident local agent.
- C. Contractor shall use standard Performance and Payment Bond forms such as documents provided with this contract book or AIA form A312-1984 (or later). Each document will be for 100% of the Contract Bid Amount.

11. POWER OF ATTORNEY

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

12. TAXES AND WORKMEN'S COMPENSATION

The CONTRACTOR and subcontractor will be required to accept liability for payment of all payroll taxes, sales and use tax, and all other taxes or deductions required by local, state or federal law, such as old age pension, social security, or annuities measured by wages. Each shall carry Workmen's Compensation Insurance to the full amounts as required by Statutes and shall include the cost of all foregoing items in the proposal. The CONTRACTOR will not otherwise be reimbursed or compensated for such tax payments. The CONTRACTOR is urged to ascertain at his own risk his actual tax liability in connection with the execution or performance of his Contract.

13. LAWS AND REGULATIONS

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

14. EROSION AND SEDIMENT CONTROL AND PERMITS

The CONTRACTOR and Subcontractors performing work on projects on behalf of the OWNER shall also comply with all applicable federal, state, and local environmental

regulations and all requirements and conditions set forth in "special" permits including but not limited to Corp of Engineers 404 permits, 401 Water Quality Certifications, Stream Crossing and Floodplain Encroachment Permits as described in Part 4 General Conditions Paragraph 5.17.

15. AFFIRMATIVE ACTION PLAN

The successful Bidder must submit with their bid, the following items to the Urban County Government:

- 1. Affirmative Action Plan of the firm
- Current Work Force Analysis Form
- 3. Good Faith Effort Documentation
- 4. List of Disadvantaged Business Enterprise Subcontractors and the Dollar Value of each Subcontract

A Work Force Analysis Form shall be submitted for each Contract. Failure to submit these items as required herein may result in disqualification of the Bidder from award of the Contract.

All submissions should be directed to:

Director, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, Third Floor Lexington, KY 40507

16. CONTRACT TIME

The number of calendar days within which the Work is to be substantially completed and ready for final payment (the Contract Time) is set forth in the Form of Proposal and the Agreement.

17. SUBSTITUTE OR "OR-EQUAL" ITEMS

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by the CONTRACTOR if acceptable to the CONSULTANT and OWNER, application for such acceptance will not be considered by the CONSULTANT and OWNER until after the effective date of the Agreement. The procedure for submission of any such application by the CONTRACTOR and consideration by the CONSULTANT and OWNER is set forth in the General Conditions.

18. ALTERNATE BIDS

Bidders shall submit alternate bids/proposals only if and when such alternate bids/proposals have been specifically requested in an Invitation for Bids. If alternate bids/proposals are requested in an Invitation for Bids, the form of submission of such alternate bid and the conditions under which such alternate bids will be considered for award of a contract will be established in the Invitation.

Any Bidder who submits a bid incorporating an alternate proposal when alternate bids/proposals have not been requested in the Invitation for Bids shall have his/her bid rejected as non-responsive.

Any Bidder who submits a bid incorporating two (2) or more prices for an item or groups of items (unless such method of pricing is requested in the Invitation for Bids), or which imposes conditions for acceptance other than those established in the Invitation for Bids, shall have their bid rejected as non-responsive.

19. SIGNING OF AGREEMENT

When OWNER gives a Notice of Award to the successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ten days thereafter, CONTRACTOR shall sign and deliver the required number of counterparts of the Agreement and attached documents to OWNER with the required Bonds, Certificate of Insurance, and Power of Attorney. The OWNER will deliver one fully signed counterpart to CONTRACTOR at such time as it has been signed by the Mayor.

20. ASSISTANCE TO BE OFFERED TO DISADVANTAGED BUSINESS ENTERPRISE (MWDBE) CONTRACTORS

A. Outreach for MWDBE(s)

The Lexington-Fayette Urban County Government (LFUCG) maintains a database of MWDBE contractors and organizations. When a LFUCG construction project is advertised for bidding, notices are sent to companies registered at https://lexingtonky.ionwave.net. The notices describe the project and indicate the deadline for submitting bids.

If you wish to be added to the LFUCG MWDBE contractor database, please contact:

Sherita Miller, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, Room 338

Lexington, Kentucky 40507 mclark@lexingtonky.gov

B. Bid Bond Assistance for MWDBE(s)

For those MWDBE contractors who wish to bid on LFUCG project, bid bond assistance is available. This bid bond assistance is in the form of a "Letter of Certification" which is accepted by the LFUCG's Division of Purchasing, in lieu of a bid bond. The "Letter of Certification" must be included in the bid package when it is submitted to the Division of Purchasing. The "Letter of Certification" will reference the specific project for which the bid is being submitted, and the time and date on which the bid is due. Bid bond assistance must be requested from the Lexington-Fayette Urban County Government's Division of Central Purchasing.

C. Eligibility for Bid Bond Assistance for MWDBE(s)

In order to be eligible for any Bid bonding assistance, a MWDBE construction company must be owned or controlled at the level of 51% or more by a member or members of a minority group or females. Prior to receiving assistance, a statement providing evidence of ownership and control of the company by a member or members of a minority group or females must be signed by the Owner or corporate officer and by an attorney or accountant submitted to:

Sherita Miller, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, Room 338 Lexington, Kentucky 40507 mclark@lexingtonky.gov

D. MWDBE Subcontractors

The LFUCG will, upon request, assist prime contractors in the procurement of eligible DBE subcontractors in an effort to achieve 10% minimum MWDBE goal.

For a list of eligible subcontractors, please contact:

Sherita Miller, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, Room 338 Lexington, Kentucky 40507 smiller@lexingtonky.gov

21. LFUCG NON-APPROPRIATION CLAUSE

Contractor acknowledges that the LFUCG is a governmental entity, and the contract validity is based upon the availability of public funding under the authority of its statutory mandate.

In the event that public funds are unavailable and not appropriated for the performance of the LFUCG's obligations under this contract, then this contract shall automatically expire without penalty to the LFUCG thirty (30) days after written notice to Contractor of the unavailability and non-appropriation of public funds. It is expressly agreed that the LFUCG shall not activate this non-appropriation provision for its convenience or to circumvent the requirements of this contract, but only as an emergency fiscal measure during a substantial fiscal crisis, which affects generally its governmental operations.

In the event of a change in the LFUCG's statutory authority, mandate and mandated functions, by state and federal legislative or regulatory action, which adversely affects the LFUCG's authority to continue its obligations under this contract, then this contract shall automatically terminate without penalty to the LFUCG upon written notice to Contractor of such limitation or change in the LFUCG's legal authority.

END OF SECTION

PART III

FORM OF PROPOSAL

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PART III

Invitation to Bid No. 18-2017

Black & Williams Center Roof Replacement & Repairs

1. FORM OF PROPOSAL

	Place: Lexington, Kentucky
	Date:
The follow	wing Form of Proposal shall be followed exactly in submitting a proposal for this Work.
This Prop	osal Submitted by
	(Name and Address of Bidding Contractor)
(Hereinaf	ter called "Bidder"), organized and existing under the laws of the State of, doing business as "a corporation," "a partnership", or an "individual" as applicable.
	"a corporation," "a partnership", or an "individual" as applicable.
То:	Lexington-Fayette Urban County Government (Hereinafter called "OWNER") Office of the Director of Purchasing 200 East Main Street, 3rd Floor Lexington, KY 40507

Gentlemen:

The Bidder, in compliance with your Invitation for Bids for Black & Williams Center Roof Replacement & Repairs having examined the Plans and Specifications with related documents, having examined the site for proposed Work, and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the lump sum and/or unit prices stated hereinafter. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this proposal is a part. The OWNER will issue work orders for work to be performed under this Contract.

The Bidder hereby acknowledges receipt o	f the following addenda:	
Addendum No Date		
Insert above the number and the date of	any Addendum issued and received.	If none has been

issued and received, the word "NONE" should be inserted.

2. <u>LEGAL STATUS OF BIDDER</u>

•	A corporation duly organized and doing business under the laws of the State for whom, bearing the official title of, whose signature is affixed to the Bid/Proposal, is duly authorized to execute contracts.
•	A Partnership, all of the members of which, with addresses are: (Designate general partners such)
•	An individual, whose signature is affixed to this Bid/Proposal (please print name)
•	An individual, whose signature is affixed to this Bid/Proposal (please print name)

3. <u>BIDDERS AFFIDAVIT</u>

	es the Affiant, r penalty of perjury as follows:	, and after being first duly sw	orn, states		
1.	His/her name is	and he/she is the	individual		
	submitting the bid or is the authorized	representative of	1 0		
	referred to as "Bidder").	, the entity submitting the bid (nereinatter		
2.	County Government at the time the bi	which are owed to the Lexington-Fayed is submitted, prior to award of the coard to those taxes and fees during the	ontract and		
3.	Bidder will obtain a Lexington-Fayett applicable, prior to award of the contra	e Urban County Government business ct.	license, if		
4.	Bidder has authorized the Division of a information with the Division of Reve that taxes and/or fees are delinquent or	Central Purchasing to verify the above-inue and to disclose to the Urban Count that a business license has not been obtained.	ty Council		
5.	Bidder has not knowingly violated an Commonwealth of Kentucky within the to the Bidder will not violate any process.	e past five (5) years and the award of	a contract		
6.	Bidder has not knowingly violated a Fayette Urban County Government Co	cnowingly violated any provision of Chapter 25 of the Lexington- unty Government Code of Ordinances, known as the "Ethics Act."			
7.	Bidder acknowledges that "knowingle respect to conduct or to circumstances offense, that a person is aware or sho nature or that the circumstance exists. Further, Affiant sayeth naught.	y" for purposes of this Affidavit me described by a statute or ordinance de	eans, with		
		(Affiant)			
TATE OF					
OUNTY OI	7				
ne foregoing	instrument was subscribed, sworn to and	acknowledged before me by			
	on this t	ne day of	, 20		
ly Commission					
-y					
	NOTAR	Y PUBLIC, STATE AT LARGE			

4. <u>BID SCHEDULE - SCHEDULE OF VALUES</u>

The Bidder agrees to perform all the Work described in the Specifications and shown on the Plans for the following proposed lump sum and/or unit prices, if applicable, which shall include the furnishing of all labor, materials, supplies, equipment and/or vehicle usage, services, all items of cost, overhead, taxes (federal, state, local), and profit for the Contractor and any Subcontractor involved, within the time set forth herein. If unit prices are applicable, Bidder must make the extensions and additions showing the total amount of bid.

Form of proposal must include unit bid prices written in words, unit price written in numbers and total amount bid (unit price x quantity) per line item OR bid may be considered non-responsive. In case of price discrepancy, unit bid price written in words will prevail followed by unit price written in numbers then total amount bid per line item.

If a discrepancy between the unit price and the item total exists, the unit price prevails except:

If the unit price is illegible, omitted, or the same as the item total, item total prevails and the unit price is the quotient of the item total and the quantity.

If the unit price and the item total are illegible or are omitted, the bid may be determined nonresponsive. If a lump sum total price is illegible or is omitted, the bid may be determined nonresponsive.

For a lump sum based bid, the item total is the bid amount the Division uses for bid comparison.

For a unit price based bid, the sum of the item totals is the bid amount the Division uses for bid comparison.

The LFUCG's decision on the bid amount is final.

Item No.	Description w/Unit Bid Price Written in Words	Unit	Total Bid Amount
1.	Base Bid - Roof Replacement and Repairs as per specifications and drawings forDollarsCents	LS	\$

LIST OF UNIT PRICES

The following List of Unit Prices is required by the Owner to be completely executed and submitted with each Bidder's Proposal. Each unit price shall include the furnishing of all labor, materials, supplies and services, and shall include all items of cost, overhead, and profit for the Contractor and any Sub-Contractors involved, and shall be used uniformly, without modification, for either additions or deductions from the Bid. These unit prices as established shall also be used to determine the equitable adjustment of the Contract Price in connection with changes, or extra work performed under the Contract. The "Rules of Measurement" set forth in the Special Conditions shall govern where volume units are concerned.

	DESCRIPTION OF WORK	UNIT PRICE		
1.	Repointing Brick		_ LF	
2.	Camel Back Clay Tile Coping: Remove Existing & Replace w/ Salvaged Coping		_ LF	
3.	Roof Walkway Pad, Installed		_ EA	

Submitted by:			
	Firm		
	Address		
	City, State & Zip		
Bid must be signed: (original signature)	Signature of Authorized Company Representative – Title		
	Representative/s Name (Typed or Printed)		
	Area Code – Phone – Extension	Fax#	
	E-Mail Address		
OFFICIAL ADDRESS:			
	(Seal if Bid is by Corporation)		
	(Seat II Blu is by Corporation)		

By signing this form you agree to ALL terms, conditions, and associated forms in this bid package

5. STATEMENT OF BIDDER'S QUALIFICATIONS

The following statement of the Bidder's qualifications is required to be filled in, executed, and submitted with the Proposal: 1. Name of Bidder: Permanent Place of Business: 2. 3. When Organized: Where Incorporated: 4. 5. Construction Plant and Equipment Available for this Project: (Attach Separate Sheet If Necessary) 6. Financial Condition: If specifically requested by the OWNER, the apparent low Bidder is required to submit its latest three (3) years audited financial statements to the OWNER'S Division of Central Purchasing within seven (7) calendar days following the bid opening. In the event the Contract is awarded to the undersigned, surety bonds will be furnished by: 7. (Surety) Signed: ______(Representative of Surety) The following is a list of similar projects performed by the Bidder: (Attach separate sheet if 8. necessary).

<u>NAME</u>	<u>LOCATION</u>	CONTRACT SUM
The Bidder has now unde	r contract and bonded the following pr	ojects:
NAME	LOCATION	CONTRACT SUM
List Key Bidder Personne	el who will work on this Project.	
<u>NAME</u>	POSITION DESCRIPTION	NO. OF YEARS WITH BIDDER

11.	DBE Participation on current bonded projects under contract:			
	SUBCONTRACTORS (LIST)	PROJECT (SPECIFIC TYPE)	<u>DBE</u>	% of WORK
	·			
	·			

11.

(USE ADDITIONAL SHEETS IF NECESSARY)

We acknowledge that, if we are the apparent low Bidder, we may be required to submit to the 12. OWNER within 7 calendar days following the Bid Opening, a sworn statement regarding all current work on hand and under contract, and a statement on the OWNER'S form of the experience of our officers, office management and field management personnel. Additionally, if requested by the OWNER, we will within 7 days following the request submit audited financial statements and loss history for insurance claims for the 3 most recent years (or a lesser period stipulated by the OWNER).

6. <u>LIST OF PROPOSED SUBCONTRACTORS</u>

The following list of proposed subcontractors is required by the OWNER to be executed, completed and submitted with the BIDDER'S FORM OF PROPOSAL. All subcontractors are subject to approval of the Lexington-Fayette Urban County Government. Failure to submit this list completely filled out may be cause for rejection of bid.

BRANCH OF WORK - LIST EACH MAJOR ITEM Such as: Grading, bituminous paving, concrete, seeding and protection, construction staking, etc.	SUBCONTRACTOR	DBE Yes/No	% of Work
1. Roofing	Name:		
	Address:		
2. <u>Masonry</u>	Name:		
	Address:		
3. Carpentry	Name:		
	Address:		
4. Painting	Name:		
	Address:		
5	Name:		
	Address:		
6	Name:		
	Address:		
7	Name:		
	Address:		

(Attach additional sheet(s) if necessary.)

6.1 MATERIAL AND EQUIPMENT LISTING

	Manufacturer Manufacturer	
1	Modified Bitumen Roofing	
2	Manufactured Ladder	
3	Roof Hatch	

7. LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT MWDBE PARTICIPATION GOALS, FORMS, AND GOOD FAITH EFFORTS

A. GENERAL

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) and Veteran-Owned Small Business (VOSB) Enterprises as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) The LFUCG has also established a 3% of total procurement costs as a Goal for participation of Veteran-Owned Small Businesses.
- 4) It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.

B. PROCEDURES

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned, Woman-Owned subcontractors or Veteran-Owned and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Woman-Owned or Veteran-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:

- a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

C. DEFINITIONS

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned and operated by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned and operated by one or more Non-Minority Females.
- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned and operated by a person(s) that are economically and socially disadvantaged.
- 4) A Veteran-Owned Small Business (VOSB) is defined as a business which is certified as being at least 51% owned and operated by a veteran and/or a service disabled veteran.
- 5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

- 1) The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE and Veteran-Owned subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.
- 2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4) Failure to submit this information as requested may be cause for rejection of bid or delay in contract award.

E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

- 1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form." The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.
- 2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE and/or Veteran participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:
 - a. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
 - b. Included documentation of advertising in the above publications with the bidders good faith efforts package
 - c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event
 - d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities
 - e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.
 - f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG Economic Engine and showed evidence of contacting the companies on the list(s).
 - g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
 - h. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
 - i. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.
 - j. Provided the interested MWBDE firm and/or Veteran-Owned businesses with adequate and timely information about the plans, specifications, and requirements of the contract.

- k. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
- Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- m. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
- n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.
- o. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
- p. Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.
- q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.

NOTE: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.



MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented resolution 167-91—Disadvantaged Business Enterprise (DBE) 10% Goal Plan in July of 1991. The resolution states in part (a full copy is available in Central Purchasing):

"A Resolution supporting adoption of the administrative plan for a ten percent (10%) Minimum goal for disadvantaged business enterprise participation in Lexington-Fayette Urban County Government construction and professional services contracts; Providing that as part of their bids on LFUCG construction contracts, general Contractors shall make a good faith effort to award at least ten percent (10%) of All subcontracts to disadvantaged business enterprises; providing that divisions of LFUCG shall make a good faith effort to award at least ten percent of their Professional services and other contracts to disadvantaged business enterprises..."

A Disadvantaged Business Enterprise is defined as a business that has been certified as being at least 51% owned, operated and managed by a U.S. Citizen of the following groups:

- African-American
- Hispanic-American
- Asian/Pacific Islander
- Native American/Native Alaskan
- Non-Minority Female
- Economically and Socially Disadvantaged

In addition, to that end the city council also adopted and implemented resolution 167-91—Veteran-owned Businesses, 3% Goal Plan in July of 2015. The resolution states in part (a full copy is available in Central Purchasing):

"A resolution adopting a three percent (3%) minimum goal for certified veteran-owned small businesses and service disabled veteran-owned businesses for certain of those Lexington-Fayette Urban County contracts related to construction for

professional services, and authorizing the Division of Purchasing to adopt and implement guidelines and/or policies consistent with the provisions and intent of this resolution by no later than July 1, 2015."

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs and Veteran-Owned Small Businesses in (https://lexingtonky.ionwave.net)

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625
Tri-State Minority Supplier Diversity Council	Susan Marston	smarston@tsmsdc.com	502-365-9762
Small Business Development Council	Shirie Hawkins UK SBDC	smack@uky.edu	859-257-7666
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwboc.org	800-675-5066
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhammad	paatricem@keynewsjournal.com	859-373-9428



LFUCG MWDBE PARTICIPATION FORM Bid/RFP/Quote Reference #_____

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. Failure to submit a completed form may cause rejection of the bid.

MWDBE Company, Name, Address, Phone, Email	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1.			
2.			
3.			
4.			

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Company	Company Representative
Date	Title



LFUCG MWDBE SUBSTITUTION FORM	
Bid/RFP/Quote Reference #	

The substituted MWDBE and/or Veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project. Failure to submit this form may cause rejection of the bid.

SUBSTITUTED MWDBE Company Name, Address, Phone, Email	MWDBE Formally Contracted/ Name, Address, Phone, Email	Work to Be Performed	Reason for the Substitution	Total Dollar Value of the Work	% Value of Total Contract
2.					
3.					
4.					

applicable Federal and State laws concerning false	statements and false claims.	
Company	Company Representative	
Date	Title	



MWDBE QUOTE SUMMARY FORM Bid/RFP/Quote Reference

bid/RFF/Quote Reference #
The undersigned acknowledges that the minority and/or veteran subcontractors listed on
this form did submit a quote to participate on this project

Company Name			Contac	Contact Person				
Address/Phone/Email		Bid Pag	Bid Package / Bid Date					
AWDBE Company Address	Contact Person	Contact Information (work phone, Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	
Native Afficial	1)					merican/Pacific Is		
and/ of be subject	to applicable Fe	deral and State lav	s accurate. A	any misrepre g false staten	esentation may res ments and claims.	sult in termination o	of the contract	
Company				Compa	ny Representati	ve	_	
Date					Title		_	



LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDBE and Veteran vendors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

Project Name/ Contract #				Work Period/ From: To:			
Company Name:				Address:			
Federal Tax ID				Contact Person:			
Subcontractor Vendor ID (name, address, phone, email	Description of Work	Total Subcontract Amount	% of Total Contract Awarded to Prime for this Project	Total Amount Paid for this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date
correct, an	d that each	of the repres	entations s	set forth belo	esentative, you o w is true. Any m r applicable Fede	usrepresent	tations may
Company			- -	Company Rep	oresentative		
Date			Title				

LFUCG STATEMENT OF GOOD FAITH EFFORTS Bid/RFP/Quote #____

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.
Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
Included documentation of advertising in the above publications with the bidders good faith efforts package
Attended LFUCG Central Purchasing Economic Inclusion Outreach event
Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities
Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses
requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG Economic Engine and showed evidence of contacting the companies on the list(s).
Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
Followed up initial solicitations by contacting MWDBEs and Veteran- Owned businesses to determine their level of interest.
Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the

contract goals. This includes, where appropriate, breaking out contract work

Date	Title
Company	Company Representative
in termination	ned acknowledges that all information is accurate. Any misrepresentations may result of the contract and/or be subject to applicable Federal and State laws concerning atts and claims.
erri	NOTE: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to approval by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.
	Otherany other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.
	Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.
	Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
	Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.
	Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
	Negotiated in good faith with interested MWDBE firms and Veteran- Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
	items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce

Date

8. <u>AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION, NON-CONFLICT OF INTEREST</u>

I hereby swear (or affirm) under the penalty for false swearing:

- 1. That I am the Bidder (if the Bidder is an individual), a partner of the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
- 2. That the attached bid has been arrived at by the Bidder independently, and has been submitted without collusion with, and without any agreement, understanding or planned common course of action, with any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition;
- 3. That the contents of the bid or bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished, with the bid or bids, and will not be communicated to any such person, prior to the official opening of the bid or bids;
- 4. That the Bidder is legally entitled to enter into the contracts with the Lexington-Fayette Urban County Government, and is not in violation of any prohibited conflict of interest;
- 5. (Applicable to corporation only) That as a foreign corporation, we are registered with the Secretary of State, Commonwealth of Kentucky, and authorized to do business in the State _____ or, that as a domestic corporation, we are in good standing with the Secretary of State, Commonwealth of Kentucky _____. Check the statement applicable.
- 6. This offer is for 60 calendar days from the date this bid is opened. In submitting the above, it is expressly agreed that, upon proper acceptance by the Lexington-Fayette Urban County Government of any or all items bid above, a contract shall thereby be created with respect to the items accepted.
- 7. That I have fully informed myself regarding the accuracy of the statements made in this statement.
- 8. That I certify that Subcontractors have not and will not be awarded to any firm(s) that have been debarred from noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law.

9. STATEMENT OF EXPERIENCE

NAME OF INDIVIDUAL:		
POSITION/TITLE:		
STATEMENT OF EXPERIENCE:		
	-	
NAME OF INDIVIDUAL:		
POSITION/TITLE:		
STATEMENT OF EXPERIENCE:		
		<u> </u>
NAME OF INDIVIDUAL:		
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NAME OF INDIVIDUAL:		
POSITION/TITLE:		
STATEMENT OF EXPERIENCE:		
NAME OF INDIVIDUAL:		
POSITION/TITLE:		
STATEMENT OF EXPERIENCE:		

^{*} Include all officers, office management's, Affirmative Action officials, and field management personnel. (Attach separate sheets if necessary.)

10. EQUAL OPPORTUNITY AGREEMENT

The Law

- * Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- * Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and subcontractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 States:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- * Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal Contracts.
- * Section 206 (A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors, and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractor may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped, and aged persons.

Signature

Name of Business

The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its subcontracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

The Kentucky equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any count, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

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, age or national origin;
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;
- (3) The contract will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.

The Act further provides:

KRS 45.610. Hiring minorities – Information required

- (1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.
- (2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment

practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 45.640.
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions quoted above to be included as <u>special conditions</u> in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

11. EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION POLICY

	It is the policy of
to assu	are that all applicants for employment and all employees are treated on a fair and equitable
basis v	without regard to their race, religion, sex, color, handicap, natural origin or age.

Such action shall include employment, promotion, demotion, recruitment or recruitment advertising, layoff or termination, rates of pay and other forms of compensation, and selection for training, whether apprenticeship and/or on-the-job-training.

Furthermore, this company agrees to make special recruitment efforts to hire the protected class whenever feasible. This company also agrees to adhere to all applicable federal, state, and local laws relating to Equal Employment Opportunity for all individuals.

12. WORKFORCE ANALYSIS FORM

Name of Organization:

								T					
Total	<u> </u>	4	1	_	_	\rightarrow	-				\downarrow	_	_
۲	Σ				ļ								
Two or more races (Not Hispanic or Latino	щ												
	Σ												
American Indian or Iskan Native t Hispanic or Latino	ш												
American Indian or Alaskan Native (not Hispanic or Latino	Σ												
(Not anic tino	щ												
Asian (Not Hispanic or Latino	Σ												
Native Hawaiian and Other Pacific Islander (Not	ш									į			
Native Hawaiian and Other Pacific Islander (Not	W												
or tan tan ic or	L												
Black or African- American (Not Hispanic or Latino	Σ												
no no	щ												
Hispanic Latino	Σ												
ite ot nic or no)	Ŧ												
White (Not Hispanic or Latino)	Σ												
Total													
Categories		Administrators	Professionals	Superintendents	Supervisors	Foremen	Technicians	Protective Service	Para-Professionals	Office/Clerical	Skilled Craft	Service/Maintenance	Total:

Jate: _____/___/ Revised 2015-Dec-15

13. EVIDENCE OF INSURABILITY

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT CONSTRUCTION PROJECT

(Use separate form for each Agency or Brokerage agreeing to provide coverage)

Names Insured:

Names Insured:		Employee ID:							
Address:				Phone:					
Project to be insured:						"" 			
In lieu of obtaining certificates of insurance at t and Risk Management of Part V (Special Cond	his time, the undersi itions), including all	gned agrees to provide the above Na requirements, and conditions:	amed Insured with the minimum	a coverage listed below. Th	ese are outlined is	n the Insurance			
Section Items	Coverage	Minimum Limits and Policy Requirements	Limits Provided To Insured	Name of Insurer	A.M. Best's Code Rating				
SC-3, Section 2, Part 4.1 – see provisions	CGL	\$1,000,000 per occ. And \$2,000,000 aggregate	\$			- Kunig			
SC-3, Section 2, Part 4.1 – see provisions	AUTO	\$2,000,000/per occ.	\$						
SC-3, Section 2, Part 4.1 – see provisions	WC	Statutory w /endorsement as noted	\$						
Section 2 includes required provisions, statement when submitting.	nts regarding insurar	nce requirements, and the undersigne	ed agrees to abide by all provision	ons for the coverage's check	ed above unless	stated otherwise			
Agency or Brokerage			Name of Authorized	Representative	<u> </u>				
Street Address			Title						
ty State Zip		Zip	Authorized Signature						
Telephone Number			Date						

NOTE: Authorized signatures may be the agent's if agent has placed insurance through an agency agreement with the insurer. If insurance is brokered, authorized signature must be that of authorized representative of insurer.

