

# VARIOUS LOCATIONS - ROOF REPLACEMENTS

## ENERGY MANAGEMENT & MISSOURI ATHLETIC TRAINING CENTER COLUMBIA, BOONE COUNTY, MISSOURI 65211

FOR: THE CURATORS OF THE  
UNIVERSITY OF MISSOURI

DATE: FEBRUARY 11, 2025

PROJECT NO.: CP243181

### CODES AND STANDARDS:

UM CONSULTANT PROCEDURES AND DESIGN GUIDELINES: CURRENT EDITION

IBC:	2021
IBD:	2021
IMC:	2021
IPC:	2021
IFC:	2021
IFGC:	2018
NEC:	2020
NFPA 13:	2019
NFPA 14:	2019
NFPA 20:	2019
NFPA 45:	2019
NFPA 72:	2019
NFPA 90A:	2018
NFPA 96:	2017
NFPA 99:	2012
NFPA 101:	2012
NFPA 110:	2019
ASHRAE 90.1:	2019
ASME A17.1:	2016
ADA:	2017

### INDEX of DRAWINGS

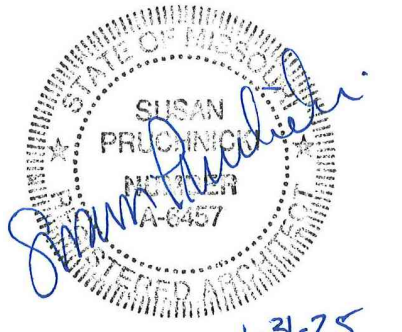
11/11/2024 - ISSUED FOR CONSTRUCTION			REVISION DESCRIPTION								
SHEET NO.	SHEET TITLE	SHEET TYPE	1	2	3	4	5	6	7	8	9
A100	COVER SHEET (THIS SHEET)	DIRECTORY	Δ								
A101	ENERGY MANAGEMENT SITE COORDINATION PLAN	SITE PLAN	Δ								
A102	ENERGY MANAGEMENT DEMOLITION ROOF PLAN	ROOF PLAN	Δ								
A103	ENERGY MANAGEMENT RENOVATION ROOF PLAN	ROOF PLAN	Δ								
A201	ENERGY MANAGEMENT DETAILS	ROOF DETAILS	Δ								
A202	ENERGY MANAGEMENT DETAILS	ROOF DETAILS	Δ								
A203	ENERGY MANAGEMENT DETAILS	ROOF DETAILS	Δ								
A301	MATC SITE COORDINATION PLAN	SITE PLAN	Δ								
A302	MATC DEMOLITION ROOF PLAN	ROOF PLAN	Δ								
A303	MATC RENOVATION ROOF PLAN	ROOF PLAN	Δ								
A401	MATC DETAILS	ROOF DETAILS	Δ								
A402	MATC DETAILS	ROOF DETAILS	Δ								
A403	MATC DETAILS	ROOF DETAILS	Δ								
A404	MATC DETAILS	ROOF DETAILS	Δ								
A405	MATC DETAILS	ROOF DETAILS	Δ								
A406	MATC DETAILS	ROOF DETAILS	Δ								
A407	MATC DETAILS	ROOF DETAILS	Δ								



I HEREBY CERTIFY THAT DRAWINGS AND/OR SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS AND/OR SPECIFICATIONS ARE AS REQUIRED BY AND IN COMPLIANCE WITH BUILDING CODES OF THE UNIVERSITY OF MISSOURI.

SIGNATURE:

*Susan Prichard*



### PROJECT NOTES:

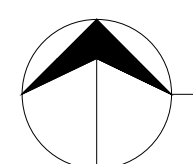
- ANY OPERATION WHERE HIGH LEVELS OF NOISE ARE EXPECTED ON THE CONSTRUCTION SITE WILL NEED TO BE COORDINATED AND APPROVED WITH THE OWNER'S REPRESENTATIVE AT LEAST 48 HOURS PRIOR TO THE WORK BEING INITIATED.
- DISCONNECTION OR INTERRUPTION OF ANY BUILDING SYSTEMS OR SERVICES MUST BE COORDINATED WITH OWNER'S REPRESENTATIVE AT LEAST 72 HOURS PRIOR TO WORK BEING PERFORMED, CONTRACTOR'S WORK SHALL BE CONTINUOUS UNTIL UTILITY IS RESTORED.
- AREAS NOT UNDER CONSTRUCTION SHALL BE MAINTAINED FOR PUBLIC ACCESS AND CIRCULATION. CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTS AND MAINTAIN TEMPERATURE AND HUMIDITY CONTROL WITHIN THE WORK AREA DURING THE CONSTRUCTION OF THE PROJECT AS DIRECTED BY OWNER'S REPRESENTATIVE AND AS REQUIRED FOR THE SAFETY AND SECURITY OF THE PUBLIC.
- CONTRACTOR SHALL MAINTAIN AND KEEP ALL EXISTING MEANS OF EGRESS BARRIER-FREE.
- CONTRACTOR SHALL MAINTAIN AND PROTECT THE EXISTING CONDITIONS IN THE WORK AREA UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF INTERIOR AND EXTERIOR AREAS DOCUMENTING EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK. ANY DAMAGE DONE TO EXISTING CONDITIONS DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE WITHOUT ADDITIONAL COST THE OWNER.
- EVERY DIMENSION THAT IS DIRECTLY OR INDIRECTLY RELATED TO EXISTING CONDITIONS OR CONSTRUCTION SHALL BE CAREFULLY MEASURED AND COORDINATED WITH ADJACENT CONDITIONS. CONTRACTOR SHALL REPORT DISCREPANCIES, EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE AND/OR ARCHITECT PRIOR TO BEGINNING THE WORK.
- CONTRACTOR SHALL CONTAIN ALL CONSTRUCTION ACTIVITY, INCLUDING STORAGE OF MATERIAL AND EQUIPMENT, WITHIN THE CONSTRUCTION LIMITS. THE ROOFING CONTRACTOR MUST INSTALL A SAFETY FENCE 6' FROM THE PERIMETER OF THE STORED ROOFING MATERIALS WITHIN THE PRE-DETERMINED STAGING AREA. MATERIALS ARE TO STORED WITH A TARP COVERING OF SUFFICIENT MIL THICKNESS WHICH HAS BEEN PROPERLY WEIGHED DOWN. LIQUID MATERIALS (SUCH AS GASOLINE, MEMBRANE ADHESIVE, WEATHERED MEMBRANE CLEANER, ETC.) ARE TO ONLY BE STORED ON THE ROOF NEAR ROOFING SECTION UNDER REPLACEMENT.
- CONTRACTOR SHALL PROVIDE TEMPORARY DIRECTIONAL SIGNAGE AS WELL AS CONSTRUCTION SIGNAGE NOTIFYING THE PUBLIC OF CONSTRUCTION LIMITS, AS NEEDED.
- CONTRACTOR SHALL SECURE AND PROTECT THE WORK AREA AT THE END OF EACH DAY.
- CONTRACTOR SHALL MAKE ALLOWANCES FOR AMPLE EXPANSION AND CONTRACTION FOR ELECTRICAL, STRUCTURAL AND OTHER BUILDING COMPONENTS SUBJECT TO SUCH MOVEMENT, INSTALL SLEEVES, RECESSES AND OPENING IN THE WORK TO RECEIVE MATERIALS INSTALLED BY OTHER TRADES.

### PROJECT NOTES: (CONT.)

- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS AND SEQUENCES OF CONSTRUCTION AND THE SAFETY OF CONSTRUCTION PERSONNEL AND AUTHORIZED VISITORS.
- NO STANDING, STAGING OR PARKING IN FIRE LANE. ACCESS OF LIMITED FOR STOCKING AND HAUL-OFF. ALL LOADING AND HAUL-OFF ACTIVITY WILL BE DAILY; NO HOURLY LIMIT ON STOCKING AND HAUL-OFF HOURS.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING ROOF MEMBRANE DURING DEMOLITION.
- UNIVERSITY STAFF AND STUDENT'S HOLD THE RIGHT-OF-WAY AT ALL TIMES DURING ROOF CONSTRUCTION, ESPECIALLY DURING CAMPUS SURGICAL EVENTS.
- AS OF 2018, SMOKING AND THE USE OF TOBACCO OR SMOKELESS TOBACCO PRODUCTS BY STUDENTS, FACULTY, STAFF AND VISITORS ARE PROHIBITED ON ALL MISSOURI STATE UNIVERSITY PROPERTIES EXCEPT; 1. WHILE INSIDE OF A PERSONAL VEHICLE 2. WITHIN THE DESIGNATED SMOKING AREAS OUTSIDE GREAT SOUTHERN BANK ARENA, PLASTER STADIUM, HAMMONS STUDENT CENTER, AND JUANITA K. HAMMONS HALL DURING PERFORMANCES OR EVENTS.

### LANDSCAPE NOTES:

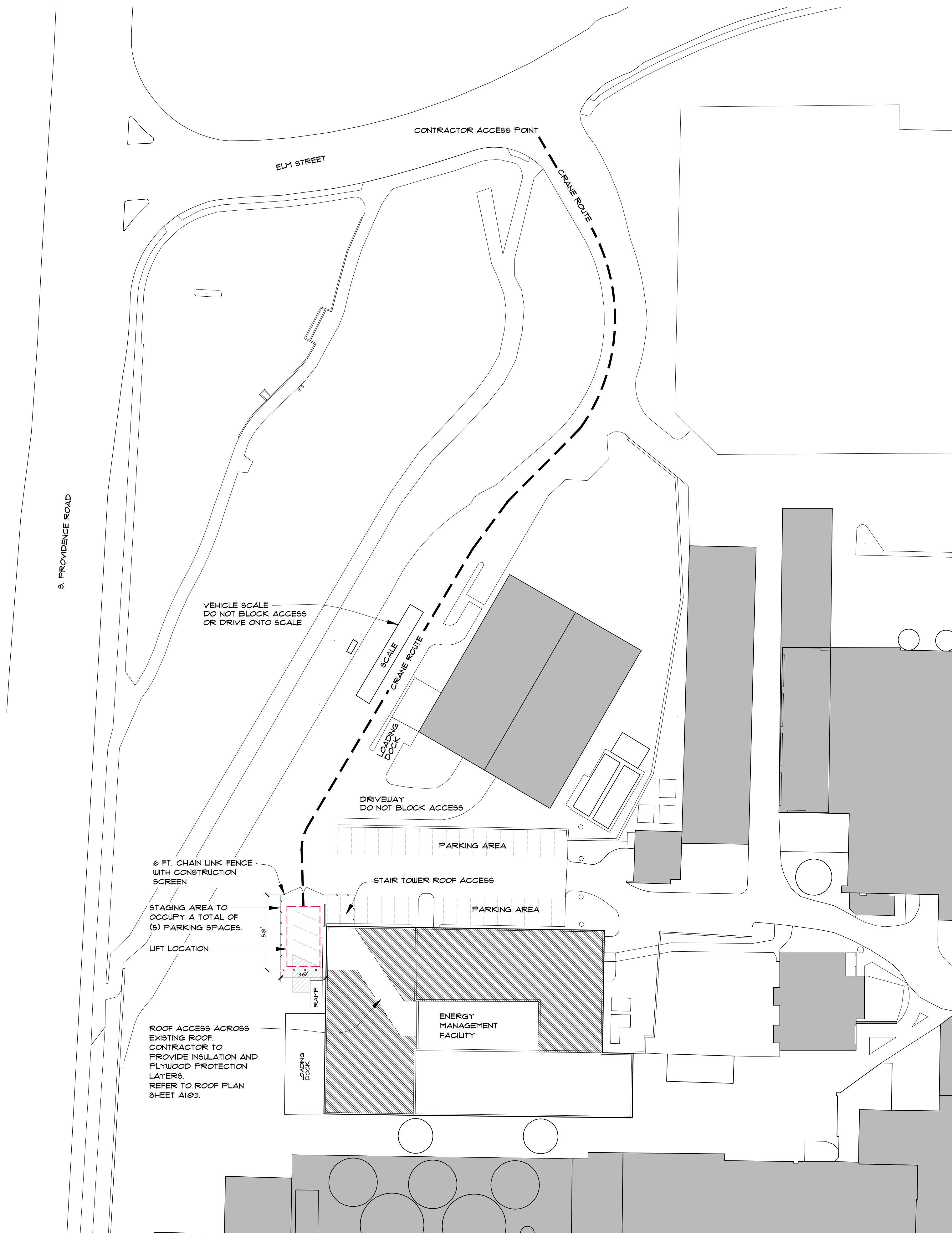
- VEHICLES ARE TO USE DESIGNATED CONSTRUCTION ENTRANCES AS INDICATED ON DRAWINGS OR CONSTRUCTION DOCUMENTS. IF NO CONSTRUCTION ROUTE IS INDICATED VEHICLES ARE RESTRICTED TO SIDEWALKS OR PAVED AREAS. ALL CONSTRUCTION EQUIPMENT AND OR VEHICLES SHALL VERIFY THE WEIGHT LIMIT AND RESTRICTION ON PAVEMENT PRIOR TO CONSTRUCTION AND NOTIFY OWNER'S REPRESENTATIVE OF THE PLANNED ROUTE.
- THERE SHALL BE NO VEHICLE MOVEMENT IN ANY LANDSCAPED, SHRUB OR PERENNIAL AREAS, MULCH BED AND/OR TREE CANOPY DRIP AND ROOT ZONES, WITHOUT PRIOR NOTIFICATION AND APPROVAL FROM LANDSCAPE SERVICES. LANDSCAPE SERVICES REQUIRES ONE WEEK NOTICE PRIOR TO ANY VEHICLE MOVEMENT IN THESE AREAS.
- WHERE ACCESS TO BUILDING REQUIRES CROSSING TURF, MULCH AREA, TREE ROOT SYSTEMS, TREE CANOPY ZONES, OR IRRIGATION SYSTEMS, THE CONTRACTOR SHALL USE ALTERNAMATS BY DICA OR APPROVED EQUAL.
- VEHICLE ACCESS SHALL NOT BREAK OR RUB TREE BRANCHES. OWNER WILL PRUNE TREE BRANCHES TO PROVIDE CLEARANCE AROUND BUILDING ENTRANCE. OWNER REQUIRES ONE WEEK'S NOTICE FOR THIS WORK TO BE DONE.
- DO NOT COMPACT GRADE WITHIN THE DRIP LINE OF TREES. PROVIDE APPROVED FENCING TO PREVENT DRIVING OR EQUIPMENT PARKING WITHIN DRIP LINE OF TREES, PRIOR TO CONSTRUCTION OR WORK IN THE PROJECT AREA. MU'S CAMPUS STANDARD 6' CHAIN LINK FENCE AND POSTS SHALL BE USED UNLESS OTHERWISE NOTED AND/OR APPROVED BY LANDSCAPE SERVICES.



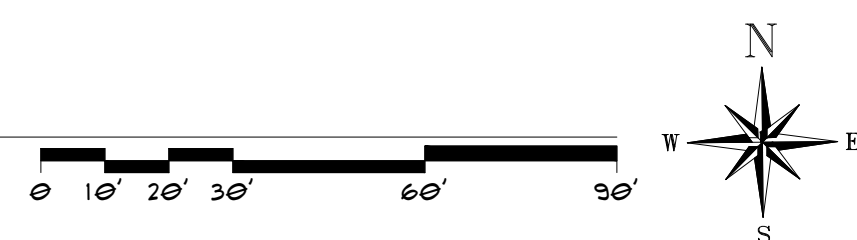
UNIVERSITY OF MISSOURI - COLUMBIA SITE MAP

SCALE: 1" = 600' - 0"

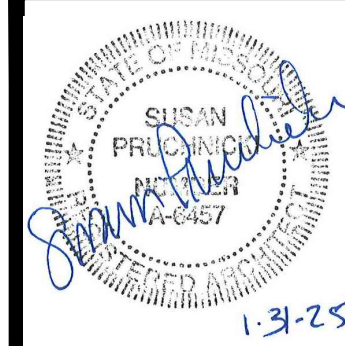




1 SITE COORDINATION PLAN  
SCALE: 1" = 30'-0"



2 SITE PLAN OVERVIEW  
SCALE: N.T.S.



The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal and signature are not part of this contract, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal.  
This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
ENERGY MANAGEMENT  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

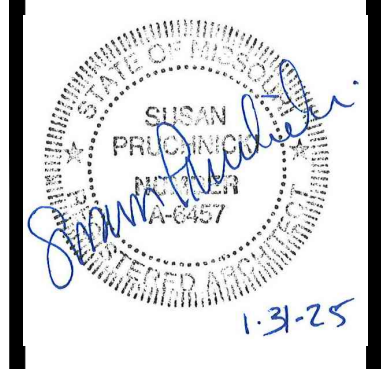
PROJECT NUMBER  
CP243181

SHEET  
A101 OF 17









**RENOVATION NOTES:**

1. ON ROOF SECTION 1 PRIME ROOF DECK AND INSTALL SELF ADHERED (SA) VAPOR BARRIER.
2. ON ROOF SECTION 2, WITH 1'-90" FM REQUIREMENTS INSTALL ONE LAYER OF 5/8" GYPSUM BOARD, MECHANICALLY ATTACHED TO WOOD DECK.
3. ADHERE SA VAPOR BARRIER TO EXISTING ROOF DECK.
4. ADHERE 2 LAYERS OF 1.5" POLY ISO WITH FM 1'-90" RIBBON METHOD TO UNDERLYING SUBSTRATE.
5. INSTALL ONE LAYER OF 1/2" HD POLYISO BOARD, ADHERED WITH LOW RISE FOAM ADHESIVE.
6. INSTALL 1/2" PER FOOT TAPERED POLY ISO CRICKETS BETWEEN DRAINS AND DRAINS AND ENDWALLS AND BETWEEN SCUPPERS AND SCUPPERS AND ENDWALLS.
7. INSTALL 60 ML EPDM, SINGLE-PLY MEMBRANE, FULLY ADHERED TO HD POLYISO SUBSTRATE.
8. INSTALL 1/2" EXTERIOR GRADE, FIRE RATED PLYWOOD SHEATHING ON ALL WALLS W/ 1 FASTENER PER 2 SQ. FT.
9. INSTALL FIELD FABRICATED STAINLESS-STEEL COUNTER FLASHING ON BRICK WALLS.
10. APPLY DOUBLE SIDED BUTYL TAPE BELOW THE INSTALLATION OF TERMINATION BAR AND OR SURFACE MOUNTED COUNTER FLASHING.
11. FIELD WRAP ALL PENETRATIONS IF POSSIBLE, STAINLESS-STEEL PITCH PANS AND 2 PART SEALANTS ARE ACCEPTABLE.
12. INSTALL 24 GA. STAINLESS-STEEL SHEET METAL COUNTER FLASHING ON EXHAUST FAN CURB.
13. INSTALL NEW 24 GA. STAINLESS STEEL THROUGHWALL SCUPPER PICTURE FRAME ON EXTERIOR OF PARAPET WALL.
14. INSTALLATION OF PRE MANUFACTURED STAINLESS STEEL COPING ANCHORED ON THE TOP OF ALL PARAPETS, FASTEN 12" O.C.
15. APPLY DOW 190 SEALANT TO CAULK RECEIVER ON THE TOP OF THE COUNTER FLASHING DETAIL TO INTERFACE WITH WALL AND STONE SHEET METAL INTERFACE. TOOL SMOOTH.
16. INSTALLATION OF SURFACE MOUNTED 24 GA. STAINLESS-STEEL COUNTER FLASHING ON ROOF AREA 2.
17. RE WORK NORTH EAST CORNER OF BRICK WALL WITH DOW 190 SEALANT. REPACK WITH 1" BACKER ROD AS NEEDED.
18. INSTALL 4'x4'x1/2" PLYWOOD AT LADDER ACCESSSES.
19. INSTALLATION OF NEW ROOF ACCESS STAIRS.
20. INSTALLATION OF NEW WALK PADS TO ALL LADDER AND STAIR EGRESS.
21. CONTRACTOR RESPONSIBLE TO PROTECT SURROUNDING ROOF AREAS THAT MAY BE UTILIZED FOR ACCESS BY LAYING INSULATION AND PLYWOOD ALONG DESIGNATED PATH.
22. COORDINATE LOCKING OUT DOOR ACCESS WITH ENERGY MANAGEMENT.

The Professional Architect's seal and signature are required on this sheet only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal and signature are not to be used in connection with this project, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal.  
 This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

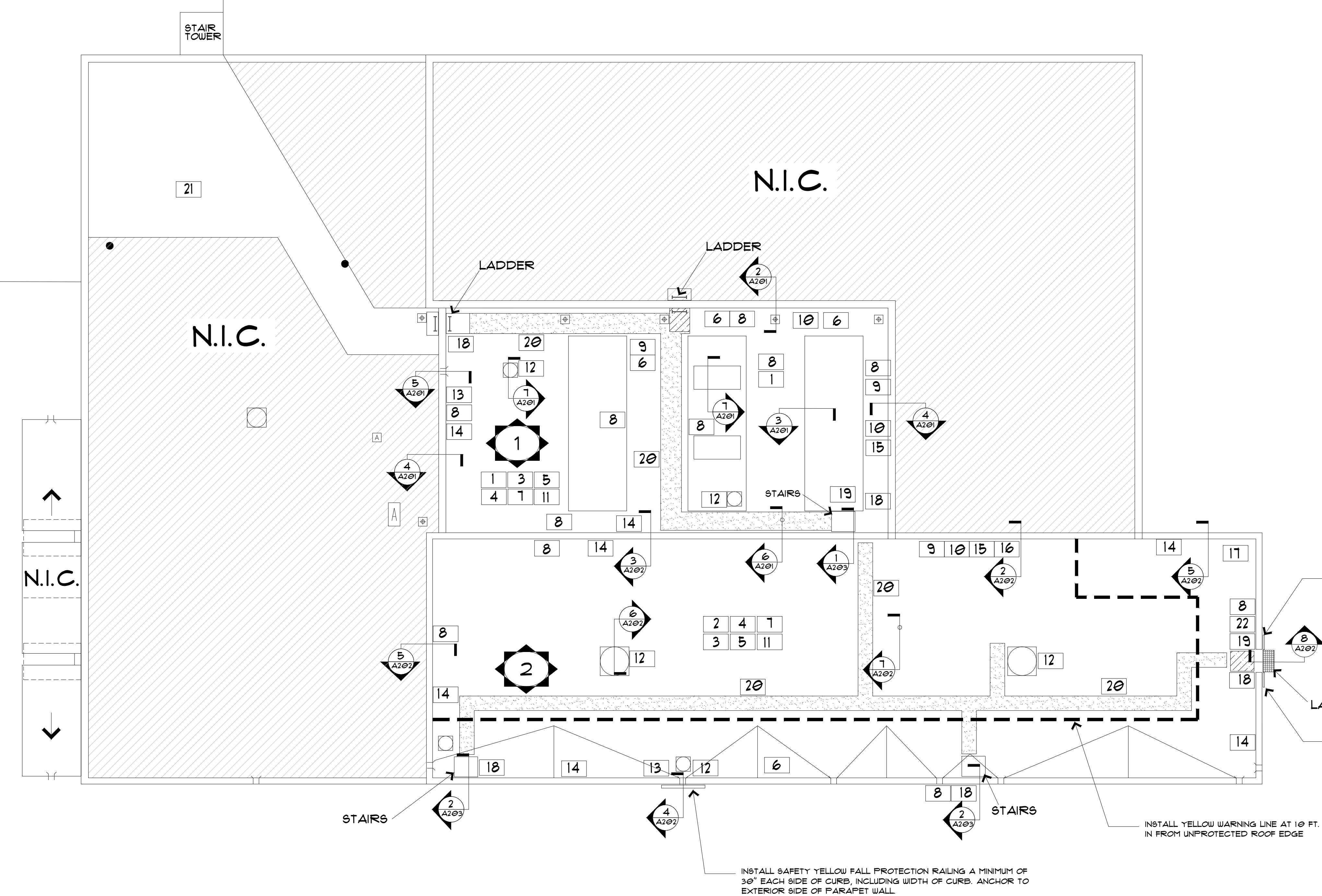
2/11/25 ISSUED FOR CONSTRUCTION  
 DRAWN BY: KFO  
 CHECKED BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
 410 SOVEREIGN COURT #18  
 MANCHESTER, MO 63011  
 (636)-391-2185

**VARIOUS LOCATIONS - ROOF REPLACEMENTS ENERGY MANAGEMENT**  
 COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
 RENOVATION PLAN

PROJECT NUMBER  
**CP243181**  
 SHEET  
**A103** OF 17

GATE  
 SEE SHEET A101 FOR STAGING LAYOUT AND NOTES



INSTALL SAFETY YELLOW FALL PROTECTION RAILING A MINIMUM OF 30" EACH SIDE OF WALL OPENING FOR LADDER ACCESS. ANCHOR TO EXTERIOR SIDE OF PARAPET WALL.

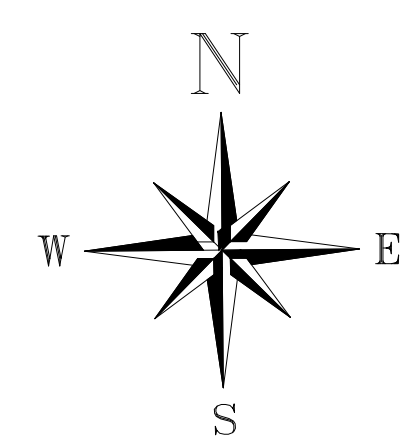
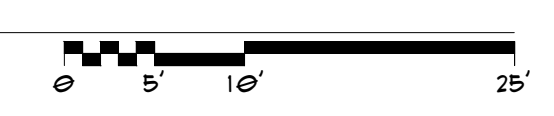
LADDER

INSTALL SAFETY YELLOW FALL PROTECTION RAILING A MINIMUM OF 30" EACH SIDE OF WALL OPENING FOR LADDER ACCESS. ANCHOR TO EXTERIOR SIDE OF PARAPET WALL.

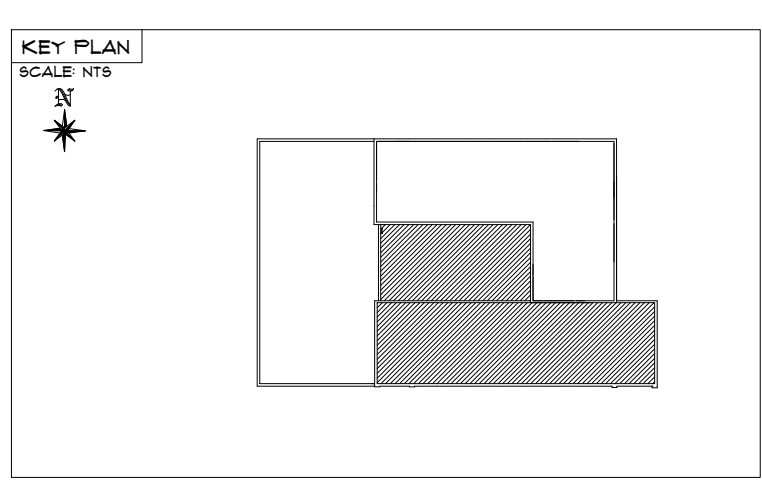
INSTALL YELLOW WARNING LINE AT 10 FT. IN FROM UNPROTECTED ROOF EDGE.

