Addendum No. 002

Project:
3 Courthouse Roofs Replacement
Clarksville, TN

Addendum No: 002

Issue Date: 3/18/2025

Owner:
Montgomery County, TN
1 Millennium Plaza, Suite 401
Clarksville, TN 37040

Addendum Issued by:
Walter P Moore
1201 Peachtree Street NE, Suite 1600
Atlanta, GA 30361

Note: This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents and previous addenda as noted below. Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may subject Bidder to disqualification.

QUESTIONS FROM BIDDERS:

- See attached spreadsheet with responses to bidders' Requests for Information submitted as of 3/12/25.

CLARIFICATION FROM OWNER:

- The cooling tower replacement program is scheduled to be performed starting April 12, with backup date of April 19, with a 1-week duration. The replacement is scheduled to be completed prior to the start of reroofing project.

MODIFICATIONS TO DOCUMENTS:

1. **1 Millenium Plaza (Historic Courthouse) Drawings:**
    a. Sheet RD-100: Edge Flashing Note was updated to include removal and replacement of metal coping caps.
    b. Sheet R-100: Existing decking to remain for steep slope roofs was updated to show metal decking (not wood deck).
    c. Sheet R-500, Detail 12: Note was updated to include removal and replacement of metal coping caps.
    d. Sheet R-500, Detail 6: Note added to clarify removal of existing materials within gutter prior to installation of new EPDM lining in gutter. (Note that this was also stated on Sheet RD-100 in Note for Eave Gutter).

2. **2 Millenium Plaza (Courts Center Complex) Drawings:**
    a. Sheet R-100: Note for new tapered polyisocyanurate insulation to be sloped ¼" per ft.
    b. Sheet R-500, Detail 2: Note added related to positioning of overflow drains to reduce prolonged water ponding at sumps.

3. **Courthouse Annex Drawings:**
    a. Sheets RD-100 and R-100: Task Item 7.2 was replaced with Task Item 7.2B to reflect use of flatstock polyisocyanurate insulation in lieu of tapered polyisocyanurate insulation.
    b. Sheet R-100: Note for flatstock insulation was updated.

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c. Sheet RD-100: Note on existing spire at top of copper tile roofing was added to specify its removal and replacement.

4. Specifications Project Manual:

a. Section 004143 “Bid Form”: Bid tables for Base Bid 1 was updated to include bid allowance quantities for Task Item 3.1, and Base Bids 2 and 3 were updated to include bid allowance quantities for Task Item 5.1.
b. Section 004143 “Bid Form”: On Bid table for Base Bid 3, Task Item 7.2 was replaced with Task Item 7.2B to reflect use of flatstock polyisocyanurate insulation in lieu of tapered polyisocyanurate insulation.
c. Section 010150 “Task Items”: Task Items 7.2A and 7.2B were modified to reflect updated insulation slope.
d. Sections 013100 “Project Management and Coordination”, 017329 “Cutting and Patching”, and 017700 “Closeout Procedures” have been added.
e. Section 075323 “EPDM Roofing”: Warranty requirements were updated to include 72-mph warranty wind speed coverage.

Note that bids are due on Tuesday, March 25, 2025, at 2:00 PM.

Issued by: Walter P. Moore and Associates, Inc.

Amaris Beza

Project Manager: Amaris Beza, PE

Attachments:

1. RFI Log Responses
2. Updated specification sections
3. Updated drawing sets

#	Date of Request	Request for Information	Date of Response	Response
1	3/12/2025	1 MILLENNIUM Plaza (Courthouse) - Existing Slate Tile Roofing: RD-100 states that we are to remove the existing slate tile, battens, underlayment, and other accessories of the slate tile roofing system down to the existing metal roof deck. Whereas, in the notes at the bottom of the same page state that the steep slope roofing areas (hip & towers) state that the slate tiles and underlayment are to be removed but that the 5/8" plywood and either the 7/16" osb or plywood, rigid board insulation and hat channels are to remain.? These two contradict each other as to the type of roof decking is under these slate tiles. Please clarify the roof decking under the slate tiles and what is to remain or be discarded. The next page R-100 has note stating on "Steep slope roof areas" there are new slate tiles, underlayment, and existing wood deck. Can you verify which if any of the slate roofing areas are a metal deck or have wood decking?	3/18/2025	The structural decking below steep slope roofs are metal deck. The existing substrate for slate tiles is assumed to be plywood. The note on Sheet R-100 is updated in Addendum No. 2 set.
2	3/12/2025	1 MILLENNIUM Plaza (Courthouse) - Details: There are a lot of areas of this roof and the transitions to other areas where no details are provided. Examples are: At the front and I assume also at the rear of the building where the smaller gabled dormer meets the parapet wall there is a metal ridge transitioning into what appears to be metal cladding on the parapet wall, which is also covering slate tiles and an EPDM membrane on the parapet wall? This "cluster" of several different materials appears to have no definitive or detailed composition. Can you provide drawings as to the proper method to reinstall all of these materials properly?	3/18/2025	Additional details for specific conditions will be addressed during the pre-construction shop drawing submittal process and Contractor Requests for Information (RFIs) during the construction phase. Provide assumptions in bid if necessary.
3	3/12/2025	1 MILLENNIUM Plaza (Courthouse) - Details: There also appears to be no details provided as to the transition of metals from the ridge on the main roof to the ridge metal on the four corner "towers" On those same tower roofs there is a half diamond shape at the bottom of the finial that covers some of the slate tiles. This is going to need to be removed to install the slate tiles underneath. Can you provide details of how all these metal pieces are to come apart and then how to re-install them?	3/18/2025	Additional details for specific conditions will be addressed during the pre-construction shop drawing submittal process and Contractor Requests for Information (RFIs) during the construction phase. Provide assumptions in bid if necessary.
4	3/12/2025	1 MILLENNIUM Plaza (Courthouse) - Details: There is also a transition from the bottom of the main tower structure that sits on the flat roof but the metal covers the top of the slate below. Can you provide a detail of this metal to slate transition, as to how it is to be disassembled and then re- assembled?	3/18/2025	Additional details for specific conditions will be addressed during the pre-construction shop drawing submittal process and Contractor Requests for Information (RFIs) during the construction phase. Provide assumptions in bid if necessary.
5	3/12/2025	1 MILLENNIUM Plaza (Courthouse) - Details: Next is the transition from the corner tower to the gutter. Detail?	3/18/2025	Additional details for specific conditions will be addressed during the pre-construction shop drawing submittal process and Contractor Requests for Information (RFIs) during the construction phase. Provide assumptions in bid if necessary.
6	3/12/2025	1 MILLENNIUM Plaza (Courthouse): Are we supposed to re-use as much of the metal ridge/hip caps as possible and then replace with like kind to what may have been damaged during the removal process?	3/18/2025	Yes, assume reuse of existing metal ridge/hip caps in bid per Detail 7/R-500, Note 1 and replace in kind if damaged.
7	3/12/2025	2 MILLENNIUM Plaza (Courts Center Complex): Are we supposed to replace or try to save and re-install the metal ridge caps and finials on the two tower roofs? Or replace with new?	3/18/2025	Assume reuse of existing metal ridge/hip caps in bid per Detail 17/R-500, Note 1 and replace in kind if damaged. Assume reuse of finials on tower roofs.
8	3/12/2025	2 MILLENNIUM Plaza (Courts Center Complex): Plans state that the deck on the tower roofs is metal, can you verify? Do we know the deck material under the Synthetic slate roof area in center of the roof? The only notes state that steep slope roof area is metal roof deck. The plan details do not seem to show its composition.	3/18/2025	The steep-sloped tower roofs have metal decking as stated in the notes.

SECTION 00 41 43 – BID FORM

PROJECT IDENTIFICATION: 3 Courthouse Buildings Roof Replacements

THIS BID IS SUBMITTED TO: **Montgomery County Purchasing Office**
mocobids@mcgtn.net

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. This Bid shall remain subject to acceptance for sixty (60) days after the day of Bid opening.

3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

   3.1 BIDDER has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

   Date _____ Number _____

   Date _____ Number _____

   3.2 Bidder has familiarized itself with the nature and extent of the Contract Documents proposed Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

   3.3 BIDDER has given ENGINEER written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER.

   3.4 This Bid is genuine and not made in the interest of, or on behalf of, any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

4. POSSIBLE CHANGES IN QUANTITY OF WORK

   4.1 BIDDER understands that the quantities specified herein for the repairs are approximate and that actual quantities in the field may increase or decrease from the quantities estimated. BIDDER herby agrees to perform all quantities of Work as either increased or decreased, as required by the Engineer in accordance with the provisions of the Construction Documents. The final payment to the

BIDDER shall be based on the Lump Sum/Unit Prices bid and the actual quantities completed (for items that are not lump sum).

5. Approximate quantities for the items of repair shown on the drawings are as follows:

BASE BID 1 OF 3 – 1 MILLENNIUM PLAZA					
TASK ITEM	**DESCRIPTION**	**UNITS**	**QUANTITY (1)**	**UNIT PRICE (2)**	**EXTENSION (1) x (2) =**
1.1	Project Mobilization	L.S.	1	$	$
2.1A	Demolition And Substrate Preparation - Low Slope Roofing - Complete Tear Off Down To Deck	L.S.	1	$	$
2.1B	Demolition And Substrate Preparation - Steep Slope Roofing	L.S.	1	$	$
2.2A	Recycling Program - Low Slope Roofing - Existing Materials	L.S.	1	$	$
2.2B	Recycling Program - Steep Slope Roofing - Existing Materials	L.S.	1	$	$
3.1	Deck Repair/Replacement – Concrete Structural Decking **(Allowance)**	**S.F.**	**75**	$	$
6.1	Rough Carpentry	L.S.	1	$	$
7.1A	Low Slope Roofing - Vapor Barrier	L.S.	1	$	$
7.1B	Steep Slope Roofing - Underlayment	L.S.	1	$	$
7.2A	Roofing Insulation - Tapered Polyiso With Cover Board	L.S.	1	$	$
7.3A	Low Slope Roofing Membrane - Single Ply EPDM Roofing	L.S.	1	$	$
7.3B	Steep Slope Roofing - Natural Slate Tiles	L.S.	1	$	$
7.4A	Low Slope Roofing - Flashing And Sheet Metal	L.S.	1	$	$
7.4B	Steep Slope Roofing - Flashing And Sheet Metal	L.S.	1	$	$
7.6	Roofing System Warranty - Low Slope Roofing System	L.S.	1	$	$
7.9	Roofing System Warranty - Steep Slope Roofing	L.S.	1	$	$
22.1A	Plumbing Work - Reuse Existing Drains	L.S.	1	$	$
23.1	Mechanical Work	L.S.	1	$	$
26.1	Electrical Work	L.S.	1	$	$
26.2	Lightning Protection	L.S.	1	$	$
	BASE BID TOTAL – 1 MILLENNIUM PLAZA				$

Description of Abbreviations:
L.F. = Lineal Feet
S.F. = Square Feet
L.S. = Lump Sum
EA = Each

BASE BID 2 OF 3 – 2 MILLENNIUM PLAZA					
TASK ITEM	**DESCRIPTION**	**UNITS**	**QUANTITY (1)**	**UNIT PRICE (2)**	**EXTENSION (1) x (2) =**
1.1	Project Mobilization	L.S.	1	$	$
2.1A	Demolition And Substrate Preparation - Low Slope Roofing - Complete Tear Off Down To Deck	S.F.	1	$	$
2.1B	Demolition And Substrate Preparation - Steep Slope Roofing	L.S.	1	$	$
2.2A	Recycling Program - Low Slope Roofing - Existing Materials	L.S.	1	$	$
2.2B	Recycling Program - Steep Slope Roofing - Existing Materials	L.S.	1	$	$
5.1	Deck Repair – Steel Decking **(Allowance)**	**S.F.**	**400**	$	$
6.1	Rough Carpentry	L.S.	1	$	$
7.1A	Low Slope Roofing - Vapor Barrier	L.S.	1	$	$
7.1B	Steep Slope Roofing - Underlayment	L.S.	1	$	$
7.2A	Roofing Insulation - Tapered Polyiso With Cover Board	L.S.	1	$	$
7.3A	Low Slope Roofing Membrane - Single Ply EPDM Roofing	L.S.	1	$	$
7.3C	Steep Slope Roofing - Synthetic Slate Shingles	L.S.	1	$	$
7.4A	Low Slope Roofing - Flashing And Sheet Metal	L.S.	1	$	$
7.4B	Steep Slope Roofing - Flashing And Sheet Metal	L.S.	1	$	$
7.5	Water Management Systems - Gutters And Downspouts	L.S.	1	$	$
7.6	Roofing System Warranty - Low Slope Roofing System	L.S.	1	$	$
7.9	Roofing System Warranty - Steep Slope Roofing	L.S.	1	$	$
22.1A	Plumbing Work - Reuse Existing Drains	L.S.	1	$	$
22.1B	Plumbing Work – Install Retrofit Drains	L.S.	1	$	$
23.1	Mechanical Work	L.S.	1	$	$
26.1	Electrical Work	L.S.	1	$	$
26.2	Lightning Protection	L.S.	1	$	$
	BASE BID TOTAL – 2 MILLENNIUM PLAZA				$

Description of Abbreviations:
L.F. = Lineal Feet
S.F. = Square Feet
L.S. = Lump Sum
EA = Each

BASE BID 3 OF 3 – COURTHOUSE ANNEX					
TASK ITEM	**DESCRIPTION**	**UNITS**	**QUANTITY (1)**	**UNIT PRICE (2)**	**EXTENSION (1) x (2) =**
1.1	Project Mobilization	L.S.	1	$	$
2.1A	Demolition And Substrate Preparation - Low Slope Roofing - Complete Tear Off Down To Deck	S.F.	1	$	$
2.1B	Demolition And Substrate Preparation - Steep Slope Roofing	L.S.	1	$	$
2.2A	Recycling Program - Low Slope Roofing - Existing Materials	L.S.	1	$	$
2.2B	Recycling Program - Steep Slope Roofing - Existing Materials	L.S.	1	$	$
5.1	Deck Repair– Steel Decking **(Allowance)**	**S.F.**	**150**	$	$
6.1	Rough Carpentry	L.S.	1	$	$
7.1A	Low Slope Roofing - Vapor Barrier	L.S.	1	$	$
7.1B	Steep Slope Roofing - Underlayment	L.S.	1	$	$
7.2B	Roofing Insulation - **Flatstock** Polyiso With Cover Board	L.S.	1	$	$
7.3A	Low Slope Roofing Membrane - Single Ply EPDM Roofing	L.S.	1	$	$
7.3D	Steep Slope Roofing - Copper Shingles	L.S.	1	$	$
7.4A	Low Slope Roofing - Flashing And Sheet Metal	L.S.	1	$	$
7.4B	Steep Slope Roofing - Flashing And Sheet Metal	L.S.	1	$	$
7.5	Water Management Systems - Gutters And Downspouts	L.S.	1	$	$
7.6	Roofing System Warranty - Low Slope Roofing System	L.S.	1	$	$
7.9	Roofing System Warranty - Steep Slope Roofing	L.S.	1	$	$
22.1A	Plumbing Work - Reuse Existing Drains	L.S.	1	$	$
23.1	Mechanical Work	L.S.	1	$	$
26.1	Electrical Work	L.S.	1	$	$
26.2	Lightning Protection	L.S.	1	$	$
	BASE BID TOTAL – COURTHOUSE ANNEX				$

Description of Abbreviations:
L.F. = Lineal Feet
S.F. = Square Feet
L.S. = Lump Sum
EA = Each

6. The Total Bid for the 3 Courthouse Buildings Roof Replacements Project based upon the above estimated quantities is:

TOTAL BASE BID – 1 MILLENNIUM PLAZA _____

_____(Use words)

$ _____(Use figures)

TOTAL BASE BID – 2 MILLENNIUM PLAZA _____

_____(Use words)

$ _____(Use figures)

TOTAL BASE BID – COURTHOUSE ANNEX_____

_____(Use words)

$ _____(Use figures)

BIDDER agrees that the Work on this building will be complete within _____calendar days for the Base Bid - 1 Millennium Plaza, within _____calendar days for the Base Bid - 2 Millennium Plaza, within _____calendar days for the Base Bid – Courthouse Annex. BIDDER shall bid this project assuming that OWNER requires at least two crews working on the repair project simultaneously. The contractor should submit a schedule for the repair project at the time of bid submission.

7. Communications concerning this Bid shall be addressed to (Contractor):

_____

_____

_____

_____

Submitted on _____, 20_____

8. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions provided by the Owner.

9. We plan to sub-contract the following items of work (please list):

Description	Sub-contractor	Value

SECTION 01 01 50 – TASK ITEMS: EXISTING ROOFING REPLACEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 00 and Division 01 Specification Sections, apply to this Section.

B. The extent of the Task Items is indicated on the drawings and by the requirements of each section of the specifications.

C. This section is for the convenience of the Contractor only and shall not be construed as a complete accounting of all work to be performed.

D. Field Verification: Information of the existing membrane roofing provided in the contract documents is for the contractor's general reference only and requires field verification. The Contractor shall examine the site and shall be responsible for verifying all existing construction, conditions, and dimensions. No extra payment will be considered for work additional to that shown or noted, if such work would have been apparent in an inspection of the premises.

E. Coordination: Coordinate the work throughout the duration of the project with other trades.

1. As indicated in certain task items below which require Inspector or Engineer review of existing conditions, provide adequate notice to prevent delays to construction, as described in the General Conditions.

F. Unit Price Work: Several task items below include instructions for performing work per unit price. Contractor shall include in the Base Bid a cost for performing the number of units assumed in the Task Item. Contractor shall also provide an Add/Deduct cost for performing a single unit of the work. The Base Bid amount will be adjusted using this Add/Deduct cost according to actual work units completed.

PART 2 - PRODUCTS (See EXECUTION Section)

PART 3 - EXECUTION

3.1 TASK ITEM 1.1 – PROJECT MOBILIZATION

A. Scope of Work:
1. Coordinate, schedule, obtain and assembly at construction site all equipment, materials, permits, supplies, manpower and other essentials and incidentals necessary to perform work in this Section.
2. Coordinate all aspects of work with Owner and all trades.

3. Provide protective measures in and around the building as directed by the Owner prior to beginning work. The contractor shall take measures as necessary to keep access to the building free and clear of all hazards.
4. Interior Protection: Contractor shall include in their bid all costs, materials, and equipment required to protect interior of building from water infiltration and debris that could enter the building during this work. This includes plastic drape dust protection and protection of all interior finishes and furniture. The contractor shall clean all areas affected by any interior operations. Where curbs are being removed and existing openings filled in, provide protection in the area below the work area and coordinate the work with the facilities management so that personnel in affected areas can be notified.
5. Odor Controls: Contractor shall include in their bid all costs, materials, and equipment required to mitigate odor infiltration during roofing installation including but not limited to low VOC adhesives, from infiltrating the interior of building during this work. This includes performing a pre-construction survey of potentially unsealed thru-deck penetrations, deck-to-wall transitions, mechanical ducts, etc. The contractor shall identify these locations prior to start of work, prepare an odor mitigation plan to be submitted to Owner for review and approval, and implement approved odor mitigation prevention procedures as necessary to prevent disruption of the interior operations of the facility. Where necessary, provide protection in the interior areas below the work area and coordinate the work with the facilities management so that personnel in affected areas can be notified.
6. At the existing roof areas, Contractor shall install certified temporary fall protection systems meeting all regulatory and governmental requirements prior to performing any work on the roof. Provide signed and sealed drawings of all temporary fall protection systems for the Owner's records. All required safety systems must remain in place for the entire duration of the roofing construction and shall continuously be used in strict accordance with all institutional, regulatory, and governmental requirements.

    a. Contractor shall install Safety Debris Netting on the Temporary Guardrail System, installed on the near-edge unprotected roof perimeter zones, to prevent any tools/items/material/equipment debris from falling over the edge of the Roofs.
    b. Contractor shall follow BP Health, Safety, Security & Environment (HSSE) Procedures: 11.9 (Roof Access Procedure), 18.11 (Manual Handling Procedure) and 18.7 (Fall Prevention and Protection Procedure).

7. Salvage existing material which has been indicated for reinstallation according to work items below. Store salvaged materials in clean, dry locations and protect from moisture, extreme temperatures, and direct sunlight.
8. Properly dispose of all debris and waste construction materials in accordance with all applicable laws and regulations.
9. Prepare project staging, phasing, building enclosure protection (water, dust, and odor), and demolition haul-off plans and submit to Owner for their review and approval. Provide signed and sealed engineered shop drawings if required for any trash shoot or demolition related structural attachments to be used during demolition.

B. Repair Drawings and Specifications:
    1. Not Applicable.

3.2 TASK ITEM 2.1A – DEMOLITION AND SUBSTRATE PREPARATION – LOW SLOPE ROOFING - COMPLETE TEAR OFF DOWN TO DECK

A. Existing roofing system: Existing roofing system is based on limited exploratory roofing cuts information and available record drawings of the area. Contractor shall be responsible for field verifying this information prior to start of construction.

1. 1 Millenium Plaza: High Roof, Low Roof (East), and Low Roof (West) (from top down)

    a. Fully adhered EPDM roofing membrane
    b. Fully adhered high-density polyiso cover board and polyiso insulation board
    c. Existing concrete roof decking (to remain)

2. 2 Millenium Plaza: Main Roof, Penthouse Roofs, and Walkway Roofs (from top down)

    a. Fully adhered EPDM roofing membrane
    b. Mechanically fastened gypsum cover board and polyiso insulation board
    c. Existing metal roof decking (to remain)

3. Courthouse Annex: Main Roof (from top down)

    a. Fully adhered EPDM roofing membrane
    b. Mechanically fastened gypsum cover board and polyiso insulation board
    c. Existing metal roof decking (to remain)

B. Scope of Work
1. Remove all existing roofing membrane, base flashings, penetration flashings, cover board, and insulation board down to roof structural decking which shall be left in place expect as noted otherwise (this work shall be performed in a controlled manner to prevent damage to adjacent structural and architectural components to remain).
2. Remove obsolete roof penetrations and curbs identified on the roof plan. Contractor shall coordinate equipment removal with the Owner. Contractor shall perform all necessary service disconnects and relocations as may be required.
3. Remove and dispose of existing sheet metal, curbs, coating assembly inside the eave gutter, and other existing roofing accessories as shown in Drawings.
4. Remove all debris from roof area and properly dispose of all materials off site.
5. At the end of each day, ensure that all drains are in proper working order, that drain lines are clear to the first elbow, downspouts are completely clear, and that the facility is left is a completely weathertight condition. Implement any required corrective measures before leaving the job site that day.

3.3 TASK ITEM 2.1B – DEMOLITION AND SUBSTRATE PREPARATION – STEEP SLOPE ROOFING

A. Existing roofing system: Existing roofing system is based on limited exploratory roofing cuts information and available record drawings of the area. Contractor shall be responsible for field verifying this information prior to start of construction.

1. 1 Millenium Plaza: Corner Tower Roofs and Center Tower Roof (from top down)

    a. Slate Tiles
    b. Batten
    c. Underlayment
    d. Staples, nails, screws, fasteners, etc.
    e. Metal roof structural decking

2. 2 Millenium Plaza: Gable Roofs and Tower Roofs (from top down)

    a. Synthetic Slate Tiles
    b. Batten
    c. Underlayment
    d. Staples, nails, screws, fasteners, etc.
    e. Metal roof structural decking

3. Courthouse Annex: Corner Tower Roof (from top down)

    a. Copper Tiles
    b. Underlayment
    c. Staples, nails, screws, fasteners, etc.
    d. 5/8 inch plywood

B. Scope of Work
1. Protect existing low slope roofing membrane with plywood or other approved cover boards.
2. Protect lightning protection system with plywood or other approved coverboards.
3. Remove all existing roofing tiles and underlayment down to roof structural decking.
4. Remove and dispose of existing sheet metal flashing at locations identified on the roof plan including along roof rakes at walls and stone copings, roof valley, eaves, and penetrations.
5. Remove all existing wood and fiber cants at base of curbs and walls.
6. Remove all fasteners, screws, nails, staples, etc. for roof structural decking.
7. Remove and re-use existing sheet flashing/counterflashing at locations identified on the roof plan including along roof eaves at the bottom of steep slope roofs, under stone copings, and metal cap at top of clock tower.
8. Remove all debris from roof area and properly dispose of all materials off site.
9. At the end of each day, ensure that all gutters are in proper working order and that drain lines are clear to the first elbow and downspouts are completely clear, and that the facility is left is a completely weathertight condition. Implement any required corrective measures before leaving the job site that day.

3.4 TASK ITEM 2.2A – RECYCLING PROGRAM – LOW SLOPE ROOFING - EXISTING MATERIALS

A. Scope of Work
1. Prior to start of work, Contractor shall perform a survey of the roofing work areas to identify recyclable material within the roofing construction locations and submit a report of these materials to the Owner for review and approval.

2. After receipt of written approval from the Owner, Contractor shall recycle approved removed roofing materials. Return to original roof manufacturer or an approved recycler of roofing membrane materials. Keep ongoing and accurate records of the recycled materials as described in the General Conditions.
3. Recycle removed roofing membrane.
4. Recycle removed insulation.
5. Recycle removed sheet metal flashings, termination bars, fasteners and screws, sheet metal rooftop curbs and equipment.
6. Recycle new product packaging materials. Ensure packaging materials are recyclable prior to procurement and shipping.
7. Submit proof and certification to Engineer and Owner that materials were sent to a certified recycling contractor. These documents shall be submitted with all pay applications.

3.5 TASK ITEM 2.2B – RECYCLING PROGRAM – STEEP SLOPE ROOFING - EXISTING MATERIALS

A. Scope of Work
1. Prior to start of work, Contractor shall perform a survey of the roofing work areas to identify recyclable material within the roofing construction locations and submit a report of these materials to the Owner for review and approval.
2. After receipt of written approval from the Owner, Contractor shall recycle approved removed roofing materials. Return to original roof manufacturer or an approved recycler of roofing membrane materials. Keep ongoing and accurate records of the recycled materials as described in the General Conditions.
3. Recycle removed tiles.
4. Recycle removed roofing underlayment.
5. Recycle removed sheet metal flashings, termination bars, metal battens not to be re-used in new roofing.
6. Recycle removed fasteners, screws, sheet metal rooftop curbs, equipment, etc., not to be re-used in the new roofing.
7. Recycle new product packaging materials. Ensure packaging materials are recyclable prior to procurement and shipping.
8. Submit proof and certification to Engineer and Owner that materials were sent to a certified recycling contractor. These documents shall be submitted with all pay applications.

3.6 TASK ITEM 3.1 – DECK REPAIR/REPLACEMENT – CONCRETE STRUCTURAL DECKING

A. Scope of Work
1. Repair damaged, spalled, or otherwise deteriorated structural concrete roof deck. Patch any concrete that is spalled more than 3/4-inch deep from the deck surface, and/or any spalls with exposed reinforcement – as determined during post tear off inspection.
2. The contract price will include the following allowances, to be adjusted by unit costs listed in bid form:

    a. Prepare and patch concrete spalls: 20 Square Feet

3. Exposed steel shall be epoxy coated with an approved epoxy product.

4. Contractor shall locate and mark all work areas as specified in Section "Surface Preparation for Patching." Marking will be done with an accepted submittal method. Contractor shall identify all critical repair work areas before starting the work.
5. Procedure for delaminated, spalled, and unsound concrete removal shall be as specified in Section "Surface Preparation for Patching." Patch any concrete that is spalled more than 3/4-inch deep from the deck surface, and/or any spalls with exposed reinforcement – as determined during post tear off inspection.
6. Exposed steel shall be epoxy coated with an approved epoxy product as specified in Section "Surface Preparation for Patching."
7. Contractor shall prepare cavities for repair placement as specified in Section "Surface Preparation for Patching."
8. Patch installation procedures shall be in accordance with referenced specifications for selected material.
9. Allow concrete repair material to cure in accordance with the manufacturer's requirements prior to installing final roofing system.
10. Engineer shall view all replaced or repaired areas before the new roofing system is installed.
11. Remove, scrape, and/or spud clean loose and debonded original built-up roofing residue and roofing from the concrete surface to ensure bond for new roofing system.
12. Remove any standing water on top of roof deck by pushing to drains, wet vacuuming, or pumping to drains.
13. Dry damp or moist deck surfaces prior to installation of new roofing system in strict accordance with manufacturer's requirements. Use drying methods that do not damage the concrete decking. DO NOT TRAP MOISTURE UNDER NEW ROOFING SYSTEM.

3.7 TASK ITEM 5.1 – DECK REPAIR – STEEL DECKING

A. Scope of Work
1. After removal of existing roofing system, inspect roof deck for attachment to roof structure, and identify areas of corroded or deteriorated steel deck.
2. Clean, wire brush, and prime paint any surface rusted steel deck as determined during post tear-off inspection. Galvanizing repair paint shall be "ZRC Galvalite" as manufactured by ZRC Chemical Products or a paint complying with SSPC-Paint20, Level 1. Steel deck surfaces to be coated shall be cleaned in accordance with manufacturer's requirements, i.e., devoid of grease, oil, mill scale, oxidation, loosely adherent rust, paint, etc.
    a. Contact Engineer for further review if 10% or greater section loss of metal deck is observed.
3. The contract price will include the following allowances, to be adjusted by unit costs listed in bid form:
    a. Wire brush, clean, and prime paint surface rusted steel deck 100 Square Feet.

4. Prior to the start of Task Item 5.1 repairs, Contractor shall coordinate with the Owner's representative to perform an underdeck survey of conduit systems attached to the metal deck and bar joists to prevent impacting or damaging any deck-attached utility conduits or other attachments.

3.8 TASK ITEM 6.1 – ROUGH CARPENTRY

A. Scope of Work
   1. Work consists of installation of new lumber nailers, sleepers, curbs, and edging as required for installation of new roofing system. For bidding purposes, assume all existing lumber will require replacement unless specified otherwise in the drawings.
   2. Install replacement wood nailers where deteriorated components were removed or new nailers as indicated by project details. Add wood nailers along roof edges to accommodate new insulation board.
   3. Install new curbs and platforms as necessary to provide a minimum of 8-inch freeboard or as otherwise required by the membrane manufacturer.
   4. All Task Item 6.1 roofing attachments shall be installed to resist the wind uplift pressures specified in the Drawings.

3.9 TASK ITEM 7.1A – LOW SLOPE ROOFING –VAPOR BARRIER

A. Scope of Work
   1. Install 1/2-inch substrate board at 2 Millenium and Courthouse Annex buildings. Mechanically fasten substrate board to existing metal roof decking.
      a. Prior to the start of substrate installation, Contractor shall coordinate with the Owner's representative to perform an underdeck survey of conduit systems attached to the metal deck and bar joists to prevent impacting or damaging any deck-attached utility conduits or other attachments.
   2. Install 45 mil bituminous sheet membrane to serve as a vapor barrier on top of roof decking over entire roof decking surface.
   3. Terminate sheet membrane per drawings.
   4. All membrane materials and accessories shall be VOC compliant. Alert Owner prior to use of solvent based primers with high VOCs to prevent infiltration through intake louvers and the building HVAC systems.

3.10 TASK ITEM 7.1B – STEEP SLOPE ROOFING – UNDERLAYMENT

A. Scope of Work
   1. Install 55 mil bituminous self-adhering sheet membrane underlayment on top of roof decking over entire roof decking surface.
   2. Terminate self-adhering sheet membrane at roof eaves, roof rakes, gable ends, dormers, walls, etc. per drawings.
   3. All membrane materials and accessories shall be VOC compliant. Alert Owner prior to use of solvent based primers with high VOC's to prevent infiltration through intake louvers and the building HVAC systems.

3.11 TASK ITEM 7.2A – LOW-SLOPE ROOF – ROOFING INSULATION – TAPERED POLYISO WITH COVER BOARD – (1 & 2 MILLENIUM ONLY)

A. Scope of Work

1. Work consists of providing and installation of continuous tapered polyisocyanurate insulation for insulating purposes and to introduce slope for positive drainage. The insulation shall provide a minimum thermal resistance of R- 20.
2. Prior to start of work, Contract shall take field measurements and submit roof slope plan shop drawings taking into account all roof curb, roof parapet, and wall flashing heights. After acceptance, modify slope plan and taper requirements as necessary based on existing conditions.
3. Install continuous layers of polyisocyanurate insulation. Minimum bottom layer thickness shall be 1/2 inch at roof drains. Top layer shall be tapered polyisocyanurate insulation at **1/4-inch** per 12-inch. Stagger joints between layers of insulation. Fully adhered in cold adhesive to substrate.
   a. Install cold adhesive between all layers of insulation using manufacturer required adhesive ribbon spacing.
4. Install 1/2-inch thick cover board on top of new insulation. Adhere in cold adhesive to substrate using manufacturer required adhesive ribbon spacing.
5. Provide tapered sumps to the drains. Extend length of sump as needed to accommodate overflow drains where present.
6. Install 1/4 inch per foot tapered insulation crickets at locations indicated on the slope plan shop drawings, including the high side of the rooftop equipment curbs.
7. All Task Item 7.2 roofing attachments shall be designed and installed to resist the wind uplift pressures specified in the Drawings.

3.12 TASK ITEM 7.2B – LOW-SLOPE ROOF – ROOFING INSULATION – FLATSTOCK POLYISO WITH COVER BOARD – (COURTHOUSE ANNEX)

A. Scope of Work
1. Work consists of providing and installation of continuous polyisocyanurate insulation for insulating purposes. The insulation shall provide a minimum thermal resistance of R- 20.
2. Install continuous layers of polyisocyanurate insulation. **Minimum bottom layer thickness shall be 1/2 inch. Top layer shall be flatstock polyisocyanurate insulation.** Stagger joints between layers of insulation. Fully adhered in cold adhesive to substrate.
   a. Install cold adhesive between all layers of insulation using manufacturer required adhesive ribbon spacing.
3. Install 1/2-inch thick cover board on top of new insulation. Adhere in cold adhesive to substrate using manufacturer required adhesive ribbon spacing.
4. Provide tapered sumps to the drains. Extend length of sump as needed to accommodate overflow drains where present.
5. All Task Item 7.2 roofing attachments shall be designed and installed to resist the wind uplift pressures specified in the Drawings.

