BOARD OF COMMISSIONERS

Meetings Second Tuesday

MARTIN H. MOSELEY, JR. Chairman

WALTER SMITH Vice-Chairman

BETTY C. HILL

ROY LEWIS

WADE YODER

MARCIA W. JOHNSON County Administrator



213 Persons Street Fort Valley, Georgia 31030 Phone 478-825-2535 Fax 478-825-2678

COUNTY OFFICIALS

KIM WILSON Probate Judge

JOE WILDER Clerk of Superior Court

> TERRY DEESE Sheriff

W. L. BROWN Tax Commissioner

KERRY ROOKS Coroner

LAURENS C. LEE Magistrate

ADVERTISEMENT REQUEST FOR BIDS

RFB No. 17-008 Peach County Fire Station No. 6 Roof Rehabilitation

The Peach County Board of Commissioners will be accepting Sealed Bids pertaining to the roof rehabilitation and repair at Fire Station No. 6 located on US 341 in Fort Valley, GA

Closing date for Sealed Bids responding to Request for Bid (RFB) No. 17-008, shall be September 26, 2017 @ 2:30 p.m. Bids will be opened in public without discussion September 26, 2017 @ 3:15 p.m. at the Peach County Board of Commissioners' meeting room, 213 Persons Street, Fort Valley, GA 31030. Bid amounts will not be released until the Board of Commissioners has awarded the project to the winning contractor.

A Pre-bid meeting will be held Friday, September 15, 2017 at 10:00 A.M. at Fire Station No. 6 located at 1770 Highway 341 Fort Valley, Georgia 31030. Attendance at the pre-bid meeting is not required to submit a bid, but is highly recommended.

The complete RFB package will be available by contacting, Paul Schwindler, P.E. at (478) 825-8717, Paul-schwindler@peachcounty.net, or by visiting www.peachcounty.net or www.glga.org.

Peach County reserves the right to reject all bids, to waive informalities, to re-advertise and/or to award any bid that is in the best interest of Peach County.

Mail or deliver Sealed Bids to: April Hodges Peach County Board of Commissioners ATTN: RFB # 17-008 213 Persons Street Fort Valley, GA 31030



TECHNICAL SPECIFICATIONS

SECTION 00 01 01

PEACH FIRE STATION 6 REHABILITATION PROJECT FORT VALLEY, GEORGIA RFB 17-008

AUGUST 21, 2017

ISSUED FOR:

- □ PRELIMINARY (NOT FOR CONSTRUCTION)
- **☑** BIDDING AND CONSTRUCTION (100%)

EDIFICE PROJECT #16PCGJ05RP102

SECTION 00 01 02 PROJECT DIRECTORY

Project:

Peach Fire Station 6 Rehabilitation Project 1770 U S Hwy 341 Fort Valley, GA. 31030

Owner:

Peach County Georgia 205 West Church Street, Suite 204 Fort Valley, GA. 31030

Consultant:

Edifice Consulting, Inc. P.O. Box 1060 Byron, GA. 31008

Email: jody@edifice.biz

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SECTION 00 21 16 INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 INTENT

- A. The Peach County Board of Commissioners intends to award a contract to a qualified Contractor to replace the roof rehabilitation work at Fire Station 6. The County seeks one or more companies who have extensive experience in this field. The award will be evaluated on specific criteria. Note that all criteria may not exist on all projects.
 - 1. Criteria and weighted value:

a.	Contractor History	15%
b.	Schedule	20%
c.	Similar Work	20%
d.	Past Work History With Peach County	5%
e.	Peach County Business Location	3%
f.	References	17%
g.	Warranty	20%

- B. Following the opening of bids, the following procedure will be used to determine the successful bidder:
 - 1. The County will first eliminate from consideration all bids that are not "responsive" as such term is defined as "a bid or proposal that conforms in all material respects to the requirements set forth in the invitation for bids," and will further eliminate any bid as "not responsible" to which the County does not assign an aggregate score of at least 78 under weighted evaluation factors set forth below.
 - 2. The County will deem all remaining bids to be responsive and responsible.

1.2 BID REQUIREMENTS

- A. All bidders responding to this RFB must submit a completed detailed bid.
- B. Submission of Bids:
 - 1. Sealed bids will be received in the Peach County Board of Commissioners' Office, 213 Persons Street, Fort Valley, Georgia 31030, until September 26, 2017, 2:30 p.m. local time. Bids shall be opened in public without discussion at the Board of Commissioners' meeting room, 213 Persons Street, Fort Valley, GA at 3:15 p.m., September 26, 2017, to verify completeness. Bid price amounts will not be made public until the winning Bid has been accepted by the Board of Commissioners.
 - 2. Bids may be mailed or hand delivered to Peach County Board of Commissioners Office, Attn. April Hodges, 213 Persons Street, Fort Valley, Georgia 31030.

- 3. Bids shall be opened as stated in the Owners RFB for this project.
- 4. Bid price amounts will not be made public until the winning bid has been accepted by the Board of Commissioners.
- C. Addendum and Supplement to Request - If it becomes necessary to revise any part of this RFB, or if additional data are necessary to enable an exact interpretation of provisions of this RFB, an addendum will be issued. It is the responsibility of the party submitting the Bid to ensure that they have received all addenda prior to submitting a bid. All addenda must be initialed and attached to the bid. Failure to include addenda may be ample cause for rejection of the bid as non-responsive. Addendum will be published on the Peach County web site www.peachcounty.net.
- D. Required Copies - Each firm shall submit one (1) original and three (3) copies of their bid to the County's Purchasing Department as indicated in this RFB. The original bid shall be clearly marked "ORIGINAL", in blue ink and shall contain all original signatures in blue ink. Copies of the original bid shall be clearly marked "COPY", in red ink. All original and copies of bids shall be permanently bound. Bids submitted using spring loaded clips are not considered permanently bound. Bids not bound in a permanent method or in any way that individual sheets can are not connected to adjacent sheets will be considered Non-Responsive and will not be considered.
- E. Late Bids - Late bids will be returned to party submitting the bid unopened if the RFB number, acceptance date, and Contractor's return address is shown on the container.
- F. Rights of County - The County reserves the right to accept or reject all or any part of any bid.
- G. Miscellaneous Requirements - The County will not be responsible for any expenses incurred by the Contractor in preparing and submitting a bid. All bids shall provide a straightforward, concise delineation of the Contractor's capabilities to satisfy the requirements of this RFB. Emphasis should be on completeness and clarity of content.
- Н. Peach County Public works reserves the right to waive any informalities, to reject any and all bids, to evaluate bids, to accept portions of any bids and to accept any bid, which in its opinion, may be in the best interest of the County.
- I. The County reserves the right to add to or delete from the contract after the contract has been awarded.
- J. Pre-Bid Meeting:
 - Refer to the requirements of the Owners RFB for this project. 1.

1.3 **OUESTIONS**

All questions will be submitted in writing, and shall be directed to: A.

> Attention: Paul Schwindler, P.E. Public Works Director/County Engineer Peach County Public Works Dept. 410 Old Macon Rd. Fort Valley, GA. 31030 478 285 8717 Paul-Schwindler@peachcounty.net

- B. Inquires pertaining to this request for bid must give firm or contractor name, project number, title, and acceptance date. Questions will be answered in writing and will be distributed to all firms who receive the bid and attend the mandatory pre- bid meeting, provided that all questions are received at least five (5) days in advance of the bid acceptance date. If the bidder feels a conflict exists between what is considered good roofing practice and these specifications, he/she shall state in writing all objections five days prior to submitting quotations.
- C. The county will recognize only communications with are in writing and signed. The County shall not be responsible for oral interpretations given by any County employee, representative, or others. The issuance of an addendum is the only official method whereby interpretation, clarification, or additional information can be given.

COMPETENCY OF THE BIDDER 1.4

- Contractor is experienced, as determined by Peach County, as one who has specialized in the A. installation of work similar to that required for this project
- B. The roof contractor must have been in business for 7 years, performing work of similar size, scope and complexity and submit proof of this in the submittal package, with no less than 3 relative examples.
- The roof contractor must have an Experience Modification Rating of less than 0.9 and submit C. proof of this with their bid.
- D. Peach County may make such investigations deemed necessary to determine the ability of the contractor to perform the work and ensure there is no conflict of interest as it relates to the project. The contractor shall furnish to the County any additional information and financial data for the purpose as the County may request. The data may include a detailed and up-to-date list of plant equipment and materials which contractor proposes to use, indicating which portions they already possesses and a detailed description of the method and program or work to be done.

1.5 **DISOUALIFICATION OF BIDDERS**

- A. Any one or more of the following causes may be considered sufficient for the disqualification of a Bidder and the rejection of his/her bid:
 - 1. Evidence of collusion among Bidders:
 - 2. Lack of responsibility as revealed by either financial, experience or equipment statements, as submitted;
 - 3. Lack of expertise as shown by past work, and judged from the standpoint of workmanship and performance history;
 - 4. Uncompleted work under other contracts which, in the judgment of the Owner, might hinder or prevent the prompt completion of additional work if awarded; or
 - 5. Being in arrears on existing contracts, in litigation with an Owner, or having defaulted on a previous contract.

1.6 ACCEPTANCE AND AWARD

- A. All bids shall remain valid for a period of sixty (60) days following the bid opening.
- В Upon acceptance of the winning bid by the Peach County Board of Commissioners, a contract will be negotiated and executed between the winning contractor and Peach County. No work shall commence until the contract has been signed and executed, all required forms have been completed and submitted, and a Notice to Proceed (NTP) issued by the County. A draft copy of the agreement is attached to this RFB (See Exhibit 1)
- C. A Purchase Order will be issued with the NTP. The contractor shall be paid upon submission of invoices. The invoices must conform to the prices stipulated herein for articles delivered and accepted. Invoices must show Purchase Order number. Invoices shall be submitted to:

Peach County Public Works Department Attention: Paul Schwindler, P.E. Public Works Director/County Engineer 410 Old Macon Road Fort Valley, Georgia 31030

No delivery of products or services shall become due or be accepted until a purchase order has D. been issued by Peach County.

1.7 START AND COMPLETION DATE

- Work shall begin within ten (10) days from the award of this contract, or as agreed upon by the A. parties.
- B. All work as required in these specifications and drawings shall be completed within sixty (60) days of the start date, or as agreed upon by the parties.
- C. The Contractor is responsible for supplying trained workers in proper numbers and for scheduling and laying out his/her work, so that it will be started and completed in a professional manner within the time period indicated on his/her Bid Form.

To:

Peach Fire Station 6 Rehabilitation Project RFB 17-008 Fort Valley, Georgia **Edifice Project #16PCGJ05RP102**

SECTION 00 42 00 BID FORM

To:	Peach County Public Works Department.				
	Attention: Paul Schwindler, P.E.				
	Public Works Director/County Engineer				
	410 Old Macon Road				
	Fort Valley, GA. 31030				
Proje	ject Name: Peach Fire Station 6 Rehabilitation Project, Peach County, Georgia				
Vend	or Name:				
Owne	er RFB#: RFB 17-008				
	nust meet the requirements of Owner provide RFB for this project, in addition to the requirements of the nical Specifications, and Project Diagrams.				
Bid:	Having carefully examined the Specifications entitled <u>PEACH FIRE STATION 6 REHABILITATION</u>				
PROJ	ECT and the Bid Documents and Addendum (a), as well as the Site and conditions affecting the Work,				
bidder	r hereby offers to furnish all services, labor, materials, and equipment called for by them for the entire Work,				
in acc	ordance with the aforesaid documents, for the sum of:				
	Dollars				
	Alphanumeric Price Quote (i.e. Nine Thousand Two Hundred Fifty Dollars)				
	(\$)				
	Numeric Price Quote (i.e. \$9,250.00)				

The sum listed on this page is hereinafter called the Bid. The Bid shall be the amount of the Contract Sum executed between the Owner and the Contractor.