INSTALL SAFETY YELLOW FALL PROTECTION RAILING A MINIMUM OF 30" EACH SIDE OF CURB, INCLUDING WIDTH OF CURB. ANCHOR TO EXTERIOR SIDE OF PARAPET WALL.

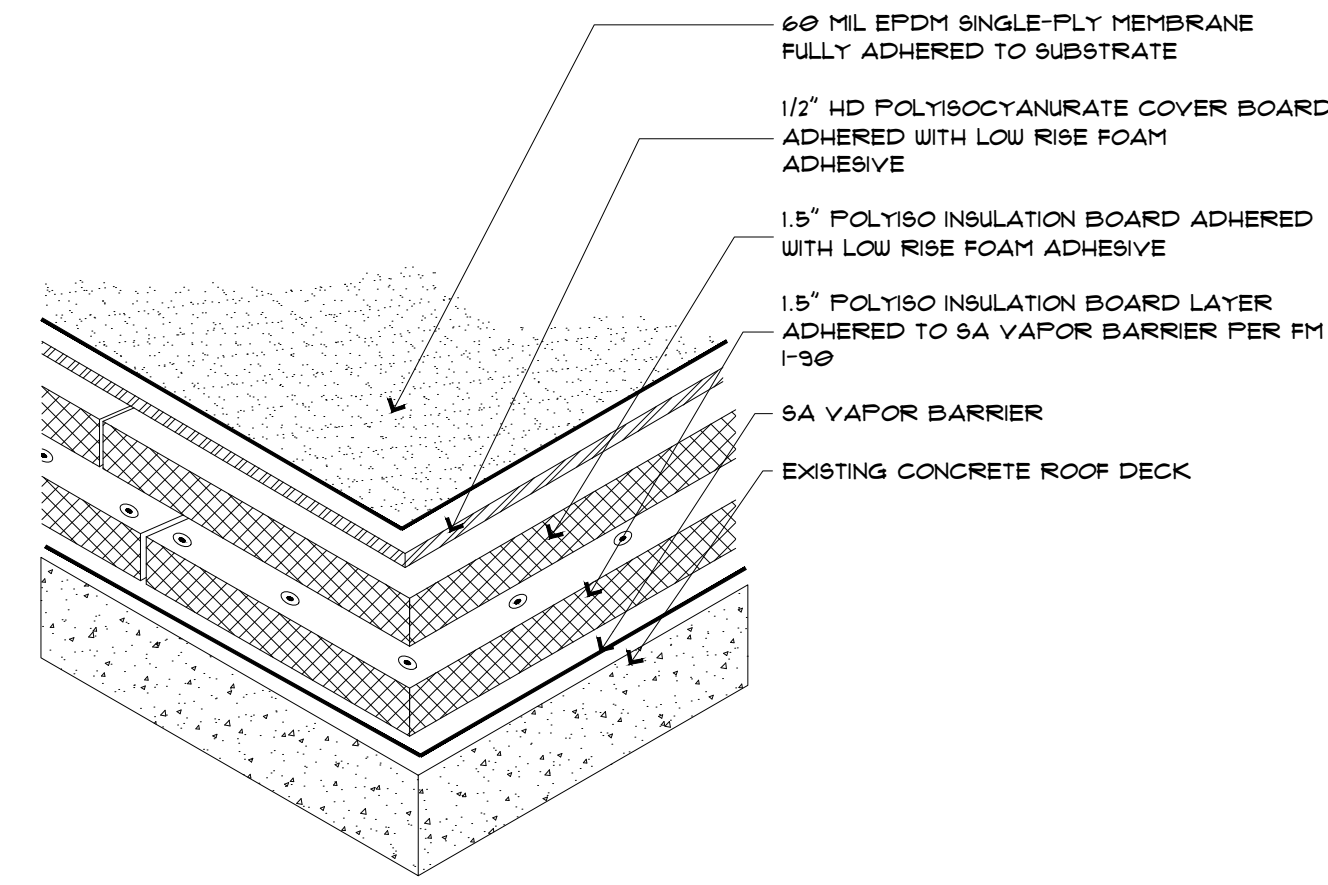
**1 RENOVATION PLAN**  
 A103 SCALE: 3/32" = 1'-0"



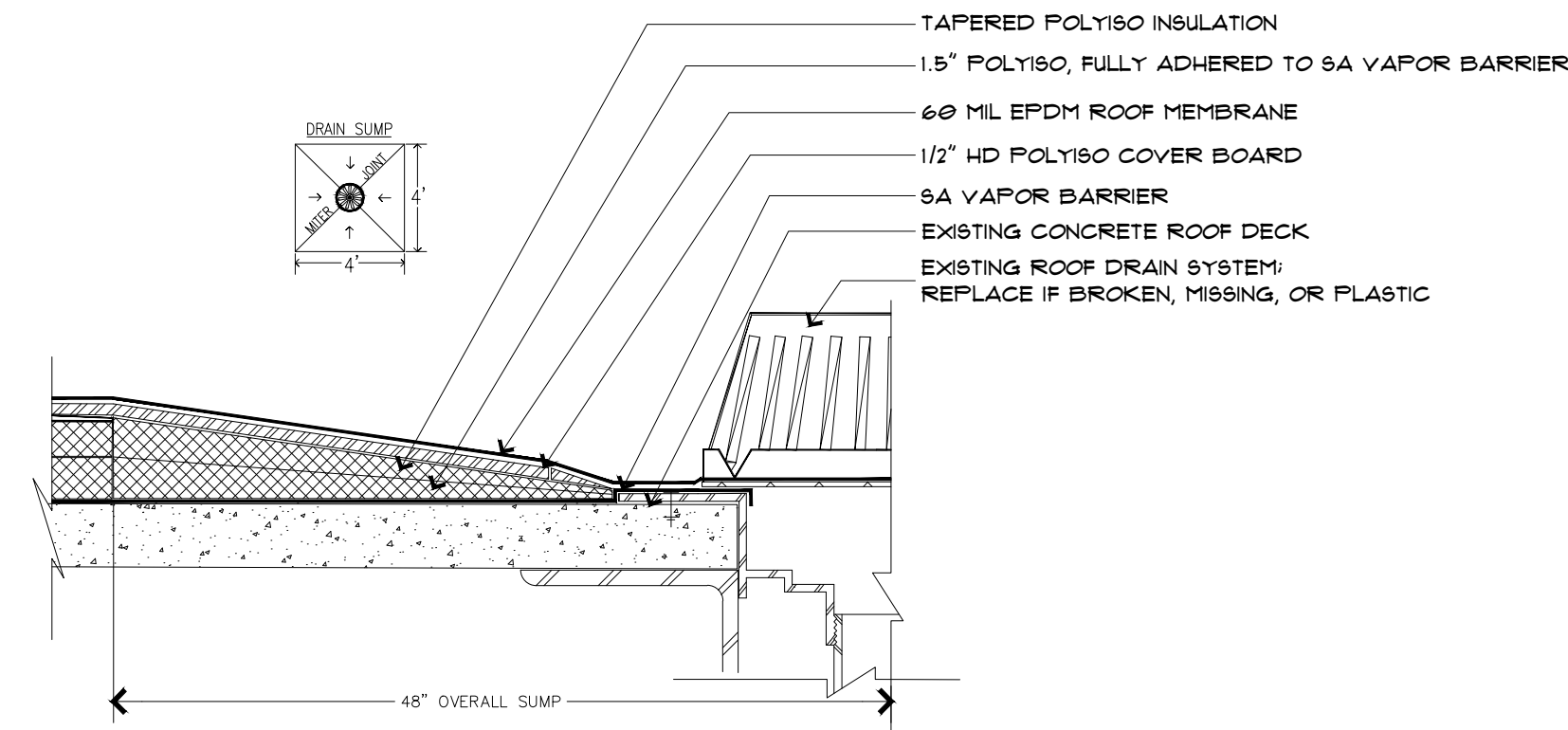
ROOFING LEGEND	
(O)	DEMOLITION KEY NOTE
(+)	ROOF DRAIN
(D)	DOMED VENTILATOR
(S)	SOL STACK
(C)	CORE EXTRACTION
(I)	RENOVATION KEY NOTE
(R)	ROOF AREA IDENTIFIER
(S)	SCUPPER
(F)	FENCE
(C)	CONTRACTOR AREA
(N)	N.I.C. AREA



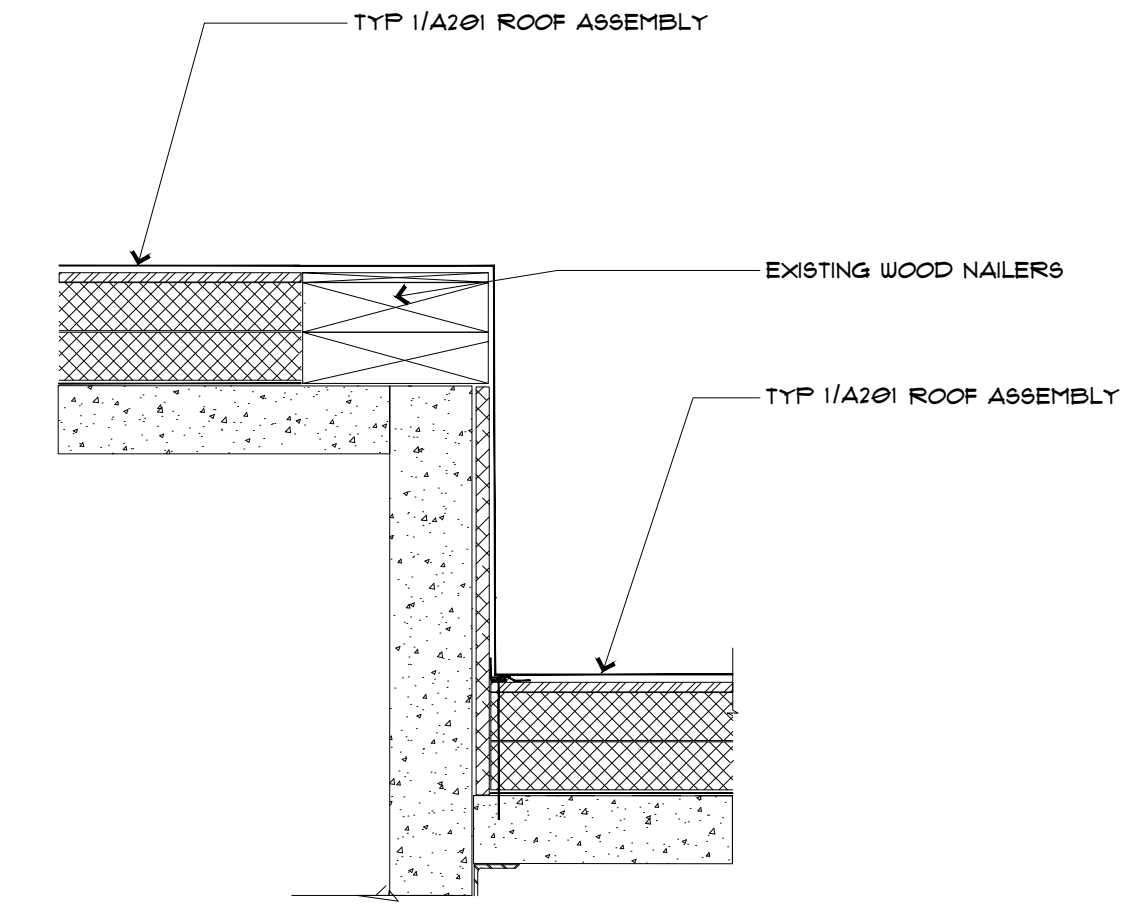




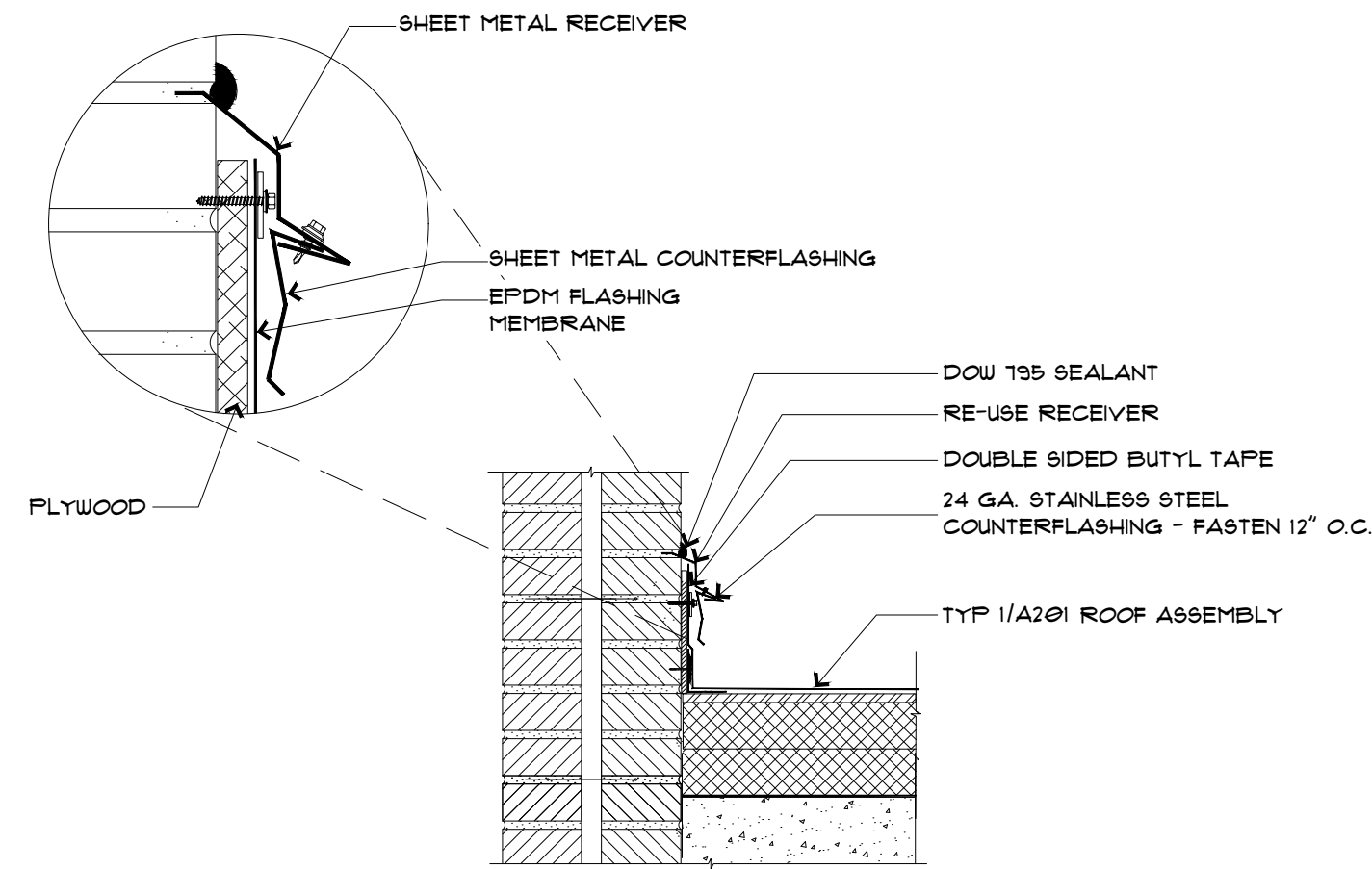
1 FIELD SECTION #1/TYP  
A201 SCALE: 1 1/2" = 1'



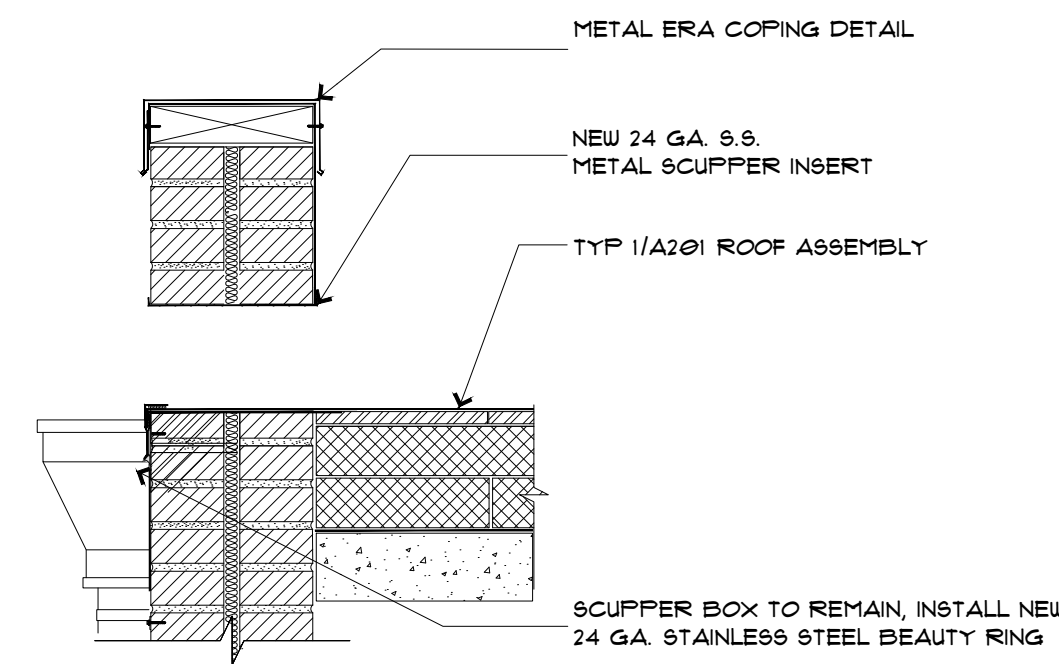
2 DRAIN DETAIL  
A201 SCALE: NTS



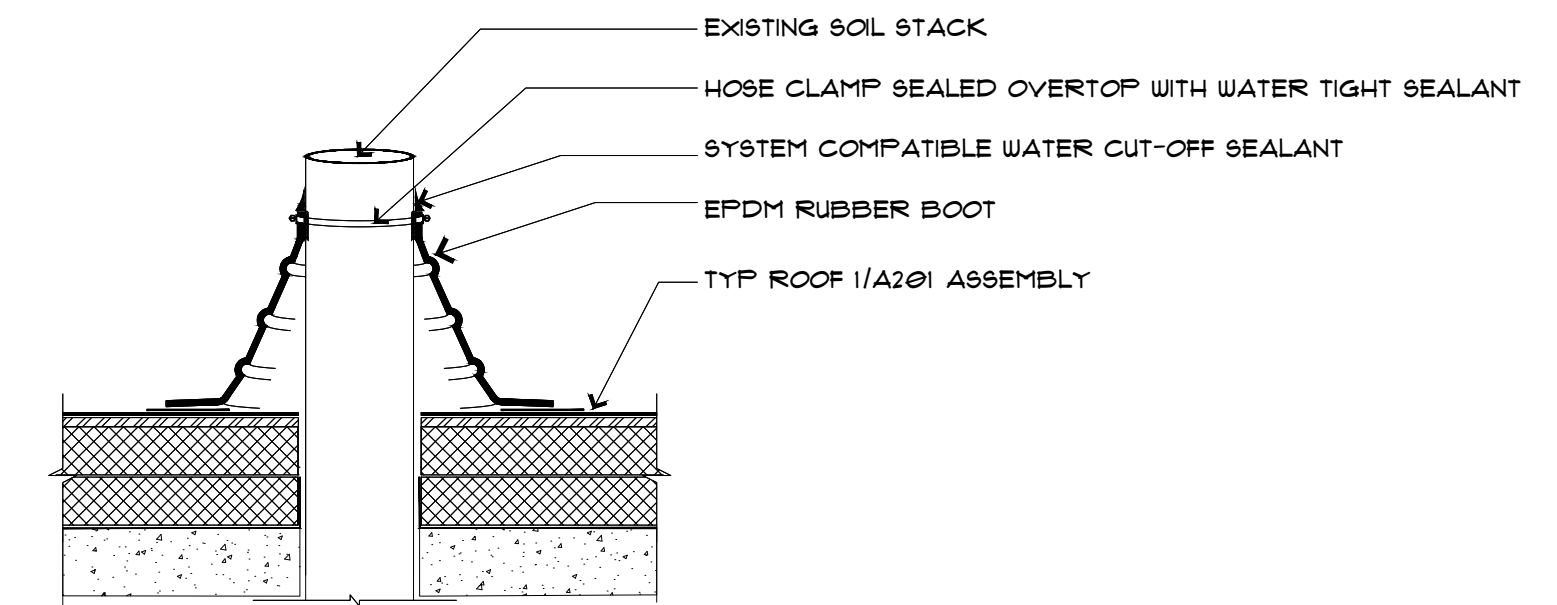
3 RAISED ROOF FLASHING  
A201 SCALE: 1 1/2" = 1'



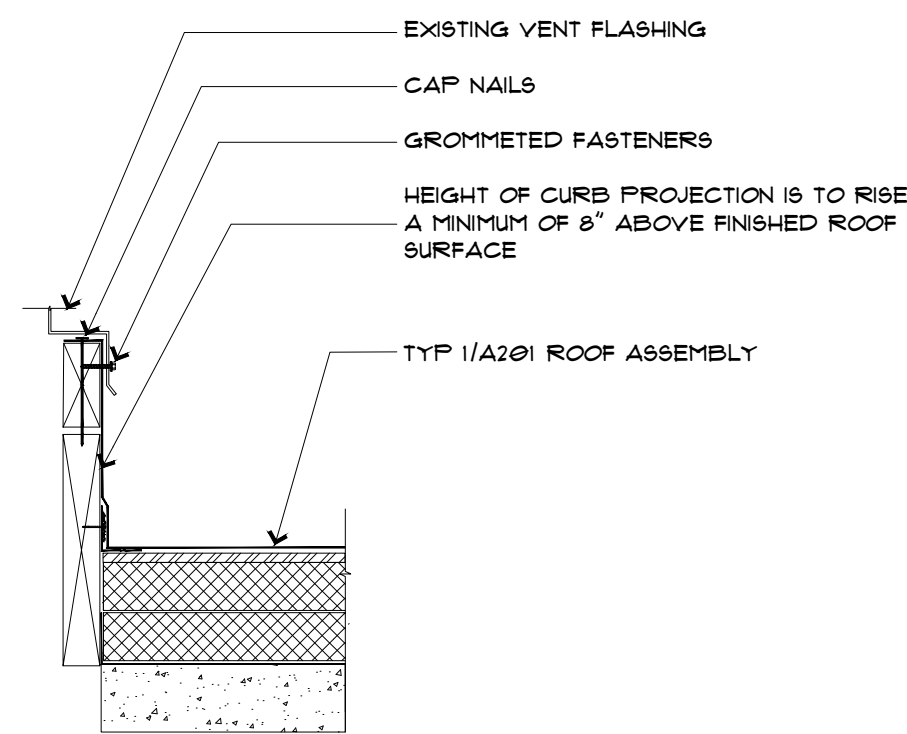
4 WALL FLASHING  
A201 SCALE: 1 1/2" = 1'



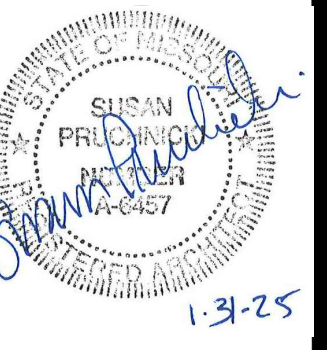
5 SCUPPER  
A201 SCALE: 1 1/2" = 1'



6 SOIL STACK  
A201 SCALE: 1 1/2" = 1'



7 VENT CURB  
A201 SCALE: 1 1/2" = 1'



The Professional Architect seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25 ISSUED FOR CONSTRUCTION  
DRAWN BY: KFO  
CHECKED BY: KFO

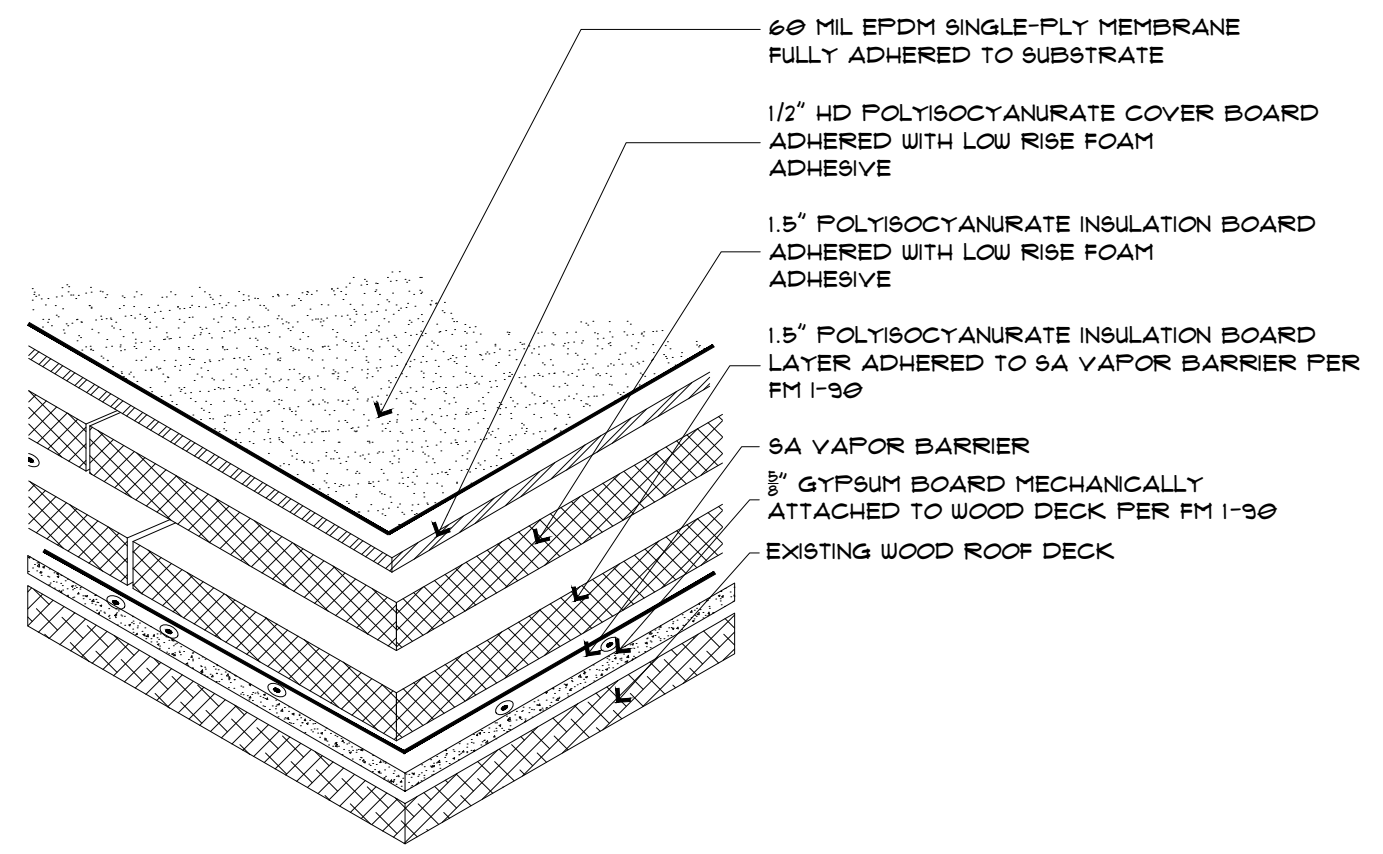
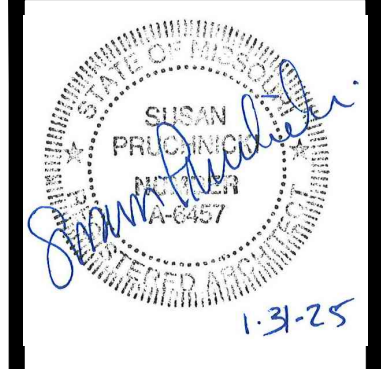
**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
ENERGY MANAGEMENT  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

