SHAFER | ZAHNER | ZAHNER
OFFICE OF ARCHITECTURE

September 7, 2023
GS# 320-092, PEARL PROB. & PAROLE RE-ROOF
Department of Corrections, Pearl, MS

Addendum No. 1

This Addendum forms part of the Contract Documents for the above referenced project. All other requirements of the original Contract Documents shall remain in effect except as specifically modified in this Addendum. Bidder is to acknowledge receipt of this Addendum with their bid proposal. Failure to do so may subject the Bidder to disqualification. This Addendum is issued to all known Plan Holders.

1. A Pre-Bid Meeting was held on August 29, 2023. See this addendum for resolution of questions asked and other information discussed at this meeting. See the Pre-Bid Conference Meeting Minutes, sign-in sheet and discussion points attached. The Pre-Bid minutes and discussion points are included as part of this addendum. The attached **Discussion Points and Pre-Bid Conference Meeting Minutes** contain many of the requirements for this project. The contractor will be responsible for adhering to these and all rules associated with this facility and MDOC.
2. See the attached BOB Instructions to Bidders that were discussed and will be included in this addendum.
3. See the attached Magic Instructions to Bidders for electronic bidding requirements to be included as part of this addendum.
4. See the attached Staging and Access Points diagram for allowable storage/staging and access points as part of this addendum. Fencing and site repair requirements will apply to these and all other areas used.
5. See the attached specification section 075419 Induction Welded Membrane Roofing Systems. This will now be the required roofing system for this project. Remove specification Section 07550 Modified Bituminous Sheet Roofing. See all other notes listed below.

Drawings and Specifications: The following General Notes shall apply to all drawings and specification sections:

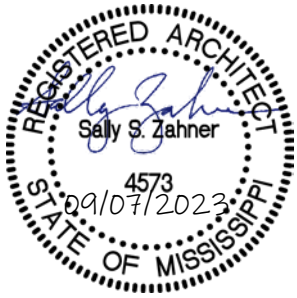
6. **See attached Drawing A201 that will take the place of sheet A201 in the previously issued drawing set. The following changes will apply to this and all other drawing sheets.**
7. **The roof system will now be a retrofit type of roof system over the existing metal building roof system. All references to a modified bitumen roof system (membranes flashing, etc.) will now be replaced by the new roofing system described in the specification section in Addendum #1.**
    a. **The existing roofing system is to be removed down to the metal roof panels. New flute fillers and High Density Polyisocyanurate are to be installed.**
    b. **A RhinoBond (or equal by the roof membrane manufacturer) type of induction plate system is to be installed with attachment to the existing purlins.**
    c. **A new single ply roof is to be installed per the new specifications that are included in Addendum #1**
8. **See Addendum #1 for the new roof membrane specification.**
9. **Note that the new flat Polyisocyanurate insulation is to be a High Density (HD) type with a minimum of 80 PSI compressive strength.**

510 University Drive ●Starkville, Mississippi 39759 ●662.323.1628 **T** ● info@szzarch.com **E**
A LIMITED LIABILITY CORPORATION

10. **Note that the flute filler insulation is to be 1.5 lb. EPS or polyisocyanurate.**
11. **All of the existing ridge vents on both the upper and lower roofs are to be removed and disposed of, these vents are no longer needed. The areas in the ridge cap where the vents are removed are to be infilled with bent metal building roofing with a profile to match the existing roof panels for a flush and properly supported condition. The roofing system is then to be installed over the ridge.**
12. **See the reissued drawing A201 for changes in the parapet detail and new through wall scuppers. Note that the new detail calls for infilling the existing integral gutter, creating new through wall scuppers and installing new collector heads and downspouts (verify locations). The scupper openings are to be 8" x8" minimum. New crickets will be installed between the new through wall scuppers. The exterior of the new scupper is to have a prefinished metal, 1-1/2" "picture frame" type flange around the perimeter in a color that reasonably matches the existing brick. The existing PVC drain outlets at grade will cut flush with the brick face and capped with a square piece of prefinished metal to match the brick color reasonably closely. The metal shall have hemmed edges and be attached to the brick with drive pins.**
13. **New PVC condensate lines are to be run from each mechanical unit to the nearest scupper.**
14. **There is a cable draped across the upper roof. This cable serves a camera that is no longer used. The cable is to be removed.**

Contents: This addendum consists of **23** (8 ½" x 11") sheets and **1** (24" x 36") sheet.

End of Addendum No. for: GS# 320-092, PEARL PROB. & PAROLE RE-ROOF, Department of Corrections, Pearl, MS



510 University Drive ●Starkville, Mississippi 39759 ●662.323.1628 **T** ● info@szzarch.com **E**
A LIMITED LIABILITY CORPORATION

SHAFER ZAHNER ZAHNER
OFFICE OF ARCHITECTURE

GS# 320-092
Pearl Prob. & Parole Re-Roof Pre-Bid Meeting August 29, 2023 @ 10:00 am
Mississippi Department of Corrections, Pearl, MS

Project Contacts:
Mr. Barney Poole, Deputy Administrator for Facilities – MDOC
Mr. Heith Newman, Project Manager - BOB
Scott Comish, Project Manager – Shafer-Zahner-Zanher

Bid Date: Tuesday, September 12, 2023 @ 2:00:00 pm @ the Bureau of Building, Grounds and Real Property Management (see ***Advertisement For Bids, Section 00 11000*** for official information). Official Time is by the Bureau of Building. See Advertisement for RFx # if you are bidding electronically.

Meeting Attendees: See attached sign in sheet.

Current Bidders List: 8 General Contractors (currently), see sign-in sheet for meeting attendees
If you are a sub-contractor looking for GC's contact our office for a current list

Construction days: **150** days for project (see *Proposal Form*)
Notice to Proceed – by BOB. Must hold price per specifications.

Contract Administration: Architects will be on site regularly once construction begins. Using Agency and BOB construction administrators will also visit regularly.

Construction Progress Meetings held monthly as required by Division 1.

Commissioning- none on this project.

Construction Access: Discuss: weekends, Sunday work, holidays, etc. **Weekend work allowed with prior permission, parking permits.**
Restricted "no work" days due to events:

Staging Areas/Fencing/Access – Discuss: **Discuss/outline this area**

Protection of interior (responsibility of the Contractor, see specs.) **Note that the contractor is responsible for protecting all interior finishes and materials.**

Scope of work: Discuss: In general, the entire building receives new New roofing. See parapet detail, metal on all parapet caps, all termination bars covered with prefinished metal counterflashing. See drawings for complete definition.

Bidding rules: Pay attention to *Instructions To Bidders*. See Bidders Checklist.
Pay particular attention to Special Conditions

BOB is the owner- Contract is between BOB and Contractor.

Common mistakes: -Certificate of Responsibility number on envelope.
-Any changes to bid on outside of envelope. Initial and date.
-Acknowledge addenda.

SHAFER | ZAHNER | ZAHNER
OFFICE OF ARCHITECTURE

GS# 320-092
PEARL PROB. & PAROLE RE-ROOF
MISSISSIPPI DEPARTMENT OF CORRECTIONS **Pre-Bid Meeting 8/29/2023**

Discussion points/Meeting Minutes:

- The building will be fully occupied.
- Buildings must be weatherproof at all times.
- All interior and exterior finishes must be protected.
- Details were developed by using on site observation, some conditions are assumed. Variation may exist in the details and actual conditions, contractor to coordinate.
- Although this is a public building, it also has a correctional department component so Special Conditions apply. **NCIC background checks will not be required.**

Scope of Work:

- Reroof all roofs areas.
- See drawings/specifications for complete description of work.
- Complete tear off, new insulation, cover board and ~~**2 ply mod bit. Veral (foil faced) vertical flashing (at curbs and walls).**~~ New prefinished metal. Protect all existing weeps.
- All termination bars are to be covered with prefinished metal flashing/counter flashing.
- Any abandoned equipment and penetrations it should be identified and be marked by Owner. Any abandoned equipment is to be removed and deck infilled.
- The Contractor will be responsible for locating all underground utilities and protecting them during construction.
- All samples were tested as being negative for asbestos. Asbestos Report is in the Specifications.
- Insulation is flat, 2" insulation (total of flute filler and polyisocyanurate) the slope is in the deck (the existing slope is in the structure). ~~**The ¾" per foot slope requires the modified bitumen sheets to be "back nailed" to physically restrain the sheets. This is detailed, see 5/A203.**~~ Follow the selected manufacturer's instructions.
- Remove existing metal wall panels at interior of parapet walls and replace/install new 3/4" exterior grade plywood- add blocking as needed for attachment. See details
- ~~**Foil faced modified bitumen**~~ New wall flashing is to extend full heigh up to the new metal parapet cap for a continuous roof membrane condition. **See New Detail in Addendum #1.**
- We are utilizing the existing (assumed to be through wall) flashing at the low roof to wall connection. We will therefore keep the same configuration while installing a new termination bar and counterflashing attached to the existing through wall flashing. See details 2&4 on A203.
- (2) new ladders. Ladder @ grade to include a 6'-0" high security door. These ladders and all components will be metal/steel construction. See detail 3/A203.
- ~~**Discuss existing gutter detailing and connection into downspouts (not able to install a drain). See sheet A201.**~~

Questions/Clarifications:

- Access: **Laydown and storage areas** as defined by owner.
- No field office is required.
- Port-a-Jon is required.
- Limit access to building interior.
- Fencing is required with wind screens around all active work or laydown areas. See specifications.
- Liquidated Damages are $250.00 per day.
- Objectional workmen: will be removed from the site and not be allowed to return.