IMPORTANT: Contract may not be awarded if a completed and signed copy of this form for all coverage's listed above is not provided with the bid.

PROJECT NAME: **BID NUMBER:** LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT LEXINGTON, KY All prime Contractors shall certify that Subcontractors have not and will not be awarded to any firms that has been debarred for noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law. All bidders shall complete the attached certification in duplicate and submit both copies to the Owner with the bid proposal. The Owner (grantee) shall transmit one copy to the Lexington-Fayette Urban County Government, Division of Community Development, within fourteen (14) days after bid opening. has The undersigned hereby certifies that the firm of _ not and will not award a subcontract, in connection with any contract award to it as the result of this bid, to any firm that has been debarred for noncompliance with the Federal labor Standards, Title VI of the civil Rights Act of 1964, Executive Order 11246 as amended or any Federal Law. Name of Firm Submitting Bid Signature of Authorized Official Title

DEBARRED FIRMS

14.

Date

15. DEBARMENT CERTIFICATION

All contractors/subcontractors shall complete the following certification and submit it with the bid proposal.

The contractor/subcontractor certifies in accordance with Executive Order 12549 (Debarment and Suspension 2/18/86) that to the best of its knowledge and belief, that it and its principals:

- Are not presently debarred, suspended, proposed for debarment, declared negligible, or voluntarily excluded from covered transactions or contract by any Federal department or agency for noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 as amended, Executive Order 11246 as amended or any other Federal law;
 - a) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - b) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(a) of this certification; and
 - c) Have not within a three year period preceding this bid has one or more public (Federal, State or local) transactions or contracts terminated for cause or default.
- 2) Where the contractor is unable to certify to any of the statements in this certification, such prospective contractors shall attach an explanation to this certification form.

Firm Name:	
Project:	
Printed Name and Title of Authorized Representative:	
Signature:	
Date:	

END OF SECTION

PART IV

GENERAL CONDITIONS

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END OF SECTION

PART IV

GENERAL CONDITIONS

1. **DEFINITIONS**

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

1.1 Addenda

Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bid Documents or the Contract Documents.

1.2 Agreement

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

1.3 Application for Payment

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

1.4 Bid

The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

1.5 Bidder

An individual, partnership, or corporation, who submit a Bid for a prime contract with the OWNER, for the Work described in the proposed Contract Documents.

1.6 Bonds

Bid, performance and payment bonds and other instruments of security.

1.7 Calendar Day

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

1.8 Change Order

A document recommended by CONSULTANT, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

1.9 Contract Documents

The Advertisement for Bidders, Information for Bidders, Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR'S Bid (including documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Bonds, these General Conditions, the Special Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all amendments, modifications and supplements.

1.10 Contract Unit Price

The monies payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement. Unit Prices are to be firm for the term of this Contract.

1.11 Contract Time

The number of consecutive calendar days between the date of issuance of the Notice to Proceed and the contract completion date.

1.12 CONTRACTOR

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

1.13 Defective

An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to CONSULTANT'S recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER).

1.14 Drawings

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

1.15 Effective Date of the Agreement

The date indicated in the Agreement on which it becomes effective.

1.16 CONSULTANT

The Lexington-Fayette Urban County Government or its authorized representative.

1.17 Field Order

A documented order issued by CONSULTANT which orders minor changes in the Work, but which does not involve a change in the Contract Price or the Contract Time.

1.18 Giving Notice

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

1.19 Laws and Regulations

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

1.20 Notice of Award

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

1.21 Notice to Proceed

A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.

1.22 OWNER

The Lexington-Fayette Urban County Government.

1.23 Partial Utilization

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

1.24 Project

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

1.25 Inspector

The authorized representative who is assigned to the site or any part thereof.

1.26 Shop Drawings

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

1.27 Specifications

Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and

workmanship as applied to the Work and certain administrative details applicable thereto.

1.28 Standard Specifications

The "Standard Specifications for Road and Bridge Construction", Transportation Cabinet, Department of Highways, Commonwealth of Kentucky, current edition. MUTCD shall refer to the "Manual of Uniform Traffic Control Devices.

1.29 Subcontractor

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

1.30 Special Conditions

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

1.31 Supplier

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

1.32 Underground Facilities

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

1.33 Unit Price Work

Not applicable

1.34 Work

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

1.35 Time Period

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

2. PRELIMINARY MATTERS

2.1 Delivery of Bonds

When the CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER, such Bonds, Insurance Certificate, and Power of Attorney as CONTRACTOR may be required to furnish.

2.2 Copies of Documents

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

2.3 Commencement of Contract Time; Notice to Proceed

The Contract Time will commence to run on the day specified in the Notice to Proceed.

2.4 Starting the Project

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

2.5 Before Starting Construction

Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to CONSULTANT any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from CONSULTANT before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or CONSULTANT for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

2.6 Submittal of Schedules

Within ten days after the effective date of the Agreement (unless otherwise specified) CONTRACTOR shall submit to CONSULTANT for review:

- **2.6.1** an estimated progress schedule indicating the starting and completion dates of the various stages of the Work;
- 2.6.2 a preliminary schedule of Shop Drawing submissions; and
- **2.6.3** a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into costs per labor and materials by specification

section to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission. Schedule of values shall be submitted on AIA G702/703 forms, or approved equal.

2.7 Preconstruction Conference

Before CONTRACTOR starts the Work at the proposed site, a conference attended by CONTRACTOR, CONSULTANT, EEO-Affirmative Action Officer, and other appropriate parties will be held to discuss the following issues: (1) The scheduling of the Work to be completed; (2) The procedures for handling shop drawings and other submittals; (3) The processing of applications for payment; (4) The establishment of an understanding among the involved parties in regard to the proposed project; and (5) The establishment of procedures for effectively implementing the LFUCG's 10% minimum DBE goals.

2.8 Finalizing Schedules

At least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, CONSULTANT and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to CONSULTANT as providing orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on CONSULTANT responsibility for the progress or scheduling of the Work nor relieve CONTRACTOR from full responsibility thereof. The finalized schedule of Shop Drawing submissions will be acceptable to CONSULTANT as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to CONSULTANT as to form and substance.

3. CONTRACT DOCUMENTS: INTENT, CONFLICTS, AMENDING AND REUSE

3.1 General

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

3.2 Intent

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

interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or CONSULTANT, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to CONSULTANT, or any of CONSULTANT'S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12.3 or 8.12.4. Clarifications and interpretations of the Contract Documents shall be issued by CONSULTANT as provided in paragraph 8.4.

3.3 Conflicts

If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to CONSULTANT in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from CONSULTANT; however, CONTRACTOR shall not be liable to OWNER or CONSULTANT for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

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

- 1. Agreement
- 2. Field and Change Orders
- 3. Addenda
- 4. Special Conditions
- 5. Instruction to Bidders
- 6. General Conditions
- 7. Specifications and Drawings

Figure dimension on drawings shall govern over scale dimensions and detailed Drawings shall govern over general Drawings.

3.4 Amending and Supplementing Contract Documents

The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof by means of a Change Order or a Field Order. Contract Price and Contract Time may only be changed by a Change Order.

3.5 Reuse of Documents

Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of CONSULTANT; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and CONSULTANT and specific written verification or adaptation by CONSULTANT.

4. AVAILABILITY OF LANDS; PHYSICAL CONDITIONS, REFERENCE POINTS

4.1 Availability of Lands

OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER'S furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Article 11. CONSULTANT shall determine if the claim is legitimate or not. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 Physical Conditions

4.2.1 Explorations and Reports

Reference is made to the Special Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by CONSULTANT in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof for CONTRACTOR'S purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.

4.2.2 Existing Structures

Reference is made to the Special Conditions for identification of those drawings of physical conditions in or relating to existing surface and

subsurface structures (except Underground Facilities referred to in paragraph 4.3 which are at or contiguous to the site that have been utilized by CONSULTANT in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR'S purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.

4.2.3 <u>Report of Differing Conditions</u> If CONTRACTOR believes that:

- 4.2.3.1 any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is inaccurate, or
- 4.2.3.2 any physical conditions uncovered or revealed at the site differ materially from that indicated, reflected or referred to in the Contract Documents,

CONTRACTOR shall, promptly after becoming aware thereof and before performing and WORK in connection therewith (except in an emergency) notify OWNER and CONSULTANT in writing about the inaccuracy or difference.

4.2.4 CONSULTANT'S Review

CONSULTANT will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise CONTRACTOR of CONSULTANT'S findings and conclusions.

4.2.5 Possible Document Change

If CONSULTANT concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change I the Contract Documents is required, a Change Order will be issued as provided in Article 10 to reflect and document the consequences of the inaccuracy or difference.

4.2.6 Possible Price and Time Adjustments

In each such case, an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, or any combination thereof, will be allowable to the extent that they are attributable to any such inaccuracy or difference.

4.3 Physical Conditions-Underground Facilities

4.3.1 Shown or Indicated

The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is

based on information and data furnished to OWNER or CONSULTANT by the owners of such underground facilities or by others. Unless it is otherwise expressly provided in the Special Conditions:

4.3.1.1 <u>OWNER and CONSULTANT</u> shall not be responsible for the accuracy or completeness of any such information or data; and,

4.2.1.2 <u>CONTRACTOR</u> shall have full responsibility for reviewing and checking all such information and data; for locating all underground facilities shown or indicated in the Contract Documents; for coordination of the Work with the owners of such underground facilities during construction; and for the safety and protection thereof and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

4.3.2 Not Shown or Indicated

If an underground facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency), identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and CONSULTANT. CONSULTANT will promptly review the underground facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such underground facility. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any underground facility that was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of.

4.4 Reference Points

OWNER shall provide engineering surveys to establish reference points for construction which in CONSULTANT'S judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to CONSULTANT whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by a Registered Land Surveyor.

5. CONTRACTOR'S RESPONSIBILITIES

5.1 Supervision

CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall assure that all CONTRACTOR personnel (including subcontractors, etc.) conduct themselves in a courteous and respectful manner toward the CONSULTANT and the general public. CONTRACTOR shall keep at the Project Site during the progress of the Work a competent project manager/superintendent and all necessary assistants, all of whom shall be satisfactory to OWNER. OWNER reserves the right to reject CONTRACTOR'S construction superintendent and project management personnel if they are unsatisfactory to OWNER and upon such rejection CONTRACTOR shall designate and provide competent successors. Failure to comply with this condition of the Contract will result in immediate suspension of the Work. Following a review by the Commissioner of Public Works, the Contract may be terminated (see GC section CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

5.2 Superintendence

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

5.3 Labor

CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. OWNER reserves the right to require CONTRACTOR to remove from the Project any of it's personnel, or subcontractor's personnel for violating LFUCG Policies, Rules or Regulations. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without OWNER'S written consent given after prior written notice to CONSULTANT.

5.4 Start-Up and Completion of Work

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

5.5 Materials and Equipment

All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by CONSULTANT, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to CONSULTANT, or any of CONSULTANT'S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12.3 or 8.12.4.

5.5.1 Not Clearly Specified or Indicated

In all instances where materials specified are obtainable in different sizes, weights, trade grades, qualities or finishes, etc., whose weights, trade grades, qualities or finishes, etc., are not clearly specified or indicated on the Drawings, the CONTRACTOR shall notify the CONSULTANT of all such instances at least five (5) days in advance of receiving the proposals. The CONSULTANT will then determine which size, weight, trade grade, quality, finish, etc., is required.

5.5.2 Coordination of Work

The CONTRACTOR shall see that for his own Work and for the work of each subcontractor, proper templates and patterns necessary for the coordination of the various parts of the Work are prepared. The CONTRACTOR shall furnish or require the Subcontractor to furnish such duplicates as will enable the Subcontractors to fit together and execute fully their respective portions of the Work.

5.6 Adjusting Progress Schedule

CONTRACTOR shall submit to CONSULTANT for acceptance (to the extent indicated in paragraph 2.8) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the Contract Documents applicable thereto.

5.7 Substitutes or "Or-Equal" Items

5.7.1 General

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

5.7.2 Substitutes

If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to OWNER/CONSULTANT, if CONTRACTOR submits sufficient information to allow OWNER/CONSULTANT to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by OWNER/CONSULTANT will be

similar to that provided in paragraph 5.7.1 as applied by OWNER/CONSULTANT.

5.7.3 OWNER/CONSULTANT'S Approval

OWNER/CONSULTANT will be allowed a reasonable time within which to evaluate each proposed substitute. OWNER/CONSULTANT will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without OWNER/CONSULTANT'S prior written acceptance which will be evidenced by either a Change Order or an approved Shop OWNER may require CONTRACTOR to furnish at CONTRACTOR'S expense a special performance guarantee or other surety with respect to any substitute. OWNER/CONSULTANT will time required by OWNER/CONSULTANT OWNER/CONSULTANT'S consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract occasioned thereby. OWNER/CONSULTANT accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of OWNER/CONSULTANT and OWNER/CONSULTANT'S consultants for evaluating each proposed substitute.

5.8 Subcontractors, Suppliers, and Others

5.8.1 Acceptable to CONSULTANT

CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and CONSULTANT as indicated in paragraph 5.8.2), whether initially or as a substitute, against whom OWNER or CONSULTANT may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

5.8.2 Objection After Due Investigation

If the Contract Documents require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials and equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of the Agreement for acceptance by OWNER and CONSULTANT and if CONTRACTOR has submitted a list thereof, OWNER'S or CONSULTANT'S acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute. No acceptance by OWNER or CONSULTANT of any such Subcontractor, Supplier or other

person or organization shall constitute a waiver of any right of OWNER or CONSULTANT to reject defective Work.

5.8.3 Contractor Responsible for Acts of Subcontractors

The CONTRACTOR shall perform on the site, and with its own organization, work equivalent to at least fifty (50) percent of the total amount of Work to be performed under the Contract. This percentage may be reduced by a supplemental agreement to this Contract if, during performing the Work, the CONTRACTOR requests a reduction and the Urban County project manager determines that the reduction would be to the advantage of the Urban County Government.

The CONTRACTOR shall, at the time he submits his proposal for the Contract, notify the OWNER in writing of the names of Subcontractors proposed for the Work. He shall not employ any Subcontractor without the prior written approval of the OWNER.

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

5.8.4 <u>Division of Specifications</u>

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

5.8.5 Agreement Between Contractor and Subcontractors

All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and CONSULTANT.

5.8.6 Statements and Comments by CONTRACTOR

Neither the CONTRACTOR, his employees, nor his subcontractors shall at any time make any statement or comment as to the project scope, nature, intention, design, or construction

method to any third party or parties without the explicit written consent of the OWNER.

Any third party requesting such information shall be referred to the OWNER or his representative.

Should there be any change from the original intent of the project as a result of any statement or comment by the contractor, his employees or subcontractors, contractor shall be held liable for any change in the scope, nature, design, or construction method and shall bear the full cost for the previously mentioned changes.

5.9 Patent Fees and Royalties

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others.

5.10 Permits

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

5.11 Laws and Regulations

5.11.1 CONTRACTOR to Comply

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

5.11.2 Specifications and Drawings at Variance

If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give CONSULTANT prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws, or Regulations, and without such notice to CONSULTANT, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR'S primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

Any party, firm or individual submitting a proposal pursuant to invitation must have paid all taxes owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, and must maintain a "current" status in regard to those taxes throughout the Contract. If applicable, business must be licensed in Fayette County.

5.12 Taxes

CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work. Any party, firm or individual submitting a proposal pursuant to invitation must have paid all taxes owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, and must maintain a "current" status in regard to those taxes throughout the Contract. If applicable, business must be licensed in Fayette County.

5.13 Use of Premises

5.13.1 Project Site

CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the staging areas or work site areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such

land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or CONSULTANT by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and CONSULTANT harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or CONSULTANT to the extent based on a claim arising out of CONTRACTOR'S performance of the Work.

5.13.2 Clean UP

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

5.13.1 Loading of Structures

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

5.14 Record Drawings

CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Change Orders, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to CONSULTANT for reference. Upon completion of the Work, these record documents, samples and Shop Drawings will be delivered to CONSULTANT for OWNER.

5.15 Shop Drawings and Samples -

5.15.1 Shop Drawing Submittals

After checking and verifying all field measurements and after complying

with applicable procedures specified, CONTRACTOR shall submit to CONSULTANT for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.8), or for other appropriate action if so indicated in the Special Conditions, five copies (unless otherwise specified) of all Shop Drawings, which will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR'S responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as CONSULTANT may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable CONSULTANT to review the information as required.

5.15.2 Sample Submittals

CONTRACTOR shall also submit to CONSULTANT for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR'S responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

5.15.3 Review by CONTRACTOR

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

5.15.4 Notice of Variation

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

5.15.5 CONSULTANT'S Approval

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

procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by CONSULTANT, and shall return the required number of corrected copies of Shop Drawings and submit, as required, new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by CONSULTANT on previous submittals.

5.15.6 Responsibility for Errors and Omissions

CONSULTANT'S review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called CONSULTANT'S attention to each such variation at the time of submission as required by paragraph 5.15.4 and CONSULTANT has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by CONSULTANT relieve CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 5.15.3.

5.15.7 Cost of Related Work

Where a Shop or sample is required by the Specifications, any related Work performed prior to CONSULTANT'S review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

5.16 Continuing the Work

CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolutions of any disputes or disagreements, except as permitted by paragraph 14.5 or as CONTRACTOR and OWNER may otherwise agree in writing.

5.17 Erosion and Sediment Control

5.17.1 General Environmental Requirements

The CONTRACTOR and Subcontractors performing work on projects on behalf of the OWNER shall comply with all applicable federal, state, and local environmental regulations and all requirements and conditions set forth in "special" permits including but not limited to Corp of Engineers 404 permits, 401 Water Quality Certifications, Stream Crossing and Floodplain Encroachment Permits.

Any fines or penalties resulting from the failure to comply with the terms of the federal, state or local permits or perform necessary corrective action are solely the obligation of the CONTRACTOR.

5.17.2 Stormwater Pollution Prevention

- A. The CONTRACTOR shall exercise due care to prevent or minimize any damage to any stream or wetland from pollution by debris, sediment or other material. The operation of equipment and/or materials in a jurisdictional wetland is expressly prohibited. Water that has been used for washing or processing, or that contains oils, sediments or other pollutants shall not be discharged from the job site. Such waters shall be collected and properly disposed of by the CONTRACTOR in accordance with applicable local, state and federal law.
- B. The CONTRACTOR is solely responsible for securing all required state and local permits associated with stormwater discharges from the project including, but not necessarily limited to the KY Notice of Intent to Disturb (NOI) for Coverage of Storm Water Discharges Associated with Construction Activities under the KPDES Storm Water General Permit KYR100000 and the LFUCG, Land Disturbance Permit. Permit application preparation and all required documentation are the responsibility of the CONTRACTOR. The CONTRACTOR is solely responsible for maintaining compliance with the stormwater pollution prevention plan or erosion and sediment control plan and ensuring the following:
- a. That the Stormwater Pollution Prevention Plan (SWPPP) or erosion control plan is current and available for review on site;
- b. That any and all stormwater inspection reports required by the permit are conducted by qualified personnel and are available for review onsite; and
- c. That all best management practices (BMPs) are adequately maintained and effective at controlling erosion and preventing sediment from leaving the site.
- C. The CONTRACTOR shall provide the necessary equipment and personnel to perform any and all emergency measures that may be required to contain any spillage or leakage and to remove materials, soils or liquids that become contaminated. The collected spill material shall be properly disposed at the CONTRACTOR's expense.
- D. Upon completion of the work and with the concurrence of the OWNER, the CONTRACTOR must file a Notice of Termination (NOT) of Coverage Under the KPDES General Permit for Storm Water Discharges Associated with Construction Activity with the appropriate local and state authorities.

E. Any fines or penalties resulting from the failure to comply with the terms of the state or local stormwater permits or perform necessary corrective action are solely the obligation of the CONTRACTOR.

6. OTHER WORK

6.1 Related Work at Site

OWNER may perform other work related to the Project at the site by OWNER'S own forces, have other work performed by utility owners or let other direct contracts therefor which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work; and, if such performance will involve additional expense to CONTRACTOR or requires additional time, a Change Order to the Contract will be negotiated.

6.2 Other Contractors or Utility Owners

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

6.3 Delays Caused by Others

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

6.4 Coordination

If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Special Conditions, and the specific matters to be covered by such authority and

responsibility will be itemized, and the extent of such authority and responsibilities will be provided, in the Special Conditions.

7. OWNER'S RESPONSIBILITIES

7.1 Communications

OWNER shall issue all communications to CONTRACTOR through CONSULTANT.

7.2 Data and Payments

OWNER shall furnish the data required of OWNER under the Contract Documents promptly after they are due.

7.3 Lands, Easements, and Surveys

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

7.4 Change Orders

OWNER is obligated to execute Change Orders as indicated in paragraph 9.4.

7.5 Inspections, Tests and Approvals

OWNER'S responsibility in respect to certain inspections, tests and approvals is set forth in paragraph 13.3.

7.6 Stop or Suspend Work

In connection with OWNER'S right to stop Work or suspend Work, see paragraph 12.4 and 14.1 Paragraph 14.2 deals with OWNER'S rights to terminate services of CONTRACTOR under certain circumstances.

8. CONSULTANT'S STATUS DURING CONSTRUCTION

8.1 OWNER'S Representative

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

8.2 Visits to Site

CONSULTANT will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. CONSULTANT will not be required to make exhaustive or

continuous on-site inspections to check the quality or quantity of the Work. CONSULTANT'S efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations, CONSULTANT will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

8.3 Project Representation

CONSULTANT will provide an Inspector to assist CONSULTANT in observing the performance of the Work. If OWNER designates another agent to represent OWNER at the site who is not CONSULTANT'S agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Special Conditions.

8.4 Clarifications and Interpretations

CONSULTANT will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as CONSULTANT may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

8.5 Authorized Variations in Work

CONSULTANT may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order.

8.6 Rejecting Defective Work

CONSULTANT will have authority to disapprove or reject Work which CONSULTANT believes to be defective, and will also have authority to require special inspection or testing of the Work as provided in paragraph 12.3, whether or not the Work is fabricated, installed or completed.

8.7 Shop Drawings

In connection with CONSULTANT'S responsibility for Shop Drawings and samples, see paragraphs 5.15.1 through 5.16 inclusive.

8.8 Change Orders

In connection with CONSULTANT'S responsibilities as to Change Orders, see Articles 10, 11 and 12.

8.9 Payments

In connection with CONSULTANT'S responsibilities with respect to Applications for Payment, etc., see Article 13.

8.10 Determinations for Unit Prices

CONSULTANT will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR.

CONSULTANT will review with CONTRACTOR CONSULTANT'S preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise).

8.11 Decision on Disputes

CONSULTANT will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 10 and 11 in respect of changes in the Contract Price or Contract Time will be referred initially to CONSULTANT in writing with a request for a formal decision in accordance with this paragraph, which CONSULTANT will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered to CONSULTANT promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to CONSULTANT within sixty days after such occurrence unless CONSULTANT allows an additional period of time to ascertain more accurate data in support of the claim.

8.12 Limitations on CONSULTANT's Responsibilities

8.12.1 CONTRACTOR, Supplier, or Surety

Neither CONSULTANTS authority to act under this Article 8 or elsewhere in the Contract Documents nor any decision made by CONSULTANT in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of CONSULTANT to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

8.12.2 To Evaluate the Work

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", or "satisfactory" or adjectives or like "effect" or "import" are used to describe a requirement, direction, review or judgment of CONSULTANT as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign CONSULTANT any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12.3 or 8.12.4.

8.12.3 CONTRACTOR'S Means, Methods, Etc.

CONSULTANT will not be responsible for CONTRACTOR'S means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and CONSULTANT will not be responsible for CONTRACTOR'S failure to perform or furnish the Work in accordance with the Contract Documents.

8.12.4 Acts of Omissions of CONTRACTOR

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

9. CHANGES IN THE WORK

9.1 OWNER May Order Change

Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Change Order. Upon receipt of such notice, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

9.2 Claims

Claims for an increase or decrease in the Contract Price or an extension or shortening or the Contract Time that should be allowed as a result of a Change Order will be settled as provided for in Article 10 or Article 11.

9.3 Work Not in Contract Documents

CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraph 3.4, except in the case of an emergency and except in the case of uncovering Work as provided in paragraph 12.3.4.

9.4 Change Orders

OWNER and CONTRACTOR shall execute appropriate Change Orders covering:

- 9.4.1 changes in the Work which are ordered by OWNER pursuant to paragraph 9.1, are required because of acceptance of defective Work under paragraph 12.7 or corrective defective Work under paragraph 12.8, or are agreed to by the parties;
- 9.4.2 changes in the Contract Price or Contract Time which are agreed to by the parties; and

9.4.3 changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by CONSULTANT pursuant to paragraph 8.11; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and REGULATIONS, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 5.16.

9.5 Notice of Change

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

10. CHANGE OF CONTRACT PRICE

10.1 Total Compensation

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

10.2 Claim for Increase or Decrease in Price

The Contract Price may only be changed by a Change Order. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the CONTRACTOR to the CONSULTANT promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days after such occurrence (unless CONSULTANT allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by CONTRACTOR'S written statement that the amount claimed covers all known amounts (direct, indirect, and consequential) to which the CONTRACTOR is entitled as a result of the occurrence of said event.

10.3 Value of Work

The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

10.3.1 Unit Prices

Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraphs 10.9.1. through 10.9.3, inclusive).

10.3.2 <u>Lump Sum</u>

By mutual acceptance of a lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 10.6.2.1).

10.3.3 Cost Plus Fee

On the basis of the Cost of the Work (determined as provided in paragraphs 10.4 and 10.5) plus a CONTRACTOR'S fee for overhead and profit (determined as provided in paragraphs 10.6 and 10.7).

10.4 Cost of the Work

The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project; shall include only the following items; and shall not include any of the costs itemized in paragraph 10.5:

10.4.1 Payroll Costs

Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

10.4.2 Materials and Equipment Costs

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

10.4.3 Subcontractor Costs

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

10.4.4 Special Consultant Costs

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

10.4.5 Supplemental Costs

- 10.4.5.1 The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR'S employees incurred in discharge of duties connected with the Work.
- 10.4.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.
- 10.4.5.3 Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of CONSULTANT, and the costs of transportation, loading, unloading, installation, dismantling and removal shall be in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.
- 10.4.5.4 Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

- 10.4.5.5 Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- 10.4.5.6 Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER), provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR'S fee. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid a fee proportionate to that stated in paragraph 10.6.2 for services.
- 10.4.5.7 The cost of utilities, fuel and sanitary facilities at the site.
- 10.4.5.8 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
- 10.4.5.9 Cost of premiums for additional Bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by OWNER.

10.5 Not to Be Included in Cost of the Work

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

10.5.1 Costs of Officers and Executives

Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR'S principal or a branch office for general administration of

the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 or specifically covered by paragraph 10.4.4 - all of which are to be considered administrative costs covered by the CONTRACTOR'S fee.

10.5.2 Principal Office

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

10.5.3 Capital Expense

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

10.5.4 Bonds and Insurance

Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 10.4.5.9 above).

10.5.5 Costs Due to Negligence

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

10.5.6 Other Costs

Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4.