3.13 TASK ITEM 7.3A – LOW SLOPE ROOFING MEMBRANE – SINGLE PLY EPDM ROOFING

A. Scope of Work
1. Install a 80 mil fully adhered EPDM membrane on top of insulation in cold adhesive in accordance with the membrane manufacturer’s instructions.
2. Membrane attachment to substrate shall be designed to resist the wind uplift pressures as shown in the General Notes and Roof Plan - Wind Load based on ASCE 7.
3. Install sacrificial sheet membrane under all pipe, duct, and conduit supports.

4. Install perforated walkway mats at locations as shown on the project drawings.

3.14 TASK ITEM 7.3B – STEEP SLOPE ROOFING – NATURAL SLATE TILES

A. Scope of Work
   1. Install tiles per drawings and shingle manufacturer recommendations:

      a. 1 Millenium Plaza: Use Natural Slate Shingles per Section 07 13 26.1.

   2. Shingle attachment to substrate shall be designed to resist the wind uplift pressures as shown in the General Notes and Roof Plan - Wind Load based on ASCE 7.

3.15 TASK ITEM 7.3C – STEEP SLOPE ROOFING – SYNETHETIC SLATE TILES

A. Scope of Work
   1. Install tiles per drawings and shingle manufacturer recommendations:

      a. 2 Millenium Plaza: Use Synthetic Slate Shingles per Section 07 13 26.

   2. Shingle attachment to substrate shall be designed to resist the wind uplift pressures as shown in the General Notes and Roof Plan - Wind Load based on ASCE 7.

3.16 TASK ITEM 7.3D – STEEP SLOPE ROOFING – COPPER TILES

A. Scope of Work
   1. Install tiles per drawings and shingle manufacturer recommendations:

      a. Courthouse Annex: Use Copper Shingles per Section 07 31 16.

   2. Shingle attachment to substrate shall be designed to resist the wind uplift pressures as shown in the General Notes and Roof Plan - Wind Load based on ASCE 7.

3.17 TASK ITEM 7.4A – LOW SLOPE ROOFING - FLASHING AND SHEET METAL

A. Scope of Work
   1. Work consists of installation of all sheet metal flashing and trim as indicated on project drawings and specifications for fully roofing replacement.
   2. Install new edge metal and flashing. See drawings for flashing details at roof parapet.
   3. Install new counter-flashings.
   4. Install new metal pitch pans, filler, and collars. Bonnets shall be installed on all pitch pans.
   5. Install new continuous sheet metal caps for all new curbs. Provide a minimum vertical lip of 4 inches on the cap.
   6. Install new formed metal flashings at flue, pipes, etc., as shown in the drawings.
   7. Install new drain lead flashings.
   8. Install new soil pipe lead flashings.

9. Provide gooseneck hoods at all HVAC line penetrations to eliminate gang pitch pans. All shall extend above the finished roof system a minimum of 8 inches.
10. Provide all necessary sealants, sealant tapes, and fasteners to ensure a watertight installation. Sealant installation shall be incidental to the project.
11. Provide fastener type and spacing for sheet metal flashings and trim which will resist the wind loads specified in the Drawings.

3.18 TASK ITEM 7.4B – STEEP-SLOPE ROOFING - FLASHING AND SHEET METAL

A. Scope of Work
1. Work consists of installation of all sheet metal flashing and trim as indicated on project drawings and specifications.
2. Install metal flashings according to manufacturer's written recommendations and recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual".
3. Replace base flashing and counter-flashings. Do not remove flashing installed integral with siding.
4. Install new sheet metal flashing at roof rakes, eave drip edges, valley, and penetrations, as required.
5. Provide all necessary sealants, sealant tapes, and fasteners to ensure a watertight installation.
6. Flashing attachments to underlying structural substrates shall be designed and installed to resist the wind uplift pressures specified in the Drawings.
7. Contractor shall provide shop drawings meeting these requirements, signed, and sealed by a professional engineer licensed in the State of Tennessee, of all new flashing and sheet metal trim installations and attachments.

3.19 TASK ITEM 7.5 – WATER MANAGEMENT SYSTEMS – GUTTERS AND DOWNSPOUTS

A. Scope of Work
1. Replace existing gutters (can be reused if in undamaged condition and acceptable to Owner):
   a. 2 Millenium Plaza: Hanging gutters.
2. Reuse existing downspouts.
3. Ensure gutter is sloped toward downspout to avoid flooding.

3.20 TASK ITEM 7.6 – ROOFING SYSTEM WARRANTY – LOW SLOPE ROOFING SYSTEM

A. Scope of Work
1. Work consists of providing a manufacturer and contractor warranties for new roofing system.
2. Provide a minimum 20 year "Roof System/Labor Guaranty" material and labor warranty for the new roofing systems at the fully roofing replacement, including the membrane, insulation, overlay board, and other accessories.
3. Provide a 10-year warranty for pre-finished sheet metal flashing finish.
4. Warranty shall be the shared responsibility of the Roofing Contractor and the Roofing Membrane Manufacturer as follow:
   a. Base Bid: Two (2) years after substantial completion.

5. The Contractor shall make all necessary notices for warranty purposes to the primary roofing manufacturer, to secure timely inspections and issuance of the warranty.

3.21 TASK ITEM 7.9 – ROOFING SYSTEM WARRANTY – STEEP SLOPE ROOFING

A. Scope of Work
1. Work consists of providing a manufacturer and contractor warranties for new roofing system.
2. Provide a 2-year material and labor warranty for the new roofing systems. Warranty shall be the shared responsibility of the Roofing Contractor and the Roofing Membrane Manufacturer. The Contractor shall provide a standard NRCA warranty form.
3. Provide a 50-year material warranty for the new roofing systems. Warranty shall be the responsibility of the tile Manufacturer.
4. The Contractor shall make all necessary notices for warranty purposes to the primary roofing manufacturer to secure timely inspections and issuance of the warranty.

3.22 TASK ITEM 7.10 – JOINT SEALANT REPLACEMENT/INSTALLATION AT CAST STONE COPING CAPS

A. Scope of Work
1. Work consists of removal and replacement or installation of cast stone coping joint sealants at Courthouse Annex building.
2. Remove existing sealant and/or mortar from joints as shown in Details.
3. All joints shall be thoroughly cleaned by either abrasive methods or grinding to remove all laitance, unsound substrate, and curing compounds which may interfere with adhesion. Joint shall be air blasted to remove remaining debris.
4. Prime joint surfaces as needed.
5. Install backer rod or bond breaker in strict accordance with manufacturer’s instructions.
6. Install sealant with concave profile and overall dimensions to conform with manufacturer’s recommendations for best practice for sealant installation.
7. Do not allow sealant to ooze or sag

3.23 TASK ITEM 22.1A – PLUMBING WORK – REUSE EXISTING DRAINS

A. Scope of Work
1. Work consists of cleaning existing drain lines, repairing damaged drains, replacing damaged drains, and other drain related work items at all roof areas.
2. Clean and rod out all existing drains.
3. Check drain bowl to deck connection and drain bowl to interior downspout connection to ensure watertight connection prior to roofing tear-off. Contact Inspector prior to roofing tear-off if existing interior drain connections may lead to interior water leakage.
4. Reuse existing drain bowls and deck plates, where indicated on the Drawings. Reuse existing clamping rings, fasteners, and strainers. Report missing or damaged drain bowls and clamping rings to the Inspector. Clean and coat steel if required.
5. Install piping extensions as required to raise curbs, vents, stacks, and soil pipes to a minimum of 8-inches above the finished roof surface.
6. Install pre-manufacturer new pipe supports on top of new roofing membrane with sacrificial pad.

7. All plumbing retrofit work shall be performed by a licensed and experienced plumber and shall be performed according to all applicable current codes and regulations.

3.24 TASK ITEM 22.1B – PLUMBING WORK – INSTALL RETROFIT DRAINS

A. Scope of Work
1. Work consists of cleaning existing drain lines, repairing damaged drains, replacing damaged drains, and other drain related work items at all roof areas.
2. Clean and rod out all existing drains.
3. Check drain bowl to deck connection and drain bowl to interior downspout connection to ensure watertight connection prior to roofing tear-off. Contact Inspector prior to roofing tear-off if existing interior drain connections may lead to interior water leakage.
4. Reuse existing drain bowls and deck plates, where indicated on the Drawings. Reuse existing clamping rings, fasteners, and strainers. Report missing or damaged drain bowls and clamping rings to the Inspector. Clean and coat steel if required.
5. Install piping extensions as required to raise curbs, vents, stacks, and soil pipes to a minimum of 8-inches above the finished roof surface.
6. Install pre-manufacturer new pipe supports on top of new roofing membrane with sacrificial pad.
7. All plumbing retrofit work shall be performed by a licensed and experienced plumber and shall be performed according to all applicable current codes and regulations.

3.25 TASK ITEM 23.1 – MECHANICAL WORK

A. Scope of Work
1. Work consists of raising all equipment curbs, conduits, gas lines, ducts, and pipes as necessary to provide 8-inches clearance to accommodate and protect new roofing system or insulation thicknesses.
2. Remove abandoned curbs, platforms, and rooftop equipment as indicated in project drawings and as identified by the Owner.
3. Coordinate with mechanical sub-contractor to raise all curbs and platforms to a minimum of 8-inches or as indicated in project details above the finished roof surface and flash over the tops of the curbs to install proper counter-flashing and as otherwise needed for installation of the new roofing system.
4. All mechanical equipment retrofit work shall be performed by a licensed contractor experienced in this type of work and shall be performed according to all applicable current codes and regulations.

3.26 TASK ITEM 26.1 – ELECTRICAL WORK

A. Scope of Work
1. Work consists of removing and reinstalling conduits, wiring, cameras, lights, circuits, fixtures, and other electrical work during installation of new roofing system.
2. Raise existing electrical conduit at rooftop equipment to a minimum of 8 inches above the finished roof surface. Provide extensions of services to allow for goosenecks to be installed.
3. Install new conduit supports on top of new roofing membrane with sacrificial pad.
4. Remove existing cameras along parapet wall. Re-install after new roofing installation.

5. Remove existing conduit along mid-height of parapet wall. Re-install after new roofing installation.
6. All electrical work shall be performed by a licensed and experienced electrician and shall be performed according to all applicable current codes and regulations.

3.27 TASK ITEM 26.2 – LIGHTNING PROTECTION

A. Scope of Work
1. Work consists of temporarily removing, reinstalling, and re-certifying the existing lightning protection system during installation of new roofing system. This work shall be performed at all roofing replacement construction areas whether shown on the Drawings or not.
2. Refer to recommendations from roofing manufacturer and warranty holder on attachment of lightning protection.
3. Upon completion the Contractor will deliver to the Owner as-built drawing and the appropriate system certification documents under the Underwriter's Laboratory and the Lightning Protection institute programs.
4. Removal and reinstallation of the existing lightning protection system shall be performed by a Lightning Protection institute Certified Master Installer.
5. Provide sacrificial cap sheet ply under all conductor cables, attachments, rods, and connection points at exposed roofing membrane flashing locations.

END OF SECTION 01 01 50

If BIDDER is:

An Individual

By _____ (SEAL)
(Individual's Name)

doing business as _____

Business Address: _____

_____

_____

Phone No.: _____

A Partnership

By _____ (SEAL)
(Firm Name)

_____
(General Partner)

Business Address: _____

_____

_____

Phone No.: _____

A Corporation

By _____(Corporate Seal)
(Corporation Name)

_____
(State/Province of Incorporation)

By _____
(Name of Person Authorized to Sign)

_____
(Title)

Attest _____
(Secretary)

Business Address: _____

_____

_____

Phone No.: _____

END OF DOCUMENT 00 41 43

SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. General project coordination procedures.
2. Coordination Submittals.
3. Requests for Information (RFIs).
4. Administrative and supervisory personnel.
5. Project meetings.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Division 01 Section "Closeout Procedures" for coordinating Contract closeout.

1.3 COORDINATION

A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.

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, before or after its own installation.

2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.

3. Make adequate provisions to accommodate items scheduled for later installation.

B. If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other 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. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Pre-installation conferences.
6. Project closeout activities.

1.4 COORDINATION SUBMITTALS

A. Coordination Drawings: Prepare Coordination Drawings for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.

1. Indicate relationship of components shown on separate Shop Drawings.
2. Indicate required installation sequences.

B. Staff Names: Within 15 days of starting construction operations, submit a list of principal staff assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone.

1.5 REQUESTS FOR INFORMATION (RFI)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.

1. Engineer will return RFIs submitted to Engineer by other entities controlled by Contractor with no response.

2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

1. Project Name.
2. WPM Project number.
3. Date.
4. Name of Contractor.
5. Name of Engineer.

6. RFI number, numbered sequentially.
7. RFI subject.
8. Specification Section number and title and related paragraphs, as appropriate.
9. Drawing number and detail references, as appropriate.
10. Field dimensions and conditions, as appropriate.
11. Where applicable, contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
12. Contractor's signature.
13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.

    a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

C. RFI Forms: Email the RFI to the Engineer.

1. Title the subject line of the email with: WPM Project number - Project Name - RFI number

2. Attachments shall be electronic files in PDF format.

D. RFI Forms: Generate the RFI in the Owner’s project management software.

1. Where the Owner’s project management software does not include space for the information above Include information as an electronically attached MS word file.

2. Attachments shall be electronic files preferably in PDF format if permitted by the Owner’s software.

E. Engineer’s Action: Engineer will review each RFI, determine action required, and respond. Allow seven 7 working days for Engineer's response for each RFI. RFIs received by Engineer after 1:00 p.m. will be considered as received the following working day.

1. The following Contractor-generated RFIs will be returned without action:

    a. Requests for approval of submittals.
    b. Requests for approval of substitutions.
    c. Requests for approval of Contractor's means and methods.
    d. Requests for coordination information already indicated in the Contract Documents.
    e. Requests for adjustments in the Contract Time or the Contract Sum.
    f. Requests for interpretation of Engineer's actions on submittals.
    g. Incomplete RFIs or inaccurately prepared RFIs.

2. Engineer's action may include a request for additional information, in which case Engineer's time for response will date from time of receipt of additional information.

3. Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal.

a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Engineer in writing within 10 days of receipt of the RFI response.

F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following in the FRI Log:

1. Project name.
2. Name of Contractor.
3. Name of Engineer.
4. RFI number including RFIs that were returned without action or withdrawn.
5. RFI summary description.
6. Date the RFI was submitted.
7. Date Engineer's response was received.

G. On receipt of Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Engineer within seven 7 days if Contractor disagrees with response.

1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

1.6 OWNERS PROJECT WEB SITE

A. Use Owner's Project Web Site for purposes of hosting and managing project communication and documentation until Final Completion. Owner’s Project Web site may include the following functions:

1. Project directory.
2. Project correspondence.
3. Meeting minutes.
4. Contract modifications forms and logs.
5. RFI forms and logs.
6. Task and issue management.
7. Photo documentation.
8. Schedule and calendar management.
9. Submittals forms and logs.
10. Payment application forms.
11. Drawing and specification document hosting, viewing, and updating.
12. Online document collaboration.
13. Reminder and tracking functions.
14. Archiving functions.

B. Contractor, subcontractors, and other parties granted access by Contractor to Project Web site shall execute a data licensing agreement in the form of Agreement acceptable to Owner and Engineer.

1.7 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

1.8 PROJECT MEETINGS

A. General: Coordinate with the Engineer and Owner's Representatives in the scheduling and participation in meetings and conferences at Project site, unless otherwise indicated.

1. Attendees: Inform the Owner's Representative, Engineer, and Contractor of the date and time of each meeting. Contractor and Owner's Representative shall inform others involved, and individuals whose presence is required, of date and time of each meeting.

2. Agenda: Engineer or Owner's Representative will prepare the meeting agenda and distribute the agenda to all invited attendees.

3. Minutes: Contractor will record significant discussions and agreements achieved. Minutes will be distributed to everyone concerned, including Owner, Engineer, and Contractor.

B. Preconstruction Conference: Coordinate with the Engineer and Owner's Representatives in the scheduling of a preconstruction conference before starting construction, at a time acceptable to the Contractor and convenient to Owner and Engineer but no later than 15 days after execution of the Agreement. Hold the conference at the Project site or another convenient location. The Engineer or Owner's Representative will conduct the meeting to review responsibilities and personnel assignments.

1. Attendees: Authorized representatives of Owner, Engineer, and their consultants; Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Discuss items of significance that could affect progress, may include the following:

a. Tentative construction schedule.
b. Phasing.
c. Critical work sequencing.
d. Designation of responsible personnel.
e. Procedures for processing field decisions and Change Orders.
f. Procedures for processing Applications for Payment.
g. Distribution of the Contract Documents.
h. Submittal procedures.
i. Preparation of Record Documents.
j. Use of the premises.
k. Responsibility for temporary facilities and controls.
l. Parking availability.
m. Office, work, and storage areas.
n. Equipment deliveries and priorities.

o. First aid.
p. Security.
q. Progress cleaning.
r. Working hours.

C. Preinstallation Conferences: Contractor shall conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Engineer of scheduled meeting dates.

2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

a. Contract Documents.
b. Options.
c. Related Change Orders.
d. Deliveries.
e. Submittals.
f. Compatibility problems.
g. Time schedules.
h. Weather limitations.
i. Manufacturer's written recommendations.
j. Warranty requirements.
k. Compatibility of materials.
l. Acceptability of substrates.
m. Temporary facilities and controls.
n. Space and access limitations.
o. Testing and inspecting requirements.
p. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements.

4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Progress Meetings: Engineer or Owner’s Representative will conduct progress meetings at weekly intervals. Contractor shall coordinate preparation of payment requests with dates of meetings.

1. Attendees: In addition to representatives of Owner and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

    a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

    b. Review present and future needs of each entity present, including the following:
        1) Sequence of operations.
        2) Status of submittals.
        3) Access.
        4) Site utilization.
        5) Temporary facilities and controls.
        6) Work hours.
        7) Hazards and risks.
        8) Progress cleaning.
        9) Quality and work standards.
        10) Change Orders.
        11) Documentation of information for payment requests.

3. Reporting: Engineer or Owner’s Representative will distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.

    a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

END OF SECTION 01 31 00

SECTION 01 73 29 – CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

A. This Section includes procedural requirements for cutting and patching.

B. Related Sections include the following:

1. Divisions 02 through 16 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1.3 DEFINITIONS

A. Cutting: Removal of existing construction necessary to permit installation or performance of other Work.

B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.4 SUBMITTALS

A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:

1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
2. Changes to Existing Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
3. Products: List products to be used and firms or entities that will perform the Work.
4. Dates: Indicate when cutting and patching will be performed.
5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.

    a. Include description of provisions for temporary services and systems during interruption or permanent services and systems.
6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.

7. Engineer's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.5 QUALITY ASSURANCE

A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.

B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.

C. Miscellaneous Elements: Do not cut and patch the following elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.

D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Engineer's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

1.6 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections of these Specifications.

B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.

1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Temporary Support: Provide temporary support of Work to be cut.

B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

D. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to avoid interruption of services to occupied areas.

3.3 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
6. Proceed with patching after construction operations requiring cutting are complete.

C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

    a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.

4. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

END OF SECTION 01 73 29

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:

1. Inspection procedures.
2. Submittal of warranties.
3. Final cleaning.

B. Related Sections:

1. Division 01 Section “Payment Procedures”

2. Division 01 Section "Periodic and Final Cleaning".

3. Division 01 Section "Project Record Documents"

4. Closeout requirements for specific construction activities are included in appropriate Sections 02 through 16. .

1.3 SUBSTANTIAL COMPLETION

A. Submittals for Substantial Completion: Complete the following a minimum of [ten] days prior to requesting field review for of Substantial Completion. List items below that are incomplete at time of request.

1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.

2. Submit closeout submittals referenced in this and other Sections.

3. Submit as-built drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information.

4. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.

5. Obtain and submit releases enabling Owner unrestricted use of Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.

6. Submit an Application for Payment that coincides with, or first follows, date Substantial Completion is claimed, show 100% completion for portion of Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and statement showing an accounting of changes to Contract Sum.

    a. If 100% completion cannot be shown, include list of incomplete items, value of incomplete construction, and reasons Work is not complete.

B. Procedures for Substantial Completion: Before requesting field review for Certification of Substantial Completion, complete the following. List exceptions in request.

1. Advise Owner of pending insurance change-over requirements.
2. Deliver tools, spare parts, extra stock, and similar items.
3. Make final change-over of permanent locks and transmit keys to Owner. Advise Owner's personnel of change-over in security provisions.
4. Complete start-up testing of systems, and instruction of Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from site, along with construction tools, mock-ups, and similar elements.
5. Advise Owner of changeover of utilities if applicable.
6. Participate with Owner in conducting inspection and walkthrough.
7. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
8. Complete final cleaning requirements, including coating touchups.
9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

C. Field Review Procedures: On receipt of request for field review, Engineer will either proceed with the review of work or advise Contractor of unfilled requirements. Engineer will prepare Certificate of Substantial Completion following inspection, or advice Contractor of construction that must be completed or corrected before certificate will be issued.

1. Engineer will repeat field review when requested and assured that Work has been substantially completed.
2. Engineer will provide one repeat inspection under its contract with Owner. Subsequent field reviews shall be at Contractor's expense.
3. Results of completed field reviews will form basis of requirements for final acceptance.

1.4 FINAL COMPLETION PROCEDURES

A. Submittals for Final Completion: Before requesting final field review for certification of final acceptance and final payment, complete the following. List exceptions in request.

1. Submit final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
2. Submit an updated final statement, accounting for final additional changes to Contract Sum.
3. Submit certified copy of Engineer's final field review list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, and list has been endorsed and dated by Engineer.

4. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
5. Submit final meter readings for utilities, measured record of stored fuel, and similar data as of date of Substantial Completion, or when Owner took possession of and responsibility for corresponding elements of Work.
6. Submit consent of surety to final payment.
7. Submit final liquidated damages settlement statement.
8. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

PART 2 - PRODUCTS (NOT APPLICABLE).

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

A. Operating and Maintenance Instructions: Arrange for each installer of equipment or materials that require regular maintenance to meet with Owner's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives.

END OF SECTION 01 77 00

SECTION 07 53 23 - ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Adhered ethylene-propylene-diene-terpolymer (EPDM) roofing system.
2. Substrate board.
3. Vapor retarder.
4. Roof insulation.
5. Cover board.
6. Walkways.

B. Related Requirements:

1. Section 061000 "Rough Carpentry" for wood nailers, curbs, and blocking.
2. Section 076200 "Sheet Metal Flashing and Trim" for metal roof flashings and counterflashings.
3. Section 079200 "Joint Sealants" for joint sealants, joint fillers, and joint preparation.

1.3 DEFINITIONS

A. Roofing Terminology: Definitions in ASTM D1079 and glossary of NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" apply to work of this Section.

1.4 PREINSTALLATION MEETINGS

A. Preliminary Roofing Conference: Before starting roof deck construction, conduct conference at Project site .

1. Meet with Owner, Consultant, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, air barrier Installer, and installers whose work interfaces with or affects roofing, including installers of roof accessories and roof-mounted equipment.
2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
3. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

4. Review deck substrate requirements for conditions and finishes, including flatness and fastening.
5. Review structural loading limitations of roof deck during and after roofing.
6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that affects roofing system.
7. Review governing regulations and requirements for insurance and certificates if applicable.
8. Review temporary protection requirements for roofing system during and after installation.
9. Review roof observation and repair procedures after roofing installation.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. For insulation and roof system component fasteners.

B. Shop Drawings: Include roof plans, sections, details, and attachments to other work, including the following:

1. Layout and thickness if insulation.
2. Base flashings and membrane terminations.
3. Flashing details at penetrations.
4. Tapered insulation, thickness, and slopes.
5. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.

C. Samples for Verification: For the following products:

1. Roof membrane and flashings of color required.
2. Walkway pads or rolls, of color required.

D. Wind Uplift Resistance Submittal: For roofing system, indicating compliance with wind uplift performance requirements.

1.6 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer and manufacturer.

B. Manufacturer Certificates:

1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.

a. Submit evidence of complying with performance requirements.

2. Special Warranty Certificate: Signed by roof membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.

C. Product Test Reports: For components of roof membrane and insulation, for tests performed by a qualified testing agency, indicating compliance with specified requirements.

D. Evaluation Reports: For components of roofing system, from ICC-ES.

1. Field Test Reports:
2. Fastener-pullout test results and manufacturer's revised requirements for fastener patterns.

E. Field quality-control reports.

F. Sample Warranties: For manufacturer's special warranties.

1.7 CLOSEOUT SUBMITTALS

A. Maintenance Data: For roofing system to include in maintenance manuals.

B. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by Work performed under this Section.

1.8 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer that is UL listed for roofing system identical to that used for this Project.

B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.

1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

D. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

1.10 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.11 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.

1. Special warranty includes roof membrane, base flashings, roof insulation, fasteners, cover boards, substrate board, and other components of roofing system.
2. Warranty Period: 20 years from Date of Substantial Completion.
3. **Provide Manufacturer's 20-year "Total System Warranty" with 72-mph Warranty Wind Speed Coverage extending to insulation, flashings and other material furnished or approved by the manufacturer or incorporated into this system guaranteeing roofing materials form failure from normal roof exposure. Provide an executed warranty, on membrane manufacturer's form.**

B. Special Project Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering the Work of this Section, including all components of roofing system such as roof membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, and walkway products, for the following warranty period:

1. Warranty Period: Two years from Date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. General Performance: Installed roofing system and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roofing and flashings shall remain watertight.

1. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G152, ASTM G154, or ASTM G155.
2. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D3746, ASTM D4272, or the Resistance to Foot Traffic Test in FM Approvals 4470.

B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roof membrane manufacturer based on testing and field experience.

C. Wind Uplift Resistance: Design roofing system to resist the wind uplift pressures when tested according to ASCE 7 and as shown in General Notes and Roof Plan – Wind Loads.

D. Exterior Fire-Test Exposure: ASTM E108 or UL 790, **Class A** ; for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

E. Fire-Resistance Ratings: Comply with fire-resistance-rated assembly designs indicated. Identify products with appropriate markings of applicable testing agency.

2.2 ETHYLENE-PROPYLENE-DIENE-TERPOLYMER (EPDM) ROOFING

A. Fabric-Backed EPDM Sheet: ASTM D4637/D4637M, Type III, nonreinforced, EPDM sheet, laminated to a nonwoven polyester fabric backing except at selvages with factory-applied seam tape.

1. Carlisle; Sure-Seal EPDM-FleeceBACK
2. Composite Thickness: 115 mils (2.9 mm), nominal.
3. Source Limitations: Obtain components for roofing system from roof membrane manufacturer or manufacturers approved by roof membrane manufacturer.

2.3 AUXILIARY ROOFING MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with other roofing components.

1. Adhesive and Sealants: Comply with VOC limits of authorities having jurisdiction.

B. Sheet Flashing: 60-mil- (1.5-mm-) thick EPDM, partially cured or cured, according to application.

C. Protection Sheet: Epichlorohydrin or neoprene nonreinforced flexible sheet, 55 to 60 mils (1.4 to 1.5 mm) thick, recommended by EPDM manufacturer for resistance to hydrocarbons, non-aromatic solvents, grease, and oil.

D. Slip Sheet: ASTM D2178/D2178M, Type IV; glass fiber; asphalt-impregnated felt.

E. Slip Sheet: Manufacturer's standard, of thickness required for application.

F. Vented Base Sheet: ASTM D4897/D4897M, Type II; nonperforated, asphalt-impregnated fiberglass reinforced, with mineral granular patterned surfacing on bottom surface.

G. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.

H. Bonding Adhesive: Manufacturer's standard, water based.

I. Low-Rise, Urethane, Fabric-Backed Membrane Adhesive: Roof system manufacturer's standard spray-applied, low-rise, two-component urethane adhesive formulated for compatibility and use with fabric-backed membrane roofing.

J. Seaming Material: Factory-applied seam tape, width as recommended by manufacturer.

K. Lap Sealant: Manufacturer's standard, single-component sealant, colored to match membrane roofing.

L. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.

M. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.

N. Metal Battens: Manufacturer's standard, aluminum-zinc-alloy-coated or zinc-coated steel sheet, approximately 1 inch wide by 0.05 inch thick (25 mm wide by 1.3 mm thick), prepunched.

O. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening components to substrate, and acceptable to roofing system manufacturer.

P. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, molded pipe boot flashings, preformed inside and outside corner sheet flashings, reinforced EPDM securement strips, T-joint covers, in-seam sealants, termination reglets, cover strips, and other accessories.

Q. Liquid flashing: Product specifically formulated for EPDM membrane roofing

2.4 SUBSTRATE BOARDS

A. Substrate Board: ASTM C1177/C1177M, glass-mat, water-resistant gypsum board or ASTM C1278/C1278M, fiber-reinforced gypsum board.
   1. Thickness: 1/2 inch (13 mm).

B. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening substrate panel to roof deck.

2.5 VAPOR RETARDER

A. Self-Adhering-Sheet Vapor Retarder: ASTM D1970/D1970M, polyethylene film laminated to layer of rubberized asphalt adhesive, minimum 40-mil- (1.0-mm-) total thickness; maximum permeance rating of 0.1 perm (6 ng/Pa x s x sq. m); cold applied, with slip-resisting surface and release paper backing. Provide primer when recommended by vapor retarder manufacturer.

2.6 ROOF INSULATION

A. General: Preformed roof insulation boards manufactured or approved by EPDM roof membrane manufacturer.

B. Polyisocyanurate Board Insulation: ASTM C1289, Type II, Class 1, Grade 2, felt or glass-fiber mat facer on both major surfaces.
   1. Compressive Strength: 20 psi (138 kPa).
   2. Size: 48 by 96 inches (1219 by 2438 mm).

C. Tapered Insulation: Provide factory-tapered insulation boards.

1. Material: Match roof insulation .
2. Minimum Thickness: 1/4 inch (6.35 mm).
3. Slope:

a. Roof Field: 1/8 inch per foot unless otherwise indicated on Drawings.
b. Saddles and Crickets: 1/4 inch per foot unless otherwise indicated on Drawings.

2.7 INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with other roofing system components.

B. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to substrate or to another insulation layer as follows:
1. Full-spread, spray-applied, low-rise, two-component urethane adhesive.

C. Cover Board: ASTM C1177/C1177M, glass-mat, water-resistant gypsum substrate, or ASTM C1278/C1278M, fiber-reinforced gypsum board.
1. Thickness: 1/2 inch (13 mm).

2.8 WALKWAYS

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads, approximately 3/16 inch (5 mm) thick and acceptable to roofing system manufacturer.

1. Size: Approximately 36 by 60 inches (914 by 1524 mm).
2. Color: Contrasting with roof membrane.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

1. Verify that roof openings and penetrations are in place, curbs are set and braced, and roof-drain bodies are securely clamped in place.
2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
3. Verify that surface plane flatness and fastening of steel roof deck complies with requirements in Section 053100 "Steel Decking."
4. Verify that concrete substrate is visibly dry and free of moisture, and that minimum concrete internal relative humidity is not more than **75** percent, or as recommended by roofing system manufacturer when tested according to ASTM F2170.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing system installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

C. Perform fastener-pullout tests according to roof system manufacturer's written instructions.

1. Submit test result within 24 hours of performing tests.

    a. Include manufacturer's requirements for any revision to previously submitted fastener patterns required to achieve specified wind uplift requirements.

3.3 ROOFING INSTALLATION, GENERAL

A. Install roofing system according to roofing system manufacturer's written instructions, and FM Global Property Loss Prevention Data Sheet 1-29.

B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

C. Install roof membrane and auxiliary materials to tie in to existing roofing to maintain weathertightness of transition.

3.4 SUBSTRATE BOARD INSTALLATION

A. Install substrate board with long joints in continuous straight lines, with end joints staggered not less than 24 inches (610 mm) in adjacent rows.

1. At steel roof decks, install substrate board at right angle to flutes of deck.

    a. Locate end joints over crests of steel roof deck.

2. Tightly butt substrate boards together.
3. Cut substrate board to fit tight around penetrations and projections, and to fit tight to intersecting sloping roof decks.
4. Fasten substrate board to top flanges of steel deck according to recommendations in FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification.

5. Fasten substrate board to top flanges of steel deck to resist uplift pressure at corners, perimeter, and field of roof according to roofing system manufacturers' written instructions.

3.5 VAPOR RETARDER INSTALLATION

A. Self-Adhering-Sheet Vapor Retarder: Prime substrate if required by manufacturer. Install self-adhering-sheet vapor retarder over area to receive vapor retarder, side and end lapping each sheet a minimum of 3-1/2 and 6 inches (90 and 150 mm), respectively.

1. Extend vertically up parapet walls and projections to a minimum height equal to height of insulation and cover board.
2. Seal laps by rolling.

B. Completely seal vapor retarder at terminations, obstructions, and penetrations to prevent air movement into roofing system.

3.6 INSULATION INSTALLATION

A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at end of workday.

B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.

C. Installation:

1. Install base layer of insulation with joints staggered not less than 24 inches (610 mm) in adjacent rows.
    a. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    b. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
    c. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).

        1) Trim insulation so that water flow is unrestricted.

    d. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
    e. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
    f. Adhere base layer of insulation to vapor retarder according to FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification.
        1) Set insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
        2) Set insulation in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.