- The contractor is not to interrupt utilities or egress/access without prior permission and notice.

These below changes were made as a result of the site visit after the meeting:

1. **The roof system will now be a retrofit type of roof system over the existing metal building roof system. All references to a modified bitumen roof system (membranes flashing, etc.) will now be replaced by the new roofing system described in the specification section in Addendum #1.**
    a. **The existing roofing system is to be removed down to the metal roof panels. New flute fillers and <u>High Density</u> Polyisocyanurate are to be installed.**
    b. **A RhinoBond (or equal by the roof membrane manufacturer) type of induction plate system is to be installed with attachment to the existing purlins.**
    c. **A new single ply roof is to be installed per the new specifications that are included in Addendum #1**
2. **See Addendum #1 for the new roof membrane specification.**
3. **Note that the new flat Polyisocyanurate insulation is to be a <u>High Density (HD)</u> type with a minimum of 80 PSI compressive strength.**
4. **Note that the flute filler insulation is to be 1.5 lb. EPS or polyisocyanurate.**
5. **All of the existing ridge vents on both the upper and lower roofs are to be removed and disposed of, these vents are no longer needed. The areas in the ridge cap where the vents are removed are to be infilled with bent metal building roofing with a profile to match the existing roof panels for a flush and properly supported condition. The roofing system is then to be installed over the ridge.**
6. **See the reissued drawing A201 for changes in the parapet detail and new through wall scuppers. Note that the new detail calls for infilling the existing integral gutter, creating new through wall scuppers and installing new collector heads and downspouts (verify locations). The scupper openings are to be 8" x8" minimum. New crickets will be installed between the new through wall scuppers. The exterior of the new scupper is to have a prefinished metal, 1-1/2" "picture frame" type flange around the perimeter in a color that reasonably matches the existing brick. The existing PVC drain outlets at grade will cut flush with the brick face and capped with a square piece of prefinished metal to match the brick color reasonably closely. The metal shall have hemmed edges and be attached to the brick with drive pins.**
7. **New PVC condensate lines are to be run from each mechanical unit to the nearest scupper.**
8. **There is a cable draped across the upper roof. This cable serves a camera that is no longer used. The cable is to be removed.**

Note: Parking is limited, bidders will be required to pass through security, the official time clock is behind reception's desk of the Woolfolk Bldg on the 14th floor, and no bids will be accepted after 2:00:00 pm.

GS# 320-092

Project Name: Pearl Prob. & Parole Re-Roof

Bid Date: Tuesday, September 12, 2023

PRE-BID AGENDA
INSTRUCTIONS TO BIDDERS

SECTION 00100

PART 1 - GENERAL

1.01 **QUESTIONS:** Questions should be directed to the Professional. Should a Bidder find discrepancies in or omissions from, the Drawings or Project Manual, or be in doubt as to their meaning, the Bidder should immediately notify the Professional. The Professional will send written instruction(s) or interpretation(s) to all known holders of the documents. Neither the Owner, nor the Professional, will be responsible for any oral instruction or interpretation.

1.03 **NON-RESIDENT BIDDER:** When a non-resident Bidder (a Contractor whose principal place of business is outside the State of Mississippi) submits a bid for a Mississippi public works project, one of the following is required and shall be submitted with the Proposal Form:

A. Copy of Law: If the non-resident Bidder's state has a resident Bidder preference law, a copy of that law shall be submitted with the Proposal Form.
B. Statement: If the state has no such law then a statement indicating *the State of (Name of State) has non-resident Contractor preference law* shall be submitted with the Proposal Form.

1.08 **OBLIGATION OF BIDDER:** At tile bid opening, each Bidder will be presumed to have inspected the site, read and become thoroughly familiar with the Drawings and the Project Manual, including all addenda.

PART 2- PROPOSAL FORM

2.02 **PROPOSAL FORMS:** The Bidder shall make all proposals on forms provided and shall fill all applicable blank spaces without interlineations or alteration and must not contain recapitulation of the work to be done. No oral or telegraphic proposals will be considered.

- *Make sure your name at Secretary of State and Contractor's Board match.*

2.06 **ADDENDA:** Any addenda to the Drawings or Project Manual issued before or during the time of bidding shall be included in the proposal and become a part of the Contract. The Proposal Form will have ample space to indicate the receipt of addenda. When completing the Proposal Form, the Bidder shall list the Addendum number and the date received in spaces provided.

- *Note that all addenda's will be issued NO LATER THAN (48) forty-eight hrs before bid time. (Thursday, 9/7, at 5 pm)*
- *Ask Professional if any addenda's are planned.*

PART 4 - BID OPENING AND AWARD OF CONTRACT

4.03 **PROTEST:** Any protest must be delivered in writing to the Owner within twenty-four (24) hours after the bid opening.

- *Do not send any protest or errors to the project professional, both must be sent to Owner.*

4.04 **ERRORS:** Any claim of error and request for release from bid must be delivered in writing to the Owner within twenty-four (24) hours after the bid opening. The Bidder shall provide sufficient documentation with the written request clearly proving an error was made.

PART 5 - BIDDER'S CHECKLIST

The following checklist is for the Bidder's assistance only. It is not inclusive and **is not a part of the bid documents**; therefore, this checklist should not be included with the Proposal Form when submitting a bid proposal.

5.01 **PROPOSAL FORM**: (only one original proposal form to be submitted) (also see 3.01 and 600.42 of Manual)

Base Bid

( ) Write in the amount of the base bid in words and numbers. The written word shall govern.

Alternates

( ) Write in each alternates amount in words and numbers. The written word shall govern.

Addenda

( ) Acknowledge the receipt of each addendum by writing in the number of the addendum and the date received.

Acceptance

( ) Proposal is signed by authorized person

( ) Name of Business - complete spelling of bidder's name and address - exact as recorded at the Secretary of State [http://www.sos.state.ms.us/busserv/corp/soskb/csearch.asp] which should be the same as you applied for at the Mississippi State Board of Contractors [http://www.msboc.us/Search2.CFM] (see 2.07, 3.01, 5.01, proposal form)

( ) Legal address of the business listed above (at SOS and Contractor's Board)

( ) Correct Certificate of Responsibility Number(s) as it appears in the current Mississippi State Board of Contractors Roster

Certificate of Responsibility Number(s) on envelope (see below for on proposal form)

( ) Base Bid is under $50,000 and no number is required

( ) Base Bid is under $50,000 and the statement "bid does not exceed $50,000" is on the outside of the sealed envelope

( ) Base Bid is over $50,000 and number is required

( ) Joint Venture and *joint venture* number is required

OR ( ) Joint Venture participants' numbers are required

5.02 **BID SECURITY:**

( ) Included Bid Bond

OR ( ) Included Certified Check

5.03 **POWER OF ATTORNEY:**

( ) Included Power of Attorney

5.04 **NON-RESIDENT BIDDER:**

( ) Attached a Copy of Non-Resident Bidder's Preference Law

OR ( ) Attached a Statement

5.05 **SUB-CONTRACTORS NAME** **Refer to 1.04 for responsiveness**

( ) List your Mechanical and Electrical Contractors regardless of cost

* List name even for under $50,000
* Fire Protection Sprinkler Contractors do not have to be listed
* If there is a separate HVAC/Plumbing Contractor, so notate as mentioned herein
* If Mechanical, Plumbing, and/or Electrical Contractor is performed by the General, be sure the General has a COR for said discipline and list General's name on the line and COR number mentioned herein

OR * If there is no Mechanical, Plumbing, and/or Electrical Contractor, so notate "none" on the line

5.06 **SUB-CONTRACTORS' COR NUMBER** **Refer to 1.04 for responsiveness**

( ) * List Certificate of Responsibility Number for over $50,000.00 (also allowed, but not required, for under $50,000)

* If under $50,000 – so notate on the COR line "under $50,000" (or can still show COR#)

OR * If there is no Mechanical, Plumbing, and/or Electrical in Divisions 15 or 16, so notate "none" on the name line and the COR# line as mentioned herein