10.6 Contractor's Fee

The CONTRACTOR'S Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

- 10.6.1 a mutually acceptable fixed fee; or if none can be agreed upon,
- 10.6.2 a fee based on the following percentages of the various portions of the Cost of the Work:
 - 10.6.2.1 for costs incurred under paragraphs 10.4.1 and 10.4.2, the CONTRACTOR'S fee shall be fifteen percent;
 - 10.6.2.2 for costs incurred under paragraph 10.4.3, the CONTRACTOR'S fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent;
 - 10.6.2.3 no fee shall be payable on the basis of costs itemized under paragraphs 10.4.4, 10.4.5 and 10.5;
 - 10.6.2.4 the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR'S Fee by an amount equal to ten percent of the net decrease; and
 - 10.6.2.5 when both additions and credits are involved in any one change, the adjustment in CONTRACTOR'S fee shall be computed on the basis of the net change in accordance with paragraphs 10.6.2.1 through 10.6.2.4, inclusive.

10.7 Itemized Cost Breakdown

Whenever the cost of any Work is to be determined pursuant to paragraph 10.4 or 10.5, CONTRACTOR will submit in form acceptable to CONSULTANT an itemized cost breakdown together with supporting data.

10.8 Cash Allowances

It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to CONSULTANT, CONTRACTOR agrees that:

10.8.1 Materials and Equipment

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

10.8.2 Other Costs

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

10.8.3 Change Order

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

10.9 Unit Price Work

10.9.1 General

Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by CONSULTANT in accordance with Paragraph 8.10.

10.9.2 Overhead and Profit

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

10.9.3 Claim for Increase in Unit Price

Where the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement and there is no corresponding adjustment with respect to any other item of Work and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 10.

11. CHANGE OF CONTRACT TIME

11.1 Change Order

The Contract Time may only be changed by a Change Order. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered to CONSULTANT promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless CONSULTANT allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by CONSULTANT in accordance with paragraph 8.11. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph 11.1.

11.2 Justification for Time Extensions

The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefore as provided in paragraph 11.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional work as contemplated by Article 6, or to fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.

11.3 Time Limits

All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Article 11 shall not exclude recovery for damages (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court costs) for delay by either party.

12. WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

12.1 Warranty and Guarantee

CONTRACTOR warrants and guarantees to OWNER and CONSULTANT that all Work will be in accordance with the Contract Documents and will not be defective. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 12.

12.2 Access to Work

CONSULTANT and CONSULTANT'S representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

12.3 Tests and Inspections

12.3.1 Timely Notice

CONTRACTOR shall give CONSULTANT timely notice of readiness of the Work for all required inspections, tests or approvals.

12.3.2 Requirements and Responsibilities

The CONSULTANT may require such inspection and testing during the course of the Work as he/she deems necessary to ascertain and assure the integrity and acceptable quality of the materials incorporated and the work performed. Inspection presence may be either full-time or intermittent, and neither the presence nor absence at any time of the CONSULTANT or the INSPECTOR shall relieve the CONTRACTOR of sole responsibility for the acceptability and integrity of the Work or any part thereof.

The costs of sampling, testing, and inspection on-site to ascertain acceptability of the Work and materials will be borne by the OWNER except as otherwise provided. The OWNER will select a testing laboratory to perform such sampling and testing. Sampling and/or testing required by the CONTRACTOR or necessitated by failure of Work or materials to meet the above acceptability test shall be at the expense of the CONTRACTOR.

Inspection services may be performed by the employees of the OWNER or by others selected or designated by the OWNER or the CONSULTANT.

Sampling and/or testing required for manufacturing quality and/or process control, for certification that raw mineral materials or manufactured products are the quality specified in the contract, or to assure the acceptability for incorporation into the Work shall be borne by the CONTRACTOR or the material supplier.

Cost for inspection, sampling, testing, and approvals required by the laws or regulations of any public body having competent jurisdiction shall be borne by the CONTRACTOR or the material supplier.

Sampling and testing will be in accord with pertinent codes and regulations and with appropriate standards of the American Society of Testing Materials or other specified standards.

12.3.3 On-Site Construction Test and Other Testing

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

12.3.4 Covered Work

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

12.3.5 CONTRACTOR'S Obligation

Neither observations by CONSULTANT nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR'S obligations to perform the Work in accordance with the Contract Documents.

12.4 OWNER May Stop the Work

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

12.5 Correction or Removal of Defective Work

If required by CONSULTANT, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by CONSULTANT, remove it from the site and replace it with non-defective Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.6 One Year Correction Period

If within one year after the date of Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER'S written instructions, either correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with non-defective Work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement

(including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service before Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Change Order.

12.7 Acceptance of Defective Work

If, instead of requiring correction or removal and replacement of defective Work, OWNER prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER'S evaluation of and determination to accept such defective Work (such costs to be approved by CONSULTANT as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals).

12.8 OWNER May Correct Defective Work

If CONTRACTOR fails within a reasonable time after written notice of CONSULTANT to proceed to correct and to correct defective Work or to remove and replace rejected Work as required by CONSULTANT in accordance with paragraph 12.5, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR'S services related thereto, take possession of CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER'S representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by CONSULTANT, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR'S defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER'S rights and remedies hereunder.

13. PAYMENTS TO CONTRACTOR AND COMPLETION

13.1 Schedule of Values

The schedule of values established as provided in paragraph 2.8 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to CONSULTANT. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.2 Application for Progress Payment

At least ten days before each progress payment is scheduled (but not more often than once a month), CONTRACTOR shall submit to CONSULTANT for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that OWNER has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER'S interest therein, all of which will be satisfactory to OWNER. OWNER shall, within thirty (30) calendar days of presentation to him of an approved Application for Payment, pay CONTRACTOR the amount approved by CONSULTANT. Monthly progress payments shall be ninety (90) percent of the sum obtained by applying the respective bid unit prices to the approved estimated quantities of work completed by the Contractor during the preceding month. The remaining ten (10) percent will be held by the Owner, as retainage. At such time as the CONSULTANT deems appropriate - based on the quality of work performed, progress of cleanup, and other pertinent factors - the rate of retainage, or the total amount retained, may be reduced; although, any reduction in retainage, below the ten (10) percent level, is made solely at the CONSULTANT's discretion. All remaining retainage held will be included in the final payment to the Contractor.

13.3 CONTRACTOR'S Warranty of Title

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

13.4 Review of Applications for Progress Payment

13.4.1 Submission of Application for Payment

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

13.4.2 CONSULTANT'S Recommendation

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

- 13.4.2.1 the Work is defective, or completed Work has been damaged requiring correction or replacement;
- 13.4.2.2 the Contract Price has been reduced by Written Amendment or Change Order;
- 13.4.2.3 OWNER has been required to correct defective Work or complete Work in accordance with paragraph 12.8; or
- 13.4.2.4 of CONSULTANT's actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.1 through 14.2.9 inclusive.

13.5 Partial Utilization

OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and has been completed. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER that said part of the Work is complete and request that a Certificate of Completion be issued for that part of the Work.

13.6 Final Inspection

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

13.7 Final Application for Payment

After CONTRACTOR has completed all such corrections to the satisfaction of CONSULTANT and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 5.14) and other documents - all as required by the Contract Documents, and after CONSULTANT has indicated that the Work is acceptable (subject to the provisions of paragraph 13.10), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER'S property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

13.8 Final Payment and Acceptance

13.8.1 CONSULTANT'S Approval

If, on the basis of CONSULTANT'S observation of the Work during construction and final inspection, and CONSULTANT'S review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents, CONSULTANT is satisfied that the Work has been completed and CONTRACTOR'S other obligations under the Contract Documents have been fulfilled, CONSULTANT will, after receipt of the final Application for Payment, indicate in writing CONSULTANT'S recommendation of payment and present the Application to OWNER for payment. Thereupon CONSULTANT will give written notice to OWNER and CONTRACTOR that the Work is acceptable, subject to the provisions of paragraph 13.10. Otherwise, CONSULTANT will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application.

13.8.2 Delay in Completion of Work

If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, OWNER shall, upon receipt of CONTRACTOR'S final Application for Payment and recommendation of CONSULTANT, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is

less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 10 of Part II, <u>Information for Bidders</u>, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to CONSULTANT with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

13.9 CONTRACTOR'S Continuing Obligation

CONTRACTOR'S obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by CONSULTANT, nor the issuance of a certificate of Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR'S obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 13.10).

13.10 Waiver of Claims

The making and acceptance of final payment will constitute:

- a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from defective Work appearing after final inspection or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR'S continuing obligations under the Contract Documents; and
- a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

14. SUSPENSION OF WORK AND TERMINATION

14.1 OWNER May Suspend Work

OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and CONSULTANT which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 10 and 11.

14.2 OWNER May Terminate

The OWNER may terminate the Work upon the occurrence of any one or more of the following events:

- 14.2.1 if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;
- 14.2.2 if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;
- 14.2.3 if CONTRACTOR makes a general assignment for the benefit of creditors;
- 14.2.4 if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR'S creditors;
- 14.2.5 if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;
- 14.2.6 if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.8 as revised from time to time);
- 14.2.7 if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;
- 14.2.8 if CONTRACTOR disregards the authority of CONSULTANT, or
- 14.2.9 if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety) seven days' written notice and to the extent permitted by Laws and Regulations,

terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by CONSULTANT and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

- 14.2.10 If safety violations are observed and brought to the Contractors attention and Contractor fails to take immediate corrective measures any repeat of similar safety violations, Owner will order an immediate termination of contract. Note: it is the Contractor's responsibility to know proper safety measures as they pertain to construction and OSHA.
- 14.2.11 This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- 14.2.12 This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.

14.3 CONTRACTOR'S Services Terminated

Where CONTRACTOR'S services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

14.4 Payment After Termination

Upon seven days' written notice to CONTRACTOR, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any expense sustained plus reasonable termination expenses, which

will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs).

14.5 CONTRACTOR May Stop Work or Terminate

If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or CONSULTANT fails to act on any Application for Payment within sixty days after it is submitted, or OWNER fails for sixty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and CONSULTANT, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if CONSULTANT has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven days' written notice to OWNER and CONSULTANT stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 5.16 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

15. MISCELLANEOUS

15.1 Claims for Injury or Damage

Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 15.1 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

15.2 Non-Discrimination in Employment

The CONTRACTOR shall comply with the following requirements prohibiting discrimination:

15.2.1 That no person (as defined in KRS 344.010) shall bid on Lexington-Fayette Urban County Government construction projects, or bid to furnish materials or supplies to the Lexington-Fayette Urban County Government, if, within six months prior to the time of opening of bids, said person shall have been found, by declamatory judgment action in Fayette Circuit Court, to be presently engaging in an unlawful practice, as hereinafter defined. Such declamatory judgment action may be brought by an aggrieved individual or upon an allegation that an effort at conciliation pursuant to KRS 344.200 has been attempted and failed, by the Lexington-Fayette County Human Rights Commission.

15.2.2 That it is an unlawful practice for an employer:

- 15.2.2.1 to fail or refuse to hire, or to discharge any individual or otherwise to discriminate against an individual, with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, age, or national origin; or
- 15.2.2.2 to limit, segregate or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee because of such individual's sex, race, color, religion, age, or national origin.
- 15.2.3 That it is an unlawful practice for an employer, labor organization, or joint-labor management committee controlling apprenticeship or other training or retraining, including on-the-job training programs to discriminate against an individual because of his race, color, religion, sex, age, or national origin in admission to, or employment in, any program established to provide apprenticeship or other training.
- 15.2.4 That a copy of this Ordinance shall be furnished all suppliers and made a part of all bid specifications.
- 15.2.5 This Ordinance shall take effect after it is signed, published and recorded, as required by law.

15.3 Temporary Street Closing or Blockage

The CONTRACTOR will notify the CONSULTANT at least 72 hours prior to making any temporary street closing or blockage. This will permit orderly notification to all concerned public agencies. Specific details and restrictions on street closure or blockage are contained in the Special Conditions.

15.4 Percentage of Work Performed by prime CONTRACTOR

The CONTRACTOR shall perform on site, and with its own organization, Work equivalent to at least fifty (50%) percent of the total amount of Work to be performed under the Contract. This percentage may be reduced by a supplemental agreement to this Contract if, during performing the Work, the CONTRACTOR requests a reduction and the CONSULTANT determines that the reduction would be to the advantage of the OWNER.

15.5 Clean-up

Cleanup shall progress, to the greatest degree practicable, throughout the course of the Work. The Work will not be considered as completed, and final payment will not be made, until the right-of-way and all ground occupied or affected by the

Contractor in connection with the Work has been cleared of all rubbish, equipment, excess materials, temporary structures, and weeds. Rubbish and all waste materials of whatever nature shall be disposed of, off of the project site, in an acceptable manner. All property, both public and private, which has been damaged in the prosecution of the Work, shall be restored in an acceptable manner. All areas shall be draining, and all drainage ways shall be left unobstructed, and in such a condition that drift will not collect or scour be induced.

15.6 General

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 12.1, 12.3.5, 13.3, and 15.2 and all of the rights and remedies available to OWNER and CONSULTANT thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Agreement.

15.7 Debris Disposal

For all LFUCG projects any trash, construction demolition debris, yard waste, dirt or debris of any kind that is removed from the project site must be disposed of in accordance with local, state, and federal regulations. The disposal site or facility must be approved in advance by the LFUCG and disposal documentation is required. The Contractor will be responsible for payment of any fines associated with improper disposal of material removed from the project site.

END OF SECTION

<u>PART V</u> SPECIAL CONDITIONS

RISK MANAGEMENT PROVISIONS INSURANCE AND INDEMNIFICATION

INDEMNIFICATION AND HOLD HARMLESS PROVISION

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- (5) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

FINANCIAL RESPONSIBILITY

BIDDER/CONTRACTOR understands and agrees that it shall, prior to final acceptance of its bid and the commencement of any work, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

INSURANCE REQUIREMENTS

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AAND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Required Insurance Coverage

BIDDER/CONTRACTOR shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR. The cost of such insurance shall be included in any bid:

Coverage	<u>Limits</u>
General Liability aggregate	\$1 million per occurrence, \$2 million
(Insurance Services Office Form CG 00 01)	or \$2 million combined single limit
Commercial Automobile Liability occurrence (Insurance Services Office Form CA 0001)	combined single, \$1 million per
Worker's Compensation	Statutory
Employer's Liability	\$500,000.00

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky (DOI). LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.
- c. The General Liability Policy shall include a Products and Completed Operations endorsement or Premises and Operations Liability endorsement unless deemed not

to apply by LFUCG.

- d. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- e. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

Deductibles and Self-Insured Programs

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If BIDDER/CONTRACTOR satisfies any portion of the insurance requirements through deductibles, self-insurance programs, or self-insured retentions, BIDDER/CONTRACTOR agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- Latest audited financial statement, including auditor's notes.
- b. Any records of any self-insured trust fund plan or policy and related accounting statements.
- c. Actuarial funding reports or retained losses.
- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

DEFAULT

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging BIDDER/CONTRACTOR for any such insurance premiums purchased, or suspending or terminating the work.

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PART VI

CONTRACT AGREEMENT

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PART VI

CONTRACT AGREEMENT

THIS AGREEMENT, made on the <u>Sixteenth</u> day of <u>March</u>, <u>2017</u>, by and between <u>Lexington-Fayette Urban County Government</u>, acting herein called "OWNER" and <u>Tri-State Roofing & Sheet Metal Company</u>, doing business as <u>a corporation</u> located in the City of <u>Lexington</u>, County of <u>Fayette</u>, and State of <u>Kentucky</u>, hereinafter called "CONTRACTOR."

WITNESSETH: That the CONTRACTOR and the OWNER in consideration of <u>Two Hundred Seven Thousand</u>, <u>Eight Hundred Ninety</u> Dollars and <u>Zero</u> Cents (<u>\$207,890.00</u>) quoted in the proposal by the CONTRACTOR, dated <u>February 22, 2017</u>, hereby agree to commence and complete the construction described as follows:

1. SCOPE OF WORK

The CONTRACTOR shall furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions, and the Special Conditions of the Contract, the Specifications and Contract Documents therefore as prepared by <u>Tate Hill Jacobs Architects</u> for <u>Black & Williams Center Roof Replacement & Repairs</u> project.

2. TIME OF COMPLETION

The time period estimated and authorized by the OWNER for the proper execution of the Work by the Contract, in full, is hereby fixed as one hundred eighty (180) calendar days to Final Completion. The time shall begin in accordance with the Notice to Proceed provided by OWNER.

3. ISSUANCE OF WORK ORDERS

Notice to begin Work will be given in whole or for part of the Work as determined by the OWNER pending the availability of funds. The order of construction will be as determined by the Engineer after consultation with the CONTRACTOR and the OWNER.

4. THE CONTRACT SUM

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, as quoted in the proposal, subject to any additions and deductions, as provided therein.

5. PROGRESS PAYMENTS

The OWNER shall make payments on account of the Contract, as provided in accordance with the General Conditions, as estimated by the Engineer, less the aggregate of previous payments.

6. ACCEPTANCE AND FINAL PAYMENT

Final payment shall be due within ninety (90) days after completion of the Work, provided the Work be then fully completed and the Contract fully accepted.

Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the Engineer that all payrolls, material bills, and other indebtedness connected with the Work has been paid.

If, after the Work has been substantially completed, full completion thereof is materially delayed through no fault of the CONTRACTOR, and the ENGINEER so certifies, the OWNER shall upon certificate of the ENGINEER, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

7. THE CONTRACT DOCUMENTS

The Advertisement for Bids, Information for Bidders, the General Conditions, Performance and Payment Bonds, Contract Agreement, Special Conditions, Technical Specifications, any and all Addenda, and Proposal, and Plan Drawings form the Contract, and they are fully a part of the Contract as if hereto attached or herein repeated.

8. EXTRA WORK

The OWNER, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the Work, the Contract Sum being adjusted accordingly. All such Work shall be executed and paid for in accordance with the General Conditions, which is a part of this Contract.

9. THE FOLLOWING IS AN ENUMERATION OF THE SPECIFICATIONS AND DRAWINGS (CONTRACT DOCUMENTS):

SPECIFICATIONS

NO.	TITLE		PAGES	S
I	Advertisement for Bids	AB	1 thru	5
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Division 011000 012000 013000 013300	1. Roof materials test report 2. Other controls and controls are controls and controls are controls are controls and controls are controlled and controls are controls are controls are controls are controlled are controlled and controls are controlled are		1 thru 4 1 thru 3 1 thru 5 1 thru 6	
Division 011000 012000 013000 013300 014000	1. Roof materials test report 2. Constant Requirements 3. Submaterial Procedures 4. Submittal Procedures 5. Submittal Procedures 6. Quality Requirements		1 thru 4 1 thru 3 1 thru 5 1 thru 6 1 thru 3	
Division 011000 012000 013000 013300 014000 015000	1. Roof materials test report 2. Submary Of Work 2. Price/Payment Procedures 3. Administrative Requirements 4. Submittal Procedures 4. Quality Requirements 5. Temporary Facilities and Controls		1 thru 4 1 thru 3 1 thru 5 1 thru 6 1 thru 3 1 thru 5	
Division 011000 012000 013000 013300 014000 015000 016000	1. Roof materials test report 2. Controls Product Requirements 2. Controls Product Requirements		1 thru 4 1 thru 3 1 thru 5 1 thru 6 1 thru 3 1 thru 5 1 thru 2	
Division 011000 012000 013000 013300 014000 015000 016000	1. Roof materials test report 2. Submary Of Work 2. Price/Payment Procedures 3. Administrative Requirements 4. Submittal Procedures 4. Quality Requirements 5. Temporary Facilities and Controls		1 thru 4 1 thru 3 1 thru 5 1 thru 6 1 thru 3 1 thru 5	
Division 011000 012000 013000 013300 014000 015000 016000 017000	1. Roof materials test report 2. Controls Product Requirements 2. Controls Product Requirements		1 thru 4 1 thru 3 1 thru 5 1 thru 6 1 thru 3 1 thru 5 1 thru 2	
Division 011000 012000 013000 013300 014000 015000 016000 017000	1. Roof materials test report 1. Roof materials test report 1. O1 - General Requirements Summary Of Work Price/Payment Procedures Administrative Requirements Submittal Procedures Quality Requirements Temporary Facilities and Controls Product Requirements Execution and Closeout Requirements	ls	1 thru 4 1 thru 3 1 thru 5 1 thru 6 1 thru 3 1 thru 5 1 thru 2	

Division 04 - MASONRY

040100 Maintenance of Masonry 1 thru 7

Division 05 - METALS

055100 Manufactured Ladders 1 thru 3

Division 06 - WOOD, PLASTICS, AND COMPOSITES

061000 Carpentry 1 thru 4

Division 07 - Thermal and Moisture Protection

070150	Maintenance of Membrane Roofing	1 thru 3
075200	Modified Bituminous Membrane Roofing	1 thru 13
076200	Sheet Metal Flashing and Trim	1 thru 5
077123	Manufactured Gutters and Downspouts	1 thru 4
077233	Roof Hatches	1 thru 4
079000	Joint Protection	1 thru 3

Division 09 - Finishes

099000 Paintings and Coatings 1 thru 6

PLAN DRAWINGS

Cover Sheet
A1 Roof Plan & Details
A2 Roof Details
A3 Roof Details
A4 Elevations
A5 Roof Hatch & Ladders

IN WITNESSETH WHEREOF, the parties hereto have executed this Contract as of the date and year above written.

(Seal) ATTEST: Clerk of the Urban County Council	Lexington-Fayette Urban County Government. Lexington, Kentucky (Owner) BY: MAYOR
(Witness)	(Title) Tri State Roofing + Speet Metal Co. (Contractor)
(Secretary)*	BY: Gug llo
Witness) Ones	Vice President (Title)
	(Address and Zip Code)

IMPORTANT: *Strike out any non-applicable terms.

Secretary of the Owner should attest. If the CONTRACTOR is corporation, Secretary should attest. Give proper title of each person-executing Contract.

PART VII

PERFORMANCE AND PAYMENT BONDS

- 1. PERFORMANCE BOND
- 2. PAYMENT BOND

PART VII

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that
(Name of CONTRACTOR)
(Address of CONTRACTOR)
a, hereinafter
(Corporation, Partnership, or Individual)
called Principal, and
(Name of Surety)
(Address of Surety)
hereinafter called Surety, are held and firmly bound unto
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT 200 East Main Street, Third Floor Lexington, Kentucky 40507 hereinafter called "OWNER" in the penal sum of: Dollars, (\$), for the payment of whereof Principal and Surety bind themselves, their heirs
executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
WHEREAS, Principal by written agreement is entering into a Contract with OWNER for
specifications prepared by: (the Engineer) which Contract is by reference
made a part hereof, and is hereinafter referred to as the Contract.
NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal shal promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shal remain in full force and effect.
The Surety hereby waives notice of any alteration or extension of time made by the OWNER.
Whenever, Principal shall be, and declared by OWNER to be in default under the Contract, the OWNER having performed OWNER'S obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) Complete the Contract in accordance with its terms and conditions or
- Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or if the OWNER elects, upon determination by the OWNER and Surety jointly of the lowest responsible bidder, arrange for a Contract between such bidder and OWNER, and make available as Work progresses (even though there may be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract Price", as used in this paragraph shall mean the total amount payable by OWNER to Principal under the Contract and any amendments thereto, less the amount properly paid by OWNER to Principal.

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

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

IN WITNESS WHEREOF, this instrument is	s executed in	each one of which shall t
deemed an original, this the	(n	umber)
ATTEST:		
	-	Principal
(Principal) Secretary		
	BY:	(s)
		(Address)
Witness as to Principal		
(Address)		
ATTEST:	BY:	Surety Attorney-in-Fact
(0,)		Attorney-in-Fact
(Surety) Secretary		(Address)
(SEAL)		
Witness as to Surety		
(Address)		
	TITLE:	Surety
	BY:	
TITLE:	 -	

NOTE: The number of executed counterparts of the bond shall coincide with the number of execute counterparts of the Contract.

PART VII

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT: that
(Name of Contractor)
(Address of Contractor)
a, hereinafter
(Corporation, Partnership or Individual)
called Principal, and
(Name of Surety)
(Address of Surety)
hereinafter called Surety, are held and firmly bound unto:
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT 200 East Main Street, Third Floor Lexington, Kentucky 40507
Obligee, hereinafter called OWNER, for the use and benefit of claimants as hereinafter defined, in the amount of Dollars (\$)
the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
WHEREAS, Principal by written agreement is entering into a Contract with OWNER for in accordance with drawings and specifications prepared by: (the Engineer) which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.
NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Principal shall promptly make payment to all claimants as hereinafter defined for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions.
1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

- 2. The above named Principal and Surety hereby jointly and severally agree with the OWNER that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The OWNER shall not be liable for the payment of any costs or expenses of any such suit.
- 3. No suit or action shall be commenced hereunder by any claimant:
 - (a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: The Principal, the OWNER, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the Work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the Work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, OWNER, or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
 - (b) After the expiration of one (1) year following the date on which Principal ceased Work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - (c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.
- 4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against aid improvement, whether or not claim for the amount of such lien be presented under and against this bond.

IN WITNESS WHEREOF, this instrument is exe	cuted in	counterparts	s, each one of
IN WITNESS WHEREOF, this instrument is exe	(num	iber)	
which shall be deemed an original, this the	day of	,20	•
ATTEST:			
		(Principal)	-
(Principal) Secretary			
(SEAL)	BY:		(s)
		(Address)	
(Witness to Principal)			
(Address)			
ATTEST:		(Surety)	
	BY:	(Attorney-in-Fact)	
(Surety) Secretary			
(SEAL)			
Witness as to Surety		(Address)	
(Address)			

NOTE: The number of executed counterparts of the bond shall coincide with the number of executed counterparts of the Contract.

END OF SECTION

PART VIII

ADDENDA

All addenda issued during the bidding of the Project will be reproduced in the signed Contract Documents, on the pages following this heading sheet.

Addendum <u>Number</u>	<u>Title</u>	<u>Date</u>
1		
2		
3		
4		
5.		

IX. TECHNICAL SPECIFICATIONS

SECTION 000110 - TABLE OF CONTENTS

Section Title

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS INTRODUCTORY INFORMATION

000110 Table of Contents

003100 Available Project Information

1. Roof materials test report

PROCUREMENT REQUIREMENTS Indexed Separately

CONTRACTING REQUIREMENTS Indexed Separately

SPECIFICATIONS GROUP GENERAL REQUIREMENTS SUBGROUP DIVISION 01 - GENERAL REQUIREMENTS

011000 Summary

012000 Price/Payment Procedures

013000 Administrative Requirements

013300 Submittal Procedures 014000 Quality Requirements

015000 Temporary Facilities and Controls

016000 Product Requirements

017000 Execution and Closeout Requirements

FACILITY CONSTRUCTION SUBGROUP DIVISION 02 - EXISTING CONDITIONS

020801 Removal & Disposal of Asbestos Containing Materials

024119 Selective Demolition

DIVISION 03 - CONCRETE- not used

DIVISION 04 - MASONRY

040100 Maintenance of Masonry

DIVISION 05 - METALS

055100 Manufactured Ladders

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000 Carpentry

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

070150 Maintenance of Membrane Roofing

075200 Modified Bituminous Membrane Roofing

076200 Sheet Metal Flashing And Trim

077123 Manufactured Gutters and Downspouts

077233 Roof Hatches 079000 Joint Protection DIVISION 08 - OPENINGS - not used

DIVISION 09 - FINISHES 099000 Painting and Coating

DIVISION 10 thru 33 - not used

END OF SECTION

SECTION 003100 AVAILABLE PROJECT INFORMATION

1.1 SUMMARY

- A. Document Includes:
 - Materials Testing Reports
- B. Available Project information has been furnished by Owner to Architect for use in designing this Project.
 - 1. Each Bidder shall be fully familiar with available Project information, which has been prepared for Owner by separate consultants.
 - Available Project information is offered solely for reference and shall not be considered part of Contract Documents. Data contained in Documents prepared by Owner's separate consultants is believed to be reliable; however, Owner and Architect do not guarantee their accuracy or completeness.
 - 3. In preparing their Bids, Bidders shall consider and evaluate data contained in available Project information as well as Contract Documents prepared by Architect/Engineer.