2. Install upper layers of insulation and tapered insulation with joints of each layer offset not less than 12 inches (305 mm) from previous layer of insulation.

    a. Staggered end joints within each layer not less than 24 inches (305 mm) in adjacent rows.
    b. Install with long joints continuous and with end joints staggered not less than 12 inches (305 mm) in adjacent rows.
    c. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    d. Make joints between adjacent insulation boards not more than 1/4 inch (6 mm) in width.
    e. At internal roof drains, slope insulation to create a square drain sump with each side equal to the diameter of the drain bowl plus 24 inches (610 mm).

        1) Trim insulation so that water is unrestricted.

    f. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
    g. Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
    h. Adhere each layer of insulation to substrate using adhesive according to FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification.
        1) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.

3.7 INSTALLATION OF COVER BOARDS

A. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches (150 mm) in each direction.

1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
2. At internal roof drains, conform to slope of drain sump.

    a. Trim cover board so that water flow is unrestricted.

3. Cut and fit cover board tight to nailers, projections, and penetrations.
4. Adhere cover board to substrate using adhesive according to FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification.
    a. Set cover board in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.

3.8 ADHERED ROOFING INSTALLATION

A. Adhere roof membrane over area to receive roofing according to roofing system manufacturer's written instructions.

B. Unroll membrane roof membrane and allow to relax before installing.

C. Start installation of roofing in presence of roofing system manufacturer's technical personnel and Owner's testing and inspection agency.

D. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

E. Bonding Adhesive: Apply to substrate and underside of roof membrane at rate required by manufacturer, and allow to partially dry before installing roof membrane. Do not apply to splice area of roof membrane.

F. Fabric-Backed Roof Membrane Adhesive: Apply to substrate at rate required by manufacturer, and install fabric-backed roof membrane.

G. In addition to adhering, mechanically fasten roof membrane securely at terminations, penetrations, and perimeters.

H. Apply roof membrane with side laps shingled with slope of roof deck where possible.

I. Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement.

1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
2. Apply lap sealant and seal exposed edges of roofing terminations.
3. Apply a continuous bead of in-seam sealant before closing splice if required by roofing system manufacturer.

J. Tape Seam Installation: Clean and prime both faces of splice areas, apply splice tape.

1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
2. Apply lap sealant and seal exposed edges of roofing terminations.

K. Factory-Applied Seam Tape Installation: Clean and prime surface to receive tape.

1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
2. Apply lap sealant and seal exposed edges of roofing terminations.

L. Repair tears, voids, and lapped seams in roof membrane that do not comply with requirements.

M. Spread sealant or mastic bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.

N. Adhere protection sheet over roof membrane at locations indicated.

3.9 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories, and adhere to substrates according to roofing system manufacturer's written instructions.

B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate, and allow to partially dry. Do not apply to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

D. Clean splice areas, apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of sheet flashing terminations.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.10 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products according to manufacturer's written instructions.

1. Install flexible walkways at the following locations:

   a. Perimeter of each rooftop unit.
   b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
   c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
   d. Top and bottom of each roof access ladder.
   e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
   f. Locations indicated on Drawings.
   g. As required by roof membrane manufacturer's warranty requirements.

2. Provide 6-inch (76-mm)clearance between adjoining pads.
3. Adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

3.11 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to inspect substrate conditions, surface preparation, roof membrane application, sheet flashings, protection, and drainage components, and to furnish reports to Consultant.

B. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion, in presence of Consultant, and to prepare inspection report.

C. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements.

D. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

3.12 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing system, inspect roofing system for deterioration and damage, describing its nature and extent in a written report, with copies to Consultant and Owner.

B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 07 53 23

1 MILLENNIUM PLAZA ROOFING REPLACEMENT

1 MILLENNIUM PLAZA, CLARKSVILLE TN 37040

N

SITE PLAN

SHEET LIST	
SHEET NUMBER	SHEET NAME
CVR	COVER SHEET
R-000	GENERAL NOTES
R-010	ROOF PLAN - WIND LOADS
RD-100	ROOF - DEMOLITION PLAN
R-100	ROOFING REPLACEMENT PLAN
R-500	TYPICAL DETAILS

walter p moore

Walter P Moore and Associates, Inc.
1201 Peachtree St NE, Suite 1600
Atlanta, Georgia 30361

404.898.9620

Project Name:

1 MILLENNIUM PLAZA ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

No.	Date	Description
	08/30/24	100% Design Development
	09/24/24	90% Construction Document
	12/20/24	Issued for Construction

Project Number :
D06.24034.00

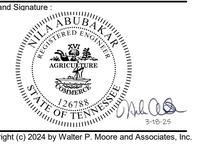
Drawn By :
AG/PM

Approved By :
AB

Checked By :
DB

Certification Statement :
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Seal and Signature



Drawing Title :

COVER SHEET

Sheet No. :

CVR

GENERAL NOTES

I. DESIGN CRITERIA

A. GENERAL BUILDING CODE

1. THE REPAIR DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE INTERNATIONAL EXISTING BUILDING CODE 2018.

B. CONSTRUCTION LIVE LOADS

1. CONSTRUCTION LIVE LOADS: AN ALLOWANCE OF 20 PSF HAS BEEN PROVIDED FOR CONSTRUCTION LIVE LOADS WHICH INCLUDE BUT ARE NOT LIMITED TO MATERIALS, PERSONNEL AND EQUIPMENT IMPOSED ON THE STRUCTURE DURING CONSTRUCTION.

A. ROOFS: ORDINARY FLAT, PITCHED AND CURVED ROOFS: 20 PSF

C. WIND LOADS

1. WIND PRESSURES ARE BASED ON THE AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-16 AND THE FOLLOWING CRITERIA:

A. BASIC WIND SPEED: 106 MPH (3 SECOND GUST)

B. BUILDING CATEGORY: III

C. WIND EXPOSURE CATEGORY: C

D. INTERNAL PRESSURE COEFFICIENT: +0.18/-0.18

2. WIND PRESSURES USED FOR THE DESIGN OF COMPONENTS AND CLADDING ARE SHOWN IN THE SHEET S0.01, ROOF PLAN – WIND ZONE.

NOTES:

A. WIDTH OF END ZONE/EDGE/CORNER STRIP SHOWN IN SHEET S0.01, ROOF PLAN – WIND ZONE.

B. COMPONENT AND CLADDING PRESSURES ACT NORMAL TO THE SURFACE. THE DESIGN PRESSURE LISTED IN THE WIND PRESSURE TABLE ARE NEGATIVE PRESSURES ACT AWAY FROM THE SURFACE.

C. DESIGN PRESSURE FOR COMPONENTS AND CLADDING SHALL NOT BE LESS THAN 10 PSF ACTING IN EITHER DIRECTION NORMAL TO THE SURFACE.

D. THE EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.

E. THE DESIGN PRESSURES LISTED IN THE WIND PRESSURE TABLE ARE CALCULATED USING A VALUE OF KD OF 1.0. THE VALUES CAN BE REDUCED BY 15% IF LOAD COMBINATIONS SPECIFIED IN ASCE 7-16 ARE USED IN DESIGN. [A 0.6 REDUCTION FACTOR PER ASCE 7 MAY BE APPLIED TO NOMINAL/STRENGTH LOADS FOR ELEMENTS DESIGNED USING ALLOWABLE STRESS METHOD.]

II. SCOPE OF WORK

A. SCOPE OF WORK INCLUDES THE DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING CONDITIONS PROVIDED BY OWNER.

B. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, TOOLS, SUPPLIES, PERMITS, EQUIPMENT, TRANSPORTATION, SUPERINTENDENCE, BARRICADES, SHORING, BRACING, TEMPORARY CONSTRUCTION OF EVERY NATURE, INSURANCE, TAXES, CONTRIBUTIONS AND ALL SERVICES AND FACILITIES, UNLESS SPECIFICALLY EXCEPTED, AND INSTALL/REMOVE ALL MATERIALS, ITEMS, AND EQUIPMENT REQUIRED TO COMPLETE THE DEMOLITION AND CONSTRUCTION OF THE PROJECT, AS SET FORTH IN THE CONTRACT DOCUMENTS.

C. COOPERATE WITH THE OWNER'S REPRESENTATIVE IN ALL CONSTRUCTION OPERATIONS TO MINIMIZE CONFLICT AND TO FACILITATE OWNER USAGE.

D. CONTRACTOR ACKNOWLEDGES BY SUBMITTING A BID OR PROPOSAL TO PERFORM THE SPECIFIED WORK, THAT THEY HAVE VISITED AND INSPECTED THE PROJECT SITE IN WHICH THE WORK IS TO BE PERFORMED, THAT THEY HAVE SATISFIED THEMSELVES AS TO THE NATURE AND LOCATION OF THE WORK, INCLUDING ANY OBSTRUCTIONS, AMOUNT OF WORK, ACTUAL LEVELS, THE EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING THE EXECUTION OF THE WORK, AND ALL OTHER MATTERS WHICH CAN IN ANY WAY AFFECT THE WORK OR THE COST THEREOF UNDER THIS CONTRACT.

E. FAILURE BY CONTRACTOR TO HAVE ACQUAINTED HIMSELF WITH AVAILABLE INFORMATION CONCERNING SITE CONDITIONS, INCLUDING FACTORS AFFECTING COSTS AND LIABILITIES, SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR PERFORMANCE OF WORK IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND FOR AMOUNT OF CONSIDERATION NAMED OR OTHERWISE DETERMINED.

F. WHEN CONTRACTOR ENCOUNTERS A CONDITION REQUIRING FURTHER INFORMATION OR A CLARIFICATION, CONTRACTOR SHALL SUBMIT TO ENGINEER A WRITTEN REQUEST FOR INFORMATION (R.F.I.) NUMBERED SEQUENTIALLY. ENGINEER WILL RESPOND IN WRITING TO ALL R.F.I.'S.

III. SELECTIVE DEMOLITION

A. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING DECONSTRUCTION / DEMOLITION

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED BRACING DURING DEMOLITION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE DEMOLITION PROCESS. CONTRACTOR SHALL ENGAGE A PROFESSIONAL ENGINEER TO SURVEY CONDITION OF BUILDING TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION OPERATIONS.

B. DEFINITIONS

1. REMOVE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.

2. REMOVE AND SALVAGE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND DELIVER THEM TO OWNER READY FOR REUSE. OWNER TO IDENTIFY ITEMS TO BE REUSED OR SALVAGED.

3. EXISTING TO REMAIN: EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE REMOVED AND THAT ARE NOT OTHERWISE INDICATED TO BE REMOVED, REMOVED AND SALVAGED, OR REMOVED AND REINSTALLED.

C. MATERIAL OWNERSHIP

1. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR OTHERWISE INDICATED TO REMAIN OWNER’S PROPERTY. DEMOLISHED MATERIALS SHALL BECOME CONTRACTOR’S PROPERTY, AND SHALL BE REMOVED FROM PROJECT SITE. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN A PROPER AND LEGAL MANNER PER FEDERAL, STATE AND LOCAL REGULATIONS.

D. QUALITY ASSURANCE

1. DEMOLITION FIRM QUALIFICATIONS: AN EXPERIENCED FIRM THAT HAS SPECIALIZED IN DEMOLITION WORK SIMILAR IN MATERIAL AND EXTENT TO THAT INDICATED FOR THIS PROJECT.

2. PROFESSIONAL QUALIFICATIONS OF ENGINEER ENGAGED BY CONTRACTOR: CURRENT REGISTRATION IN THE STATE WHERE THE PROJECT IS LOCATED.

3. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING OWNER, LOCAL, STATE, FEDERAL, AND EPA NOTIFICATIONS AND REGULATIONS BEFORE BEGINNING SELECTIVE DECONSTRUCTION / DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

4. CONTRACTOR SHALL PHOTO DOCUMENT EXISTING CONDITIONS OF THE BUILDING AND ADJOINING PROPERTIES. PHOTOS SHALL BE SUBMITTED TO OWNER AND ENGINEER OF RECORD PRIOR TO DECONSTRUCTION / DEMOLITION.

5. PRE-DEMOLITION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE TO ADDRESS THE FOLLOWING:

A. INSPECT AND DISCUSS CONDITION OF CONSTRUCTION TO BE SELECTIVELY DEMOLISHED.
B. REVIEW STRUCTURAL LOAD LIMITATIONS OF EXISTING STRUCTURE AS APPROPRIATE FOR THE PROPOSED MEANS AND METHODS.
C. REVIEW AND FINALIZE SELECTIVE DEMOLITION SCHEDULE AND VERIFY AVAILABILITY OF MATERIALS, DEMOLITION PERSONNEL, EQUIPMENT, AND FACILITIES NEEDED TO MAKE PROGRESS AND AVOID DELAYS.

E. PROJECT CONDITIONS

1. CONDUCT SELECTIVE DEMOLITION SO OWNER’S OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NOT LESS THAN 72-HOUR NOTICE TO OWNER OF ACTIVITIES THAT WILL AFFECT OWNER’S OPERATIONS.

2. MAINTAIN ACCESS TO EXISTING WALKWAYS, CORRIDORS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT WALKWAYS, CORRIDORS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND TECHNICAL SPECIFICATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE, FOR THE PROPOSED SCAFFOLDING SYSTEM TO BE USED FOR ACCESS TO ELEVATED WORK AREAS. SCAFFOLDING SHALL INCLUDE PROTECTION NETTING AND BE DESIGNED / CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATORY REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE STRICTEST GOVERNING SECTIONS OF 29 CFR OSHA 1926 SUBPART L, 29 CFR OSHA 1926 SUBPART M, 29 CFR OSHA 1926.105, AND ANSI A10.11 CONSENSUS STANDARD.

4. OWNER ASSUMES NO RESPONSIBILITY FOR CONDITION OF AREAS TO BE SELECTIVELY DEMOLISHED.

A. CONDITIONS EXISTING AT TIME OF INSPECTION FOR BIDDING PURPOSE WILL BE MAINTAINED BY OWNER AS FAR AS PRACTICAL.
B. BEFORE SELECTIVE DEMOLITION, OWNER WILL REMOVE ITEMS WITHIN SPACE AS NEEDED.

5. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF AS APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

6. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE WILL NOT BE PERMITTED.

7. UTILITY SERVICE: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. MAINTAIN FIRE-PROTECTION FACILITIES IN SERVICE DURING SELECTIVE DEMOLITION.

8. PROTECT ADJACENT PAVING (ASPHALT OR CEMENT ROADWAYS, SEWERS, ETC.) AND DRAINAGE DITCHES AS NEEDED.

9. ALL AREAS OUTSIDE OF DEMOLITION SCOPE TO BE PROTECTED FROM DAMAGE BY CONTRACTOR. RESTORE AREAS SUBJECT TO DAMAGE TO THEIR PRE-DEMOLITION CONDITION.

F. UTILITY SERVICES

1. MAINTAIN EXISTING UTILITIES IN SERVICE. CONTRACTOR SHALL COORDINATE WITH OWNER IF ANY INTERRUPTION OF EXISTING UTILITIES ARE REQUIRED. CONTRACTOR SHALL NOT COMMENCE WORK WHICH MAY IMPACT EXISTING UTILITIES UNLESS THE OWNER APPROVES IN WRITING A PLANNED INTERRUPTION OF EXISTING UTILITIES.

G. PREPARATION

1. DANGEROUS MATERIALS: DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.

A. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
B. ERECT A PLAINLY VISIBLE FENCE AROUND DRIP LINE OF INDIVIDUAL TREES OR AROUND PERIMETER DRIP LINE OF GROUPS OF TREES TO REMAIN.

2. CONTRACTOR SHALL MAINTAIN ACCESS TO EXITS AND EXIT STAIRS AT ALL TIMES. FIRE ALARMS AND SMOKE DETECTION SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES. PROTECT SMOKE DETECTORS AS REQUIRED AND IN CONFORMANCE TO LOCAL CODES, REGULATIONS, AND LOCAL AUTHORITIES HAVING JURISDICTION.

3. TEMPORARY FACILITIES: PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN.

A. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA AND TO AND FROM OCCUPIED PORTIONS OF ADJACENT FACILITIES.

4. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL AND PEDESTRIAN CONTROL MEASURES AS REQUIRED.

5. CONTRACTOR SHALL COORDINATE WITH OWNER IF ANY REMOVAL OF LANDSCAPE IS REQUIRED.

6. TEMPORARY PARTITIONS: ERECT AND MAINTAIN DUSTPROOF PARTITIONS AND TEMPORARY ENCLOSURES TO LIMIT DUST AND DIRT MIGRATION AND TO SEPARATE AREAS FROM FUMES AND NOISE.

7. TEMPORARY SHORING: PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. STRENGTHEN OR ADD TEMPORARY SUPPORTS WHEN REQUIRED DURING PROGRESS OF SELECTIVE DEMOLITION.

H. POLLUTION CONTROLS

1. CONDUCT DEMOLITION WASTE DISPOSAL OPERATIONS IN COMPLIANCE WITH LOCAL LAWS AND ORDINANCES. COMPLY FULLY WITH FEDERAL AND LOCAL ENVIRONMENTAL AND ANTI-POLLUTION REGULATIONS.

2. REFER TO DIVISION 01 SPECIFICATION SECTIONS FOR REQUIREMENTS ON DUST CONTROL, DISPOSAL, AND CLEANING OF DEMOLISHED MATERIAL.

I. EXECUTION OF SELECTIVE DEMOLITION

1. GENERAL: DEMOLISH EXISTING CONSTRUCTION AS INDICATED. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS:
A. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION.
B. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. AT CONCEALED SPACES, VERIFY CONDITION AND CONTENTS OF HIDDEN SPACES BEFORE STARTING FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS.
C. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
D. REMOVE DECAYED, VERMIN-INFESTED, OR OTHERWISE DANGEROUS OR UNSUITABLE MATERIALS AND PROMPTLY DISPOSE OF OFF-SITE.
E. LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, SLABS, OR FRAMING.
F. DISPOSE OF DEMOLISHED ITEMS AND MATERIALS PROMPTLY.

2. EXISTING FACILITIES: COMPLY WITH OWNER’S REQUIREMENTS FOR USING AND PROTECTING OTHER BUILDING FACILITIES DURING SELECTIVE DEMOLITION OPERATIONS.

3. REMOVED AND SALVAGED ITEMS: COMPLY WITH THE FOLLOWING:
A. CLEAN SALVAGED ITEMS.
B. STORE ITEMS IN A SECURE AREA UNTIL DELIVERY TO OWNER.
C. TRANSPORT ITEMS TO OWNER’S STORAGE AREA AS DESIGNATED BY OWNER.

4. EXISTING ITEMS TO REMAIN: CONTRACTOR TO COORDINATE WITH OWNER (PRIOR TO BEGINNING WORK) ON ITEMS THAT ARE TO REMAIN AND HENCE BE PROTECTED DURING THE DEMOLITION PROCESS. WHEN PERMITTED BY OWNER, ITEMS MAY BE REMOVED TO A SUITABLE AND/OR PROTECTED LOCATION.

J. DISPOSAL OF WASTE AND DEMOLISHED MATERIALS

1. GENERAL: PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.

2. BURNING: DO NOT BURN DEMOLISHED MATERIALS.

3. KEEP RECEPTACLES AND OTHER WASTE COLLECTION AREAS NEAT AND ORDERLY. DO NOT ALLOW WASTE TO OVERFLOW ITS CONTAINER OR ACCUMULATE FOR EXCESSIVELY LONG PERIODS OF TIME. LOCATE TRASH COLLECTION POINTS WHERE THEY WILL LEAST LIKELY BE AFFECTED BY STORM WATER RUNOFF.

4. DISPOSAL: TRANSPORT DEMOLISHED MATERIALS OFF OWNER’S PROPERTY AND LEGALLY DISPOSE OF THEM.

5. WATER CAPTURE: FOLLOW ALL LOCAL ORDINANCES AND REGULATION FOR WATER CAPTURE.

IV. SUBMITTALS

A. SUBMITTAL LIST AND SCHEDULE

1. THE CONTRACTOR SHALL PREPARE A DETAILED LIST AND SCHEDULE OF ALL SUBMITTAL ITEMS TO BE SENT TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. THIS LIST SHALL BE UPDATED AND REVISED AND KEPT CURRENT AS THE JOB PROGRESSES. THE SUBMITTAL LIST SHALL BE ORGANIZED AS SHOWN BELOW:

A. SHOP DRAWINGS
B. DESIGN CALCULATIONS
C. PRODUCT DATA, CERTIFICATE, REPORTS, AND OTHER LITERATURE
D. PRODUCT AND CONTRACTOR WARRANTIES
E. MANUFACTURER LITERATURE FOR PRODUCTS, ASSEMBLIES, AND HARDWARE

2. DEFERRED SUBMITTALS:

A. THE FOLLOWING ITEMS ARE CONSIDERED DEFERRED SUBMITTALS BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE:

1) TEMPORARY FALL PROTECTION SYSTEMS (S&S, REC)

2) STRUCTURAL ATTACHMENT FOR ROOFTOP UNIT (RTU) RETROFITS AND SUPPLEMENTARY WOOD BLOCKING CONNECTIONS (S&S, REC)

3) SCAFFOLDING AND OVERHEAD PROTECTION (S&S, REC)

4) SHOP DRAWINGS FOR EXTERIOR WALL AIR BARRIER ASSEMBLIES, COMPONENTS, TRANSITION FLASHINGS, AND ACCESSORIES (REC)

5) SHOP DRAWINGS FOR SHEET METAL FLASHING AND TRIM ASSEMBLIES, COMPONENTS, AND ACCESSORIES (REC)

NOTES:

(S&S) ITEMS MARKED THUS SHALL HAVE THE SHOP DRAWINGS AND DELEGATED DESIGN SUBMITTALS (INCLUDING CALCULATIONS) SEALED PER THE PROJECT REQUIREMENTS BY AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND ENGAGED BY THE CONTRACTOR.

(REC) ITEMS MARKED THUS SHALL BE SUBMITTED TO ENGINEER FOR RECORD ONLY AND WILL NOT HAVE THE ENGINEER’S SHOP DRAWING STAMP AFFIXED.

B. DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE FORWARDED TO THE BUILDING OFFICIAL.
C. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

3. SHOP DRAWINGS:

A. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS:

1) ROOFING INSULATION SLOPE PLAN

2) SHEET METAL FLASHING AND DETAILING

4. MANUFACTURER LITERATURE

A. SUBMIT MANUFACTURER’S PRODUCT DATA SHEETS FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT. WHERE APPROPRIATE, ALSO SUBMIT MANUFACTURER’S INSTALLATION INSTRUCTIONS AND SAFETY DATA SHEETS FOR ALL PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.

5. SUBMITTAL REQUIREMENTS:

A. ALL SHOP DRAWINGS MUST BE REVIEWED AND ELECTRONICALLY STAMPED BY THE CONTRACTOR PRIOR TO SUBMITTAL.
B. CONTRACTOR SHALL PROVIDE THE SUBMITTAL IN ELECTRONIC PORTABLE DOCUMENT FORMAT (PDF).
C. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.

C. REPRODUCTION

1. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

V. MISCELLANEOUS

A. CONTRACT DOCUMENTS

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, [FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD] [THE PROCUREMENT, FABRICATION, AND INSTALLATION OF ROOFING COMPONENTS.].

2. THE CONTRACTOR SHALL FULLY AND PROPERLY IMPLEMENT THE ENGINEERING CONTROLS, WORK PRACTICES, AND RESPIRATORY PROTECTION AGAINST TOXIC AND HAZARDOUS SUBSTANCES INCLUDING RESPIRABLE CRYSTALLINE SILICA ACCORDING TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) 29 CFR 1926.1153. WALTER P MOORE DOES NOT HAVE CONTROL OVER, CHARGE OF, OR RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, NOR SHALL WALTER P MOORE BE RESPONSIBLE FOR THE CONTRACTOR’S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

3. THE CONTRACT DRAWINGS REPRESENT THE ROOFING SYSTEM INSTALLATION, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCES.

4. PERFORM FIELD SURVEYS TO VERIFY AS-BUILT CONDITIONS INCLUDING: EXPANSION JOINT SYSTEMS, PREVIOUS REPAIRS PERFORMED IN THE FACILITY, LOCATION AND SIZE OF STRUCTURAL MEMBERS (BEAMS, COLUMNS, WALLS, ETC.), SLAB THICKNESS, AND OTHER INFORMATION RELEVANT TO THE PROJECT.

B. DRAWING CONFLICTS

1. CONTRACTOR SHALL COMPARE THE [ARCHITECTURAL AND STRUCTURAL DRAWINGS] [ROOFING REPLACEMENT CONSTRUCTION DRAWINGS AND SPECIFICATIONS] [FAÇADE REPAIR CONSTRUCTION DRAWINGS AND SPECIFICATIONS] AND REPORT ANY DISCREPANCY [BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS] [WITHIN EACH SET OF THESE DOCUMENTS] TO THE ENGINEER PRIOR TO THE PROCUREMENT, FABRICATION, AND INSTALLATION OF ANY [ROOFING][FAÇADE REPAIR] COMPONENTS.

C. EXISTING CONDITIONS

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BUILDING AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO ENGINEER PRIOR TO THE [FABRICATION AND ERECTION OF ANY MEMBERS] [PROCUREMENT OF MATERIAL AND INSTALLATION OF ROOFING SYSTEMS]. EXISTING DIMENSIONS SHOWN ON THE DRAWINGS ARE FOR GENERAL REFERENCE ONLY AND SHOULD NOT BE USED FOR FINAL CONSTRUCTION OR DETAILING.

2. WORK SHOWN ON THE DRAWINGS IS EXISTING, UNLESS NOTED AS NEW.

3. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. THE DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE FOR CONTRACTOR USE AND SHALL BE REFERENCED FOR FAMILIARIZATION WITH EXISTING CONDITIONS. HOWEVER, THE AVAILABLE DRAWINGS OF EXISTING CONSTRUCTION ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR BEING KNOWLEDGEABLE OF INFORMATION PRESENTED IN AVAILABLE DRAWINGS AND SHALL FIELD VERIFY ALL PERTINENT INFORMATION.

4. CONTRACTOR SHALL PERFORM A SURVEY TO LOCATE ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND TAKE CARE TO PROTECT UTILITIES TO REMAIN IN SERVICE.

5. CONTRACTOR SHALL PROVIDE DUST, ODOR, BUILDING ENCLOSURE, AND NOISE PROTECTION, AND SAFETY MEASURES AS NECESSARY FOR THE DURATION OF REPAIRS.

6. CONTRACTOR SHALL PERFORM A PRE-CONSTRUCTION CONDITION SURVEY TO DOCUMENT SITE CONDITIONS PRIOR TO START OF WORK. SUBMIT SURVEY TO OWNER AND THE ENGINEER. DOCUMENT LOCATION AND CONDITION OF ANY CONSTRUCTION DESIGNATED FOR REMOVAL AND REINSTALLATION.

7. CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION WITH SIMILAR MATERIALS AND WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE OWNER.

D. ROOFING SYSTEM MANUFACTURER REPRESENTATION

1. THE CONTRACTOR SHALL ENGAGE REPRESENTATIVES OF THE ROOFING SYSTEM MANUFACTURER TO BE ON-SITE DURING THE EARLY STAGES OF WORK. ROOFING SYSTEM MANUFACTURER’S REPRESENTATIVES SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING, DURING TEAR-OFF OF THE EXISTING ROOFING SYSTEM, AND AT OTHER PHASES OF THE PROJECT OR AS OTHERWISE REQUIRED BY OWNER AND ENGINEER.

E. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING CONSTRUCTION

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS ADJACENT TO REPAIR AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED SHORING AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF ALL BUILDING ELEMENTS DURING REPAIR OPERATIONS UNTIL THE ROOF SYSTEM INSTALLATION IS COMPLETED.

F. RESPONSIBILITY OF THE CONTRACTOR FOR CONSTRUCTION LOADS

1. THE CONTRACTOR SHALL NOT OVERLOAD THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE ADEQUACY OF THE STRUCTURE TO SUPPORT ANY APPLIED CONSTRUCTION LOADS, INCLUDING THOSE DUE TO CONSTRUCTION VEHICLES OR EQUIPMENT, MATERIAL HANDLING OR STORAGE, SHORING OR RESHORING, OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL SUBMIT CALCULATIONS SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED VERIFYING THE ADEQUACY OF THE STRUCTURE FOR ANY PROPOSED CONSTRUCTION LOADS THAT ARE IN EXCESS OF THE STATED DESIGN LOADS. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO DESIGN OR CHECK THE STRUCTURE FOR LOADS APPLIED TO THE STRUCTURE FOR ANY CONSTRUCTION ACTIVITY.

G. CONTRACTOR SUBSTITUTIONS

1. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE CONSIDERED FOR APPROVAL ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:

A. A COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST.
B. THE MATERIAL OR PRODUCT IS IN CONFORMANCE WITH THE REQUIREMENTS OF THE REFERENCED BUILDING CODE AND THE ICC EVALUATION REPORT IS SUBMITTED WITH THE REQUEST.
1) ICC-ESR EVALUATION REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.
2) ICC REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.

2. SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.

3. REFER TO SPECIFICATION SECTION “PROJECT SUBSTITUTIONS PROCEDURES” FOR ADDITIONAL SUBSTITUTIONS REQUIREMENTS AND SUBMITTAL PROCEDURES.

H. THE ENGINEER-OF-RECORDS ROLE DURING CONSTRUCTION

1. THE ENGINEER SHALL NOT HAVE CONTROL NOR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF WALTER P. MOORE AND ASSOCIATES, INC. IS SOLELY FOR THE PURPOSE OF BECOMING GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE WORK COMPLETED AND DETERMINING, IN GENERAL, IF THE WORK OBSERVED IS BEING PERFORMED IN A MANNER INDICATING THAT THE WORK, WHEN FULLY COMPLETED, WILL BE IN ACCORDANCE WITH THE REPAIR CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

I. MAINTENANCE STATEMENT

1. ALL ROOFING AND BUILDING ENCLOSURE SYSTEMS REQUIRE PERIODIC MAINTENANCE TO EXTEND LIFESPAN AND TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A PLANNED PROGRAM OF MAINTENANCE SHALL BE ESTABLISHED BY THE BUILDING OWNER. THIS PROGRAM SHALL INCLUDE SUCH ITEMS SUCH AS BUT NOT LIMITED TO REPLACEMENT OF SEALANTS AT ROOF FLASHING TERMINATIONS, ROOF EXPANSION JOINTS, CLEANING OF EXPOSED ROOFING CAP SHEET, AND ALL OTHER MAINTENANCE ITEMS RECOMMENDED BY THE ROOFING MANUFACTURER. IMMEDIATELY REPORT ANY LEAKS TO THE ROOFING MANUFACTURER SO THAT APPROPRIATE REPAIRS MAY BE IMPLEMENTED.

2. INSPECTIONS: COORDINATE WITH ROOFING MANUFACTURER FOR PERIODIC INSPECTIONS OF THE ROOFING SYSTEM INCLUDING BUT NOT LIMITED TO VISUAL REVIEW OF THE MEMBRANE SURFACING, FLASHING SEAMS, BASE FLASHINGS, EXPANSION JOINTS, ETC. IMMEDIATELY REPORT ANY ROOF RELATED LEAKS TO THE ROOFING MANUFACTURER SO THAT APPROPRIATE REPAIRS MAY BE IMPLEMENTED.

VI. DRAWING INTERPRETATION

A. DRAWING VIEWS LABELED AS “TYPICAL”

1. PARTIAL PLANS, ELEVATIONS, SECTIONS, DETAILS, OR SCHEDULES LABELED WITH “TYPICAL” AT THE BEGINNING OF THEIR TITLE SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY SHOWN. THE APPLICABILITY OF THE CONTENT OF THESE VIEWS TO LOCATIONS ON THE PLAN CAN BE DETERMINED FROM THE TITLE OF THE VIEWS. SUCH VIEWS SHALL APPLY WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. DECISIONS REGARDING APPLICABILITY OF THESE “TYPICAL” VIEWS SHALL BE DETERMINED BY THE ENGINEER OF RECORD.