Bidder Certification:

Certification under Oath. Under oath I certify that I am a principal or other representative of the bidder, and that I am authorized by it to execute the foregoing bid on its behalf; and further, that I am a principal person of the bidder with management responsibility for the construction for the bidder, and as such I am personally knowledgeable of all its pertinent matters. I further certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same services, materials, labor, supplies, or equipment and is in all respects fair and without collusion or fraud. Bidder and its principals understand that collusive proposing is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards. Bidder agrees to abide by all conditions of this bid.

E	BY:	
	Authorized Signature (
	Printed Name	Title
The bidder hereby acknowledg	ges receipt of the following add	enda:
Addendum No	Dated	
Addendum No	Dated	
Addendum No	Dated	
Sworn to and subscribed before	me this Day of , 20_	
Notary Public		_
My commission expires:	(SEAL)	

NOTE: THE NOTARY SEAL MUST BE APPLIED UNDER GEORGIA LAW, WHETHER OR NOT THE LAW OF THE STATE WHERE EXECUTED PERMITS OTHERWISE.

SECTION 00 72 00 GENERAL CONDITIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including RFB 17-008 and other Division 01-48 Specification Sections, and drawing diagrams, apply to this Section.
- B. Refer to Owner provided General Conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

SECTION 00 73 00 SUPPLEMENTARY CONDITIONS

PART 1 - GENERAL

1.2 RELATED DOCUMENTS

C. Drawings and general provisions of the Contract including RFB 17-008 and other Division 01-48 Specification Sections, and drawing diagrams, apply to this Section.

1.3 INTENT AND INTERPRETATION OF THE CONTRACT DOCUMENTS

- A. The intent of these specifications is to describe the materials and methods of construction required for the performance of the work.
- B. Where discrepancies exist in the contract documents, the more stringent requirement shall apply. Refer to contract documents for appropriate procedure to obtain clarifications.

1.4 **DEFINITIONS**

- A. The Owner, the Contractor and the Owner's Representative shall be indicated as such throughout these documents.
- B. The term "Contractor" is defined in the General Conditions.
- C. The term "Owner" is defined in the General Conditions.
- D. The term "Owner's Representative", or "Consultant" is Edifice Consulting Inc., Byron, GA

1.5 VERIFICATION OF DIMENSIONS AND ELEVATIONS

- A. Dimensions and elevations indicated on the drawings in reference to existing structures or utilities are the best available data obtainable but are not guaranteed by the Owner's Representative and the Owner's Representative will not be responsible for their accuracy.
- B. Before proposing on any work dependent upon the data involved, the Contractor shall field check and verify all dimensions, grades, lines, levels or other conditions of limitations at the site to avoid construction errors.
- C. If any work is performed by the Contractor or any of his/her sub-contractors prior to adequate verification or applicable data, any resulting extra cost for adjustment of work as required to conform to existing limitations, shall be assumed by the Contractor without reimbursement or compensation by the Owner.

1.6 RESPONSIBILITY FOR MEASUREMENTS AND QUANTITIES

A. The Proposing Contractor shall be solely responsible for all accuracy of all measurements and for estimating the material quantities required to satisfy these specifications.

1.7 SPECIAL PROTECTION

- B. Follow all Owner provided barricade, danger, warning and detour sign protections.
- C. In areas where fluid or liquid materials will be raised to the roof area, a protective covering shall be placed from the base of the wall extending up and over the top edge of the roof. This coverage

shall be wide enough to assure that the exterior walls do not become stained or soiled during roofing operations

1.8 HOUSEKEEPING

- Keep materials neat and orderly. A.
- B. Remove scrap, waste and debris from project area.
- C Follow all Owner and material manufacturer requirements.

1.9 CONDITION OF SITE

A. The bidders shall visit the site before submitting their bids and determine the field conditions affecting their work. In considering the bids, the Owner will assume that the bidders are aware of all items, pertinent to their work and have made allowance for same in their bids.

1.10 INSPECTION

- Where the drawings or specifications require the inspection and approval of any work in progress A. by the Owner's Representative, the Contractor shall give that Representative ample notice to allow for scheduling the inspection, which shall be made promptly to avoid delay of work. If work has progressed without the required inspections or approval by the Representative, it shall be uncovered for inspection at the Contractor's expense.
- B. Uncovering of work not originally inspected, or uncovering questioned work may be ordered by the Owner's Representative and it shall be done by the Contractor. If examination proves such work to be incorrectly done or not done in accordance with the plans and specifications, the Contractor shall bear all cost of the reexamination. If the work is proven correctly installed, all such expense shall be borne by the Owner.
- C. The roofing contractor shall notify building Owner, in writing of any defects in the substrate, and work shall not proceed until defects have been corrected.
- Do not install new roofing until all unsatisfactory conditions are corrected. Beginning work D. constitutes acceptance of conditions.
- E. Check projections, curbs, and substrates for inadequate anchorage, foreign material, moisture, or unevenness that would prevent quality and execution of new roofing system.
- F. Start of work by the roofing contractor shall imply approval of substrates and site conditions; and no claim in this respect will be considered valid in case of failure of the roofing components within the guarantee period.
- G. Noncompliance with the terms of this specification and ensuing contract can result in either the cancellation of the contract, or complete replacement of the defective areas at the Contractor's expense. In the event of cancellation, the Owner will not be obligated to compensate the Contractor for any work undertaken in a defective manner.
- H. Damages caused by water infiltration resulting from the failure of the Contractor to secure each day's work in a weather tight manner, will be corrected at the Contractor's expense. Included as damages will be all labor costs incurred by the Owner as a result of such water infiltration.

- I. The Owner will require the Owner's Representative to examine the work in progress, as well as upon completion, in order to ascertain the extent to which the materials and procedures conform to the requirements of these specifications and to the published instructions of the Manufacturer.
- J. The authorized Owner's Representative shall be responsible for:
 - Keeping the Owner informed on a periodic basis as to the progress and quality of the work:
 - 2. Calling to the attention of the Contractor those matters he/she considers to be in violation of the contract requirements;
 - 3. Reporting to the Owner any failure or refusal of the Contractor to correct unacceptable practices;
 - Conducting preliminary and subsequent job-site meetings with the Contractor's official 4. iob representative:
 - 5. Rendering any other inspection services which the Owner may designate; and
 - 6. Certifying, after completion of the work, the extent to which the Contractor has complied with these specifications as well as to the published instructions of the Manufacturing Company.
- K. The presence and activities of the Owner's Representative shall in no way relieve the Contractor of his/her contractual responsibilities.

SAFETY PRECAUTIONS 1.11

- All Owners' safety rules shall be adhered to in the execution of this work. Adequate protection A. shall be provided, to prevent burns and skin irritation, in accordance with safety requirements.
- B. Safety Requirements
 - TORCHES OR ANY TYPE OF OPEN FLAME IS NOT PERMITTED ON THIS 1. PROJECT.
 - 2. All application, material handling, and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
 - 3. Comply with federal, state, local and Owner fire and safety requirements.
 - 4. Advise Owner whenever work is expected to be hazardous to Owner employees and/or operations.
 - Maintain proper fire extinguisher within easy access whenever power tools are being 5. used.
 - 6. ALL SAFETY REQUIREMENTS OF THE OWNER MUST BE FOLLOWED. NO EXCEPTIONS WILL BE PERMITTED. SAFETY ORIENTATION MEETING REQUIRED PRIOR TO PERFORMING ANY WORK.
 - 7. THE CONTRACTOR SHALL "HOLD HARMLESS" THE DESIGN PROFESSIONAL AGAINST ANY LITIGATION ARISING FROM ANY ACCIDENTS DURING THE COURSE OF THE CONTRACT.

- The Contractor shall be responsible for guarding against fires, and shall provide suitable fire C. extinguishers conveniently located at the site.
- D. Competent operators shall be in attendance at all times equipment is in use. Materials shall be stored neatly in areas designated by the Owner and dispersed so as to present a minimum fire hazard.
- E. Loads placed on the roof at any point shall not exceed the safe load for which the roof is designed.
- F. Contractor shall conform to requirements as designated by the United States Federal Government (O.S.H.A.). Contractor shall abide by all regulations as outlined in the O.S.H.A. handbook and shall have a handbook on location at all times.
- G. Contractors hereby acknowledged that they and their workers have undergone Safety Training and shall at all times act in compliance with all NRCA recommended safety compliance rules and regulations.
- The Contractor shall properly notify all employees of conditions relating to roof areas with very Н. poor condition and which will be worked on. After such notification, the Contractor must take all necessary precautions to ensure the safety of his/her employees as well as the building personnel.

1.12 **ROOF TRAFFIC**

- After work on roof is started, no traffic will be permitted on the roof other than that necessary for A. the roofing application and inspection.
 - 1. Materials shall not be piled on the roof to the extent that design live loads are exceeded.

1.13 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Proper storage on or off the site shall be the responsibility of the roofing contractor.
- Refer to the specified requirements of Sections 01-48 of this project manual. В.

1.14 WORK SEQUENCE

- Once work is started on a roof or section, it shall continue without undue delay until that section A. is completed before starting another. The installation of flashings shall follow application of the roofing immediately.
- В. Refer to project diagrams (key plans) for sequence of roofing activities.

1.15 MISCELLANEOUS UTILITIES

- Electrical power will be furnished by the Owner for small tools only. All connections to the A. electrical system will be furnished by the Contractor.
- The Owner will furnish potable water. Any connections to the water system shall be the В responsibility of the Contractor.
- C. At the completion of the work, or when the above connections are no longer required, the Contractor shall remove all connections and leave the facilities in a condition at least as satisfactory as prior to the commencement of his/her work.
- D. The Contractor will provide toilet facilities.

- 1. The Contractor will be responsible for supplying a portable toilet on the job-site.
- 2. The Contractor's personnel are not permitted to enter the building without proper authorization from the Owner or Owner's Representative.

1.16 CHANGES OR EXTRA WORK

- The Owner may, without invalidating the original contract, order such changes or additions as may from time to time be deemed desirable. In so doing, the contract price shall be adjusted, as stated below, with all work being done under the conditions of the original contract except for such adjustments in extension of time as may be acceptable to the Owner. The value of such extra work shall be determined in one of the following ways:
 - 1. By firm price adjustment.
 - 2. By cost plus with a guaranteed maximum.
 - 3. By cost with a fixed fee.
 - 4. By unit cost.
- В. If agreement is reached that the extra cost shall be handled as per methods 2, 3, or 4, the Contractor shall keep and compile a correct amount of the cost together with such vouchers, etc., as may be necessary to substantiate same for presentation to the Owner.
- C. The Owner's Representative shall have authority to make minor job changes or additions as may be necessary to expedite the job providing such changes do not involve additional material cost.
- No major change or addition shall be made except upon receipt by the Contractor of a signed D. order from the Owner authorizing such a change. No claims for an extra to the contract price shall be valid unless so authorized.

1.17 CORRECTION OF WORK PRIOR TO FINAL PAYMENT

The Contractor shall promptly remove any work that does not meet the requirements of the plans A. and specifications or is incorrectly installed or otherwise disapproved by the Owner or the Owner's Representative as failing to meet the intent of the plans and specifications. The Contractor shall promptly replace any such work without expense to the Owner and shall bear the cost of making good all work of other contractors, or the Owner, destroyed or damaged by such removal or replacement.