SHAFER ZAHNER ZAHNER

OFFICE OF ARCHITECTURE

Pearl Prob. & Parole Re-Roof
Pre-Bid Meeting, August 29, 2023
MDOC, Pearl, MS

Sign In Sheet

NAME	FIRM	EMAIL
Scott Comish	Shafer-Zahner-Zahner	scomish@szzarch.com
Rustin Exum	EC Malone	Rustin@ECMalone.com
Blake Yarbrough	EC Malone	Blake@ecmalone.com
Cooper Fulton	Independent Roofing	cfulton@roofing.ms
Jason Koenenn	Rowell Roofs Inc	JKoenenn@rowellroofs.com
Eli Rowell	R+R Sheet Metal	eli@rroofs.com
Christian Salvador	Roofing Solutions	estimating@roofingsolutionsla.com
Trey Boren	B Four Plied, Inc.	trey@bfourplied.com
Josh Baez	B Four Plied, Inc.	josh@bfourplied.com
Heith Newman	BoB	heith.newman@dfa.ms.gov
BARNEY. POOLE	MDOC-CENTRAL OFFICE	BARNEY.POOLE@mdoc.state.ms.us
HURLEY ARCHIE	MDOC - Central Ms Correctional Facility	H.Archie@mdoc.state.ms.us

510 University Drive | Starkville, Mississippi 39759 | 662.323.1628 T | 662.324.8239 F | info@szzarch.com E | szzarch.com W

STATE OF MISSISSIPPI
GOVERNOR PHIL BRYANT

DEPARTMENT OF FINANCE AND ADMINISTRATION

Liz Welch
EXECUTIVE DIRECTOR

M E M O R A N D U M

TO: Contractors, through the AGC, ABC, and MBOC

FROM: Bureau of Building, Grounds and Real Property Management

DATE: May 30, 2023 (links modified)

SUBJECT: Electronic Construction Bidding per Law effective 1/1/2018

Beginning January of 2018, the Mississippi Department of Finance and Administration / Bureau of Building Grounds and Real Property Management started receiving construction bids electronically as required by House Bill 1106, Laws of 2017. Electronic bids are at the discretion of the Bidder/Supplier. Paper bids WILL STILL BE received as stipulated in the Advertisement / Request for Bids The instrument being used to carry out this is a program called MAGIC which is available to all State of Mississippi departments, agencies, and Bidders/Suppliers. (MAGIC is the State's Accounting System.)

TO BID USING MAGIC: Potential Bidder/Supplier must first register (see below). When the Bidder/Supplier registers themselves, they will automatically receive their Magic sign-in information. (The Bureau of Building, et al, can assist with this, and, if so, will notify the Bidder/Supplier by email of doing so, so they can contact Magic to get their sign-in information for bidding electronically) Construction Bidders/Suppliers who have received awards in recent years through the Bureau of Building, et al, should already have their company information properly entered. Those companies should still verify that their system "Product Code" is set to "90922" [for construction] in order to receive "system generated Bid Notices" for construction projects. (Bid Opportunities will continue to be in the newspaper, on the Magic Portal, and on the Bureau of Building, et al, web.) When registering, a company should enter their company information EXACTLY as shown per the Mississippi Secretary of State's listing and per their W9. Contact Magic at: mash@dfa.ms.gov or 601-359-1343. A tutorial is available at: http://uperform.magic.ms.gov/gm/folder-1.11.7512?originalContext=1.11.8507
(when registering, the MS SoS, MBOC, and W9 should all agree.)

HOW BIDDER/SUPPLIER REGISTERES THEMSELVES:
www.dfa.ms.gov
vendor registration (middle of the page)
down the page to State of Mississippi Supplier Registration
Complete that form
And "send" (top left or bottom of form on left)
This is the current link for the info above: https://sus.magic.ms.gov/sap/bc/webdynpro/sapsrm/wda_e_suco_sreg?sap-client=100#

TO ADD THE PRODUCT CODE 90922 once in your MAGIC Address Table click the steps below:
1. Click on Suppliers Self Service Tab.
2. Click Company Data.
3. Click the Process Button.
4. Click Add Categories in the Product Categories section
5. Add the product Categories from here (90922 for construction)

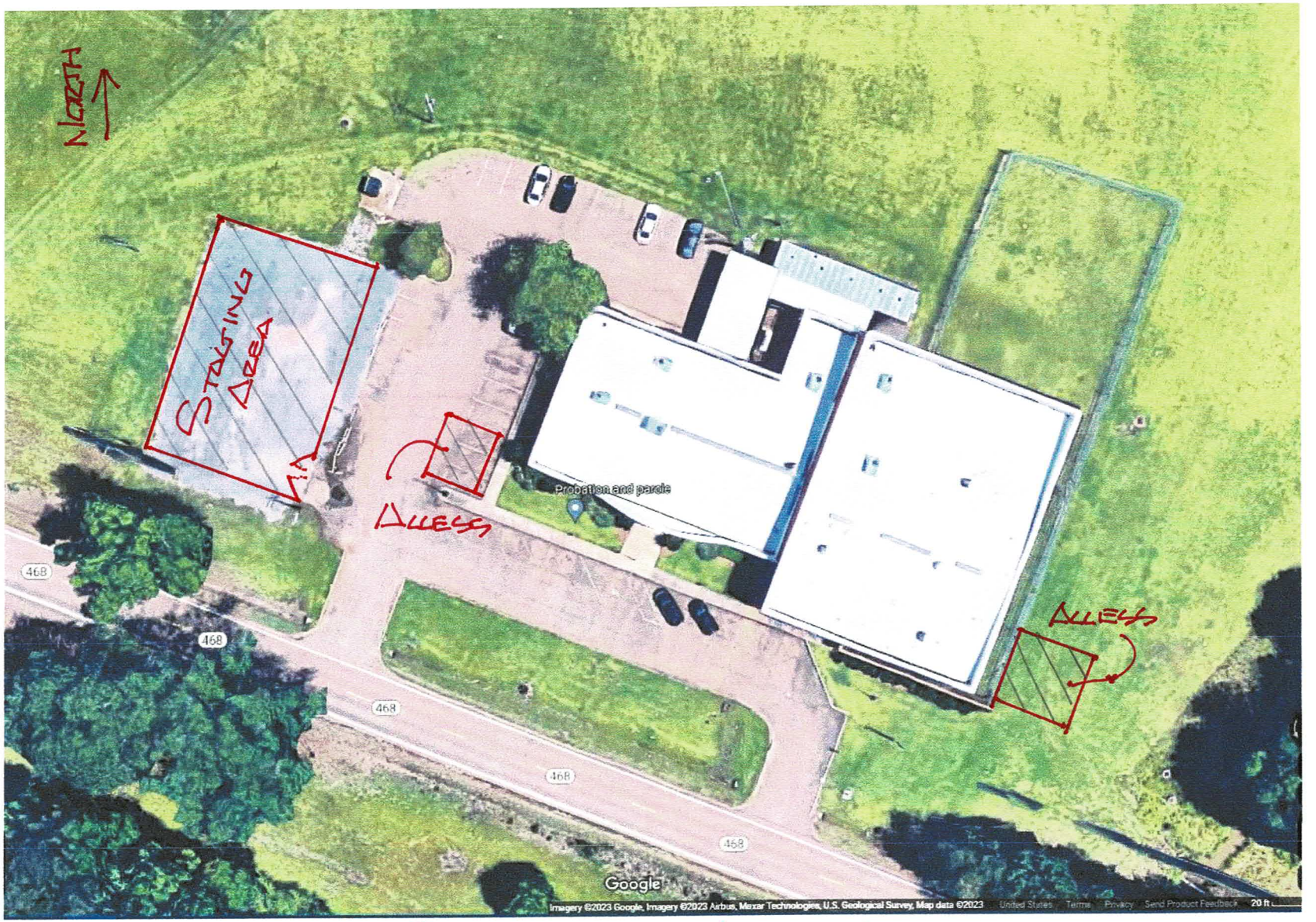
TO VIEW ADVERTISED PROJECT INFORMATION on line
1. DFA Web site
2. Supplier/Vendor
3. Mississippi Procurement Portal
4. (RFx) Procurement Opportunities and Public Notifications
5. Advanced Search Options
6. Major Procurement Category: Select Construction
7. Dept/Agency: Select MS DEPT FINANCE AND ADMINISTRATION 6. SEARCH

Another option from the DFA/BoB web site is to:
1. Select DFA Offices
2. Select Bureau of Building Grounds and Real Property Management.
3. Bid and RFP Notice
4. Construction Solicitations and Bid Tabs
5. Locate the GS# at left of the list and the RFx number at the right.

On both lists, the RFx number for each project is listed which is required in MAGIC when preparing bids.

For additional information regarding registration in MAGIC, contact MMRS at (601) 359-1343 or by email at mash@dfa.ms.gov .

/pgw



STAGING AND ALLEY LOCATIONS

075419 - Induction Welded Membrane Roofing Systems

This document is for installation of a quality, high performance Induction Welded Roofing System. Technical Bulletins, Application Guidelines and Best Practices are included by reference and considered part of any specification intended to guide or govern the installation of this system.

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Induction Welded Membrane Roofing System.