B. STRUCTURAL ABBREVIATIONS AND NOTATIONS

1. THE FOLLOWING ABBREVIATIONS AND NOTATIONS MAY APPEAR ON THE DRAWINGS:

@	AT
&	AND
#	NUMBER
Ø	ROUND, DIAMETER
(E)	EXISTING
(N)	NEW
ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BLDG	BUILDING
BOT	BOTTOM
CJ	CONTROL JOINT
CL	CENTER LINE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
DN	DOWN
EA	EACH
ELEV	ELEVATION
ENGR	ENGINEER
EJ	EXPANSION JOINT
EW	EACH WAY
EXIST	EXISTING
FV	FIELD VERIFY
GALV	GALVANIZED
GEN	GENERAL
GYP	GYPSUM
HORZ	HORIZONTAL
ICC	INTERNATIONAL CODE COUNCIL
ICRI	INTERNATIONAL CONCRETE REPAIR INSTITUTE
INFO	INFORMATION
LWC	LIGHTWEIGHT CONCRETE
LBF	POUNDS FORCE
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
MSD	MATERIAL SAFETY DATA
MSDS	MATERIAL SAFETY DATA SHEET
NTS	NOT TO SCALE
OC	ON CENTER
PLF	POUNDS PER LINER FOOT
PSF	POUNDS PER SQUARE FOOT
QTY	QUANTITY
REINF	REINFORCEMENT
REQD	REQUIRED
SIM	SIMILAR
STD	STANDARD
SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
TBPE	TEXAS BOARD OF PROFESSIONAL ENGINEERS
TI	TASK ITEM
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL, TOP OF SLAB
TYP	TYPICAL
VERT	VERTICAL

C. STRUCTURAL SYMBOLS

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1201 Peachtree St NE, Suite 1600
Atlanta, Georgia 30361

404.898.9620

Project Name:

1 MILLENNIUM PLAZA
ROOFING
REPLACEMENT

Client :

MONTGOMERY
COUNTY
GOVERNMENT

Consultants / Discipline :

Keyplan :

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Seal and Signature :

NILA ABUBAKAR
126788
3-18-25

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GENERAL NOTES

Sheet No. :

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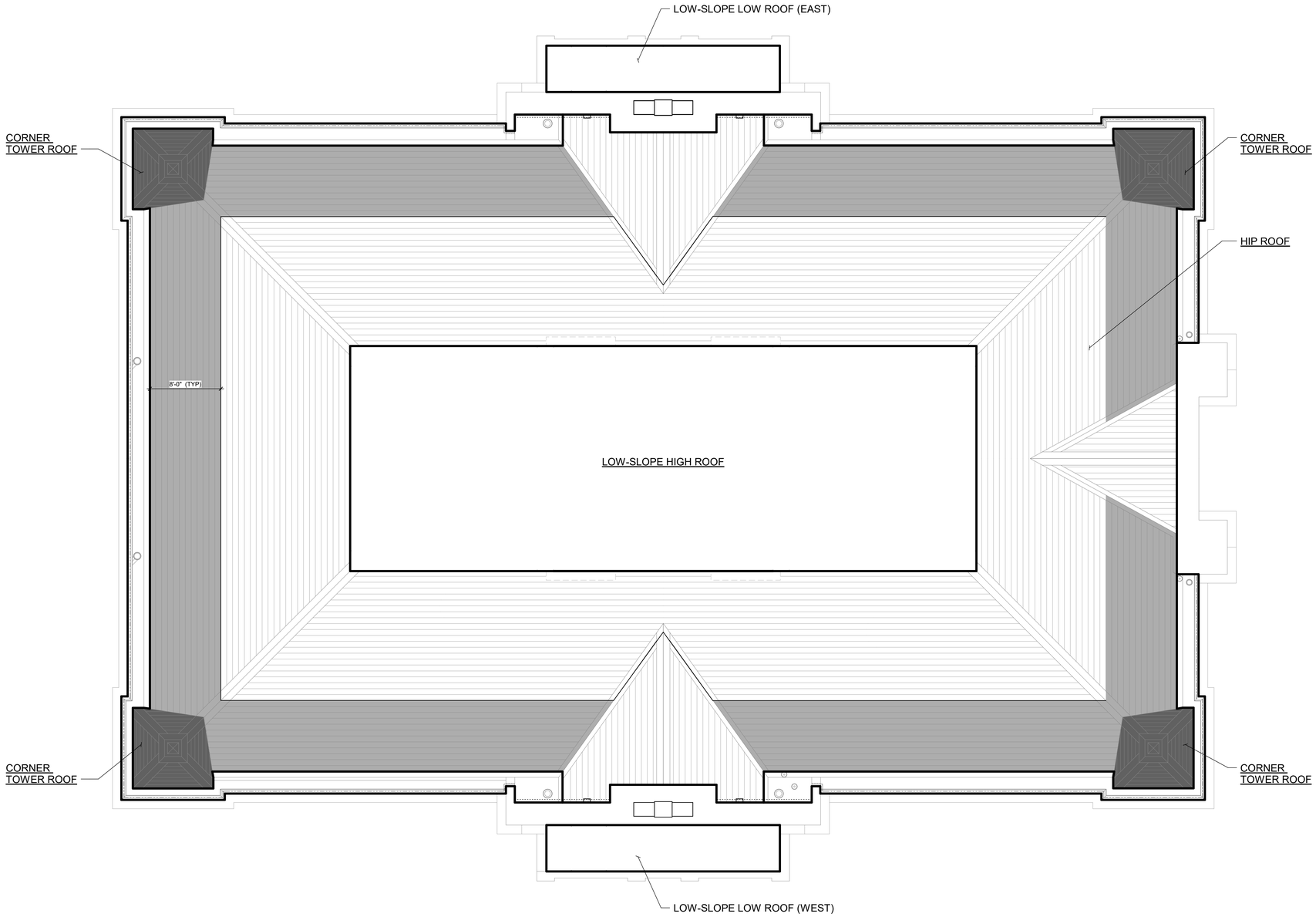
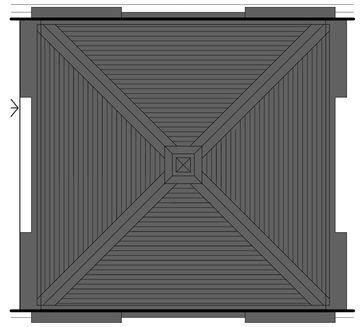


1 ROOF PLAN - WIND ZONE
NO SCALE



2 TOWER ROOF - WIND ZONE
3/16" = 1'-0"

WIND ZONE HATCH LEGEND

- HIP ROOF EDGE ZONE
- TOWER ROOF

WIND UPLIFT PRESSURE

ROOF AREA	WIND ZONE	WIND LOAD (PSF)
LOW-SLOPE HIGH ROOF	ENTIRE ROOF	-97
LOW-SLOPE LOW ROOF	ENTIRE ROOF	-76
HIP ROOF	FIELD ZONE	-57
	EDGE ZONE	-59
CENTER TOWER ROOF	ENTIRE ROOF	-109
CORNER TOWER ROOF	ENTIRE ROOF	-92

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Drawing Title :

ROOF PLAN - WIND LOADS

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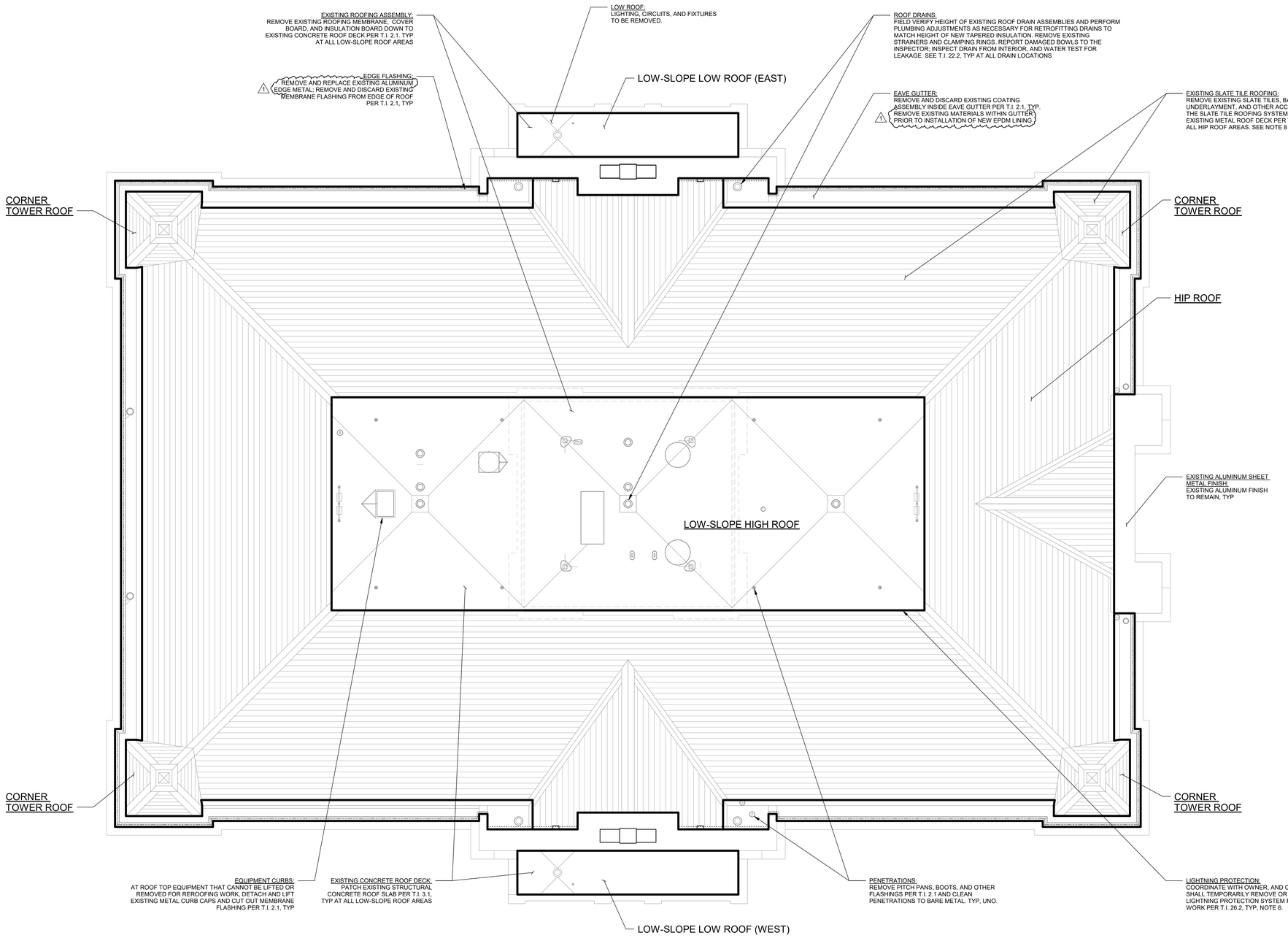

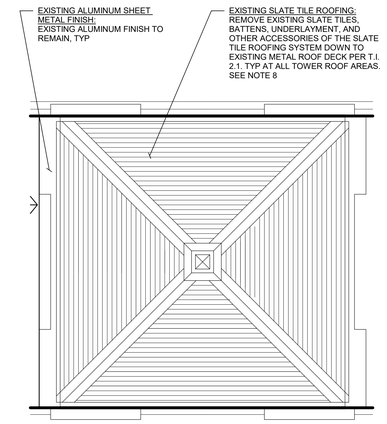

2 TOWER ROOF DEMOLITION PLAN
3/16" = 1'-0"

NOTES:
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2. CONTRACTOR IS ADVISED THAT THE ROOFS DO NOT HAVE OSHA COMPLIANT PARAPET WALLS. TEMPORARY FALL PROTECTION MUST BE INSTALLED PRIOR TO PERFORMING ANY WORK ON THE ROOF AND MUST REMAIN IN PLACE FOR THE DURATION OF THE REPAIRS.
3. ABANDONED ROOFTOP EQUIPMENT MAY BE IDENTIFIED BY OWNER FOR REMOVAL
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE WEATHER TIGHTNESS OF THE FACILITY DURING ALL FACILITY OPERATIONS. SUBMIT A BUILDING ENCLOSURE PROTECTION PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
5. DO NOT BLOCK ALLEYWAY OR STREETS ADJACENT TO STAGING AREAS WITH ROOFING MATERIALS, TRASH, VEHICLES, EQUIPMENT, OR ANY OTHER MISCELLANEOUS ITEMS DURING ROOFING PROJECT.
6. LIGHTNING SYSTEM LOCATIONS ARE SHOWN SCHEMATICALLY ONLY. FIELD VERIFY LOCATIONS OF LIGHTNING PROTECTION TO BE REMOVED AND TEMPORARILY STORED.
7. CONTRACTOR SHALL COORDINATE WITH CLARKSVILLE STREET DEPARTMENT FOR ANY PARTIAL ROAD CLOSERS THAT ARE NEEDED. CONTRACTOR MAY RESERVE AND PAY FOR ONSTREET PARKING FOR DUMPSTERS AND/OR EQUIPMENT STAGING THROUGH THE CLARKSVILLE PARKING AUTHORITY.
8. SLATE TILES SHALL BE REMOVED AND REPLACED PRIOR TO DEMOLITION AND REPLACEMENT OF THE EXISTING MEMBRANE ROOF.

EXISTING ROOFING SYSTEM	LOW-SLOPE ROOF AREAS
-EPDM MEMBRANE	TO BE REMOVED
-COVER BOARD AND RIGID INSULATION BOARD	TO BE REMOVED
-CONCRETE ROOF DECK	TO REMAIN

NEW ROOFING SYSTEM	STEEP-SLOPE ROOF AREAS	HIP ROOF
-SLATE TILES	TO BE REMOVED
-UNDERLAYMENT	TO BE REMOVED
-5/8-IN PLYWOOD	TO REMAIN
-7/16-IN OSB	TO REMAIN
-RIGID INSULATION BOARD	TO REMAIN
-METAL ROOF DECK	TO REMAIN

EXISTING ROOFING SYSTEM	STEEP-SLOPE ROOF AREAS	TOWER ROOFS
-SLATE TILES	TO BE REMOVED
-UNDERLAYMENT	TO BE REMOVED
-5/8-IN PLYWOOD	TO REMAIN
-7/16-IN PLYWOOD	TO REMAIN
-HAT CHANNELS	TO REMAIN

TASK ITEM PER SECTION 01 01 50 "TASK ITEM - EXISTING ROOFING SYSTEM"	
TASK ITEM	DESCRIPTION
1.1	PROJECT MOBILIZATION
2.1A	DEMOLITION AND SUBSTRATE PREPARATION - LOW SLOPE ROOFING - COMPLETE TEAR OFF DOWN TO DECK
2.1B	DEMOLITION AND SUBSTRATE PREPARATION - STEEP SLOPE ROOFING
2.2A	RECYCLING PROGRAM - LOW SLOPE ROOFING - EXISTING MATERIALS
2.2B	RECYCLING PROGRAM - STEEP SLOPE ROOFING - EXISTING MATERIALS
3.1	DECK REPAIR/REPLACMENT - CONCRETE STRUCTURAL DECKING
5.1	DECK REPAIR - STEEL DECKING
6.1	ROUGH CARPENTRY
7.1A	LOW SLOPE ROOFING - VAPOR BARRIER
7.1B	STEEP SLOPE ROOFING - UNDERLAYMENT
7.2A	ROOFING INSULATION - TAPERED POLYISO WITH COVER BOARD
7.3A	LOW SLOPE ROOFING MEMBRANE - SINGLE PLY EPDM ROOFING
7.3B	STEEP SLOPE ROOFING - NATURAL SLATE TILES
7.3C	STEEP SLOPE ROOFING - SYNTHETIC SLATE TILES
7.4A	LOW SLOPE ROOFING - FLASHING AND SHEET METAL
7.4B	STEEP SLOPE ROOFING - FLASHING AND SHEET METAL
7.6	ROOFING SYSTEM WARRANTY - LOW SLOPE ROOFING SYSTEM
7.9	ROOFING SYSTEM WARRANTY - STEEP SLOPE ROOFING
22.1A	PLUMBING WORK - REUSE EXISTING DRAINS
23.1	MECHANICAL WORK
26.1	ELECTRICAL WORK
26.2	LIGHTNING PROTECTION

N 1 ROOF DEMOLITION PLAN
NO SCALE

walter p moore
Walter P Moore and Associates, Inc.
1201 Peachtree St NE, Suite 1600
Atlanta, Georgia 30361
404.898.9620

Project Name:

1 MILLENNIUM PLAZA ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

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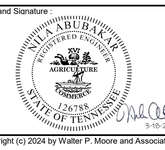
Seal and Signature

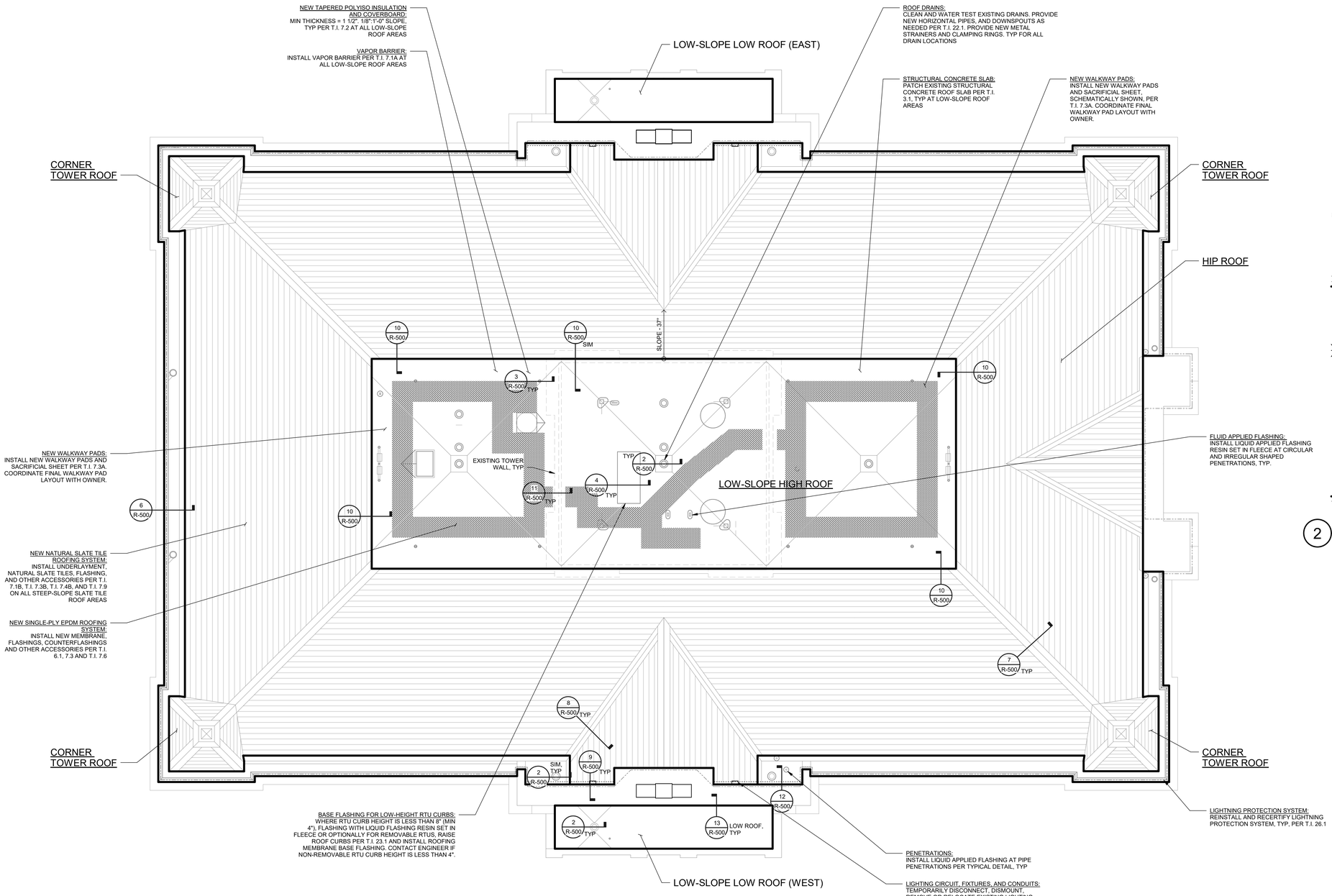


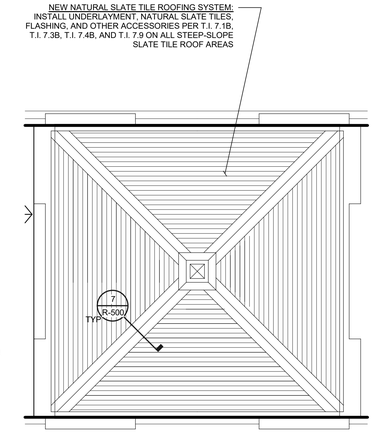
Drawing Title :

ROOF - DEMOLITION PLAN

Sheet No. :

RD-100





2 TOWER ROOF - ROOFING REPLACEMENT PLAN
3/16" = 1'-0"

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2. CONTRACTOR IS ADVISED THAT THE ROOFS DO NOT HAVE OSHA-COMPLIANT PARAPET WALLS. TEMPORARY FALL PROTECTION MUST BE INSTALLED PRIOR TO PERFORMING ANY WORK ON THE ROOF AND MUST REMAIN IN PLACE FOR THE DURATION OF THE REPAIRS.
3. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE WEATHER TIGHTNESS OF THE FACILITY DURING ALL FACILITY OPERATIONS. SUBMIT A BUILDING ENCLOSURE PROTECTION PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
4. DO NOT BLOCK ALLEYWAY OR STREETS ADJACENT TO STAGING AREAS WITH ROOFING MATERIALS, TRASH, VEHICLES, EQUIPMENT, OR ANY OTHER MISCELLANEOUS ITEMS DURING ROOFING PROJECT.
5. LIGHTNING SYSTEM SHOWN SCHEMATICALLY. FIELD VERIFY LOCATIONS OF LIGHTNING PROTECTION.
6. SLOPE PLANS SHOWN ARE CONCEPTUAL ONLY. FINAL SLOPE DESIGN SHALL BE PER THE SLOPE DESIGN CONSULTANT OF THE ROOFER WHO SHALL SOLELY BE RESPONSIBLE FOR PROVIDING THE SPECIFIED FINISHED ROOFING SYSTEM SLOPES FOR FREE DRAINAGE OF WATER FROM THE ROOFING SURFACE.
7. CONTRACTOR IS ADVISED THAT THE HEIGHT OF NEW INSULATION MAY CONFLICT WITH EXISTING WALLS. CONTRACTOR SHALL PERFORM A FIELD SURVEY OF ALL EXISTING FIELD CONDITIONS AND REPORT TO ENGINEER ANY CONFLICTS COMPARED TO THE PRELIMINARY TAPERED INSULATION SHOP DRAWING SUBMITTAL PRIOR TO ORDERING OF TAPERED INSULATION MATERIAL. BASED ON THESE FIELD VERIFICATIONS AND AS DIRECTED BY ENGINEER, MODIFY AND RE-SUBMIT FINAL TAPERED INSULATION SHOP DRAWINGS FOR ENGINEER'S REVIEW.

NEW ROOFING SYSTEM | LOW-SLOPE ROOF AREAS
-EPDM MEMBRANE
-COVER BOARD AND RIGID INSULATION BOARD
-VAPOR BARRIER
-SUBSTRATE BOARD
-EXISTING CONCRETE ROOF DECK

NEW ROOFING SYSTEM | STEEP-SLOPE ROOF AREAS
-SLATE TILES
-UNDERLAYMENT
1 (-EXISTING METAL DECK)

TASK ITEM PER SECTION 01 01 50 "TASK ITEM - EXISTING ROOFING SYSTEM"	
TASK ITEM	DESCRIPTION
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2.1A	DEMOLITION AND SUBSTRATE PREPARATION - LOW SLOPE ROOFING - COMPLETE TEAR OFF DOWN TO DECK
2.1B	DEMOLITION AND SUBSTRATE PREPARATION - STEEP SLOPE ROOFING
2.2A	RECYCLING PROGRAM - LOW SLOPE ROOFING - EXISTING MATERIALS
2.2B	RECYCLING PROGRAM - STEEP SLOPE ROOFING - EXISTING MATERIALS
3.1	DECK REPAIR/REPLACMENT - CONCRETE STRUCTURAL DECKING
5.1	DECK REPAIR - STEEL DECKING
6.1	ROUGH CARPENTRY
7.1A	LOW SLOPE ROOFING - VAPOR BARRIER
7.1B	STEEP SLOPE ROOFING - UNDERLAYMENT
7.2A	ROOFING INSULATION - TAPERED POLYISO WITH COVER BOARD
7.3A	LOW SLOPE ROOFING MEMBRANE - SINGLE PLY EPDM ROOFING
7.3B	STEEP SLOPE ROOFING - NATURAL SLATE TILES
7.3C	STEEP SLOPE ROOFING - SYNTHETIC SLATE TILES
7.4A	LOW SLOPE ROOFING - FLASHING AND SHEET METAL
7.4B	STEEP SLOPE ROOFING - FLASHING AND SHEET METAL
7.6	ROOFING SYSTEM WARRANTY - LOW SLOPE ROOFING SYSTEM
7.9	ROOFING SYSTEM WARRANTY - STEEP SLOPE ROOFING
22.1A	PLUMBING WORK - REUSE EXISTING DRAINS
23.1	MECHANICAL WORK
26.1	ELECTRICAL WORK
26.2	LIGHTNING PROTECTION

N 1 ROOFING REPLACEMENT PLAN
NO SCALE

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Seal and Signature :

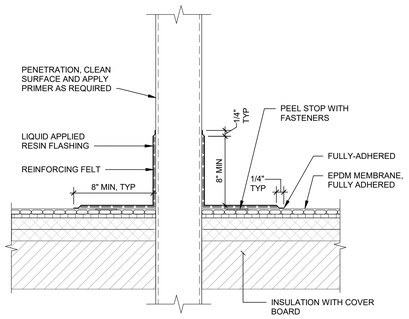
NILAB ABUBAKR
REGISTERED ENGINEER
AGRICULTURE
ENGINEER
126788
STATE OF TENNESSEE
3-18-25

Drawing Title :

ROOFING REPLACEMENT PLAN

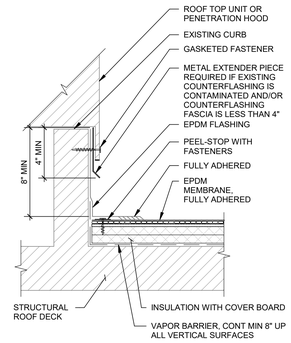
Sheet No. :

R-100



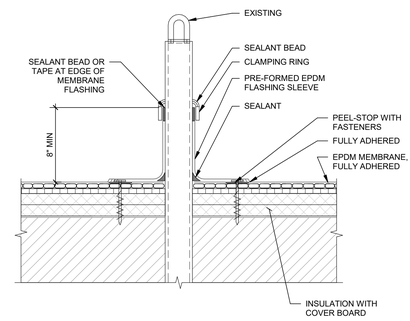
5 TYPICAL LIQUID-APPLIED FLASHING AT IRREGULAR PENETRATIONS

NO SCALE



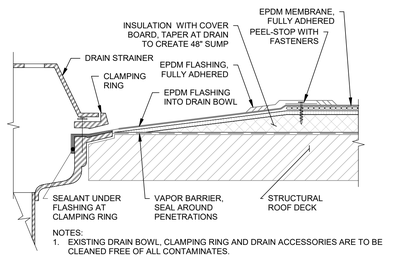
4 TYPICAL DETAIL ADHERED FELT-BACK EPDM FLASHING AT NON-REMOVABLE RTU OR ROOF PENETRATION

NO SCALE



3 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT ROOF TIE BACKS

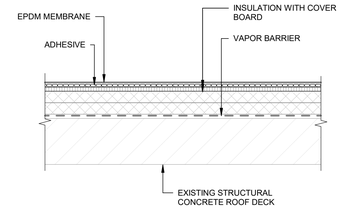
NO SCALE



NOTES:
1. EXISTING DRAIN BOWL, CLAMPING RING AND DRAIN ACCESSORIES ARE TO BE CLEANED FREE OF ALL CONTAMINATES.

2 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT EXISTING ROOF DRAIN

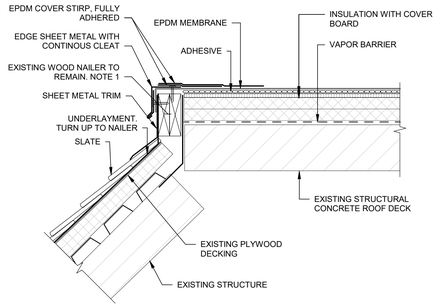
NO SCALE



LOW-SLOPE ROOFS

1 LOW-SLOPE FLEECE-BACK EPDM ROOFING ASSEMBLY - TYP

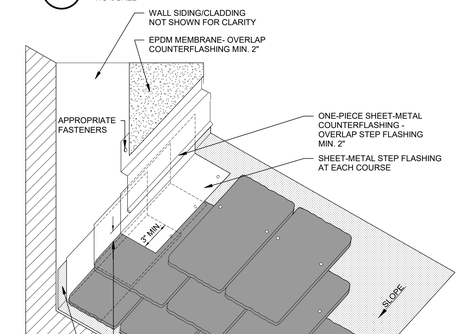
NO SCALE



NOTES:
1. INSPECT EXISTING WOOD NAILER AT ROOF EDGE. REPORT ANY ROTTEN OR OTHERWISE DETERIORATED WOOD NAILER TO ENGINEER FOR REVIEW. REPLACE ANY ROTTEN OR OTHERWISE DETERIORATED EXISTING WOOD NAILER WITH NEW TREATED NAILER.

10 ROOF SLOPE TRANSITION

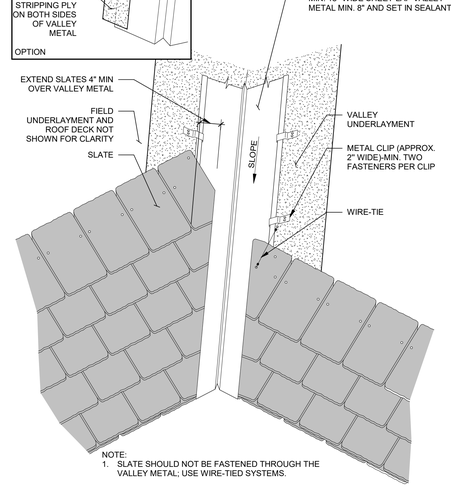
NO SCALE



NOTE:
1. FOR SECUREMENT AND JOINERY OPTIONS FOR SHEET METAL AND COUNTERFLASHING OPTIONS, REFER TO THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION AND AIR LEAKAGE CONTROL, AND REROOFING.
2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

9 SIDEWALL FLASHING

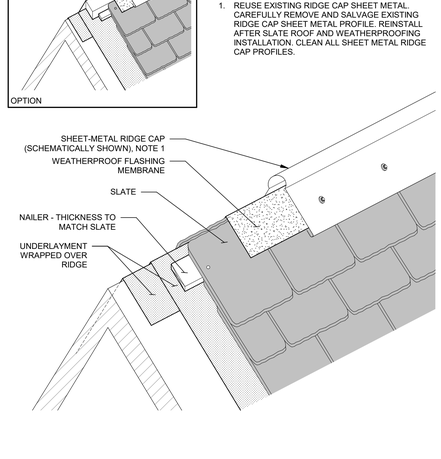
NO SCALE



NOTE:
1. SLATE SHOULD NOT BE FASTENED THROUGH THE VALLEY METAL; USE WIRE-TIED SYSTEMS.

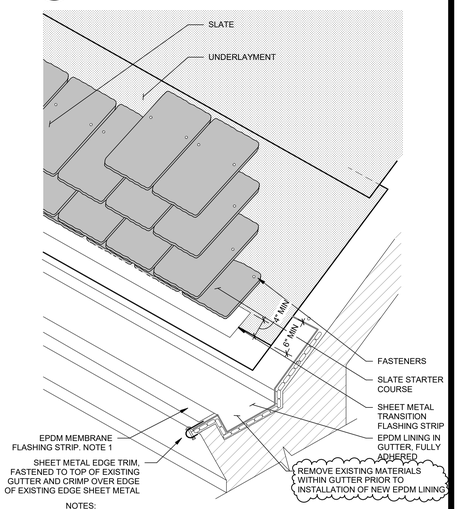
8 OPEN VALLEY

NO SCALE



7 RIDGE WITH SHEET-METAL CAP

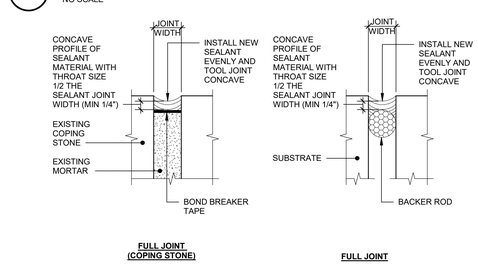
NO SCALE



NOTES:
1. LIGHTNING PROTECTION SYSTEM NOT SHOWN. TEMPORARILY REMOVE AND SALVAGE, AND REINSTALL AND RECERTIFIY AFTER ROOFING REPLACEMENT.

6 EAVE - SLATE ROOF (HIP ROOF)

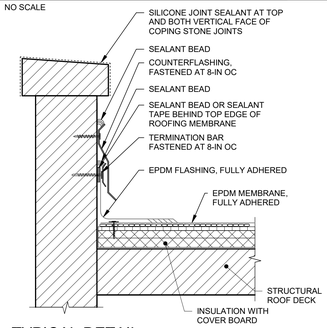
NO SCALE



NOTES:
1. THIS TYPICAL DETAIL APPLIES AT ALL APPLICABLE SEALANT INSTALLATIONS SHOWN THROUGHOUT THE DRAWINGS, UNLESS WHERE SPECIFICALLY NOTED OTHERWISE.
2. REMOVE EXISTING JOINT SEALANT AND BACKER ROD MATERIAL IF PRESENT.
3. CLEAN ALL SURFACES WITHIN JOINT BEFORE FILLING WITH SEALANT SUCH THAT THERE ARE NO OLD RESIDUAL MATERIALS, DUST, OR CONTAMINANTS ON THE INSIDE SURFACES OF THE JOINT.
4. INSTALL BOND BREAKER AND/OR BACKER ROD TO A UNIFORM DEPTH. INSTALLATION OF WAVY OR NON-UNIFORM BOND BREAKER/BACKER ROD WILL NOT BE ACCEPTABLE.
5. DO NOT OVERFILL THE JOINT.
6. REFER TO SPECIFICATIONS FOR SEALANT TYPE AND OTHER REQUIREMENTS.
7. TOOL JOINT CONCAVE.