1.2 MATERIALS TESTING REPORT

- A. A copy of roofing materials test report is enclosed herein.
- B. The materials testing report identifies the presence of asbestos in the roofing samples furnished to the testing laboratory by the Owner.

END OF DOCUMENT

MON 10/25/10

CUSTODY

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PROJECT NAME:	Block	TOTAL
PROJECT LOCATION SAMPLE LD.	: 498 Carrillans	WOA S
BW11-49	WTLA OFFICE	
BW11-50	2ND Floor the	
BW11-51	2ND Floor Hay	1. Asbests
BW11-52	ROOF	1. Asbestos
BW11-53	Roofing Haterial Roof	1. Asbessos
Bw11-54	Rone Material	/ As bestos
BW11-55	Roofing Material Roofing Material	1. Asbestos
BW11-56 BW11-57	Roofing Material Roof Roof	1. Asbestos
3w11-58	Roof Roof Roof Roof	1. Asbestos
Bw11-59	Looping Material Roop	1. Asbesos
3W11-60	Roofing Material	1. Asbestos
RELINQUISHED BY:	Roofing Material	1-Aslessos

RELINQUISHED BY:	in the contract of the contrac	1. ASIESTES V
1.) D. Kellein	TATAL DE ST	DATE (TO
2.)	17 7 1/1	DATE/TIME RECEIVED:
	27	2)
	V	

CUSTODY

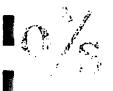
CLINISLANCE

DATE SAMPLE | DIE 6- Kelsey

DATE SAMPLE | DIE Buck | DIE 6- Kelsey

PROJECT NAME: PROJECT LOCATIO	N: 498 CHINAMS	WA.
SAMPLE LD.		W.O. #: 2011-1414
	SAMPLE LOCATION & DESCRIP	
BW11-61	ROOF	THON ANALYSIS BEOVE
	Rook C.	40131
BW11-62	Roof Flashing	1/ 1sharm 59 1
	ROOF	1. Asbestos 56 Chi
Bw11-63	ROOF Flashing	
63	KOOF	1. Asbestos Stelling
BW11-64	ROOF Flashing	
00011 64	KOOF	1. Asbestos 67.64A
River	Roof Flashing	1/240
BW11-65	Roop	1. Asbestos
	Roof Flashing	1. Asbestos 6 7 Chap
BW11-66	KANE	- V. Asbesme La
	Roof Fl	1. Asbestos 62.06
BW11-67	Roof Flashing	Asbestos Kt
		1. Asbessos & Chan
BW11-68	Roof Flashing	1. Asbestos 686 hay
	Roop	THOUSING BECKEY
BW11-69	Roof Flushing	1. Asbestos 6Zehn
	1	The Eleha
BW11-70	Raox Flashing	1/A540
	IST Floor HALLWAY	1. Asbessos 6 & Chay
BW11-71	Cooling plaster	1/ 15600
	TOOK HALLWAY	1. Asbestos Ung
W11-72	- Celina	1. Asbestos Mo
10-		11150-3/05 W10
	Ceiling plaster	1. Asbestos No

RELINQUISHED BY:		1. Asbestos Nuo
1.) S. Kelus	RECEIVED BY:	
2.)	47.017	DATE/TIME RECEIVED:
	2)	2.)
		a.,



BWII-36	2 nd Floor Hallway - Wall Plaster	NAD
BWII-37	WTLA Office Area - Wall Plaster	NAD
BWII-38	WILA Office Area - Wall Plaster	NAD
BW11-39	WTLA Office Area – Wall Plaster	NAD
BWII-40	2 nd Floor Hall - 210 - 220 - Wall Plaster	NAD
BWIJ-41	2 nd Floor Hall – 210 – 220 – Wall Plaster	NAD
BWII-42	2 rd Floor Hall - 210 - 220 - Wall Plaster	NAD
BWII-43	WTLA Office Area – Ceiling Tile	NAD
BWII-44	WTLA Office Area - Ceiling Tile	NAD
BWII-45	WTLA Office Area - Ceiling Tile	NAD
BWII-46	WTLA Office Area – Ceiling Tile	NAD
BWII-47	WTLA Office Area - Ceiling Tile	NAD
BWJJ-48	WTLA Office Area - Ceiling Tile	NAD
BWII-49	WTLA Office Area - Ceiling Tile	NAD
BWII-50	2 nd Floor Hall - 210 - 220 - Ceiling Tile	NAD
BWII-51	2 nd Floor Hall – 210 – 220 – Ceiling Tile	NAD
BWII-52	Roof - Roofing Material	NAD
BWII-53	Roof - Roofing Material	NAD
BWII-54	Roof - Roofing Material	NAD
BWII-55	Roof - Roofing Material	NAD
BWII-56	Roof - Roofing Material	NAD
BWI1-57	Roof - Roofing Material	NAD



BWII-58	Roof - Roofing Material	NAD
BWII-59	Roof - Roofing Material	NAD
BWII-60	Roof - Roofing Material	NAD
BWII-61	Roof - Roof Flashing	5% Chrysotile
BW11-62	Roof Roof Flashing	5% Chrysotile
BWII-63	Roof Roof Flathing	5% Chrysotile
BWII-64	Roof Roof Flashing	6% Chrysotile
BWII-65	Roof - Roof Flashing	6% Chrysotile
BWTZ-66	Roof - Roof Flasking	5% Chrysotile
ВWД-67	Roof Roof Flasking	5% Chrysotile
BW17-68	Roof – Roof Flashing	6% Chrysotile
BWII-69	Roof – Roof Flashing	6% Chrysotile
BW11-70	1" Floor Hallway - Cailing Plaster	NAD
BW/II-71	1* Floor Hallway - Ceiling Plaster	NAD
BWII-72	1* Floor Hallway - Ceiling Plaster	TNAD
BWII-73	l* Floor Hallway - Ceiling Plaster	NAD
BW11-74	1st Floor Hallway - Ceiling Plaster	NAD
BWII-75	1" Floor Hallway - Ceiling Plaster	NAD
BWII-76	1 st Floor Hallway – Ceiling Plaster	NAD
BWII-77	1st Ploor Hallway - Ceiling Plaster	NAD
BWII-78	l* Floor Hallway - Celling Plaster	NAD
BWII-79	1ª Floor Hallway - Wali Plaster	NAD

SECTION 011000 - SUMMARY

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. The Contract Documents
 - 2. Contract description.
 - 3. Times of Completion and Liquidated Damages
 - 4. Pre-Bid Meeting
 - 5. Owner's Special Conditions
 - 6. Work by Owner or other Work at the Site.
 - 7. Work Sequence
 - 8. Owner-furnished products.
 - 9. Contractor's use of Site and premises.
 - 10. Owner occupancy.
 - 11. Specification conventions.

1.2 THE CONTRACT DOCUMENTS

- A. The drawings and specifications are intended to be fully explanatory and supplementary. However, should anything be shown, indicated or specified on one and not the other, it shall be done the same as if shown, indicated or specified in both.
- B. It shall be the responsibility of all Contractors and Subcontractors to carefully examine all Drawings, Specifications and Contract Documents in order that Contractor and Subcontractors may foresee all requirements for coordination of their work. Submission of a bid shall be construed as evidence that such an examination has been made. Claims based on unforeseen requirements will not be considered.
- C. Should any error or inconsistency appear in Drawings or Specifications, the Contractor, before proceeding with the work, must make mention of the same to the Architect for proper adjustment, and in no case proceed with the work in uncertainty or with insufficient drawings.
- D. Bidders, subcontractors and suppliers, before submitting proposals, shall visit and examine the sites to satisfy themselves as to the nature and scope of the demolition, renovation, and new construction. Requests for additional compensation resulting from any difficulties encountered, which could have been foreseen had such an examination been made, will not be recognized.
- E. The Contractor and each Subcontractor shall be responsible for verification of all measurements before ordering any materials or doing any work. No additional compensation shall be allowed due to differences between actual dimensions and dimensions indicated on the Drawings. Any such discrepancy in dimensions, which may be found, shall be submitted to the Architect for consideration before the Contractor proceeds with the work in the affected areas.
- F. Contractors shall follow sizes in Specifications or figures on Drawings, in preference to scale measurements and follow detail drawings in preference to general drawings.
- G. Where it is obvious that a drawing illustrates only part of a given work or of a number of items, the remaining shall be deemed repetitious and so constructed.

1.3 CONTRACT DESCRIPTION

- A. The work includes complete removal of existing roofing systems and installation of new 2-ply SBS Modified Bitumen Roofing systems at the Black & Williams Center located at 498 Georgetown Street, Lexington, KY 40508.
- B. Work of the Project also includes:
 - 1. Temporary removal, salvage, storage, cleaning and reinstallation of the masonry pediment located at the west (Georgetown Street) elevation.
 - 2. Temporary removal, salvage, storage, rehabilitation and reinstallation of the wood cornice located at the west (Georgetown Street) elevation.
 - 3. Removal of existing roof hatch, cutting and patching of existing wood roof framing and installation of new, larger roof hatch and new manufactured aluminum ladder.
 - 4. Removal and replacement with new of all existing gutters and downspouts.
 - Selective masonry pointing of roof parapet walls and selective removal of existing camel back clay tile roof copings
 - 6. Permanent removal of existing roof mounted equipment and repair to roof structure where specified on the drawings.
 - 7. Temporary disconnection, lifting, installation of new supports and flashing in association with roof equipment scheduled to remain in place.
 - 8. Field painting of new wood cornice.
 - 9. All other work shown on the Contract Drawings and/or included in the Project Manual.
- Perform Work of Contract under fixed cost Contract with Owner according to Conditions of Contract.

1.4 TIMES OF COMPLETION AND LIQUIDATED DAMAGES

- A. All work is to be substantially complete within 150 calendar days following the Date of Commencement as specified in the Contract issued by the Owner. Liquidated Damages will be assessed in the amount of \$250.00 per calendar day for failure to meet the Final Completion Contract Deadline.
- B. Substantial Completion: The total work to be done under this contract shall commence on the Date of Commencement as specified in the Contract issued by the Owner and shall Substantially Complete the work within the time specified above.
- C. The date of Substantial Completion shall be the date when a FINAL ROOFING INSPECTION has been performed by the roofing manufacturer and a <u>minimal list</u> of outstanding items (punch list) can be compiled. Any/all items on the punch list must be completed within 30 days following the date of substantial completion.
- D. Final Completion: The total work to be done under this combined Construction Contract shall be fully completed within 30 days following the date of Substantial Completion. The Date of Final Completion shall be the date that the work, including all punch list items and submittal of final closeout documents, is complete and all Contract requirements have been fulfilled by the Contractor.

1.5 PRE-BID MEETING

 A. A Pre-Bid Meeting will be held at the time, date, and location identified in the Advertisement for Bids.

1.6 OWNER'S SPECIAL CONDITIONS

- A. Work to be performed is to be coordinated with the Owner on a daily basis.
- B. Requirements that contractor must perform work by are:
 - 1. All roads and paved parking areas must be kept in passable condition for owner, public and fire protection purposes.
 - 2. Weapons, ammunition and other dangerous instruments are forbidden on site.
 - 3. All ladders and scaffolds, when in use, shall be under observation. When they are to be used for an extended period of time, they shall be in fenced-in area to prevent unauthorized access.
 - 4. Parking permitted only in areas designated for contractor's use by the Owner.
 - Access to the roof area shall be by exterior means only unless special arrangements have been made with the Owner's representative.
 - 6. The Owner will not receive, store or be responsible for contractor's materials.
 - 7. Permission must be obtained from the Owner's representative for work to be scheduled outside the hours 7:00 a.m. to 5:00 p.m. weekdays and on weekends, or holidays.
 - 8. OSHA, KOSH, and NFPA Safety Codes are to be adhered to for the duration of the contract.
 - If any chemicals are to be used by the contractor, copies of MSDS for the chemicals must be provided to the Owner.
 - 10. Any injury, or situation, including an injury to contractor personnel involving emergency services (fire department, police, ambulance, etc.,) is to be reported to the Owner.
 - 11. The Owner will furnish electricity, and domestic water. The Owner will instruct Contractors of proper, acceptable locations.
 - 12. All workers shall dress appropriately and conduct themselves in a manner acceptable to the Owner.

1.7 WORK BY OWNER OR OTHERS

- A. Owner will advise the Contractor of other work that may impact work of this contract at the Pre-Construction Meeting.
- B. Coordinate Work with Owner utilities.
- C. Items noted NIC (Not in Contract):

1.8 WORK SEQUENCE

A. Complete installation of masonry restoration in advance of installing the new granular surface roof cap sheet.

1.9 OWNER-FURNISHED PRODUCTS

- A. Owner's Responsibilities:
 - Arrange for and deliver Owner-reviewed Shop Drawings, Product Data, and Samples to Contractor.
 - 2. Arrange and pay for delivery to Site.
 - 3. Upon delivery, inspect products jointly with Contractor.
 - Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
 - Review Owner-reviewed Shop Drawings, Product Data, and Samples.

- Receive and unload products at Site; inspect for completeness or damage jointly with Owner.
- 3. Handle, store, install, and finish products.
- 4. Repair or replace items damaged after receipt.

1.10 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limit use of Site and premises to allow:
 - 1. Owner occupancy and use by public.
 - 2. Work by Owner.
- B. Access to Site: Using existing road system.
- C. Emergency Building Exits during Construction: Maintain a clear path of egress to all existing building exits during construction.
- D. Construction Operations: Limited to areas indicated on Drawings.
 - Noisy and Disruptive Operations (such as Use of Jack Hammers and Other Noisy Equipment): Coordinate and schedule such operations with Owner to minimize disruptions.
- E. Time Restrictions for Performing Work: Refer to Article 1.5 above.
- F. Utility Outages and Shutdown:
 - 1. Coordinate and schedule electrical and other utility outages with Owner.

1.11 OWNER OCCUPANCY

- A. Owner will the building and areas surrounding the building during entire period of construction.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy of the site and surrounding buildings.

1.12 SPECIFICATION CONVENTIONS

A. These Specifications are written in imperative mood and streamlined form. This imperative language is directed to Contractor unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 012000 - PRICE/PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Schedule of values.
- B. Applications for payment.
- C. Change procedures.
- D. Defect assessment.
- E. Unit prices.

1.2 SCHEDULE OF VALUES

- A. Submit printed schedule on AIA Form G703

 Continuation Sheet G702.
- B. Submit Schedule of Values in duplicate within 15 days of the Date of Commencement.
- C. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Separate each line item into material and labor cost. Provide line items for the following:
 - 1. Closeout Documents As-Builts
 - 2. Closeout Documents Manuals
 - Final Cleaning

Provide additional breakdown of costs when requested by the Architect.

- D. Include within each line item, direct proportional amount of Contractor's overhead and profit.
- E. Revise schedule to list approved Change Orders, with each Application For Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on AIA Form G702- Application and Certificate for Payment and AIA G703 Continuation Sheet for G702.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule with each Application for Payment.
- D. Payment Period: Once a month.
- E. Submit with transmittal letter as specified for Submittals in Section 013300.
- F. Stored Material: Payment for stored material will be made under the following conditions
 1. Materials are being stored on site
- G. Substantiating Data: When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question.

1.4 CHANGE PROCEDURES

- A. Submittals: Submit name of individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. When a change is proposed to the scope of the work impacting the Contract Cost or Contract Time, the Contractor shall submit a complete and thorough breakdown of the additional costs separating material and labor costs. The Contractor shall identify material quantities, and manhour requirements where applicable. The General Contractor shall attach all quotes received from Subcontractors to substantiate the pricing.
- C. The Architect/Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on AIA Form G710.
- D. The Architect/Engineer may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, and a change in Contract Time for executing the change. Contractor will prepare and submit estimate within the time stipulated within the request.
- E. Contractor may propose changes by submitting a request for change to Architect/Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on Work by separate or other Contractors.
- F. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Architect/Engineer.
- G. Unit Price Change Order: For contract unit prices and quantities, the Change Order will be executed on fixed unit price basis.
- H. Change Order Forms: As required by the Owner.
- I. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- J. Correlation Of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise subschedules to adjust times for other items of work affected by the change, and
 - 3. Promptly enter changes in Project Record Documents.
- K. Refer to Article 10 of the General Conditions for additional change order procedure requirements.

1.5 DEFECT ASSESSMENT

A. Refer to Article 12 in the General Conditions.

1.6 UNIT PRICES

- A. Authority: Measurement methods are delineated in individual specification sections.
- B. Measurement methods delineated in individual specification sections complement criteria of this section. In event of conflict, requirements of individual specification section govern.
- C. Take measurements and compute quantities. Architect/Engineer will verify measurements and quantities.
- D. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of item of the Work; overhead and profit.
- E. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect/Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.
- F. Measurement Of Quantities:
 - Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
 - Measurement by Area: Measured by square dimension using mean length and width or radius.
 - Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
 - 4. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.
- G. Unit Price Schedule: See Form of Proposal

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 013000 - ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coordination and project conditions.
- B. Preconstruction meeting.
- C. Progress meetings.
- D. Hazardous Materials
- E. Pre-installation meetings.
- F. Cutting and patching.
- G. Special procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- C. Coordinate space requirements, supports, and installation of electrical Work indicated diagrammatically on Drawings. Follow routing for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.
- F. Coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Architect will schedule meeting after Notice of Award.
- B. Attendance Required: Owner, Architect and Contractor.
- C. Agenda:
 - 1. Confirmation of Owner-Contractor Agreement execution.
 - Confirmation that executed bonds and insurance certificates have been submitted.
 - 3. Submission of list of Subcontractors, schedule of values, and progress schedule.

- 4. Designation of personnel representing parties in Contract.
- 5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- 6. Scheduling.

1.4 PROGRESS MEETINGS

- A. Progress meetings will be held once a month unless otherwise appropriate based upon the progress of the work.
- B. Architect will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. The Contractor's Superintendent shall prepare a detailed written report of progress made since the last meeting and planned work for the following 30 day period. Copies shall be provided by the Contractor and distributed at the meeting.
- D. Attendance Required: Job superintendent, major subcontractors and suppliers, Owner, Architect, Engineer, and others as appropriate to agenda topics for each meeting.
- E. Agenda:
 - 1. Review minutes of previous meetings.
 - Review of Work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems impeding planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of off-site fabrication and delivery schedules.
 - 7. Maintenance of progress schedule.
 - 8. Corrective measures to regain projected schedules.
 - 9. Planned progress during succeeding work period.
 - 10. Coordination of projected progress.
 - 11. Maintenance of quality and work standards.
 - 12. Effect of proposed changes on progress schedule and coordination.
 - 13. Other business relating to Work.

1.6 HAZARDOUS MATERIALS:

- A. The contractor is hereby advised that it is possible that hazardous materials, including but not limited to asbestos, asbestos products, or other toxic substances may be present in the building. If any workman encounters any material, which he suspects is hazardous or toxic, he shall discontinue work on or near that material and shall immediately advise the Owner.
- B. The architect shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances.
- C. If the work which is to be performed under this contract interfaces in any way with existing components which contain hazardous materials, it shall be the contractor's responsibility to contact the Owner regarding the proper means and methods to be utilized in dealing with the hazardous materials. It is not the intent of this contract for any hazardous materials to be disturbed, removed or disposed.
- D. By execution of the contract for construction, the Contractor hereby agrees to bring no claim

for negligence, breach of contract, indemnity or otherwise against the architect, his principals, employees, agents, and consultants if such claim in any way would involve the investigation of or remedial work related to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. The contractor further agrees to defend, indemnify, and hold the Architect and his principals, employees, agents and consultant harmless from any such claims related to hazardous material that may be brought by the Contractor's subcontractors, Suppliers or other third parties who may be acting under the direction of the Contractor pursuant to this project.

1.5 PRE-INSTALLATION MEETINGS

- A. When required in individual specification sections, convene pre-installation meetings at Project site prior to, or on day of, commencing work of specific section.
- B. Require attendance of parties directly affecting, or affected by, Work of specific section.
- C. Notify Architect/Engineer one week in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of installation, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within five days after meeting to participants, including Architect/Engineer, Owner, and those affected by decisions made.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements affecting:
 - Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching[including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

- D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using masonry saw or core drill.
- F. Restore Work with new products in accordance with requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material.
- J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
- K. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.2 SPECIAL PROCEDURES

- A. Materials: As specified in product sections; match existing with new products and salvaged products for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.
- C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- E. Remove debris and abandoned items from area and from concealed spaces.
- F. Prepare surface and remove surface finishes to permit installation of new work and finishes.
- G. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- H. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to "like new" condition.
- I. Refinish existing visible surfaces to remain in renovated rooms and spaces, to "like new" condition for each material, with neat transition to adjacent finishes.
- J. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.
- K. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect/Engineer for review.

- L. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition; to Architect/Engineer for review/approval prior to commencement of the work.
- M. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- N. Finish surfaces as specified in individual product sections or if not specified to match existing conditions.

END OF SECTION

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- Proposed products list.
- D. Product data.
- E. Use of electronic CAD files of Project Drawings
- F. Shop drawings.
- G. Samples.
- H. Design data.
- I. Test Reports
- J. Certificates.
- K. Manufacturer's instructions.
- Erection drawings.
- M. Construction photographs.
- N. Contractor Review
- O. Architect/Engineer review

1.2 SUBMITTAL PROCEDURES

- A. All submittals shall be made electronically in .pdf format unless otherwise specified.
- B. Transmit each submittal with Contractor's standard Cover Letter/Transmittal.
- C. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite Project. Coordinate submission of related items.
- F. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.

- G. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.
- H. Allow space on submittals for Contractor and Architect/Engineer review stamps.
- 1. When revised for resubmission, identify changes made since previous submission.
- J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.

1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedules electroncially within 7 days after date of Notice of Award of Contract. After review, resubmit required revised data within five days.
- B. Submit revised Progress Schedules with each Application for Payment.
- C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Submit computer generated horizontal bar chart with separate line for each major portion of Work or operation, identifying first work day of each week.
- F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.
- G. Indicate estimated percentage of completion for each item of Work at each submission.
- H. Submit separate schedule of submittal dates for shop drawings, product data, and samples, including Owner furnished products, and dates reviewed submittals will be required from Architect/Engineer. Indicate decision dates for selection of finishes.
- Indicate delivery dates for Owner furnished products.
- J. Revisions To Schedules:
 - Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
 - 3. Prepare narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including effect of changes on schedules of separate contractors.

1.4 PROPOSED PRODUCTS LIST

- A. Within 5 days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

PRODUCT DATA 1.5

- Product Data: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- Submit number of copies Contractor requires, plus two copies Architect/Engineer will retain and one copy for Owner's Closeout Manual.
- Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 017000.

1.6 **ELECTRONIC CAD FILES OF PROJECT DRAWINGS**

- Electronic CAD Files of Project Drawings: May only be used to expedite production of Shop Drawings for the Project. Use for other Projects or purposes is not allowed.
- Electronic CAD Files of Project Drawings: Distributed only under the following conditions:
 - Use of files is solely at receiver's risk. Architect/Engineer does not warrant accuracy of files. Receiving files in electronic form does not relieve receiver of responsibilities for measurements, dimensions, and quantities set forth in Contract Documents. In the event of ambiguity, discrepancy, or conflict between information on electronic media and that in Contract Documents, notify Architect/Engineer of discrepancy and use information in hardcopy Drawings and Specifications.
 - CAD files do not necessarily represent the latest Contract Documents, existing conditions, 2. and as-built conditions. Receiver is responsible for determining and complying with these conditions and for incorporating addenda and modifications.
 - User is responsible for removing information not normally provided on Shop Drawings and removing references to Contract Documents. Shop Drawings submitted with information associated with other trades or with references to Contract Documents will not be reviewed and will be immediately returned.
 - Receiver shall not hold Architect/Engineer responsible for data or file clean-up required to make files usable, nor for error or malfunction in translation, interpretation, or use of this electronic information.
 - Receiver shall understand that even though Architect/Engineer has computer virus scanning software to detect presence of computer viruses, there is no guarantee that computer viruses are not present in files or in electronic media.
 - Receiver shall not hold Architect/Engineer responsible for such viruses or their consequences, and shall hold Architect/Engineer harmless against costs, losses, or damage caused by presence of computer virus in files or media.

SHOP DRAWINGS

- All shop drawings shall be submitted electronically in .pdf format unless otherwise specified. A.
- Shop Drawings: Submit to Architect/Engineer for review for limited purpose of checking for B. conformance with information given and design concept expressed in Contract Documents.

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- C. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- After review, distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 017000.

1.8 SAMPLES

- A. Samples: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Samples For Selection as Specified in Product Sections:
 - 1. Submit to Architect/Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Include identification on each sample, with full Project information.
- E. Submit number of samples specified in individual specification sections; Architect/Engineer will retain one sample.
- F. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 017000.

1.9 DESIGN DATA

- A. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.10 TEST REPORTS

- A. Submit reports for Architect/Engineer's knowledge as Contract administrator or for Owner.
- B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.
- C. Concrete test reports shall be distributed directly from the testing lab to the Architect within 48 hours of testing.

1.11 CERTIFICATES

- A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

1.12 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Architect/Engineer for delivery to Owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.13 ERECTION DRAWINGS

- A. Submit drawings for Architect/Engineer's benefit as contract administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by Architect/Engineer or Owner.

1.14 CONSTRUCTION PHOTOGRAPHS

- A. Under special circumstances and when specifically requested by the Architect/Engineer provide digital photographs of specific conditions.
- B. Identify each electronic image by date the photo was taken and image number. Reduce size of file to not more than 1 MB.
- C. E-mail photos to Architect same day that photos were taken.

1.15 CONTRACTOR REVIEW

- A. Review for compliance with Contract Documents and approve submittals before transmitting to Architect/Engineer.
- B. Contractor: Responsible for:
 - 1. Determination and verification of materials including manufacturer's catalog numbers.
 - 2. Determination and verification of field measurements and field construction criteria.
 - Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
 - 4. Determination of accuracy and completeness of dimensions and quantities.
 - 5. Confirmation and coordination of dimensions and field conditions at Site.
 - 6. Construction means, techniques, sequences, and procedures.
 - 7. Safety precautions.
 - 8. Coordination and performance of Work of all trades.
- Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.
- D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Architect/Engineer.