CORRECTION OF WORK AFTER FINAL PAYMENT 1.18

A. The Contractor shall provide the specified warranties for this project.

DEDUCTION FOR UNCORRECTED WORK 1.19

A. If the Owner deems it unacceptable to have the Contractor correct work that has been incorrectly done, a deduction from the contract price shall be agreed upon therefore. Such a deduction from the contract price shall in no way affect the Contractor's responsibility for defects that may occur nor his/her ability for correcting them, and damage caused by them.

1.20 LIENS

A. The Contractor shall furnish the Owner with a release in full of all liens arising out of this contract or in lieu thereof, and receipts in full for all materials and labor on the job. In either case, the Contractor shall furnish an affidavit that the liens or receipts include all the labor and material for which a lien could be filed. In lieu of the above, the Contractor may at his/her option furnish a bond to indemnify the Owner against all hazards of liens. Neither part nor final payment shall in any way release the Contractor from the above obligation and in the event that part or full payment has been made and any lien remains un-discharged, the Contractor shall refund to the Owner the necessary funds to discharge such a lien including all cost and attorney's fees.

JOB CONDITIONS 1.21

- There is NO SMOKING allowed on the project property, and the Contractor shall be responsible A. for enforcement of this job rule at all times with his/her personnel.
- B. Ladders: Any ladders used on this project must be in good condition. The ladder must also be secured at the roofline at all times while in use. All ladders must be O.S.H.A. approved.
- C. No drugs or alcoholic beverages are permitted on the grounds.
- D. The Contractor shall place necessary barriers and/or protection around or under all work areas where his/her operations involve risk of injury to plant personnel.
- E. The Contractor will also protect the building structure from damage in the process of the job. In the event that damage does occur to any property or equipment, or the Owner's work in process, notification must be made within two (2) working days of the incidents to the Owner and Owner's Representative.
- F. During the progress of the job, if waste material and rubbish are found or damage resulting from the Contractor's operations is found, or the Contractor does not comply with the requirement by keeping the premises free of accumulations and correct the damage, it shall be the Owner's prerogative to hire personnel to do so; and the cost of this work will be deducted from the balance due the Contractor.
- G. The Contractor is responsible for protecting all materials from the elements. If any material becomes wet, it cannot be installed and must be replaced at the Contractor's expense. NOTE: Roofing materials must be covered with waterproof tarps at the end of each workday. Plastic wrappers supplied by the manufacturer are not acceptable substitutes for tarps. The Owner's Representative will reject any covering method or material that does not adequately protect roofing materials.
- Н. Anyone guilty of willful destruction or unlawful removal of Owner's property will be dismissed from the job and is subject to prosecution by law.
- I. The Contractor must verify that all materials can be installed to accommodate the building design, governing codes and regulations, and the manufacturer's current recommendations. In the event of a conflict the more stringent shall govern.
- J. The Contractor will ensure that all substrates are clean, dry, sound, smooth, and free of dirt, debris, and other contamination before any materials are supplied.

1.22 WORKMANSHIP

- Α. All materials will be securely fastened and placed in a watertight, neat and workmanlike manner. All workmen shall be thoroughly experienced in the particular class or work upon which they are employed. All work shall be done in accordance with these specifications and shall meet the approval of the Owner or Owner's Representative. The Contractor's representative or job supervisor shall have a complete copy of specifications and drawings on the job-site at all times.
- Contractor shall plan and conduct the operations of the work so that each section started on one В. day is complete and thoroughly protected before the close of work for that day.

WORK HOURS AND DAYS 1.23

When the Contract is awarded, the Contractor will contact the Owner's Representative to arrange A. the work schedule and the hours of the day that the workers may be on the building.

COMPLIANCE WITH LAWS 1.24

The Contractor shall give notices, pay all fees, permits and comply with all laws, ordinances, A. rules and regulations bearing on the conduct of work.

1.25 **OWNER'S RULES**

- The Contractor and all his/her personnel/agent(s) shall abide by all rules created by the Owner. A.
- B. The Contractor must contact the Owner's Representative for specific information regarding the rules governing all operations of the project.

1.26 ANTI-DISCRIMINATION IN EMPLOYMENT

A. Contractors and subcontractors shall not discriminate against any employees or applicant for employment, to be employed in performance of his/her contract, with respect to his/her hire, tenure, terms, conditions or privileges of employment because of his/her race, color, gender, sexual preference, religion, national origin, or ancestry.

FINAL INSPECTION 1.27

Upon completion of the installation, an inspection shall be made by a representative of the A. roofing manufacturer to ascertain that the roofing system has been installed according to the roofing system warrantor's published specifications and details. The warranty will be issued upon approval of the installation and payment for all materials and fees.

1.28 ADJUSTMENT AND REPAIR

A. Any roofing damaged or misapplication shall be repaired or replaced as designated by the building Owner and roofing system warrantor. Repairs or replacement will be made by the contractor at no expense to building Owner.

1.29 WITHDRAWAL OR MODIFICATION OF BID

- A. Any Bidder may withdraw their bid at any time before the scheduled closing date of the bid by appearing in person or by sending an authorized representative of the Bidder.
 - 1. An appointment should first be scheduled by calling the Owner's Representative.
 - 2. The Bidder or his/her representative shall be asked to sign, in writing that the bid was returned to him/her.
 - 3. After the withdrawal, the Proposing Contractor may submit a new bid, up to the bid date and time.

1.30 BID OPENINGS

A. Bid opening will take place at the pleasure of the Owner.

1.31 DISCREPANCIES AND ADDENDA

- A. Should a Bidder find any discrepancies in the Drawings and Specifications, or should he be in doubt as to their meaning, he/she shall notify the Owner's Representative at once, who will send a written Addendum to all Bidders concerned. Oral instructions or decisions, unless confirmed by Addenda, will not be considered valid, legal or binding.
- B. No extras will be authorized because of the Contractor's failure to include work called for in the Addenda in his/her bid.
- C. It shall be the responsibility of all Bidders to call to the Owner's Representative's attention at the pre bid meeting, any discrepancies which may exist between or with any of the contract documents, or any questions which may arise as to their true meaning.
- D. Modifications to the specifications (if necessary) will be followed by an addendum; no verbal discussions or agreements shall be recognized.

1.32 START AND COMPLETION DATE

A. As directed by the Owner.

1.33 PAYMENT

A. As directed by the Owner.

1.34 BOND REQUIREMENTS

A. As directed by the Owner.

1.35 TERMINATION BY THE OWNER FOR CAUSE

- A. The Owner may terminate the contract and finish the work by whatever reasonable method he/she deems necessary if the Contractor:
 - 1. Persistently or repeatedly refuses to supply specified materials or to provide enough skilled workers to ensure the project will be completed within the time period indicated on his/her Bid form:
 - 2. Is guilty of substantial breach of any provision of the project documents.

TAXES 1.36

A. Contractor must comply with all state, federal and local taxes. The Contractor shall accept sole and exclusive responsibility for any and all state and federal taxes with respect to Social Security, unemployment benefits, withholding taxes and sales taxes.

1.37 **BUILDING PERMITS**

A. The acquisition of the applicable permits and associated costs to obtain said permits will be the responsibility of the successful Contractor.

1.38 JOB COORDINATION

- Contractor is responsible for daily communication with the Owner or Owner's Representative A. relating to areas of roof work in order that the Owner may adequately protect tenant's personal belongings, and the people themselves against possible damage or injury. Contractor is also responsible for policing and protecting areas involving removal and replacement of roof projections, defective substrates or other work involving substrates penetration.
- B. Seventy-two hours prior to starting of the project and/or delivery of materials, the Contractor shall notify the designated Owner's Representative.

CLEAN-UP 1.39

A. Accumulated debris shall be removed periodically to assure maximum safety and sanitation at all times. At completion of work, the Contractor shall remove all excess material and debris from the site and leave all roof surfaces free from accumulations of dirt, debris and other extraneous materials. The Contractor shall also remove any and all drippage of fluid materials from the face of the buildings, floor, window, ladders and other finished surfaces.

1.40 SUPERINTENDENT

- A. The Contractor shall keep a competent non-working superintendent, satisfactory to the Owner and Owner's Representative, on the job at all times when work is in progress. The superintendent shall not be changed without notifying the Owner and the Owner's Representative.
- B. The superintendent shall attend all meetings beginning with the pre-installation meeting.
- C. The superintendent shall represent the Contractor in his/her absence and all directions and instructions given to the superintendent shall be as binding as if given directly to the Contractor.
- D. The superintendent shall be responsible for the conduct of all the Contractor's employees on the premises and shall promptly take necessary measures to correct any abuses called to his/her attention by the Owner.

ACCEPTABILITY OF COMPLETED WORK 1.41

- The acceptability of completed roofing work will be based on its conformance to the contract A. requirement.
- B. The Owner and Owner's rep are not obligated to accept non-conforming work, and such nonconforming work may be rejected.
 - The rejected work shall be promptly replaced or corrected in a manner and by methods 1. approved by the Owner's rep at the Contractor's expense.
- C. The Owner's rep will instruct the Contractor's foreman and work crew on the proper methods of installation of the roofing system, and will follow-up on a regular basis to inspect the work being done.
- D. Any deficiencies from the specified work noted by the Owner's rep will be immediately reported to the Owner, along with recommended corrective actions necessary.
- E. The Owner's rep will not act in a supervisory capacity, and will not be responsible for the Contractor's errors or omissions.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

SECTION 00 74 00 SPECIAL CONDITIONS

PART 1 - GENERAL

1.1 WORK HOURS AND DAYS

- A. The Owner offers the successful bidder site and building access Monday through Saturday between the hours of 6 a.m. and 9 p.m.
- B. Actual construction times and/or work hours must be in accordance with applicable local ordinances.

1.2 TAXES

A. Contractor must comply with all state, federal and local taxes. The Contractor shall accept sole and exclusive responsibility for any and all state and federal taxes with respect to Social Security, unemployment benefits, withholding taxes, and sales taxes.

1.3 PROJECT DELAYS

A. If delay is foreseen, the Contractor shall give immediate written notice to the Peach County Director of Public Works or a representative assigned by the Director. The Contractor must keep the County advised at all times of status of the project work.

1.4 DELIVERY FAILURE:

A. Time is of the essence. Should the Contractor fail to supply the proper materials or work at the time and place as specified, or within a reasonable period of time thereafter, or should the Contractor fail to make a timely replacement of rejected items when so requested, the County may, at its sole discretion, cancel the contract and secure another Contractor.

1.5 INSURANCE REQUIREMENTS

- A. The Contractor shall be responsible for the work and every part thereof, and for all materials, tools, equipment, appliances, and properties of any and all description used in connection therewith. The Contractor assumes all risks of direct and indirect damage or injury to the property of persons used or employed on or in connection with the work contracted for, and of all damage or injury to any person or property wherever located, resulting from any action, omission, commission or operation under the Contract, or in connection in any way whatsoever with the contracted work.
- B. The Contractor shall, during the continuance of all work under the Contract, maintain the following insurance:
- C. Worker's Compensation and Employer's Liability insurance in an amount of not less than \$500,000 each accident, and \$500,000 each disease to protect the Contractor from any liability or damages for any injuries (including death and disability) to any of its employees, volunteers, or subcontractor, including any and all liability or damage which may arise by virtue of any statute or law in force within the State of Georgia, or which may be herein after enacted.