1.2 RELATED SECTIONS

A. Section 06100 - Rough Carpentry. (06 10 00 - Rough Carpentry.)

B. Section 07270 - Air Barriers. (07 27 00 - Air Barriers.)

C. Section 07260 - Vapor Retarders. (07 26 00 - Vapor Retarders.)

D. Section 07720 - Roof Accessories. (07 72 00 - Roof Accessories.)

E. Section 07620 - Sheet Metal Flashing and Trim. (07 62 00 - Sheet Metal Flashing and Trim.)

1.3 REFERENCES

A. ASTM International (ASTM):
   1. ASTM D6754 - Standard Specification for Ketone Ethylene Ester Based Sheet Roofing.
   2. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
   3. ASTM C473 - Standard Test Methods for Physical Testing of Gypsum Panel Products.
   4. ASTM D6164 - Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements.

B. FM Approvals (FM):
   1. FM Standard 4470 - Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction.
   2. Loss Prevention Data Sheets 1-28, 1-29.

C. FBC - Florida Building Code.

D. Miami-Dade Building Code Compliance - N.O.A. (Notice of Acceptance).

E. UL - Fire Resistance Directory.
   1. UL-790 - Standard Test Method for Fire Tests of Roof Coverings.

1.4 SUBMITTALS

A. Submit under provisions of Division 1

B. Product Data:

1. Most recent published technical literature and guide specifications issued by manufacturer.
2. Authorized Applicator's approved copy of the Project Registration.
3. Preparation instructions and recommendations.
4. Storage and handling requirements and recommendations.
5. Typical installation methods.
6. Dimensioned shop drawings, including roof plan detailing perimeter enhancement, flashing methods, terminations and acceptance by manufacturer.
7. Written approval from manufacturer confirming any accessories submitted, not manufactured or expressly approved in manufacuturer’s literature are acceptable and compatible with the proposed roofing sysem.
8. Safety Data Sheets (SDS) relating to all products, chemicals and solvents.
9. Certification that the system specified complies with identifiable building code and insurance requirements.
10. Manufacturer’s References:
    a. General Guide Specification.
    b. Construction Details.
    c. Guidelines for Induction Welded Installations.
    d. Technical Bulletins.

C. Verification Samples: Two representative units of each type, size, pattern and color.

D. Shop Drawings: Include details of materials, construction and finish. Include relationship with adjacent construction.

1.5 QUALITY ASSURANCE

A. The Induction Welded Roofing Systems shall be installed only by an Applicator, authorized by the manufacturer to install the Induction Welded Roofing Systems prior to bid or contract award.

B. Authorized Applicator's key personnel shall have received specialized training in the installation of the roofing system and the recommended installation tools.

C. Induction Welded Roofing Systems shall be installed in accordance with the most current guide specifications and details as authorized by the manufacturer for the specific project requirements.

D. There shall be no deviations from approved contract specifications or shop drawings without prior written approval by the Owner or Owner representative.

E. Any work found to be substandard or not in accordance with the manufacturer's recommendations shall be subject to correction including complete removal and replacement with new materials at the expense of the Applicator as required by the manufacturer.

F. A quality assurance inspection of the roof system shall be performed by the manufacturer for acceptance and approval. This inspection shall be performed upon by the Applicator once the Roofing System has reached 100 percent completion, a quality installation has been completed in accordance with the approved contract specifications, and all field welds have been probed and inspected.

1.6 COORDINATION

A. Prior to installation of materials, a pre-roofing conference shall be held with the Authorized Applicator, and Owner or Owner's Representatives to discuss the specified roofing system, coordinate its proper application and the expectations of all parties involved.

B. Plan and coordinate the installation of the roofing system with other trades in such a manner to avoid membrane damage, keeping the complete installation weather tight and in accordance with all approved details and warranty requirements.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver all materials to the job site in manufacturer's original, unopened containers, with legible labels and in sufficient quantity to allow for continuity of work.

B. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
   1. Store rolls of membrane lying down, elevated above the roof deck and completely protected from moisture with tarpaulins. Manufacturer's packaging is not considered adequate for outdoor storage.
   2. Elevate insulation and cover board materials on pallets and fully protect from moisture with tarpaulins. Manufacturer's packaging is not considered adequate protection from moisture.
   3. Store adhesives and sealants between 50- and 80-degrees F (10 and 26.7 degrees C) prior to use.
   4. Store flammable materials in cool dry areas away from sparks and open flames.
   5. Follow all precautions as outlined in manufacturer's material safety data sheets.

1.8 JOB CONDITIONS

A. Safety:
   1. Take necessary precautions regarding worker health and safety when using solvents, adhesives or hot asphalt.
   2. Worker safety is paramount.
   3. FiberTite is slippery when wet, exhibits dew, frost, ice or other form of moisture.
   4. Comply with OSHA requirements for roof construction and fall protection.
   5. Store flammable liquid and materials away from open sparks, flames and extreme heat.
   6. Take necessary precautions when using solvents and adhesives.
   7. Daily site cleanup to minimize debris and hazardous congestion.

B. Protection:
   1. Schedule installation sequence to limit access and utilization of installed membrane for material storage, construction staging, mechanical and excessive foot traffic.
   2. Provide proper protection on newly completed roofing.
   3. Minimize traffic on freshly laid roofing.
   4. Protect walls, rooftop units, windows and other components during installation.

C. Additional Precautions:
   1. Adverse weather conditions, e.g. extreme temperature, high winds, high humidity and moisture, could have a detrimental effect on adhesives, general production efforts and the quality of the finished installation.
   2. Daily production schedules shall be limited to what can be made 100 percent watertight at the end of each day, including flashing and night seals.
   3. All surfaces to receive the new roof system, including insulation and flashing, shall be free from all dirt, debris and be thoroughly dry.
   4. Comply with local EPA requirements as published by local, state and federal authorities.
   5. During the construction process temporary ballast, especially in the perimeter and corner areas may be required to provide protection against high winds.

1.9 DESIGN CONDITIONS

A. Applications and project specifications, and the applicator authorization are to be reviewed by the manufacturer prior to application as required by the manufacturer.

B. Exterior Fire Test Exposure: Roof system shall achieve a FM or UL Class rating for roof slopes indicated as follows:
   1. FM Approvals Class A Rating.
   2. Underwriters Laboratory Class A Rating.

C. Design Requirements:
   1. Uniform Wind Uplift Load Capacity:
      a. Installed roof system shall withstand negative (uplift) design wind loading pressures.
         1) Design Code: ASCE 7, Method 2 for Components and Cladding
   2. Dead Load:
      a. Installation of new roofing materials shall not exceed the dead load capacity of the existing roof structure.

D. Energy Star: Roof System shall comply with the initial and aged reflectivity required by the U.S. Federal Government's Energy Star program.

E. LEED: Roof system shall meet the reflectivity and emissivity criteria to qualify for one point under the LEED credit category, SSc7.2, Heat Island Effect - Roof.

F. Roof system shall have been tested in compliance with the following codes and test requirements:
   1. Florida FBC (For use outside Miami-Dade and Broward Counties):
   2. Miami-Dade County:
      a. For membrane Systems Over the existing substrate.
   3. Underwriters Laboratories Certification

G. Environmental Considerations:
   1. Compliance with EPA and OSHA requirements as published by local, state and federal authorities.
   2. Pay attention to and follow adhesive storage and application precautions and guidelines.

1.10 WARRANTY

A. Provide two-year contractors' unlimited warranty under provisions of all appropriate Division 1 Specification Sections to be supplied by roofing contractor to cover entire roof assembly including flashings and other accessories (labor and materials) for water-tightness.

B. Cover damage to roofing system components resulting from failure to prevent penetration of water through any component of the roof system. Warranty must cover labor (workmanship) and materials. The completed roof shall be inspected by the manufacturer prior to issuing this warranty.

C. Project Warranty (Manufacturer): Provide written warranty, signed by Manufacturer of primary roofing materials and his authorized installer, agreeing to replace/repair defective materials, installation and workmanship. Warranty must be a no dollar limit, watertightness warranty on entire roof system (all components, accessories, etc.). Warranty must meet all additional requirements set forth in all appropriate Division 1 Specification Sections (Warranties and Bonds, Contract Closeout, etc.)

   All sheet metal, flashing, trim, counterflashing, parapet caps, and similar items covered by or listed in the specifications or otherwise shown in the contract documents must be covered by the roof system manufacturer's 20-year warranty.

The warranty period is 20 years after the date of final acceptance of project, no dollar limit.

Manufacturer shall review project prior to bidding. Any condition which may negatively affect the warranty must be identified by the contractor prior to bidding so that nonconforming conditions can be corrected or otherwise accounted for. No exceptions to the required warranty will be allowed. Otherwise, the Contractor will be responsible for all corrections.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer:
   1. FiberTite, Seaman Corporation
   2. Carlisle SinTec Systems
   3. Elevate/Firestone Building Products
   4. Siplast, Inc.