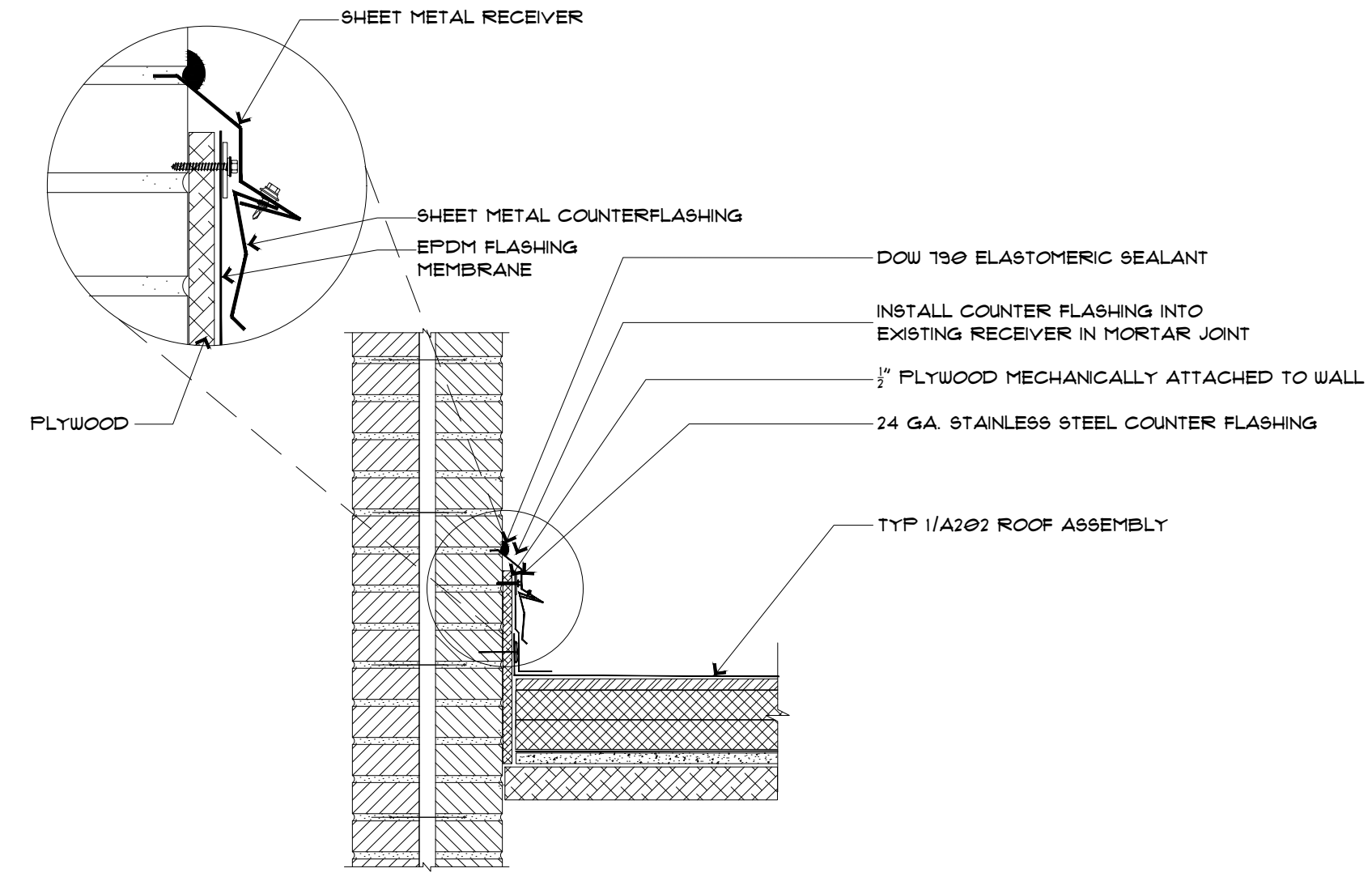
PROJECT NUMBER  
CP243181

SHEET  
A201 OF 17

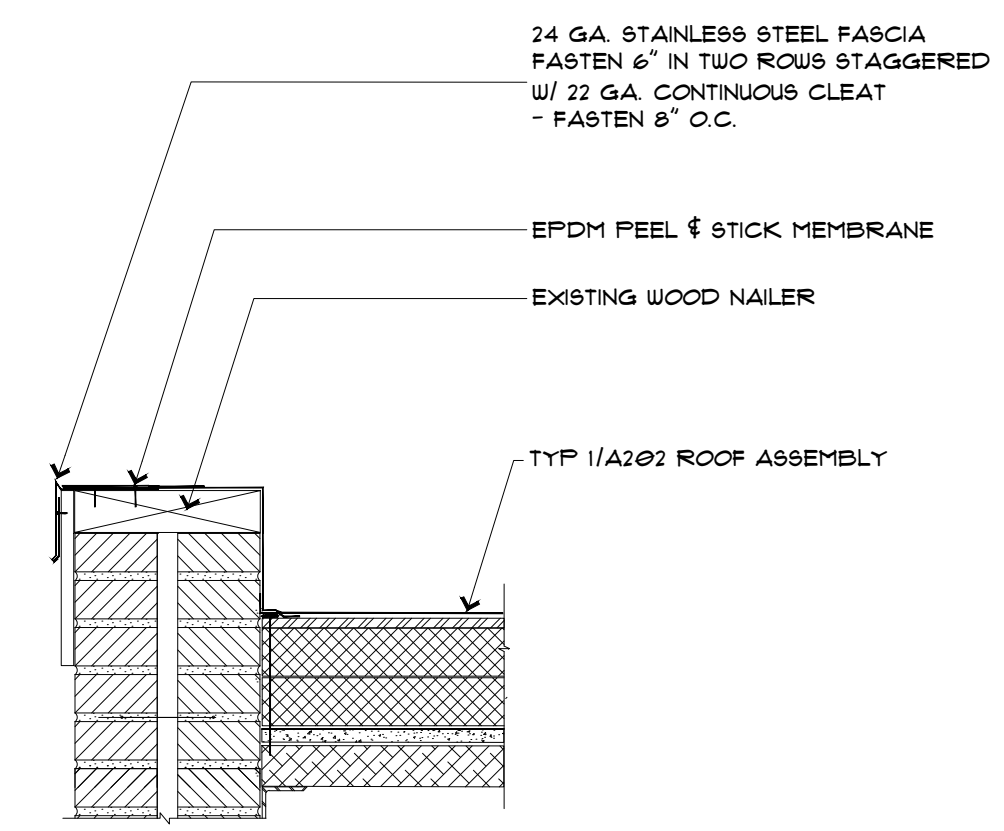




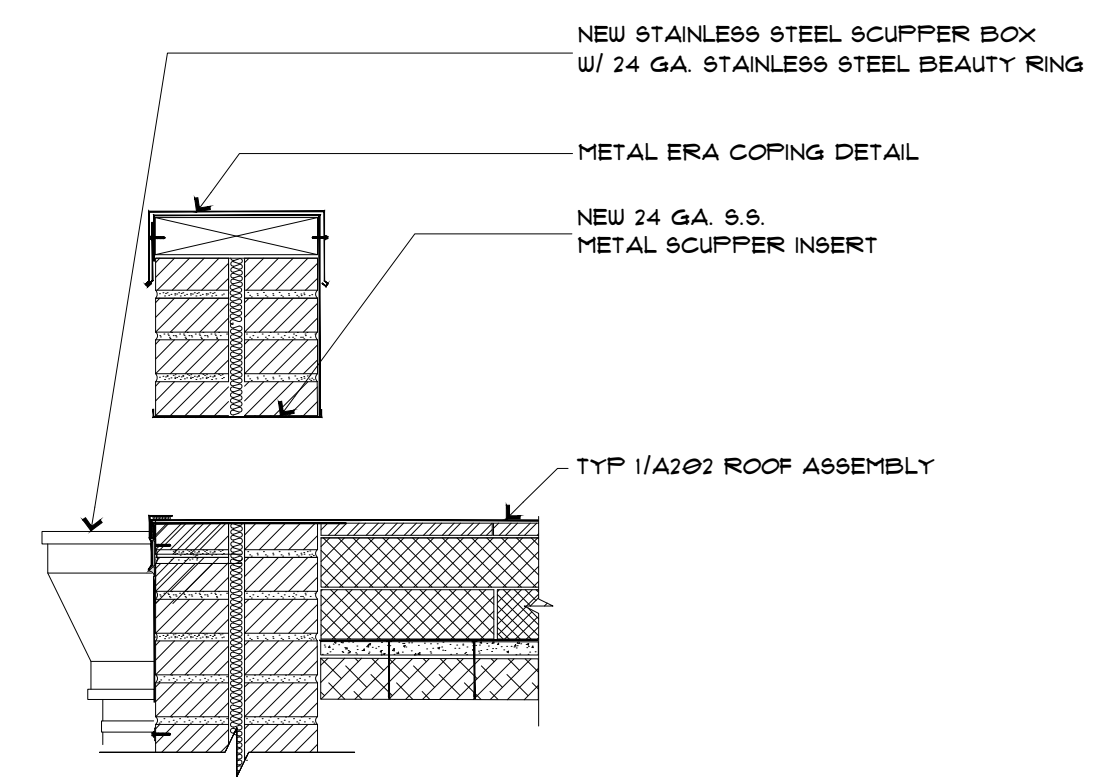
1 FIELD SECTION #2/TYP  
A202 SCALE: 1 1/2" = 1'



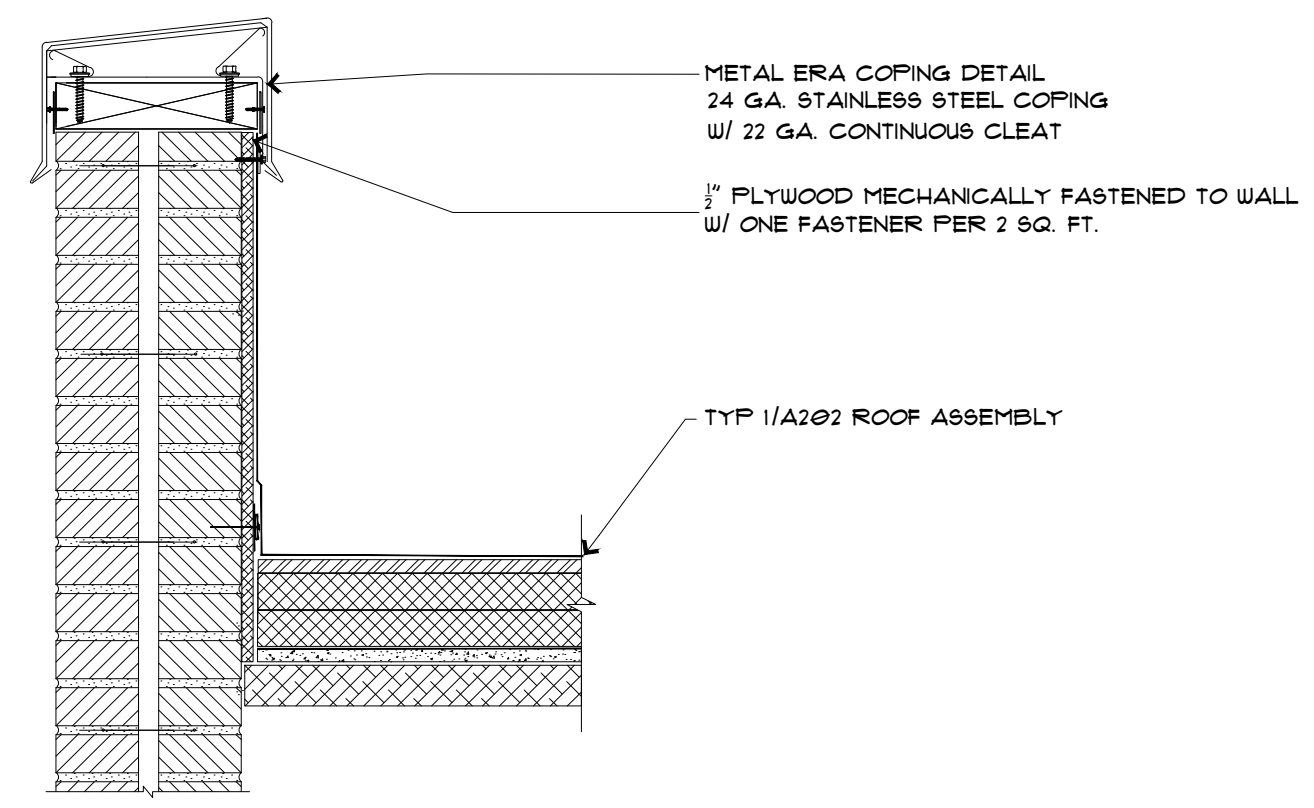
2 FLASHING AT WALL  
A202 SCALE: 1 1/2" = 1'



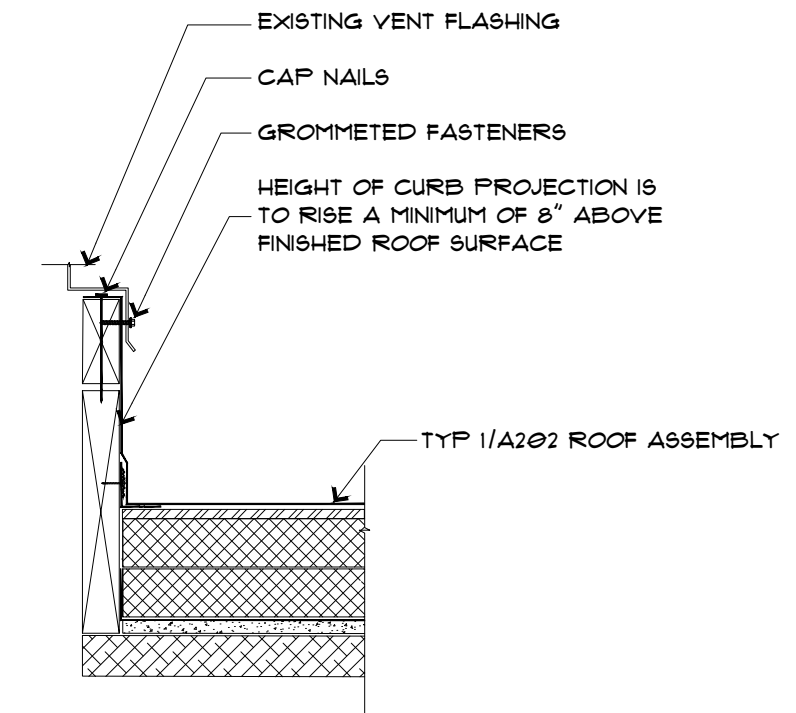
3 LOW PARAPET WALL  
A202 SCALE: 1 1/2" = 1'



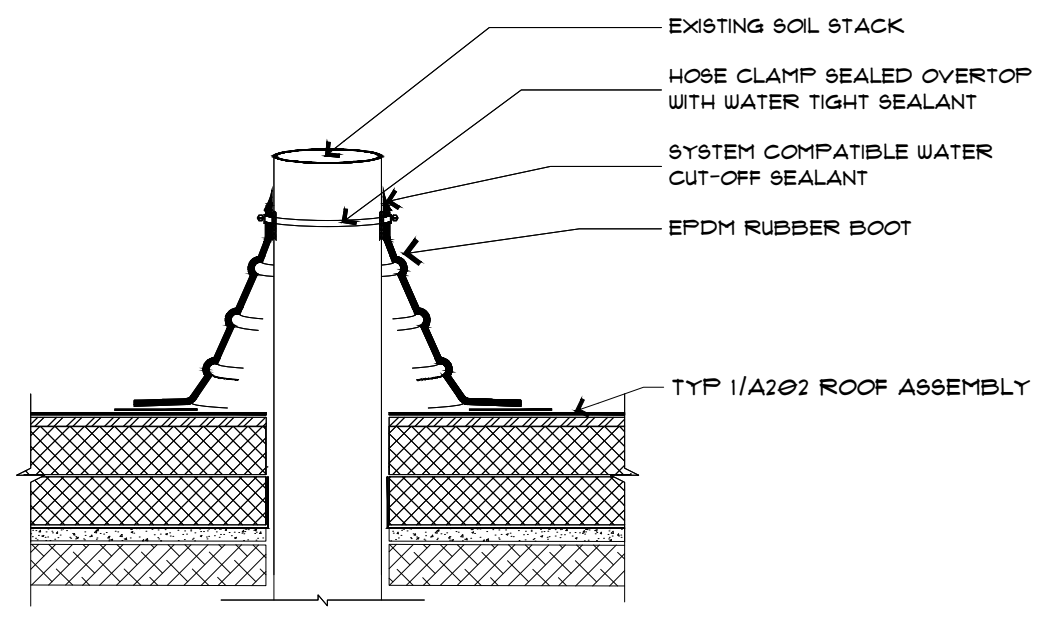
4 SCUPPER  
A202 SCALE: 1 1/2" = 1'



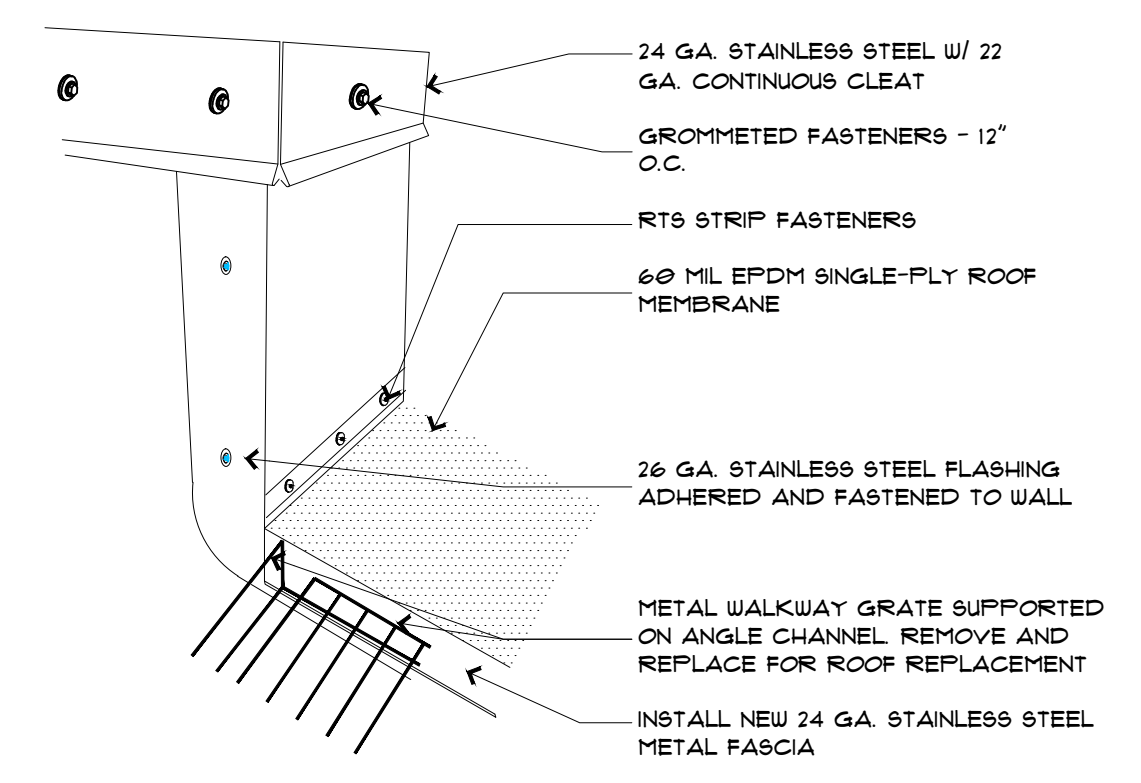
5 FLASHING AT WALL  
A202 SCALE: 1 1/2" = 1'



6 VENT CURB  
A202 SCALE: 1 1/2" = 1'



7 SOIL STACK  
A202 SCALE: 1 1/2" = 1'



8 PARAPET WALL OPENING  
A202 SCALE: 1 1/2" = 1'

The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal and signature are hereby rejected, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal.  
This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

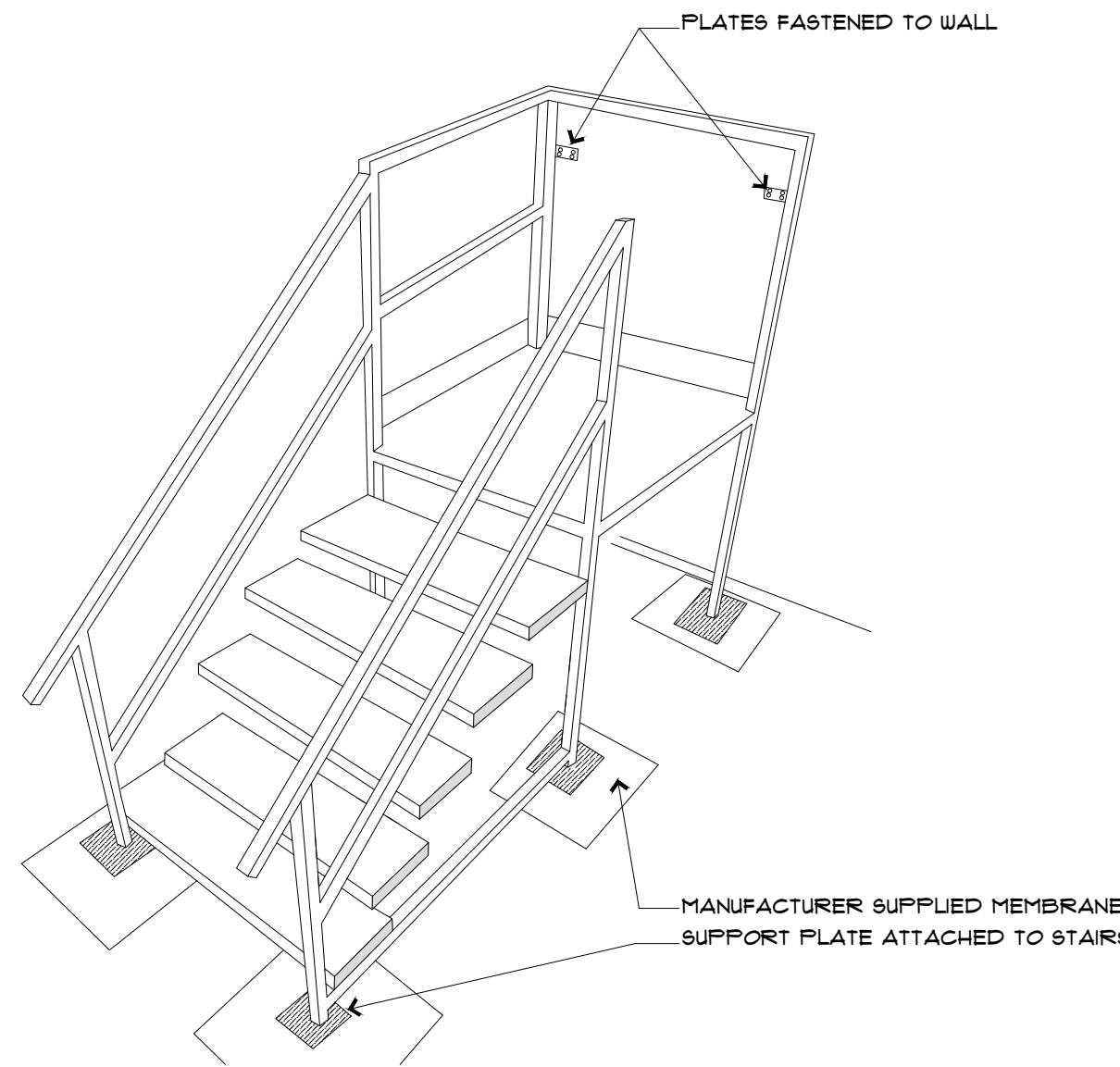
2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

**RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.**  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

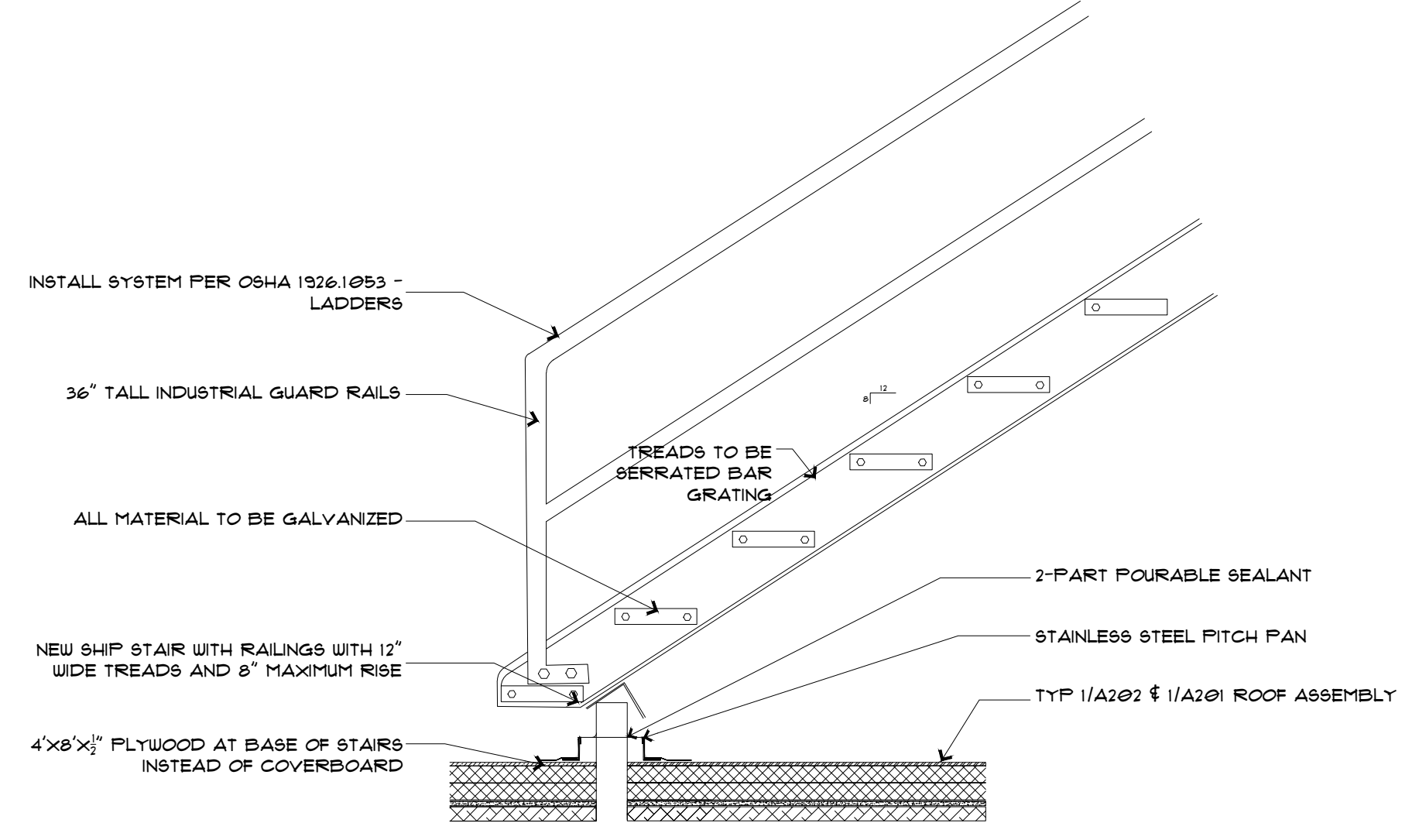
**VARIOUS LOCATIONS - ROOF REPLACEMENTS  
ENERGY MANAGEMENT  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN**

PROJECT NUMBER  
**CP243181**

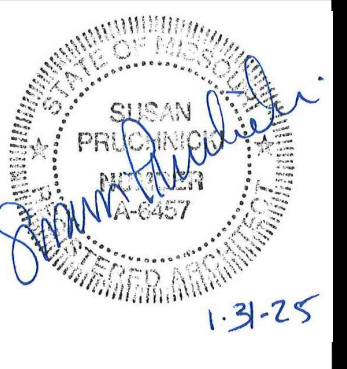
SHEET  
**A202 OF 17**



1 NEW STAIR INSTALLATION  
A203 SCALE: NTS



2 STAIRS  
A203 SCALE: NTS



The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are not the work of the architect, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	DRAWN BY: KFO	CHECKED BY: KFO
---------	-------------------------	---------------	-----------------

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
ENERGY MANAGEMENT  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

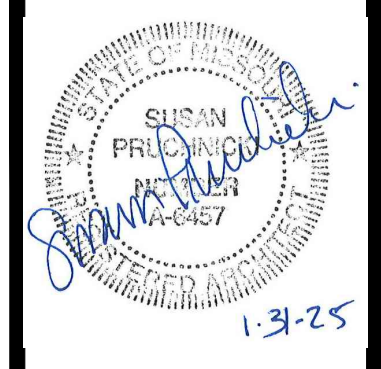
PROJECT NUMBER  
CP243181

SHEET  
A203 OF 17









**EXISTING ROOF CONSTRUCTION:**

- 1. PLYWOOD SHEATHING, VAPOR BARRIER, 2 LAYERS 1.5" FLATSTOCK POLYISO, 2 PLY MODIFIED BITUMEN ROOFING.
- 2. PLYWOOD SHEATHING, VAPOR BARRIER, 2 LAYERS 1.5" FLATSTOCK POLYISO, 2 PLY MODIFIED BITUMEN ROOFING.
- 3. PLYWOOD SHEATHING, ASPHALT VAPOR BARRIER, 1" EPS, 1/2" FIBERBOARD, 2 PLY MODIFIED BITUMEN ROOFING.
- 4. PLYWOOD SHEATHING, ASPHALT VAPOR BARRIER, 1" EPS, 1/2" FIBERBOARD, 2 PLY MODIFIED BITUMEN ROOFING.
- 5. PLYWOOD SHEATHING, ASPHALT VAPOR BARRIER, 1" EPS, 1/2" FIBERBOARD, 2 PLY MODIFIED BITUMEN ROOFING.
- 6. PLYWOOD SHEATHING, VAPOR BARRIER, 1" EPS, 1/2" FIBERBOARD, 2 PLY MODIFIED BITUMEN ROOFING.
- 7. PLYWOOD SHEATHING, VAPOR BARRIER, 1" EPS, 1/2" FIBERBOARD, 2 PLY MODIFIED BITUMEN ROOFING.
- 8. PLYWOOD SHEATHING, VAPOR BARRIER, RIGID INSULATION, 2 PLY MODIFIED BITUMEN ROOFING.
- 9. PLYWOOD SHEATHING, VAPOR BARRIER, RIGID INSULATION, 2 PLY MODIFIED BITUMEN ROOFING.
- 10. PLYWOOD SHEATHING, VAPOR BARRIER, 2 LAYERS 1.5" FLATSTOCK POLYISO, 2 PLY MODIFIED BITUMEN ROOFING.

**DEMOLITION NOTES:**

- 1. CONTRACTOR RESPONSIBLE TO RECORD CONDITIONS OF EACH DAY'S WORK AREA PRIOR TO BEGINNING DEMOLITION.
- 2. CONTRACTOR TO ONLY TEAR-OFF SECTIONS OF MATERIAL WHICH CAN BE SEALED WATERTIGHT DAILY REGARDLESS OF DRY, OVERNIGHT WEATHER FORECASTS.
- 3. REMOVE ALL ASSOCIATED SHEET METAL COMPONENTS.
- 4. ALL EXISTING ROOF DRAINS TO REMAIN. REMOVE STRAINER AND CLAMPING RING FOR REINSTALLATION, REPLACE ANY MISSING, DETERIORATED, DEFECTIVE, OR BROKEN DRAIN COMPONENTS.
- 5. REMOVE COUNTER FLASHING FOR REUSE.
- 6. REMOVE EXISTING CURB FLASHING. REMOVE ALL PROJECTIONS AND SLEEPERS.
- 7. REMOVE EXISTING ROOFING MATERIAL DOWN TO THE STRUCTURAL DECK SURFACE.
- 8. REMOVE 3 LAYERS OF FIBER BOARD.

The Professional Architect's seal and signature are affixed to this sheet only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are void and of no effect. This architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, the media should not be considered a certified document.

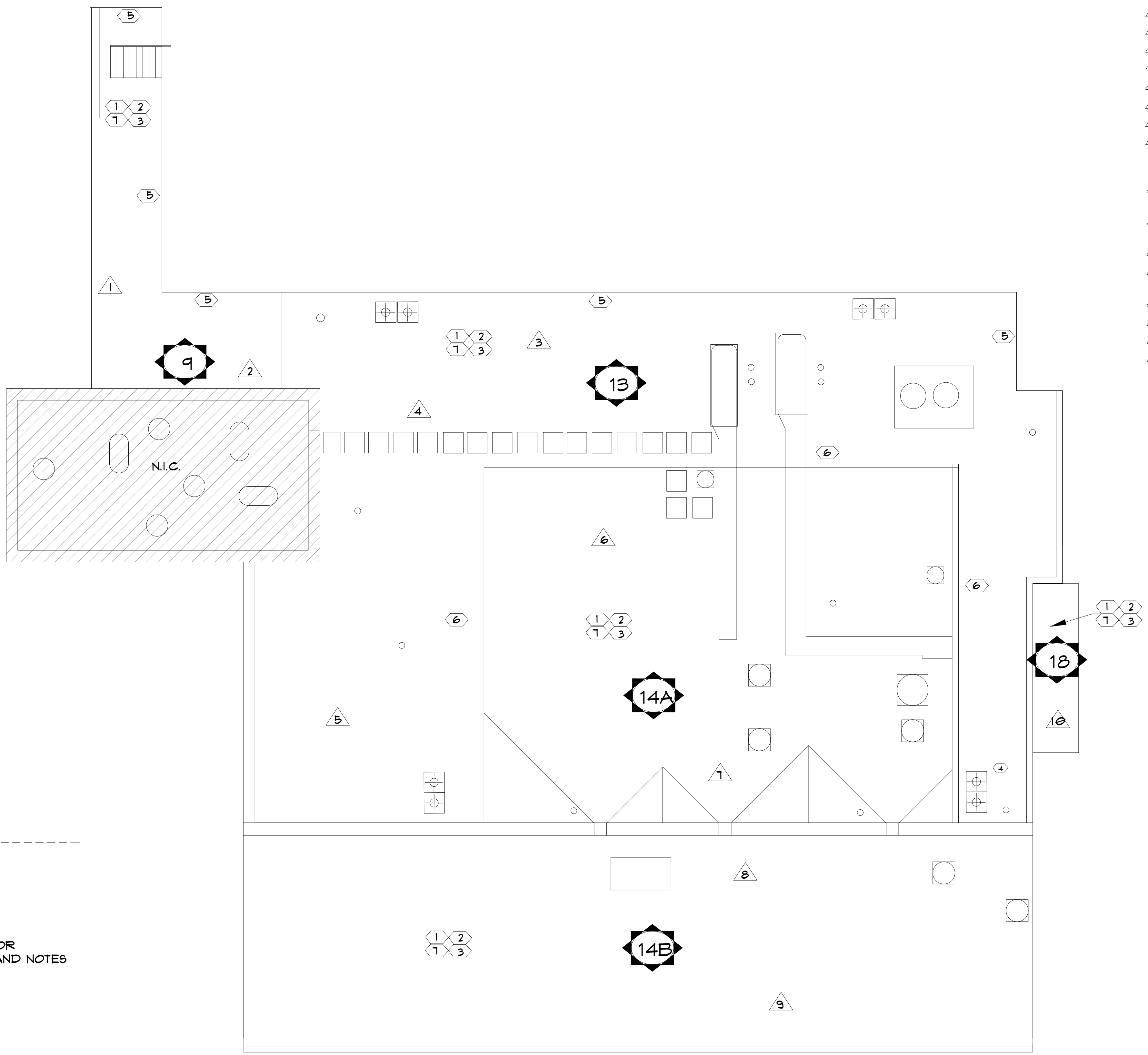
2/11/25 ISSUED FOR CONSTRUCTION  
 DRAWN BY: KFO  
 CHECKED BY: KFO

**RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.**  
 410 SOVEREIGN COURT #18  
 MANCHESTER, MO 63011  
 (636)-391-2185

**VARIOUS LOCATIONS - ROOF REPLACEMENTS MISSOURI ATHLETIC TRAINING CENTER COLUMBIA, BOONE COUNTY, MISSOURI, 65211 RENOVATION PLAN**

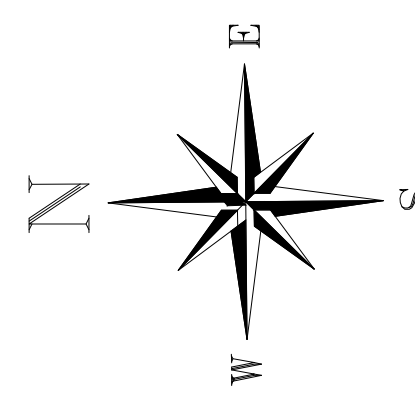
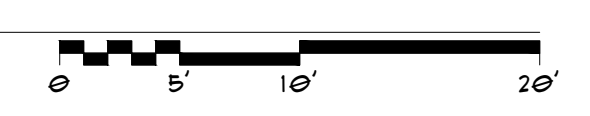
PROJECT NUMBER  
**CP243181**

SHEET  
**A302 OF 17**



SEE SHEET A301 FOR STAGING LAYOUT AND NOTES

**1 DEMOLITION PLAN**  
**A302 SCALE: 1/8" = 1'-0"**

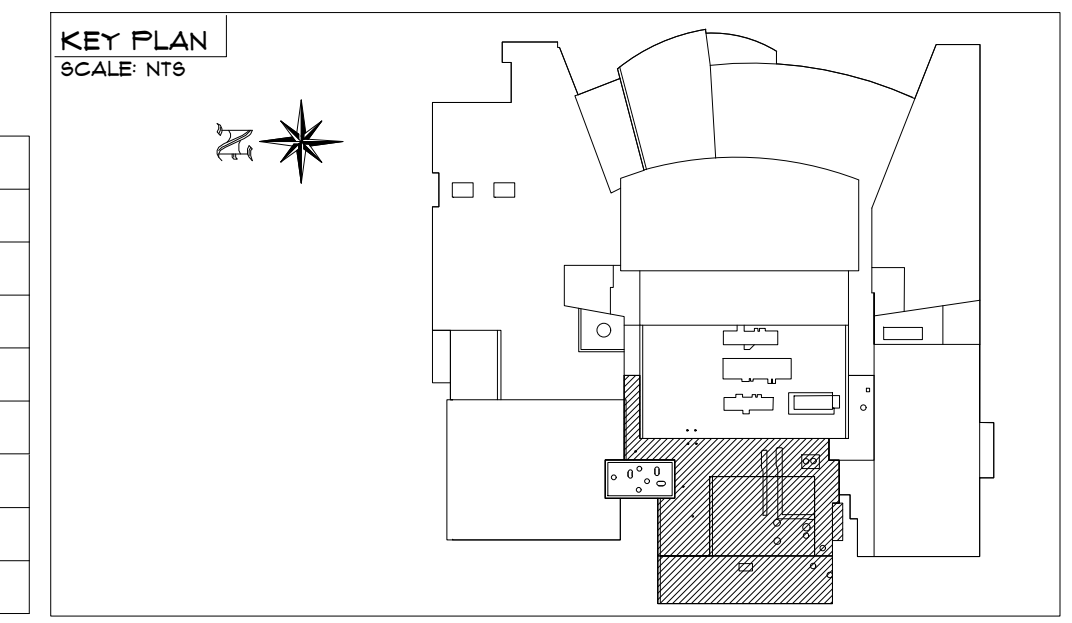


**AREA LEGEND**

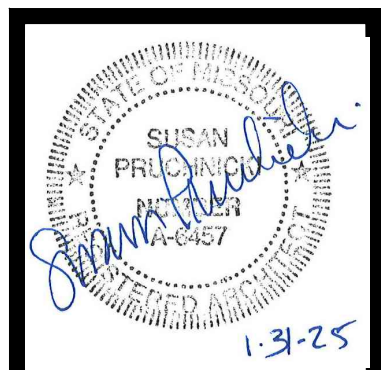
⊗	641 SQ. FT.
⊗	3,938 SQ. FT.
⊗	2,842 SQ. FT.
⊗	2,840 SQ. FT.

**ROOFING LEGEND**

①	DEMOLITION KEY NOTE
⊕	ROOF DRAIN
⊖	DOMED VENTILATOR
○	SOL STACK
△	CORE EXTRACTION
⊗	RENOVATION KEY NOTE
⊗	ROOF AREA IDENTIFIER
⊗	SCUPPER







The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal and signature are not part of this contract, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal.  
This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

ISSUED FOR CONSTRUCTION  
2/11/25  
DRAWN BY: KFO  
CHECKED BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
MISSOURI ATHLETIC TRAINING CENTER  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

PROJECT NUMBER  
CP243181  
SHEET  
A303 OF 17

**RENOVATION NOTES:**

1. CONTRACTOR RESPONSIBLE TO FIELD VERIFY ALL MEASUREMENTS PRIOR TO MATERIAL INSTALLATION.
2. SWEEEP DECK FREE OF DEBRIS.
3. INSTALL 5/8" GYPSUM BASE BOARD MECHANICALLY FASTENED INTO DECKING PER FM 1-90.
4. INSTALL ONE (1) LAYER OF SELF ADHERED VAPOR BARRIER TO A PRIMED GYPSUM SUBSTRATE.
5. INSTALL TWO (2) LAYERS 2.0" POLYISO INSULATION ADHERED WITH TWO PART LOW RISE FOAM PER FM 1-90 REQUIREMENTS.
6. INSTALL ONE BASE LAYER OF 1.5" POLYISO INSULATION OVER 5/8" GYPSUM LOW RISE FOAM FOLLOWED BY AN 1/8"-12" TAPERED.
7. INSTALL 1/2" - 12" TAPERED POLYISO INSULATION WITH TWO PART FOAM PER FM 1-90.
8. INSTALL 4' x 8' x 1/2" MARINE GRADE PLYWOOD LANDINGS IN PLACE OF COVER BOARD AT ACCESS POINTS.
9. 1/2" - 12" TAPERED POLYISO CRICKETS AT PROJECTION UP SLOPE AND AT POTENTIAL PONDING AREAS.
10. INSTALL 1/2" EXTERIOR GRADE PLYWOOD MECHANICALLY ATTACHED TO WALL SURFACES TO RECEIVE EPDM FULLY ADHERED FLASHING.
11. INSTALL ONE (1) LAYER 1/2" HD COVERBOARD INSULATION ADHERED WITH TWO PART LOW RISE FOAM PER FM 1-90 REQUIREMENTS.
12. CONTRACTOR TO RAISE ALL CURBS WHERE POSSIBLE TO A MIN OF 6" OVER FINISHED MEMBRANE SURFACE.
13. INSTALL NEW 24 GA COUNTERFLASHINGS. FASTEN 12" O.C.
14. INSTALL NEW 24 GA KYNAR COATED COUNTER FLASHING INTO CLEAN, EXISTING REGLET RECEIVER WITH DOW 790 SEALANT ATOP CAULK TRAY.
15. INSTALL ONE (1) LAYER OF 60 MIL EPDM MEMBRANE WITH 3" OVERLAPPING SEAMS WITH EPDM SEAM TAPE, FULLY ADHERE MEMBRANE WITH LOW-VOC MEMBRANE ADHESIVE.
16. INSTALL FULLY-ADHERED EPDM FLASHING OVER 2" WIDE BUTYL TAPE, TERMINATE WITH A 1" ALUMINUM TERMINATION BAR FASTENED INTO EACH GIVEN ALLOWANCE.
17. INSTALL PIPE SUPPORTS BELOW 6" SMALL A/C UNITS, GAS LINES, AND CONDUIT LINES.
18. INSTALL WALK PADS AT SERVICEABLE EQUIPMENT, LADDER, AND DOORS ACCESS POINTS.
19. ALL EXISTING ROOF DRAINS TO REMAIN, CONTRACTOR TO INSTALL 48" TAPERED SUMPDS AT DRAIN BEFORE INSTALLING EPDM MEMBRANE FLASHINGS. INSTALL NEW HARDWARE AND STRAINERS.
20. INSTALL GREASE TRAP TO SURROUND ACTIVE FRYER EXHAUST FANS.
21. SNAKE ALL DRAINS FOLLOWING PROJECT COMPLETION.
22. CONTRACTOR RESPONSIBLE FOR RE-INSTALLATION AND RE-CERTIFICATION OF LIGHTNING PROTECTION SYSTEM.
23. INSTALL 24 GA KYNAR COATED GUTTER W/ 24 GA. KYNAR COATED DRIP EDGE.
24. INSTALL METAL-ERA FASCIA SYSTEM.
25. CONTACT THIRD PARTY FOR RE-INSTALLATION AND CERTIFICATION OF LIGHTNING ARREST SYSTEM.
26. REINSTALL METAL COUNTERFLASHING.

**ROOF #9:**

1. MECHANICALLY FASTEN 5/8" TYPE X GYPSUM /SECUREROCK OR EQUAL WITH FM 1-90 FASTENING PATTERN (MINIMUM 16 FASTENERS PER 4x8).
2. INSTALL MANUFACTURER APPROVED (SA) SELF-ADHERED VAPOR BARRIER TO THE PRIMED GYPSUM SUBSTRATE.
3. INSTALL TWO LAYERS OF 2.0" POLYISOCYANURATE INSULATION ADHERED WITH 2-PART LOW RISE FOAM.
4. INSTALL ONE (1) LAYER OF 1/2" HD POLY ISO.
5. INSTALL 60 MIL EPDM MEMBRANE.

**ROOF #13:**

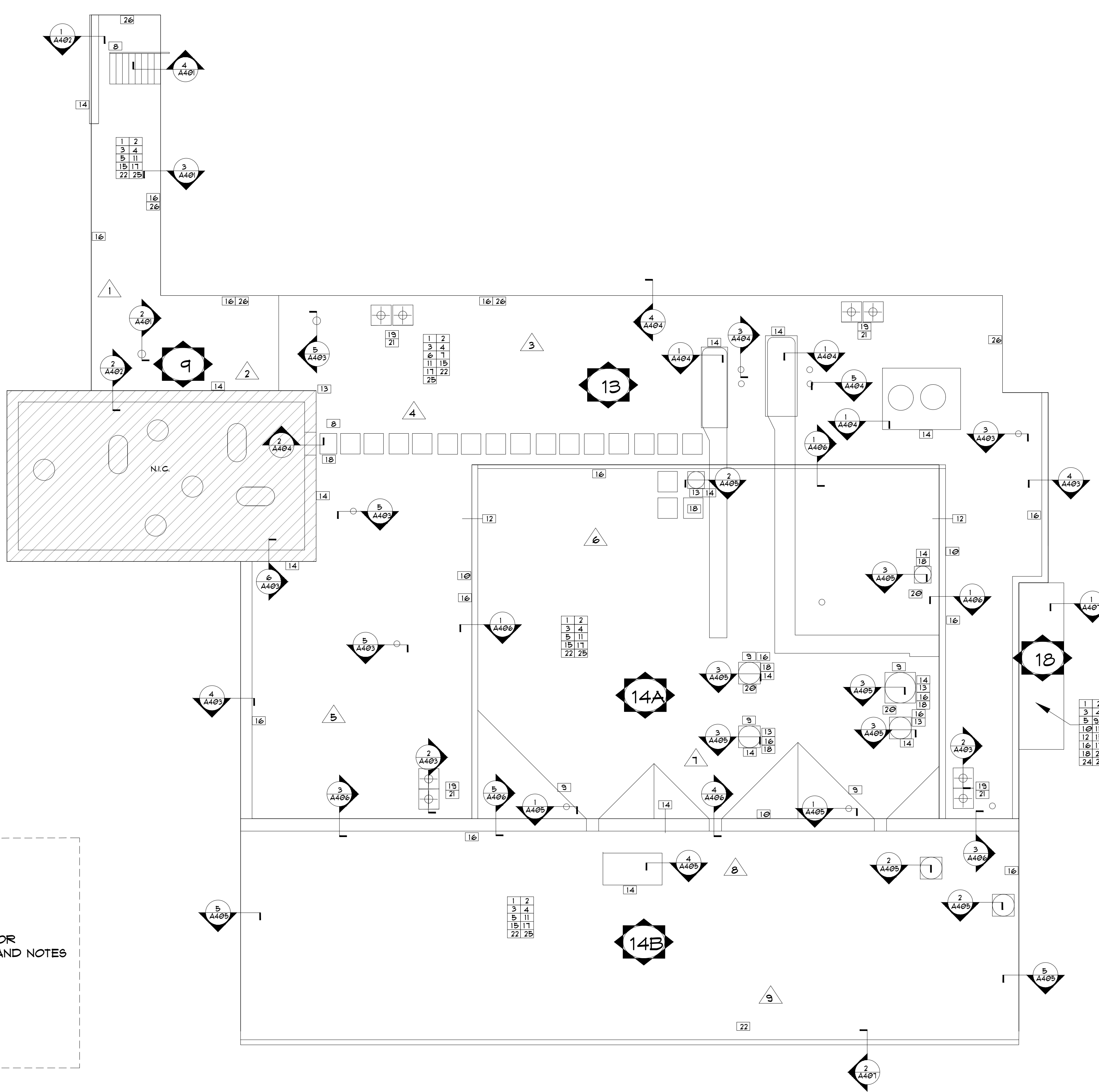
1. MECHANICALLY FASTEN 5/8" TYPE X GYPSUM /SECUREROCK OR EQUAL WITH FM 1-90 FASTENING PATTERN (MINIMUM 16 FASTENERS PER 4x8).
2. INSTALL MANUFACTURER APPROVED (SA) SELF-ADHERED VAPOR BARRIER.
3. INSTALL ONE (1) LAYER OF 1.5" POLYISOCYANURATE INSULATION BASE LAYER LOW RISE FOAMED TO VAPOR BARRIER.
4. INSTALL 1/8"-12" TAPERED POLYISOCYANURATE INSULATION.
5. INSTALL ONE (1) LAYER OF 1/2" HD COVERBOARD.
6. INSTALL 60 MIL EPDM MEMBRANE.

**ROOF #14A & 14B:**

1. MECHANICALLY FASTEN 5/8" TYPE X GYPSUM /SECUREROCK OR EQUAL WITH FM 1-90 FASTENING PATTERN (MINIMUM 16 FASTENERS PER 4x8).
2. INSTALL MANUFACTURER APPROVED SELF-ADHERED (SA) VAPOR BARRIER TO THE PRIMED GYPSUM SUBSTRATE.
3. INSTALL TWO (2) LAYERS OF 2.0" POLYISOCYANURATE INSULATION ADHERED WITH 2-PART LOW RISE FOAM.
4. INSTALL ONE (1) LAYER OF 1/2" HD COVERBOARD.
5. INSTALL 60 MIL EPDM MEMBRANE.

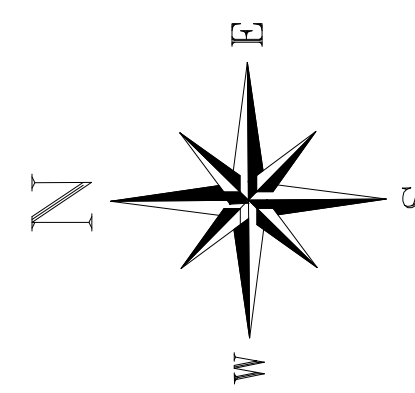
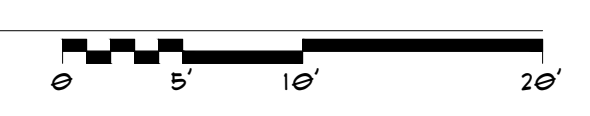
**ROOF #18:**

1. MECHANICALLY FASTEN 5/8" TYPE X GYPSUM /SECUREROCK OR EQUAL WITH FM 1-90 FASTENING PATTERN (MINIMUM 16 FASTENERS PER 4x8).
2. INSTALL MANUFACTURER APPROVED SELF-ADHERED (SA) VAPOR BARRIER TO THE PRIMED GYPSUM SUBSTRATE.
3. INSTALL TWO (2) LAYERS OF 2.0" POLYISOCYANURATE INSULATION ADHERED WITH 2-PART LOW RISE FOAM.
4. INSTALL ONE (1) LAYER OF 1/2" HD COVERBOARD.
5. INSTALL 60 MIL EPDM MEMBRANE.