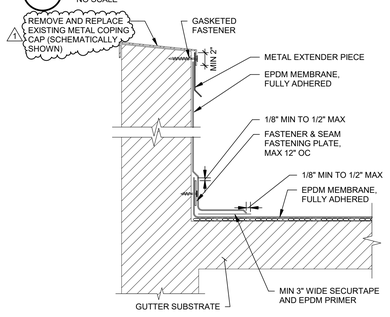
14 SEALANT JOINTS

1 1/2" = 1'-0"



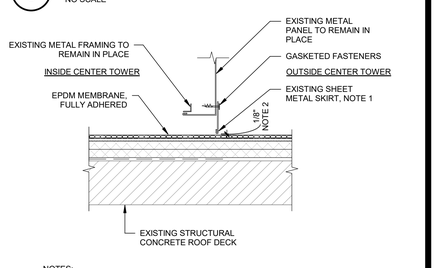
13 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT VERTICAL WALL

NO SCALE



12 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT GUTTER PARAPET

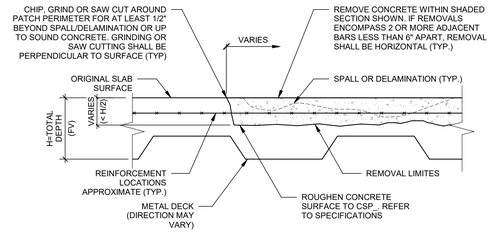
NO SCALE



NOTES:
1. CAREFULLY REMOVE AND SALVAGE EXISTING SHEET METAL SKIRT FOR ROOFING SYSTEM INSTALLATION AT THE TOWER WALL. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGING THE EXISTING METAL WALL PANEL. REINSTALL SKIRT AFTER ROOFING REPLACEMENT.
2. MAINTAIN UNIFORMED GAP BETWEEN SHEET METAL SKIRT AND FINISHING ROOFING SURFACE ALONG THE TOWER WALL.

11 ROOFING TRANSITION AT TOWER WALL

NO SCALE



CAUTION:
1. SLAB MAY HAVE EMBEDDED ELECTRICAL CONDUITS. VERIFY LOCATION PRIOR TO COMMENCEMENT OF WORK.

NOTES:
1. PROTECT EXISTING REINFORCEMENT FROM DAMAGE DURING CHIPPING, GRINDING OR SAW CUTTING FOR SPALL/DELAMINATION REPAIR. USE SMALL CHIPPING HAMMERS LESS THAN 15LB. DO NOT INDUCE EXCESSIVE VIBRATIONS DURING CONCRETE REMOVAL IN COMPOSITE DECKS THAT COULD RESULT IN IMPAIRMENT OF THE BOND BETWEEN CONCRETE AND METAL DECK.
2. REFER TO SECTION "SURFACE PREPARATION FOR PATCHING" FOR CLEANING AND COATING ALL EXPOSED REINFORCEMENT.
3. PROVIDE 3/4" CLEARANCE AROUND ALL EXPOSED REINFORCEMENT WHERE REQUIRED AS SPECIFIED IN SECTION "SURFACE PREPARATION FOR PATCHING."
4. WHERE REINFORCEMENT THAT IS EXPOSED DURING SURFACE PREPARATION IS FOUND TO BE SEVERELY CORRODED OR HAS LOST 10% OR MORE OF ITS CROSS SECTIONAL AREA, SUPPLEMENTARY REINFORCEMENT MAY BE REQUIRED. REPORT TO ENGINEER FOR REVIEW AND DESIGN OF SUPPLEMENTARY REINFORCEMENT.
5. NEW PATCH SHALL MATCH EXISTING FINISH.
6. PROVIDE SHORING AS SPECIFIED BY ENGINEER PRIOR TO COMMENCEMENT OF ANY CONCRETE REMOVAL WORK.

15 PARTIAL DEPTH SLAB REPAIR AT METAL DECK

3" = 1'-0"

walter p moore

Walter P Moore and Associates, Inc.
1201 Peachtree St NE, Suite 1600
Atlanta, Georgia 30361

404.898.9620

Project Name:

1 MILLENNIUM PLAZA ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

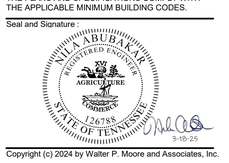
100% CD

No.	Date	Description
	08/30/24	100% Design Development
	09/24/24	90% Construction Document
	12/20/24	Issued for Construction
1	3/18/25	Addendum #1

Project Number : D06.24034.00	Drawn By : AM
Approved By : AB	Checked By : DB

Certification Statement :
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Seal and Signature



Drawing Title :

TYPICAL DETAILS

Sheet No. :

R-500

2 MILLENNIUM PLAZA ROOFING REPLACEMENT

2 MILLENNIUM PLAZA, CLARKSVILLE TN 37040

N

SITE PLAN

SHEET LIST	
SHEET NUMBER	SHEET NAME
CVR	COVER SHEET
R-000	GENERAL NOTES
R-010	ROOF PLAN - WIND LOADS
RD-100	ROOF - DEMOLITION PLAN
R-100	ROOFING REPLACEMENT PLAN
R-500	TYPICAL DETAILS

walter p moore

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DB

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Seal and Signature :

JILANBUBAKAR
REGISTERED ENGINEER
AGRICULTURE
126788
STATE OF TENNESSEE
3-10-25

Drawing Title :

COVER SHEET

Sheet No. :

CVR

GENERAL NOTES

I. DESIGN CRITERIA

A. GENERAL BUILDING CODE

1. THE REPAIR DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE INTERNATIONAL EXISTING BUILDING CODE 2018.

B. CONSTRUCTION LIVE LOADS

1. CONSTRUCTION LIVE LOADS: AN ALLOWANCE OF 20 PSF HAS BEEN PROVIDED FOR CONSTRUCTION LIVE LOADS WHICH INCLUDE BUT ARE NOT LIMITED TO MATERIALS, PERSONNEL AND EQUIPMENT IMPOSED ON THE STRUCTURE DURING CONSTRUCTION.

   A. ROOFS: ORDINARY FLAT, PITCHED AND CURVED ROOFS: 20 PSF

C. WIND LOADS

1. WIND PRESSURES ARE BASED ON THE AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-16 AND THE FOLLOWING CRITERIA:

   A. BASIC WIND SPEED: 106 MPH (3 SECOND GUST)

   B. BUILDING CATEGORY: III

   C. WIND EXPOSURE CATEGORY: C

   D. INTERNAL PRESSURE COEFFICIENT: +0.18/-0.18

2. WIND PRESSURES USED FOR THE DESIGN OF COMPONENTS AND CLADDING ARE SHOWN IN THE SHEET S0.01, ROOF PLAN – WIND ZONE.

NOTES:

   A. WIDTH OF END ZONE/EDGE/CORNER STRIP SHOWN IN SHEET S0.01, ROOF PLAN – WIND ZONE.

   B. COMPONENT AND CLADDING PRESSURES ACT NORMAL TO THE SURFACE. THE DESIGN PRESSURE LISTED IN THE WIND PRESSURE TABLE ARE NEGATIVE PRESSURES ACT AWAY FROM THE SURFACE.

   C. DESIGN PRESSURE FOR COMPONENTS AND CLADDING SHALL NOT BE LESS THAN 10 PSF ACTING IN EITHER DIRECTION NORMAL TO THE SURFACE.

   D. THE EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.

   E. THE DESIGN PRESSURES LISTED IN THE WIND PRESSURE TABLE ARE CALCULATED USING A VALUE OF KD OF 1.0. THE VALUES CAN BE REDUCED BY 15% IF LOAD COMBINATIONS SPECIFIED IN ASCE 7-16 ARE USED IN DESIGN. [A 0.6 REDUCTION FACTOR PER ASCE 7 MAY BE APPLIED TO NOMINAL/STRENGTH LOADS FOR ELEMENTS DESIGNED USING ALLOWABLE STRESS METHOD.]

II. SCOPE OF WORK

A. SCOPE OF WORK INCLUDES THE DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING CONDITIONS PROVIDED BY OWNER.

B. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, TOOLS, SUPPLIES, PERMITS, EQUIPMENT, TRANSPORTATION, SUPERINTENDENCE, BARRICADES, SHORING, BRACING, TEMPORARY CONSTRUCTION OF EVERY NATURE, INSURANCE, TAXES, CONTRIBUTIONS AND ALL SERVICES AND FACILITIES, UNLESS SPECIFICALLY EXCEPTED, AND INSTALL/REMOVE ALL MATERIALS, ITEMS, AND EQUIPMENT REQUIRED TO COMPLETE THE DEMOLITION AND CONSTRUCTION OF THE PROJECT, AS SET FORTH IN THE CONTRACT DOCUMENTS.

C. COOPERATE WITH THE OWNER'S REPRESENTATIVE IN ALL CONSTRUCTION OPERATIONS TO MINIMIZE CONFLICT AND TO FACILITATE OWNER USAGE.

D. CONTRACTOR ACKNOWLEDGES BY SUBMITTING A BID OR PROPOSAL TO PERFORM THE SPECIFIED WORK, THAT THEY HAVE VISITED AND INSPECTED THE PROJECT SITE IN WHICH THE WORK IS TO BE PERFORMED, THAT THEY HAVE SATISFIED THEMSELVES AS TO THE NATURE AND LOCATION OF THE WORK, INCLUDING ANY OBSTRUCTIONS, AMOUNT OF WORK, ACTUAL LEVELS, THE EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING THE EXECUTION OF THE WORK, AND ALL OTHER MATTERS WHICH CAN IN ANY WAY AFFECT THE WORK OR THE COST THEREOF UNDER THIS CONTRACT.

E. FAILURE BY CONTRACTOR TO HAVE ACQUAINTED HIMSELF WITH AVAILABLE INFORMATION CONCERNING SITE CONDITIONS, INCLUDING FACTORS AFFECTING COSTS AND LIABILITIES, SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR PERFORMANCE OF WORK IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND FOR AMOUNT OF CONSIDERATION NAMED OR OTHERWISE DETERMINED.

F. WHEN CONTRACTOR ENCOUNTERS A CONDITION REQUIRING FURTHER INFORMATION OR A CLARIFICATION, CONTRACTOR SHALL SUBMIT TO ENGINEER A WRITTEN REQUEST FOR INFORMATION (R.F.I.) NUMBERED SEQUENTIALLY. ENGINEER WILL RESPOND IN WRITING TO ALL R.F.I.'S.

III. SELECTIVE DEMOLITION

A. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING DECONSTRUCTION / DEMOLITION

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED BRACING DURING DEMOLITION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE DEMOLITION PROCESS. CONTRACTOR SHALL ENGAGE A PROFESSIONAL ENGINEER TO SURVEY CONDITION OF BUILDING TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION OPERATIONS.

B. DEFINITIONS

1. REMOVE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.

2. REMOVE AND SALVAGE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND DELIVER THEM TO OWNER READY FOR REUSE. OWNER TO IDENTIFY ITEMS TO BE REUSED OR SALVAGED.

3. EXISTING TO REMAIN: EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE REMOVED AND THAT ARE NOT OTHERWISE INDICATED TO BE REMOVED, REMOVED AND SALVAGED, OR REMOVED AND REINSTALLED.

C. MATERIAL OWNERSHIP

1. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR OTHERWISE INDICATED TO REMAIN OWNER'S PROPERTY. DEMOLISHED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, AND SHALL BE REMOVED FROM PROJECT SITE. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN A PROPER AND LEGAL MANNER PER FEDERAL, STATE AND LOCAL REGULATIONS.

D. QUALITY ASSURANCE

1. DEMOLITION FIRM QUALIFICATIONS: AN EXPERIENCED FIRM THAT HAS SPECIALIZED IN DEMOLITION WORK SIMILAR IN MATERIAL AND EXTENT TO THAT INDICATED FOR THIS PROJECT.

2. PROFESSIONAL QUALIFICATIONS OF ENGINEER ENGAGED BY CONTRACTOR: CURRENT REGISTRATION IN THE STATE WHERE THE PROJECT IS LOCATED.

3. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING OWNER, LOCAL, STATE, FEDERAL, AND EPA NOTIFICATIONS AND REGULATIONS BEFORE BEGINNING SELECTIVE DECONSTRUCTION / DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

4. CONTRACTOR SHALL PHOTO DOCUMENT EXISTING CONDITIONS OF THE BUILDING AND ADJOINING PROPERTIES. PHOTOS SHALL BE SUBMITTED TO OWNER AND ENGINEER OF RECORD PRIOR TO DECONSTRUCTION / DEMOLITION.

5. PRE-DEMOLITION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE TO ADDRESS THE FOLLOWING:

   A. INSPECT AND DISCUSS CONDITION OF CONSTRUCTION TO BE SELECTIVELY DEMOLISHED.
   B. REVIEW STRUCTURAL LOAD LIMITATIONS OF EXISTING STRUCTURE AS APPROPRIATE FOR THE PROPOSED MEANS AND METHODS.
   C. REVIEW AND FINALIZE SELECTIVE DEMOLITION SCHEDULE AND VERIFY AVAILABILITY OF MATERIALS, DEMOLITION PERSONNEL, EQUIPMENT, AND FACILITIES NEEDED TO MAKE PROGRESS AND AVOID DELAYS.

E. PROJECT CONDITIONS

1. CONDUCT SELECTIVE DEMOLITION SO OWNER'S OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NOT LESS THAN 72-HOUR NOTICE TO OWNER OF ACTIVITIES THAT WILL AFFECT OWNER'S OPERATIONS.

2. MAINTAIN ACCESS TO EXISTING WALKWAYS, CORRIDORS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT WALKWAYS, CORRIDORS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND TECHNICAL SPECIFICATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE, FOR THE PROPOSED SCAFFOLDING SYSTEM TO BE USED FOR ACCESS TO ELEVATED WORK AREAS. SCAFFOLDING SHALL INCLUDE PROTECTION NETTING AND BE DESIGNED / CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATORY REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE STRICTEST GOVERNING SECTIONS OF 29 CFR OSHA 1926 SUBPART L, 29 CFR OSHA 1926 SUBPART M, 29 CFR OSHA 1926.105, AND ANSI A10.11 CONSENSUS STANDARD.

4. OWNER ASSUMES NO RESPONSIBILITY FOR CONDITION OF AREAS TO BE SELECTIVELY DEMOLISHED.

   A. CONDITIONS EXISTING AT TIME OF INSPECTION FOR BIDDING PURPOSE WILL BE MAINTAINED BY OWNER AS FAR AS PRACTICAL.
   B. BEFORE SELECTIVE DEMOLITION, OWNER WILL REMOVE ITEMS WITHIN SPACE AS NEEDED.

5. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF AS APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

6. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE WILL NOT BE PERMITTED.

7. UTILITY SERVICE: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. MAINTAIN FIRE-PROTECTION FACILITIES IN SERVICE DURING SELECTIVE DEMOLITION.

8. PROTECT ADJACENT PAVING (ASPHALT OR CEMENT ROADWAYS, SEWERS, ETC.) AND DRAINAGE DITCHES AS NEEDED.

9. ALL AREAS OUTSIDE OF DEMOLITION SCOPE TO BE PROTECTED FROM DAMAGE BY CONTRACTOR. RESTORE AREAS SUBJECT TO DAMAGE TO THEIR PRE-DEMOLITION CONDITION.

F. UTILITY SERVICES

1. MAINTAIN EXISTING UTILITIES IN SERVICE. CONTRACTOR SHALL COORDINATE WITH OWNER IF ANY INTERRUPTION OF EXISTING UTILITIES ARE REQUIRED. CONTRACTOR SHALL NOT COMMENCE WORK WHICH MAY IMPACT EXISTING UTILITIES UNLESS THE OWNER APPROVES IN WRITING A PLANNED INTERRUPTION OF EXISTING UTILITIES.

G. PREPARATION

1. DANGEROUS MATERIALS: DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.

   A. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
   B. ERECT A PLAINLY VISIBLE FENCE AROUND DRIP LINE OF INDIVIDUAL TREES OR AROUND PERIMETER DRIP LINE OF GROUPS OF TREES TO REMAIN.

2. CONTRACTOR SHALL MAINTAIN ACCESS TO EXITS AND EXIT STAIRS AT ALL TIMES. FIRE ALARMS AND SMOKE DETECTION SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES. PROTECT SMOKE DETECTORS AS REQUIRED AND IN CONFORMANCE TO LOCAL CODES, REGULATIONS, AND LOCAL AUTHORITIES HAVING JURISDICTION.

3. TEMPORARY FACILITIES: PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN.

   A. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA AND TO AND FROM OCCUPIED PORTIONS OF ADJACENT FACILITIES.

4. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL AND PEDESTRIAN CONTROL MEASURES AS REQUIRED.

5. CONTRACTOR SHALL COORDINATE WITH OWNER IF ANY REMOVAL OF LANDSCAPE IS REQUIRED.

6. TEMPORARY PARTITIONS: ERECT AND MAINTAIN DUSTPROOF PARTITIONS AND TEMPORARY ENCLOSURES TO LIMIT DUST AND DIRT MIGRATION AND TO SEPARATE AREAS FROM FUMES AND NOISE.

7. TEMPORARY SHORING: PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. STRENGTHEN OR ADD TEMPORARY SUPPORTS WHEN REQUIRED DURING PROGRESS OF SELECTIVE DEMOLITION.

H. POLLUTION CONTROLS

1. CONDUCT DEMOLITION WASTE DISPOSAL OPERATIONS IN COMPLIANCE WITH LOCAL LAWS AND ORDINANCES. COMPLY FULLY WITH FEDERAL AND LOCAL ENVIRONMENTAL AND ANTI-POLLUTION REGULATIONS.

2. REFER TO DIVISION 01 SPECIFICATION SECTIONS FOR REQUIREMENTS ON DUST CONTROL, DISPOSAL, AND CLEANING OF DEMOLISHED MATERIAL.

I. EXECUTION OF SELECTIVE DEMOLITION

1. GENERAL: DEMOLISH EXISTING CONSTRUCTION AS INDICATED. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS:
   A. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION.
   B. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. AT CONCEALED SPACES, VERIFY CONDITION AND CONTENTS OF HIDDEN SPACES BEFORE STARTING FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS.
   C. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
   D. REMOVE DECAYED, VERMIN-INFESTED, OR OTHERWISE DANGEROUS OR UNSUITABLE MATERIALS AND PROMPTLY DISPOSE OF OFF-SITE.
   E. LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, SLABS, OR FRAMING.
   F. DISPOSE OF DEMOLISHED ITEMS AND MATERIALS PROMPTLY.

2. EXISTING FACILITIES: COMPLY WITH OWNER'S REQUIREMENTS FOR USING AND PROTECTING OTHER BUILDING FACILITIES DURING SELECTIVE DEMOLITION OPERATIONS.

3. REMOVED AND SALVAGED ITEMS: COMPLY WITH THE FOLLOWING:
   A. CLEAN SALVAGED ITEMS.
   B. STORE ITEMS IN A SECURE AREA UNTIL DELIVERY TO OWNER.
   C. TRANSPORT ITEMS TO OWNER'S STORAGE AREA AS DESIGNATED BY OWNER.

4. EXISTING ITEMS TO REMAIN: CONTRACTOR TO COORDINATE WITH OWNER (PRIOR TO BEGINNING WORK) ON ITEMS THAT ARE TO REMAIN AND HENCE BE PROTECTED DURING THE DEMOLITION PROCESS. WHEN PERMITTED BY OWNER, ITEMS MAY BE REMOVED TO A SUITABLE AND/OR PROTECTED LOCATION.

J. DISPOSAL OF WASTE AND DEMOLISHED MATERIALS

1. GENERAL: PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.

2. BURNING: DO NOT BURN DEMOLISHED MATERIALS.

3. KEEP RECEPTACLES AND OTHER WASTE COLLECTION AREAS NEAT AND ORDERLY. DO NOT ALLOW WASTE TO OVERFLOW ITS CONTAINER OR ACCUMULATE FOR EXCESSIVELY LONG PERIODS OF TIME. LOCATE TRASH COLLECTION POINTS WHERE THEY WILL LEAST LIKELY BE AFFECTED BY STORM WATER RUNOFF.

4. DISPOSAL: TRANSPORT DEMOLISHED MATERIALS OFF OWNER'S PROPERTY AND LEGALLY DISPOSE OF THEM.

5. WATER CAPTURE: FOLLOW ALL LOCAL ORDINANCES AND REGULATION FOR WATER CAPTURE.

IV. SUBMITTALS

A. SUBMITTAL LIST AND SCHEDULE

1. THE CONTRACTOR SHALL PREPARE A DETAILED LIST AND SCHEDULE OF ALL SUBMITTAL ITEMS TO BE SENT TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. THIS LIST SHALL BE UPDATED AND REVISED AND KEPT CURRENT AS THE JOB PROGRESSES. THE SUBMITTAL LIST SHALL BE ORGANIZED AS SHOWN BELOW:

   A. SHOP DRAWINGS
   B. DESIGN CALCULATIONS
   C. PRODUCT DATA, CERTIFICATE, REPORTS, AND OTHER LITERATURE
   D. PRODUCT AND CONTRACTOR WARRANTIES
   E. MANUFACTURER LITERATURE FOR PRODUCTS, ASSEMBLIES, AND HARDWARE

2. DEFERRED SUBMITTALS:

   A. THE FOLLOWING ITEMS ARE CONSIDERED DEFERRED SUBMITTALS BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE:

      1) TEMPORARY FALL PROTECTION SYSTEMS (S&S, REC)

      2) STRUCTURAL ATTACHMENT FOR ROOFTOP UNIT (RTU) RETROFITS AND SUPPLEMENTARY WOOD BLOCKING CONNECTIONS (S&S, REC)

      3) SCAFFOLDING AND OVERHEAD PROTECTION (S&S, REC)

      4) SHOP DRAWINGS FOR EXTERIOR WALL AIR BARRIER ASSEMBLIES, COMPONENTS, TRANSITION FLASHINGS, AND ACCESSORIES (REC)

      5) SHOP DRAWINGS FOR SHEET METAL FLASHING AND TRIM ASSEMBLIES, COMPONENTS, AND ACCESSORIES (REC)

   NOTES:

   (S&S) ITEMS MARKED THUS SHALL HAVE THE SHOP DRAWINGS AND DELEGATED DESIGN SUBMITTALS (INCLUDING CALCULATIONS) SEALED PER THE PROJECT REQUIREMENTS BY AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND ENGAGED BY THE CONTRACTOR.

   (REC) ITEMS MARKED THUS SHALL BE SUBMITTED TO ENGINEER FOR RECORD ONLY AND WILL NOT HAVE THE ENGINEER'S SHOP DRAWING STAMP AFFIXED.

   B. DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE FORWARDED TO THE BUILDING OFFICIAL.
   C. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

3. SHOP DRAWINGS:

   A. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS:

      1) ROOFING INSULATION SLOPE PLAN

      2) SHEET METAL FLASHING AND DETAILING

4. MANUFACTURER LITERATURE

   A. SUBMIT MANUFACTURER'S PRODUCT DATA SHEETS FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT. WHERE APPROPRIATE, ALSO SUBMIT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SAFETY DATA SHEETS FOR ALL PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.

5. SUBMITTAL REQUIREMENTS:

   A. ALL SHOP DRAWINGS MUST BE REVIEWED AND ELECTRONICALLY STAMPED BY THE CONTRACTOR PRIOR TO SUBMITTAL.
   B. CONTRACTOR SHALL PROVIDE THE SUBMITTAL IN ELECTRONIC PORTABLE DOCUMENT FORMAT (PDF).
   C. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.

C. REPRODUCTION

1. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

V. MISCELLANEOUS

A. CONTRACT DOCUMENTS

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, [FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD] [THE PROCUREMENT, FABRICATION, AND INSTALLATION OF ROOFING COMPONENTS.].

2. THE CONTRACTOR SHALL FULLY AND PROPERLY IMPLEMENT THE ENGINEERING CONTROLS, WORK PRACTICES, AND RESPIRATORY PROTECTION AGAINST TOXIC AND HAZARDOUS SUBSTANCES INCLUDING RESPIRABLE CRYSTALLINE SILICA ACCORDING TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) 29 CFR 1926.1153. WALTER P MOORE DOES NOT HAVE CONTROL OVER, CHARGE OF, OR RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, NOR SHALL WALTER P MOORE BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

3. THE CONTRACT DRAWINGS REPRESENT THE ROOFING SYSTEM INSTALLATION, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCES.

4. PERFORM FIELD SURVEYS TO VERIFY AS-BUILT CONDITIONS INCLUDING: EXPANSION JOINT SYSTEMS, PREVIOUS REPAIRS PERFORMED IN THE FACILITY, LOCATION AND SIZE OF STRUCTURAL MEMBERS (BEAMS, COLUMNS, WALLS, ETC.), SLAB THICKNESS, AND OTHER INFORMATION RELEVANT TO THE PROJECT.

B. DRAWING CONFLICTS

1. CONTRACTOR SHALL COMPARE THE [ARCHITECTURAL AND STRUCTURAL DRAWINGS] [ROOFING REPLACEMENT CONSTRUCTION DRAWINGS AND SPECIFICATIONS] [FAÇADE REPAIR CONSTRUCTION DRAWINGS AND SPECIFICATIONS] AND REPORT ANY DISCREPANCY [BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS] [WITHIN EACH SET OF THESE DOCUMENTS] TO THE ENGINEER PRIOR TO THE PROCUREMENT, FABRICATION, AND INSTALLATION OF ANY [ROOFING][FAÇADE REPAIR] COMPONENTS.

C. EXISTING CONDITIONS

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BUILDING AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO ENGINEER PRIOR TO THE [FABRICATION AND ERECTION OF ANY MEMBERS] [PROCUREMENT OF MATERIAL AND INSTALLATION OF ROOFING SYSTEMS]. EXISTING DIMENSIONS SHOWN ON THE DRAWINGS ARE FOR GENERAL REFERENCE ONLY AND SHOULD NOT BE USED FOR FINAL CONSTRUCTION OR DETAILING.

2. WORK SHOWN ON THE DRAWINGS IS EXISTING, UNLESS NOTED AS NEW.

3. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. THE DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE FOR CONTRACTOR USE AND SHALL BE REFERENCED FOR FAMILIARIZATION WITH EXISTING CONDITIONS. HOWEVER, THE AVAILABLE DRAWINGS OF EXISTING CONSTRUCTION ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR BEING KNOWLEDGEABLE OF INFORMATION PRESENTED IN AVAILABLE DRAWINGS AND SHALL FIELD VERIFY ALL PERTINENT INFORMATION.

4. CONTRACTOR SHALL PERFORM A SURVEY TO LOCATE ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND TAKE CARE TO PROTECT UTILITIES TO REMAIN IN SERVICE.

5. CONTRACTOR SHALL PROVIDE DUST, ODOR, BUILDING ENCLOSURE, AND NOISE PROTECTION, AND SAFETY MEASURES AS NECESSARY FOR THE DURATION OF REPAIRS.

6. CONTRACTOR SHALL PERFORM A PRE-CONSTRUCTION CONDITION SURVEY TO DOCUMENT SITE CONDITIONS PRIOR TO START OF WORK. SUBMIT SURVEY TO OWNER AND THE ENGINEER. DOCUMENT LOCATION AND CONDITION OF ANY CONSTRUCTION DESIGNATED FOR REMOVAL AND REINSTALLATION.

7. CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION WITH SIMILAR MATERIALS AND WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE OWNER.

D. ROOFING SYSTEM MANUFACTURER REPRESENTATION

1. THE CONTRACTOR SHALL ENGAGE REPRESENTATIVES OF THE ROOFING SYSTEM MANUFACTURER TO BE ON-SITE DURING THE EARLY STAGES OF WORK. ROOFING SYSTEM MANUFACTURER'S REPRESENTATIVES SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING, DURING TEAR-OFF OF THE EXISTING ROOFING SYSTEM, AND AT OTHER PHASES OF THE PROJECT OR AS OTHERWISE REQUIRED BY OWNER AND ENGINEER.

E. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING CONSTRUCTION

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS ADJACENT TO REPAIR AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED SHORING AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF ALL BUILDING ELEMENTS DURING REPAIR OPERATIONS UNTIL THE ROOF SYSTEM INSTALLATION IS COMPLETED.

F. RESPONSIBILITY OF THE CONTRACTOR FOR CONSTRUCTION LOADS

1. THE CONTRACTOR SHALL NOT OVERLOAD THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE ADEQUACY OF THE STRUCTURE TO SUPPORT ANY APPLIED CONSTRUCTION LOADS, INCLUDING THOSE DUE TO CONSTRUCTION VEHICLES OR EQUIPMENT, MATERIAL HANDLING OR STORAGE, SHORING OR RESHORING, OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL SUBMIT CALCULATIONS SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED VERIFYING THE ADEQUACY OF THE STRUCTURE FOR ANY PROPOSED CONSTRUCTION LOADS THAT ARE IN EXCESS OF THE STATED DESIGN LOADS. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO DESIGN OR CHECK THE STRUCTURE FOR LOADS APPLIED TO THE STRUCTURE FOR ANY CONSTRUCTION ACTIVITY.

G. CONTRACTOR SUBSTITUTIONS

1. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE CONSIDERED FOR APPROVAL ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:

   A. A COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST.
   B. THE MATERIAL OR PRODUCT IS IN CONFORMANCE WITH THE REQUIREMENTS OF THE REFERENCED BUILDING CODE AND THE ICC EVALUATION REPORT IS SUBMITTED WITH THE REQUEST.
      1) ICC-ESR EVALUATION REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.
      2) ICC REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.

2. SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.

3. REFER TO SPECIFICATION SECTION "PROJECT SUBSTITUTIONS PROCEDURES" FOR ADDITIONAL SUBSTITUTIONS REQUIREMENTS AND SUBMITTAL PROCEDURES.

H. THE ENGINEER-OF-RECORDS ROLE DURING CONSTRUCTION

1. THE ENGINEER SHALL NOT HAVE CONTROL NOR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF WALTER P. MOORE AND ASSOCIATES, INC. IS SOLELY FOR THE PURPOSE OF BECOMING GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE WORK COMPLETED AND DETERMINING, IN GENERAL, IF THE WORK OBSERVED IS BEING PERFORMED IN A MANNER INDICATING THAT THE WORK, WHEN FULLY COMPLETED, WILL BE IN ACCORDANCE WITH THE REPAIR CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

I. MAINTENANCE STATEMENT

1. ALL ROOFING AND BUILDING ENCLOSURE SYSTEMS REQUIRE PERIODIC MAINTENANCE TO EXTEND LIFESPAN AND TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A PLANNED PROGRAM OF MAINTENANCE SHALL BE ESTABLISHED BY THE BUILDING OWNER. THIS PROGRAM SHALL INCLUDE SUCH ITEMS SUCH AS BUT NOT LIMITED TO REPLACEMENT OF SEALANTS AT ROOF FLASHING TERMINATIONS, ROOF EXPANSION JOINTS, CLEANING OF EXPOSED ROOFING CAP SHEET, AND ALL OTHER MAINTENANCE ITEMS RECOMMENDED BY THE ROOFING MANUFACTURER. IMMEDIATELY REPORT ANY LEAKS TO THE ROOFING MANUFACTURER SO THAT APPROPRIATE REPAIRS MAY BE IMPLEMENTED.

2. INSPECTIONS: COORDINATE WITH ROOFING MANUFACTURER FOR PERIODIC INSPECTIONS OF THE ROOFING SYSTEM INCLUDING BUT NOT LIMITED TO VISUAL REVIEW OF THE MEMBRANE SURFACING, FLASHING SEAMS, BASE FLASHINGS, EXPANSION JOINTS, ETC. IMMEDIATELY REPORT ANY ROOF RELATED LEAKS TO THE ROOFING MANUFACTURER SO THAT APPROPRIATE REPAIRS MAY BE IMPLEMENTED.

VI. DRAWING INTERPRETATION

A. DRAWING VIEWS LABELED AS "TYPICAL"

1. PARTIAL PLANS, ELEVATIONS, SECTIONS, DETAILS, OR SCHEDULES LABELED WITH "TYPICAL" AT THE BEGINNING OF THEIR TITLE SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY SHOWN. THE APPLICABILITY OF THE CONTENT OF THESE VIEWS TO LOCATIONS ON THE PLAN CAN BE DETERMINED FROM THE TITLE OF THE VIEWS. SUCH VIEWS SHALL APPLY WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. DECISIONS REGARDING APPLICABILITY OF THESE "TYPICAL" VIEWS SHALL BE DETERMINED BY THE ENGINEER OF RECORD.