- D. Comprehensive General Liability insurance in an amount of not less than \$1,000,000 per occurrence and \$2,000,000 policy limit to protect the Contractor, its subcontractor, and the interest of the County, against any and all injuries to third parties, including bodily injury and personal injury, wherever located, resulting from any action or operation under the Contract or in connection with the contracted work. The General Liability insurance shall also include the Broad Form Property Damage Liability endorsement, in addition to coverage for explosion, collapse, and underground hazards, where required.
- E. Business Automobile Liability insurance in an amount of not less than \$1,000,000 per occurrence and \$2,000,000 policy limit to protect the Contractor, its subcontractor, and the interest of the County, against any and all injuries to third parties, including property damage, bodily injury and personal injury, wherever located, resulting from any automobile collision or accident.
- F. Contractor shall notify the Owner, in writing, thirty (30) days prior to any change in insurance coverage, including cancellation, non-renewal, etc. The Contractor shall furnish a new certificate prior to any change or cancellation date. The failure of the Contractor to deliver a new and valid certificate shall result in suspension of all payments until the new certificate is furnished. Additionally, contract work may be suspended until the new certificate is furnished to the Owner.
- G. Insurance coverage required in these specifications shall be in force throughout the Contract term. Should the Contractor fail to provide acceptable evidence of current insurance within five (5) days of written notice at any time during the Contract term, the Owner shall have the absolute right to terminate the Contract without any further obligation to the Contractor. Further, the Contractor shall be responsible for the cost of procuring the uncompleted portion of the Contract at the time of termination. Contractual and other Liability insurance provided under this Contract shall not contain a supervision, inspection, or engineering services exclusion that would preclude the Owner from supervising and/or inspecting the project as to the end result. The Contractor shall assume all on the job responsibilities as to the control of persons directly employed by it and of the subcontractor and any persons employed by the subcontractor.
- H. The subcontractors shall comply with current Occupational Safety and Health Act requirements and amendments, as it may apply to this Contract.

1.6 ANTI-DISCRIMINATION IN EMPLOYMENT

A. Contractors and subcontractors shall not discriminate against any employees or applicant for employment, to be employed in performance of his/her contract, with respect to his/her hire, tenure, terms, conditions or privileges of employment because of his/her race, color, gender, sexual preference, religion, national origin, or ancestry.

1.7 PAYMENT

A. Payment for materials shall only be made after the material has been delivered to the job-site. A Purchase Order will be issued with the Notice to Proceed (NTP). An invoice for the material must be presented to the Owner for payment with the P.O. number indicated on the invoice. Materials are not to be delivered to the job-site until the project is ready to begin. The Contractor must provide a release of lien from the Material Manufacturer. Subsequent requests for payment can be made monthly. Invoices shall be submitted to:

Peach County Public Works Department Attention: Paul Schwindler, P.E. Public Works Director/County Engineer 410 Old Macon Road Fort Valley, Georgia 31030

- B. Final payment for the project will be made following completion, after the final inspection has been made and an invoice presented to the Owner.
- C. When the job in progress is interrupted for two (2) weeks or longer by causes beyond the Contractor's control such as a strike, weather, acts of God, etc., the Owner agrees to pay, upon request of the Contractor, a price equivalent to the percentage of work completed at that time. Regular progress payments shall be made for labor and/or materials.
- D. Each invoice shall be accompanied by a detailed estimate of the amounts and values of labor expended and materials purchased up to the last day of the preceding month.
- E. Such payments shall be viewed by both parties as progress payments and shall not in any way relieve the Contractor of performance obligations under this contract, nor shall such payments be viewed as approval or acceptance of work performed under this contract.
- F. Final payment shall be withheld until all provisions of the specifications are met, including all necessary clean-up, and the Owner receives written verification of completion.
- G. Upon completion of the job, the Owner, the Owner's Representative, and the Contractor will make final inspection of the work done, and the Owner's Representative will sign a completion slip authorizing final payments.
- H. All payments for material used in the execution of this contract can be made by a check issued jointly, payable to the Contractor and Owner's Representative if requested by Owner's Representative.
- I. If requested by the Owner and/or Owner's Representative, the Contractor shall provide a Letter of Credit from the bank to secure payment to material supplier.

- J. If requested by the Owner and/or Owner's Representative, a certified check shall be paid by the Contractor to material supplier prior to release of order.
- K. If requested by the Owner and/or Owner's Representative, a certified check shall be paid by the Contractor to material supplier via common carrier upon receipt of delivery.
- L. Contractor shall have a pre-approved line of credit from the material supplier.
- M. Final payment shall be made to the Contractor no later than thirty (30) days after job approval, providing the Contractor submits waivers of lien, and final affidavit (supplied by owner), with his/her invoice indicating that all suppliers, and sub contractors, have been paid.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

SECTION 01 11 13.07 SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Roofing work covered by the Contract Documents.
 - 2. Miscellaneous provisions.

1.3 ROOFING WORK COVERED BY CONTRACT DOCUMENTS

- A. At all roof areas and in addition to the work shown on the project diagrams:
 - 1. Remove existing roof system assembly down to the existing structure only as required to install new roof repair components, as specified.
 - 2. Prepare existing substrates to receive new component installation as specified.
 - 3. Install new metal roof repair components, as specified.
- B. Roofing repair and/or replacement will consist of, but may not be limited to the following:
 - 1. Furnishing of all labor, materials, tools and equipment and proper supervision for the roofing, sheet metal, and related work as per plans and specifications.
 - 2. Protection of the buildings, grounds, building personnel and visitors.
 - 3. Protect the building from fire while completing all of the work of this project. No exceptions.
 - 4. Maintain the building in a watertight condition during the process of performing all work under this contract.
 - 5. Removal and disposal, off Owner's property, of the existing roof system, sheet metal flashings, insulations, internal gutters, accessories, and other existing components as indicated in the Contract Documents.

1.4 MISCELLANEOUS PROVISIONS

- A. Without exception, no product or material used on the Project will contain asbestos. Contractor is responsible for providing Consultant with manufacturer's written technical data for questionable items. If installed materials are found to contain asbestos, these materials will be removed and replaced with acceptable materials at Contractor's expense.
- B. Prior to Substantial Completion, inspect, test and adjust performance of every system of the roofing Work to ensure that overall performance complies with the Project Specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

SECTION 01 31 00.07 PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination Drawings.
 - 2. Project meetings.
 - 3. Requests for Interpretation (RFI).
- B. Related Sections include the following:
 - 1. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.3 **DEFINITIONS**

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Construction Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Delivery and Processing of Submittals.
 - 4. Progress Meetings.
 - 5. Pre-installation Conferences.
 - 6. Project Closeout Activities.

1.5 PROJECT MEETINGS, GENERAL

A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

1.6 PRE-ROOFING CONFERENCE

- Approximately five (5) days prior to scheduled commencement of the built-up roofing installation A. and associated work, meet at project site with Installer, installer of each component of associated work, installers of substrates or substrate construction to receive roofing work, installers of rooftop units and other work in and around roofing which must precede or follow roofing work (including mechanical work if any), Owner, Consultant, Contractor/Roof Installer, Roof Systems Manufacturer's Technical Representative, and other representatives directly concerned with performance of the work including (where applicable) Owner's insurers, test agencies, and governing authorities.
 - ATTENDANCE OF THE ROOF INSTALLER'S PROJECT FOREMAN (DESIGATED 1. ON-SITE PROJECT SUPERINTENDENT) IS MANDATORY.
 - 2. Roof system manufacturer's representative attending the Conference must be a Technical Representative and full time employee of the roof manufacturer.
 - 3. Manufacturer Distributors, Sales Representatives, or Distributor Sales Representatives, do not comply with this requirement.
- В The pre-roofing conference is intended to clarify demolition and application requirements for work to be completed before roofing operations can begin. This would include a detailed review of the specifications, roof plans, roof substrates information, flashing details, approved shop drawings, submittal data, and samples. If conflict exists between the specifications and the Manufacturer's requirements, this shall be resolved.
- C. If this pre-roofing conference cannot be satisfactorily concluded without further inspection and investigation by any means of the parties present, it shall be reconvened at the earliest possible time to avoid delay of the work. In no case should work proceed without inspection of all roof substrates areas and substantial agreement on all points.
- D. The Consultant shall prepare a written report indicating actions taken and decisions made at this pre-roofing conference. This report shall be made a part of the project record and copies furnished the Contractor, the Owner.
- E. The contractor shall be fully prepared to address the following during the conference.
 - 1. Establish trade-related job schedules, including the installation of roof-mounted mechanical equipment.
 - 2. Establish roofing schedule and work methods that will prevent roof damage.
 - 3. Establish those areas on the job site that will be designed as work and storage areas for roofing operations.
 - 4. Establish weather and working temperature conditions to which all parties must agree.
 - 5. Establish acceptable methods of protecting the finished work if any trades must travel across or work on or above any areas of the finished roof.

- 6. Review foreseeable methods and procedure related to roofing work, including but not necessarily limited to the following:
 - a. Tour representative areas of roofing areas, inspect and discuss condition of substrate, curbs, penetrations and other preparatory work performed by other trades.
 - b. Review roofing system requirements (drawings, specifications and other contract documents).
 - c. Review required submittals, both completed and yet to be completed.
 - d. Review and finalize construction schedule related to roofing work and verify availability of materials, Installer's personnel, equipment and facilities needed to make progress and avoid delays.
 - e. Review required inspection, testing, certifying and material usage accounting procedures.
 - f. Review expected weather and forecast weather conditions, and procedures for addressing unfavorable conditions, including possibility of temporary roofing (if not a mandatory requirement).
 - g. Review roof application procedures, technique, details and roof specifics, e.g. review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
 - h. Review job specific safety requirements, safety barriers, haul routes, building access, site contact, facilities, security, etc.

1.7 PROGRESS MEETINGS

- A. Contractor and Contractors designated <u>On-Site Project Superintendent</u> is required to be present at any project progress meetings requested by the Owner and/or Consultant.
 - 1. The location, time and agenda for Progress Meetings will be set by the Owner and/or Consultant.
 - 2. Contractor shall all required personnel or representatives present, as requested by the Consultant.

1.8 REQUESTS FOR INTERPRETATION (RFI)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 - 1. RFI shall originate with Contractor. RFI submitted by entities other than Contractor will be returned with no response.
 - 2. Coordinate and submit RFI in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
 - 3. Submit to Consultant for review.

- Content of the RFI: Include a detailed, legible description of item needing interpretation and the B. following:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Contractor.
 - 4 Name of Consultant.
 - 5. RFI number, numbered sequentially.
 - 6. Specification Section number and title and related paragraphs, as appropriate.
 - 7. Diagram number and detail references, as appropriate.
 - 8. Field dimensions and conditions, as appropriate.
 - 9 Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 10. Contractor's signature.
- C. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings and other information necessary to fully describe items needing interpretation.
- Consultant's Action: Consultant will review each RFI, determine action required and return it. D. Allow seven (7) working days for Consultant's response for each RFI. RFI's received after 2:00 P.M. EDST will be considered as received the following working day.
- E. The following RFI will be returned without action:
 - 1. Requests for approval of substitutions.
 - 2. Requests for coordination information already indicated in the Contract Documents.
 - 3. Requests for adjustments in the Contract Time or the Contract Sum.
 - Requests for interpretation of Consultant's actions on submittals. 4.
 - 5. Incomplete RFI's or RFI's with numerous errors.
- F. Consultant's action may include a request for additional information, in which case Consultant's time for response will start again.
- Consultant's action on RFI's that may result in a change to the Contract Time or the Contract Sum G. may be eligible for Contractor to submit Change Bid according to Section "Contract Modification Procedures."