2.2 MEMBRANE

A. Physical Properties: See associated data sheets.

B. Single Ply Membrane:
   1. FiberTite-XT 50 Membrane:
   2. Carlisle Sure-Flex PVC/Kee HP 80 mil
   3. Elevate/Firestone 80 mil PVC/KEE
   4. Siplast Parasolo 80mil PVC/KEE

C. Flashing Membrane:
   1. These membranes were selected based on tensile strength and puncture resistance.
   2. Required to match field membrane and warranty requirements selected for roofing system.

2.3 ANCILLARY MATERIALS

A. Flashing Adhesive:
   1. VOC compliant solvent borne, contact (two-sided) bonding adhesive for bonding smooth-back membranes to properly prepared horizontal and vertical substrates.
   2. Trowel grade elastomeric adhesive and sealant used to adhere flashing membranes to pre-approved vertical substrates.

B. Fasteners:
   1. Securing membranes to steel, wood and structural concrete decks.
      a. No. 15-13, buttress threaded, No. 3 Phillips head fastener constructed of case-hardened carbon steel with a reduced diameter drill point and corrosion resistant coating.
   2. Securing insulation to steel, wood and structural concrete decks.
      a. No. 14-13, heavy duty threaded steel No. 3 Phillips truss, self-tapping corrosion resistant fastener.
   3. Welding plates by RhinoBond or by roof manufacturer equal to the RhinoBond system. The typical roofing option is to fasten the membrane into the structural purlins which are usually spaced at 5-foot centers. Install the plate and purlin fastener system into the purlin at the rate required to meet the uplift force.

C. Additional Components:
   1. Flashing Terminations Sealant: Single-component gun-grade polyether.

2. Sealant for Pitch Pans: Single -component self-leveling polyether.
3. Fabricated Metal Flashing:
    a. Material - Steel: 24 gauge hot dipped G-90 laminated with a 0.02 inch (0.0005 mm) polymeric coating.
    b. Material - Aluminum 300H14: 0.040 inch (1.02 mm) thick laminated with a 0.02 mil (0.0005 mm) polymeric coating.
4. Premolded Flashings: Injection molded vent stack, split Wrapid Flash and inside and outside corner flashing using manufacturer's vinyl compound.
5. Primer: A blend of synthetic polymers, solvents and resins, low VOC primer for VaporTite self-adhered vapor retarder.
6. A rapid-curing, proprietary formulation of polymethyl-methacrylate (PMMA) liquid flashing resin. combined with Primer and Fleece reinforcing fabric to form a flexible and monolithic, reinforced membrane used in aberrant flashing and detail applications.
7. Metal Primer: An acrylic primer used with various metal substrates to promote adhesion of waterproofing and surfacing components.
8. Fleece: a non-woven polyester reinforcement used in liquid flashing applications.
9. Walkway and Protection Pads: High grade walk way and protection material with slip-resistant design.
10. Termination Bar: Membrane flashings restraint and termination seals. 0.125 x 1 x 120 inch (3 x 25 x 3048 mm) 6060-T5 extruded aluminum bar with pre-punched slots, 8 inches (203 mm) on center.
11. Metal Fascia System: Two piece "snap-on" pre-formed, architectural Kynar metal edge systems.
12. Dual component, single bead (ribbon applied) urethane insulation adhesive. Adhesive is a non-solvent, elastomeric, urethane adhesive specifically designed for bonding single or multiple layers of roof insulation and insulation composites or cover boards to structural roof decks and base sheets.
13. Seam Cleaner: Seam Cleaner is to be used with clean white cotton cloths or rags to clean contamination from the seam areas of the membrane prior to welding.
14. Joint Covers: Pre-cut 4 x 4 inch (102 x 102 mm) 60 mil (1.5 mm) non-reinforced membrane to reinforce areas where three overlapping sheets of membrane intersect.

2.4 INSULATION

A. Insulation shall be installed, where specified or required to provide a suitable surface for the Roofing Systems and meet desired thermal values.

B. Products must be pre-approved in writing by the manufacturer and comply with minimal characteristics and classification requirements.

C. Corporation.
1. Listed and approved by FM Approvals in conjunction with specified insulation and substrate.
2. Meet minimum roofing system design requirements, evidenced by testing in conjunction with the proposed substrate and or composite.
    a. Testing to be performed under FM requirements or acceptable third-party laboratory.
3. Provide written specifications regarding the safe handling, storage and surface preparation for a quality application of the product.
4. Insulation Adhesives:
    a. Polyurethane Adhesive: Either a dual or single component polyurethane, dispensed from a portable pressurized container or traditional foam equipment.

2.5 RELATED MATERIALS

A. Wood Nailers: No. 2 or better construction grade lumber.
   1. Installation of other types of treated lumber should be verified with a design professional.
   2. Wood treatment: Borate.
   3. Wood Treatment: As designated on the Drawings.
   4. Wood Treatment: As determined by the Architect.
   5. Creosote or asphaltic type preservatives are not acceptable.
   6. Top Nailer Thickness: 1.5 inches (38 mm) minimum.

PART 3 EXECUTION

3.1 GENERAL

A. Authorized Applicator: Ensure strict compliance with FTR GRS01/21; General Guide Specifications for Installation of FiberTite Roofing Systems.
   1. Provide suitable substrate surface for proper installation of roofing system, roof insulation and specified components.
   2. Coordinate installation ensuring system remains watertight at end of each working day.

B. Application of Seaman Corporation/FiberTite materials constitutes an agreement that Authorized Applicator has inspected and found the substrate suitable for installation of roofing system.

3.2 SUBSTRATE PREPARATION

A. Authorized Applicator: Verify the deck condition or existing roof construction is suitable for the specified installation.

B. Meet manufacturers required fastener withdrawal values (pull out tests) on roofing projects to verify suitability of decking to accept a mechanically fastened insulation or membrane roof system.

C. Examine surfaces for inadequate anchorage, low areas that will not drain properly, foreign material, ice, wet insulation, unevenness or any other defect which would prevent the proper execution and quality application roofing system as specified.

D. Prepared substrate shall be smooth, dry, and free of debris and any other irregularities which would interfere with proper installation.

E. Do not proceed with any part of the application until all defects and preparation work have been corrected and complete.

3.3 SUBSTRATE PREPARATION (REROOFING)

A. General:
   1. Authorized Applicator shall inform the building Owner or Owner Representative of any issues in regard to the condition and structural integrity of the existing decking.
   2. Re-roofing applications require fastener withdrawal tests to substantiate proposed attachment patterns for the new mechanically fastened insulation systems and membranes.
   3. Re-roofing applications that require modification to the deck or insulation system should be installed to provide positive slope and subsequent positive drainage of the new Induction Welded Roofing Systems.
   4. All terminations of the Induction Welded Roofing Systems must be constructed to prevent water from penetrating behind or beneath the new roofing system. This includes water from above, beside, below and beneath the new system.

B. Removal of Existing Roof Systems:
   1. Remove all existing roofing materials, insulation, flashing, metal and deteriorated wood blocking as indicated on the drawings and legally dispose off-site.
   2. Remove only enough roofing to accommodate the day's work and ensure the exposed area can be made 100 percent watertight at the end of the day or first sign of inclement weather.

C. Steel and Wood Decks:
   1. Rotted or deteriorated decking shall be removed and replaced with like kind.
   2. Areas of structurally acceptable steel decking exhibiting slight surface rust shall be properly cleaned, primed and painted prior to installing the approved insulation.
   3. All decking shall be inspected for proper attachment and excessive deflection that would compromise the uplift performance of the new Induction Welded Roofing System.
   4. Attachment and deflection deficiencies shall be repaired and brought into compliance with current, local building code requirements.

3.4 WOOD NAILERS

A. Install treated lumber at same heights as insulation layer or adjacent construction plus or minus 0.25 inch (6 mm). Install continuous treated wood nailers at all perimeters, around roof projections and penetrations as shown in approved details.

B. Wood Nailers Installed Directly on the Substrate: Carefully examine substrates to confirm the entire area provides a suitable fastening surface. Repair defects by appropriate trades prior to installation.

C. Nailers (W x H): Minimum 3.5 x 1.5 inches (89 x 38 mm). Installed and anchored in such a manner to resist a force of 250 lbs per linear foot of wood blocking in any direction.

D. Nailers along parapets, curbs and expansion joints are recommended for insulated decking. Consult manufacturer for optional and alternate membrane termination and securement methods.