B. STRUCTURAL ABBREVIATIONS AND NOTATIONS

1. THE FOLLOWING ABBREVIATIONS AND NOTATIONS MAY APPEAR ON THE DRAWINGS:

@	AT
&	AND
#	NUMBER
Ø	ROUND, DIAMETER
(E)	EXISTING
(N)	NEW
ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BLDG	BUILDING
BOT	BOTTOM
CJ	CONTROL JOINT
CL	CENTER LINE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
DN	DOWN
EA	EACH
ELEV	ELEVATION
ENGR	ENGINEER
EJ	EXPANSION JOINT
EW	EACH WAY
EXIST	EXISTING
FV	FIELD VERIFY
GALV	GALVANIZED
GEN	GENERAL
GYP	GYPSUM
HORZ	HORIZONTAL
ICC	INTERNATIONAL CODE COUNCIL
ICRI	INTERNATIONAL CONCRETE REPAIR INSTITUTE
INFO	INFORMATION
LWC	LIGHTWEIGHT CONCRETE
LBF	POUNDS FORCE
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
MSD	MATERIAL SAFETY DATA
MSDS	MATERIAL SAFETY DATA SHEET
NTS	NOT TO SCALE
OC	ON CENTER
PLF	POUNDS PER LINER FOOT
PSF	POUNDS PER SQUARE FOOT
QTY	QUANTITY
REINF	REINFORCEMENT
REQD	REQUIRED
SIM	SIMILAR
STD	STANDARD
SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
TBPE	TEXAS BOARD OF PROFESSIONAL ENGINEERS
TI	TASK ITEM
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL, TOP OF SLAB
TYP	TYPICAL
VERT	VERTICAL

C. STRUCTURAL SYMBOLS

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1201 Peachtree St NE, Suite 1600
Atlanta, Georgia 30361

404.898.9620

Project Name:

2 MILLENNIUM PLAZA ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

No.	Date	Description
	08/30/24	100% Design Development
	09/24/24	90% Construction Document
	01/28/25	Issued for Construction

Project Number : D06.24034.00
Drawn By : AG\PM
Approved By : AB
Checked By : DB

Certification Statement :
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Seal and Signature :

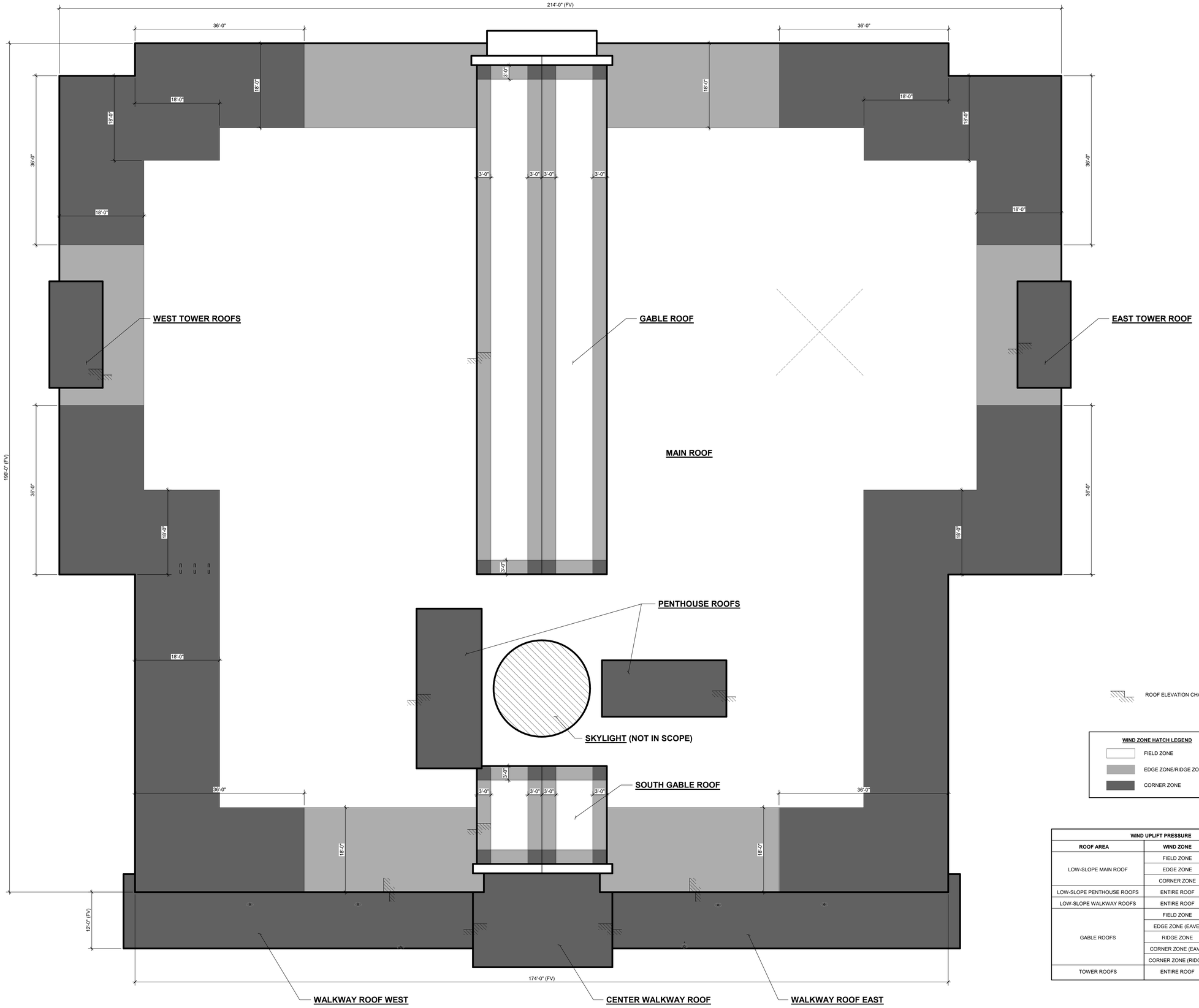
NILA ABUBAKAR
126788
3-18-25

Drawing Title :

GENERAL NOTES

Sheet No. :

R-000



ROOF ELEVATION CHANGE

WIND ZONE HATCH LEGEND

- FIELD ZONE
- EDGE ZONE/RIDGE ZONE
- CORNER ZONE

WIND UPLIFT PRESSURE		
ROOF AREA	**WIND ZONE**	**WIND LOAD** (PSF)
LOW-SLOPE MAIN ROOF	FIELD ZONE	-73
	EDGE ZONE	-97
	CORNER ZONE	-132
LOW-SLOPE PENTHOUSE ROOFS	ENTIRE ROOF	-138
LOW-SLOPE WALKWAY ROOFS	ENTIRE ROOF	-114
GABLE ROOFS	FIELD ZONE	-67
	EDGE ZONE (EAVE)	-67
	RIDGE ZONE	-107
	CORNER ZONE (EAVE)	-107
	CORNER ZONE (RIDGE)	-151
TOWER ROOFS	ENTIRE ROOF	-81

N

1 ROOF PLAN - WIND ZONE

NO SCALE

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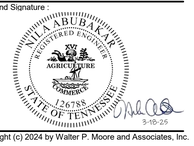
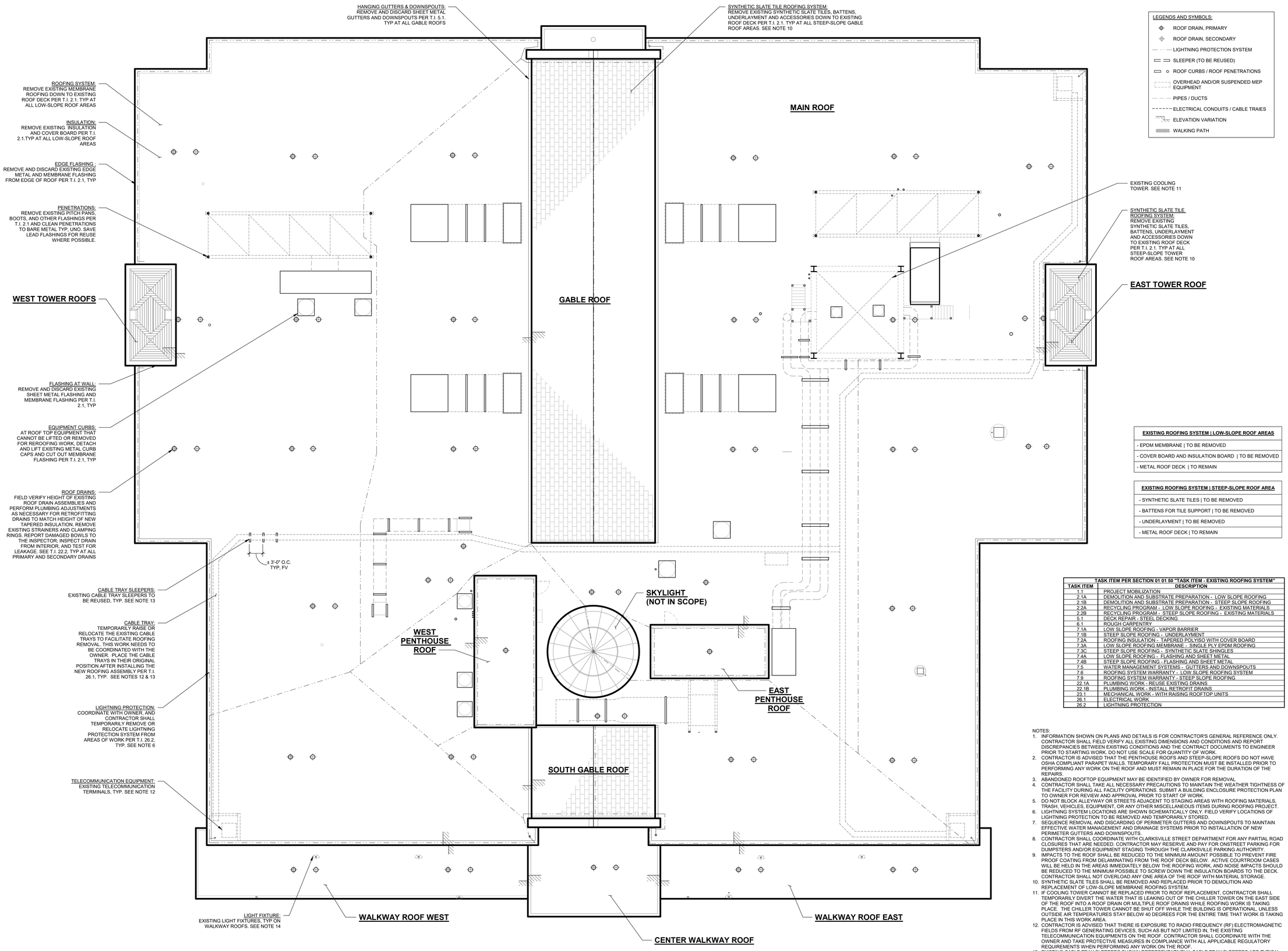


Drawing Title :

ROOF PLAN - WIND LOADS

Sheet No. :

R-010



LEGENDS AND SYMBOLS:

- ROOF DRAIN, PRIMARY
- ROOF DRAIN, SECONDARY
- LIGHTNING PROTECTION SYSTEM
- SLEEPER (TO BE REUSED)
- ROOF CURBS / ROOF PENETRATIONS
- OVERHEAD AND/OR SUSPENDED MEP EQUIPMENT
- PIPES / DUCTS
- ELECTRICAL CONDUITS / CABLE TRAIES
- ELEVATION VARIATION
- WALKING PATH

EXISTING ROOFING SYSTEM	LOW-SLOPE ROOF AREAS
- EPDM MEMBRANE | TO BE REMOVED	
- COVER BOARD AND INSULATION BOARD | TO BE REMOVED	
- METAL ROOF DECK | TO REMAIN	

EXISTING ROOFING SYSTEM | STEEP-SLOPE ROOF AREA
- SYNTHETIC SLATE TILES | TO BE REMOVED
- BATTENS FOR TILE SUPPORT | TO BE REMOVED
- UNDERLAYMENT | TO BE REMOVED
- METAL ROOF DECK | TO REMAIN

"TASK ITEM PER SECTION 01 01 50 "TASK ITEM - EXISTING ROOFING SYSTEM"

TASK ITEM	DESCRIPTION
1.1	PROJECT MOBILIZATION
2.1A	DEMOLITION AND SUBSTRATE PREPARATION - LOW SLOPE ROOFING
2.1B	DEMOLITION AND SUBSTRATE PREPARATION - STEEP SLOPE ROOFING
2.2A	RECYCLING PROGRAM - LOW SLOPE ROOFING - EXISTING MATERIALS
2.2B	RECYCLING PROGRAM - STEEP SLOPE ROOFING - EXISTING MATERIALS
5.1	DECK REPAIR - STEEL DECKING
6.1	ROUGH CARPENTRY
7.1A	LOW SLOPE ROOFING - VAPOR BARRIER
7.1B	STEEP SLOPE ROOFING - UNDERLAYMENT
7.2A	ROOFING INSULATION - TAPERED POLYISO WITH COVER BOARD
7.3A	LOW SLOPE ROOFING MEMBRANE - SINGLE PLY EPDM ROOFING
7.3C	STEEP SLOPE ROOFING - SYNTHETIC SLATE SHINGLES
7.4A	LOW SLOPE ROOFING - FLASHING AND SHEET METAL
7.4B	STEEP SLOPE ROOFING - FLASHING AND SHEET METAL
7.5	WATER MANAGEMENT SYSTEMS - GUTTERS AND DOWNSPOUTS
7.6	ROOFING SYSTEM WARRANTY - LOW SLOPE ROOFING SYSTEM
7.9	ROOFING SYSTEM WARRANTY - STEEP SLOPE ROOFING
22.1A	PLUMBING WORK - REUSE EXISTING DRAINS
22.1B	PLUMBING WORK - INSTALL RETROFIT DRAINS
23.1	MECHANICAL WORK - WITH RAISING ROOFTOP UNITS
26.1	ELECTRICAL WORK
26.2	LIGHTNING PROTECTION

NOTES:

1. INFORMATION SHOWN ON PLANS AND DETAILS IS FOR CONTRACTOR'S GENERAL REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND REPORT DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS TO ENGINEER PRIOR TO STARTING WORK. DO NOT USE SCALE FOR QUANTITY OF WORK.
2. CONTRACTOR IS ADVISED THAT THE PENTHOUSE ROOFS AND STEEP-SLOPE ROOFS DO NOT HAVE OSHA COMPLIANT PARAPET WALLS. TEMPORARY FALL PROTECTION MUST BE INSTALLED PRIOR TO PERFORMING ANY WORK ON THE ROOF AND MUST REMAIN IN PLACE FOR THE DURATION OF THE REPAIRS.
3. ABANDONED ROOFTOP EQUIPMENT MAY BE IDENTIFIED BY OWNER FOR REMOVAL
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE WEATHER TIGHTNESS OF THE FACILITY DURING ALL FACILITY OPERATIONS. SUBMIT A BUILDING ENCLOSURE PROTECTION PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
5. DO NOT BLOCK ALLEYWAY OR STREETS ADJACENT TO STAGING AREAS WITH ROOFING MATERIALS, TRASH, VEHICLES, EQUIPMENT, OR ANY OTHER MISCELLANEOUS ITEMS DURING ROOFING PROJECT.
6. LIGHTNING SYSTEM LOCATIONS ARE SHOWN SCHEMATICALLY ONLY. FIELD VERIFY LOCATIONS OF LIGHTNING PROTECTION TO BE REMOVED AND TEMPORARILY STORED.
7. SEQUENCE REMOVAL AND DISCARDING OF PERIMETER GUTTERS AND DOWNSPOUTS TO MAINTAIN EFFECTIVE WATER MANAGEMENT AND DRAINAGE SYSTEMS PRIOR TO INSTALLATION OF NEW PERIMETER GUTTERS AND DOWNSPOUTS.
8. CONTRACTOR SHALL COORDINATE WITH CLARKSVILLE STREET DEPARTMENT FOR ANY PARTIAL ROAD CLOSURES THAT ARE NEEDED. CONTRACTOR MAY RESERVE AND PAY FOR ONSTREET PARKING FOR DUMPSTERS AND/OR EQUIPMENT STAGING THROUGH THE CLARKSVILLE PARKING AUTHORITY.
9. IMPACTS TO THE ROOF SHALL BE REDUCED TO THE MINIMUM AMOUNT POSSIBLE TO PREVENT FIRE PROOF COATING FROM DELAMINATING FROM THE ROOF DECK BELOW. ACTIVE COURTROOM CASES WILL BE HELD IN THE AREAS IMMEDIATELY BELOW THE ROOFING WORK, AND NOISE IMPACTS SHOULD BE REDUCED TO THE MINIMUM POSSIBLE TO SCREW DOWN THE INSULATION BOARDS TO THE DECK. CONTRACTOR SHALL NOT OVERLOAD ANY ONE AREA OF THE ROOF WITH MATERIAL STORAGE.
10. SYNTHETIC SLATE TILES SHALL BE REMOVED AND REPLACED PRIOR TO DEMOLITION AND REPLACEMENT OF LOW-SLOPE MEMBRANE ROOFING SYSTEM.
11. IF COOLING TOWER CANNOT BE REPLACED PRIOR TO ROOF REPLACEMENT, CONTRACTOR SHALL TEMPORARILY DIVERT THE WATER THAT IS LEAKING OUT OF THE CHILLER TOWER ON THE EAST SIDE OF THE ROOF INTO A ROOF DRAIN OR MULTIPLE ROOF DRAINS WHILE ROOFING WORK IS TAKING PLACE. THE CHILLER TOWER CANNOT BE SHUT OFF WHILE THE BUILDING IS OPERATIONAL, UNLESS OUTSIDE AIR TEMPERATURES STAY BELOW 40 DEGREES FOR THE ENTIRE TIME THAT WORK IS TAKING PLACE IN THIS WORK AREA.
12. CONTRACTOR IS ADVISED THAT THERE IS EXPOSURE TO RADIO FREQUENCY (RF) ELECTROMAGNETIC FIELDS FROM RF GENERATING DEVICES, SUCH AS BUT NOT LIMITED IN, THE EXISTING TELECOMMUNICATION EQUIPMENTS ON THE ROOF. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND TAKE PROTECTIVE MEASURES IN COMPLIANCE WITH ALL APPLICABLE REGULATORY REQUIREMENTS WHEN PERFORMING ANY WORK ON THE ROOF.
13. EXISTING CABLE TRAY SLEEPERS SHOWN REPRESENTATIVELY. CABLE TRAY SLEEPERS ARE TYPICAL ALONG THE ENTIRE RUN OF CABLE TRAYIES ON THE MAIN ROOF.
14. CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT AND TO PREVENT DAMAGING THE EXISTING LIGHT FIXTURES ON THE WALKWAY ROOF. COORDINATE WITH THE OWNER AND ENGAGE QUALIFEID AND LICENSED ELECTRICAL SUB-CONTRACTORS AS NEEDED TO TEMPORARILY DISCONNECT AND STORE THE LIGHT FIXTURE FOR ROOFING REMOVAL AND REPLACEMENT. REINSTALL THE LIGHT TO ITS ORIGINAL ORIENTATION AND ANGLE.

N

1 ROOF DEMOLITION PLAN

1/8" = 1'-0"

walter p moore

Walter P Moore and Associates, Inc.
1201 Peachtree St NE, Suite 1600
Atlanta, Georgia 30361

404.898.9620

Project Name:

2 MILLENNIUM PLAZA ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

No.	Date	Description
	08/30/24	100% Design Development
	09/24/24	90% Construction Document
	01/28/25	Issued for Construction

Project Number : D06.24034.00
Drawn By : AG\PM
Approved By : AB
Checked By : DB

Certification Statement :
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

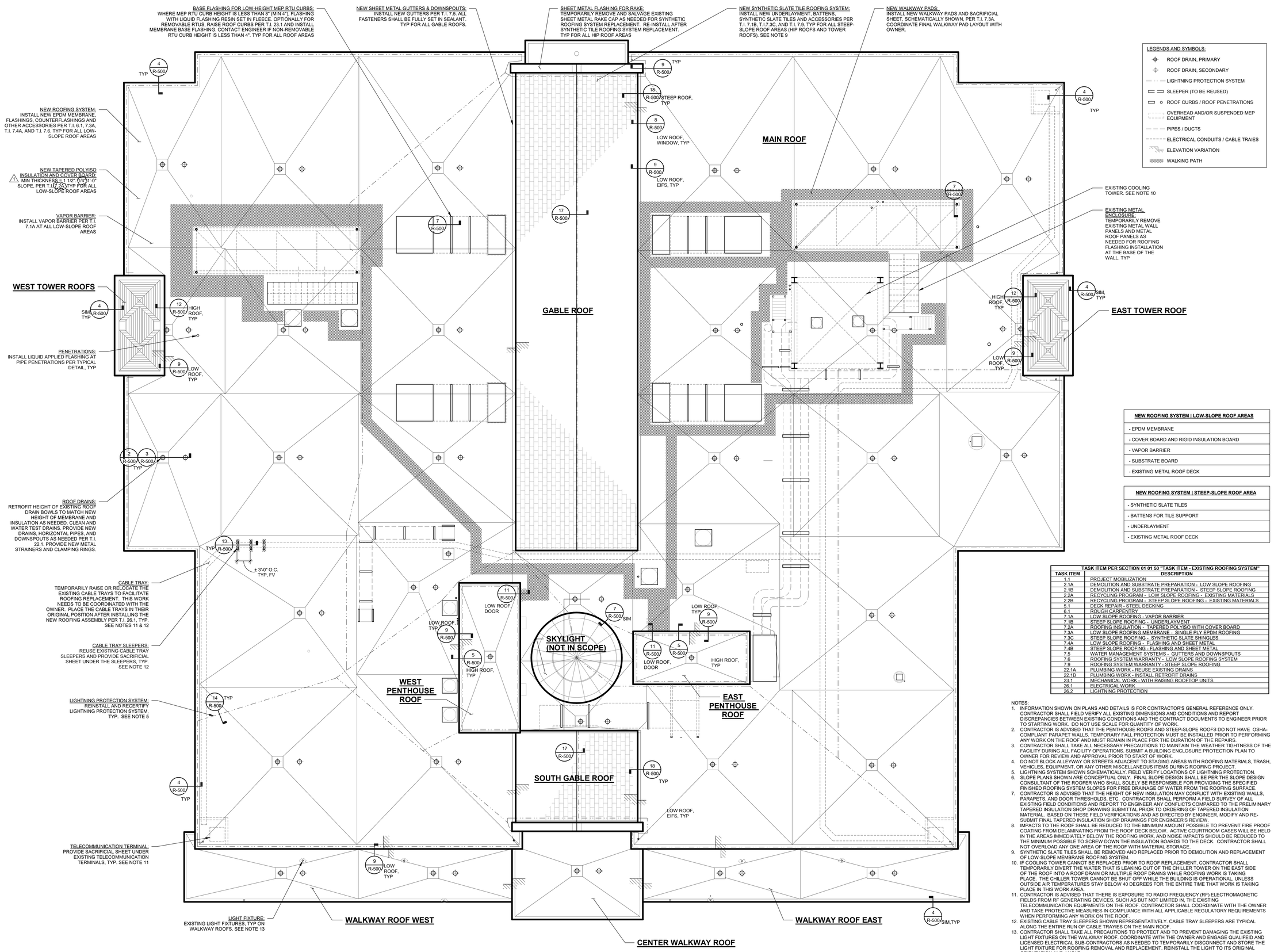
Seal and Signature :

Drawing Title :

ROOF - DEMOLITION PLAN

Sheet No. :

RD-100



LEGENDS AND SYMBOLS:

- ROOF DRAIN, PRIMARY
- ROOF DRAIN, SECONDARY
- LIGHTNING PROTECTION SYSTEM
- SLEEPER (TO BE REUSED)
- ROOF CURBS / ROOF PENETRATIONS
- OVERHEAD AND/OR SUSPENDED MEP EQUIPMENT
- PIPES / DUCTS
- ELECTRICAL CONDUITS / CABLE TRAIES
- ELEVATION VARIATION
- WALKING PATH

NEW ROOFING SYSTEM	LOW-SLOPE ROOF AREAS
- EPDM MEMBRANE	
- COVER BOARD AND RIGID INSULATION BOARD	
- VAPOR BARRIER	
- SUBSTRATE BOARD	
- EXISTING METAL ROOF DECK	

NEW ROOFING SYSTEM I STEEP-SLOPE ROOF AREA
- SYNTHETIC SLATE TILES
- BATTENS FOR TILE SUPPORT
- UNDERLAYMENT
- EXISTING METAL ROOF DECK

TASK ITEM PER SECTION 01 01 50 "TASK ITEM - EXISTING ROOFING SYSTEM"

TASK ITEM	DESCRIPTION
1.1	PROJECT MOBILIZATION
2.1A	DEMOLITION AND SUBSTRATE PREPARATION - LOW SLOPE ROOFING
2.1B	DEMOLITION AND SUBSTRATE PREPARATION - STEEP SLOPE ROOFING
2.2A	RECYCLING PROGRAM - LOW SLOPE ROOFING - EXISTING MATERIALS
2.2B	RECYCLING PROGRAM - STEEP SLOPE ROOFING - EXISTING MATERIALS
5.1	DECK REPAIR - STEEL DECKING
6.1	ROUGH CARPENTRY
7.1A	LOW SLOPE ROOFING - VAPOR BARRIER
7.1B	STEEP SLOPE ROOFING - UNDERLAYMENT
7.2A	ROOFING INSULATION - TAPERED POLYISO WITH COVER BOARD
7.3A	LOW SLOPE ROOFING MEMBRANE - SINGLE PLY EPDM ROOFING
7.3C	STEEP SLOPE ROOFING - SYNTHETIC SLATE SHINGLES
7.4A	LOW SLOPE ROOFING - FLASHING AND SHEET METAL
7.4B	STEEP SLOPE ROOFING - FLASHING AND SHEET METAL
7.5	WATER MANAGEMENT SYSTEMS - GUTTERS AND DOWNSPOUTS
7.6	ROOFING SYSTEM WARRANTY - LOW SLOPE ROOFING SYSTEM
7.9	ROOFING SYSTEM WARRANTY - STEEP SLOPE ROOFING
22.1A	PLUMBING WORK - REUSE EXISTING DRAINS
22.1B	PLUMBING WORK - INSTALL RETROFIT DRAINS
23.1	MECHANICAL WORK - WITH RAISING ROOFTOP UNITS
26.1	ELECTRICAL WORK
26.2	LIGHTNING PROTECTION

NOTES:

1. INFORMATION SHOWN ON PLANS AND DETAILS IS FOR CONTRACTOR'S GENERAL REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND REPORT DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS TO ENGINEER PRIOR TO STARTING WORK. DO NOT USE SCALE FOR QUANTITY OF WORK.
2. CONTRACTOR IS ADVISED THAT THE PENTHOUSE ROOFS AND STEEP-SLOPE ROOFS DO NOT HAVE OSHA-COMPLIANT PARAPET WALLS. TEMPORARY FALL PROTECTION MUST BE INSTALLED PRIOR TO PERFORMING ANY WORK ON THE ROOF AND MUST REMAIN IN PLACE FOR THE DURATION OF THE REPAIRS.
3. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE WEATHER TIGHTNESS OF THE FACILITY DURING ALL FACILITY OPERATIONS. SUBMIT A BUILDING ENCLOSURE PROTECTION PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
4. DO NOT BLOCK ALLEYWAY OR STREETS ADJACENT TO STAGING AREAS WITH ROOFING MATERIALS, TRASH, VEHICLES, EQUIPMENT, OR ANY OTHER MISCELLANEOUS ITEMS DURING ROOFING PROJECT.
5. LIGHTNING SYSTEM SHOWN SCHEMATICALLY. FIELD VERIFY LOCATIONS OF LIGHTNING PROTECTION.
6. SLOPE PLANS SHOWN ARE CONCEPTUAL ONLY. FINAL SLOPE DESIGN SHALL BE PER THE SLOPE DESIGN CONSULTANT OF THE ROOFER WHO SHALL SOLELY BE RESPONSIBLE FOR PROVIDING THE SPECIFIED FINISHED ROOFING SYSTEM SLOPES FOR FREE DRAINAGE OF WATER FROM THE ROOFING SURFACE.
7. CONTRACTOR IS ADVISED THAT THE HEIGHT OF NEW INSULATION MAY CONFLICT WITH EXISTING WALLS, PARAPETS, AND DOOR THRESHOLDS, ETC. CONTRACTOR SHALL PERFORM A FIELD SURVEY OF ALL EXISTING FIELD CONDITIONS AND REPORT TO ENGINEER ANY CONFLICTS COMPARED TO THE PRELIMINARY TAPERED INSULATION SHOP DRAWING SUBMITTAL PRIOR TO ORDERING OF TAPERED INSULATION MATERIAL. BASED ON THESE FIELD VERIFICATIONS AND AS DIRECTED BY ENGINEER, MODIFY AND RE-SUBMIT FINAL TAPERED INSULATION SHOP DRAWINGS FOR ENGINEER'S REVIEW.
8. IMPACTS TO THE ROOF SHALL BE REDUCED TO THE MINIMUM AMOUNT POSSIBLE TO PREVENT FIRE PROOF COATING FROM DELAMINATING FROM THE ROOF DECK BELOW. ACTIVE COURTROOM CASES WILL BE HELD IN THE AREAS IMMEDIATELY BELOW THE ROOFING WORK, AND NOISE IMPACTS SHOULD BE REDUCED TO THE MINIMUM POSSIBLE TO SCREW DOWN THE INSULATION BOARDS TO THE DECK. CONTRACTOR SHALL NOT OVERLOAD ANY ONE AREA OF THE ROOF WITH MATERIAL STORAGE.
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walter p moore

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Seal and Signature :

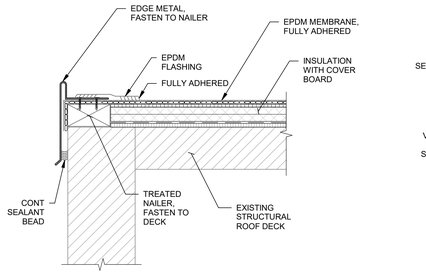
ALI ABUBAKAR, REGISTERED ENGINEER, 226785, STATE OF TENNESSEE, 3-10-25

Drawing Title :

ROOFING REPLACEMENT PLAN

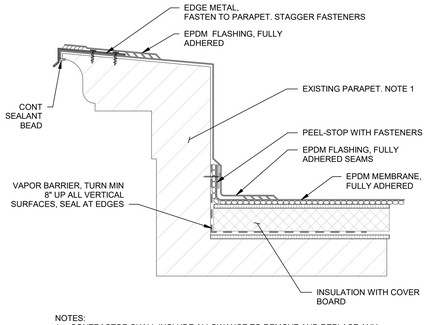
Sheet No. :

R-100



5 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT ROOF EDGE

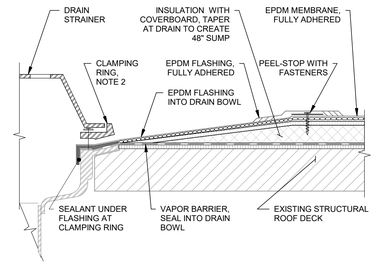
NO SCALE



NOTES:
1. CONTRACTOR SHALL INCLUDE ALLOWANCE TO REMOVE AND REPLACE ANY DETERIORATED SUBSTRATE (SHEATHING) AT VERTICAL FACE OF PARAPET. CONTACT ENGINEER FOR REVIEW DURING EXISTING ROOFING REMOVAL.

4 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT PARAPET

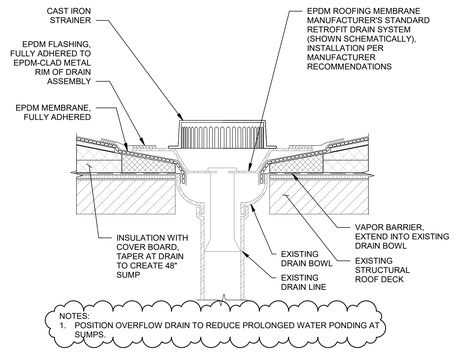
NO SCALE



NOTES:
1. EXISTING DRAIN BOWL, CLAMPING RING AND DRAIN ACCESSORIES ARE TO BE CLEANED FREE OF ALL CONTAMINATES.
2. WATER DAM FOR OVERFLOW DRAIN NOT SHOWN.

3 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT EXISTING ROOF DRAIN

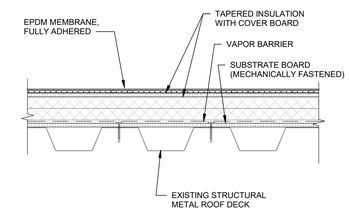
NO SCALE



NOTES:
1. POSITION OVERFLOW DRAIN TO REDUCE PROLONGED WATER PONDING AT SUMPS.

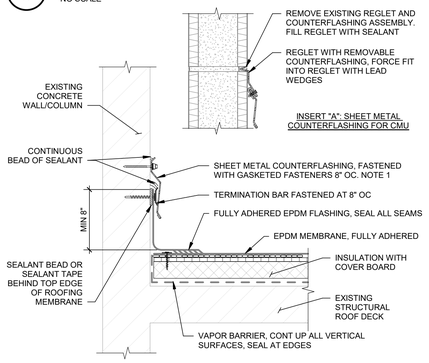
2 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING RETROFIT DRAIN

NO SCALE



1 TYPICAL DETAIL ADHERED FELT-BACK EPDM ASSEMBLY (LOW-SLOPE ROOFS)

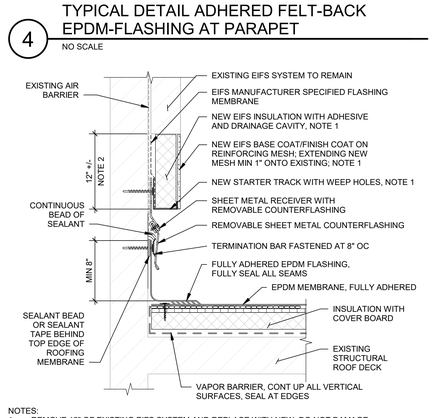
NO SCALE



NOTES:
1. FOR CMU WALL, SEE INSERT "A" FOR COUNTERFLASHING INSTALLATION.

10 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT CONCRETE

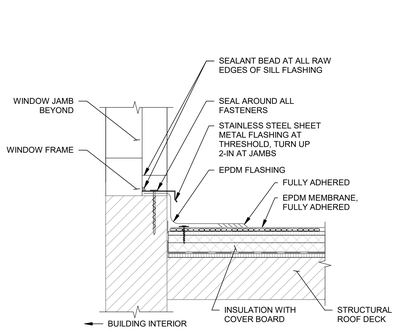
NO SCALE



NOTES:
1. REMOVE 12" OF EXISTING EIFS SYSTEM AND REPLACE WITH NEW. DO NOT DAMAGE EXISTING AIR BARRIER. MATCH NEW FINISH COAT WITH EXISTING.