- H. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Consultant in writing within ten (10) days of receipt of the RFI response.
- I. On receipt of Consultant's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Consultant within seven (7) days if Contractor disagrees with response.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 01 33 24 SUBMITTALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing roofing submittals.
- B. Types of submittals include the following:
 - 1. With Bid.
 - 2. Prior to Award
 - 3. Prior to Mobilization for Work
 - 4. During Construction

1.3 INCLUDE WITH BID SUBMITTAL

A. Refer to Bid Submittal requirements in Owner provided RFB 17-008.

1.4 PROCEDURES FOR SUBMITTING THE SUBMITTALS DUE PRIOR TO AWARD AND PRIOR TO MOBILIZATION FOR WORK:

- A. Number of sets: one (1), except where noted otherwise.
- B. Provide all submittals on 8.5" X 11" paper
- C. Use a cover page to separate and clearly identify each submittal. Cover page will list job name, job number, contractor name, submittal number, and submittal title. Submittals without cover pages will be rejected, with no further review.
- D. Cause all pages of each individual submittal to be connected to the cover page.
- E. Product data sheets with multiple product listings shall have the product submitted clearly marked and otherwise identified.
- F. Multiple page submittals shall be submitted in order, as well as the entire submittal package.

1.5 SUBMITTALS PRIOR TO AWARD

- A. Due: Prior to award.
- B. Format and delivery: Do not staple, fold, spindle, bend, hole-punch, or otherwise physically alter the paper on which the submittal is printed in any way that would slow or jam a high-speed scanner. Properly package submittals to protect them during shipping. Damaged documents will be returned without review.
 - 1. Deliver hard/paper copies to Glenn Howell, Edifice Consulting Inc., P.O. Box 1060, Byron, Georgia 31008.
 - 2. Deliver electronic PDF copies by email to Glenn Howell, glenn@edifice.biz

C. Content:

- 1. Manufacturer's application manuals for all materials.
- 2. A list of subcontractors that will be utilized on the project.
- 3. Individual product identification, including material supplier's literature, product data sheets, and material safety data sheets for all products to be used on the project.
- 4. Specimen/Sample Warranty Copies: Provide one copy of each warranty listed in Section 01 61 00, Warranty Requirements, meeting all specified requirements.

1.6 SUBMITTALS PRIOR TO MOBILIZATION FOR WORK

- A. Due: Minimum five working days prior to preconstruction meeting.
- B. Format and delivery: Do not staple, fold, spindle, bend, hole-punch, or otherwise physically alter the paper on which the submittal is printed in any way that would slow or jam a high-speed scanner. Properly package submittals to protect them during shipping. Damaged documents will be returned without review.
 - 1. Deliver hard/paper copies to Glenn Howell, Edifice Consulting Inc., P.O. Box 1060, Byron, Georgia 31008.
 - 2. Deliver electronic PDF copies by email to Glenn Howell, glenn@edifice.biz

C. Content:

- 1. Any additional shop drawings requested of the bidder by the Owner, the Owner's consultant, or their representative.
- 2. Insurance certificates with The Peach County Board of Commissioners listed as additionally insured.
- 3. Sheet metal color charts.
- 4. Sealant color charts.
- 5. Contact information for manufacturers field technical representative.

1.7 SUBMITTALS DURING WORK

- A. Due: Within three (3) business days of all manufacturer site visits.
- B. Format and delivery: Electronic Adobe PDF format.
 - 1. Deliver to by email to Chuck Kilgore, chuck@edifice.biz
- C. Content:
 - 1. One (1) copy of any available roofing system manufacturer's field inspection report(s).

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

SECTION 01 40 00 QUALITY CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

A. This Section includes requirements for quality control on this project.

1.3 QUALITY CONTROL

- A. Contractor shall:
 - 1. When required, provide a payment and performance bond equal to 100% of the contract amount.
 - 2. Be experienced and well versed in:
 - i. Standing Seam Metal Roofing.
 - j. Roofing Sheet Metal.
 - 3. Be acceptable to owner.
 - 4. Have operated under the same name, without court order protection from creditors, for no less than seven years.
 - 5. Maintain the specified liability insurance.
 - 6. Meet all submittal requirements.
- B. Roofing manufacturer shall:
 - 1. Be an Associate Member in good standing with National Roofing Contractor's Association (NRCA).
 - 2. Be recognized in roofing industry.
 - 3. Be approved by owner.

1.4 SUBMITTAL REQUIREMENTS CONSTITUTE QUALITY CONTROL REQUIREMENTS

A. Submittal requirements in this project manual constitute quality control requirements for the project. Anything required as a submittal is understood to be a requirement for the project.

1.5 RANDOM SAMPLING

- A. During course of work, owner/owner's representative, may secure samples of materials being used from containers at job site and submit them to an independent laboratory for comparison to specified material.
- B. If test results prove that a material is not functionally equal to specified material:
 - 1. Contractor shall pay for all testing.
 - 2. Work will be replaced with material that meets the standard.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Comply with Quality Control, References, Specification, and Manufacturer's data. Where conflict may exist, more stringent requirements govern.
- B. Provide primary products, including each type of roofing, miscellaneous flashing materials, underlayment, and sheet metal components from a single manufacturer, which has produced that type of product successfully for not less than three (3) years. Provide secondary products (mechanical fasteners, lumber, etc.) only as recommended by manufacturer of primary products for use with roofing system specified.
- C. All flashing work will comply with SMACNA Standards, at a minimum.

PART 3 - EXECUTION

3.1 SUBMITTALS

A. Meet submittals requirements, SECTION 01 33 24, and conform to this section.

SECTION 01 61 00 WARRANTY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division Α 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section

1.2 **SUMMARY**

This Section includes project warranty requirements for specific components and systems. A.

1.3 CONTRACTOR WARRANTY

Contractor Warranty: The contractor will provide a one (1) year workmanship warranty for all A. work provided under this contract.

1.4 EXPOSED SHEET METAL FACTORY APPLIED FINISH WARRANTY

- Special Warranty on Factory Applied Finishes: Where non-mill finish exposed metal is used, A. Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Finish Warranty Periods:
 - a. 40 Year – Adhesion – no loose of adhesion including crack, check or peel.
 - 30 Year Chalking not in excess of a No. 8 rating for roof when tested b. according to ASTM 4214 method A.
 - 30 Year Fading no more than 4 Hunter units for sidewalls and 5 Hunter units c. when tested according to ASTM D-2244.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

SECTION 01 77 00.07 CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including but not limited to, the following:
 - 2. Inspection procedures.
 - 3. Warranties.
 - 4. Final cleaning.
- B. Refer to individual divisions 02-48 "Sections" for specific closeout and special cleaning requirements for the Work required in those Sections.

1.3 CLOSEOUT SUBMITTALS

- A. Close out Submittals: Two (2) copies of close out submittals of which receipt and acceptance are pre-requisites for final payment shall include, but not necessarily be limited to, the following:
 - 1. Evidence of Payments and Release of Liens.
 - 2. Contractors Warranty.
 - 3. Manufacturers Warranty.
 - 4. Final Application for Payment.

1.4 SUBSTANTIAL COMPLETION

- A. Substantial Completion is the stage in the progress of the Work of this project, when all of the Work is sufficiently complete in accordance with the Contract Documents. The Consultant makes the final determination that Substantial Completion has been achieved by issuing a written Certificate of Substantial Completion.
- B. Preliminary Procedures: Before requesting a Consultant Final Inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list and reasons why the Work is not complete.
 - 2. Prepare and submit product and system operation and maintenance manuals, any relevant project record documents, and any available or relevant Final Completion construction (as-built) drawings.

- 3. Deliver extra, unused, or leftover new materials and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
- 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools and similar elements.
- 5. Complete final cleaning requirements, including touchup painting.
- 6. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.5 CONSULTANT FINAL INSPECTION

- Inspection: Submit a written request to the Consultant for a Final Inspection for Substantial Α. Completion. On receipt of request, Consultant will either proceed with inspection or notify Contractor of unfulfilled requirements. Consultant will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Consultant that must be completed or corrected before Certificate will be issued.
- B. Consultant final inspection will take place after the manufacturer final inspection and subsequently noted deficiencies are corrected.

1.6 LIST OF INCOMPLETE ITEMS

- Preparation: Following the Final Inspection the Consultant will prepare a (punch) list of A. deficiencies and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
- B. Re-Inspection: After completion of Punch List items, submit a written request to the Consultant for re-inspection. Final Application for Payment cannot be issued until all items have been satisfactorily completed.

EVIDENCE OF PAYMENTS AND RELEASE OF LIENS 1.7

- A. Contractor shall submit:
 - 1. Contractor's Affidavit of Payment of Debts and Claims
 - 2 Contractor's Affidavit of Release of Liens
 - Consent of Surety to Final Payment.
- All submittals shall be duly executed before delivery to the Consultant. В.

FINAL ADJUSTMENT OF ACCOUNTS 1.8

- A. Submit final statement of accounting to the Consultant. Statement shall reflect all adjustments, including, but not necessarily limited to, the following:
 - 1. Original Contract Sum.
 - 2. Additions and deductions resulting from:
 - a. Previous change orders.
 - b. Other adjustments.

- c. Deductions for uncorrected work.
- d. Penalties and bonuses.
- e. Total Contract Sum, as adjusted.
- f. Previous payments.
- g. Sum remaining due.
- The Consultant will prepare final change order addressing any approved adjustment to Contract В Sum not previously made by change order.

1.9 FINAL COMPLETION

- A. Final project completion is the point where all items and activities required by the Contract Documents has been completed. The Final Completion date is determined by the Consultant.
- The following items must be submitted before Final Completion is achieved. B.
 - Submission and approval of any required specific warranties, workmanship warranties, maintenance service agreements, final certifications and similar documents.
 - 2. Submission and approval of product and system operation and maintenance manuals, any relevant project record documents, and any available or relevant Final Completion construction (as-built) drawings.

1.10 FINAL APPLICATION FOR PAYMENT

- A. Contractor shall submit final application in accordance with requirements of General and/or Supplementary Conditions, and Closeout Procedures specification sections.
- B. Final payment will not be made to contractor until Final Completion has been achieved and determined by the Consultant.

FINAL CERTIFICATE FOR PAYMENT 1.11

A. The Consultant will issue final certificate in accord with provisions of General Conditions. Should final completion be materially delayed through no fault of Contractor, the Consultant may issue a Semi-Final Certificate for Payment, in accord with provisions of General Conditions.

PART 2 - PRODUCTS

2.1 **MATERIALS**

- Α. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
- B. Use of bleach or muriatic acid is specifically prohibited for cleaning.

PART 3 - EXECUTION

3.2 FINAL CLEANING

- General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - Clean Project site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter and other foreign substances.
 - 2. Sweep paved areas broom clean. Remove petrochemical spills, stains and other foreign deposits.
 - 3. Remove tools, construction equipment, machinery and surplus material from Project site.
 - 4. Remove discarded fasteners, metal trimmings, and other construction debris from all roofs and gutters (when present).
 - 5. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 6. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - 7. Comply with safety standards for cleaning. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

SECTION 02 41 19.14 SELECTIVE ROOF DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Demolition and removal of selected portions of building, e.g. existing roof system, sheet and sheet metal flashings, etc., as indicated in the Contract documents and diagrams.

1.3 **DEFINITIONS**

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged, or removed and reinstalled.
- B. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- C. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
- D. Remove and Return: Existing items identified in the Contract documents that are to be removed and returned to the Owner
- E. Replace: Remove items of existing construction, dispose of materials off- site, unless otherwise indicated and install new material as indicated.
- F. Remediate: Perform work as specified and as shown the project diagrams.
- G. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.