1.16 ARCHITECT/ENGINEER REVIEW

- A. Submittals made by Contractor that are not required by Contract Documents may be returned without action.
- B. Submittal approval does not authorize changes to Contract requirements unless accompanied by Change Order or Architect's Supplemental Instruction.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances.
- C. References.
- D. Manufacturers' field services.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
 - Bidders attention shall be directed to specific qualification requirements for work of Specification Section 040100 Maintenance of Masonry.
 - a. Installer: Company specializing in performing masonry restoration services with not less than 5 years documented experience. Individuals performing work on this project shall have not less than 1 year documents experience working with the restoration company before working on this project.
 - Masonry Companies that meet this criterion include, but are not limited to:
 - Rochester-Miller Restoration (Miles Miller)
 1112 Russell Cave Road
 Paris, KY
 859- 987-2672
 - Gilpin Masonry Construction (Gil Gilpin) 100 Sea Otter Circle Midway, KY 40347 http://www.gilpinmasonry.com 502-863-2940
 - Schickel Masonry Restoration (Dave Schickel)
 720 Rolling Creek Drive
 New Albany, IN 47150
 http://www.schickelmasonry.com
 812-944-8872

- England Construction (Tom England)
 2024 Kings Lane
 Cynthiana, KY
 1-800-280-3207
 859-235-9649
 Fax 859-2359149
- 5) Carter & Witt (Ron Carter/Malcomb Witt)
 520 Hume Bedford Road
 Paris, KY
 859-987-2606
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.5 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, and to initiate instructions when necessary.
- B. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.

C. Refer to Section 013300 - Submittal Procedures, "Manufacturer's Field Services" Article.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary Utilities:
 - 1. Temporary electricity.
 - 2. Telephone service.
 - 3. Temporary water service.
 - 4. Temporary sanitary facilities.

B. Construction Facilities:

- Field offices and sheds.
- 2. Vehicular access.
- 3. Parking.
- 4. Progress cleaning and waste removal.
- 5. Project identification.
- 6. Fire prevention facilities.

C. Temporary Controls:

- 1. Barriers.
- 2. Security.
- 3. Water control.
- 4. Dust control.
- 5. Erosion and sediment control.
- 6. Noise control.
- 7. Pest control.
- 8. Pollution control.
- 9. Rodent control.
- D. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

- A. Owner will pay cost of energy used. Exercise measures to conserve energy. Utilize Owner's existing power service.
- B. Permanent convenience receptacles may be utilized during construction.
 - ONLY convenience receptacles located on the exterior of the building shall be utilized for exterior work. Do not allow extensions cords to be installed between interior and exterior work areas.

1.3 TELEPHONE SERVICE

A. Provide, maintain, and pay for telephone service to the field at time of project mobilization; cell phone is acceptable provided service is reliable.

1.4 TEMPORARY WATER SERVICE

A. Owner will pay cost of temporary water. Exercise measures to conserve energy. Utilize Owner's existing water system, extend and supplement with temporary devices as needed to maintain specified conditions for construction operations.

1.5 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide facilities at time of Project mobilization.

1.6 FIELD OFFICES

- A. Office: NONE REQUIRED
- B. Project meetings will be held at an on-site location to be determined.
- C. Storage Areas And Sheds: Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and for inspection of products to requirements of Section 016000 Product Requirements.
- D. Removal: At completion of Work remove all temporary construction assemblies, utility services, and/or debris. Restore areas.

1.7 VEHICULAR ACCESS

- A. Utilize existing access drive from public road to serve construction area. Do not block Owner's use of drive.
- B. Provide unimpeded access for emergency vehicles. Maintain turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.

1.8 PARKING

- A. Contractor parking areas shall be located in accordance with Owner approved locations which will be determined at the pre-construction meeting.
- B. Use existing on-site streets and driveways for construction traffic except DO NOT allow tracked vehicles on paved areas.
- C. Do not allow heavy vehicles or construction equipment onto the property.

1.9 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
 - CLEAN ALL WORK AREAS DAILY.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing spaces.
- C. Broom and vacuum clean interior areas daily when work creates dust/dirt/debris to migrate into interior spaces
- D. Collect and remove waste materials, debris, and rubbish from site daily and dispose off-site.

1.10 PROJECT IDENTIFICATION

A. None required. None allowed.

1.11 FIRE PREVENTION FACILITIES

- A. Prohibit use of any/all tobacco products at any location within 30 feet of any structure. Designate area on site where smoking is permitted. Provide approved ashtrays in designated smoking areas. Coordinate use of tobacco products with Owner's Representative.
- B. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- C. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B: C UL rating.
 - Provide minimum one fire extinguisher on the roof, in every construction trailer and storage shed.

1.12 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of Site, and to protect existing facilities and adjacent site areas from damage from construction operations.
- B. Provide protection for plants designated to remain.
- Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.13 SECURITY

A. Security Program:

- Protect Work on existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
- 2. Initiate program in coordination with Owner's existing security system at project mobilization.
- 3. Maintain program throughout construction period.

B. Restrictions

- 1. All roads must be kept in passable condition for the fire protection purposes.
- Weapons, ammunition and other dangerous instruments are forbidden on facility grounds.
- 3. All ladders and scaffolds, when in use, shall be under observation. When they are to be used for an extended period of time, they shall be in fenced-in area to prevent unauthorized access.
- 4. Parking permitted only in areas designated for contractor's use by the Owner.
- Access to the roof area shall be by exterior means only unless special arrangements have been made with the Owner's Representative.
- 6. The Owner will not receive, store or be responsible for contractor's materials.
- 7. Permission must be obtained from Owner for work to be scheduled outside the hours 7:00 a.m. to 5:00 p.m. weekdays and on weekends, or holidays.
- 8. OSHA, KOSH, and NFPA Safety Codes are to be adhered to for the duration of the contract.
- 9. If any chemicals are to be used by the contractor, copies of MSDS for the chemicals must be provided to the Owner.
- 10. Any injury, or situation, including an injury to contractor personnel involving emergency services (fire department, police, ambulance, etc.,) is to be reported to the Owner.

- 11. The Owner will furnish electricity, and domestic water. The Owner will instruct Contractors of proper, acceptable locations.
- All workers shall dress appropriately and conduct themselves in a manner acceptable to the Owner.

1.14 WATER CONTROL

A. Protect site from puddling or running water. Protect site from soil erosion.

1.15 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.16 EROSION AND SEDIMENT CONTROL

- Plan and execute construction by methods to control surface drainage. Prevent erosion and sedimentation.
- B. Minimize surface area of bare soil exposed.
- Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.17 NOISE CONTROL

Provide methods, means, and facilities to minimize noise produced by construction operations.

1.18 PEST CONTROL

A. Provide methods, means, and facilities to prevent pests and insects from entering facility.

1.19 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.20 RODENT CONTROL

A. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.21 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.

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SECTION 015000 TEMPORARY FACILITIES AND CONTROLS

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- Product substitution procedures.

1.2 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- C. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. For exterior storage of fabricated products, place on sloped supports above ground.
- E. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

A. Refer to paragraph 18 of Information for Bidders

1.6 PRODUCT SUBSTITUTION PROCEDURES

- Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- B. A request constitutes a representation that Bidder:
 - Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work, which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension, which may subsequently become apparent.
 - 5. Will reimburse Owner and Architect/Engineer for review or redesign services associated with re-approval by authorities having jurisdiction.
- C. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request prior to Bid Date or at time of Bid Opening, or when acceptance will require revision to Contract Documents.
- D. Substitution Submittal Procedure: Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 - 1. Attach and use as a "Cover Sheet" identifying project name, name of person/company submitting the request, date of submittal, specification section of product. Identify the mfr/make of the specified "basis of design" product and the mfr/make of the proposed substitution. Additionally, submit Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
 - 2. The owner shall be the final judge of parallel quality and reserves the right to require that the product or material specified by name be furnished at no increase to the contract.
 - 3. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Project record documents.
- C. Maintenance data.
- D. Product warranties and product bonds.
- E. Examination.
- F. Preparation.
- G. Execution.
- H. Cutting and patching.
- 1. Protecting existing and installed construction.
- J. Final cleaning.

1.2 CLOSEOUT PROCEDURES

- Prerequisites to Substantial Completion: Complete following items before requesting Certification of Substantial Completion.
 - Submit maintenance manuals, Project record documents, and other similar final record data in compliance with this Section.
 - 2. Complete facility startup, testing, adjusting, balancing of systems and equipment, demonstrations, and instructions to Owner's operating and maintenance personnel as specified in compliance with this Section.
 - Conduct inspection to establish basis for request that Work is substantially complete. Create
 comprehensive list (initial punch list) indicating items to be completed or corrected, value of
 incomplete or nonconforming Work, reason for being incomplete, and date of anticipated
 completion for each item. Include copy of list with request for Certificate of Substantial
 Completion.
 - 4. Obtain and submit releases enabling Owner's full, unrestricted use of Project and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases from authorities having jurisdiction and utility companies.
 - Deliver tools, spare parts, extra stocks of material, and similar physical items to Owner.
 - 6. Discontinue or change over and remove temporary facilities and services from Project Site, along with construction tools, mockups, and similar elements.
 - 7. Perform final cleaning according to this Section.
- B. Substantial Completion Inspection:
 - 1. When Contractor considers Work to be substantially complete, submit to Architect:
 - a. Written certificate that Work is substantially complete.
 - b. List of items to be completed or corrected (initial punch list).

- 2. Within seven calendar days after receipt of request for Substantial Completion, Architect will make inspection to determine whether Work is substantially complete.
- 3. Should Architect determine that Work is not substantially complete:
 - a. Architect will promptly notify Contractor in writing, stating reasons for its opinion.
 - b. Contractor shall remedy deficiencies in Work and send second written request for Substantial Completion to Architect.
 - c. Architect will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Architect inspection.
- 4. When Architect finds that Work is substantially complete, Architect will:
 - Prepare a Certificate of Substantial Completion accompanied by Contractor's list of items to be completed or corrected as verified and amended by Architect/Engineer and Owner (final punch list).
 - Submit Certificate to Owner and Contractor for their written acceptance of responsibilities assigned to them in Certificate.
- 5. After Work is substantially complete, Contractor shall:
 - Allow Owner occupancy of Project under provisions stated in Certificate of Substantial Completion.
 - b. Complete Work listed for completion or correction within time period stipulated.
- Owner will occupy all portions of building.
- C. Prerequisites for Final Completion: Complete following items before requesting final acceptance and final payment.
 - 1. When Contractor considers Work to be complete, submit written certification that:
 - a. Contract Documents have been reviewed.
 - b. Work has been examined for compliance with Contract Documents.
 - c. Work has been completed according to Contract Documents.
 - d. Work is completed and ready for final inspection.
 - 2. Submittals: Submit following:
 - a. Final punch list indicating all items have been completed or corrected.
 - Final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 - Specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
 - 3. Perform final cleaning for Contractor-soiled areas according to this Section.
- D. Final Completion Inspection:
 - 1. Within seven calendar days after receipt of request for final inspection, Architect/Engineer will make inspection to determine whether Work or designated portion is complete.
 - 2. Should Architect/Engineer consider Work to be incomplete or defective:
 - Architect/Engineer will promptly notify Contractor in writing, listing incomplete or defective Work.
 - b. Contractor shall remedy stated deficiencies and send second written request to Architect/Engineer that Work is complete.
 - c. Architect/Engineer will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Architect/Engineer's inspection.

1.3 PROJECT RECORD DOCUMENTS

- A. Maintain on Site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.

- 3. Addenda.
- 4. Change Orders and other modifications to the Contract.
- 5. Reviewed Shop Drawings, product data, and Samples.
- Manufacturer's instruction for assembly, installation, and adjusting.
- Ensure entries are complete and accurate, enabling future reference by Owner.
- Store record documents separate from documents used for construction.
- Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record, at each product Section, description of actual products installed, including the following:
 - Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates used.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction as follows:
 - Include Contract modifications such as Addenda, supplementary instructions, change directives, field orders, minor changes in the Work, and change orders.
 - Include locations of concealed elements of the Work.
 - 3. Identify depth of buried utility lines and provide dimensions showing distances from permanent facility components that are parallel to utilities.
 - 4. Dimension ends, corners, and junctions of buried utilities to permanent facility components using triangulation.
 - 5. Identify and locate existing buried or concealed items encountered during Project.
 - 6. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 7. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 8. Field changes of dimension and detail.
 - Details not on original Drawings.
- G. Submit marked-up paper copy documents to Architect/Engineer with claim for final Application for Payment.

1.4 MAINTENANCE DATA

- A. Submit in PDF composite electronic indexed file on CD.
- B. Provide CD cover with printed title "MAINTENANCE INSTRUCTIONS," title of Project.
- C. Drawings: Include a set of Record Drawings on the CD
- D. Contents: Prepare table of each product or system description identified in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
 - Part 2: Maintenance instructions arranged by system and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Include the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.

- d. Maintenance instructions for equipment and systems.
- e. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
- f. Safety precautions to be taken when operating and maintaining or working near equipment.
- 3. Part 3: Project documents and certificates, including the following:
 - a. Shop Drawings and product data.
 - b. Certificates.
 - c. Originals of warranties.

1.5 PRODUCT WARRANTIES

- A. Obtain warranties executed in duplicate by responsible Subcontractors, suppliers, and manufacturers within ten days after completion of applicable item of Work.
- B. Execute and assemble transferable warranty documents and bonds from Subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Include table of contents and assemble in unbound folder format.
- F. Submit prior to final Application for Payment.
- G. Time of Submittals:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
 - 2. Make other submittals within ten days after date of Substantial Completion, prior to final Application for Payment.
 - For items of Work for which acceptance is delayed beyond Substantial Completion, submit
 within ten days after acceptance, listing date of acceptance as beginning of warranty or bond
 period.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify that utility services are available with correct characteristics and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.3 EXECUTION

- A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.
- B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
 - 1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
 - 2. Physically separate products in place, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.
 - 3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual-effect choices to Architect/Engineer for final decision.
- E. Allow for expansion of materials and building movement.
- F. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
 - 1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
 - 2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.
- G. Mounting Heights: Where not indicated, mount individual units of Work at industry recognized standard mounting heights for particular application indicated.
 - 1. Refer questionable mounting heights choices to Architect/Engineer for final decision.
 - 2. Elements Identified as Accessible to Handicapped: Comply with applicable codes and regulations.
- H. Adjust operating products and equipment to ensure smooth and unhindered operation.
- I. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.

3.4 CUTTING AND PATCHING

A. Employ skilled and experienced installers to perform cutting and patching.

- B. Submit written request in advance of cutting or altering elements affecting:
 - 1. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching to complete Work and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and nonconforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute Work by methods to avoid damage to other Work and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using masonry saw or core drill.
- F. Restore Work with new products according to requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduits, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. At penetrations of fire-rated walls, partitions, ceiling, or floor construction, completely seal voids with fire-rated material to full thickness of penetrated element.
- J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
- K. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.5 PROTECTING EXISTING AND INSTALLED CONSTRUCTION

- A. Protect existing and installed Work and provide special protection where specified in individual Specification Sections and as necessary to prevent negative impact.
- B. Provide temporary and removable protection for existing and installed products. Control activity in immediate Work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Use durable sheet materials to protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit unnecessary traffic from landscaped areas.

3.6 FINAL CLEANING

- A. Execute final cleaning prior to final Project assessment.
 - 1. Employ experienced personnel or professional cleaning firm.
- B. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains, and foreign substances; polish transparent and glossy surfaces.
- C. Clean equipment and fixtures to sanitary condition with appropriate cleaning materials.
- D. Clean debris from roofs, gutters, downspouts, and drainage systems.
- E. Clean Site; sweep paved areas, rake clean landscaped surfaces.
- F. Remove waste and surplus materials, rubbish, and construction facilities from Site.

END OF SECTION

SECTION 020801 REMOVAL & DISPOSAL OF ASBESTOS-CONTAINING MATERIALS

PART 1 - GENERAL

1.1 **RELATED DOCUMENTS:**

Drawings and general provisions of the Contract, including General and Supplementary Α. Conditions and other Division-1 Specification sections, apply to work of this section.

1.2 SUMMARY OF WORK:

Work of this section includes removal and disposal of asbestos-containing roof flashing. A.

1.3 **GENERAL:**

Under EPA regulation 401 KAR 58:025 and 58:040, nonfriable asbestos-containing material is virtually unregulated unless it is handled in a manner that renders it friable. The least friable materials are Category 1 nonfriables like asphalt roofing and resilient floor covering. They will be considered friable if they are subject to sanding, grinding (includes mechanical chipping, drilling and other procedures that "reduce to powder or small fragments", cutting ("includes sawing but does not include shearing, slicing, or punching"), abrading, or burning. Removal of asphalt roofs by manual methods is considered a nonfriable removal.

Nonfriable roofs are regulated as friable if they exceed 5,580 square feet and are removed with a rotating-blade cutter, roof saw, or similar device. If removed by the above method the Contractor must be a Certified Asbestos Contractor and follow the criteria set forth in Appendix A of the Kentucky Division for Air Quality 401 KAR 61.140 Subpart M-National Emission Standard for Asbestos.

Work Area: Is the location where asbestos-abatement work occurs. It is a variable of the extent of work of the contract. It will be the area of building were asbestos containing materials are located. A "work area" is considered contaminated during the work, and must be isolated from the balance of the building, and decontaminated at the completion of the asbestos removal work.

CONTROL ACCESS:

Provide warning signs at all visual and/or physical barriers reading as follows:

Legend	Notation	
KEEP OUT	3" Sans Serif Gothic or Bl	ock
BEYOND THIS POINT	1" Sans Serif Gothic or Bl	ock
ASBESTOS ABATEMENT WORK	1" Sans Serif Gothic or Bl	ock
IN PROGRESS	1" Sans Serif Gothic or Bl	ock
BREATHING ASBESTOS DUST MAY BE HAZARDOUS TO YOUR HEALTH	14 Point Go	thic

1.4 RELATED WORK SPECIFIED ELSEWHERE:

N/A

1.5 SUBMITTALS:

Before Start of Work: Submit the following to the Designer for review. Do not start work until these submittals are returned with Designer's approval.

Surfactant: Submit product data, use instructions, and recommendations from manufacturer of removal encapsulant intended for use. Include data substantiating that material complies with requirements.

NESHAPS Certification: Submit certification from manufacturer of surfactant or removal encapsulant that, to the extent required by this specification, the material, if used in accordance with manufacturer's instructions, will wet asbestos-containing materials to which it is applied as required by the National Emission Standard for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations (40 CFR 61, Subpart M).

Material Safety Data Sheet: Submit the Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant and encapsulating material proposed for use on the work. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.

Ten Day Notification: Submit a copy of the Kentucky "Ten Day Report Form for Prior Notification of Asbestos Abatement Activities." Any requests for variance to Kentucky Division of Waste Management or Division for Air Quality Regulations not included on the "Alternative Procedures Request Form" should be included with this submission.

Alternative Procedures Request Form: Submit a copy of the "Alternative Procedures Request Form" submitted to Kentucky Division for Air Quality relating any alternative work procedures planned (i.e., non-friable removal procedures).

Waste: Submit copies of all manifests and landfill receipts to Owner's Representative. Submit evidence of yearly KY DOT permit from waste hauler.

1.6 DISPOSAL:

Disposal of Category 1 nonfriables as normal construction/demolition debris is exempt from EPA regulations as long as these materials are not made friable before burial.

Asbestos-containing waste material and debris which is packaged in accordance with the provision of this Specification may be disposed of at approved designated sanitary landfills when certain precautions are taken.

Notice and Permit from Appropriate State and/or Local Agencies

Dispose of all asbestos-containing material in accordance with applicable regulations.

SUBMITTALS:

Submit copies of all manifests and landfill receipts to Owner's Representative. Submit evidence of yearly KY DOT permit from waste hauler.

PART 2 - PRODUCTS:

2.1 Wetting Materials: For wetting prior to disturbance of asbestos-containing materials use either amended water or a removal encapsulant:

Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

Removal Encapsulant: Provide a penetrating type encapsulant designed specifically for removal of asbestos-containing material. Use a material which results in wetting of the asbestos-containing material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

2.2 Other Materials

Polyethylene Sheet: Provide flame resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 6.0 or 10.0 mils thick as indicated, frosted or black as indicated.

Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive which is formulated to aggressively stick to sheet polyethylene.

Spray Cement: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.

Disposal Bags: If used, provide 6 mil thick leak-tight polyethylene bags labeled with three labels with text as follows:

First Label:

CAUTION
Contains Asbestos Fibers
Avoid Opening or Breaking Container
Breathing Asbestos is Hazardous to Your Health

Second Label: Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
BREATHING AIRBORNE ASBESTOS, TREMOLITE, ANTHOPHYLLITE, OR
ACTINOLITE FIBERS IS HAZARDOUS TO YOUR HEALTH

Third Label: Provide in accordance with 40 CFR 61.150 (November 20, 1990 Revision): Name of generator and location at which waste was generated.

Fourth Label: Provide in accordance with 49 CFR 173: current Department of Transportation (DOT) labeling requirements for storing and shipping asbestos.

PART 3 - EXECUTION

3.1 NON-FRIABLE REMOVAL

ROOFING MATERIAL

The Contractor shall ensure that the following work practices are followed:

- 1. Roofing material shall be removed in an intact state to the extent feasible.
- 2. Wet methods shall be used where feasible.
- 3. Cutting machines shall be continuously misted during use, unless a competent person determines that misting substantially decreases worker safety.
- 4. All loose dust left by the sawing operation must be HEPA vacuumed immediately.
- 5. Unwrapped or unbagged roofing material shall be lowered to the ground via covered, dust-tight chute crane or hoist, or placed in an impermeable waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift.
- 6. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such a manner so as to preclude the dispersion of dust.
- 7. Roof level heating and ventilation air intake sources shall be isolated or the ventilation system shall be shut down.

3.2 WORKER PROTECTION:

OSHA regulation 29 CFR Part 1926.1101 is the Asbestos Standard for the Construction Industry. Ensure that all training, medical surveillance, exposure assessment, worker protection, and work practices comply with this standard as applicable. Before beginning work with any material for which a Material Safety Data Sheet has been submitted, provide workers with the required protective equipment as needed. Require that appropriate protective equipment be used at all times.

3.3 ADDITIONAL OSHA REQUIREMENTS

Employers are also responsible for the general health and safety of their employees on any job site. As an employer you must: (1) meet your responsibility to provide a workplace free from recognized hazards; (2) be familiar with mandatory OSHA standards (i.e., hazard communication requirements); (3) examine workplace conditions to make sure they can conform to applicable OSHA standards; (4) minimize hazards; and (5) make sure employees have and use safe tools and equipment.

3.4 AIRBORNE FIBER COUNTS:

General: Use work procedures that result in an 8 hour Time Weighted Average (TWA) airborne fiber count less than that indicated in the section of these specifications on "Air Monitoring - Test Laboratory Services." If airborne fiber counts exceed this level, immediately mist the area with amended water to lower fiber counts and revise work procedures to maintain airborne fiber levels within the required limit.

3.5 WORK AREA CLEARANCE

CONTRACTOR RELEASE CRITERIA:

The Work is complete when the work area is visually clean. No air monitoring is required since work is on the exterior of the building. However if monitoring is performed the airborne fiber levels must be reduced to the level specified below.

AIR MONITORING:

To determine if the elevated airborne fiber counts encountered during abatement operations have been reduced to the specified level, the Owner may secure samples and analyze them according to the following procedures.

PHASE CONTRAST MICROSCOPY:

Analysis: Fibers on each filter will be measured using the NIOSH 7400 procedures, A rules.

Release Criteria: Phase I decontamination of the work site is complete when every work area sample is below the Detection Limit 0.01 f/cc.

The services of a testing laboratory may be employed by the Owner to perform laboratory analysis of the air samples. A microscope and technician may be set up at the job site (for PCMs), or samples will be sent daily by overnight mail, so that verbal reports on air samples can be obtained within 48 hours. A complete record, certified by the testing laboratory, of all air monitoring tests and results shall be furnished to the Architect, the Owner, and the Contractor.

In accordance with SubSection 3.5 "Work Area Clearance" the contractor hereby certifies that he has visually inspected the work area (all surfaces within the roof area work and surrounding ground) and has

found no dust, debris or residue.		
by: (Signature)	Date)	
(Print Name)		
(Print Title)		
PROJECT DESIGNER CERTIFICATION		
The Project Designer hereby certifies that he has accompanied the contractor on his visual inspection and verifies that this inspection has been thorough and to best of his belief, the contractor's certification above is a true and honest one.		
by: (Signature)	(Date)	
(Print Name)		
(Print Title)		
WORK AREA		
Location:		
Room:		
Activity Performed:		

END OF SECTION

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

Section Includes:

- Careful removal of existing wood cornice and masonry pediment on west (front) building elevation including salvage and reuse of existing materials.
- Careful removal of existing clay tile copings where specified on the drawings including 2. salvage and reuse.
- Cutting and patching of masonry walls at existing through wall scuppers to provide 16 square inches of clear and free area for drainage.
- 4. Protecting items designated to remain.
- Removing and legal disposal of demolished materials.

Related Sections

- Section 040100 Maintenance of Masonry: cleaning and reinstallation of existing brick pediment and stone copings. Cleaning and reuse of existing clay tile copings.
- Section 061000 Carpentry: Rehabilitation and re-installation of wood cornice. 2.
- Section 070150 Maintenance of Roofing: Removal of existing roofing systems.
- Section 075200 Modified Bituminous Membrane Roofing

SUBMITTALS 1.2

- Section 013300 Submittal Procedures: Requirements for submittals.
- Demolition Schedule: Indicate overall schedule and whether or not there will be interruptions required for utility and building services.

CLOSEOUT SUBMITTALS 1.3

- Section 017000 Execution and Closeout Requirements: Requirements for submittals.
- Project Record Documents: Accurately record actual locations of capped utilities and concealed utilities discovered during demolition.

QUALITY ASSURANCE 1.4

- A. Conform to applicable code for demolition work, and dust control.
- Conform to applicable code for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.

SEQUENCING 1.5

- Section 011000 Summary Requirements for sequencing.
- Complete selective demolition work and reconstruction of masonry pediment prior to commencement of new roofing work.

1.6 SCHEDULING

- A. Schedule Work to coincide with rehabilitation work.
- B. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation in adjacent areas.
- C. Coordinate utility and building service interruptions with Owner.
 - 1. Do not disable or disrupt building fire or life safety systems without three days prior written notice to Owner.
 - 2. Schedule tie-ins to existing systems to minimize disruption.
 - 3. Coordinate Work to ensure smoke detectors, emergency lighting, exit signs and other life safety systems remain in full operation in.

1.7 PROJECT CONDITIONS

- A. Conduct demolition to minimize interference with adjacent areas.
 - Establish construction barriers on the ground to secure a safety zone beneath the masonry pediment and cornice prior commencement of work. Maintain construction barriers until rehabilitation work is complete.
- B. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.

1.8 COORDINATION

- A. Coordinate demolition requirements with other trades including Roofing contractor. Establish a plan for protecting the interior of the building from water infiltration as a result of the masonry pediment and wood cornice rehabilitation work.
- B. Coordinate new openings in through wall scuppers with new roofing system and minimum required roof insulation thickness.

PART 2 PRODUCTS - Not Used.

PART 3 EXECUTION

3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Mark location and termination of utilities.
- C. Erect, and maintain temporary barriers and security devices as appropriate and/or as instructed by either the Owner or Architect for protection of the Owner, building occupants and existing improvements indicated to remain.
- D. Erect and maintain weatherproof closures for exterior openings if necessary.
- E. Erect and maintain temporary construction assemblies as necessary to prevent spread of dust, odors, and noise.

- F. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.
- G. Do not close or obstruct building egress path.
- H. Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to Owner.