3.5 ROOF INSULATION AND COVERBOARD INSTALLATION

A. General:
   1. Install roof insulation and coverboards according to and in complete conformance with project specifications.
   2. Install insulation and coverboards where by the long dimension of the boards run in parallel alignment and the short dimensions are staggered.
   3. Install insulation and coverboards with minimum joint dimensions and tightly butted where possible.
      a. Maximum Joint Widths: 3/8 inch (9.5 mm).
      b. Damaged Corners: Cut out and replaced with an insulation piece a minimum of 12 x 12 inches (305 x 305 mm). Pieces that are cut from larger panels and are smaller than one square foot are not acceptable.
   4. Taper roof insulation to drain sumps using tapered edge strips.
      a. If insulation layer is 1.5 inches (38 mm) or less, taper 12 inches (305 mm) from drain bowl.
      b. If insulation thickness exceeds 1.5 inches (38 mm), taper 18 inches (457 mm) from drain bowl.
      c. Taper boards or pieces must be adhered or mechanically fastened with a minimum of two fasteners per board.
   5. When a cover board or multiple layers are installed each layer shall be offset from the previous layer a minimum of 12 inch (305 mm) on center.

B. Induction Welded Insulation Attachment; Plate Installation:
   1. Insulation shall be applied to and installed over properly prepared and pre-approved substrates, free of any debris, dirt, grease, oil or moisture.
   2. Install fasteners and stress plates for the mechanical attachment of insulation or cover board materials and subsequent induction bond of Roofing Membrane shall be Fasteners as provided by manufacturer.
   3. Fasteners and stress plates shall be FM approved for mechanical attachment of insulation and comply with FM Standard 4470 for corrosion resistance.
   4. Install plates in a straight grid pattern using chalk lines. Proper plate layout will improve welding effectiveness.
   5. General 1-90 attachment for insulation, cover board, and membrane in the field of the roof requires one fastener and stress plate per 6 sq ft (0.56 sq m) of insulation.
   6. Perimeter areas require a fastener tributary area decrease that is no greater than 60 percent of the field tributary per fastener.
   7. Corner areas require a fastener tributary area decrease that is no greater than 40 percent of the field tributary per fastener.
   8. Fasteners shall be installed flush with the substrate and not overdriven to the point of promoting plate deformation.
   9. Fasteners shall be installed using depth sensing tool attachments to ensure proper installation.

3.6 INSTALLATION OF MEMBRANES

A. Quality Control:
   1. It is the responsibility of the contractor to initiate and maintain a Quality Control program to govern all aspects of the installation.
   2. The contractor will be responsible for the daily execution of the Quality Control program which will include but is not limited to the supervision, inspection and probing of all heat welded seams incorporated within roofing system.
   3. If inconsistencies in quality of the application of the composite, membrane or welds are found, work shall cease until corrective actions are taken to ensure the continuity of the installation.

B. General:
   1. Coordinate work ensuring that sequencing of installation promotes a 100 percent watertight installation at the end of each day.
   2. When using adhesives outside ambient air temperature shall be above 40 degrees F (4.4 degrees C). Curing or drying time of the adhesive will be affected by ambient temperatures and must be taken into consideration when determining flashing lengths.
   3. Humidity can affect the drying time of solvent borne adhesives and cause condensation to form on the newly applied adhesive.
   4. No moisture may be present on the adhesives prior to mating or application of membranes.
   5. Roofing systems shall only be installed over properly prepared and sound substrates, free from excessive surface roughness, dirt, debris and moisture.

C. Membrane Installation:
   1. Unroll and position the membrane onto the properly prepared substrate, over the previously installed welding plates.
   2. Install the membrane in a flat, relaxed position avoiding excess wrinkles and stretching.
   3. Weld membranes to plates using only approved equipment.
   4. Adjoining rolls shall overlap a minimum of 2 inch (51 mm), properly shingled with the flow of water wherever possible.

5. Stager the factory seams in custom rolls to prevent adjacent factory welds from falling on top of one another.
6. The field membrane shall be properly affixed to wood blocking or restrained in an approved manner at all roof perimeters, walls, expansion joints, curbs and penetrations having any one dimension greater than 24-inch (610 mm) in length. Follow all manufacturer's recommendations.

D. Welding:
   1. General:
      a. Field seams exceeding 10 feet (3.05 m) in length shall be welded with an approved automatic welder.
      b. Field seams must be clean and dry prior to initiating any field welding.
      c. Remove foreign materials from the seams (dirt, oils, etc.) with Seam Cleaner or authorized alternative.
      d. Do not allow cleaning solvents to come in contact with the top finish/ Aggressive solvents will either mar or completely remove the top finish.
      e. Use Clean white cotton cloths and allow approximately five minutes for solvents to dissipate before initiating the automatic welder. Do not use denim or synthetic rags for cleaning.
      f. Contaminated areas within a membrane seam will inhibit proper welding and will require a membrane patch.
      g. Welding shall be performed only by qualified personnel to ensure the quality and continuity of the weld.
      h. Keep the bottom of the induction tool and cooling magnets clean.
      i. Continuous operation of the induction welding process can promote overheating of the cooling magnets. Periodically cool the magnets using clean water to prevent melting or scarring of the membrane.
      j. Follow the recommendations for periodic cleaning and maintenance for the welding equipment.
   2. Hot Air Hand Welding:
      a. The lap or seam area of the membrane may be intermittently tack welded to hold the membrane in place.
      b. The back, interior edge of the membrane shall be welded first, with a thin, continuous weld to concentrate heat along the exterior edge of the lap during the final welding pass.
      c. The nozzle of the hand held, hot air welder shall be inserted into the lap at a 45-degree angle to the lap. Once the polymer on the material begins to flow, a hand roller shall be used to apply pressure at a right angle to the tip of the hand welder. Properly welded seams shall utilize a 1.5 inch (38 mm) wide nozzle, to create a homogeneous weld, a minimum of 1.5 inch (38 mm) in width.
      d. Smaller nozzles may be used for corners, and field detailing, maintaining a minimum 1-inch (25 mm) weld.
   3. Automatic Hot Air Machine Welding:
      a. Follow manufacturers' instructions for safe operation of the automatic welder.
      b. Follow local code requirements for electric supply, grounding and surge protection.
      c. The use of a dedicated, portable generator is highly recommended to ensure a consistent electrical supply, without fluctuations that can interfere with weld consistency.
      d. Properly welded seams shall utilize a 1.5 inch (38 mm) wide nozzle, to create a homogeneous weld, a minimum of 1.5 inch (38 mm) in width.
   4. Induction Welding:
      a. Calibrate the induction welding tool by making test welds with the membrane and the stress plates. Make test welds using variable settings on the welder and then performing peel tests to examine continuity of the weld to the plate.

Test welds should be conducted periodically during install; especially after any break or any significant change weather.

b. The lowest energy setting that creates the most comprehensive and continuous bond is the preferred setting.
c. All membrane shall be cleaned and dry prior to induction welding.
d. Immediately upon completion of the induction weld cycle at each stress plate, place the cooling magnet directly centered over the welded membrane and plate assembly.

E. Inspection
1. The contractor shall initiate daily inspections of completed work, which shall include, but is not limited to the probing of field welding with a dull pointed instrument to assure the quality of the application and ensure that any equipment or operator deficiencies are immediately resolved.
2. Ensure all aspects of installation (sheet layout, attachment, welding, flashing details, etc.) are in strict accordance with the most current manufacturer's Membrane Roofing System Specifications and Details.
3. It is the responsibility of the contractor to perform a final self-inspection on all seams prior to requesting the inspection for warranty.

3.7 FLASHING

A. Clean vents, pipes, conduits, tubes, walls, and stacks to bare metal. Protrusions must be properly secured to roof deck with approved fasteners. Remove and discard lead pipes and drain flashing. Flash penetrations according to approved details.

B. Remove loose or deteriorated cant strips and flashings.

C. Flash curbs, parapets and interior walls in strict accordance with approved FiberTite details.

D. All flashing shall be adhered to properly prepared, approved substrates with mastic applied in sufficient quantity to ensure total adhesion.

E. The base flange of all membrane flashing shall extend out on to the plane of the deck, beyond the wood nailers to a maximum width of 8 inches

F. Vertical flashing shall be terminated no less than 8 inches above the plane of the deck with approved termination bar and counter-flashing or metal cap flashing.

G. When using adhesive, vertical wall flashing termination shall not exceed 40 inches without supplemental mechanical attachment of the flashing between the deck and the termination point of the flashing.

H. Complete all inside and outside corner flashing details with preformed corners or an approved field fabrication detail.

I. Probe all seams with a dull, pointed probe to ensure the weld has created a homogeneous bond.

J. Install penetration accessories in strict accordance with approved details. Ensure penetration accessories have not impeded in any way the working specification. Refer to the related trade for the technical specification.

3.8 METAL FLASHING

A. All perimeter edge details are to be fabricated from manufacturer's approved Metal

B. Ensure all fascia extend a minimum of 2 inches lower than the bottom of the wood nailers.

C. Fasten all metal flashing to wood nailers or approved substrate with approved fasteners per manufacturers detail drawings.

D. Break and install metal in accordance with approved details, ensuring proper attachment, maintaining ½-inch expansion joints and the installation of a minimum 2-inch bond breaker tape prior to sealing the joint.

E. Solidly weld expansion joints with a 6-inch strip of membrane welded to the Fiber Clad, covering the bond breaker tape (cover plates are optional).

