

# AG HERITAGE MUSEUM HISTORIC ROOF REPLACEMENT

SOUTH DAKOTA STATE UNIVERSITY  
BUILDING #: 0601  
WO# 22-109330

### SCOPE OF WORK SUMMARY:

PROJECT CONSISTS OF THE REMOVAL, SALVAGE, AND REINSTALLATION OF APPROXIMATELY 12,000 SQUARE FEET OF EXISTING FRENCH CLAY ROOFING TILES, RIDGE, AND HIP CAPS. THE PROJECT ALSO INCLUDES THE REMOVAL AND DISPOSAL OF ROOFING MEMBRANE, ASPHALT UNDERLAYMENT, MISCELLANEOUS ROUGH CARPENTRY, AND DETERIORATED DECORATIVE WOOD CARPENTRY. NEW CONSTRUCTION WILL INCLUDE ROOFING MEMBRANE, UNDERLAYMENT, ICE & WATER SHIELD, COPPER FLASHING, COPPER GUTTERS, 20% REPLACEMENT CLAY ROOFING TILES, ROUGH CARPENTRY, ORNAMENTAL CARPENTRY, SEALANTS, AND EXTERIOR PAINT. COPPER DOWNSPOUTS ARE TO BE SALVAGED AND REINSTALLED. INSPECT THE EXISTING TONGUE & GROOVE ROOF DECKING AND SHEET DECKING FOR DAMAGE AND IRREGULARITIES, REPAIR AS REQUIRED TO MAINTAIN A STABLE SUBSTRATE FOR THE ROOF ASSEMBLY INSTALLATION.

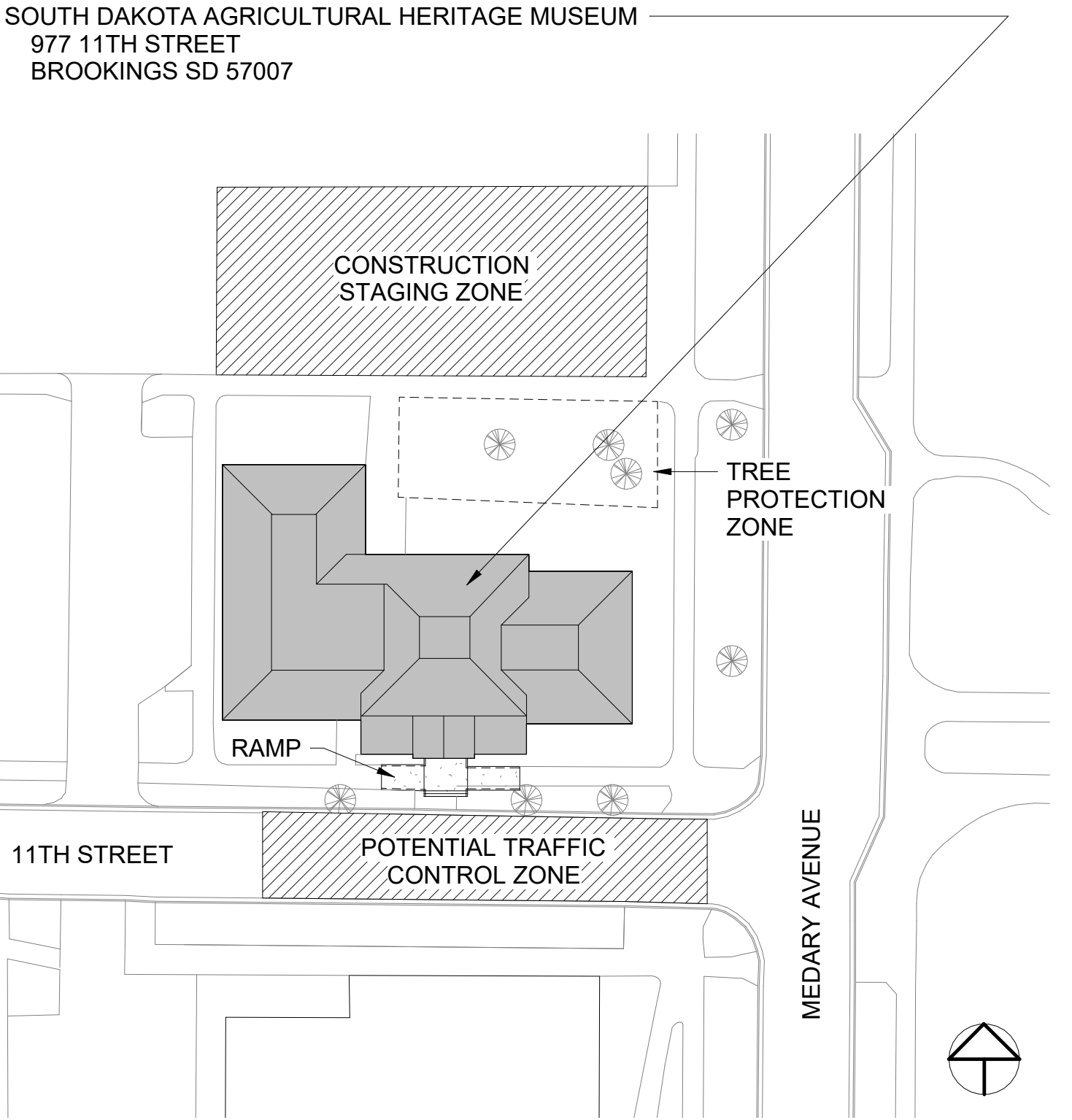
### UNIT PRICES:

- TONGUE AND GROOVE ROOF DECKING
- COPPER FLASHING AND COPING
- EXTERIOR FINISH CARPENTRY
- EXTERIOR PAINT
- THERMAL INSULATION
- WOOD ROOF DECKING, SHEET.

### PROJECT CONTACTS:

PROJECT MANAGER:	CHRISTOPHER GROSS	PHONE: (605) 688-6251
PROJECT OWNER:	GWEN MCCAUSLAND	PHONE: (605) 688-4581
ARCHITECT:	JONATHAN MEENDERING	PHONE: (605) 688-4975

### LOCATION MAP:



### ABBREVIATIONS:

ACT	ACOUSTICAL CEILING TILE	MAX	MAXIMUM
AFF	ABOVE FINISH FLOOR	MECH	MECHANICAL
ALUM	ALUMINUM	MFR	MANUFACTURER
ANOD	ANODIZED	MIN	MINIMUM
APPROX	APPROXIMATELY	MO	MASONRY OPENING
BSMT	BASEMENT	MTL	METAL
BTTM	BOTTOM OF	NIC	NOT IN CONTRACT
CIP	CAST IN PLACE	NO	NUMBER
CJ	CONTROL JOINT	NOM	NOMINAL
CLG	CEILING	OC	ON CENTER
CLR	CLEAR	PCC	PRE-CAST CONCRETE
CMU	CONCRETE MASONRY UNIT	PLUMB	PLUMBING
CO	CLEAN OUT	PNT	PAINT/PAINTED
COL	COLUMN	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PT	PRESSURE TREATED
CONST J	CONSTRUCTION JOINT	PVC	POLYVINYL CHLORIDE
CONT	CONTINUOUS	R	RADIUS
CPT	CARPET	RBR	RUBBER
CT	CERAMIC TILE	RCP	REFLECTED CEILING PLAN
DBL	DOUBLE	RD	ROOF DRAIN
DEMO	DEMOLISH	REINF	REINFORCED
DIA	DIAMETER	REQD	REQUIRED
DIMS	DIMENSIONS	RM	ROOM
DN	DOWN	SF	SQUARE FOOT
DTL	DETAIL	SIM	SIMILAR
DWG	DRAWING	SOG	SLAB ON GRADE
EA	EACH	SPEC	SPECIFIED OR SPECIFICATION
EJ	EXPANSION JOINT	SPK	SPRINKLER
EL	ELEVATION	SQ	SQUARE
ELEC	ELECTRICAL	SSTL	STAINLESS STEEL
EPDM	PROPYLENE DIENE ROOFING	STC	SOUND TRANSMISSION COEFFICIENT
EQ	EQUAL	STL	STEEL
EXIST	EXISTING	STRUCT	STRUCTURAL
EXT	EXTERIOR	T&G	TONGUE AND GROOVE
FD	FLOOR DRAIN	TI	TAPERED INSULATION
FE	FIRE EXTINGUISHER	TO	TOP OF
FEC	FIRE EXTINGUISHER CABINET	T/D	TELEPHONE AND DATA
FF	FINISH FLOOR	TELE	TELEPHONE
FLR	FLOOR	TOS	TOP OF STRUCTURE
FO	FACE OF	TOW	TOP OF WALL
FTG	FOOTING	TYP	TYPICAL
GA	GAUGE	UNO	UNLESS NOTED OTHERWISE
GALV	GALVANIZED	VIF	VERIFY IN FIELD
GWB	GYPSTUM WALL BOARD	VP	VISION PANEL
HC	HOLLOW CORE	W/	WITH
HM	HOLLOW METAL	WC	WATER CLOSET
HVAC	HEATING VENTILATION & AIR CONDITIONING	WD	WOOD
INSUL	INSULATION		
INT	INTERIOR		
LAV	LAVATORY		