3.2 SALVAGE REQUIREMENTS

- Salvage for reuse all masonry and wood construction assemblies associated with the pediment and cornice.
- B. Salvage for reuse all clay tile copings.
- C. Protect designated salvage items from demolition operations until items can be removed.
- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit safe removal

3.3 DEMOLITION

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Maintain protected egress from and access to adjacent existing buildings at all times.
- C. Cease operations immediately when structure appears to be in danger and notify Architect/Owner.
- D. Cap and identify abandoned utilities at termination points when utility is not completely removed. Annotate Record Drawings indicating location and type of service for capped utilities remaining after demolition.
- E. Demolish in orderly and careful manner. Protect existing improvements.
- F. Carefully remove building components indicated to be reused.
 - 1. Disassemble components as required to permit removal.
 - 2. Store components, protected from construction operations, until reinstalled.
- **G.** Remove demolished materials not scheduled for reuse from site except where specifically noted otherwise. **Do not burn or bury materials on site.**
- H. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- I. Remove temporary Work.

END OF SECTION

SECTION 040100 - MAINTENANCE OF MASONRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- Careful removal of existing masonry pediment wall, salvage, cleaning and reuse of existing brick for reconstruction of the west pediment wall.
- 2. Installation of new thru-wall flashing beneath the stone coping associated with rehabilitation of the masonry pediment.
- 3. Repointing mortar joints associated with the west walls of roof areas 2 and 3.
- 4. Chemical cleaning
- 5. Repair and/or replacement of clay tile camelback parapet copings
- 6. Cutting and patching of brick where roof scupper openings must be modified.

B. Related Requirements:

- Section 015000 Temporary Facilities and Controls: special protection requirements of existing work.
- 2. Section 061000 Carpentry
- 3. Section 075200 Modified Bituminous Membrane Roofing
- 4. Section 076200 Sheet Metal Flashing and Trim
- 5. Section 079000 Joint Protection: Sealants, sealers, and gaskets for sealing joints.

1.2 REFERENCE STANDARDS

A. American Concrete Institute:

- 1. ACI 530/530.1 Building Code Requirements and Specification for Masonry Structures.
- 2. National Park Service: Technical Preservation Brief 2 Repointing Mortar Joints in Historic Masonry Buildings.

1.3 SEQUENCING

- A. Section 011000 Summary: Requirements for sequencing.
- B. Perform installation of new through wall flashing and all other maintenance of masonry work prior to placement of roofing cap sheet.
- C. Perform chemical cleaning before repointing and perform cleaning/washing after repointing.

1.4 FIELD TESTING

A. Mason shall remove several samples of existing brick mortar for field analysis prior to final selection of mortar mix products.

- B. Several samples of both types of mortar shall be obtained. A single, large sample of each shall be retained for comparison and "sample" submittal purposes.
- C. Samples shall be taken from those that appear to be original; avoid use of samples that are obviously not original.
- D. Using a wooden mallet, all but the single large samples identified above shall be broken down and separated into binder and aggregate.
- E. In order to establish binder material, stir part of the binder samples in diluted hydrochloric acid. Vigorous chemical reaction(bubbling) and disappearance of material is generally an indication the binder is lime. Lack of a reaction and the presence of murky liquid is generally an indication the binder is cement.

1.4 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Submittal procedures.
- B. Field Test Report: Submit a written report describing results from Field Testing identifying binder material (lime, cement, or combination) and detailed description of aggregate size(s) and color.
- C. Product Literature for restoration cleaning products.
- D. Samples: Submit samples of existing aggregate and proposed aggregate for mortar.
- E. Samples: Submit samples of existing mortar and proposed new mortar to demonstrate the proposed new mortar matches existing. Samples shall be not less than 3/8" x 3/8" x 4" mounted on 6" x 6" x 1/4" plywood with project identification information. Submit (1) set of samples.
- F. Samples: If new brick is required to replace missing brick submit proposed new brick product samples for approval.
- G. Manufacturer's Installation Instructions: Submit installation procedures for products selected for use, manufacturer's installation instructions, and perimeter conditions requiring special attention.

1.5 QUALITY ASSURANCE

A. National Park Service: Technical Preservation Brief 2 – Repointing Mortar Joints in Historic Masonry Buildings.

1.6 QUALIFICATIONS

A. Installer: Company specializing in performing masonry restoration services with not less than 5 years documented experience. Individuals performing work on this project shall have not less than 1 year documents experience working with the restoration company before working on this project.

- B. Masonry Companies that meet this criterion include, but are not limited to:
 - Rochester-Miller Restoration (Miles Miller)
 1112 Russell Cave Road
 Paris, KY
 859- 987-2672
 - Gilpin Masonry Construction (Gil Gilpin) 100 Sea Otter Circle Midway, KY 40347 www.gilpinmasonry.com 502-863-2940
 - Schickel Masonry Restoration (Dave Schickel)
 720 Rolling Creek Drive
 New Albany, IN 47150
 schickelmasonry.com
 812-944-8872
 - England Construction (Tom England) 2024 Kings Lane Cynthiana, KY 1-800-280-3207 859-235-9649 Fax 859-2359149
 - Carter & Witt (Ron Carter/Malcomb Witt)
 520 Hume Bedford Road
 Paris, KY
 859-987-2606

1.7 MOCKUP

- A. Section 014000 Quality Requirements: Mockup requirements.
- B. Following approval of proposed pointing mortar mix, repoint a 4'x4 ' portion of brick.
- C. Obtain written approval form LFUCG Division of Historic Preservation before proceeding with the work.

1.8 PRE-INSTALLATION MEETINGS

- A. Section 01 30 00 Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 Product Requirements: Product storage and handling requirements.
- B. Store restoration cleaner materials in manufacturer's packaging.

C. Store mortar ingredients in manufacturer's packaging, or when delivered loose, with adequate weatherproof covering.

1.10 AMBIENT CONDITIONS

- A. Section 015000 Temporary Facilities and Controls: Requirements for ambient condition control facilities for product storage and installation.
- B. Cold Weather Requirements: Comply with ACI 530/530.1 if ambient temperature or temperature of masonry units is less than 40 degrees F.
- C. Hot Weather Requirements: Comply with ACI 530/530.1 if ambient temperature is greater than 100 degrees F, or if ambient temperature is greater than 90 degrees F with wind velocity greater than 8 mph.

PART 2 - PRODUCTS

2.1 COMPONENTS

- A. Tuck Pointing Mortar:
 - 1. For bidding purposes mortar mix shall be assumed to be medium strength restoration quality mix consisting of:
 - a. 1 part cement: ASTM C150, Type I, white
 - b. 1.25 parts hydrated lime: ASTM C207, Type N
 - c. 7-9 parts sand: ASTM C144 color and size mixed to match existing
 - d. Color additive: as necessary to match existing color
 - 2. Mortar Mixing:
 - Thoroughly mix mortar ingredients in accordance with ASTM C270 in quantities needed for immediate use.
 - b. Achieve uniformly damp sand immediately before mixing process.
 - c. Add admixtures to achieve uniformity of mix and coloration.
 - d. Re-temper only within two hours of mixing.
- B. Clay Brick: Salvage, Clean and reuse existing brick; as a last resort provide new and/or used brick that is the best match available.
- C. Clay Tile Camel Back Copings: Salvage, clean and reuse existing clay tile removed from north and south portions of the parapet wall on roof area 1
- D. Restoration Cleaner: Restoration grade alkaline-based pre-was cleaning compound formulated to dissolve heavy carbon encrustations from brick and limestone followed by mild organic acid cleaning compound which neutralizes alkaline based prewash products. Sure Klean Restoration Cleaner as manufactured by Pro-So-Co or approved equal.
- E. Acid Solution: Clean, stain free, commercial hydrochloric (muriatic) acid, mixed one part to 15 parts of potable water.

2.2 ACCESSORIES

A. Thru-wall Flashings: 20-ounce copper

- B. Stainless steel dowels for anchoring of stone coping: 1/2" diameter x 6" long.
- C. Sealant: Sonolastic NP-II by Sonneborn, Dymetric by Tremco, Dynatrol 11 by Pecora, or approved equal.

2.3 LIMESTONE SUPPIER

- A. Company specializing in quarrying and fabricating cut limestone with five years documented experience, and a current member in good standing of the Indiana Limestone Institute of America.
- B. Use of new limestone is ONLY APPLICABLE if the existing stone is damaged beyond repair/reuse during removal and cleaning.

2.4 LIMESTONE

- A. Limestone: Cut Indiana Oolithic Limestone
- B. Color: Buff
- C. Surface Finish: Smooth
- D. Grade: Standard, free of defects
- E. Size and Shape: as indicated on drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01300 Administrative Requirements: Coordination and project conditions.
- B. Verify surfaces to be pointed are ready for work of this section.
- C. PREPARATION
- D. Protect elements surrounding work of this section from damage or disfiguration.
- E. Immediately remove stains, efflorescence, or other excess resulting from work of this section.

3.2 INSTALLATION

A. Repointing:

- 1. Cut out loose or disintegrated mortar in joints to minimum 1 inch depth or until sound mortar is reached.
- 2. Utilize power tools only after test cuts determine no damage to masonry units results.
- 3. Do not damage masonry units.
- 4. When cutting is complete, remove dust and loose material with air jet.
- 5. Premoisten joint and apply specified mortar.

- 6. Pack tightly in maximum 1/4 inch layers. Form smooth, compact raked joint matching the existing profile.
- 7. Moist cure for 72 hours.

B. Cleaning Newly Pointed Masonry:

- Verify mortar is fully set and cured.
- 2. Clean surfaces and remove large particles with wood scrapers, brass or nylon wire brushes.
- 3. Use acid solution mixed with water. Apply acid solution and scrub masonry with stiff fiber brushes. Do not scrub mortar joints.
- 4. Protect area below cleaning operation and keep surfaces soaked with water and flushed free of acid and dissolved mortar continuously for duration of cleaning.
- 5. Before solution dries, rinse and remove acid solution and dissolved mortar, using clean, pressurized water.

3.3 RESTORATION CLEANING

- A. Conform to manufacturer's written instructions. Protect all non-masonry surfaces from exposure to chemical cleaners.
- B. Pre-test a 6' x 6' area prior to beginning full-scale cleaning operations to determine dilution rate and compatibility with masonry surfaces. To evaluate, allow panel to dry three to seven days before inspection. Obtain written approval before commencement of full-scale cleaning.
- C. Use concentrate during initial testing. If concentrate cleans effectively, tests should be run with diluted solution of up to three parts water to one part concentrate. Use the mildest solution that effectively cleans depending upon test results.
- D. Thoroughly wet area to be cleaned.
- E. Apply cleaning solution liberally using low pressure spray (50 psi), roller or densely filled masonry washing brush.
- F. Allow cleaning solution to remain on surface for 3-5 minutes. Reapply. Light scrubbing of the surface will improve cleaning results especially where high pressure rinsing equipment is not available.
- G. Begin rinsing with low pressure, flood rinse to remove initial acidic residue with minimum risk of wind drift. Then rinse treated areas thoroughly using high pressure spray. Rinse from bottom of treated area to the top flushing each section of the surface with a concentrated stream of water. To avoid streaking on vertical walls, take care to keep the wall below wet and rinsed free of cleaner and residues.
- H. DO NOT APPLY RESTORATION CLEANER WITH HIGH PRESSURE SPRAY.

3.4 MASONRY SEALANT INSTALLATION

A. PREPARATION

- 1. Remove loose materials and foreign matter impairing adhesion of sealant.
- 2. Clean and prime joints.
- 3. Perform preparation in accordance with ASTM C1193.
- 4. Protect elements surrounding Work of this section from damage or disfiguration.

B. INSTALLATION

- Perform installation in accordance with ASTM C1193.
- 2. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- Install bond breaker where joint backing is not used.
- Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- 5. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- 6. Tool joints concave.
- Precompressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch below adjoining surface.

3.5 CLEANING

- A. Section 01700 Execution Requirements: Final cleaning.
- B. As work proceeds and on completion, remove excess mortar, smears, droppings.
- C. Clean surrounding surfaces.

3.6 SCHEDULE

- A. The following is an enumeration of repointing and clay tile coping scope of work at ArtsPlace. Refer to the drawings for additional maintenance of masonry requirements.
 - 1. Pediment Rehabilitation:
 - Carefully remove pediment to approximately 2 brick courses below the bottom of the wood cornice trim.
 - b. Clean and salvage all brick and stone coping for reuse.
 - c. Reinstall brick pediment utilizing existing brick. Matching the existing coursing; confirm masonry header courses are utilized to tie brick wythes to one another. Match existing mortar color. Tool head and bed joints with a raked method matching the existing profile. Fill all voids with grout to strengthen the wall.
 - d. Provide sealant at rehabilitated stone coping for all head joints and horizontal joints located on the top of the stone.
 - e. Refer to detail 5/A3.
 - 2. Scupper Rehabilitation:
 - Cut and patch existing masonry wall to accommodate new scupper outlet requirements; refer to detail 1/A3.
 - Brick Pointing:
 - Provide partial pointing of the brick walls located on the west side of roof areas 2 and 3.
 - Point all voids and cracks that are equal to, or greater than the thickness of a single piece of 65lb card stock.
 - Camel Back Coping Rehabilitation:
 - Carefully remove copings on the north and south elevations of roof area 1 where noted on the roof plan, drawing A1.
 - b. Clean, salvage and store for reuse.
 - Sound mortar joints between all remaining tile copings. Remove loose and/or cracked mortar and repack joints with fresh mortar.
 - Include provisions (material and labor costs) to replace a total of 20 copings.
 Coordinate identification of damaged units with the Architect.

SECTION 055100 - MANUFACTURED LADDERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - Aluminum fixed vertical ladders for access to new roof hatch and to connect roof areas 1 and 2.
- B. Related Requirements:
 - 1. Section 060100 Carpentry: blocking for base plate anchors
 - 2. Section 075200 Modified Bituminous Membrane Roofing: roof treads beneath base plates

1.2 REFERENCE STANDARDS

- A. ANSI A14.3: Ladders Fixed Safety Requirements.
- B. OSHA 1910.27: Fixed Ladders.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - Installation methods.
- C. Shop Drawings for Ladders:
 - 1. Plan and section of ladder installation.

1.4 EXISTING CONDITIONS

- A. Field Measurements: Verify field measurements prior to fabrication. Indicate field measurements on Shop Drawings.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - Store products in manufacturer's unopened packaging until ready for installation.
 - B. Store products until installation inside under cover. If stored outside, under a tarp or suitable cover.

1.6 WARRANTY

A. Limited Warranty: Five years against defective material and workmanship, covering parts only, no labor or freight. Defective parts, if deemed so by the manufacturer, will be replaced at no charge, freight excluded, upon inspection at manufacturer's plant which warrants same.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Precision Ladders LLC
 - 1. Fixed Ladder w/ Parapet Platform & Roofside Return basis of design
 - 2. Fixed Ladder to Roof Hatch basis of design
- B. ACL Industries, Inc.
 - 1. Equal products to basis of design
- C. O'Keefe's Inc.
 - Equal product to basis of design
- D. Substitutions: Section 016000 Product Requirements.

2.2 ALUMINUM FIXED VERTICAL LADDER

- A. Aluminum Fixed Vertical Ladder and Components: Ladder, rest platforms, floor mounting brackets, walk-thru, and side rails.
 - 1. Capacity: Unit shall support a 1500 lb (680 kg) loading without failure, and individual treads shall withstand a 3,000 lb (1361 kg) loading without failure.
 - 2. Performance Standard: Units designed and manufactured to meet or exceed ANSI A14.3 and OSHA 1910.27.

B. Components:

- 1. Ladder Stringer: 2-1/2 inch by 1-1/16 inch by 1/8 inch extruded 6005-T5 aluminum channel. Pitch: 90 degrees.
- Ladder Tread: 2-1/4 inch by 3/4 inch by 1/4 inch extruded 6005-T5 aluminum with deeply serrated top surface.
- 3. Ladder Mounting Bracket: 8-1/2 inch (verify) by 2 inch by 3 inch by 1/4 inch thick aluminum angle.
- 4. Walk-Thru:
 - a. Hand Rails: 1-1/4 inch (32 mm) aluminum square tube with rounded edges.
 - b. Mounting Brackets: 4 inch by 4 inch by 1/4 inch aluminum.
 - c. Side Rails: 42 inch side rail extension for through ladder exits.
- 5. Rest Platform:
 - a. 1/8 inch aluminum tread plate.
 - b. Platform Size: 30" inches by 48 inches standard.
 - c. Toe Boards. 6005 T-5 aluminum.
 - d. Handrails: 1-1/4 inch aluminum square tube 42 inches high.
- 6. Floor Brackets: Floor bracket at foot of each stringer, 3 by 2 by 1/4 inch
- 7. Finishes:
 - a. Standard: clear anodized.

2.3 FABRICATION

- A. Completely fabricate ladder ready for installation before shipment to the site.
- B. Completely fabricate handrail components and ship to site ready for field assembly and attachment to ladder.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- B. Examine materials upon arrival at site. Notify the carrier and manufacturer of any damage.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions.

3.3 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.4 TOLERANCES

- A. Section 014000 Quality Requirements: Requirements for tolerances.
- B. Maximum Variation from Plumb: 1/4 inch per story.
- C. Maximum Offset from Alignment: 1/4 inch.

3.5 SCHEDULE

- A. Fixed Ladder to Roof Hatch locate at new roof hatch.
- B. Fixed Ladder with Parapet Platform & Roofside Return locate between roof areas 1 and 2 at location shown on drawings.

SECTION 061000 - CARPENTRY

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes preservative treatment of wood; miscellaneous framing; and concealed wood blocking, salvage, rehabilitation and reinstallation of exterior wood cornice
- B. Section includes roof perimeter nailers; blocking in wall and roof openings; wood furring and grounds.
- C. Related Sections:
 - Section 075200 Modified Bituminous Membrane Roofing
 - 2. Section 099000 Painting and Coating

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A135.4 Basic Hardboard.
 - 2. ANSI A208.1 Mat-Formed Wood Particleboard.
- B. APA-The Engineered Wood Association:
 - APA/EWA PS 1 Voluntary Product Standard for Construction and Industrial Plywood.
- C. Architectural Woodwork Institute:
 - AWI Quality Standards Illustrated.
- D. Hardwood Plywood and Veneer Association:
 - HPVA HP-1 American National Standard for Hardwood and Decorative Plywood.
- E. American Wood-Preservers' Association:
 - AWPA C1 All Timber Products Preservative Treatment by Pressure Process.
 - 2. AWPA C20 Structural Lumber Fire-Retardant Treatment by Pressure Processes.
- F. National Institute of Standards and Technology:
 - 1. NIST PS 20 American Softwood Lumber Standard.
- G. Northeastern Lumber Manufacturers Association:
 - NELMA Standard Grading Rules for Northeastern Lumber.
- H. National Lumber Grades Authority:
 - 1. NLGA Standard Grading Rules for Canadian Lumber.
- I. The Redwood Inspection Service:
 - RIS Standard Specifications for Grades of California Redwood Lumber.
- J. Southern Pine Inspection Bureau:
 - 1. SPIB Standard Grading Rules for Southern Pine Lumber.

- West Coast Lumber Inspection Bureau: K.
 - WCLIB Standard Grading Rules for West Coast Lumber.
- Western Wood Products Association: L.
 - WWPA G-5 Western Lumber Grading Rules.

1.3 **SUBMITTALS**

- Section 013300 Submittal Procedures: Submittal procedures. Α.
- Product Data: Submit technical data on all manufactured items. B.

1.4 QUALITY ASSURANCE

- Perform Work in accordance with the following: A.
 - Lumber Grading Agency: Certified by NIST PS 20.
 - Wood Structural Panel Grading Agency: Certified by EWA The Engineered 2. Wood Association.
 - Plywood Grading Agency: Certified by APA/EWA. 3.
- Perform finish carpentry work in accordance with AWI (Architectural Woodwork Institute) B. Architectural Woodwork Quality Standards Illustrated, Custom Grade.

PART 2 PRODUCTS

2.1 **LUMBER MATERIALS**

- Lumber Grading Rules: PS 20; graded in accordance with established grading rules; A. maximum moisture content of 13 percent; of following species and grade:
 - Structural Light Framing: Stress group S4S; select structural; No. 2 grade.
 - Non-structural Light Framing: Stress group S4S; structural grade. 2.
 - Studding: Stress group S4S; stud grade. 3.
 - Structural Joists: Stress group S4S; select structural; No. 2 grade. 4.
 - Beams and Stringers: Stress group S4S; structural; No. 1 grade. 5.

FINISH CARPENTRY COMPONENTS 2.2

- Softwood Lumber: NIST PS 20. AWI Grade II maximum moisture content of 6-8 percent; A. and the following:
 - Exterior Trim 1.

Redwood

Clear

2.

InteriorTrim

Pine, white

D-Select

Poplar

- Softwood Plywood: APA/EWA PS 1 Grade A-C softwood plywood, with veneer core; type B. of glue recommended for application.
- Wood Particleboard: ANSI A208.1; composed of wood chips or sawdust, medium C. density, made with water resistant adhesive; sanded faces.
- Hardboard: AHA A135.4; Pressed wood fiber with resin binder, tempered grade, 1/4 inch D. thick, smooth one side.

2.3 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Fasteners: Hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
 - Anchors: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt or ballistic fastener for anchorages to steel.
- B. Building Paper: No.30 asphalt felt. Plain untreated cellulose building paper.
- C. Joist Hangers: As appropriate for applications & as necessary to complete the work.

2.4 FACTORY WOOD TREATMENT

- A. Wood Preservative: Exterior blocking and any wood member used in an exterior application except exposed trim shall be pressure treated as called for by Federal Spec TT-W-571 or the published standards of the American Wood preserver's Associations and the following:
 - Maximum moisture content 30%.
 - Use paintable type treatment where wood is scheduled for paint or which will come in contact with finish materials.
 - 3. All treated lumber shall be identified as to name of treated, preservative used and retention of preservative in pounds per cubic foot of lumber.
 - 4. All lumber shall be seasoned after treatment to content required for non-treated lumber.

PART 3 EXECUTION

3.1 EXISTING FINISH CARPENTRY WORK

A. Modify and extend existing finish carpentry installations using materials and methods as specified or to match existing conditions.

3.2 FRAMING

- A. Set structural members level and plumb, in correct position.
- B. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in alignment until completion of erection and installation of permanent bracing.
- C. Place horizontal members, crown side up.
- D. Construct load bearing framing members full length without splices.
- E. Double members at openings over 24 inches wide. Space short studs over and under opening to stud spacing.
- F. Construct double joist headers at floor and ceiling openings and under wall stud partitions parallel to floor joists. Frame rigidly into joists.

- G. Bridge framing in excess of 8 feet span. Fit solid blocking at ends of members.
- H. Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.
- I. Coordinate curb installation with installation of decking and support of deck openings, and parapet construction.

3.3 TOLERANCES

- A. Section 01400 Quality Requirements: Tolerances.
- B. Framing Members: 1/4 inch from indicated position, maximum.
- C. Surface Flatness of Floor: 1/4 inch in 10 feet maximum, and 1/2 inch in 30 feet maximum.

3.4 SCHEDULE

- A. The following schedule is a list of principal items only. Refer to the drawings for a detailed description of carpentry requirements.
 - 1. Roof Nailers, Curbs and Blocking: Pressure preservative treatment, 19 percent maximum moisture content; refer to drawings for locations.
 - Temporarily remove, salvage and properly store the existing wood cornice associated with the masonry pediment specified to be rehabilitated. Provide new internal wood blocking as necessary. Replace/Repair damaged wood members with matching material. Reinstall cornice after masonry pediment reconstruction is complete.
 - Cut and patch existing roof hatch opening as necessary to accommodate the new roof hatch specified.

SECTION 070150 - MAINTENANCE OF MEMBRANE ROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes removal of existing roofing systems in preparation for new roofing system.

B. Related Sections:

- 1. Section 003100 Available Project Information: Roof Material Test Report
- Section 020801 Removal & Disposal of Asbestos Containing Materials
- Section 024119 Selective Structure Demolition: removal of roof-top equipment and associated curbs
- 4. Section 061000 Carpentry
- 5. Section 075200 Modified Bituminous Membrane Roofing: Two-ply of SBS modified bitumen
- 6. Section 076200 Sheet Metal Flashing and Trim: Sheet Metal work, flashing and trim associated with roofing and waterproofing membranes.

1.2 SYSTEM DESCRIPTION

A. Entire Roof Area: Remove existing APP roofing system, perimeter flashings, base flashings, counter flashings, vent stack flashings, roofing membranes, insulation, gutters and downspouts. Remove all materials to expose the existing p

1.3 QUALIFICATIONS

- A. Materials Removal Firm: Company specializing in performing work of this section with a minimum of 5 years documented experience.
- B. Company performing work of this section shall also be responsible for work of Sections 075200 Modified Bituminous Membrane Roofing and 076200 Sheet Metal Flashing and Trim.

1.4 PRE-INSTALLATION MEETINGS

- A. Section 013000 Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Section 016000 Product Requirements.
- B. Do not remove existing roofing membrane when weather conditions threaten integrity of building contents or intended continued occupancy.
- C. Maintain continuous temporary protection prior to and during installation of new roofing system to keep building weather tight.

1.6 SCHEDULING

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Schedule Work to coincide with commencement of installation of new roofing system.

1.7 COORDINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Coordinate removal of roofing materials which have tested positive for asbestos content with work of Section 020801 Removal & Disposal of Asbestos Containing Materials.
- C. Remove only existing roofing materials being replaced with new vapor retarder materials in one day.

PART 2 - PRODUCTS

2.1 COMPONENTS

A. Temporary Protection: Sheet fiber reinforced plastic; furnish weights to retain sheeting in position.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Verify existing roof surface is clear and ready for work of this section.

3.2 PREPARATION

- A. Sweep roof surface clean of loose matter.
- B. Remove loose refuse and dispose off site.

3.3 EXISTING CONSTRUCTION

- A. Remove metal counter flashings.
- B. Scrape roofing gravel from membrane surface.
- C. Remove roofing membrane, perimeter base flashings, flashings around roof protrusions, pitch pans and pockets, insulation vents, and all other roof system components not specified to remain.
- D. Coordinate removal work with contract drawings. Protect all assemblies scheduled to remain from being damaged.
- E. Remove insulation, fasteners and cant strips.
- F. Remove vapor retarder, sheathing paper, underlay, sheathing, and all other materials located above the structural concrete deck.
- G. Inspect existing concrete deck and notify Architect immediately if areas of deterioration are discovered.

H. Photograph and document the location of any/all deck anomalies and/or other conditions that could compromise the integrity of the new roofing systems. Direct the Architect's attention to these conditions and request inspection before proceeding.

3.4 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 017000 Execution and Closeout Requirements: Protecting installed construction.
- B. Limit the amount of removal to a quantity that can be "dried-in" in the same day. Provide weather tight temporary tie-ins between new and existing roofing systems to ensure the roof remains weather tight when work is not "in progress".
- C. Turn sheeting up and over parapets and curbing. Retain sheeting in position with temporary fasteners.
- D. Provide for surface drainage from sheeting to existing drainage facilities.
- E. Do not permit traffic over unprotected deck surface.

3.5 SCHEDULES

A. Smooth Surface APP Modified Bitumen Roofing System: Remove flashings, membrane and underlayment, in preparation for new 2-ply SBS Modified Bitumen roof system specified in Section 075200. Coordinate installation of new roof curbs and rails. Coordinate extension of existing plumbing vents. Coordinate cutting and patching of existing masonry at through wall scuppers and installation of new gutters and downspouts. Protect existing construction assemblies and finishes scheduled to remain.