F. Roof Drains:
   1. Flash all roof drains in accordance with manufacturer's roof drain details.
   2. Replace all worn or broken parts that may cut the membrane or prevent a watertight seal. This includes the clamping ring and strainer basket (if a new drain is not being installed).
   3. Drain assemblies and basins or sumps must be free of any asphalt or coal tar pitch residue prior to installation.
   4. The drain target sheet should be sized and installed to provide for a minimum of 12 inches of exposed 60 mil on all sides of the drain.

G. Liquid Flashing
   1. For aberrant penetrations and pitch pan avoidance, follow guidelines and details for substrate preparation and installation of liquid flashing on penetrations.
      a. Proper mechanical restraint is required for the roof membrane around the penetration(s) prior to the installation of the liquid flashing.
      b. Primer is required for all metal tie-ins and applications with high mechanical stresses, on detail work with small contact areas, metal components with large linear thermal expansion or edge metal terminations.

3.9 EXPANSION JOINTS

A. Flash all expansion joints in accordance with authorized details. Fasten all expansion joint material according to specifications. Ensure the expansion material has sufficient material to expand to the widest point in expansion without causing undue stress on the expansion joint material.

3.10 SEALANTS

A. Apply authorized sealants to all surface mounted reglets and per project requirements. Sealants are to shed water. Follow all manufacturer's instructions and installation guides. Use primer when recommended by the manufacturer.

3.11 WALKWAYS

A. walkways and protection pads shall be installed at areas subject to regular foot traffic.

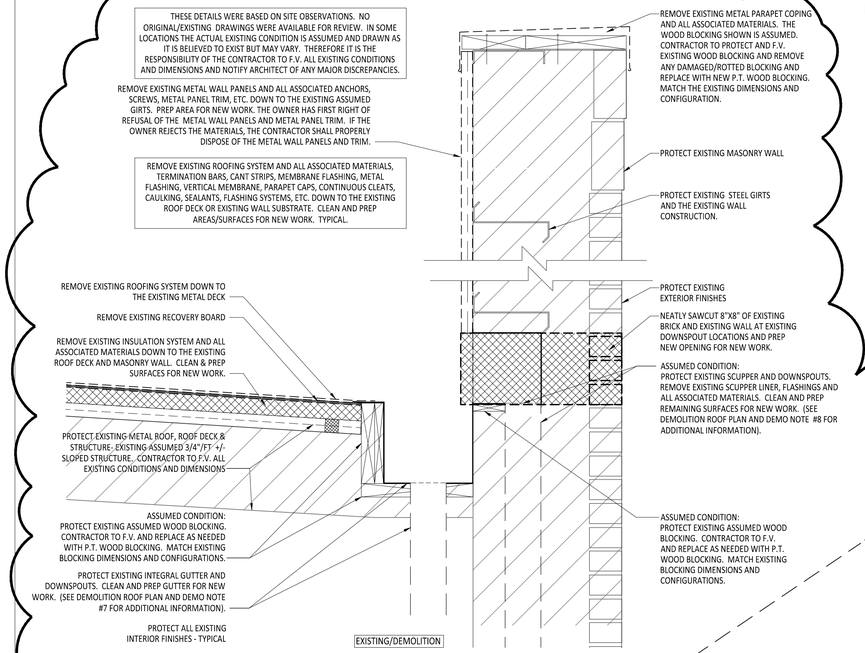
B. Walkway Installation:
   1. Roofing membrane to receive walkway material shall be clean and dry.
   2. Cut and position the walkway material as directed by the specifications or drawings.
   3. Hot air weld the entire perimeter of the walk way to the previously cleaned roofing membrane. Avoid excessive heating of the walk way material to prevent scorching the underlying roofing membrane.

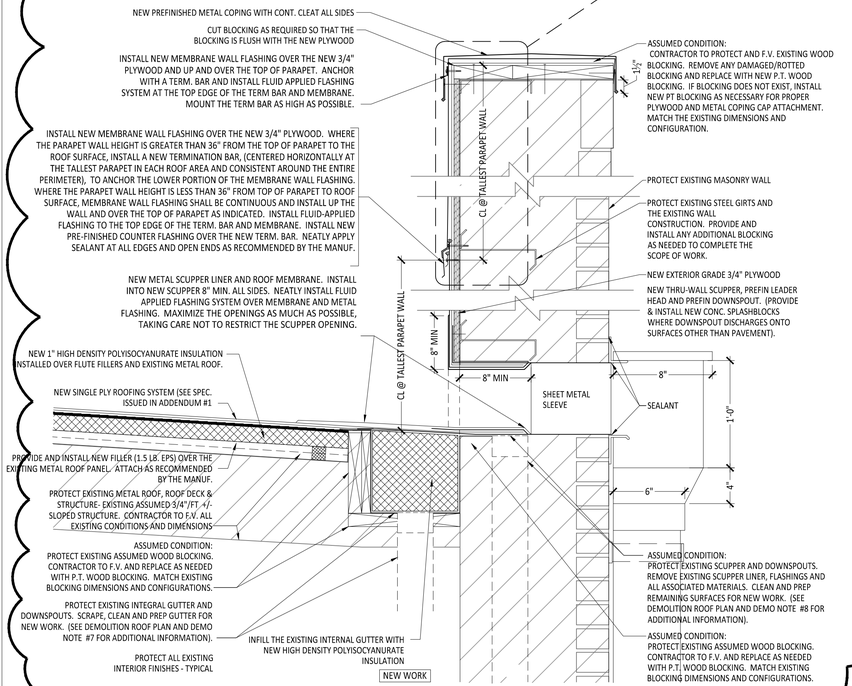
END OF SECTION

THESE DETAILS WERE BASED ON SITE OBSERVATIONS. NO ORIGINAL/EXISTING DRAWINGS WERE AVAILABLE FOR REVIEW. IN SOME LOCATIONS THE ACTUAL EXISTING CONDITION IS ASSUMED AND DRAWN AS IT IS BELIEVED TO EXIST BUT MAY VARY. THEREFORE IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO F.V. ALL EXISTING CONDITIONS AND DIMENSIONS AND NOTIFY ARCHITECT OF ANY MAJOR DISCREPANCIES.

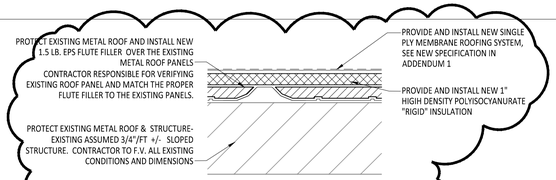
REMOVE EXISTING METAL WALL PANELS AND ALL ASSOCIATED ANCHORS, SCREWS, METAL PANEL TRIM, ETC. DOWN TO THE EXISTING ASSUMED GIRTS. PREP AREA FOR NEW WORK. THE OWNER HAS FIRST RIGHT OF REFUSAL OF THE METAL WALL PANELS AND METAL PANEL TRIM. IF THE OWNER REJECTS THE MATERIALS, THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE METAL WALL PANELS AND TRIM.

REMOVE EXISTING ROOFING SYSTEM AND ALL ASSOCIATED MATERIALS, TERMINATION BARS, CANT STRIPS, MEMBRANE FLASHING, METAL FLASHING, VERTICAL MEMBRANE, PARAPET CAPS, CONTINUOUS CLEATS, CAULKING, SEALANTS, FLASHING SYSTEMS, ETC. DOWN TO THE EXISTING ROOF DECK OR EXISTING WALL SUBSTRATE. CLEAN AND PREP AREAS/SURFACES FOR NEW WORK. TYPICAL.





1 A201 PARAPET/INTERNAL GUTTER
Scale: 1 1/2" = 1'-0" Addendum #1



4 A201 TYPICAL RAKE ROOF SECTION
Scale: 1 1/2" = 1'-0"

IN GENERAL, ALL ITEMS, REMAINING SURFACES, MATERIALS, ETC. THAT ARE REMAINING AFTER DEMOLITION ARE TO BE PREPARED AS NECESSARY TO RECEIVE THE NEW WORK. REFER TO THE NEW DETAILS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS FOR REQUIREMENTS. IN SEVERAL CASES ITEMS ARE SHOWN AS BEING "ASSUMED" OR "UNKNOWN". THESE ARE LISTED THIS WAY BECAUSE THEY APPEAR ON EXISTING DRAWINGS OR BECAUSE A PORTION OF THE DETAIL IS VISIBLE AND THE REMAINDER HAD TO BE ASSUMED. IN ALL OF THESE CASES THE CONTRACTOR SHALL ALLOW FOR VARIATIONS IN CONSTRUCTION AND ADJUST THE DETAILS OF NEW WORK ACCORDINGLY. THE CONTRACTOR IS TO VERIFY ROOF SLOPES TO THE EXTENT THAT THEY AFFECT THE WORK AND MAKE ANY NECESSARY ADJUSTMENTS TO THE WORK .