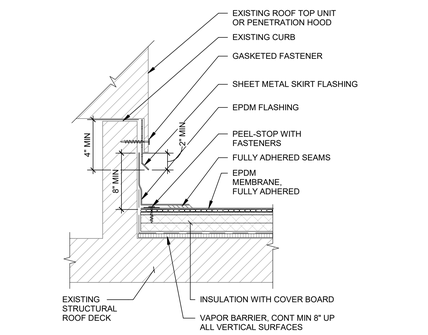
9 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT WINDOW SEAL

NO SCALE



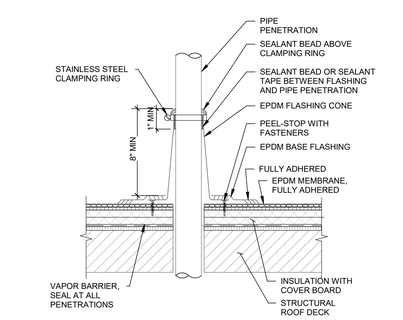
8 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT WINDOW SEAL

NO SCALE



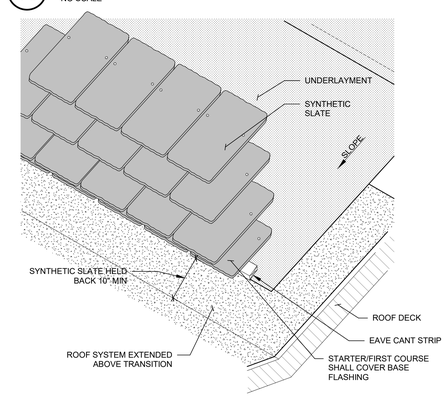
7 TYPICAL DETAIL ADHERED FELT-BACK EPDM FLASHING AT NON-REMOVABLE RTU OR ROOF PENETRATION

NO SCALE



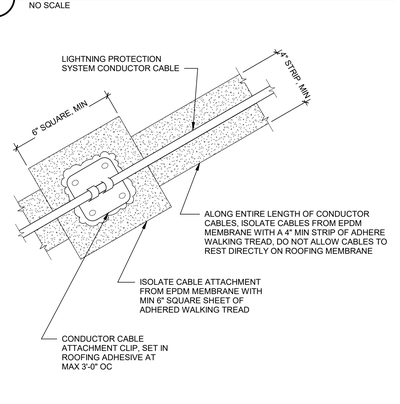
6 TYPICAL DETAIL ADHERED FELT-BACK EPDM-CONE FLASHING AT PENETRATION

NO SCALE



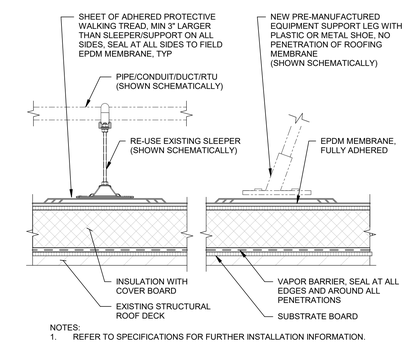
20 RAKE AT INNER ROOF

NO SCALE



19 RAKE AT INNER ROOF

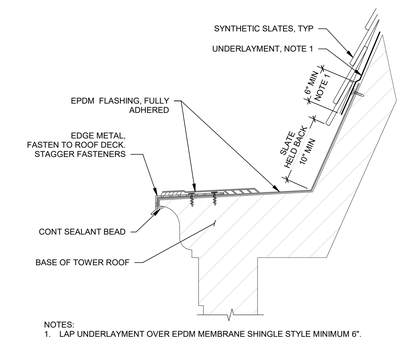
NO SCALE



NOTES:
1. REFER TO SPECIFICATIONS FOR FURTHER INSTALLATION INFORMATION.

18 EAVE WITH GUTTER

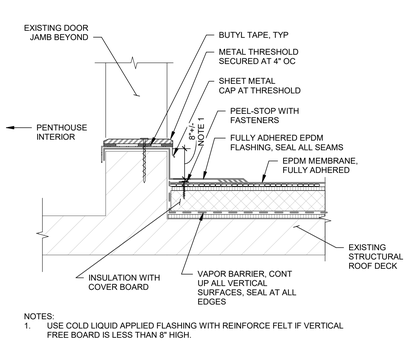
NO SCALE



NOTES:
1. LAP UNDERLAYMENT OVER EPDM MEMBRANE SHINGLE STYLE MINIMUM 6".

17 RIDGE WITH SHEET-METAL CAP

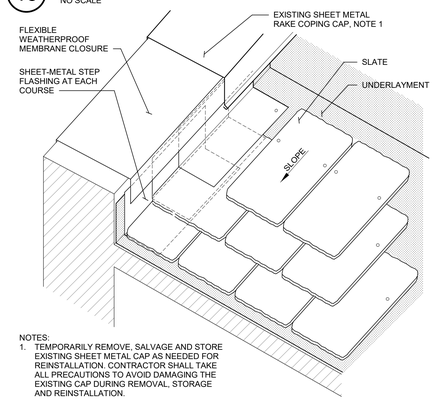
NO SCALE



NOTES:
1. USE COLD LIQUID APPLIED FLASHING WITH REINFORCE FELT IF VERTICAL FREE BOARD IS LESS THAN 8" HIGH.

16 HEADWALL FLASHING

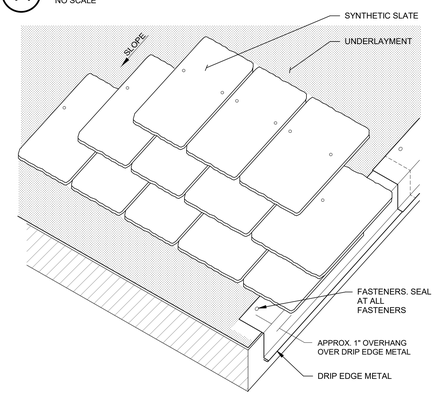
NO SCALE



NOTES:
1. TEMPORARILY REMOVE, SALVAGE AND STORE EXISTING SHEET METAL CAP AS NEEDED FOR REINSTALLATION. CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID DAMAGING THE EXISTING CAP DURING REMOVAL, STORAGE AND REINSTALLATION.

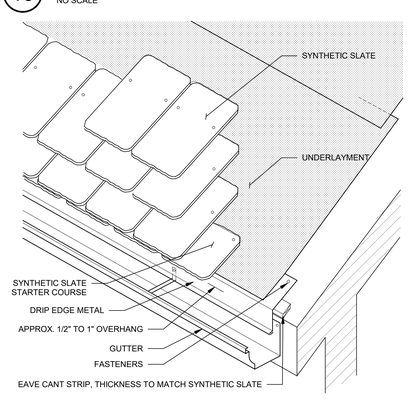
15 STEEP- TO LOW-SLOPE ROOF SYSTEM TRANSITION

NO SCALE



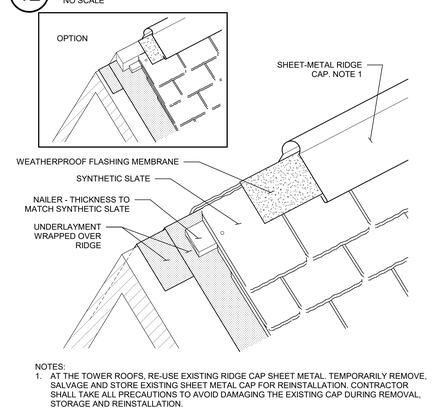
14 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT WINDOW SEAL

NO SCALE



13 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT WINDOW SEAL

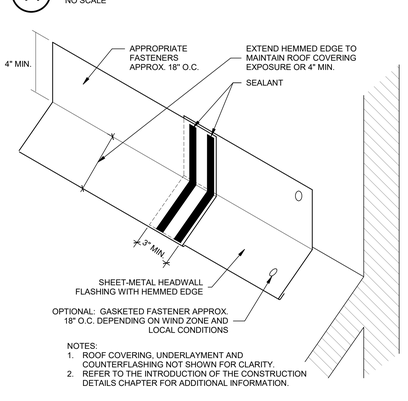
NO SCALE



NOTES:
1. AT THE TOWER ROOFS, RE-USE EXISTING RIDGE CAP SHEET METAL. TEMPORARILY REMOVE, SALVAGE AND STORE EXISTING SHEET METAL CAP FOR REINSTALLATION. CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID DAMAGING THE EXISTING CAP DURING REMOVAL, STORAGE AND REINSTALLATION.

12 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT PARAPET

NO SCALE



NOTES:
1. ROOF COVERING, UNDERLAYMENT AND COUNTERFLASHING NOT SHOWN FOR CLARITY.
2. REFER TO THE INTRODUCTION OF THE CONSTRUCTION DETAILS CHAPTER FOR ADDITIONAL INFORMATION.

11 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT DOOR THRESHOLD

NO SCALE

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Atlanta, Georgia 30361

404.898.9620

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2 MILLENNIUM PLAZA ROOFING REPLACEMENT

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Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

No.	Date	Description
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	09/24/24	90% Construction Document
	01/28/25	Issued for Construction
1	03/18/25	Addendum #1

Project Number : D06.24034.00	Drawn By : AO/PM
Approved By : AB	Checked By : DB

Certification Statement :

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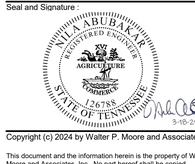
Seal and Signature :



Drawing Title :

TYPICAL DETAILS

Sheet No. :

R-500

COURTHOUSE ANNEX ROOFING REPLACEMENT

121 S 3RD STREET, CLARKSVILLE TN 37040

N

SITE PLAN

SHEET LIST	
SHEET NUMBER	SHEET NAME
CVR	COVER SHEET
R-000	GENERAL NOTES
R-010	ROOF PLAN - WIND LOADS
RD-100	ROOF - DEMOLITION PLAN
R-100	ROOFING REPLACEMENT PLAN
R-500	TYPICAL DETAILS

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Issues/Revisions :

100% CD

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	12/10/24	50% Construction Documents
	12/20/24	Issued for Construction

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Seal and Signature :

NILA ABUBAKER
REGISTERED ENGINEER
AGRICULTURE
126788
STATE OF TENNESSEE
3-18-25

Drawing Title :

COVER SHEET

Sheet No. :

CVR

GENERAL NOTES

I. DESIGN CRITERIA

A. GENERAL BUILDING CODE

1. THE REPAIR DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE INTERNATIONAL EXISTING BUILDING CODE 2018.

B. CONSTRUCTION LIVE LOADS

1. CONSTRUCTION LIVE LOADS: AN ALLOWANCE OF 20 PSF HAS BEEN PROVIDED FOR CONSTRUCTION LIVE LOADS WHICH INCLUDE BUT ARE NOT LIMITED TO MATERIALS, PERSONNEL AND EQUIPMENT IMPOSED ON THE STRUCTURE DURING CONSTRUCTION.

   A. ROOFS: ORDINARY FLAT, PITCHED AND CURVED ROOFS: 20 PSF

C. WIND LOADS

1. WIND PRESSURES ARE BASED ON THE AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-16 AND THE FOLLOWING CRITERIA:

   A. BASIC WIND SPEED: 106 MPH (3 SECOND GUST)

   B. BUILDING CATEGORY: III

   C. WIND EXPOSURE CATEGORY: C

   D. INTERNAL PRESSURE COEFFICIENT: +0.18/-0.18

2. WIND PRESSURES USED FOR THE DESIGN OF COMPONENTS AND CLADDING ARE SHOWN IN THE SHEET S0.01, ROOF PLAN – WIND ZONE.

NOTES:

   A. WIDTH OF END ZONE/EDGE/CORNER STRIP SHOWN IN SHEET S0.01, ROOF PLAN – WIND ZONE.

   B. COMPONENT AND CLADDING PRESSURES ACT NORMAL TO THE SURFACE. THE DESIGN PRESSURE LISTED IN THE WIND PRESSURE TABLE ARE NEGATIVE PRESSURES ACT AWAY FROM THE SURFACE.

   C. DESIGN PRESSURE FOR COMPONENTS AND CLADDING SHALL NOT BE LESS THAN 10 PSF ACTING IN EITHER DIRECTION NORMAL TO THE SURFACE.

   D. THE EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.

   E. THE DESIGN PRESSURES LISTED IN THE WIND PRESSURE TABLE ARE CALCULATED USING A VALUE OF KD OF 1.0. THE VALUES CAN BE REDUCED BY 15% IF LOAD COMBINATIONS SPECIFIED IN ASCE 7-16 ARE USED IN DESIGN. [A 0.6 REDUCTION FACTOR PER ASCE 7 MAY BE APPLIED TO NOMINAL/STRENGTH LOADS FOR ELEMENTS DESIGNED USING ALLOWABLE STRESS METHOD.]

II. SCOPE OF WORK

A. SCOPE OF WORK INCLUDES THE DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING CONDITIONS PROVIDED BY OWNER.

B. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, TOOLS, SUPPLIES, PERMITS, EQUIPMENT, TRANSPORTATION, SUPERINTENDENCE, BARRICADES, SHORING, BRACING, TEMPORARY CONSTRUCTION OF EVERY NATURE, INSURANCE, TAXES, CONTRIBUTIONS AND ALL SERVICES AND FACILITIES, UNLESS SPECIFICALLY EXCEPTED, AND INSTALL/REMOVE ALL MATERIALS, ITEMS, AND EQUIPMENT REQUIRED TO COMPLETE THE DEMOLITION AND CONSTRUCTION OF THE PROJECT, AS SET FORTH IN THE CONTRACT DOCUMENTS.

C. COOPERATE WITH THE OWNER'S REPRESENTATIVE IN ALL CONSTRUCTION OPERATIONS TO MINIMIZE CONFLICT AND TO FACILITATE OWNER USAGE.

D. CONTRACTOR ACKNOWLEDGES BY SUBMITTING A BID OR PROPOSAL TO PERFORM THE SPECIFIED WORK, THAT THEY HAVE VISITED AND INSPECTED THE PROJECT SITE IN WHICH THE WORK IS TO BE PERFORMED, THAT THEY HAVE SATISFIED THEMSELVES AS TO THE NATURE AND LOCATION OF THE WORK, INCLUDING ANY OBSTRUCTIONS, AMOUNT OF WORK, ACTUAL LEVELS, THE EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING THE EXECUTION OF THE WORK, AND ALL OTHER MATTERS WHICH CAN IN ANY WAY AFFECT THE WORK OR THE COST THEREOF UNDER THIS CONTRACT.

E. FAILURE BY CONTRACTOR TO HAVE ACQUAINTED HIMSELF WITH AVAILABLE INFORMATION CONCERNING SITE CONDITIONS, INCLUDING FACTORS AFFECTING COSTS AND LIABILITIES, SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR PERFORMANCE OF WORK IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND FOR AMOUNT OF CONSIDERATION NAMED OR OTHERWISE DETERMINED.

F. WHEN CONTRACTOR ENCOUNTERS A CONDITION REQUIRING FURTHER INFORMATION OR A CLARIFICATION, CONTRACTOR SHALL SUBMIT TO ENGINEER A WRITTEN REQUEST FOR INFORMATION (R.F.I.) NUMBERED SEQUENTIALLY. ENGINEER WILL RESPOND IN WRITING TO ALL R.F.I.'S.

III. SELECTIVE DEMOLITION

A. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING DECONSTRUCTION / DEMOLITION

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED BRACING DURING DEMOLITION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE DEMOLITION PROCESS. CONTRACTOR SHALL ENGAGE A PROFESSIONAL ENGINEER TO SURVEY CONDITION OF BUILDING TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION OPERATIONS.

B. DEFINITIONS

1. REMOVE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.

2. REMOVE AND SALVAGE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND DELIVER THEM TO OWNER READY FOR REUSE. OWNER TO IDENTIFY ITEMS TO BE REUSED OR SALVAGED.

3. EXISTING TO REMAIN: EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE REMOVED AND THAT ARE NOT OTHERWISE INDICATED TO BE REMOVED, REMOVED AND SALVAGED, OR REMOVED AND REINSTALLED.

C. MATERIAL OWNERSHIP

1. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, OR OTHERWISE INDICATED TO REMAIN OWNER’S PROPERTY. DEMOLISHED MATERIALS SHALL BECOME CONTRACTOR’S PROPERTY, AND SHALL BE REMOVED FROM PROJECT SITE. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN A PROPER AND LEGAL MANNER PER FEDERAL, STATE AND LOCAL REGULATIONS.

D. QUALITY ASSURANCE

1. DEMOLITION FIRM QUALIFICATIONS: AN EXPERIENCED FIRM THAT HAS SPECIALIZED IN DEMOLITION WORK SIMILAR IN MATERIAL AND EXTENT TO THAT INDICATED FOR THIS PROJECT.

2. PROFESSIONAL QUALIFICATIONS OF ENGINEER ENGAGED BY CONTRACTOR: CURRENT REGISTRATION IN THE STATE WHERE THE PROJECT IS LOCATED.

3. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING OWNER, LOCAL, STATE, FEDERAL, AND EPA NOTIFICATIONS AND REGULATIONS BEFORE BEGINNING SELECTIVE DECONSTRUCTION / DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

4. CONTRACTOR SHALL PHOTO DOCUMENT EXISTING CONDITIONS OF THE BUILDING AND ADJOINING PROPERTIES. PHOTOS SHALL BE SUBMITTED TO OWNER AND ENGINEER OF RECORD PRIOR TO DECONSTRUCTION / DEMOLITION.

5. PRE-DEMOLITION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE TO ADDRESS THE FOLLOWING:

   A. INSPECT AND DISCUSS CONDITION OF CONSTRUCTION TO BE SELECTIVELY DEMOLISHED.
   B. REVIEW STRUCTURAL LOAD LIMITATIONS OF EXISTING STRUCTURE AS APPROPRIATE FOR THE PROPOSED MEANS AND METHODS.
   C. REVIEW AND FINALIZE SELECTIVE DEMOLITION SCHEDULE AND VERIFY AVAILABILITY OF MATERIALS, DEMOLITION PERSONNEL, EQUIPMENT, AND FACILITIES NEEDED TO MAKE PROGRESS AND AVOID DELAYS.

E. PROJECT CONDITIONS

1. CONDUCT SELECTIVE DEMOLITION SO OWNER’S OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NOT LESS THAN 72-HOUR NOTICE TO OWNER OF ACTIVITIES THAT WILL AFFECT OWNER’S OPERATIONS.

2. MAINTAIN ACCESS TO EXISTING WALKWAYS, CORRIDORS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT WALKWAYS, CORRIDORS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND TECHNICAL SPECIFICATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE, FOR THE PROPOSED SCAFFOLDING SYSTEM TO BE USED FOR ACCESS TO ELEVATED WORK AREAS. SCAFFOLDING SHALL INCLUDE PROTECTION NETTING AND BE DESIGNED / CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATORY REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE STRICTEST GOVERNING SECTIONS OF 29 CFR OSHA 1926 SUBPART L, 29 CFR OSHA 1926 SUBPART M, 29 CFR OSHA 1926.105, AND ANSI A10.11 CONSENSUS STANDARD.

4. OWNER ASSUMES NO RESPONSIBILITY FOR CONDITION OF AREAS TO BE SELECTIVELY DEMOLISHED.

   A. CONDITIONS EXISTING AT TIME OF INSPECTION FOR BIDDING PURPOSE WILL BE MAINTAINED BY OWNER AS FAR AS PRACTICAL.
   B. BEFORE SELECTIVE DEMOLITION, OWNER WILL REMOVE ITEMS WITHIN SPACE AS NEEDED.

5. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF AS APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

6. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE WILL NOT BE PERMITTED.

7. UTILITY SERVICE: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. MAINTAIN FIRE-PROTECTION FACILITIES IN SERVICE DURING SELECTIVE DEMOLITION.

8. PROTECT ADJACENT PAVING (ASPHALT OR CEMENT ROADWAYS, SEWERS, ETC.) AND DRAINAGE DITCHES AS NEEDED.

9. ALL AREAS OUTSIDE OF DEMOLITION SCOPE TO BE PROTECTED FROM DAMAGE BY CONTRACTOR. RESTORE AREAS SUBJECT TO DAMAGE TO THEIR PRE-DEMOLITION CONDITION.

F. UTILITY SERVICES

1. MAINTAIN EXISTING UTILITIES IN SERVICE. CONTRACTOR SHALL COORDINATE WITH OWNER IF ANY INTERRUPTION OF EXISTING UTILITIES ARE REQUIRED. CONTRACTOR SHALL NOT COMMENCE WORK WHICH MAY IMPACT EXISTING UTILITIES UNLESS THE OWNER APPROVES IN WRITING A PLANNED INTERRUPTION OF EXISTING UTILITIES.

G. PREPARATION

1. DANGEROUS MATERIALS: DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.

   A. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
   B. ERECT A PLAINLY VISIBLE FENCE AROUND DRIP LINE OF INDIVIDUAL TREES OR AROUND PERIMETER DRIP LINE OF GROUPS OF TREES TO REMAIN.

2. CONTRACTOR SHALL MAINTAIN ACCESS TO EXITS AND EXIT STAIRS AT ALL TIMES. FIRE ALARMS AND SMOKE DETECTION SYSTEM SHALL REMAIN OPERATIONAL AT ALL TIMES. PROTECT SMOKE DETECTORS AS REQUIRED AND IN CONFORMANCE TO LOCAL CODES, REGULATIONS, AND LOCAL AUTHORITIES HAVING JURISDICTION.

3. TEMPORARY FACILITIES: PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN.

   A. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA AND TO AND FROM OCCUPIED PORTIONS OF ADJACENT FACILITIES.

4. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL AND PEDESTRIAN CONTROL MEASURES AS REQUIRED.

5. CONTRACTOR SHALL COORDINATE WITH OWNER IF ANY REMOVAL OF LANDSCAPE IS REQUIRED.

6. TEMPORARY PARTITIONS: ERECT AND MAINTAIN DUSTPROOF PARTITIONS AND TEMPORARY ENCLOSURES TO LIMIT DUST AND DIRT MIGRATION AND TO SEPARATE AREAS FROM FUMES AND NOISE.

7. TEMPORARY SHORING: PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. STRENGTHEN OR ADD TEMPORARY SUPPORTS WHEN REQUIRED DURING PROGRESS OF SELECTIVE DEMOLITION.

H. POLLUTION CONTROLS

1. CONDUCT DEMOLITION WASTE DISPOSAL OPERATIONS IN COMPLIANCE WITH LOCAL LAWS AND ORDINANCES. COMPLY FULLY WITH FEDERAL AND LOCAL ENVIRONMENTAL AND ANTI-POLLUTION REGULATIONS.

2. REFER TO DIVISION 01 SPECIFICATION SECTIONS FOR REQUIREMENTS ON DUST CONTROL, DISPOSAL, AND CLEANING OF DEMOLISHED MATERIAL.

I. EXECUTION OF SELECTIVE DEMOLITION

1. GENERAL: DEMOLISH EXISTING CONSTRUCTION AS INDICATED. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS:
   A. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION.
   B. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. AT CONCEALED SPACES, VERIFY CONDITION AND CONTENTS OF HIDDEN SPACES BEFORE STARTING FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS.
   C. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
   D. REMOVE DECAYED, VERMIN-INFESTED, OR OTHERWISE DANGEROUS OR UNSUITABLE MATERIALS AND PROMPTLY DISPOSE OF OFF-SITE.
   E. LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, SLABS, OR FRAMING.
   F. DISPOSE OF DEMOLISHED ITEMS AND MATERIALS PROMPTLY.

2. EXISTING FACILITIES: COMPLY WITH OWNER’S REQUIREMENTS FOR USING AND PROTECTING OTHER BUILDING FACILITIES DURING SELECTIVE DEMOLITION OPERATIONS.

3. REMOVED AND SALVAGED ITEMS: COMPLY WITH THE FOLLOWING:
   A. CLEAN SALVAGED ITEMS.
   B. STORE ITEMS IN A SECURE AREA UNTIL DELIVERY TO OWNER.
   C. TRANSPORT ITEMS TO OWNER’S STORAGE AREA AS DESIGNATED BY OWNER.

4. EXISTING ITEMS TO REMAIN: CONTRACTOR TO COORDINATE WITH OWNER (PRIOR TO BEGINNING WORK) ON ITEMS THAT ARE TO REMAIN AND HENCE BE PROTECTED DURING THE DEMOLITION PROCESS. WHEN PERMITTED BY OWNER, ITEMS MAY BE REMOVED TO A SUITABLE AND/OR PROTECTED LOCATION.

J. DISPOSAL OF WASTE AND DEMOLISHED MATERIALS

1. GENERAL: PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.

2. BURNING: DO NOT BURN DEMOLISHED MATERIALS.

3. KEEP RECEPTACLES AND OTHER WASTE COLLECTION AREAS NEAT AND ORDERLY. DO NOT ALLOW WASTE TO OVERFLOW ITS CONTAINER OR ACCUMULATE FOR EXCESSIVELY LONG PERIODS OF TIME. LOCATE TRASH COLLECTION POINTS WHERE THEY WILL LEAST LIKELY BE AFFECTED BY STORM WATER RUNOFF.

4. DISPOSAL: TRANSPORT DEMOLISHED MATERIALS OFF OWNER’S PROPERTY AND LEGALLY DISPOSE OF THEM.

5. WATER CAPTURE: FOLLOW ALL LOCAL ORDINANCES AND REGULATION FOR WATER CAPTURE.

IV. SUBMITTALS

A. SUBMITTAL LIST AND SCHEDULE

1. THE CONTRACTOR SHALL PREPARE A DETAILED LIST AND SCHEDULE OF ALL SUBMITTAL ITEMS TO BE SENT TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. THIS LIST SHALL BE UPDATED AND REVISED AND KEPT CURRENT AS THE JOB PROGRESSES. THE SUBMITTAL LIST SHALL BE ORGANIZED AS SHOWN BELOW:

   A. SHOP DRAWINGS
   B. DESIGN CALCULATIONS
   C. PRODUCT DATA, CERTIFICATE, REPORTS, AND OTHER LITERATURE
   D. PRODUCT AND CONTRACTOR WARRANTIES
   E. MANUFACTURER LITERATURE FOR PRODUCTS, ASSEMBLIES, AND HARDWARE

2. DEFERRED SUBMITTALS:

   A. THE FOLLOWING ITEMS ARE CONSIDERED DEFERRED SUBMITTALS BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE:

      1) TEMPORARY FALL PROTECTION SYSTEMS (S&S, REC)

      2) STRUCTURAL ATTACHMENT FOR ROOFTOP UNIT (RTU) RETROFITS AND SUPPLEMENTARY WOOD BLOCKING CONNECTIONS (S&S, REC)

      3) SCAFFOLDING AND OVERHEAD PROTECTION (S&S, REC)

      4) SHOP DRAWINGS FOR EXTERIOR WALL AIR BARRIER ASSEMBLIES, COMPONENTS, TRANSITION FLASHINGS, AND ACCESSORIES (REC)

      5) SHOP DRAWINGS FOR SHEET METAL FLASHING AND TRIM ASSEMBLIES, COMPONENTS, AND ACCESSORIES (REC)

   NOTES:

   (S&S) ITEMS MARKED THUS SHALL HAVE THE SHOP DRAWINGS AND DELEGATED DESIGN SUBMITTALS (INCLUDING CALCULATIONS) SEALED PER THE PROJECT REQUIREMENTS BY AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND ENGAGED BY THE CONTRACTOR.

   (REC) ITEMS MARKED THUS SHALL BE SUBMITTED TO ENGINEER FOR RECORD ONLY AND WILL NOT HAVE THE ENGINEER’S SHOP DRAWING STAMP AFFIXED.

   B. DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE FORWARDED TO THE BUILDING OFFICIAL.
   C. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

3. SHOP DRAWINGS:

   A. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS:

      1) ROOFING INSULATION SLOPE PLAN

      2) SHEET METAL FLASHING AND DETAILING

4. MANUFACTURER LITERATURE

   A. SUBMIT MANUFACTURER’S PRODUCT DATA SHEETS FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT. WHERE APPROPRIATE, ALSO SUBMIT MANUFACTURER’S INSTALLATION INSTRUCTIONS AND SAFETY DATA SHEETS FOR ALL PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.

5. SUBMITTAL REQUIREMENTS:

   A. ALL SHOP DRAWINGS MUST BE REVIEWED AND ELECTRONICALLY STAMPED BY THE CONTRACTOR PRIOR TO SUBMITTAL.
   B. CONTRACTOR SHALL PROVIDE THE SUBMITTAL IN ELECTRONIC PORTABLE DOCUMENT FORMAT (PDF).
   C. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.

C. REPRODUCTION

1. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

V. MISCELLANEOUS

A. CONTRACT DOCUMENTS

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, [FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD] [THE PROCUREMENT, FABRICATION, AND INSTALLATION OF ROOFING COMPONENTS.].

2. THE CONTRACTOR SHALL FULLY AND PROPERLY IMPLEMENT THE ENGINEERING CONTROLS, WORK PRACTICES, AND RESPIRATORY PROTECTION AGAINST TOXIC AND HAZARDOUS SUBSTANCES INCLUDING RESPIRABLE CRYSTALLINE SILICA ACCORDING TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) 29 CFR 1926.1153. WALTER P MOORE DOES NOT HAVE CONTROL OVER, CHARGE OF, OR RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, NOR SHALL WALTER P MOORE BE RESPONSIBLE FOR THE CONTRACTOR’S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

3. THE CONTRACT DRAWINGS REPRESENT THE ROOFING SYSTEM INSTALLATION, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCES.

4. PERFORM FIELD SURVEYS TO VERIFY AS-BUILT CONDITIONS INCLUDING: EXPANSION JOINT SYSTEMS, PREVIOUS REPAIRS PERFORMED IN THE FACILITY, LOCATION AND SIZE OF STRUCTURAL MEMBERS (BEAMS, COLUMNS, WALLS, ETC.), SLAB THICKNESS, AND OTHER INFORMATION RELEVANT TO THE PROJECT.

B. DRAWING CONFLICTS

1. CONTRACTOR SHALL COMPARE THE [ARCHITECTURAL AND STRUCTURAL DRAWINGS] [ROOFING REPLACEMENT CONSTRUCTION DRAWINGS AND SPECIFICATIONS] [FAÇADE REPAIR CONSTRUCTION DRAWINGS AND SPECIFICATIONS] AND REPORT ANY DISCREPANCY [BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS] [WITHIN EACH SET OF THESE DOCUMENTS] TO THE ENGINEER PRIOR TO THE PROCUREMENT, FABRICATION, AND INSTALLATION OF ANY [ROOFING][FAÇADE REPAIR] COMPONENTS.

C. EXISTING CONDITIONS

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BUILDING AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO ENGINEER PRIOR TO THE [FABRICATION AND ERECTION OF ANY MEMBERS] [PROCUREMENT OF MATERIAL AND INSTALLATION OF ROOFING SYSTEMS]. EXISTING DIMENSIONS SHOWN ON THE DRAWINGS ARE FOR GENERAL REFERENCE ONLY AND SHOULD NOT BE USED FOR FINAL CONSTRUCTION OR DETAILING.

2. WORK SHOWN ON THE DRAWINGS IS EXISTING, UNLESS NOTED AS NEW.

3. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. THE DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE FOR CONTRACTOR USE AND SHALL BE REFERENCED FOR FAMILIARIZATION WITH EXISTING CONDITIONS. HOWEVER, THE AVAILABLE DRAWINGS OF EXISTING CONSTRUCTION ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR BEING KNOWLEDGEABLE OF INFORMATION PRESENTED IN AVAILABLE DRAWINGS AND SHALL FIELD VERIFY ALL PERTINENT INFORMATION.

4. CONTRACTOR SHALL PERFORM A SURVEY TO LOCATE ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND TAKE CARE TO PROTECT UTILITIES TO REMAIN IN SERVICE.

5. CONTRACTOR SHALL PROVIDE DUST, ODOR, BUILDING ENCLOSURE, AND NOISE PROTECTION, AND SAFETY MEASURES AS NECESSARY FOR THE DURATION OF REPAIRS.

6. CONTRACTOR SHALL PERFORM A PRE-CONSTRUCTION CONDITION SURVEY TO DOCUMENT SITE CONDITIONS PRIOR TO START OF WORK. SUBMIT SURVEY TO OWNER AND THE ENGINEER. DOCUMENT LOCATION AND CONDITION OF ANY CONSTRUCTION DESIGNATED FOR REMOVAL AND REINSTALLATION.

7. CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION WITH SIMILAR MATERIALS AND WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE OWNER.

D. ROOFING SYSTEM MANUFACTURER REPRESENTATION

1. THE CONTRACTOR SHALL ENGAGE REPRESENTATIVES OF THE ROOFING SYSTEM MANUFACTURER TO BE ON-SITE DURING THE EARLY STAGES OF WORK. ROOFING SYSTEM MANUFACTURER’S REPRESENTATIVES SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING, DURING TEAR-OFF OF THE EXISTING ROOFING SYSTEM, AND AT OTHER PHASES OF THE PROJECT OR AS OTHERWISE REQUIRED BY OWNER AND ENGINEER.

E. RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING CONSTRUCTION

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS ADJACENT TO REPAIR AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED SHORING AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF ALL BUILDING ELEMENTS DURING REPAIR OPERATIONS UNTIL THE ROOF SYSTEM INSTALLATION IS COMPLETED.

F. RESPONSIBILITY OF THE CONTRACTOR FOR CONSTRUCTION LOADS

1. THE CONTRACTOR SHALL NOT OVERLOAD THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE ADEQUACY OF THE STRUCTURE TO SUPPORT ANY APPLIED CONSTRUCTION LOADS, INCLUDING THOSE DUE TO CONSTRUCTION VEHICLES OR EQUIPMENT, MATERIAL HANDLING OR STORAGE, SHORING OR RESHORING, OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL SUBMIT CALCULATIONS SIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED VERIFYING THE ADEQUACY OF THE STRUCTURE FOR ANY PROPOSED CONSTRUCTION LOADS THAT ARE IN EXCESS OF THE STATED DESIGN LOADS. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO DESIGN OR CHECK THE STRUCTURE FOR LOADS APPLIED TO THE STRUCTURE FOR ANY CONSTRUCTION ACTIVITY.

G. CONTRACTOR SUBSTITUTIONS

1. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE CONSIDERED FOR APPROVAL ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:

   A. A COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST.
   B. THE MATERIAL OR PRODUCT IS IN CONFORMANCE WITH THE REQUIREMENTS OF THE REFERENCED BUILDING CODE AND THE ICC EVALUATION REPORT IS SUBMITTED WITH THE REQUEST.
      1) ICC-ESR EVALUATION REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.
      2) ICC REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.

2. SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.

3. REFER TO SPECIFICATION SECTION “PROJECT SUBSTITUTIONS PROCEDURES” FOR ADDITIONAL SUBSTITUTIONS REQUIREMENTS AND SUBMITTAL PROCEDURES.