1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Where noted, historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or monetary value to Owner that may be uncovered during demolition remain the property of Owner.
- C. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 FIELD CONDITIONS

- A. Owner will occupy the building during the roof removals. Should it be deemed unsafe to the building occupants during the roof removals, the Contractor will coordinate with the Owner for roof removal to take place when the building is not occupied. Otherwise, conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for proposing purpose will be maintained by Owner as far as practical.
- C. Existing site conditions are to be maintained by the Contractor during and through the completion of the project. Contractor shall restore all site conditions including landscaping, grassing, and planting to the pre-installation status upon completion of the work. Contractor shall include the furnishing of all necessary ground protection mats as necessary to protect the existing grounds during all phases of construction.
- D. Pre-demolition Photographs or Videos showing existing conditions of adjoining facilities, site improvements and building construction, including finish surfaces and equipment that might be misconstrued as damage caused by demolition and/or construction operations are recommended to be taken and submitted to the Consultant before the work of this Contract begins.
- E. Notify Consultant of discrepancies between existing conditions and diagrams before proceeding with selective demolition.
- F. Storage or sale of removed items or materials on-site is not permitted.
- G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- H. Maintain fire-protection facilities in service during selective demolition operations.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Installer of new roofing systems licensed to perform in the State or jurisdiction where Project is located.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning roof system removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination". Refer to individual Division 02-48 Sections for additional requirements.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review record documents of existing construction provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in record documents.
- C. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Consultant.
- E. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or videos.
- F. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.
- G. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.

3.2 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
- D. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
- E. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
- F. Cover and protect furniture, furnishings, and equipment that have not been removed.
- G. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
- H. Strengthen or add new supports when required during progress of selective demolition.

3.3 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Evaluate all projections and penetrations to ensure that each item is secured to the building structure. Any item not considered to be secured to the structure shall be brought to the Owners attention prior to job start, or immediately upon discovery during roofing operations.
 - 2. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 3. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 4. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 5. Remove decayed, animal-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 6. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 - 7. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 8. Dispose of demolished items and materials promptly.
 - 9. Removed and Reinstalled Items:
 - a. Clean and repair items to functional condition adequate for intended reuse.
 - 1. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 2. Protect items from damage during transport and storage.
- B. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Consultant, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.
- D. Coordinate with Owner to shut down air intake equipment in the vicinity of the work. Cover air intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.

- E. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- F. Existing Roof Drainage Components: Existing roof drainage components shall be maintained as follows until removal:
 - All existing roof drainage system components shall be cleaned and made functional prior 1. to the removal of any existing roof system materials or components.
 - 2. Prevent debris from entering or blocking roof drainage system. Contractor shall inspect and remove any construction or other debris on a daily basis to ensure roof drainage.
 - 3. If roof drainage system is temporarily blocked or unserviceable due to roofing system removal or partial installation of new roofing system, provide alternative drainage method to remove water as needed.
- G. Verify that rooftop utilities and service piping have been shut off before commencing Work.

ROOF SUBSTRATE PREPARATION 3.4

- A. Inspect substrates for new roof system components after partial tear-off of roofing system occurs.
- В. If substrates are not suitable for receiving new roofing, or if structural integrity is suspect, immediately notify Consultant.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- Roofing: Remove no more existing roofing than what can be covered in one day by new roofing Α and so that building interior remains watertight and weather-tight.
 - No roofing materials will be removed or installed under adverse weather conditions. All 1. work shall be scheduled and executed without exposing interior building areas to the effects of inclement weather. The existing building and its contents shall be protected against all reasonable risks.
 - Only as much existing roofing shall be removed and new roofing installed as can be 2. made weather-tight each day. This includes all flashing work.
 - All existing roofing materials torn-off shall be immediately removed from the site to a 3. dumping area authorized to receive such debris.
 - 4. Any unusual or concealed conditions discovered during the course of the work that may adversely affect the performance of the new roof system must be immediately reported to the Consultant. All work shall be halted until the Consultant has responded with a solution to the problem.

5. Temporary waterstops shall be installed at the end of each workday and if inclement weather conditions dictate during the course of day's work. These temporary waterstops shall be removed at the start of the next workday and disposed of properly. No temporary waterstops shall be made so as to obstruct water flow on the completed system. Polyethylene is not considered a temporary covering.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise Α. indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Collect and place demolished materials in containers.
 - 2. Do not allow demolished materials to accumulate on-site.
 - 3 Storage or sale of demolished items or materials on-site will not be permitted.
 - 4. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - Remove debris from elevated portions of building by chute, hoist, or other device that 5. will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.7 **CLEANING**

Clean adjacent structures and improvements of dust, dirt, and debris caused by selective A. demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

3.8 SELECTIVE DEMOLITION SCHEDULE

- A. Base Bid General Demolition:
 - 1. Where indicated on the project diagrams, remove existing loose, deteriorated, or damaged roofing materials and residues down to the existing metal roof system surface prior to installation of new specified roof materials.
 - Contractor to determine need for additional demolition required for base bid and include 2. in contract price.

SECTION 05 10 50 STRUCTURAL METAL RETROFIT FRAMING

PART 1 – GENERAL

1.1 RELATED SECTIONS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SECTION INCLUDES

- A. New retrofit framing for roof repair:
 - 1. The retrofit framing system shall provide support for a new metal roof system and shall accommodate the irregularities of the existing roof to form a structural framework for supporting the new metal roof panel repairs at the specified slope.
 - 2. Furnish all labor, material, tools, equipment and services for the retrofit framing system as indicated, in accord with the provisions of the contract documents.
 - 3. The contractor will provide all components required for a complete single-supplier system including base members, clips, purlins, purlin supports, bracing and structural member-to-member fasteners as well as panels, panel clips.

1.3 **OUALITY ASSURANCE**

- A. Applicable Standards: All following referenced publications shall be the most current edition in effect on the date of solicitation.
 - 1. American Institute of Steel Construction (AISC)
 - a. AISC Specification for Structural Steel for Buildings
 - 2. American Iron and Steel Institute (AISI)
 - a. AISI CF00-01 A Design Guide for Standing Seam Roof Panels
 - b. AISI CF97-01 A Guide for Designing with Standing Seam Roof Panels.
 - c. AISI "Cold Form Steel Design Manual"
 - 3. American Society of Civil Engineers (ASCE)
 - a. ASCE-7 Minimum Design Loads for Buildings and other Structures
 - 4. American Society for Testing and Materials (ASTM) (As Applicable)
 - a. ASTM A 36/A 36M Structural Steel
 - b. ASTM A 307 Steel Bolts and Studs
 - c. ASTM A 446 Steel Sheet, Zinc Coated (Galvanized) By The Hot-Dip Process
 - d. ASTM A 525/A 525M Steel Sheet, Zinc-Coated by the Hot-Dip Method

- e. ASTM A 529/A 529M Structural Steel with 42 KSI Minimum Yield Point
- f. ASTM A 1101 Steel Sheet and Strip, Carbon, Hot-Rolled
- g. ASTM A 653/A 653M Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy - Coated (Galvannealed) By Hot-Dip Method
- h. ASTM E 1514 –Structural Standing Seam Steel Roof Panel Systems.
- ASTM E 1592 Structural Performance Test for Metal Panel and Siding Systems by Uniform Static Air Pressure Difference
- j. ASTM A792 Specification for Galvalume Coated Steel
- 5. Underwriters Laboratories, Inc. (UL)
 - a. UL 580 Tests for Uplift Resistance of Roof Assemblies
- B. Manufacturers Qualifications
 - Manufacturer of the retrofit framing system shall be experienced in fabricating complete single-supplier metal roof systems of similar size and scope to this project for a minimum of five (10) years.

1.4 **DESIGN REQUIREMENTS**

- A. **Building Code**
 - 1. The work shall be in compliance with current state and local codes and per the current edition of ASCE-7 as applicable.

1.5 **DELIVERY AND STORAGE**

Materials shall be delivered to the site in a dry and undamaged condition and stored out of contact A. with the ground. Materials shall be covered with weathertight coverings and kept dry.

PART 2 – PRODUCTS

2.1 APPROVED MANUFACTURERS

- A. The retrofit framing and metal roof panel components shall be as manufactured by the following:
 - McElroy Metal Inc. 1.
 - 2. Peterson Aluminum Company

2.2 FRAMING SYSTEM COMPONENTS

- A. The retrofit framing shall consist of the following components:
 - 1. 22 gage steel zee.
 - 2. 18 gage eave strut extension.
 - 3. 18 gage backer plate.

2.3 **MATERIALS**

- Steel sheet for roll-formed or press-broke members of the gage indicated herein, conforming to A. ASTM A 1011 and minimum yield strength 55,000 PSI.
- В. Structural shapes if required for special conditions shall conform to ASTM A 36 and minimum yield strength of 36,000 PSI.
- Cold form steel framing system members of the minimum gages indicated herein shall have a C. protective shop primer coating conforming to FS TT-P-646 with base steel prepared in accordance with SSPC-SP10.
- D. Supply all hardware items required for installation of retrofit framing system in accordance with manufacturer's installation instructions and other indicated items.

MISCELLANEOUS PRODUCTS 2.4

- A. Fasteners And Anchors
 - 1. Anchors used for the attachment of the new retrofit framing system to the existing roof structural support system shall be of the type and size that is appropriate for secure attachment to satisfy the required wind uplift pressure values at each location, as specified by the retrofit system manufacturer. All anchors shall attach directly into existing structural members.
 - 2. Fasteners used for the retrofit framing system shall be a minimum 1/4" diameter with 14 threads per inch having a stress relief head and a corrosion resistant coating.

B. **Anchor Penetration Sealant**

1. Temporary construction sealant shall be used at each anchor penetration at attachment locations of the new retrofit framing system to the existing roof structural support system. The Installer shall select the appropriate sealant type that is compatible with the existing roof membrane, which will provide a leak-free condition throughout the erection of the framing and the completion of the metal roof panel system installation. The installing contractor is responsible for any and all leaks including damage to the building contents.

PART 3 – EXECUTION

3.1 FRAMING SYSTEM INSTALLATION

A. General

- 1. Installation shall be as specified and in accordance with the requirements of this specification section.
- Install the retrofit framing system with consistency and erected without waves, warpage, 2. buckles, fastening stresses or other distortion. Every care should be taken in the installation of the retrofit framing to minimize oil canning in the new metal roof panel components.
- 3. Field cutting of framing members shall be done in a safe manner preventing damage to the existing roof or adjacent materials.
- 4. Dissimilar materials that are not compatible when contacting each other shall be insulated from each other by means of gaskets, underlayments, separation layers, or insulating compounds.

3.2 **CLEAN UP**

The Contractor shall protect installed products from damage by subsequent construction activities A. until final acceptance. The contractor shall collect and dispose of all framing system cuttings and debris including unused anchors, framing fasteners, sealant and associated material from the jobsite.