FLUID APPLIED FLASHING NOTE:
INSTALL THE MFR'S FLUID APPLIED FLASHING SYSTEM TO PROVIDE A WEATHER TIGHT CONDITION. THE FLUID APPLIED SYSTEM IS TO BE MASKED OFF WHERE NECESSARY TO CREATE A NEAT/ CLEAN TRANSITION AT THE EDGES. ALL FLUID APPLIED FLASHING IS TO BE FINISHED WITH GRANULES WHERE IT IS ADJACENT TO GRANULAR SURFACED CAP SHEET OR WITH SILVER ALUMANATION COATING WHERE IT IS ADJACENT TO FOIL FACED WALL FLASHING. ALL FLASHINGS, COUNTER FLASHING, ETC. MUST ALSO BE INSTALLED AS INDICATED IN ADDITION TO THE FLUID APPLIED FLASHING SYSTEM. IN ALL CONDITIONS, DO NOT COVER EXISTING WEEP DRAINAGE THROUGH EXISTING WALLS.

EXISTING MECHANICAL UNIT NOTE:
PROVIDE AND INSTALL NEW M.B. WALK PAD SET IN MASTIC BELOW THE EXISTING ROOF EQUIPMENT FRAMING/SUPPORT. SAND, CLEAN, PRIME AND PAINT ALL EXISTING, AND NEW, FERROUS STEEL SUPPORTS/FRAMING. ADD ADDITIONAL UNISTRUT SUPPORTS AS NEEDED. MATCH EXISTING SIZE AND PROFILE AND PRIME AND PAINT. WHERE EXISTING SUPPORTS ARE WOOD, REMOVE THE EXISTING WOOD AND PROVIDE AND INSTALL NEW UNISTRUT CHANNELS. INSTALL NEW CHANNELS AS NEEDED TO PROPERLY SUPPORT THE EXISTING EQUIPMENT.

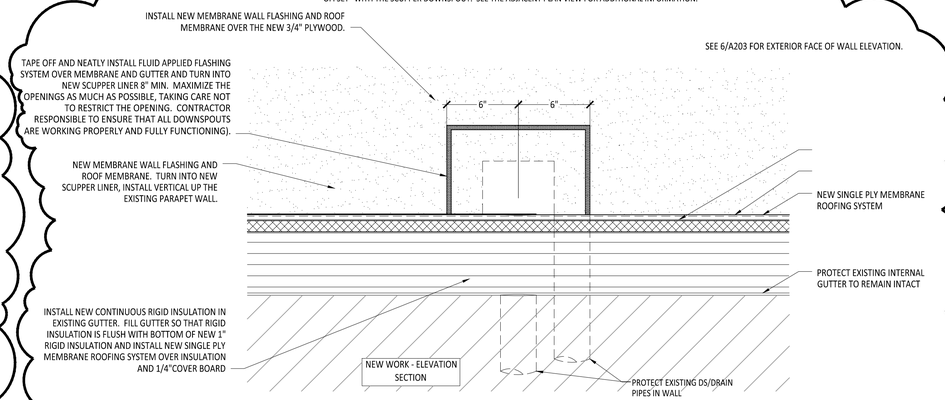
PROTECTION OF EXISTING OBJECTS/MATERIALS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL COMPONENTS OF THE BUILDING AND SITE FROM DAMAGE. IN PARTICULAR, ALL CAST STONE PARAPETS, SPECIAL FINISHES, ETC. MUST BE PROTECTED FROM DAMAGE AND BLEMISHES DUE TO CONSTRUCTION ACTIVITIES AND MATERIALS. THE CONTRACTOR IS RESPONSIBLE FOR HAVING PROTECTION IN PLACE AT ALL TIMES. BUILDING SURFACES SHALL BE PROTECTED AT THE LOCATIONS WHERE MATERIALS ARE BEING LOADED ONTO THE ROOF AND ROOF EDGES WHERE WORK IS TAKING PLACE TO PROTECT AGAINST ACCIDENTAL SPILLS/ACCIDENTS.

WHERE SPECIFIED-
* AFTER APPLYING SEALANT TO ALL JOINTS, APPLY ALSAN REINFORCED LIQUID FLASHING SYSTEM (OR APPROVED EQUAL). VERIFY PRIOR TO APPLICATION THAT THE LIQUID FLASHING IS COMPATIBLE WITH THE TEMPERATURE RANGE. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR REINFORCEMENT PLACEMENT. PAY PARTICULAR ATTENTION TO REINFORCING ALL JOINTS, EDGES, AND TRANSITIONS. EXTEND THE LIQUID FLASHING THE FULL HEIGHT OF THE VERTICAL SUPPORT UP TO THE HORIZONTAL SUPPORTS. PREPARE ALL SURFACES AS RECOMMENDED.
*MASK OFF THE TOP EDGE TO CREATE A CLEAN, NEAT EDGE AND TO PROTECT REMAINING COMPONENTS FROM ANY OF THE LIQUID FLASHING.
*COAT THE CURED LIQUID FLASHING WITH SILVER ALUMINATION PAINT PRIOR TO REMOVING THE MASKING FOR A NICELY FINISHED SURFACE AND TO PROTECT THE LIQUID FLASHING.

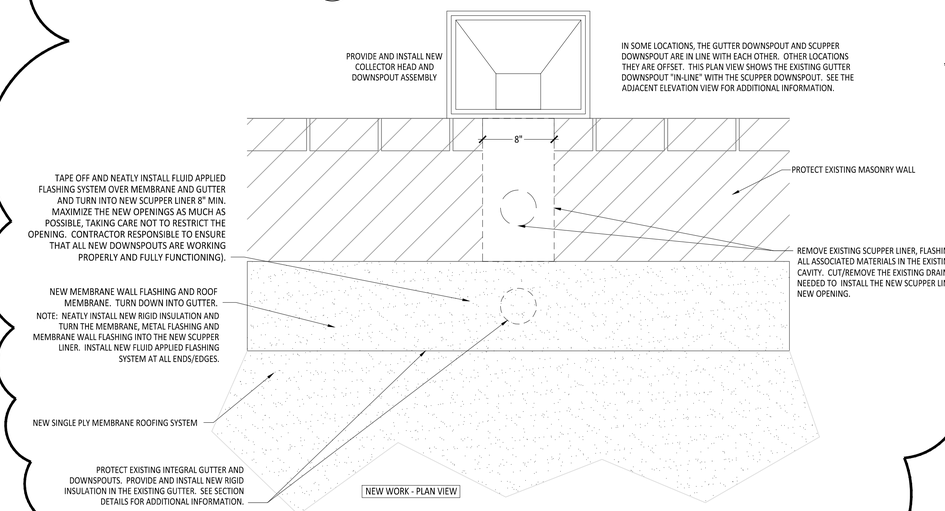
GENERAL DEMOLITION NOTE:

REMOVE EXISTING ROOF SYSTEM DOWN TO EXISTING ROOF DECK. REMOVE ALL EXISTING FLASHINGS, CANTS, SEALANTS, ETC. REPLACE ANY DETERIORATED/ROTTED PERIMETER EDGE BLOCKING WITH NEW TREATED WOOD PRIOR TO INSTALLING NEW ROOFING MEMBRANE. NEW BLOCKING SHALL MATCH EXISTING DIMENSIONS AND SUFFICIENT HEIGHT NECESSARY TO MEET MANUFACTURERS RECOMMENDATIONS AND REQUIREMENTS. CLEAN AND PREP REMAINING SURFACES TO RECEIVE NEW MODIFIED BITUMEN ROOFING SYSTEM AS SHOWN. PROTECT EXISTING ROOF PENETRATIONS TO REMAIN DURING ALL PHASES OF WORK

IN SOME LOCATIONS, THE GUTTER DOWNSPOUT AND SCUPPER DOWNSPOUT ARE IN LINE WITH EACH OTHER. OTHER LOCATIONS THEY ARE OFFSET. THIS ELEVATION VIEW SHOWS THE EXISTING GUTTER DOWNSPOUT "OFFSET" WITH THE SCUPPER DOWNSPOUT. SEE THE ADJACENT PLAN VIEW FOR ADDITIONAL INFORMATION.



2 A201 INTERNAL GUTTER/SCUPPER ELEVATION/SECTION
Scale: 1 1/2" = 1'-0" Addendum #1



3 A201 INTERNAL GUTTER/SCUPPER PLAN
Scale: 1 1/2" = 1'-0" Addendum #1

GS# 320-092
PEARL PROBATION AND PAROLE RE-ROOF
MISSISSIPPI DEPARTMENT OF CORRECTIONS

SHAFER ZAHNER ZAHNER
OFFICE OF ARCHITECTURE
510 UNIVERSITY DRIVE
STARKVILLE, MISSISSIPPI 39759
szzarch.com T(662) 323-1628

SHEET
A201
ROOF DETAILS

DATE: 7.18.2023
SZZARCH# ---
DRAWN BY: rep
CHECKED BY: sc/sz

REVISIONS:
Add#1 9.5.2023