SEE SHEET A301 FOR STAGING LAYOUT AND NOTES

**1** RENOVATION PLAN  
A303 SCALE: 1/8" = 1'-0"

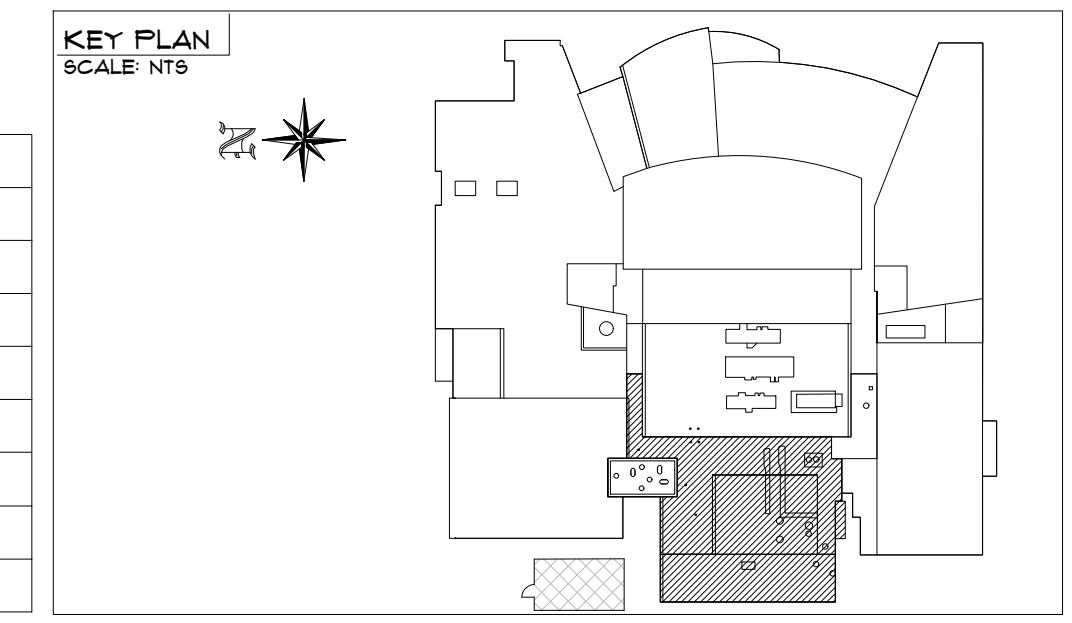


**AREA LEGEND**

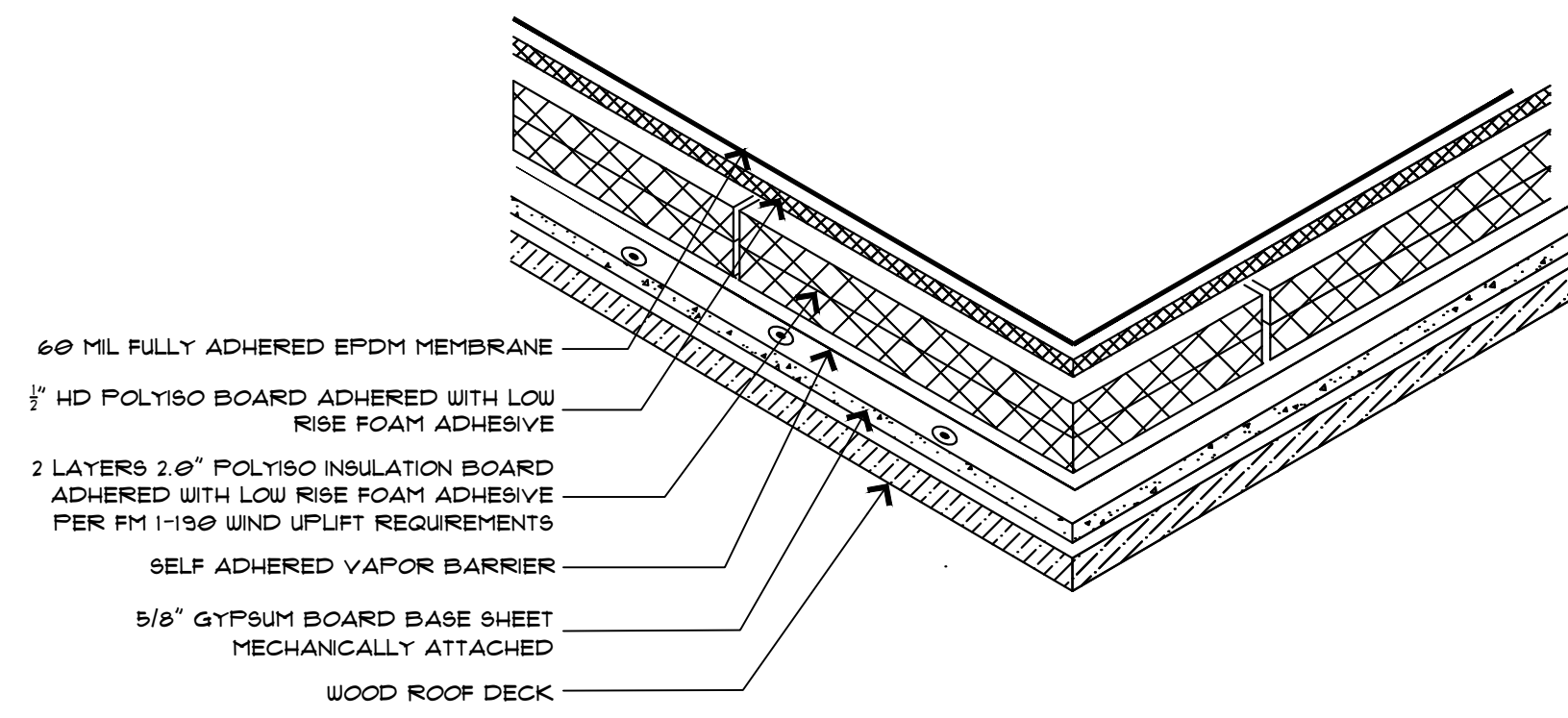
	641 SQ. FT.
	3,338 SQ. FT.
	2,842 SQ. FT.
	2,848 SQ. FT.

**ROOFING LEGEND**

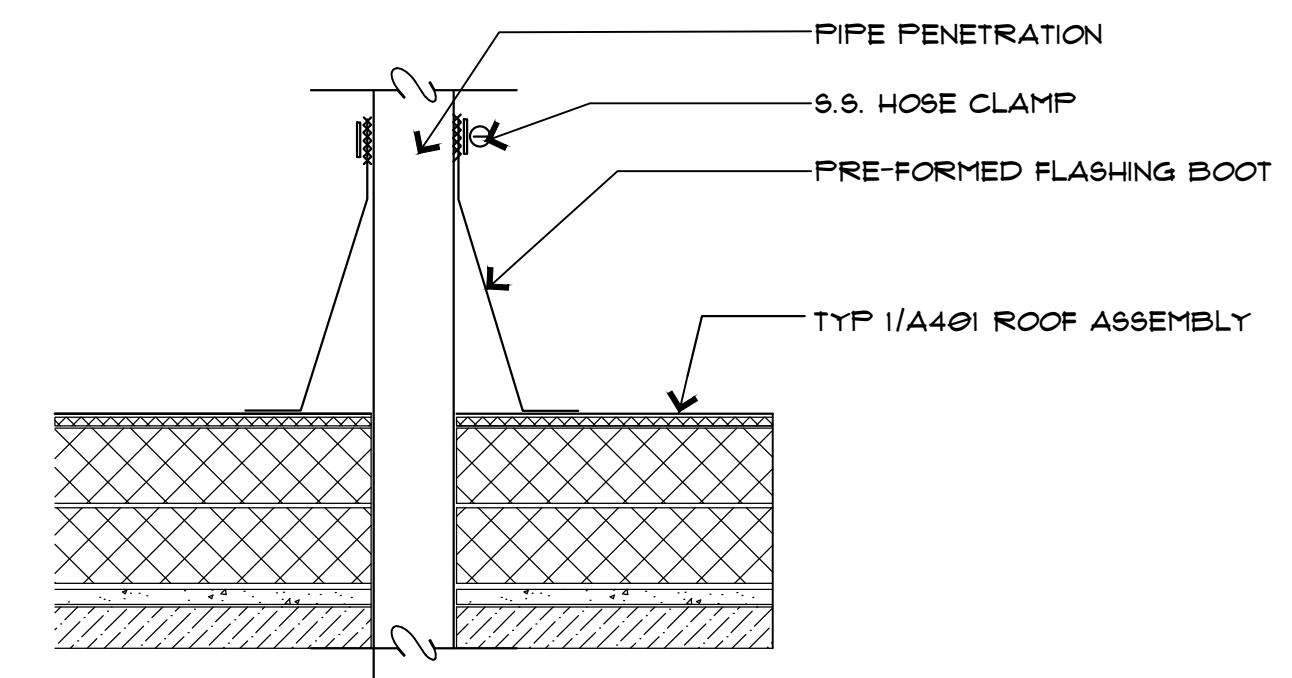
	DEMOLITION KEY NOTE
	ROOF DRAIN
	DOMED VENTILATOR
	SOIL STACK
	CORE EXTRACTION
	RENOVATION KEY NOTE
	ROOF AREA IDENTIFIER
	SCUPPER



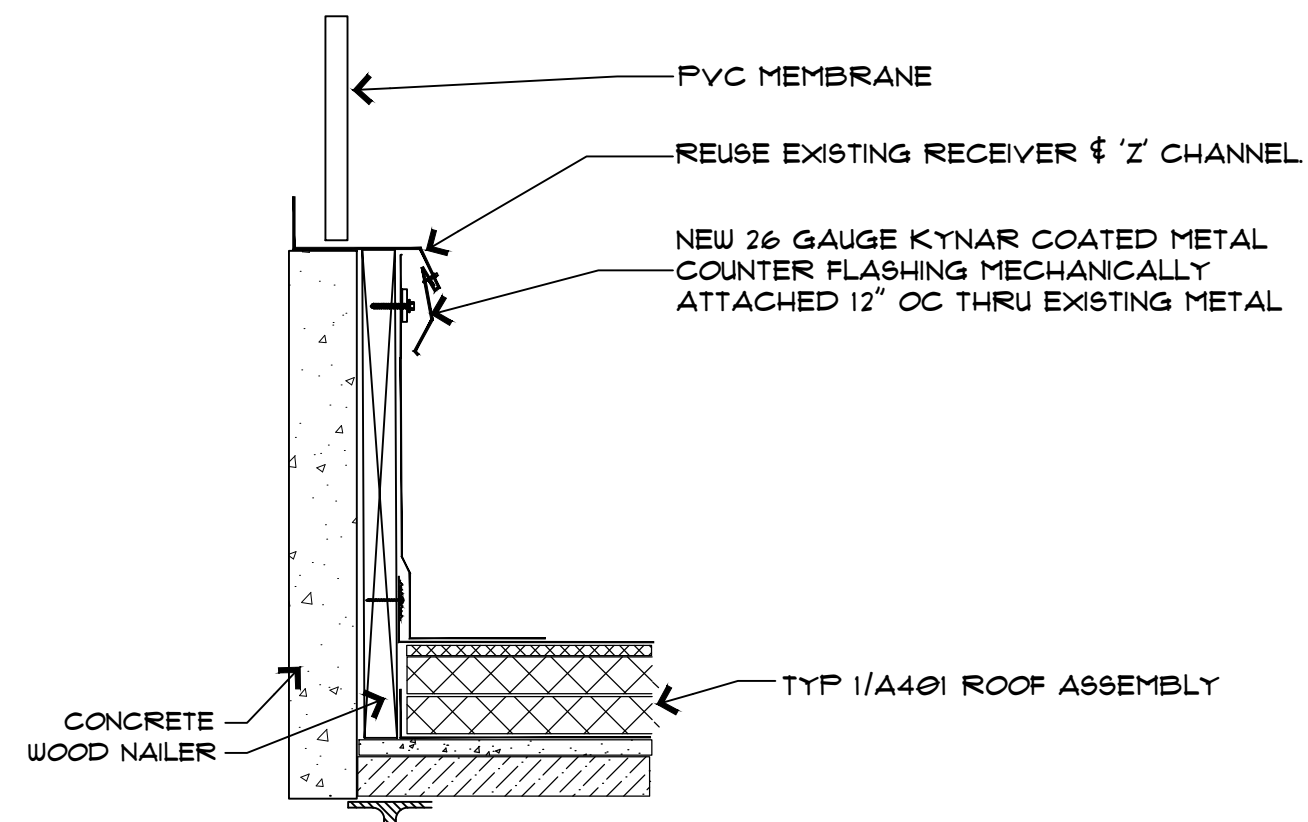




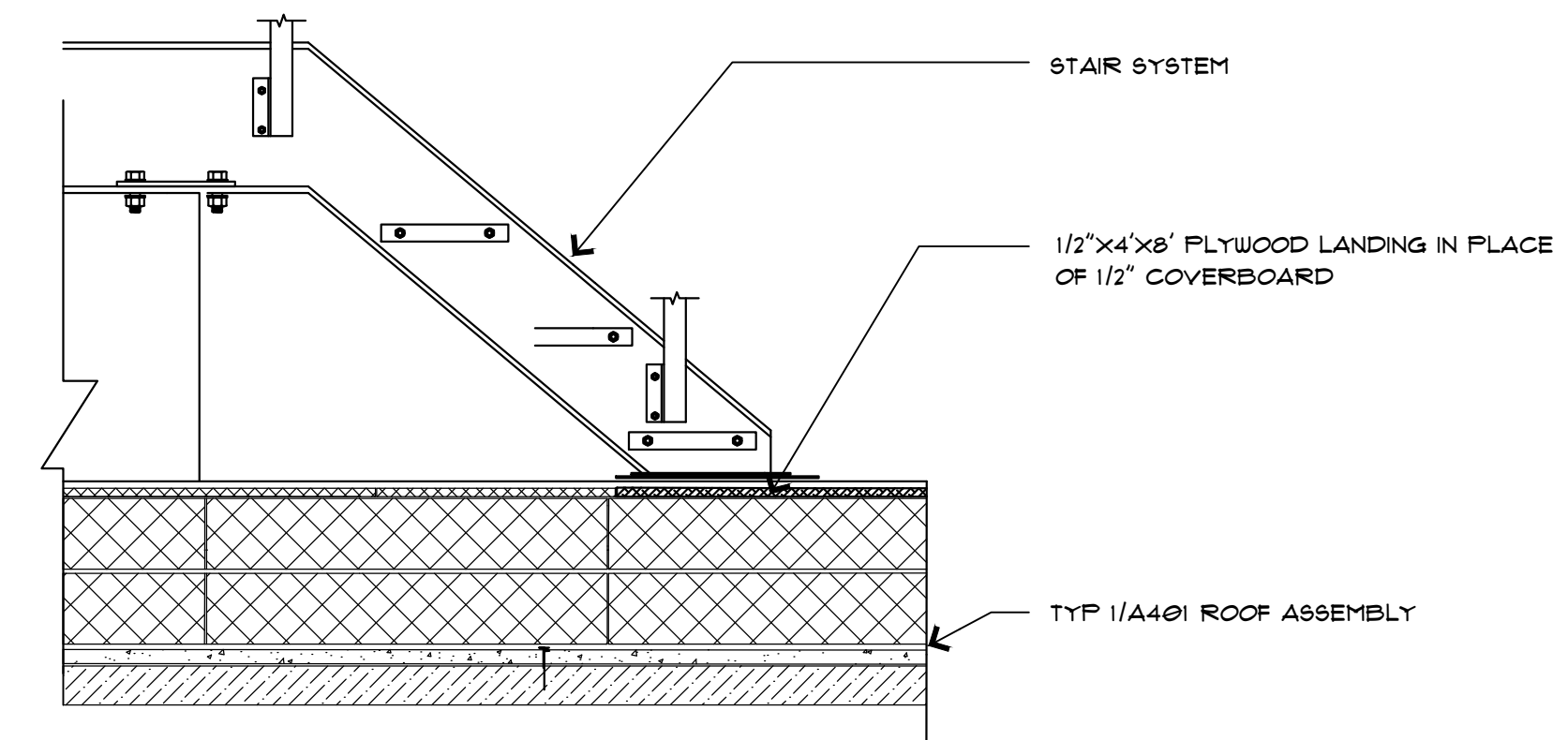
1 FIELD SECTION - WOOD PLANK DECK/TYP  
 A4401 SCALE: 1" = 1 1/2" - 0"



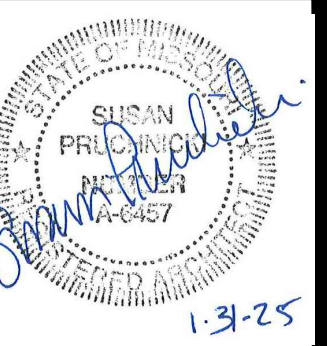
2 PIPE PENETRATION  
 A4401 SCALE: 1" = 1 1/2" - 0"



3 WALL FLASHING  
 A4401 SCALE: 1" = 1 1/2" - 0"



4 STAIR SUPPORT  
 A4401 SCALE: 1" = 1 1/2" - 0"



The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are hereby disclaimed. This architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
 410 SOVEREIGN COURT #18  
 MANCHESTER, MO 63011  
 (636)-391-2185

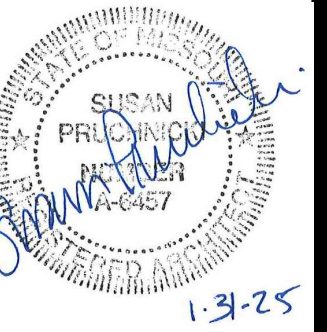
VARIOUS LOCATIONS - ROOF REPLACEMENTS  
 MISSOURI ATHLETIC TRAINING CENTER  
 COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
 RENOVATION PLAN

PROJECT NUMBER  
 CP243181

SHEET

A401 OF 17





The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are hereby disclaimed. This architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25 ISSUED FOR CONSTRUCTION  
 DRAWN BY: KFO  
 CHECKED BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
 410 SOVEREIGN COURT #18  
 MANCHESTER, MO 63011  
 (636)-391-2185

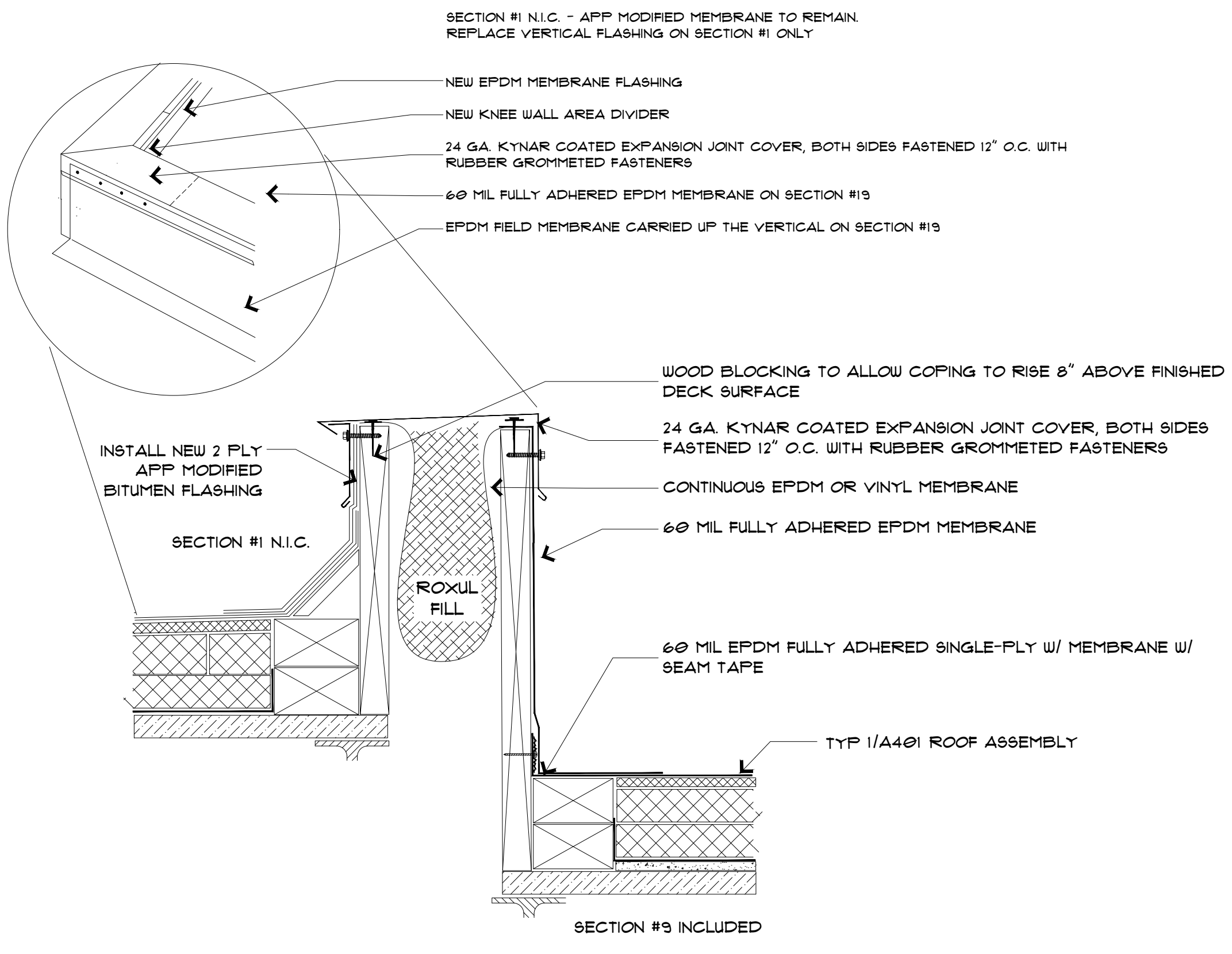
VARIOUS LOCATIONS - ROOF REPLACEMENTS  
 MISSOURI ATHLETIC TRAINING CENTER  
 COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
 RENOVATION PLAN