SECTION 07 41 14 METAL ROOF REPAIR COMPONENTS

PART 1 - GENERAL

1.1 RELATED SECTIONS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SECTION INCLUDES

A. Metal roofing panels, trim, and accessories.

1.3 QUALITY ASSURANCE

- A. Applicable Standards: All following referenced publications shall be the most current edition in effect on the date of solicitation.
 - 1. American Institute of Steel Construction (AISC)
 - a. AISC Specification for Structural Steel for Buildings
 - 2. American Iron and Steel Institute (AISI)
 - a. AISI CF00-01 A Design Guide for Standing Seam Roof Panels
 - b. AISI CF97-01 A Guide for Designing with Standing Seam Roof Panels.
 - c. AISI "Cold Form Steel Design Manual"
 - 3. American Society of Civil Engineers (ASCE)
 - a. ASCE-7 Minimum Design Loads for Buildings and other Structures
 - 4. American Society for Testing and Materials (ASTM) (As Applicable)
 - a. ASTM A 36/A 36M Structural Steel
 - b. ASTM A 307 Steel Bolts and Studs
 - c. ASTM A 446 Steel Sheet, Zinc Coated (Galvanized) By The Hot-Dip Process
 - d. ASTM A 525/A 525M Steel Sheet, Zinc-Coated by the Hot-Dip Method
 - e. ASTM A 529/A 529M Structural Steel with 42 KSI Minimum Yield Point
 - f. ASTM A 1101 Steel Sheet and Strip, Carbon, Hot-Rolled
 - g. ASTM A 653/A 653M Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) By Hot-Dip Method
 - h. ASTM E 1514 Structural Standing Seam Steel Roof Panel Systems.
 - i. ASTM E 1592 Structural Performance Test for Metal Panel and Siding Systems by Uniform Static Air Pressure Difference

- j. ASTM A792 Specification for Galvalume Coated Steel
- 5. Underwriters Laboratories, Inc. (UL)
 - a. UL 580 Tests for Uplift Resistance of Roof Assemblies
- B. Manufacturers Qualifications
 - Manufacturer of components, trim, and accessories, shall be experienced in fabricating 1 complete single-supplier metal roof systems of similar size and scope to this project for a minimum of five (10) years.

1.4 **DESIGN REQUIREMENTS**

- **Building Code** A.
 - The work shall be in compliance with current state and local codes and per the current edition of ASCE-7 as applicable.

1.5 **DELIVERY, STORAGE AND HANDLING**

- Deliver components to jobsite properly packaged to provide protection against transportation A. damage. Panels too long to ship Panels shall be site formed onto the roof by factory personnel using factory roll forming equipment.
- Exercise care in unloading, storing and erecting components to prevent bending, warping, В. twisting, and surface damage.
- C. Store all material and accessories above ground on well-skidded platforms. Store under waterproof covering. Provide proper ventilation to panels to prevent condensation build-up between each panel.
- Remove from site panels, which are damaged, or become water-stained during storage and D. handling. Remove, and replace materials, which are installed damage, or stained.

1.6 **DESIGN AND PERFORMANCE CRITERIA**

- Α. Provide sheet metal components, which have been manufactured, fabricated and installed to withstand structural and thermal movement, wind loading and weather exposure to maintain manufacturer's performance criteria without defects, damage, failure or infiltration of water.
- B. Roof components and trim attachments will satisfy the requirements of the roof design.

1.7 **COORDINATION**

Coordinate Work to minimize foot traffic and construction activity on installed finished surfaces. A.

1.8 FIELD VERIFICATION

Α. Field Measurements: Prior to fabrication of components, take field measurements of structure or substrates to receive panel system. Allow for trimming panel units, where final dimensions cannot be established prior to fabrication.

PART 2 - PRODUCTS

2.1 COMPONENT MANUFACTURERS

- Basis of Design: Materials by McElroy Metal Inc., or Peterson Aluminum Company, meeting all A. of the requirements or this project manual.
 - 1. Requests for approved equals must be submitted in accordance with project requirements. Voluntary alternates will not be considered. Substitutions or approved equals will not be permitted after the bid date of this project.

COMPONENT MATERIALS 2.2

- Metal Trim: A.
 - Refer to project diagrams for metal types and gages. 1.
 - 2. Color and metal type to match existing.
- B. Component Clip Screws: Provide screw as required for wind uplift rating requirements for application, with corrosion-resistant coating, in length necessary to penetrate substrates minimum 3/4 inch., as supplied by roof panel manufacturer.
- C. Component Clips: Galvanized steel, one-piece, designed to hold the new roof component, allow roof panel thermal movement, and meeting wind uplift requirements of this section.
- D. Trim and flashing will be of the same gage and finish unless approved otherwise by the metal roof system manufacturer.
 - Ridge closures, consisting of metal channel surrounding factory precut closed cell foam, will not be secured through the field of the existing roof panels.
- E Closures: Provide standard metal and foam panel closures as supplied by approved components manufacturer.
- Concealed supports, angles, plates, accessories and brackets in gage as shown on the project F. diagrams.
- G. Accessory Screw: Size and screw type with prefinished hex washer head in color to match panels where exposed to view.
- H. Rivets: full stainless steel, including mandrel, in size to match application.

- Field Sealant: Color coordinated primerless silicone, or high-grade, non-drying butyl, as supplied I. by approved metal system manufacturer.
- J. Sealant Tape: non-drying, 100 percent solids, high-grade butyl tape, as supplied by panel manufacturer, in sizes to match application.
- K. Flexible Membrane: Provide flexible sheet membrane, as recommended by approved system manufacturer for compliance with specified roof system warranty requirements.

PART 3 - EXECUTION

3.1 **EXAMINATION**

- Site Verification of Conditions: Verify substrate conditions, which have been previously installed A. under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Verification of Conditions:
 - a. Panel support systems are ready for construction activities of this section and within specified tolerances.
 - b. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
- B. Coordination: Coordinate metal roofing with other work, drainage, flashing and trim, deck substrates, parapets, copings, walls, and other adjoining work to provide a noncorrosive and leakproof installation.
- C. Dissimilar Metals: Prevent galvanic action of dissimilar metals.

3.2 INSTALLATION OF COMPONENTS TRIM AND ACCESSORIES

- A. Install components in continuous lengths, without end laps.
- B. Do not install components damaged by shipment or handling.
- \mathbf{C} Install intermittent clips with bearing plates and continuous clips according to pattern required for wind uplift performance.
- D. Fix components at location depicted on reviewed shop drawing(s).
- E. Allow for 1-inch component clearance at penetrations.
- F. Install concealed supports, angles and brackets to form complete assemblies.
- G. Remove component protective film prior to extended exposure to sunlight, heat, and other weather elements.
- Η. Field-apply sealant tape and gun-grade sealant airtight, waterproof installation.
- I Ensure sealant beads and tape are applied prior to sheet metal installation to achieve a concealed bead. Neatly trim exposed portions of sealant without damaging component finish.

J. Install sheet metal flashings according to manufacturer's recommendations, reviewed shop drawings and in accordance with provision of Section 07 62 00, Sheet Metal Flashing And Trim.

3.3 CLEANING

- A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.
 - 1. Remove strippable coating and perform dry wipe-down cleaning of panels as erected.

3.4 PROTECTION

- A. Protection: Protect installed product's finish surfaces from damage during construction:
- B. Protect installed products from damage by subsequent construction activities.
- C. Replace products having damage other than minor finish damage.
- D. Repair products having minor damage to finish in accordance with panel manufacturer's recommendations.
- E. Architect shall be sole judge of acceptability of repair to damaged finishes; replace products having rejected repairs.

SECTION 07 62 00 SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Diagrams, Key Plans, and provisions of the Contract Documents including RFB 17-008, Division 00 Procurement and Contracting Requirements, and other Division 01-48 specification sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Formed sheet metal fabrications.

1.3 COORDINATION

- A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.
- B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leak-proof, secure, and noncorrosive installation.

1.4 **QUALITY ASSURANCE**

A. Fabricator Qualifications: Employ skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful inservice performance.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver sheet metal flashing materials and fabrications undamaged. Protect sheet metal flashing and trim materials and fabrications during transportation and handling.
- B. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage.
- C. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to extent necessary for period of sheet metal flashing and trim installation

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. System and components shall comply with applicable state International Building Code (IBC) requirements including ANSI-SPRI/ES-1.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
- E. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.2 SHEET METALS

A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.

2.3 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated
- B. Fasteners: Self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
- C. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
 - 1. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
 - 2. Blind Fasteners: High-strength aluminum or stainless steel rivets suitable for metal being fastened.
- D. Fasteners for Zinc-Coated (Galvanized) Aluminum-Zinc Alloy-Coated Steel Sheet: Series 300 stainless.
- E. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape
 - 1. 2-inch wide, and 1/8-inch thick.

- F. Polyurethane Elastomeric Sealant: Sonneborn NP-1
- G. Silicone Elastomeric Sealant: Dow 795
- H. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.

2.4 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.
 - 1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
 - 2. Obtain field measurements for accurate fit before shop fabrication.
 - 3. Form sheet metal flashing and trim to fit substrates without excessive oil canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.
 - 4. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4-inch in 20-feet on slope and location lines indicated on Drawings and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- C. Expansion Provisions: Form metal for thermal expansion of exposed flashing and trim.
 - 1. Use lapped expansion joint unless otherwise shown.
 - 2. Form expansion joints of intermeshing hooked flanges, not less than 1-inch deep, filled with butyl sealant concealed within joints as indicated on the drawings.
- D. Sealant Joints: Where movable, non expansion-type joints are required; form metal to provide for proper installation of elastomeric sealant according to cited sheet metal standard.
 - 1. Fabricate cleats and attachment devices from galvanized steel as indicated minimum 20-gauge.
- E. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use, rivet joints where necessary for strength.
 - 1. Do not use graphite pencils to mark metal surfaces.

2.5 ROOF SHEET METAL FABRICATIONS

- A. Miscellaneous Sheet Metal:
 - 1. Fabricate from the following materials:
 - a. Refer to to project diagrams for metal type and gage
 - b. Finish color to match existing roof.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, substrate, and other conditions affecting performance of the Work.
 - 1. Verify compliance with requirements for installation tolerances of substrates.
 - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
 - 3. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Apply in shingle fashion to shed water, with lapped and taped joints of not less than 2-inches.

3.2 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 - 1. Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
 - 2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 - 3. Install continuous cleats spaced not more than 1-inch apart. Anchor each cleat with fasteners through the vertical leg face at 12-inches on center.
 - 4. Install exposed sheet metal flashing and trim without excessive oil canning, and free of buckling and tool marks.
 - 5. Torch cutting of sheet metal flashing and trim is not permitted.
 - 6. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Where dissimilar metals contact each other, or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.

- C. Bed flanges in approved sealant where required for waterproof performance.
- D. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at maximum of 10-feet with no joints allowed within 24-inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges not less than 1-inch deep, filled with elastomeric sealant concealed within the joints.
- E. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
- F. Seal joints as required for watertight construction.
- G. Use sealant-filled joints unless otherwise indicated. Embed hooked flanges of joint members not less than 1-inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.
- H. Prepare joints and apply sealants to comply with sealant manufacturer requirements.
- I. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets with solder to width of 1-1/2-inches; however, reduce pre-tinning where pre-tinned surface would show in completed Work.
 - 1. Do not solder metallic-coated steel and aluminum sheet.
 - 2. Do not pre-tin zinc-tin alloy-coated stainless steel
 - 3. Do not use torches for soldering.
 - 4. Heat surfaces to receive solder, and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.

3.3 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements, NRCA's "Roofing and Waterproofing Manual" and "SMACNA's Manual.". Provide concealed fasteners where possible, and set units true to line, levels, and slopes. Install work with laps, joints, and seams that are permanently watertight and weather resistant.
- B. Counterflashing: Coordinate installation of counter-flashing with installation of base flashing. Insert counter-flashing in reglets or receivers and fit tightly to base flashing. Extend counter-flashing 4-inches over base flashing. Lap counter-flashing joints minimum of 4-inches. Secure in waterproof manner by means of snap-in installation and sealant or lead wedges and sealant; interlocking folded seam or blind rivets and sealant as indicated.

3.4 WALL FLASHING INSTALLATION

A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to cited SMACNA sheet metal standard unless otherwise indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.