SECTION 075200 - MODIFIED BITUMINOUS MEMBRANE ROOFING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes, red rosin paper, modified bitumen membrane roofing, insulation, base flashings, and cant strips over an existing poured gypsum, metal or wood roof deck where the existing APP modified bitumen roofing system has been removed.
- Work includes increasing the height of existing plumbing vents to provide not less than 12" minimum clear height between new finish elevation of top of roof and top of vent piping.
- C. Work includes permanent removal of existing roof top equipment and associated curbs where shown on the drawings and infill of the structural roof deck where applicable.
- D. Work includes temporary removal and/or utility disconnection of existing rooftop equipment as necessary to increase the existing height and/or fully replace existing roof curbs and to complete installation of new roofing systems.

E. Related Sections:

- 1. Section 024119 Selective Structure Demolition
- 2. Section 061000 Carpentry: Wood nailers, curbs, blocking, and sheathing
- 3. Section 070150 Maintenance of Roofing: Removal of existing roof systems.
- Section 076200 Sheet Metal Flashing and Trim: Weather protection for base flashings.

1.2 REFERENCES

A. ASTM International:

- ASTM C177 Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
- 2. ASTM C208 Standard Specification for Cellulosic Fiber Insulating Board.
- ASTM C552 Standard Specification for Cellular Glass Thermal Insulation.
- 4. ASTM C726 Standard Specification for Mineral Fiber Roof Insulation Board.
- ASTM C728 Standard Specification for Perlite Thermal Insulation Board.
- ASTM C1002 Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases.
- 7. ASTM C1013 Standard Specification for Faced Rigid Cellular Polyisocyanurate Roof Insulation.
- 8. ASTM C1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
- ASTM D41 Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing.
- 10. ASTM D312 Standard Specification for Asphalt used in Roofing.
- ASTM D2178 Standard Specification for Asphalt Glass Felt Used in Roofing and Waterproofing.
- 12. ASTM D6162 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements.

- 13. ASTM D6163 Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements.
- 14. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- 15. ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings.
- 16. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials.
- 17. ASTM E408 Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.
- 18. ASTM E903 Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
- ASTM E1918 Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field.
- 20. ASTM E1980 Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.
- B. FM Global:
 - 1. FM DS 1-28 Wind Design.
 - 2. FM 4450 Approval Standard for Class 1 Insulated Steel Deck Roofs.
- C. National Roofing Contractors Association:
 - NRCA The NRCA Roofing and Waterproofing Manual.
- D. Underwriters Laboratories Inc.:
 - UL Fire Resistance Directory.

1.3 SYSTEM DESCRIPTION: WOOD AND POURED GYPSUM ROOF DECKS

- A. Modified Bitumen Conventional Roofing System with Red Rosin Paper
 - After existing roofing materials have been fully removed to expose the wood or poured gypsum roof deck loose lay red rosin paper on existing deck and mechanically fasten a fiberglass reinforced, asphalt coated sheet through the red rosin paper to the deck using manufactured approved fasteners and fastener spacing.
 - a. Red Rosin Paper is not required on gypsum deck
 - Proceed with installation of 2 or more layers of insulation. Insulation shall be adhered to the base sheet using hot mopped asphalt. Apply the base ply membrane in hot asphalt. Apply the granule surfaced cap sheet in adhesive.

1.4 SYSTEM DESCRIPTION: METAL ROOF DECKS

- A. Modified Bitumen Conventional Roofing System
 - 1. Mechanically fasten first layer of insulation to metal deck following manufacturer's fastening pattern.
 - Proceed with installation of subsequent layers of insulation. The second layer and subsequent layers of insulation shall be adhered to the first layer of mechanically fastened insulation using hot mopped asphalt. Apply the base ply membrane in hot asphalt. Apply the granule surfaced cap sheet in adhesive.

1.5 PERFORMANCE REQUIREMENTS

Conform to Kentucky Building code for roof assembly fire hazard requirements.

- B. UL: Class A Fire Hazard Classification.
- C. FM: Roof Assembly Classification, Class 1A Construction, windstorm classification of 1-90, in accordance with FM Construction Bulletin 1-28.

1.6 SUBMITTALS

- A. Section 013300 Submittal Procedures: Submittal procedures.
- B. Shop Drawings: Indicate setting plan for tapered insulation, layout of seams, and direction of laps, base flashing and all other miscellaneous details.
- C. Product Data: Submit product data for membrane materials, base flashing materials, insulation, cant strips, adhesives and fasteners.
- D. Copies of all specified NRCA Construction details.
- E. Manufacturer's Installation Instructions: Submit special precautions required for seaming membrane.
- F. Manufacturer's Certificate: Certify products meet or exceed specified requirements.
- G. Warranty:
 Provide a sample of the manufacturer's 20-year, no dollar limit, full systems roofing warranty.

1.7 QUALITY ASSURANCE

- A. Perform Work in accordance with NRCA Roofing and Waterproofing Manual and the following NRCA Construction Details.
 - 1. Embedded Edge Metal Flashing: Plates MB-3 and MB3S.
 - 2. Base Flashing for Wall Supported Deck: Plates MB-5 and MB-5S.
 - Metal Parapet Cap (Coping) and Base Flashing: Plates MB-1 and MB-1S.
 - 4. Expansion Joint with Metal Cover: Plates MB-7 and MB-7S.
 - Equipment Support Stand: Plates MB-10, MB-11 and MB-11S.
 - 6. Equipment Support Curb: Plates MB-9 and MB-9S
 - 7. Plumbing Vent: Plates MB-18 and MB-18S.
 - 8. Piping and Conduit Penetration Enclosure: Plates MB-16 and MB-16S.
 - Penetration Pocket: Plates MB-11 and MB-11S where practicable, (MB-19 and MB-19S where MB-11 and MB-11S are not practicable).
 - 10. Roof Drain: Plates MB-20 and MB-20S.
- B. Maintain one copy of each document on site.

1.8 QUALIFICATIONS

- A. Installer:
 - 1. Company specializing in performing Work of this section with minimum five years documented experience approved by roofing manufacturer.
 - Installer of work of this section shall be responsible for installation of work of Section 070150 Maintenance of Roofing, Section 076200 Sheet Metal Flashing and Trim, and Section 077123 Manufactured Gutters and Downspouts.

B. Manufacturer Requirements: The primary roofing materials manufacturer shall provide direct trained company personnel to attend necessary job meetings, perform periodic inspections when requested by the Architect, and conduct a final inspection upon successful completion of the project.

1.9 PRE-INSTALLATION MEETINGS / MANUFACTURER'S FIELD SERVICES

- A. Section 013000 Administrative Requirements: Preinstallation meetings.
- B. Not less than one week prior to commencement date of roofing work the Contractor shall schedule a pre-installation conference. The conference shall be scheduled to take place on the date work is scheduled to begin. Mandatory attendance is required for the following persons.
 - 1. Architect
 - 2. Owner Representative
 - 3. Roofing Project Manager
 - 4. Roofing Foreman
 - 5. Representative of Roofing Manufacturer
- C. The Conference shall include:
 - Confirmation that materials on site correspond to those approved in shop drawings.
 - 2. Inspection of roof deck/acceptance by roofer and Mfr's representative.
 - 3. Confirmation that the final installation will provide for free, uninhibited movement of water to gutters or roof drains.
 - 4. Review of installation procedures.
 - Review of location of kettle, material staging, and sequencing of tear-off and replacement.
 - 6. Observation of commencement of roofing installation.

1.10 MANUFACTURER'S INSPECTION OF EXISTING ROOF DECK CONDITIONS

- A. It is the intention of the Pre-Installation meeting for roof tear-off activities to commence to allow the roofing manufacturers' representative and all others the opportunity to observe first-hand existing roof deck conditions. If for any reason the roof deck is not exposed for inspection at the pre-installation meeting then a separate meeting will be required. Mandatory attendance is required for the following persons.
 - 1. Architect
 - 2. Owner Representative
 - 3. Roofing Project Manager
 - Roofing Foreman
 - 5. Representative of Roofing Manufacturer
- B. The manufacturer's representative shall inspect conditions of the existing roof deck identify deficiencies and/or other concerns relative to the roof decks suitability to receive new roofing material, and prepare a written report.

1.11 MANUFACTURER'S INTERMEDIATE INSPECTION

- A. Upon Completion of installation of the base ply and prior to commencement of installation of the cap sheet the Contractor shall schedule a progress inspection meeting. Mandatory attendance is required for the following persons.
 - 1. Architect

- 2. Owner Representative
- 3. Roofing Project Manager
- 4. Roofing Foreman
- 5. Representative of Roofing Manufacturer
- B. The manufacturer's representative shall inspect all work for conformance to manufacturer's standards, identify deficiencies, and prepare a written report. The Architect will inspect work for conformance with details contained within the contract documents.

1.12 MANUFACTURER'S FINAL INSPECTION

- A. Upon Completion of the work the roofing contractor shall schedule a final inspection. The inspection shall be attended by the following persons:
 - 1. Architect
 - 2. Owner Representative
 - 3. Roofing Project Manager
 - Roofing Foreman
 - 5. Representative of Roofing Manufacturer
- B. The manufacturer's representative shall inspect all work for conformance to manufacturer's standards, identify deficiencies, and prepare a written report. The Architect will inspect work for conformance with details contained within the contract documents.

1.13 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 Product Requirements: Product storage and handling requirements.
- B. Deliver products in manufacturer's original containers, dry, undamaged, seals and labels intact.
- C. Store products in weather protected environment, clear of ground and moisture.
- D. Stand roll materials on end.
- E. Flame-Heated Equipment:
 - Locate and use flame-heated equipment so as not to endanger the structure of other materials on the site or adjacent property.
 - 2. Do not place flame-heating equipment on the roof.
 - 3. Provide and maintain at least one fire extinguisher for each flame heating piece of equipment.

1.14 ENVIRONMENTAL REQUIREMENTS

- A. Section 016000 Product Requirements.
- B. Do not apply roofing membrane during inclement weather or when ambient temperatures are below 40 degrees F.
- C. Do not apply roofing membrane to damp or frozen deck surface.

D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.

1.15 COORDINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Coordinate work with removal of existing equipment and structural repairs to roof deck.
- C. Coordinate work with modifications to surrounding walls where new thru-wall flashing is being installed and where wood siding will be replaced with fiber cement
- D. Coordinate Work with installing associated metal flashings as work of this section proceeds.

1.16 WARRANTY

- A. Section 017000 Execution and Closeout Requirements: Product warranties and product bonds.
- B. The Roofing Contractor shall furnish to the Owner a written two-year unconditional guarantee for materials and workmanship.
- C. The Roofing Manufacturer shall furnish to the Owner a twenty (20) year, NO DOLLAR LIMIT, complete roofing systems warranty.

PART 2 PRODUCTS

- A. Manufacturers:
 - 1. Siplast: Paradiene 20, Paradiene 30 FR and Parafor 30 flashings (basis of design)
 - 2. Johns Manville 2FID: Dynabase, Dynaglass 30 FR with DynaFlex Flashing
 - 3. Tremco: PowerPly Base & Powerply Standard FR with metal faced flashings.
 - 4. Substitutions: Not Permitted

2.2 COMPONENTS

- Nailable Base Ply: ASTM CD4601 Type II.
- Red Rosin Paper: A rosin coated building paper used as the underlayment for modified bitumen base sheet conforming to ASTM D 549.
- 3. Roofing Membrane Sheet: ASTM D 6163, Grade S, Type I or II, SBS-modified asphalt sheet (reinforced with glass fibers); smooth surfaced; suitable for application method specified and as follows:
 - a. Thickness (avg): 91 mils (2.3 mm) (ASTM D 5147)
 - b. Thickness (min): 87 mils (2.2 mm) (ASTM D 5147)
 - c. Weight (min per 100 ft² of coverage): 62 lb (3.0 kg/m²)
 - d. Maximum filler content in elastomeric blend 35% by weight
 - e. Low temperature flexibility @ -15°F (-26°C): PASS (ASTM D 5147)
 - f. Peak Load (avg) @ 73°F (23°C): 30 lbf/inch (5.3 kN/m) (ASTM D 5147)
 - g. Peak Load (avg) @ 0°F (-18°C): 70 lbf/inch (12.3 kN/m) (ASTM D 5147)
 - h. Ultimate Elongation @ @ 73°F (23°C): 50% (ASTM D 5147)
 - i. Dimensional Stability (max): 0.1% (ASTM D 5147)
 - j. Compound Stability (min): 250°F (121°C) (ASTM D 5147)

- Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
- Reinforcement: Fiberglass mat or other meeting the performance and dimensional stability criteria
- Granule-Surfaced Roofing Cap Sheet: ASTM D 6163, Grade G, Type I or II, SBS-modified asphalt sheet (reinforced with glass fibers); granule surfaced; suitable for application method specified, and as follows:
 - a. Thickness (avg): 130 mils (3.3 mm) (ASTM D 5147)
 - b. Thickness at selvage (coating thickness) (avg): 98 mils (2.5 mm) (ASTM D 5147)
 - Thickness at selvage (coating thickness) (min): 94 mils (2.4 mm) (ASTM D 5147)
 - d. Weight (min per 100 ft² of coverage): 90 lb (4.4 kg/m²)
 - e. Maximum filler content in elastomeric blend: 35% by weight
 - f. Low temperature flexibility @ -15° F (-26° C): PASS (ASTM D 5147)
 - g. Peak Load (avg) @ 73°F (23°C): 30 lbf/inch (5.3 kN/m) (ASTM D 5147)
 - h. Peak Load (avg) @ 0°F (-18°C): 75 lbf/inch (13.2 kN/m) (ASTM D 5147)
 - i. Ultimate Elongation @ 73°F (23°C): 55% (ASTM D 5147)
 - j. Dimensional Stability (max): 0.1% (ASTM D 5147)
 - k. Compound Stability (min): 250°F (121° C) (ASTM D 5147)
 - I. Granule Embedment (max loss): 2.0 grams per sample (ASTM D 5147)
 - m. Approvals: UL Class listed, FM Approved (products shall bear seals of approval)
 - n. Reinforcement: Fiberglass mat or other meeting the performance and dimensional stability criteria
 - o. Surfacing: ceramic granules
 - 1) Granule Color: BLACK.
- B. Bituminous Materials:
 - 1. Asphalt Bitumen: ASTM D312, Type IV.
 - Asphalt / Concrete Primer: ASTM D41.
 - 3. Plastic Cement: ASTM D2822 Type II, cutback asphalt type.
- C. Insulation: (cover board) ASTM C728, high density board made of expanded perlite and cellulosic fibers and coated to ensure good attachment in bituminous applications.
 - 1. Board Size: 48 x 48 inch.
 - 2. Board Thickness: .5 inches.
 - Compressive Resistance at 10% deformation in accordance with ASTM C165: 50 psi.
 - 4. Stable R-Value: 1.32
 - 5. Board Edges: Square.

<u>OR</u>

- D. Insulation: (cover board) ASTM C208 Type II High Density Wood Fiber Board, with the following characteristics:
 - 1. Board Size: 48 x 48 inch.
 - 2. Board Thickness: .5 inches
 - Compressive Resistance at 10% deformation in accordance with ASTM C 165: 45 psi
 - 4. Thermal Conductivity: K factor of 0.38 as determined by ASTM C177
 - 5. Board Edges: square
 - 6. Manufacturer: approved and as warranted by roofing membrane manufacturer.

- E. Granule Surfaced Flashing Sheet: ASTM D 6164, Type I, Grade G, and CGSB 37-GP-56M Type 1, Class A Grade 2 with polyester reinforcement suitable for application method specified, and as follows:
 - 1. Thickness (avg): 161 mils (ASTM D 5147)
 - 2. Weight (min per 100 ft² of coverage): 114 lb
 - 3. Low Temperature Flexibility: -22 degress F
 - 4. Tensile Strength or Peak Load at 73 degrees F: 65 lbf/inch
 - 5. Elongation At Peak Load at 73 degrees F: 60%
 - 6. Elongation at 5% Peak Load at 73 degrees F: 90%
 - 7. Granule Embedment maximum average loss: 1.5 grams per sample
 - 8. Granule Embedment maximum individual loss: 2 grams per sample
 - 9. Dimensional Stability (maximum): 0.5%
 - 10. Surfacing: ceramic granules
 - 1) Granule Color: BLACK.
- F. Flashing Adhesive: Manufacturers elastomeric one part adhesive.
- G. PMMA Flashing Membrane Assembly: A flashing membrane assembly consisting of a liquid applied, flexible, monolithic membrane formed by the combination of PMMA-based resin and fleece fabric. The stripping ply and flashing reinforcing sheet shall consist of a prefabricated, reinforced, homogeneous Styrene-Butadiene-Styrene (SBS) block copolymer modified asphalt membrane. The reinforcement mat in the SBS ply shall be impregnated/saturated and coated each side with an SBS modified bitumen blend. The cross sectional area of the SBS sheet material shall contain no oxidized or non-SBS modified bitumen. The back of the modified bitumen base ply shall be coated with factory applied polymer modified asphalt self-adhesive coating covered with a removable film. The top surface of the modified bitumen ply sheet shall be coated with a white acrylic coating to enhance resin bond and to minimize surface temperatures. Siplast Parapro 123 Flashing System or equivalent.
 - Self-Adhesive Modified Bitumen Stripping Ply and Flashing Reinforcing Sheet. Paradiene 20 SA P by Siplast or equivalent.
 - a. Thickness (avg): 102 mils (ASTM D 5147)
 - b. Thickness (min): 98 mils (ASTM D 5147)
 - c. Weight (min per 100 ft² of coverage): 69 lb
 - d. Maximum filler content in elastomeric blend: 35% by weight
 - e. Low temperature flexibility @ -15° F PASS (ASTM D 5147)
 - f. Peak Load (avg) @ 73°F 30 lbf/inch (5.3 kN/m) (ASTM D 5147)
 - g. Peak Load (avg) @ 0°F: 75 lbf/inch (13.2 kN/m) (ASTM D 5147)
 - h. Ultimate Elongation (avg.) @ 73°F: 50% (ASTM D 5147)
 - i. Dimensional Stability (max): 0.1% (ASTM D 5147)
 - i. Compound Stability (min sheet): 250°F (ASTM D 5147)
 - k. Compound Stability (min adhesive coating): 212°F (ASTM D 5147)
 - 1. Approvals: UL Class listed, FM Approved
 - m. Reinforcement: fiberglass mat or other meeting the performance and dimensional stability criteria
 - n. Back Surfacing: polyolefin release film
 - o. Top Surfacing: factory applied acrylic coating

- 2. Resin for Flashing Applications: A flexible, PMMA-based resin combined with a thixotropic agent for use in combination with non-woven, 110 g/m², needle-punched polyester fabric reinforcement to form a monolithic, reinforced flashing membrane. Parapro Flashing Resin by Siplast or equivalent.
- 3. Fleece for Flashing Reinforcement: A non-woven, 110 g/m², needle-punched polyester fabric reinforcement as supplied by the membrane system manufacturer. Pro Fleece by Siplast; or equivalent.
- H. Walkway Pads: Manufacturers standard preformed, skid-resistant mat consisting of modified asphalt, reinforcements and fillers with granule surface on both sides.
- Fiber Cants: Asphalt impregnated wood fiberboard or high density, laminated board made of high strength fibers and expanded perlite, preformed to 45-degree angle.
- J. Counterflashings: As specified in Section 076200.

2.3 ACCESSORIES

- A. Fiber Cant and Tapered Edge Strips: Asphalt impregnated wood fiberboard, preformed to tapered edge strip.
- B. Roofing Nails: Galvanized, hot dipped or non-ferrous type, size as required to suit application.
- C. Insulation Fasteners: Appropriate for purpose intended and approved by Factory Mutual and system manufacturer; length required for thickness of material with metal washers.
- D. Sealants: As recommended by membrane manufacturer
- E. Strip Reglet Devices: Galvanized steel; recess mounted, binder bars, maximum possible length per location, with attachment flanges.

F. PMMA Primers:

- Primer for Wood, Plywood and Rigid Insulation, Masonry and Vertical Concrete Substrates: A fast-curing PMMA-based primer for use in over wood, plywood and rigid insulation substrates. Pro Primer W by Siplast; or equivalent.
- Primer for Horizontal Concrete Substrates: A fast-curing PMMA-based primer for use over horizontal concrete substrates. Pro Primer T by Siplast or equivalent.
- G. Plumbing Vent Piping: Match existing.
- H. Manufactured Roof Curbs: Provide new roof curbs to accommodate the increased thickness of roof insulation for equipment scheduled to remain unless otherwise indicated on the roof drawings.
 - 1. Curb Height = roof insulation thickness at equipment location plus 12"
 - 2. Construction: 18 gauge (minimum) 0.063 aluminum formed on (3) sides with a single seam.
 - 3. Wood Nailers: Notched and tapped joints
 - Insulation: 1.5" (min thickness) 3 lb. density rigid fiberglass
 - 5. Manufacturer: Greenheck or approved equivalent.

- Manufactured Roof Rails: Provide new roof equipment rails to accommodate the increased thickness of roof insulation for equipment scheduled to remain unless otherwise indicated on the roof drawings.
 - 1. Curb Height = roof insulation thickness at equipment location plus 12"
 - Construction: 18 gauge (minimum) galvanized steel & galvanized steel cap flashing
 - 3. Wood Nailers: nominal 2x6 minimum
 - 4. Manufacturer: Roof Products & Systems ER-4A or approved equal
- J. Manufactured Pipe/Conduit Supports: 100% recycled rubber and polyurethane prepolymer with a uniform load capacity of 500 pounds per linear foot of support with a 14 gage (min) galvanized steel frame. Manufacturer: DURA-BLOK or approved equal.
- K. Manufactured pipe flashing: Molded EPDM pipe boot with stepped sides to accommodate various pipe sizes with an integral aluminum flange. EPDM shall have a serviceable temperature range of -60 degrees F to 270 degrees F and be resistant to ozone and ultraviolet rays. Boot shall include a stainless steel clamp for positive securing of boot to pipe. Product shall be Deck-Mate flashing system as manufactured by Roof Products & Systems, Bensenville, IL or roofing manufacturer approved equivalent.

2.4 EQUIPMENT

A. Kettle: The asphalt kettle shall be "low odor type kettle" equipped with fume reduction components including a tightly sealed lid, hopper, and hood attachment designed to reduce odors.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Verify surfaces and site conditions are ready to receive work.
- C. Verify deck is clean and smooth, free of depressions, waves, or projections, properly sloped to drains, valleys, or eaves where applicable.
- D. Where drainage is to be achieved with tapered insulation, verify insulation will perform as specified. If any areas are identified where final roof installation will prevent water from reaching drains, or gutters, stop work and notify the Architect. ROOF WATER MUST DRAIN FREELY TO OUTLETS. AREAS WHERE WATER PONDS IN EXCESS OF 24 HOURS WILL BE SUFFICIENT CAUSE TO REJECT THE WORK.
- E. Confirm dry deck by moisture meter with moisture content acceptable to roofing manufacturer.
- F. Verify roof openings, curbs, pipes, conduit, sleeves, ducts, and vents through roof are solidly set, and cant strips and reglets are in place.

3.2 ACCESSORIES INSTALLATION

- A. Extend existing plumbing vent piping utilizing materials that match the existing pipe. Lead flashings to be installed under work of section 076200.
- B. Install insulated manufactured exhaust fan roof curbs following manufacturer's written instructions. Mechanically fasten curbs to the concrete roof deck and mechanically fasten fans and fan hoods to the curb.

3.3 APPLICATION

A. Insulation Application:

- Adhere insulation to vapor retarder in a mopping of hot asphalt in a manner which is conducive to FM Roof Assembly Class 1A Construction, windstorm Classification of 1-90, in accordance with FM Construction Bulletin 1-28.
- Apply hot asphalt to top surface of insulation. Embed second layer of insulation into adhesive, with joints staggered minimum 6 inches from joints of first layer.
- 3. Place first layer (thickness as detailed on drawings) and tapered thickness insulation to required slope pattern.
- 4. Place boards at right angles to deck flutes with edges over flute surface for bearing support.
- 5. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.
- 6. Lay tapered boards for distance of 24 inches back from roof drains for positive drainage providing sump area at drain as detailed.
- 7. Apply no more insulation than can be covered with membrane in same day.
- 8. Adhere coverboard insulation in a mopping of hot asphalt.

B. Membrane Application:

- 1. Apply membrane and primer in accordance with manufacturer's instructions.
- 2. Apply membrane; lap and seal edges and ends permanently waterproof.
- Apply membrane smooth, free from air pockets, wrinkles, or tears. Ensure full bond of membrane to substrate.
- 4. Extend membrane up cant strips and minimum of 8 inches onto vertical surfaces.
- 5. Mop and seal membrane around roof protrusions and penetrations.
- 6. Provide waterproof cut-off to membrane at end of day's operation. Remove cut-off before resuming roofing.

C. Flashings And Accessories:

- 1. Apply flexible sheet base flashings to seal membrane to vertical elements.
- 2. Mechanically fasten flashings when vertical distance exceeds 12 inches, and in compliance with roofing manufacturer's recommendations.
- 3. Coordinate installation of roof drains, sumps, curbs, and related flashings.
- 4. Seal flashings and flanges of items penetrating or protruding through membrane.

D. Surfacing:

1. Apply coating to all exposed mastic areas at rate recommended by membrane manufacturer.

3.4 PMMA FLASHING AND FIELD MEMBRANE APPLICATION

A. Base Flashing Application

 Using masking tape, mask the perimeter of the area to receive the flashing system. Apply resin primer to substrates requiring additional preparation and allow primer to cure.

2. Pre-cut fleece to ensure a proper fit at transitions and corners prior to membrane application.

3. Apply an even, generous base coat of flashing resin to prepared surfaces using a roller at the rate specified by the resin manufacturer. Work the fleece into the wet, catalyzed resin using a brush or roller to fully embed the fleece in the resin and remove trapped air. Lap fleece layers a minimum of 2 inch (5 cm) and apply an additional coat of catalyzed resin between layers of overlapping fleece. Again using a roller, apply an even top coat of catalyzed resin immediately following embedment of the fleece at the rate specified by the resin manufacturer, ensuring that the fleece is fully saturated. Ensure that the flashing resin is applied to extend beyond the fleece (maximum 1/4 inch). Remove the tape before the catalyzed resin cures. Make allowances for waste, including saturation of roller covers and application equipment.

4. Should work be interrupted for more than 12 hours or the surface of the cured resin becomes dirty or contaminated by the elements, wipe the surface to be lapped with new flashing resin using the specified cleaner/solvent. Allow the surface to dry for a minimum 20 minutes and a maximum 60 minutes before continuing work.

B. Field Membrane Application

 Using the specified cleaner/solvent, wipe flashing membrane surfaces to be lapped with field membrane. Allow the surface to dry for a minimum 20 minutes before continuing work.

2. Apply an even, generous base coat of field membrane resin to prepared surfaces using a roller at the rate specified by the resin manufacturer. Work the fleece into the wet, catalyzed resin using a brush or roller to fully embed the fleece in the resin and remove trapped air. Lap fleece layers a minimum of 2 inch (5 cm) and apply an additional coat of catalyzed resin between layers of overlapping fleece. Again using a roller, apply an even top coat of catalyzed resin immediately following embedment of the fleece at the rate specified by the resin manufacturer, ensuring that the fleece is fully saturated. Ensure that the flashing resin is applied to extend beyond the fleece (maximum ¼-inch (6 mm)). Make allowances for waste, including saturation of roller covers and application equipment. Allow 2 hours cure time prior to exposing the membrane to foot traffic.