PROJECT NUMBER  
 CP243181

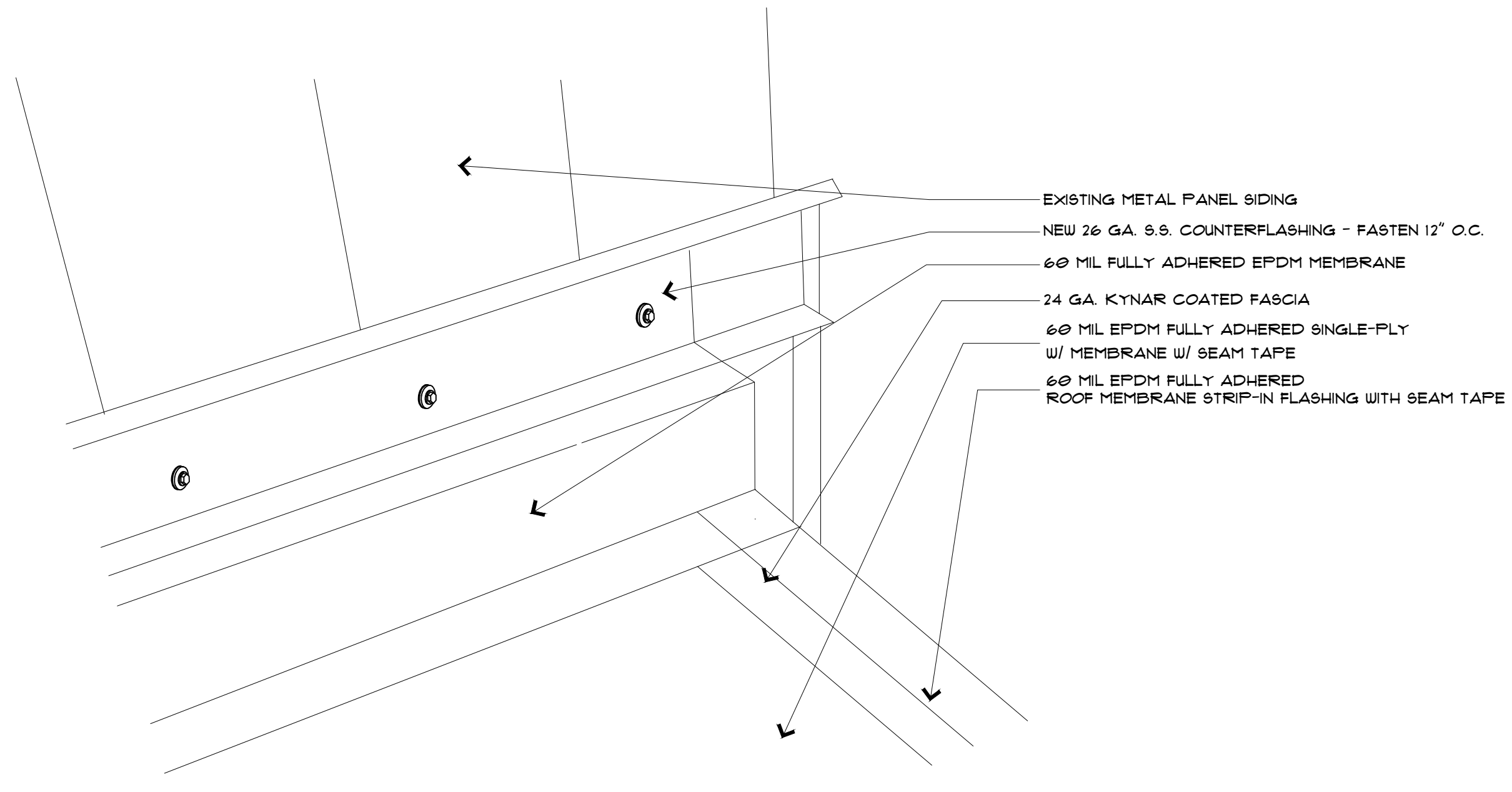
SHEET  
 A402 OF 17



**1A** NEW AREA DIVIDER  
 SCALE: N.T.S.

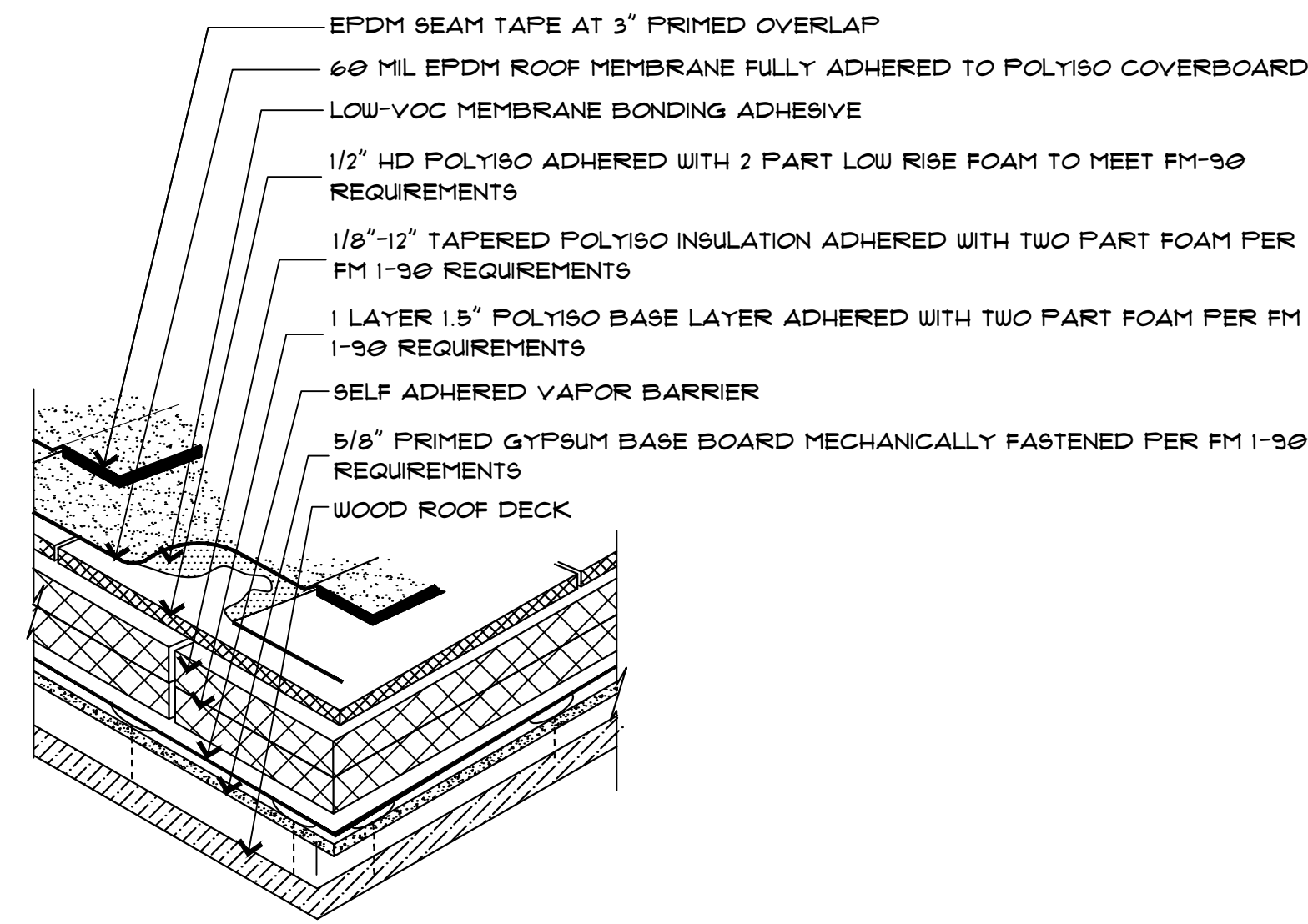


**1** AREA DIVIDER  
 SCALE: 1" = 1 1/2" - 0"

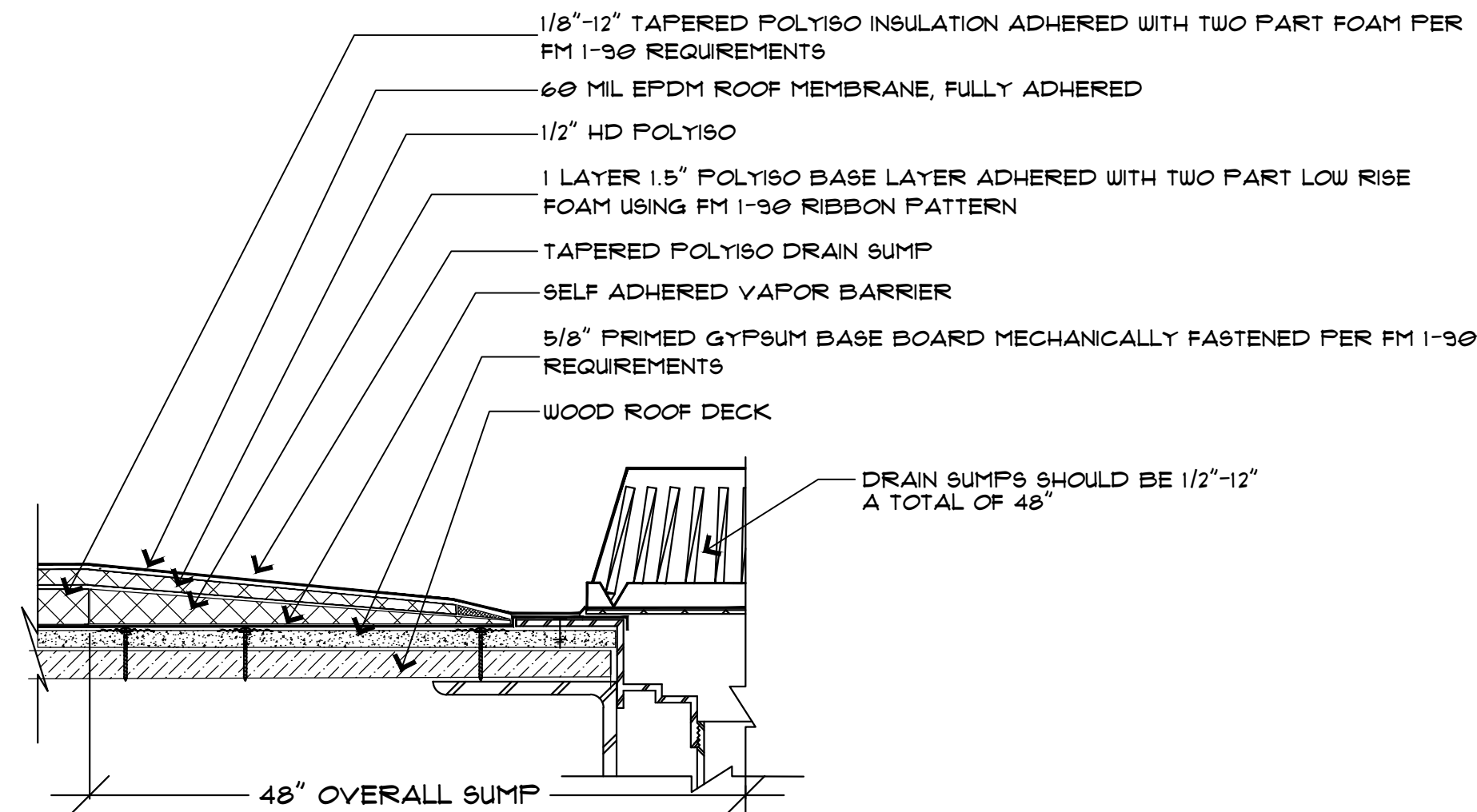


**2** PERIMETER/WALL INTERSECTION FLASHING  
 SCALE: N.T.S.



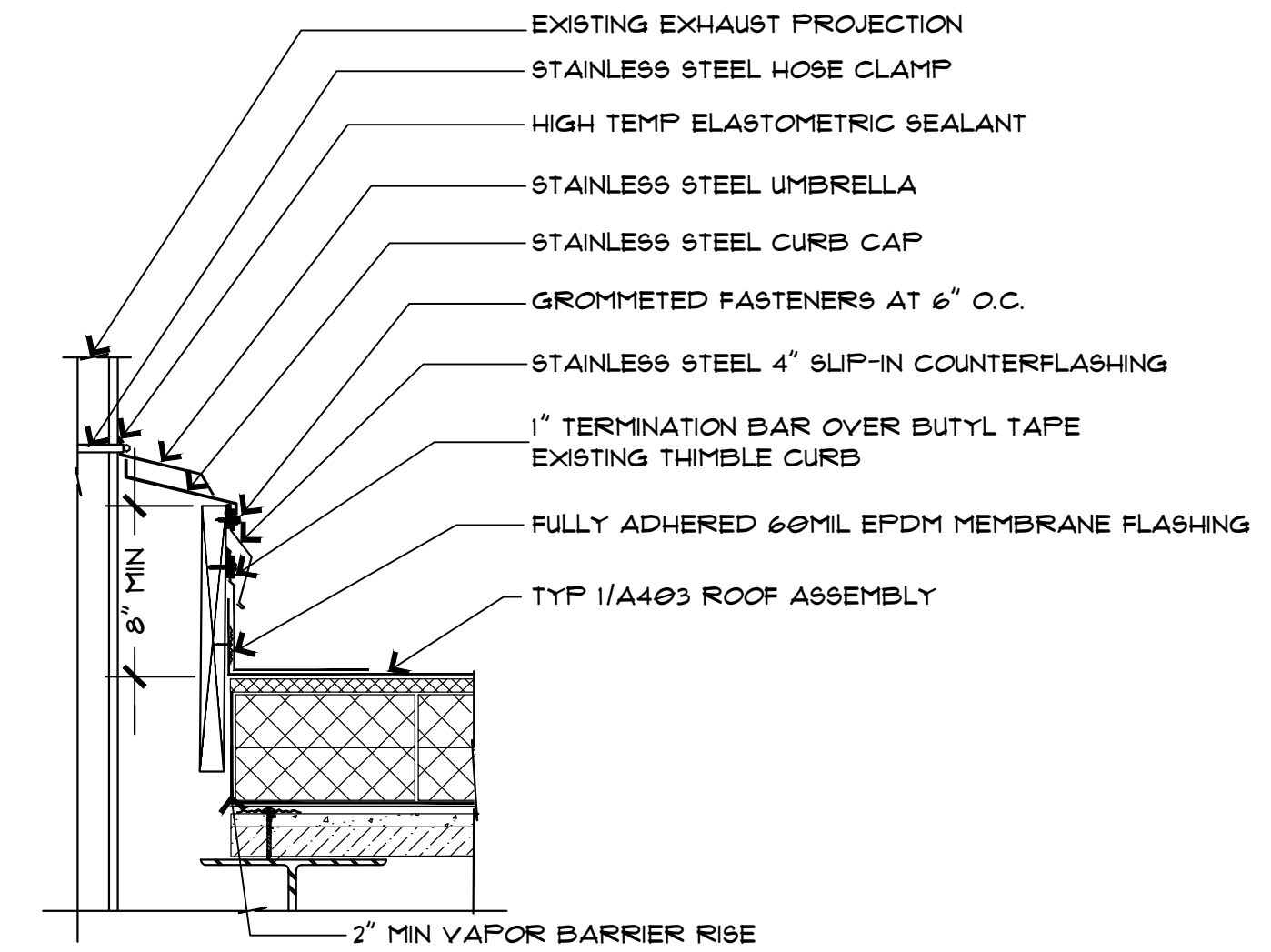


1 FIELD ASSEMBLY - SECTION 13/TYP  
A403 SCALE: 1" = 1 1/2" - 0"

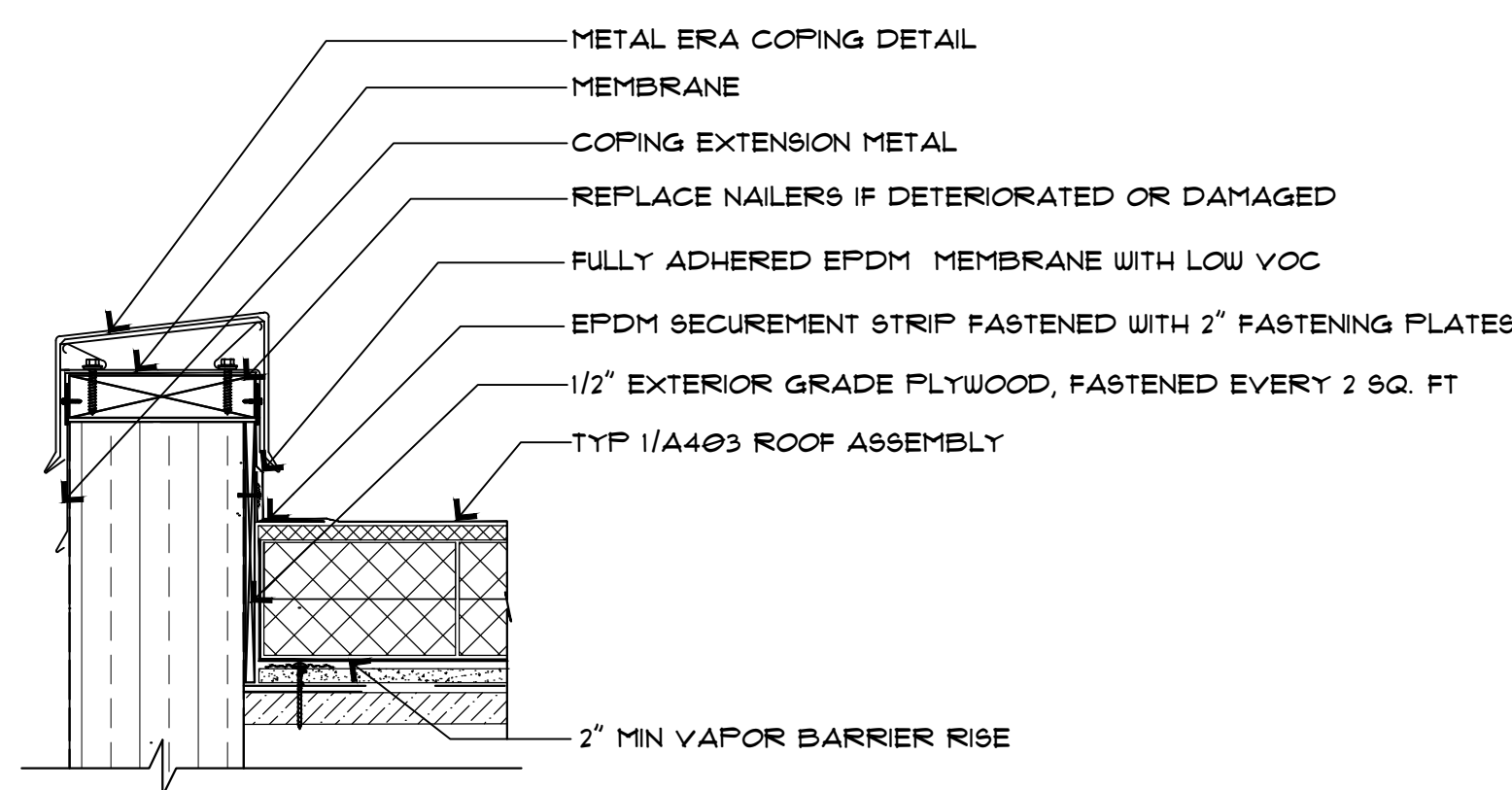


NOTES:  
- REPLACE STRAINER IF MISSING, BROKEN, OR MADE OF PLASTIC  
- REPLACE DRAIN FASTENING HARDWARE IF BROKEN OR MISSING

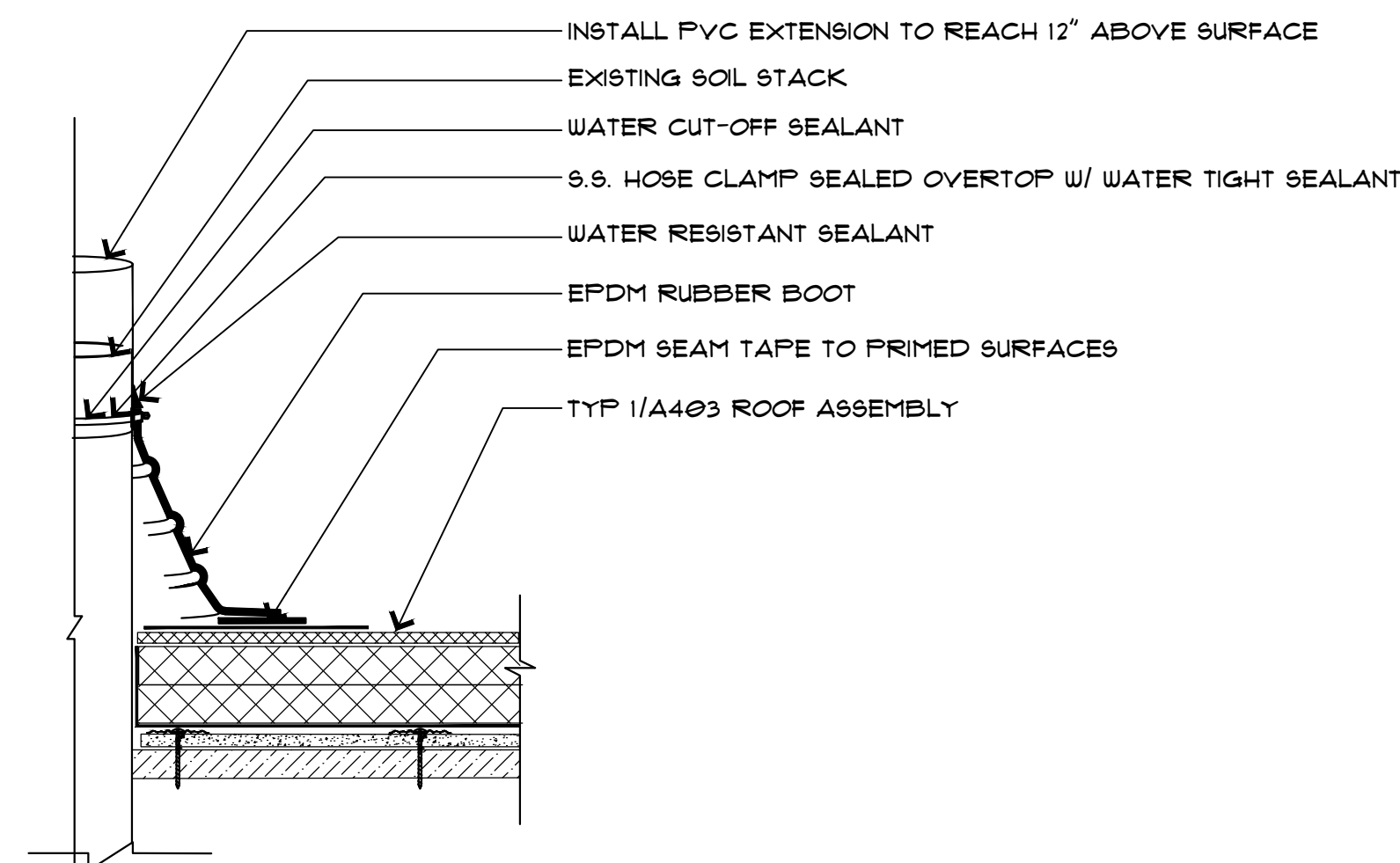
2 DRAIN FLASHING  
A403 SCALE: 1" = 1 1/2" - 0"



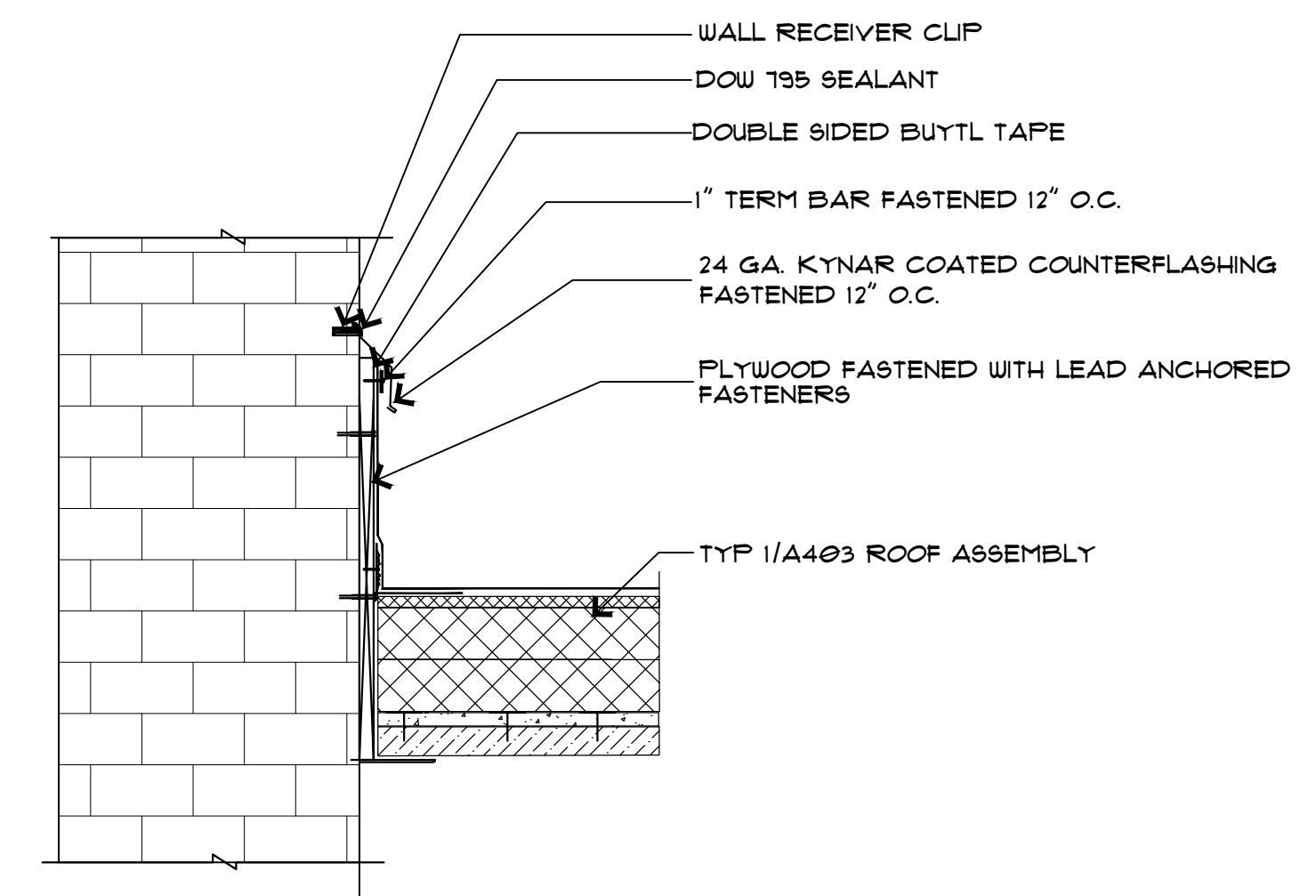
3 EXHAUST FLASHING  
A403 SCALE: 1" = 1 1/2" - 0"



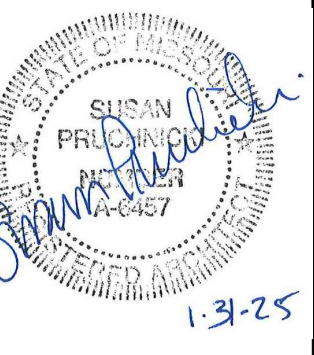
4 PARAPET COPING  
A403 SCALE: 1" = 1 1/2" - 0"



5 SOIL STACK BOOT  
A403 SCALE: 1" = 1 1/2" - 0"



6 WALL FLASHING  
A403 SCALE: 1" = 1 1/2" - 0"



The Professional Architect seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are not to be used in connection with this project, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

ISSUED FOR CONSTRUCTION  
2/11/25  
DRAWN BY: KFO  
CHECKED BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
MISSOURI ATHLETIC TRAINING CENTER  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