H. THE ENGINEER-OF-RECORDS ROLE DURING CONSTRUCTION

1. THE ENGINEER SHALL NOT HAVE CONTROL NOR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF WALTER P. MOORE AND ASSOCIATES, INC. IS SOLELY FOR THE PURPOSE OF BECOMING GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE WORK COMPLETED AND DETERMINING, IN GENERAL, IF THE WORK OBSERVED IS BEING PERFORMED IN A MANNER INDICATING THAT THE WORK, WHEN FULLY COMPLETED, WILL BE IN ACCORDANCE WITH THE REPAIR CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

I. MAINTENANCE STATEMENT

1. ALL ROOFING AND BUILDING ENCLOSURE SYSTEMS REQUIRE PERIODIC MAINTENANCE TO EXTEND LIFESPAN AND TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A PLANNED PROGRAM OF MAINTENANCE SHALL BE ESTABLISHED BY THE BUILDING OWNER. THIS PROGRAM SHALL INCLUDE SUCH ITEMS SUCH AS BUT NOT LIMITED TO REPLACEMENT OF SEALANTS AT ROOF FLASHING TERMINATIONS, ROOF EXPANSION JOINTS, CLEANING OF EXPOSED ROOFING CAP SHEET, AND ALL OTHER MAINTENANCE ITEMS RECOMMENDED BY THE ROOFING MANUFACTURER. IMMEDIATELY REPORT ANY LEAKS TO THE ROOFING MANUFACTURER SO THAT APPROPRIATE REPAIRS MAY BE IMPLEMENTED.

2. INSPECTIONS: COORDINATE WITH ROOFING MANUFACTURER FOR PERIODIC INSPECTIONS OF THE ROOFING SYSTEM INCLUDING BUT NOT LIMITED TO VISUAL REVIEW OF THE MEMBRANE SURFACING, FLASHING SEAMS, BASE FLASHINGS, EXPANSION JOINTS, ETC. IMMEDIATELY REPORT ANY ROOF RELATED LEAKS TO THE ROOFING MANUFACTURER SO THAT APPROPRIATE REPAIRS MAY BE IMPLEMENTED.

VI. DRAWING INTERPRETATION

A. DRAWING VIEWS LABELED AS “TYPICAL”

1. PARTIAL PLANS, ELEVATIONS, SECTIONS, DETAILS, OR SCHEDULES LABELED WITH “TYPICAL” AT THE BEGINNING OF THEIR TITLE SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY SHOWN. THE APPLICABILITY OF THE CONTENT OF THESE VIEWS TO LOCATIONS ON THE PLAN CAN BE DETERMINED FROM THE TITLE OF THE VIEWS. SUCH VIEWS SHALL APPLY WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. DECISIONS REGARDING APPLICABILITY OF THESE “TYPICAL” VIEWS SHALL BE DETERMINED BY THE ENGINEER OF RECORD.

B. STRUCTURAL ABBREVIATIONS AND NOTATIONS

1. THE FOLLOWING ABBREVIATIONS AND NOTATIONS MAY APPEAR ON THE DRAWINGS:

@	AT
&	AND
#	NUMBER
Ø	ROUND, DIAMETER
(E)	EXISTING
(N)	NEW
ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BLDG	BUILDING
BOT	BOTTOM
CJ	CONTROL JOINT
CL	CENTER LINE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
DN	DOWN
EA	EACH
ELEV	ELEVATION
ENGR	ENGINEER
EJ	EXPANSION JOINT
EW	EACH WAY
EXIST	EXISTING
FV	FIELD VERIFY
GALV	GALVANIZED
GEN	GENERAL
GYP	GYPSUM
HORZ	HORIZONTAL
ICC	INTERNATIONAL CODE COUNCIL
ICRI	INTERNATIONAL CONCRETE REPAIR INSTITUTE
INFO	INFORMATION
LWC	LIGHTWEIGHT CONCRETE
LBF	POUNDS FORCE
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
MSD	MATERIAL SAFETY DATA
MSDS	MATERIAL SAFETY DATA SHEET
NTS	NOT TO SCALE
OC	ON CENTER
PLF	POUNDS PER LINER FOOT
PSF	POUNDS PER SQUARE FOOT
QTY	QUANTITY
REINF	REINFORCEMENT
REQD	REQUIRED
SIM	SIMILAR
STD	STANDARD
SSMA	STEEL STUD MANUFACTURERS ASSOCIATION
TBPE	TEXAS BOARD OF PROFESSIONAL ENGINEERS
TI	TASK ITEM
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL, TOP OF SLAB
TYP	TYPICAL
VERT	VERTICAL

C. STRUCTURAL SYMBOLS

---

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Project Name:

COURTHOUSE
ANNEX ROOFING
REPLACEMENT

Client :

MONTGOMERY
COUNTY
GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

No.	Date	Description
	12/10/24	50% Construction Documents
	12/20/24	Issued for Construction

Project Number :
D06.24034.00

Drawn By :
AM

Approved By :
AB

Checked By :
DB

Certification Statement :
TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Seal and Signature :

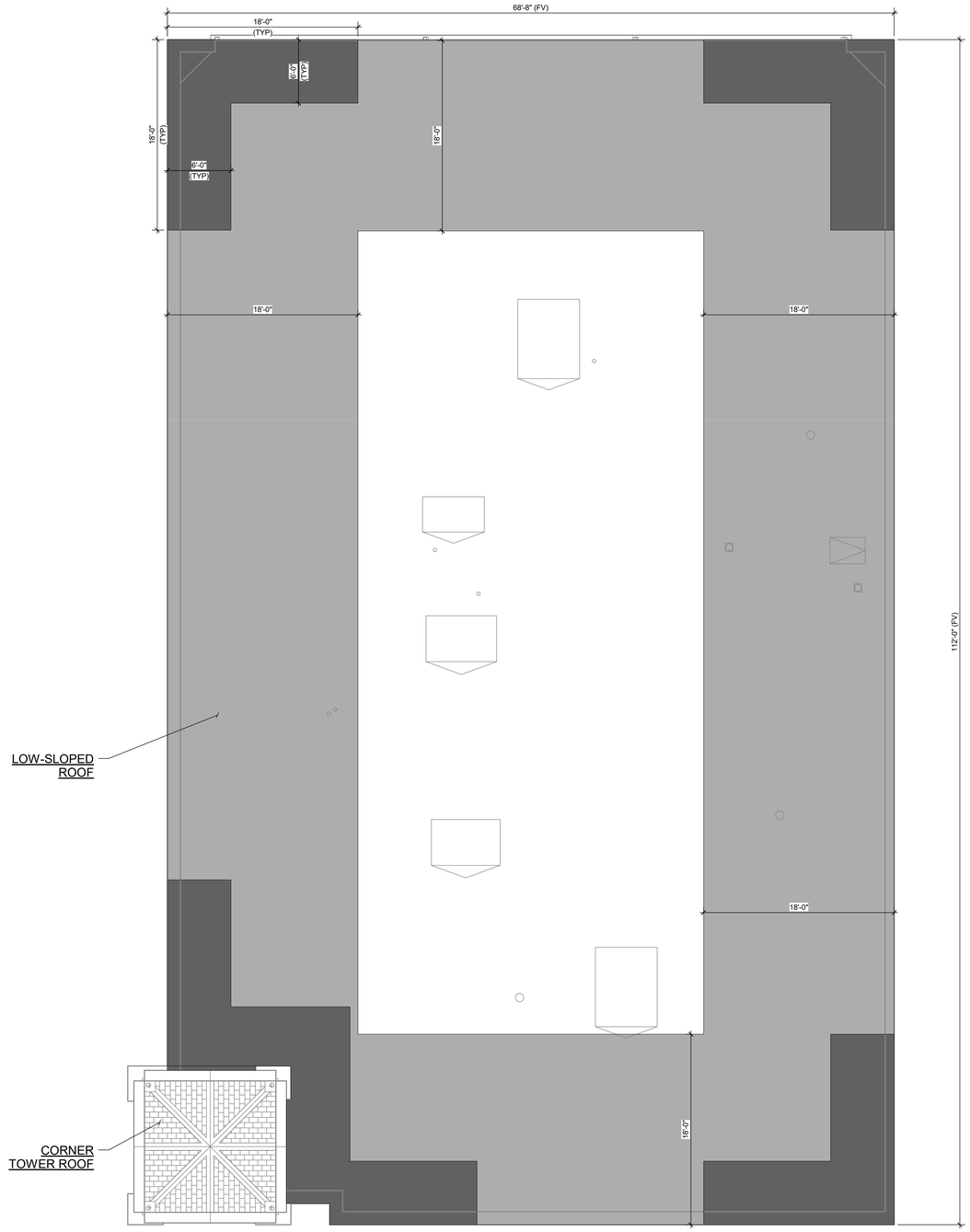
NILA ABUBAKAR
126788
3-18-25

Drawing Title :

GENERAL NOTES

Sheet No. :

R-000



WIND ZONE HATCH LEGEND

- FIELD ZONE
- CORNER ZONE
- EDGE ZONE

WIND UPLIFT PRESSURE		
ROOF AREA	**WIND ZONE**	**WIND LOAD** (PSF)
LOW-SLOPE ROOF	FIELD ZONE	-60
LOW-SLOPE ROOF	EDGE ZONE	-79
LOW-SLOPE ROOF	CORNER ZONE	-107
CORNER TOWER ROOF	ENTIRE ROOF	-113

N

1 ROOF PLAN - WIND ZONE
NO SCALE

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Seal and Signature :

NILA ABUBAKR
REGISTERED ENGINEER
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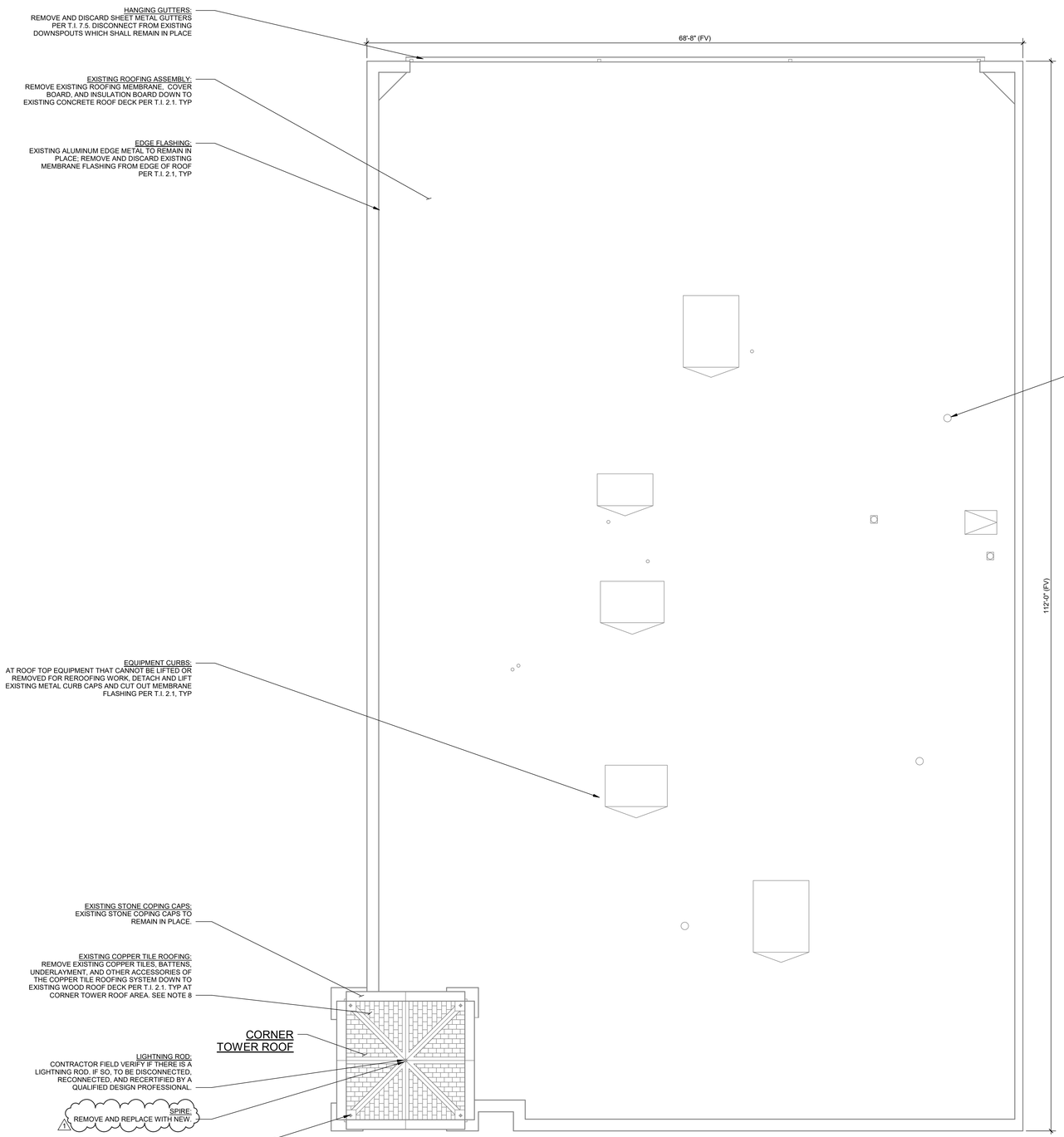
126788
STATE OF TENNESSEE
3-15-25

Drawing Title :

ROOF PLAN - WIND LOADS

Sheet No. :

R-010



EXISTING ROOFING SYSTEM | LOW-SLOPE ROOF AREAS
-EPDM MEMBRANE | TO BE REMOVED
-RIGID INSULATION BOARD | TO BE REMOVED
-STEEL ROOF DECK | TO REMAIN

EXISTING ROOFING SYSTEM | STEEP-SLOPE ROOF AREAS
-COPPER TILES | TO BE REMOVED
-STONE COPING | TO REMAIN
-UNDERLAYMENT | TO BE REMOVED
-5/8-IN PLYWOOD (FIELD VERIFY) | TO REMAIN

TASK ITEM PER SECTION 01 01 50 "TASK ITEM - EXISTING ROOFING SYSTEM"

TASK ITEM	DESCRIPTION
1.1	PROJECT MOBILIZATION
2.1A	DEMOLITION AND SUBSTRATE PREPARATION - LOW SLOPE ROOFING - COMPLETE TEAR OFF DOWN TO DECK
2.1B	DEMOLITION AND SUBSTRATE PREPARATION - STEEP SLOPE ROOFING
2.2A	RECYCLING PROGRAM - LOW SLOPE ROOFING - EXISTING MATERIALS
2.2B	RECYCLING PROGRAM - STEEP SLOPE ROOFING - EXISTING MATERIALS
5.1	DECK REPAIR - STEEL DECKING
6.1	ROUGH CARPENTRY
7.1A	LOW SLOPE ROOFING - VAPOR BARRIER
7.1B	STEEP SLOPE ROOFING - UNDERLAYMENT
7.2B	ROOFING INSULATION - FLATSTOCK POLYISO WITH COVER BOARD
7.3A	LOW SLOPE ROOFING MEMBRANE - SINGLE PLY EPDM ROOFING
7.3D	STEEP SLOPE ROOFING - COPPER SHINGLES
7.4A	LOW SLOPE ROOFING - FLASHING AND SHEET METAL
7.4B	STEEP SLOPE ROOFING - FLASHING AND SHEET METAL
7.5	WATER MANAGEMENT SYSTEMS - GUTTERS AND DOWNSPOUTS
7.6	ROOFING SYSTEM WARRANTY - LOW SLOPE ROOFING SYSTEM
7.9	ROOFING SYSTEM WARRANTY - STEEP SLOPE ROOFING
7.10	JOINT SEALANT REPLACEMENT/INSTALLATION AT CAST STONE COPING CAPS
22.1	PLUMBING WORK - REUSE EXISTING DRAINS
23.1	MECHANICAL WORK
26.1	ELECTRICAL WORK

NOTES:
1. INFORMATION SHOWN ON PLANS AND DETAILS IS FOR CONTRACTOR'S GENERAL REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND REPORT DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS TO ENGINEER PRIOR TO STARTING WORK. DO NOT USE SCALE FOR QUANTITY OF WORK.
2. CONTRACTOR IS ADVISED THAT THE ROOFS DO NOT HAVE OSHA COMPLIANT PARAPET WALLS. TEMPORARY FALL PROTECTION MUST BE INSTALLED PRIOR TO PERFORMING ANY WORK ON THE ROOF AND MUST REMAIN IN PLACE FOR THE DURATION OF THE REPAIRS.
3. ABANDONED ROOFTOP EQUIPMENT MAY BE IDENTIFIED BY OWNER FOR REMOVAL
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE WEATHER TIGHTNESS OF THE FACILITY DURING ALL FACILITY OPERATIONS. SUBMIT A BUILDING ENCLOSURE PROTECTION PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
5. DO NOT BLOCK ALLEYWAY OR STREETS ADJACENT TO STAGING AREAS WITH ROOFING MATERIALS, TRASH, VEHICLES, EQUIPMENT, OR ANY OTHER MISCELLANEOUS ITEMS DURING ROOFING PROJECT.
6. LIGHTNING SYSTEM LOCATIONS ARE SHOWN SCHEMATICALLY ONLY. FIELD VERIFY LOCATIONS OF LIGHTNING PROTECTION TO BE REMOVED AND TEMPORARILY STORED.
7. CONTRACTOR SHALL COORDINATE WITH CLARKSVILLE STREET DEPARTMENT FOR ANY PARTIAL ROAD CLOSERS THAT ARE NEEDED. CONTRACTOR MAY RESERVE AND PAY FOR ONSTREET PARKING FOR DUMPSTERS AND/OR EQUIPMENT STAGING THROUGH THE CLARKSVILLE PARKING AUTHORITY.
1 8. COPPER TILES AND SPIRES SHALL BE REMOVED AND REPLACED PRIOR TO DEMOLITION AND REPLACEMENT OF THE EXISTING MEMBRANE ROOF.

N 1 ROOF DEMOLITION PLAN
NO SCALE

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Project Name:

COURTHOUSE ANNEX ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

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1	3/18/25	Addendum #1

Project Number : D06.24034.00
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Approved By : AB
Checked By : DB

Certification Statement :

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

Seal and Signature :

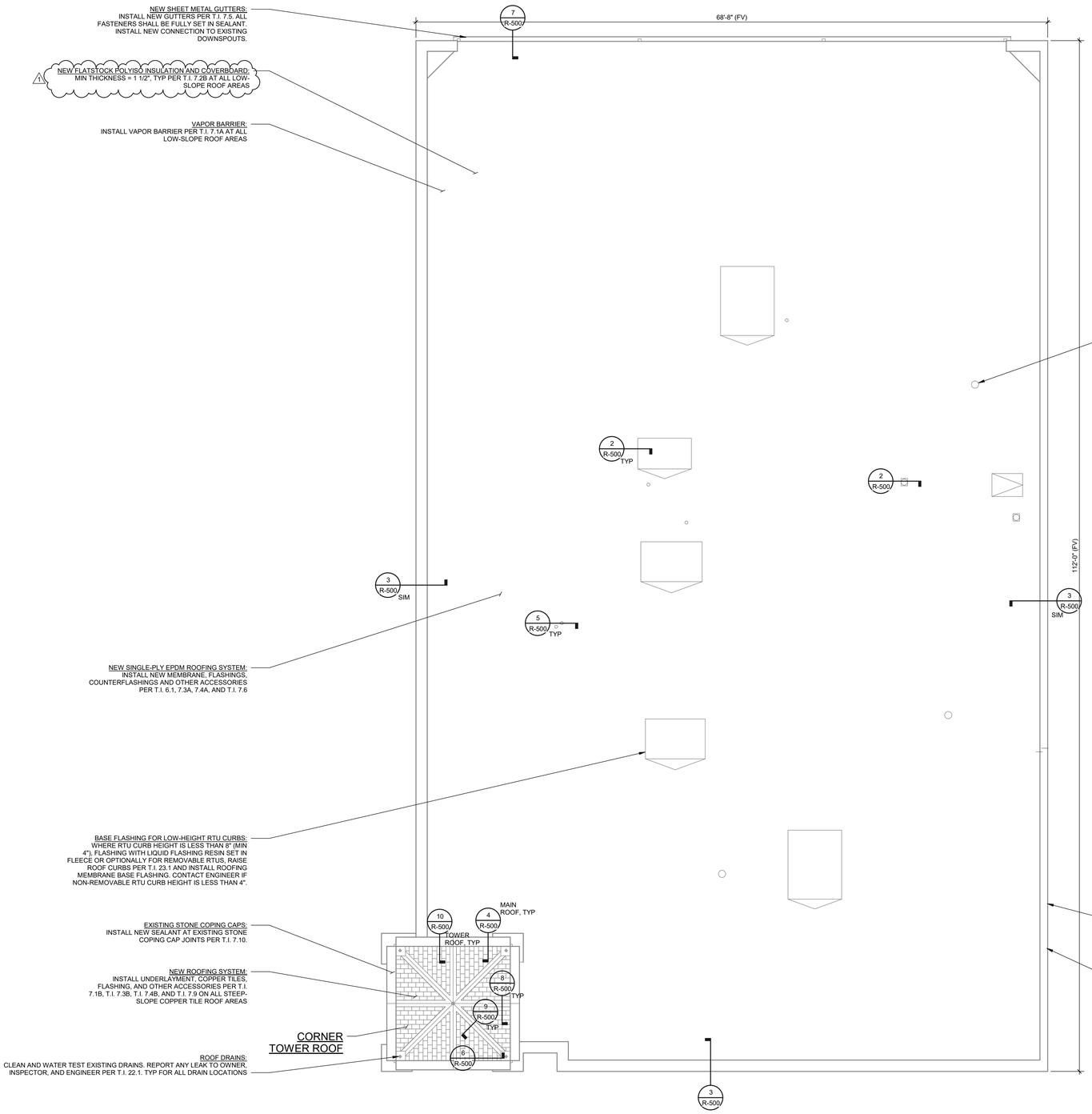
NILA ABUBAKER
REGISTERED ENGINEER
AGRICULTURE
ENVIRONMENT & CONSERVATION
126788
STATE OF TENNESSEE
3-18-25

Drawing Title :

ROOF - DEMOLITION PLAN

Sheet No. :

RD-100



NEW ROOFING SYSTEM	LOW-SLOPE ROOF AREAS
-EPDM MEMBRANE (COLOR: WHITE)	
-COVER BOARD AND RIGID INSULATION BOARD	
-VAPOR BARRIER	
-SUBSTRATE BOARD	
-EXISTING METAL ROOF DECK	

NEW ROOFING SYSTEM	STEEP-SLOPE ROOF AREAS
-COPPER TILES	
-UNDERLAYMENT	
-EXISTING WOOD DECK	

TASK ITEM PER SECTION 01 01 50 "TASK ITEM - EXISTING ROOFING SYSTEM"	
TASK ITEM	DESCRIPTION
1.1	PROJECT MOBILIZATION
2.1A	DEMOLITION AND SUBSTRATE PREPARATION - LOW SLOPE ROOFING - COMPLETE TEAR OFF DOWN TO DECK
2.1B	DEMOLITION AND SUBSTRATE PREPARATION - STEEP SLOPE ROOFING
2.2A	RECYCLING PROGRAM - LOW SLOPE ROOFING - EXISTING MATERIALS
2.2B	RECYCLING PROGRAM - STEEP SLOPE ROOFING - EXISTING MATERIALS
5.1	DECK REPAIR - STEEL DECKING
6.1	ROUGH CARPENTRY
7.1A	LOW SLOPE ROOFING - VAPOR BARRIER
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1 7.2B	ROOFING INSULATION - FLATSTOCK POLYISO WITH COVER BOARD
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2. CONTRACTOR IS ADVISED THAT THE ROOFS DO NOT HAVE OSHA-COMPLIANT PARAPET WALLS. TEMPORARY FALL PROTECTION MUST BE INSTALLED PRIOR TO PERFORMING ANY WORK ON THE ROOF AND MUST REMAIN IN PLACE FOR THE DURATION OF THE REPAIRS.
3. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE WEATHER TIGHTNESS OF THE FACILITY DURING ALL FACILITY OPERATIONS. SUBMIT A BUILDING ENCLOSURE PROTECTION PLAN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.
4. DO NOT BLOCK ALLEYWAY OR STREETS ADJACENT TO STAGING AREAS WITH ROOFING MATERIALS, TRASH, VEHICLES, EQUIPMENT, OR ANY OTHER MISCELLANEOUS ITEMS DURING ROOFING PROJECT.
5. LIGHTNING SYSTEM SHOWN SCHEMATICALLY. FIELD VERIFY LOCATIONS OF LIGHTNING PROTECTION.
6. SLOPE PLANS SHOWN ARE CONCEPTUAL ONLY. FINAL SLOPE DESIGN SHALL BE PER THE SLOPE DESIGN CONSULTANT OF THE ROOFER WHO SHALL SOLELY BE RESPONSIBLE FOR PROVIDING THE SPECIFIED FINISHED ROOFING SYSTEM SLOPES FOR FREE DRAINAGE OF WATER FROM THE ROOFING SURFACE.

N 1 ROOFING REPLACEMENT PLAN
3/16" = 1'-0"

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Project Name:

COURTHOUSE ANNEX ROOFING REPLACEMENT

Client :

MONTGOMERY COUNTY GOVERNMENT

Consultants / Discipline :

Keyplan :

Issues/Revisions :

100% CD

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Seal and Signature :

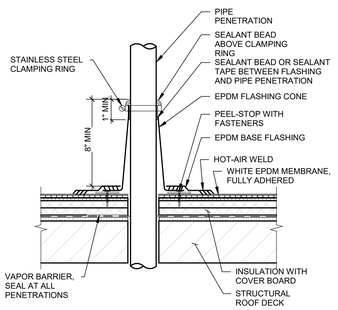
NILA ABUBAKAR — REGISTERED ENGINEER — AGRICULTURE — 126788 — STATE OF TENNESSEE — 3-18-25

Drawing Title :

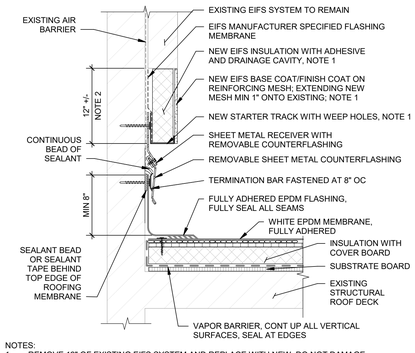
ROOFING REPLACEMENT PLAN

Sheet No. :

R-100

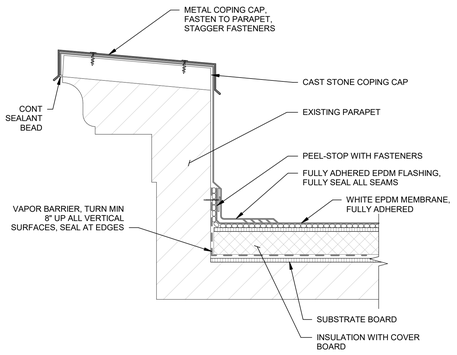


5 TYPICAL DETAIL ADHERED FELT-BACK EPDM-CONE FLASHING AT PENETRATION
NO SCALE

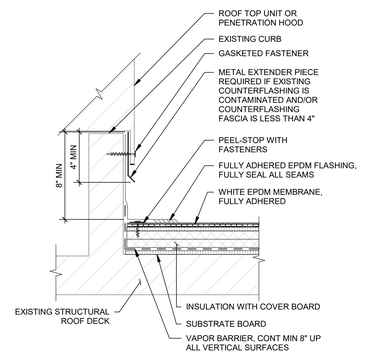


NOTES:
1. REMOVE 12" OF EXISTING EIFS SYSTEM AND REPLACE WITH NEW. DO NOT DAMAGE EXISTING AIR BARRIER. MATCH NEW FINISH COAT WITH EXISTING.

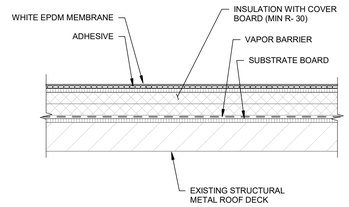
4 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT BASE OF WALL
NO SCALE



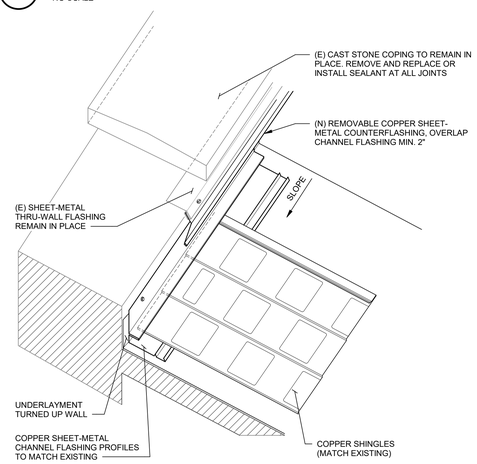
3 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT PARAPET
NO SCALE



2 TYPICAL DETAIL ADHERED FELT-BACK EPDM FLASHING AT NON-REMOVABLE RTU OR ROOF PENETRATION
NO SCALE

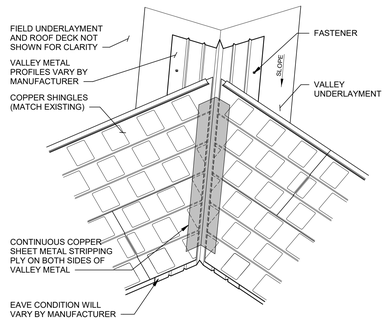


1 LOW-SLOPE ADHERED FELT-BACK EPDM ROOFING ASSEMBLY
NO SCALE

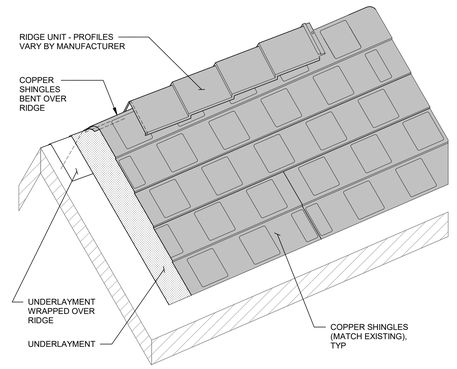


NOTES:
1. EXISTING FOR SECUREMENT AND JOINERY OPTIONS FOR SHEET METAL AND COUNTERFLASHING OPTIONS, REFER TO THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION AND AIR LEAKAGE CONTROL, AND REROOFING.

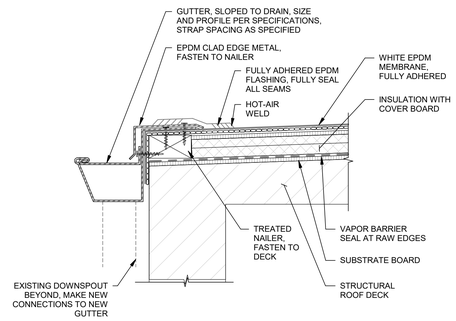
10 VENTING RIDGE
NO SCALE



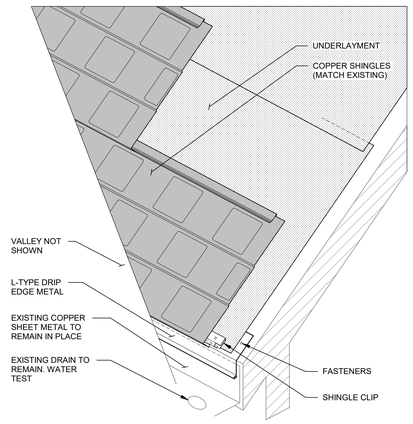
9 VENTING RIDGE
NO SCALE



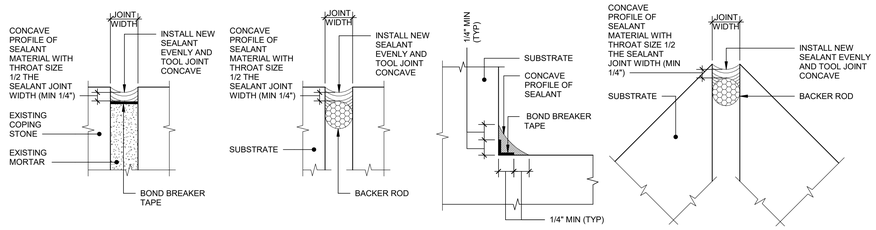
8 RIDGE
NO SCALE



7 TYPICAL DETAIL ADHERED FELT-BACK EPDM-FLASHING AT GUTTER
NO SCALE



6 EAVE
NO SCALE



NOTES:
1. THIS TYPICAL DETAIL APPLIES AT ALL APPLICABLE SEALANT INSTALLATIONS SHOWN THROUGHOUT THE DRAWINGS, UNLESS WHERE SPECIFICALLY NOTED OTHERWISE.
2. REMOVE EXISTING JOINT SEALANT AND BACKER ROD MATERIAL IF PRESENT.
3. CLEAN ALL SURFACES WITHIN JOINT BEFORE FILLING WITH SEALANT SUCH THAT THERE ARE NO OLD RESIDUAL MATERIALS, DUST, OR CONTAMINANTS ON THE INSIDE SURFACES OF THE JOINT.
4. INSTALL BOND BREAKER AND/OR BACKER ROD TO A UNIFORM DEPTH. INSTALLATION OF WAVY OR NON-UNIFORM BOND BREAKER/BACKER ROD WILL NOT BE ACCEPTABLE.
5. DO NOT OVERFILL THE JOINT.
6. REFER TO SPECIFICATIONS FOR SEALANT TYPE AND OTHER REQUIREMENTS.
7. TOOL JOINT CONCAVE.

11 SEALANT JOINTS
NO SCALE

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Seal and Signature :

Drawing Title :

TYPICAL DETAILS

Sheet No. :

R-500