C. Color Finish Application

- 1. Ensure that the field and flashing membrane and has been in place for a minimum 2 hours. Using the specified cleaner/solvent, wipe field membrane surfaces to receive the color finish layer. Allow the surface to dry for a minimum 20 minutes before continuing work.
- Apply an even top coat of catalyzed color finish resin at the rate specified by the resin manufacturer. Allow 2 hours cure time prior to exposing the membrane to foot traffic.

3.4 CLEANING

- A. Section 01700 Execution Requirements: Final cleaning.
- B. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and comply with their documented instructions.

- C. Repair or replace defaced or disfigured finishes caused by work of this section.
- 3.5 PROTECTION OF INSTALLED CONSTRUCTION
 - A. Section 017000 Execution Requirements: Protecting installed construction.
 - B. Protect building surfaces against damage from roofing work.
 - C. Where traffic must continue over finished roof membrane, protect surfaces.
- 3.6 SCHEDULE
 - A. Refer to Contract Drawings for a detailed description of the scope of the work.

SECTION 076200 - SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes flashings and counterflashings, scuppers, and fabricated sheet metal items.
- B. Related Sections:
 - 1. Section 040100 Maintenance of Masonry
 - 2. Section 061000 Carpentry: Wood blocking and/or furring
 - 3. Section 077123 Manufactured Gutters and Downspouts
 - Section 075200 Modified Bituminous Roofing: Roofing system and base flashings.

1.2 REFERENCES

- A. American Society for Testing and Materials:
 - ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM A666 Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
 - 3. ASTM A924/A924M Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
 - 4. ASTM B32 Standard Specification for Solder Metal.
 - 5. ASTM B101 Standard Specification for Lead-Coated Copper Sheet and Strip for Building Construction.
 - 6. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - ASTM B370 Standard Specification for Copper Sheet and Strip for Building Construction.
 - ASTM B749 Standard Specification for Lead and Lead Alloy Strip, Sheet, and Plate Products.
 - ASTM D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 - 10. ASTM D4397 Standard Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications.
 - 11. ASTM D4586 Standard Specification for Asphalt Roof Cement, Asbestos-Free.
- B. Federal Specification Unit:
 - 1. FS TT-C-494 Coating Compound, Bituminous, Solvent Type, Acid Resistant.
- C. Sheet Metal and Air Conditioning Contractors:
 - 1. SMACNA Architectural Sheet Metal Manual.

1.3 DESIGN REQUIREMENTS

- A. Sheet Metal Flashings: Conform to the following criteria of SMACNA "Architectural Sheet Metal Manual" and details showed in the Contract Drawings.
 - 1. Figure 1-26 Scupper Design & Installation, page 1.59, 5th edition

1.4 SUBMITTALS

- A. Section 013300 Submittal Procedures: Submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Product Data: Submit data on manufactured components metal types, finishes, and characteristics.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with NRCA Roofing and Waterproofing Manual and the following NRCA Construction Details.
 - 1. Embedded Edge Metal Flashing: Plates MB-3 and MB3S.
 - 2. Base Flashing for Wall Supported Deck: Plates MB-5 and MB-5S.
 - 3. Metal Parapet Cap (Coping) and Base Flashing: Plates MB-1 and MB-1S.
 - 4. Expansion Joint with Metal Cover: Plates MB-7 and MB-7S.
 - 5. Equipment Support Stand: Plates MB-10, MB-11 and MB-11S.
 - 6. Equipment Support Curb: Plates MB-9 and MB-9S
 - 7. Plumbing Vent: Plates MB-18 and MB-18S.
 - 8. Piping and Conduit Penetration Enclosure: Plates MB-16 and MB-16S.
 - 9. Roof Drain: Plates MB-20 and MB-20S.
 - 10. Gutter: Plates MB-22 and MB-22S.

1.6 QUALIFICATIONS

- A. Installer:
 - Company specializing in performing Work of this section with minimum five years documented experience.
 - Installer of work of this section shall be responsible for installation of work of Section 075200 Modified Bituminous Membrane Roofing, 077123 Manufactured Gutters and Downspouts and 070150 Maintenance of Roofing.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 Product Requirements: Product storage and handling requirements.
- B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- C. Prevent contact with materials causing discoloration or staining.

1.8 COORDINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Coordinate with Work of Section 040100 Maintenance of Masonry for installation of flashings associated with cutting and patching of existing masonry wall openings for through wall scuppers.

1.9 WARRANTY

A. The installer of metal flashings and trim shall provide a two-year unconditional guarantee for watertightness on all materials and workmanship.

PART 2 PRODUCTS

2.1 SHEET METAL FLASHING AND TRIM

- A. Pre-Finished Galvanized Steel Sheet: ASTM A755; structural steel sheet, G90 zinc coating; 0.024 inch thick core steel, shop pre-coated with mfr's standard factory applied paint finish; color to match existing gutters and downspouts.
- B. Stainless Steel: ASTM A240; Type 316, dead soft fully annealed, 0.018 inch thick unless otherwise specified; smooth surface, smooth surface, Number 4 finish.
- C. Lead: ASTM B749, 2.5 lb/sq ft for plumbing vents and 4 lb/sf for roof drain flashing.
- D. Copper: ASTM B370; H00 temper, 20 oz/sq ft; natural finish.

2.2 ACCESSORIES

- A. Fasteners: Stainless steel, with soft neoprene washers.
- B. Underlayment: ASTM D226, organic roofing felt, Type II, No. 30.
- C. Slip Sheet: Rosin sized building paper.
- D. Primer: Zinc molybdate.
- E. Protective Backing Paint: Zinc molybdate alkyd.
- F. Sealant: Type E butyl.
- G. Plastic Cement: ASTM D4586, Type I.
- H. Reglets: Recessed type, galvanized steel.
- Solder: ASTM B32; type suitable for application and material being soldered.

2.3 FABRICATION

- A. Form sections shape indicated on Drawings, accurate in size, square, and free from distortion or defects.
- B. Fabricate cleats of same base material as sheet metal but of heavier gage to suit appliation, interlocking with sheet.
- C. Form pieces in longest possible lengths.
- D. Hem exposed edges on underside 1/2 inch; miter and seam corners.

- E. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- F. Fabricate corners from one piece with minimum 18 inch long legs; seam for rigidity, seal with sealant.
- G. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.
- H. Fabricate flashings to allow toe to extend 2 inches over roofing. Return and brake edges.
- Seal metal joints.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- C. Verify roofing termination and base flashings are in place, sealed, and secure.

3.2 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Install surface mounted reglets to lines and levels indicated on Drawings. Seal top of reglets with sealant.
- C. Paint concealed metal surfaces with protective backing paint to minimum dry film thickness of 15 mil.

3.3 INSTALLATION

- A. Insert flashings into reglets to form tight fit. Secure in place with lead wedges. Pack remaining spaces with lead wool. Seal flashings into reglets with sealant.
- Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- D. Seal metal joints watertight.

3.4 SCHEDULE

- A. The following Schedule is a list of principle items only. Refer to Drawings Sheets for items not specifically scheduled.
 - 1. Rake/Fascia: 24 gage prefinished steel.

- Counter Flashing: Receiver to be .018 inch thick stainless steel with 24 gage prefinished steel counter flashing
- Parapet Wall Copings: 24 gage prefinished steel.
 - a. Color at stone copings to match stone color; as selected by Owner
 - b. Color where coping is specified to replace existing camel back clay tile coping shall match clay tile color; as selected by Owner.
- 4. Plumbing Vents: 2.5 lb/sf sheet lead
- 5. Gutter drip edge & scupper flashing: 24 gage prefinished steel
- 6. Through Wall Scuppers & conductor heads: 24 gage prefinished steel; color to match downspouts and gutters

SECTION 077123 - MANUFACTURED GUTTERS AND DOWNSPOUTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes seamless pre-finished galvanized steel gutters and downspouts.
 - 1. Provide precast concrete splash pads.
- B. Related Sections:
 - 1. Section 075200 Modified Bituminous Membrane Roofing
 - Section 076200 Sheet Metal Flashing and Trim.
 - 3. Section 079000 Joint Protection.

1.2 REFERENCES

- A. ASTM International:
 - ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM B32 Standard Specification for Solder Metal.
- B. Federal Specification Unit:
 - 1. FS TT-C-494 Coating Compound, Bituminous, Solvent Type, Acid Resistant.
- C. Sheet Metal and Air Conditioning Contractors:
 - 1. SMACNA Architectural Sheet Metal Manual

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Submittal procedures.
- B. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations, and installation details.
- C. Product Data: Submit data on manufactured components, materials, and finishes.
- D. Samples:
 - 1. Submit a set of metal color options for Owner selection.
 - 2. Submit two samples illustrating component design, finish, color, and configuration.

1.4 QUALIFICATIONS

- A. Installer:
 - 1. Company specializing in performing Work of this section with minimum five years documented experience.
 - 2. Installer of work of this section shall be responsible for installation of work of Sections 076200 Sheet Metal Flashing and Trim, and 075200 Modified Bituminous Membrane Roofing.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with SMACNA Manual.

 Installation of gutters shall conform to SMACNA Figure 1-16, page 1.39 of the 5th Edition. Provide 3/16" x 2 inch brackets spaced at 36 inches on center and 3/16" x 1" straps at 36 inches on center, staggered.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 Product Requirements: Product storage and handling requirements.
- B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope to drain.
- C. Prevent contact with materials during storage capable of causing discoloration, staining, or damage.

1.7 COORDINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Coordinate installation of gutters with new modified bitumen roofing systems.

1.8 WARRANTY

- A. Section 017000 Execution and Closeout Requirements: Product warranties and product bonds.
- B. Furnish five-year manufacturer warranty for gutter and downspout finishes.
- C. Installer shall provide an unconditional two-year guarantee on all gutters and downspouts for workmanship and watertightness.

PART 2 - PRODUCTS

2.1 GUTTERS AND DOWNSPOUTS

- Gutters shall be continuously formed (up to 40') from 24 gage prefinished steel.
- B. Downspouts shall be formed in single pieces from 24 gage prefinished steel.
- C. Product Description:
 - 1. Gutters: 6" x 6" profile as indicated on Drawings.
 - 2. Downspouts: 4" x 4" square.

D. Product Description:

- 1. Gutters: Sheet metal; Profile as indicated on Drawings.
- 2. Downspouts: Sheet metal; smooth square.

3. Splash Pads: Precast concrete type; minimum 3000 psi at 28 days, with minimum 5 percent air entrainment.

2.2 COMPONENTS

A. Pre-Finished Galvanized Steel Sheet: ASTM A653/A653M, G90 zinc coating; 24 gage core steel, shop pre-coated with PVDF (polyvinylidene fluoride) coating; color as selected from manufacturer's standard color.

2.3 ACCESSORIES

- A. Connectors: Furnish required connector pieces for PVC (Polyvinyl Chloride) components.
- B. Anchors and Supports: Profiled to suit gutters and downspouts.
 - 1. Anchoring Devices: In accordance with SMACNA Figure 1-16 page 1.39 in 5th Edition
 - 2. Gutter Supports: Straps and Brackets at 36 inches OC, staggered.
 - 3. Downspout Supports: Straps at 36 inches OC
- C. Fasteners: Same material and finish as gutters and downspouts, with soft neoprene washers.
- D. Primer: Zinc molybdate type.
- E. Protective Backing Paint: Zinc molybdate alkyd.
- F. Solder: ASTM B32.

2.4 FABRICATION

- A. Form gutters and downspouts of profiles and size indicated.
- B. Fabricate with required connection pieces.
- C. Form sections to shape indicated on Drawings, square, and accurate in size, in maximum possible lengths (40 feet for gutters and full lengths for downspouts), free of distortion or defects detrimental to appearance or performance. Allow for expansion at joints.
- D. Hem exposed edges of metal.
- E. Tin edges of copper sheet to be soldered. Solder shop formed metal joints. After soldering, remove flux. Wipe and wash solder joints clean. Weather seal joints.
- F. Fabricate gutter and downspout accessories; seal watertight.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify surfaces are ready to receive gutters and downspouts.

3.2 PREPARATION

A. Paint concealed metal surfaces and surfaces in contact with dissimilar metals with protective backing paint to minimum dry film thickness of 15 mil.

3.3 INSTALLATION

- A. Sheet Metal: Join lengths with formed seams soldered watertight. Flash and solder gutters to downspouts and accessories.
- B. Slope gutters 1/16" inch per foot minimum.
- C. Solder metal joints for full metal surface contact. After soldering, wash metal clean with neutralizing solution and rinse with water.
- D. Set splash pads under downspouts. Provide bedding under splash pads if necessary to ensure drainage away from the building.

SECTION 077233 - ROOF HATCHES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Prefabricated single-leaf roof hatches, with operable hardware, counterflashings, and integral support curbs used by personnel.

B. Related Requirements:

- 1. Section 061000 Carpentry: Wood framing for rough openings.
- 2. Section 075200 Modified Bituminous Membrane Roofing: base flashing around curb.

1.2 REFERENCE STANDARDS

A. American National Standards Institute:

 ANSI A1264.1 - Safety Requirements for Workplace Walking/Working Surfaces and Their Access; Workplace, Floor, Wall and Roof Openings; Stairs and Guardrails Systems.

B. Occupational Safety & Health Administration (OSHA)

- 1. OSHA 29 CFR 1910.23 Guarding floor and wall openings and tables
- OSHA 29 CFR 1926.502 Fall protections systems criteria

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer information regarding unit construction, sizes, configuration, jointing methods, locations if applicable, and attachment methods.
- Manufacturer Instructions: Submit special installation criteria and interface with adjacent components.

1.4 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum five years' documented experience.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.

- C. Store materials according to manufacturer instructions.
- D. Protection:
 - Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.6 EXISTING CONDITIONS

- A. Field Measurements:
 - Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

1.7 COORDINATION

A. Coordinate layout and installation of roof accessories with carpentry and modified bitumen roofing system including base flashings to ensure a leak proof, watertight, secure and noncorrosive installation.

1.8 WARRANTY

- A. Section 017000 Execution and Closeout Requirements: Requirements for warranties.
- B. Provide manufacturer's standard 5-year warranty. Roof hatches shall be free from manufacturing defects in materials and fabrication for a period of 5 years from the date of shipment. Should a product fail to function in normal use within this period, manufacturer shall furnish a replacement or new.

PART 2 - PRODUCTS

2.1 ROOF HATCHES

- A. MANUFACTURERS:
 - 1. Babcock-Davis: basis of design
 - a. Model BG3630 Personnel II Series Roof Hatch
 - 2. Precision Ladders: equal product
 - 3. Bilco: equal product
 - 4. JL Industries: equal product
 - 5. Substitutions: As specified in Section 016000 Product Requirements.
- B. Description:
 - 1. Material: Aluminum.
 - 2. Type: Single leaf.
 - 3. Integral Curb insulated:
 - a. Nominally 12 inches high.
 - b. 11 Gage Aluminum with single wall curb & integral railing ready tabbed counterflash mounting flange. Mounting flange shall be continuous around the base of the frame.
 - Insulation 1 inch polyisocyanurate

- C. Performance and Design Criteria:
 - 1. Loads: Cover stiffened to withstand a live load of 40-lb/sq. ft. with a maximum deflection of 1/150 of the span and 20-lb/sq ft. internal uplift load.
- D. Lid Type:
 - 1. Hatch Material:
 - a. Cover: 11 gage aluminum cover with 1 inch rigid insulation covered by 18 gage (.040) aluminum cover liner.

E. Hardware:

- 1. Hinge Assembly: Pintle hinge with stainless steel hinge pin
- 2. Spring: Gas spring with integrated damper
- 3. Hold open device: Automatic zinc plated steel hold open arm with red vinyl grip handle.
- 4. Latch: Zinc plated steel spring type slam latch with inside and outside operating turn handles and padlock hasp provisions.
- 5. Pull handle: Interior pull down handle, powder coated safety yellow
- 6. Gasket: Extruded EPDM adhesive back seal, continuous around cover
- 7. Finish: Mill Finished Aluminum

2.2 FABRICATION

- A. Fabricate components free of defects and visual distortion.
- B. Weld corners and joints.
- C. Condensation Protection: Drain to exterior above roofing.
- D. Fit components for weathertight assembly.
- E. Sloped Roofs: Taper roof hatch curbs to maintain hatch top level.

2.3 ACCESSORIES

- A. Anchorage Devices: As recommended by manufacturer.
- B. Counterflashings: Same metal type and finish as roof hatch frame.
- C. Sealant:
 - 1. As recommended by roof hatch manufacturer.
 - 2. Type: Non-hardening, non-skinning, non-drying, non-migrating, and butyl based.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 017000 Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that openings and substrate conditions are ready to receive Work of this Section.

3.2 PREPARATION

- A. Section 017000 Execution and Closeout Requirements: Requirements for installation preparation.
- B. Apply protective coating on aluminum surfaces of roof hatches in contact with cementitious materials or dissimilar metals.

3.3 INSTALLATION

- A. According to manufacturer instructions.
- B. Install curb assembly, fastening securely to roof decking.
- C. Flash curb assembly into roof system.
- D. Roof Hatch:
 - 1. Place and secure to curb assembly.
 - 2. Install integral setting sealant and counterflashing as required.
- E. Coordinate with installation of roofing system and related flashings for weathertight installation.
- F. Adjust and lubricate cover for ease of operation and watertightness.

3.4 ADJUSTING

- Section 017000 Execution and Closeout Requirements: Requirements for starting and adjusting.
- B. Adjust hinges for smooth operation.

3.5 CLEANING

- A. Section 017000 Execution and Closeout Requirements: Requirements for cleaning.
- B. Wash exposed surfaces and wipe clean.
- C. Remove excess sealant.

END OF SECTION 077233

SECTION 079000 - JOINT PROTECTION

PART 1 GENERAL

1.1 SUMMARY

A. Section includes cleaning and preparation of surfaces to receive sealants and joint backing, sealants and joint backing, precompressed foam sealers, and accessories at all locations where two different materials meet, or where there is a gap in a common material that creates a potential water problem or creates a visual concern.

B. Related Sections:

Section 040100 – Maintenance of Masonry

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM C834 Standard Specification for Latex Sealants.
 - 2. ASTM C919 Standard Practice for Use of Sealants in Acoustical Applications.
 - 3. ASTM C920 Standard Specification for Elastomeric Joint Sealants.
 - 4. ASTM C1193 Standard Guide for Use of Joint Sealants.
 - 5. ASTM D1056 Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber.
 - ASTM D1667 Standard Specification for Flexible Cellular Materials-Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam).
 - ASTM D2628 Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements.
- B. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1168 Adhesive and Sealant Applications.

1.3 SUBMITTALS

- A. Section 013300 Submittal Procedures: Submittal procedures.
- B. Products Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.
- C. Manufacturer's Installation Instructions: Submit special procedures, surface preparation, and perimeter conditions requiring special attention.
- D. Warranty: Include coverage for installed sealants and accessories failing to achieve airtight and/or watertight seal, exhibit loss of adhesion or cohesion, and sealants which do not cure.

1.4 QUALIFICATIONS

A. Applicator: Company specializing in performing Work of this section with minimum three years documented experience.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Section 016000 - Product Requirements.

B. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.6 COORDINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Coordinate Work with sections referencing this section.

PART 2 GENERAL

2.1 JOINT SEALERS

- A. Exterior Sealant, except paving joints, shall be Sonolastic NP-II by Sonneborn, Dymetric by Tremco, Dynatrol 11 by Pecora, or equal.
- B. Interior sealant shall be Pecora AC-20 Acrylic, Sonolac by Sonneborn or equal.
- C. Color of sealants shall be selected from manufacturer's standards by Architect.

2.2 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D1056, sponge or expanded rubber; oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Verify substrate surfaces and joint openings are ready to receive work.
- C. Verify joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter impairing adhesion of sealant.
- B. Clean and prime joints.
- C. Perform preparation in accordance with ASTM C1193.
- D. Protect elements surrounding Work of this section from damage or disfiguration.

3.3 INSTALLATION

- A. Perform installation in accordance with ASTM C1193.
- B. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- Install bond breaker where joint backing is not used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- F. Tool joints concave.
- G. Precompressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch below adjoining surface.

3.4 CLEANING

- A. Section 017000 Execution Requirements: Final cleaning.
- B. Clean adjacent soiled surfaces.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 017000 Execution Requirements: Protecting installed construction.
- B. Protect sealants until cured.

3.6 SCHEDULE

A. Caulk and seal all joints where different materials join. The exterior is to be water and weather tight.

END OF SECTION

SECTION 099000 - PAINTING AND COATING

PART 1 GENERAL

1.1 **SUMMARY**

- A. Section includes surface preparation and field application of paints and other coatings.
- B. Related Sections:
 - Section 061000 Carpentry: field paint of existing wood cornice 1.

REFERENCES 1.2

- A. American Society for Testing and Materials:
 - ASTM D16 Standard Terminology Relating to Paint, Varnish, Lacquer, and Related Products.
 - ASTM D4442 Standard Test Methods for Direct Moisture Content Measurement 2. of Wood and Wood-Base Materials.
- B. Painting and Decorating Contractors of America:
 - PDCA Architectural Painting Specification Manual.
- C. SSPC: The Society for Protective Coatings:
 - SSPC Steel Structures Painting Manual. 1.
- D. EPA: United States Environmental Protection Agency:
 - Lead Abatement Program: Training and Certificateion Program for Lead-based Paint Activities.
- E. OSHA: United States Occupational Safety & Health Administration
 - Safety & Health Regulations for Construction / Occupational Health & 1. Environmental Controls assocated with lead exposure.

1.3 **DEFINITIONS**

A. Conform to ASTM D16 for interpretation of terms used in this section.

SUBMITTALS 1.4

- A. Section 013300 Submittal Procedures: Submittal procedures.
- B. Certification Data: Submit certification data demonstrating workers have been properly trained to safely remove lead paint.
- C. Product Data: Submit data on finishing products.
- D. Samples: Submit one complete set of manufacturers paint deck for color selection.
- E. Manufacturer's Installation Instructions: Submit special surface preparation procedures and substrate conditions requiring special attention.

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1.5 CLOSEOUT SUBMITTALS

- A. Section 017000 Execution and Closeout Requirements: Closeout procedures.
- B. Operation and Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum five years documented experience.
- B. Applicator: Company specializing in performing work of this section with minimum five years documented experience.
 - 1. Work shall conform to Federal EPA regulations associated with Lead Renovation, Repair and Painting Program.

1.7 FIELD SERVICES

- A. Bidders shall field verify existing conditions and test existing paint coatings to ensure compatibility of proposed new coatings prior to preparation of bid. Include all costs required to adjust specified coatings as appropriate for compatibility with existing conditions.
- B. Existing paint coatings have been "assumed" to contain lead. The contractor is invited to test the paint coatings to prove they are not at their option. Unless appropriate testing documentation is provided demonstrating coatings do not contain lead, all prep and painting work shall be performed with the assumption that existing coatings contain lead.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 Product Requirements: Product storage and handling requirements.
- B. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- C. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- D. Paint Materials: Store at minimum ambient temperature of 45 degrees F and maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Section 016000 Product Requirements.
- B. Do not apply materials when surface and ambient temperatures are outside temperature ranges required by paint product manufacturer.

- C. Do not apply exterior coatings during rain or snow when relative humidity is outside humidity ranges, or moisture content of surfaces exceed those required by paint product manufacturer.
- D. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- E. Minimum Application Temperature for Varnish Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.

1.10 SEQUENCING

- A. Section 011000 Summary: Work sequence.
- B. Sequence application to the following:
 - Do not apply finish coats until paintable sealant is applied.
 - 2. Back prime wood trim before installation of trim.

1.11 WARRANTY

- A. Section 017000 Execution and Closeout Requirements: Product warranties and product bonds.
- B. Furnish five-year manufacturer warranty for paints and coatings.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. PPG Industries
- B. Sherwin Williams
- C. Farrell- Calhoun
- D. Benjamin Moore
- E. Perspective-Coronado
- F. Substitutions: Section 016000 Product Requirements

2.2 MATERIALS

- A. Coatings: Ready mixed, except field catalyzed coatings. Prepare pigments:
 - 1. To a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.
 - 2. For good flow and brushing properties.
 - Capable of drying or curing free of streaks or sags.

- B. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified; commercial quality.
- C. Patching Materials: Latex filler.
- D. Fastener Head Cover Materials: Latex or Epoxy filler.

2.4 FINISHES

A. Refer to schedule at end of section for surface finish.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 013000 Administrative Requirements: Coordination and project conditions.
- B. Verify surfaces and substrate conditions are ready to receive Work as instructed by product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report conditions capable of affecting proper application.
- D. Test shop applied primer for compatibility with subsequent cover materials.
- E. Measure moisture content of surfaces using electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Plaster and Gypsum Wallboard: 12 percent.
 - 2. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.
 - 3. Interior Wood: 15 percent, measured in accordance with ASTM D4442.
 - 4. Exterior Wood: 15 percent, measured in accordance with ASTM D4442.
 - Concrete Floors: 8 percent.

3.2 PREPARATION

- A. Surface Appurtenances: Remove or mask electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
- B. Surfaces: Correct defects and clean surfaces capable of affecting work of this section. Remove or repair existing coatings exhibiting surface defects including shop applied primers and zinc coatings.
- C. Marks: Seal with shellac those which may bleed through surface finishes.
- D. Impervious Surfaces: Remove mildew by scrubbing with solution of tetra-sodium tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- E. Previously coated metal surfaces: Remove loose paint, dirt and grease, wipe clean. Apply rust inhibitor and two coats of finish paint.

- F. Exterior Wood Scheduled to Receive Paint Finish:
 - Scrape existing wood surfaces to remove loose paint. Provide drop cloths beneath all areas where loose paint is removed. Collect and properly dispose of loose paint chips.
 - Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior paintable caulking compound after prime coat has been applied.

3.3 APPLICATION

- A. Apply products in accordance with manufacturer's recommendations.
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance (min one primer and 2 finish coats: 5-6 mils wet film finish each) Apply each coat of paint slightly darker than preceding coat unless specified otherwise 0% tint in primer, 50% tint in first Finish coat and 100% tint in second or subsequent Finish coats.
- D. Sand wood and metal surfaces lightly between coats to achieve required finish.
- E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- F. Prime concealed surfaces of woodwork with primer paint.

3.4 FIELD QUALITY CONTROL

- A. Section 014000 Quality Requirements: Testing and Inspection Services.
- B. Inspect and test questionable coated areas in accordance with manufacturer's recommended method for determining thickness of applied coating.

3.5 CLEANING

- A. Section 017000 Execution Requirements: Final cleaning.
- B. Collect waste material which may constitute fire hazard, place in closed metal containers, and remove daily from site.

3.6 SCHEDULE - EXTERIOR SURFACES

- A. Steel Galvanized:
 - One coat galvanize primer Pitt-Tech Plus DTM Industrial Primer 90-712 Series
 - 2. Two coats of 100% acrylic Pitt-Tech Plus Semi-Gloss DTM Industrial Enamel 90-1210 Series
- B. Wood Painted:
 - 1. Primer: Speedhide Trim Wood Primer Flat 6-609
 - 2. Two Finish coats: Alkyd Urethane Modified Gloss Oil 6-284 series

3.6 SCHEDULE

- A. COLOR: Paint colors to match existing.
- B. The work includes, but is not necessarily limited to:
 - 1. Preparation of and new paint finish on existing and new exterior wood associated with rehabilitation of the existing cornice.

END OF SECTION