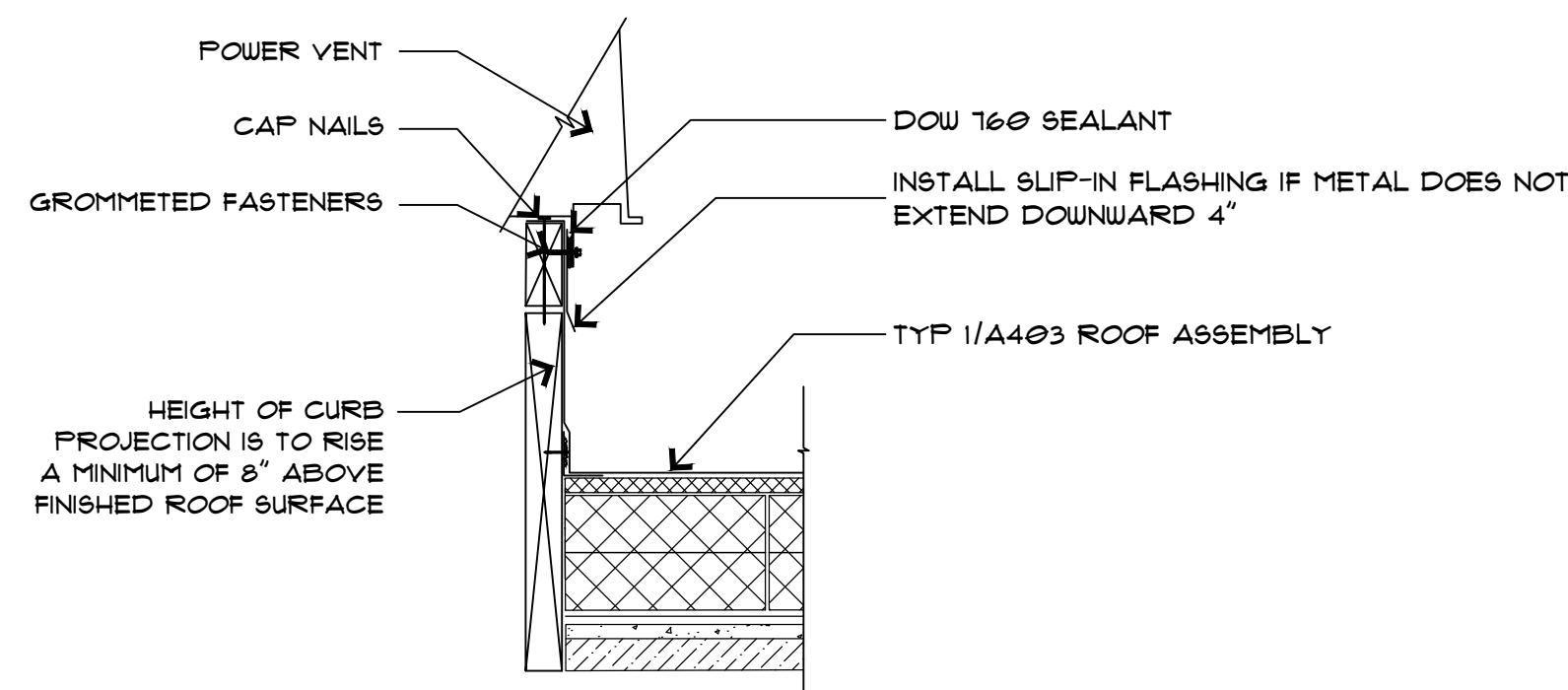
PROJECT NUMBER

CP243181

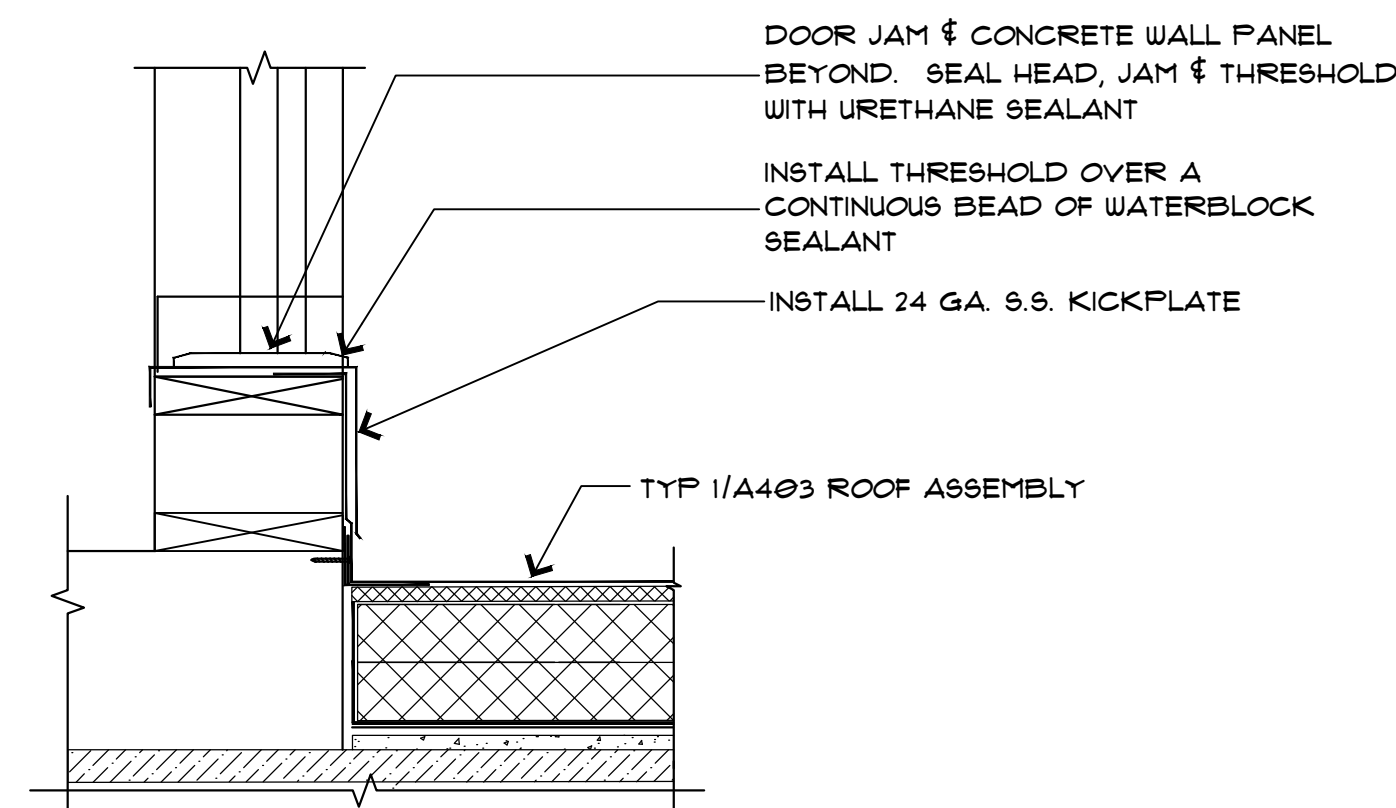
SHEET

A403 OF 17

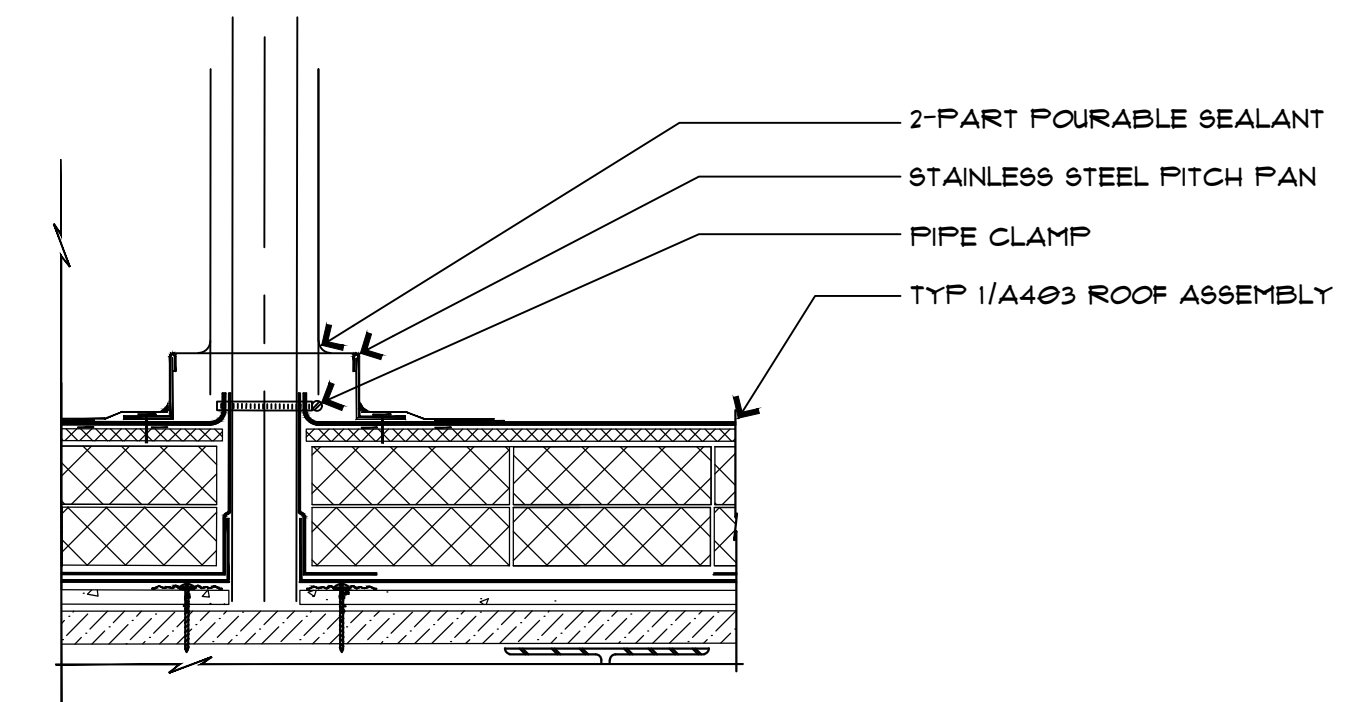




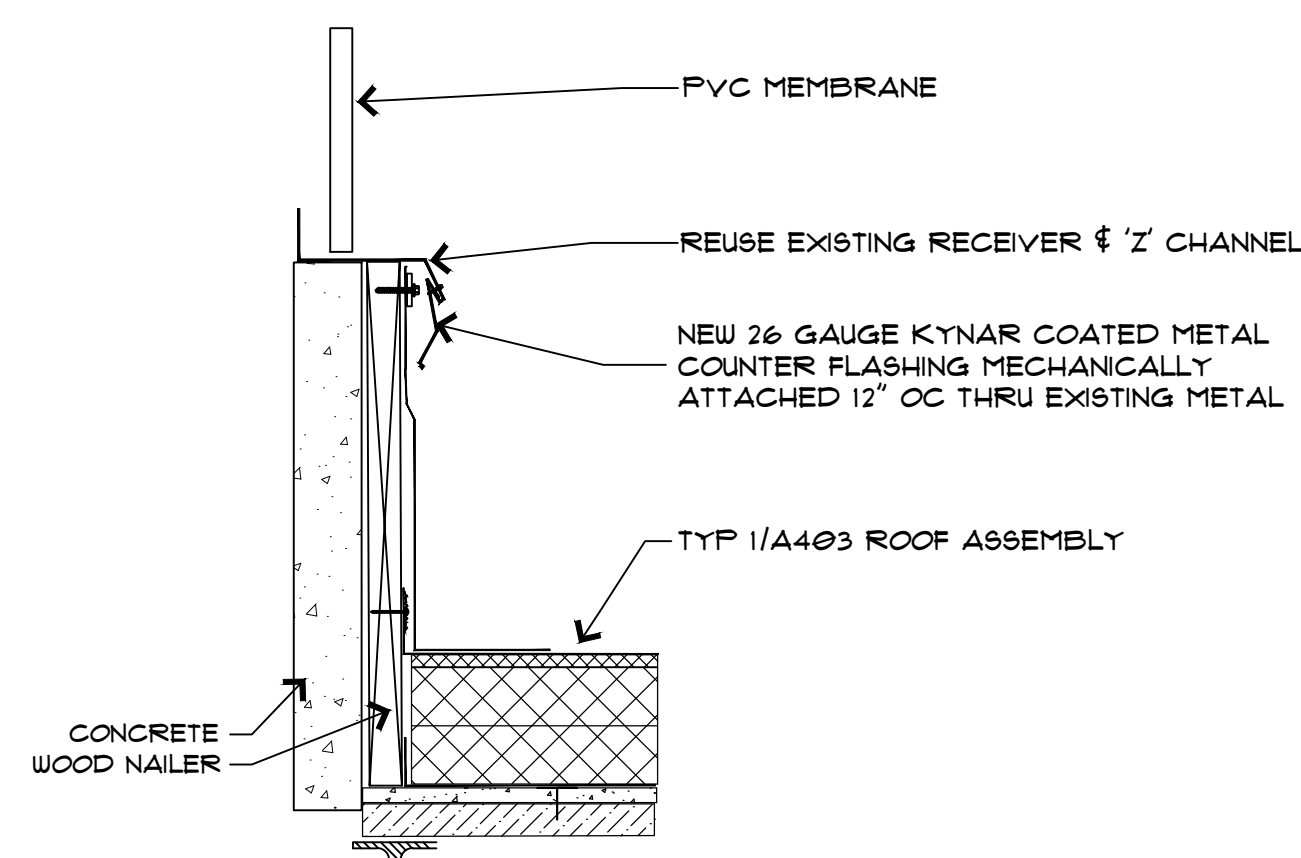
1 CURB FLASHING  
A404 SCALE: 1" = 1 1/2" - 0"



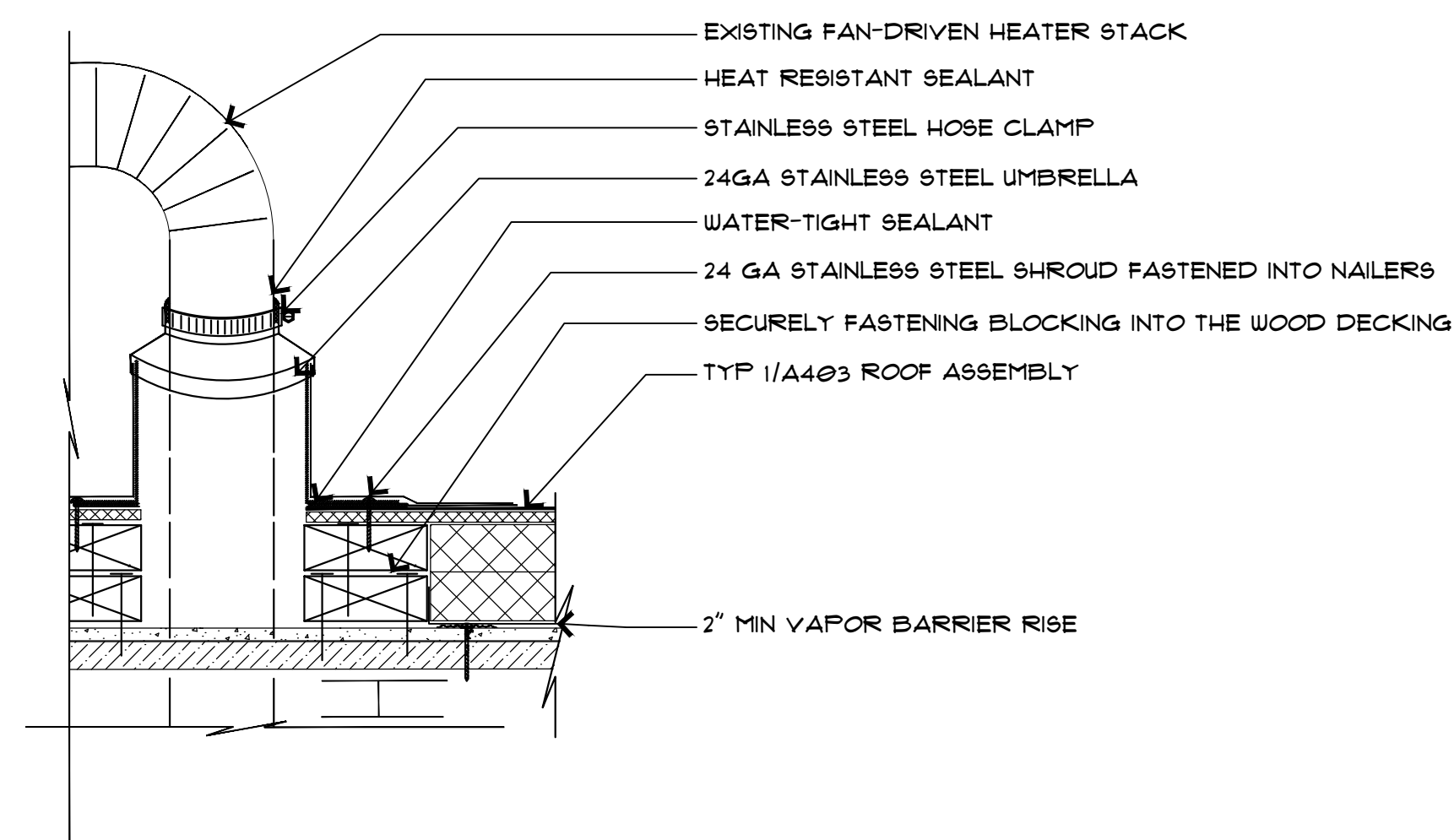
2 DOOR THRESHOLD  
A404 SCALE: 1" = 1 1/2" - 0"



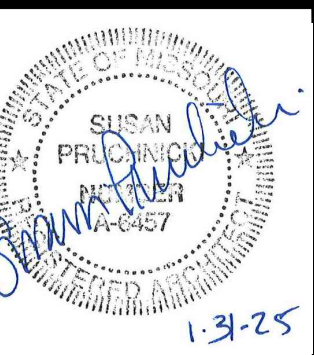
3 PITCH PAN  
A404 SCALE: 1" = 1 1/2" - 0"



4 WALL FLASHING  
A404 SCALE: 1" = 1 1/2" - 0"



5 GOOSE NECK HOT STACK  
A404 SCALE: 1" = 1 1/2" - 0"



The Professional Architect seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are hereby rejected, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

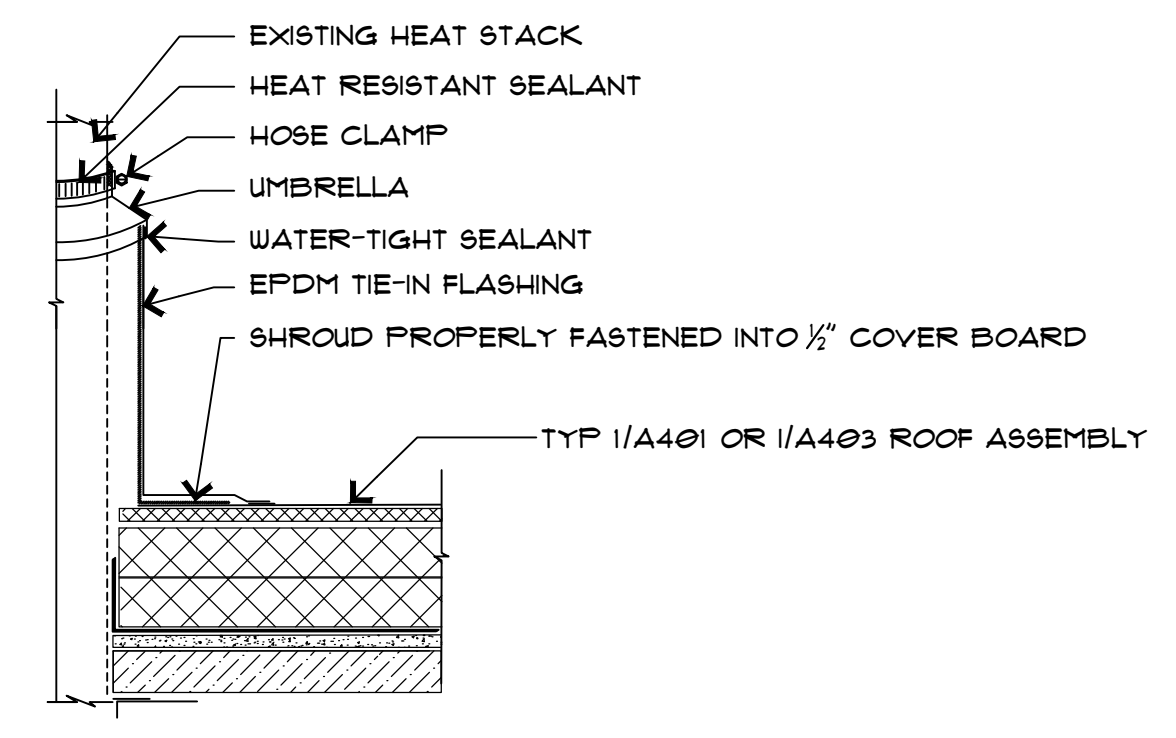
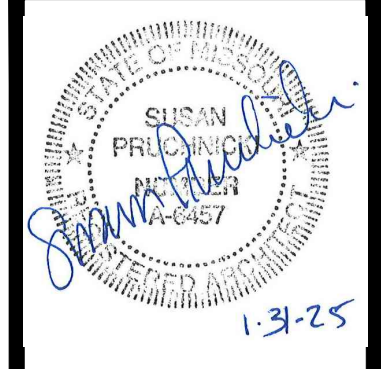
**RMT**  
RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
MISSOURI ATHLETIC TRAINING CENTER  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

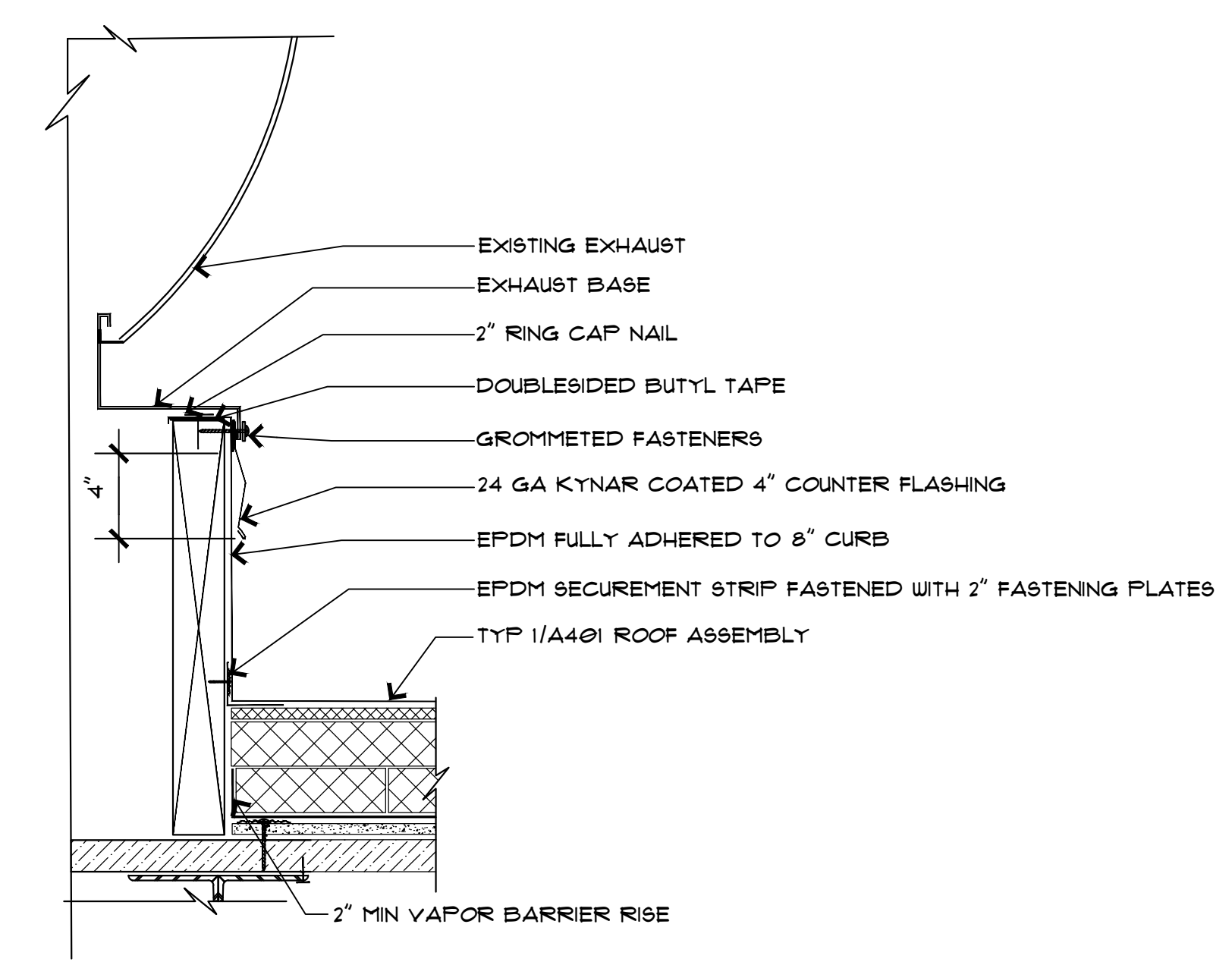
PROJECT NUMBER  
CP243181

SHEET  
A404 OF 17

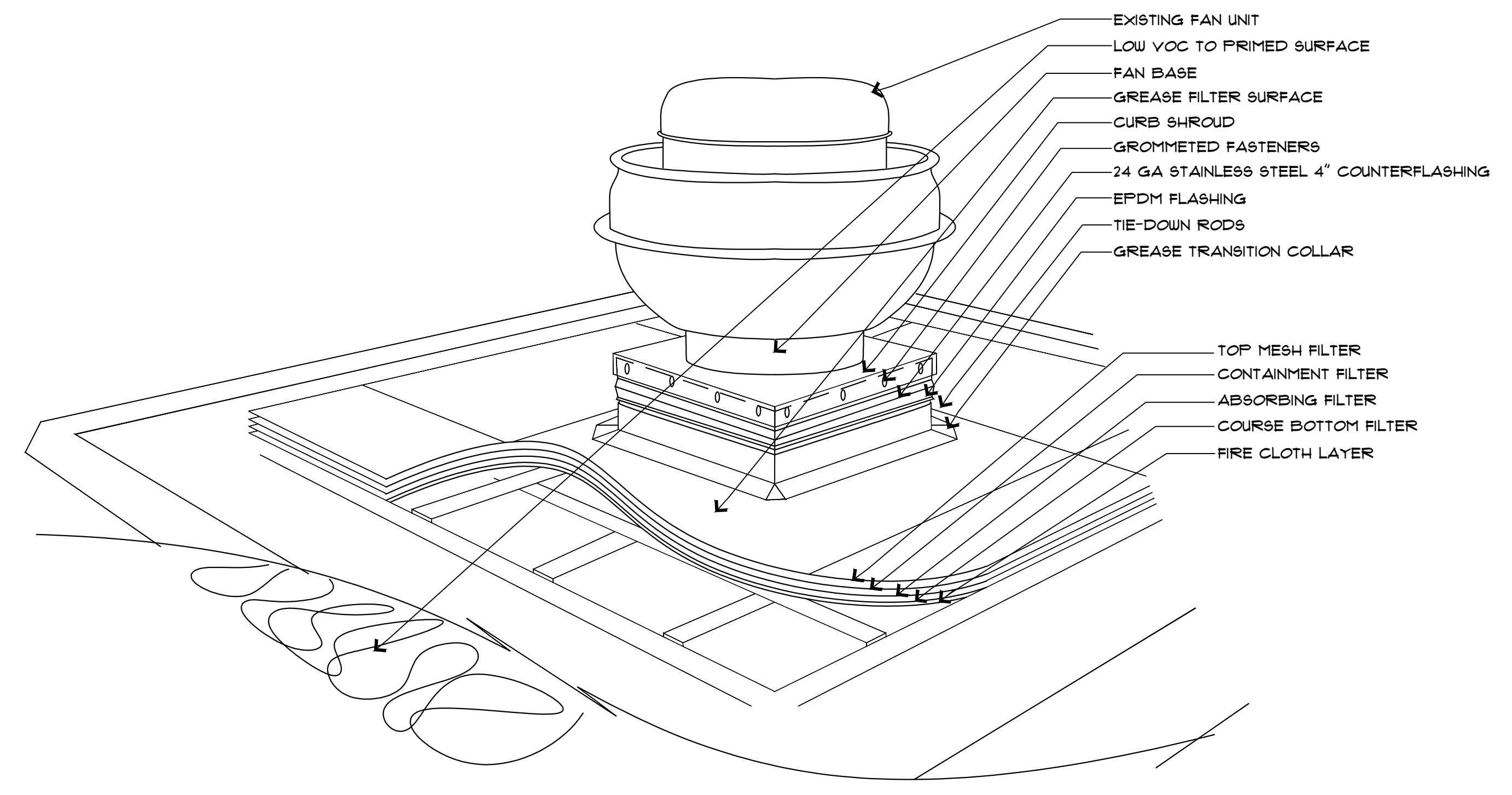




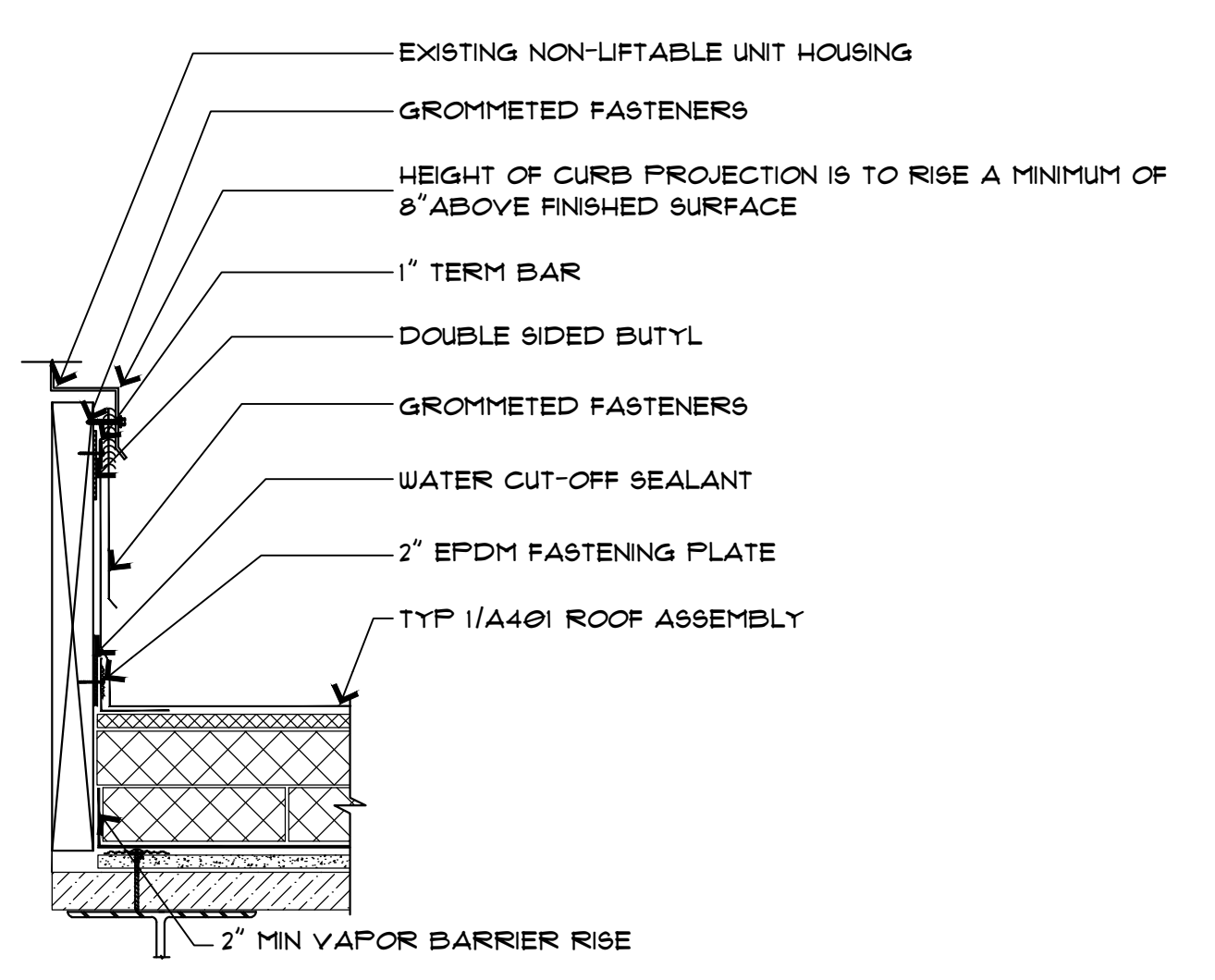
1 HEAT STACK PROJECTION/TYP  
A405 SCALE: 1" = 1 1/2" - 0"