3.5 INSTALLATION TOLERANCES

A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4-inch in 20-feet on slope and location lines indicated on Drawings and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.6 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder. Clean off excess sealants.
- C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturers written installation instructions. On completion of sheet metal flashing and trim installation, remove unused materials and clean finished surfaces as recommended by sheet metal flashing and trim manufacturer. Maintain sheet metal flashing and trim in clean condition during construction.
- D. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.



PROJECT DIAGRAMS

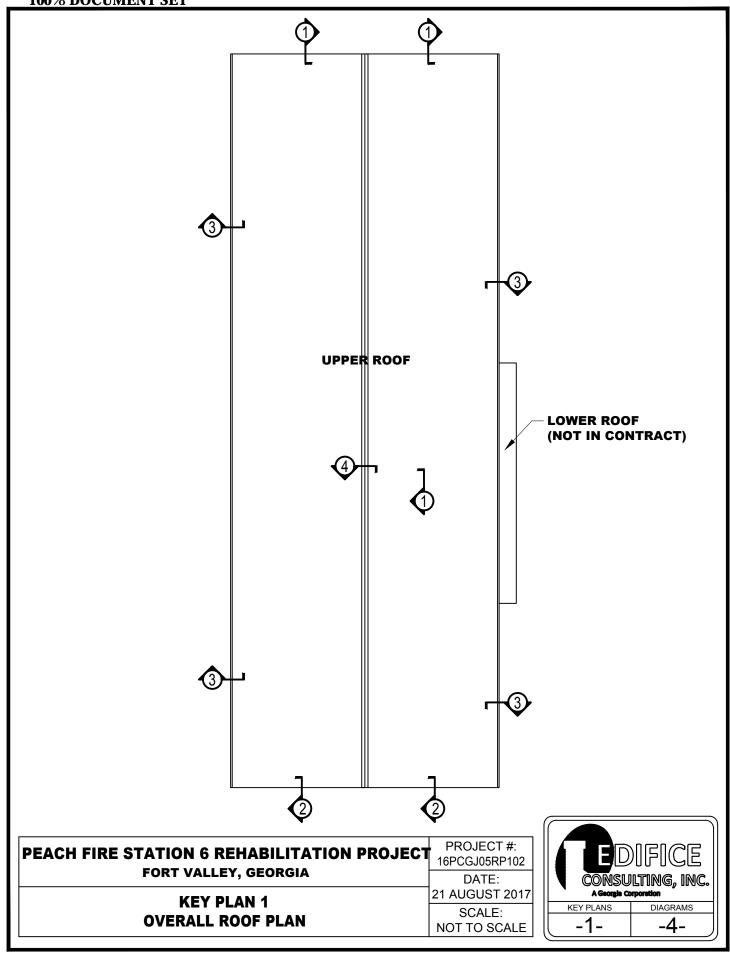
PEACH FIRE STATION 6 REHABILITATION PROJECT FORT VALLEY, GEORGIA RFB 17-008

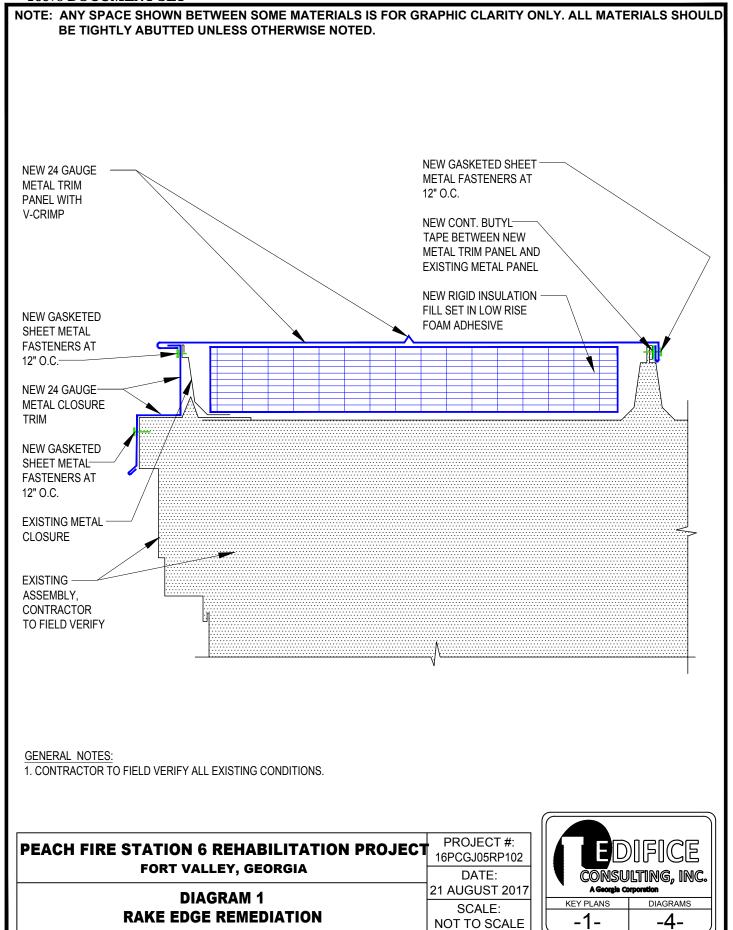
AUGUST 21, 2017

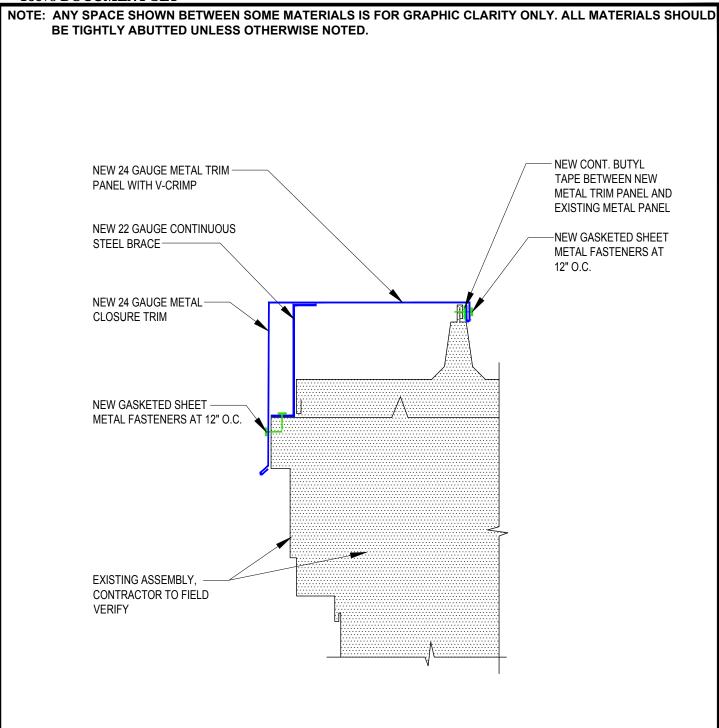
ISSUED FOR:

- □ PRELIMINARY (NOT FOR CONSTRUCTION)
- **☑** BIDDING AND CONSTRUCTION (100%)

EDIFICE PROJECT #16PCGJ05RP102





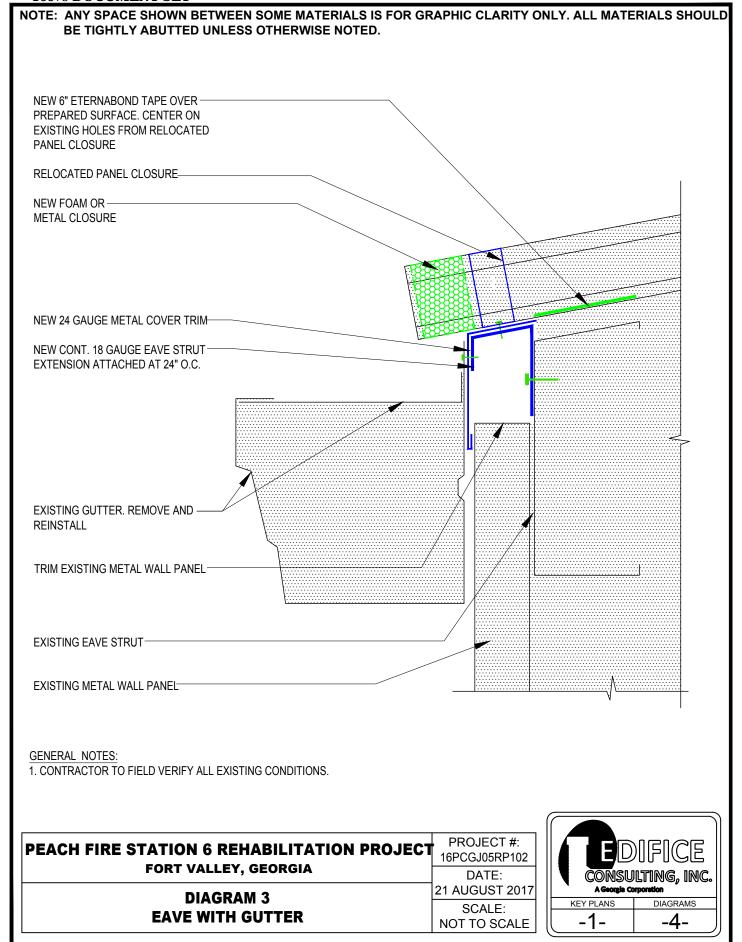


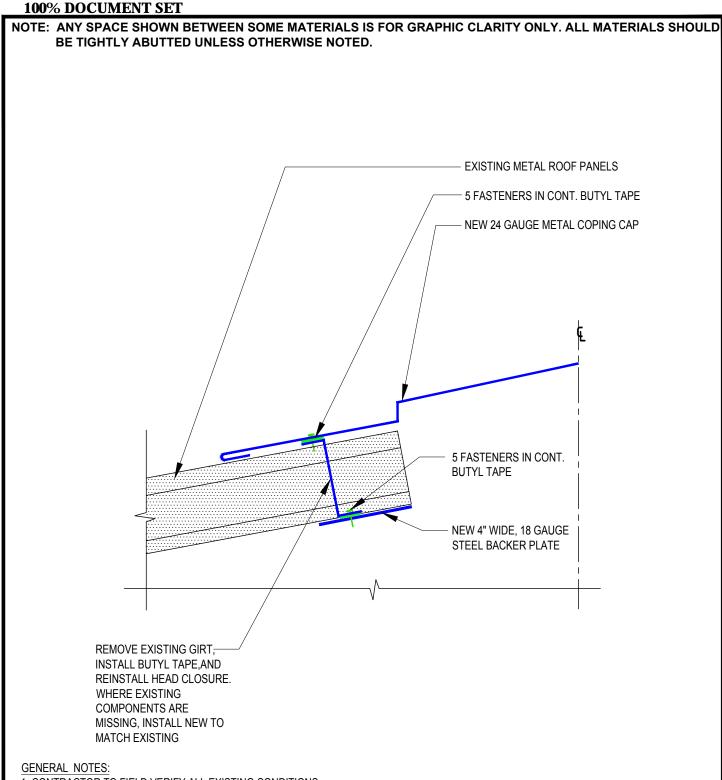
GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS.

PEACH FIRE STATION 6 REHABILITATION PROJECT	PROJECT #:
	16PCGJ05RP102
FORT VALLEY, GEORGIA	DATE:
DIAGRAM 2	21 AUGUST 2017
	SCALE:
RAKE EDGE REMEDIATION	NOT TO SCALE







1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS.

PEACH FIRE STATION 6 REHABILITATION PROJECT	. 16
FORT VALLEY, GEORGIA	21
DIAGRAM 4 RIDGE AND HEAD CLOSURE REMEDIATION	N/

PROJECT #:
16PCGJ05RP102
DATE:
21 AUGUST 2017
SCALE:
NOT TO SCALE