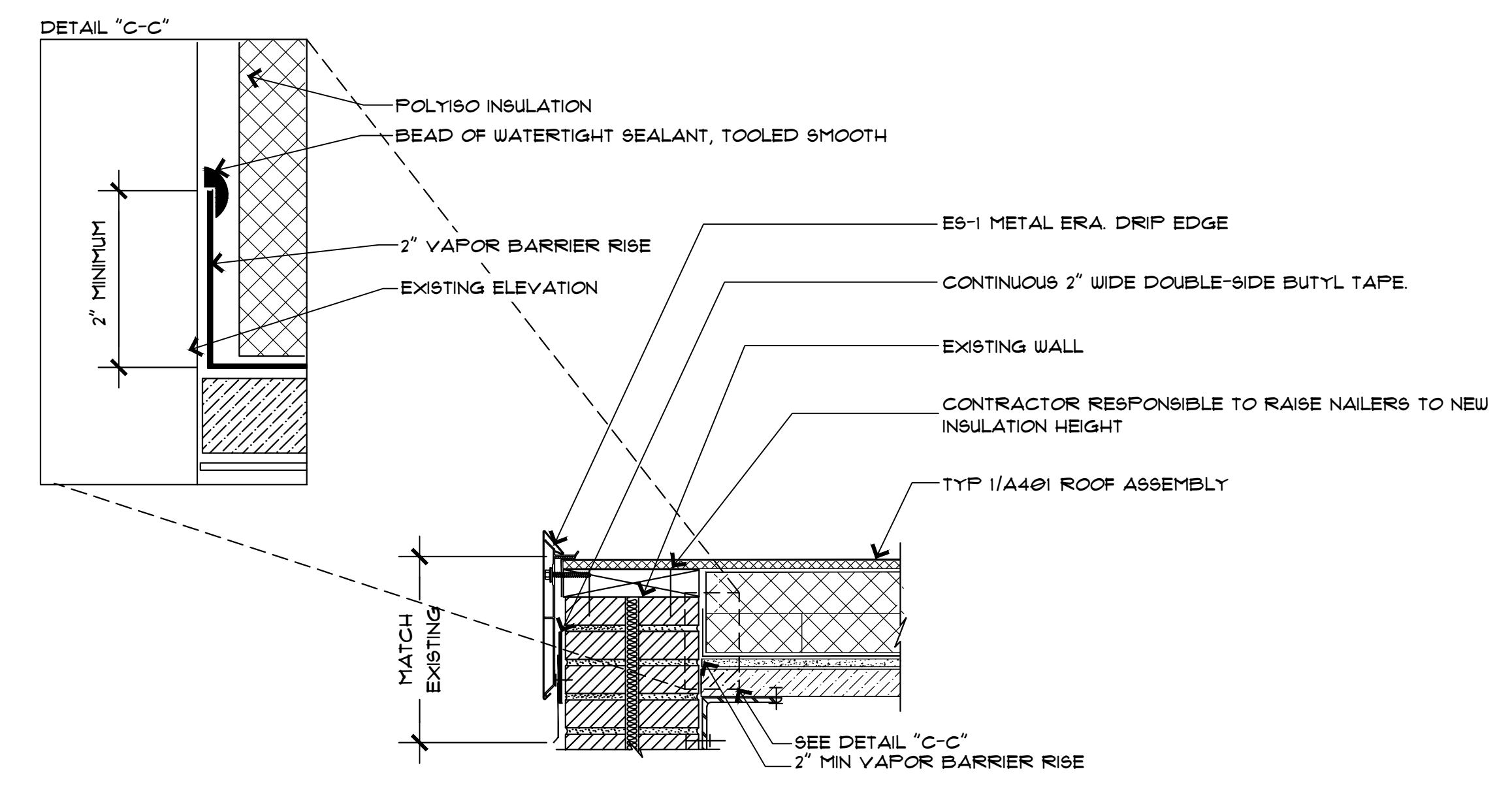
2 VENT FLASHING  
A405 SCALE: 1" = 1 1/2" - 0"



3 GREASE GUARD  
A405 SCALE: 1" = 1 1/2" - 0"



4 STATIONARY UNIT  
A405 SCALE: 1" = 1 1/2" - 0"



5 ROOF EDGE  
A405 SCALE: 1" = 1 1/2" - 0"

The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are hereby disclaimed. This architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

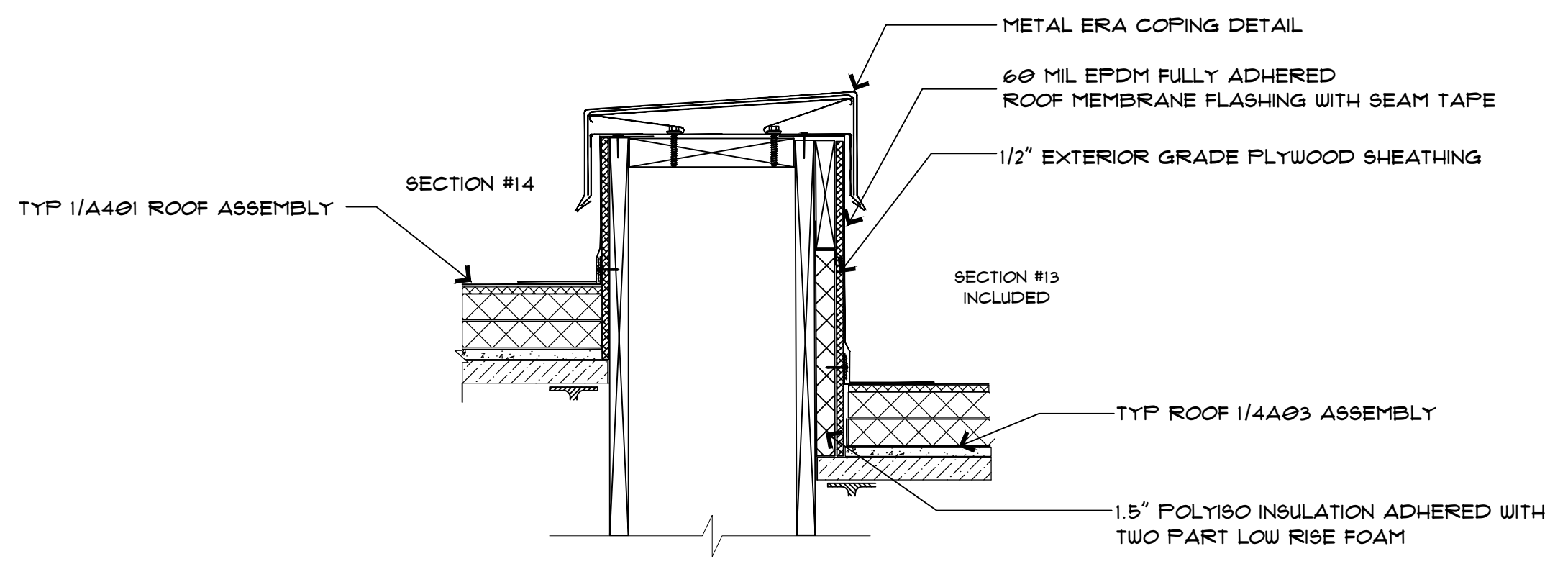
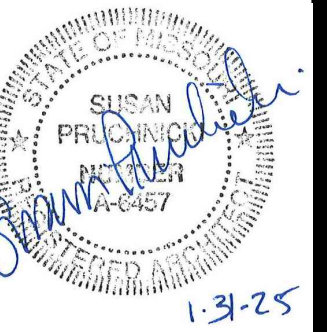
**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
MISSOURI ATHLETIC TRAINING CENTER  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

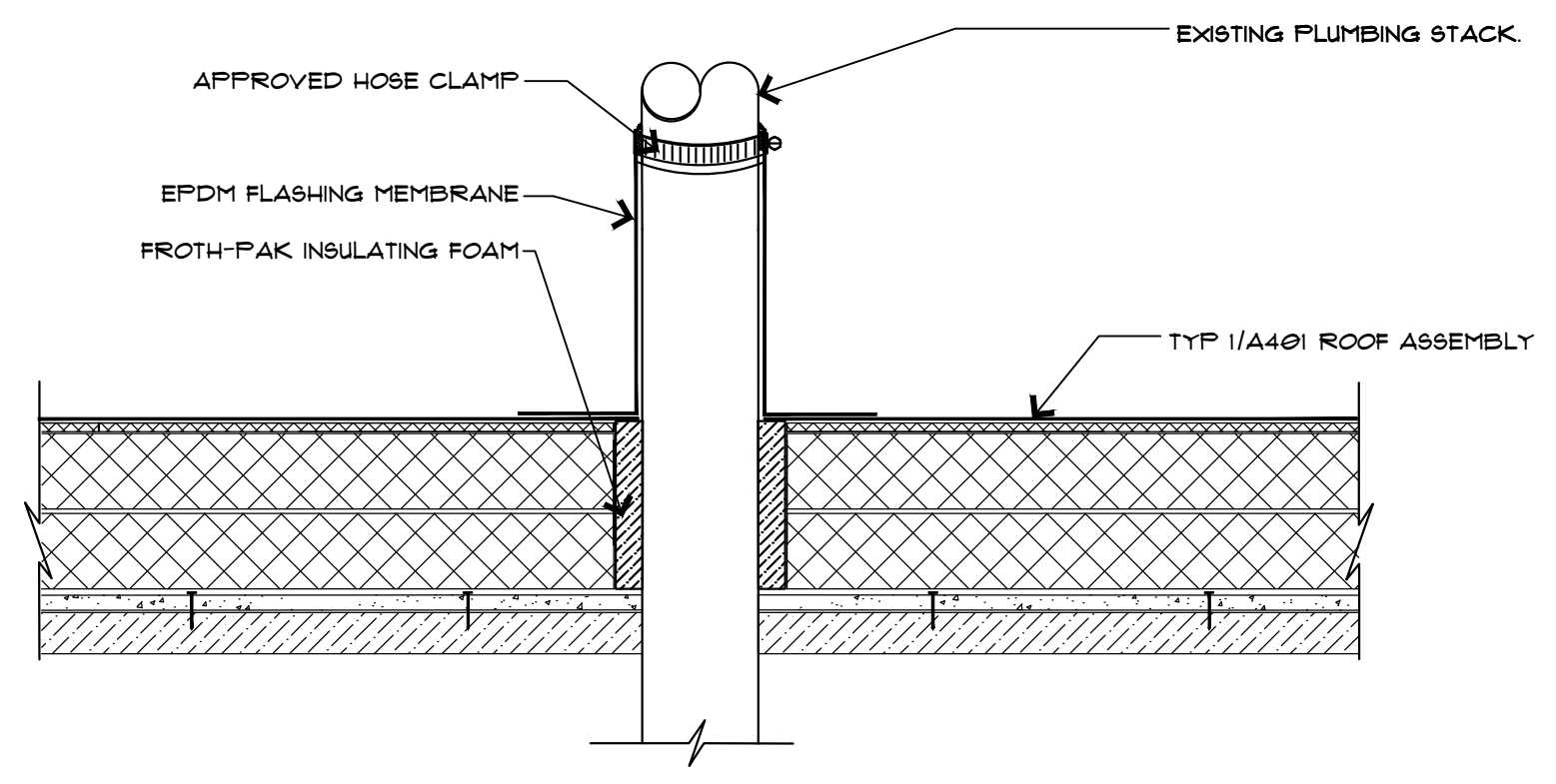
PROJECT NUMBER  
CP243181

SHEET  
A405 OF 17

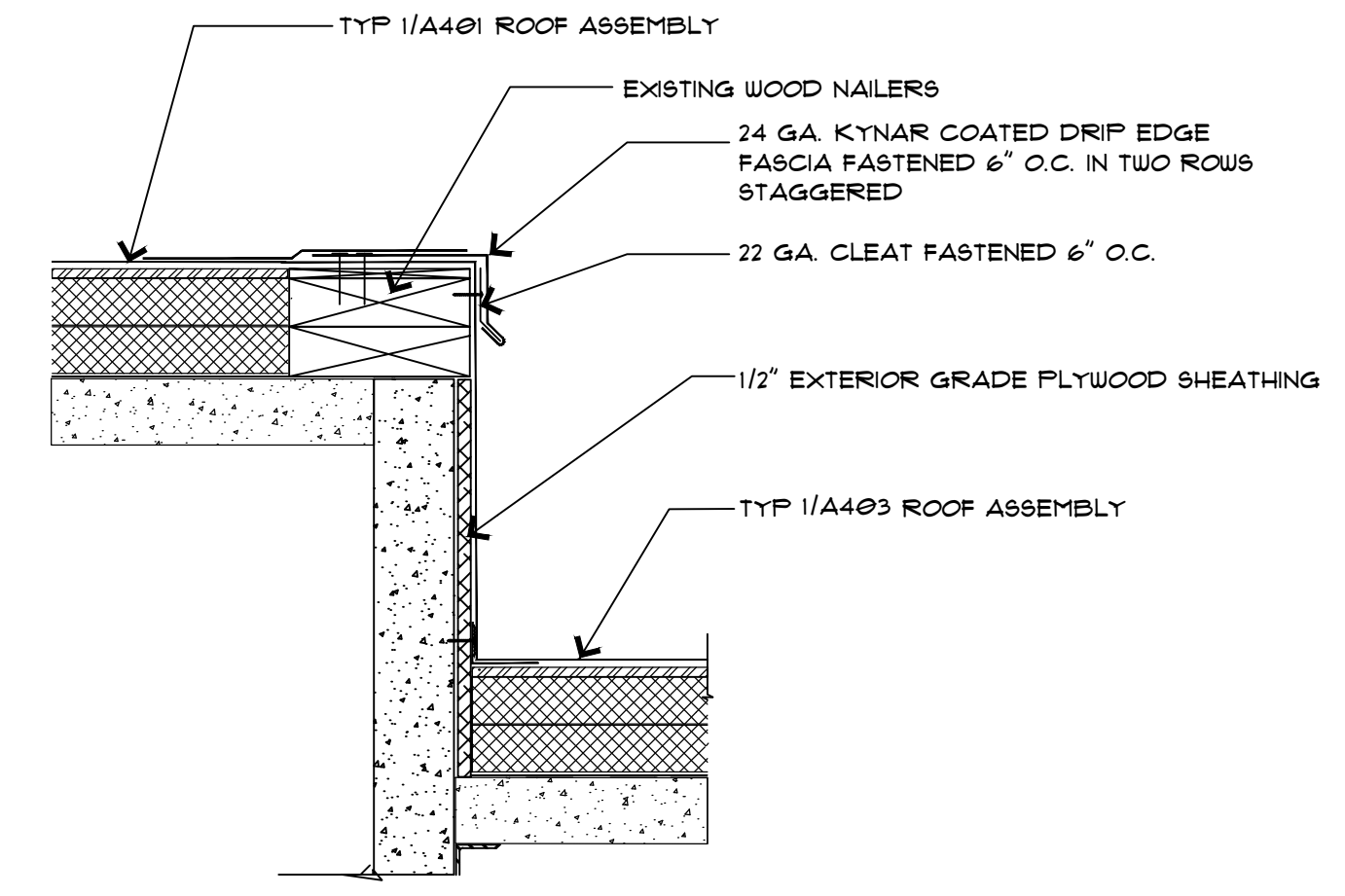




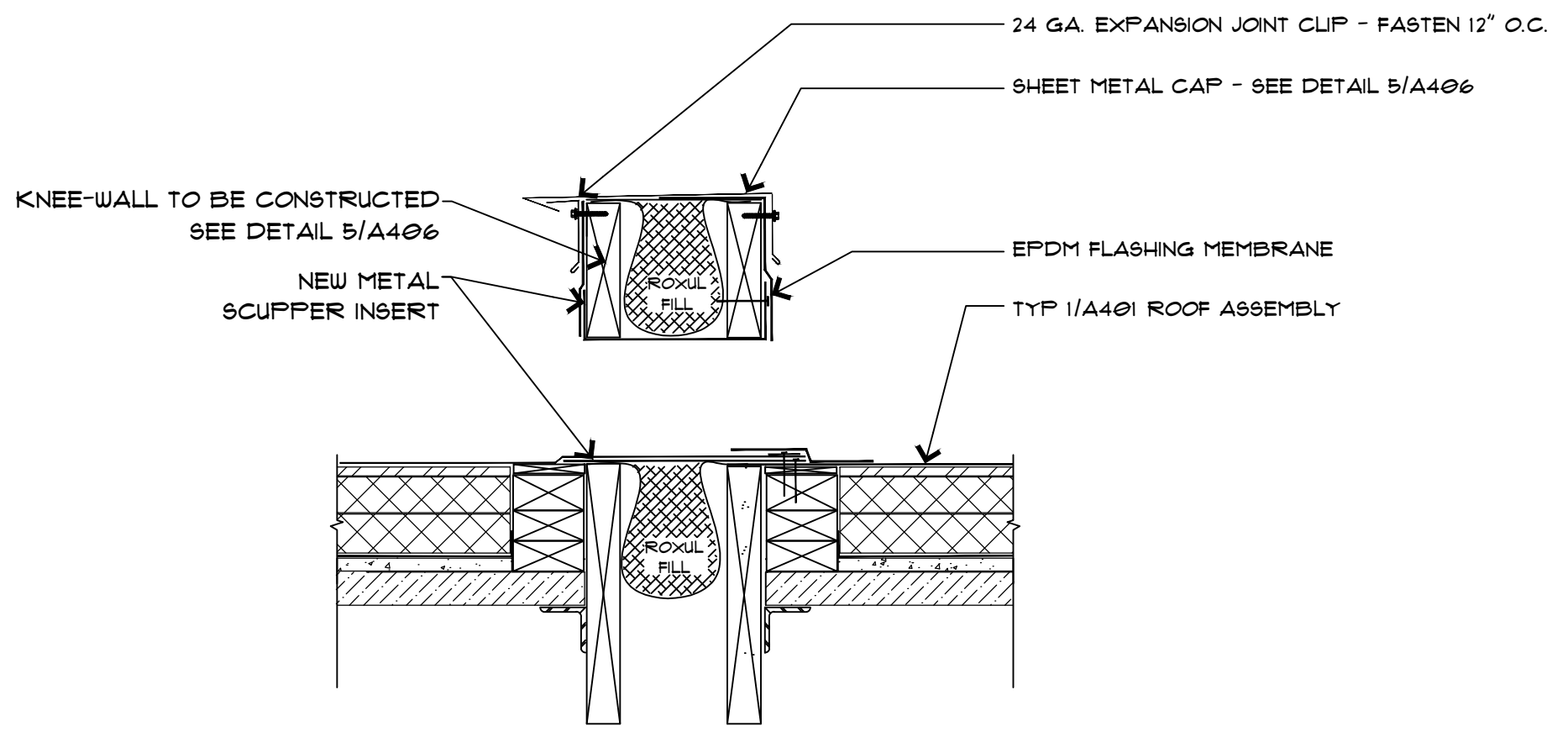
1 SECTION CHANGE  
A406 SCALE: 1" = 1 1/2" - 0"



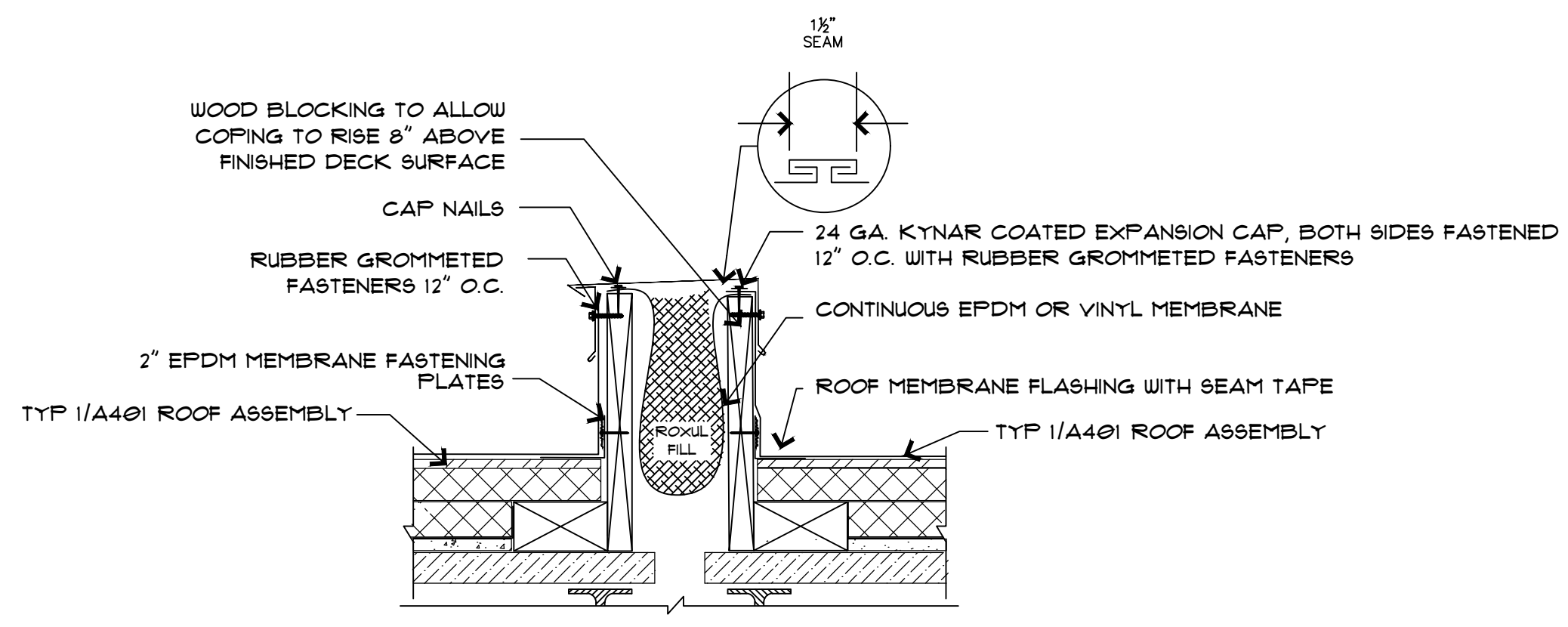
2 SOIL STACK  
A406 SCALE: 1" = 1 1/2" - 0"



3 PARAPET WALL  
A406 SCALE: 1" = 1 1/2" - 0"



4 THROUGH WALL SCUPPER  
A406 SCALE: 1" = 1 1/2" - 0"



5 NEW AREA DIVIDER  
A406 SCALE: 1" = 1 1/2" - 0"

The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal are hereby disclaimed, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal. This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

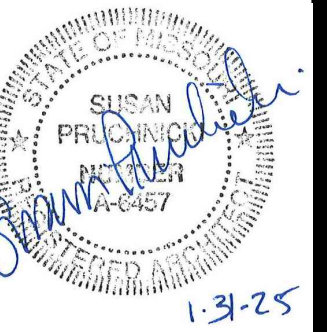
**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
410 SOVEREIGN COURT #18  
MANCHESTER, MO 63011  
(636)-391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
MISSOURI ATHLETIC TRAINING CENTER  
COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
RENOVATION PLAN

PROJECT NUMBER  
CP243181

SHEET  
A406 OF 17





The Professional Architect's seal and signature affixed to this sheet applies only to the material and information shown on this sheet. All drawings, instruments, or other documents not exhibiting this seal and signature are hereby disclaimed, and this architect expressly disclaims any and all responsibility for such plans, drawings, or documents not exhibiting this seal.  
 This Document is intended to be signed digitally. If no digital signature is attached to this file, this media should not be considered a certified document.

2/11/25	ISSUED FOR CONSTRUCTION	CHECKED BY: KFO
		DRAWN BY: KFO

**RMT** RMT ROOFING AND WATERPROOFING CONSULTANTS, INC.  
 410 SOVEREIGN COURT #18  
 MANCHESTER, MO 63011  
 (636) 391-2185

VARIOUS LOCATIONS - ROOF REPLACEMENTS  
 MISSOURI ATHLETIC TRAINING CENTER  
 COLUMBIA, BOONE COUNTY, MISSOURI, 65211  
 RENOVATION PLAN

PROJECT NUMBER  
 CP243181

SHEET  
 A407 OF 17