### SHEET INDEX:

G001	Title Sheet
G002	Historic Preservation Review
D101	Roof Demolition
A101	Roof Plan
A201	Building Sections
A202	Building Sections
A221	Details
A222	Details
A223	Details

### SYMBOLS:

	CALLOUT		ROOM TAG		REVISION TAG
	SECTION TAG		VIEW TITLE		WINDOW TAG
	INTERIOR ELEVATION		ELEVATION TAG		DOOR TAG
			CENTERLINE		WALL TAG
					KEYNOTE



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Agricultural Heritage Museum

Historic Roof Replacement

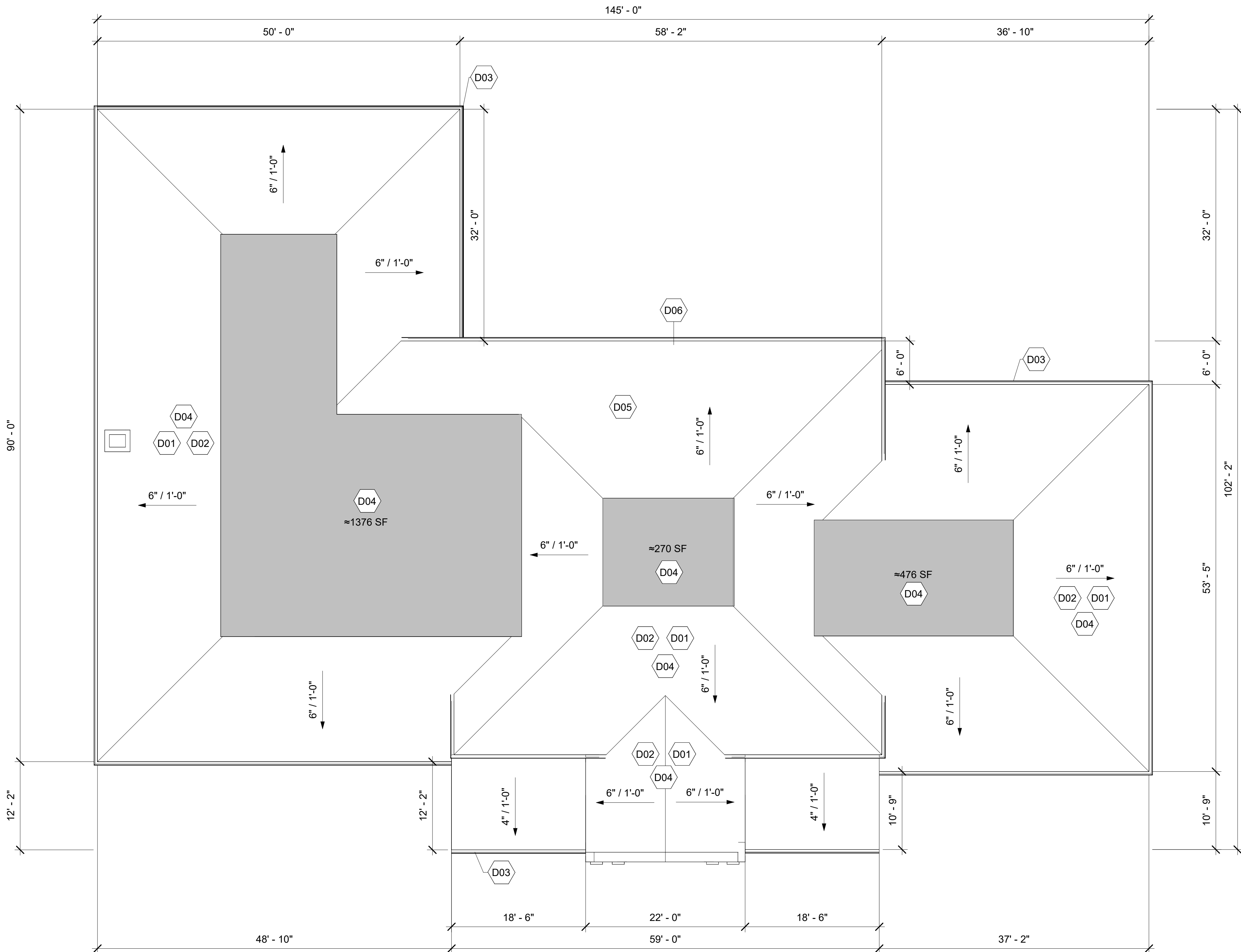
No.	Description	Date

### Title Sheet

Project number	22-109330
Date	04/03/2024
Drawn by	CS
Checked by	JM

G001

Not to Scale





① Roof Demolition  
1/8" = 1'-0"

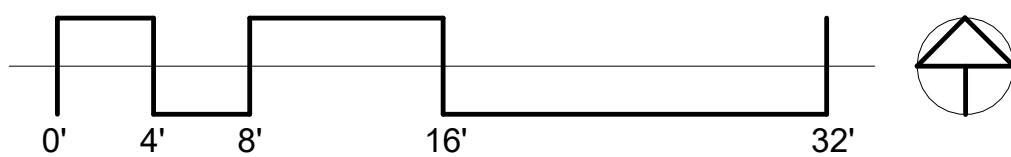
#### DEMOLITION GENERAL NOTES:

1. Notify owner of discrepancies between existing conditions (including dimensions) and Drawings before proceeding with selective demolition.
2. Remove and dispose of metal flashing and coping, rubber membrane and asphalt underlayment, damaged clay roof tile, and damaged roof decking. Steel removed from roof to be recycled by owner, contractor to coordinate recycling of steel with owner.
3. Existing items to be removed and reinstalled include copper gutters/downspouts and french clay roof tiles and trim pieces. Carefully detach clay tiles in a manner to prevent damage. Contractor to provide 20% new french clay roof tile to replace damaged roof tiles.
4. Existing items to remain include wood tongue and groove decking, sheet decking and roof insulation. Inspect remaining roof substrates for damage and make repairs or replace as required. Deck surfaces to be stable, clean, and dry prior to installation of new membrane.
5. Coordinate street closures with owner and city of Brookings. A minimum of 72 hour notice is reqd.
6. Coordinante sidewalk closures and building utility outages with owner in advance.
7. Create a tree protection zone, as shown on G001. Coordinate zone location and size with owner.
8. Contractor to locate the construction staging zone in the parking lot N of the museum as shown on G001. Staging zone not to impede sidewalks.
9. Provide protection to ensure safety of people in and around the museum and to prevent damage to adjacent buildings and facilities.

#### KEYNOTES

- D01 French clay roof tile, ridge tiles, and eave tiles to be removed and salvaged for reinstallation.  
D02 Metal flashing and coping, rubber membrane, and aphalt underlayment to be removed and disposed of.  
D03 Copper gutters and downspouts to be removed and salvaged for reinstallation.  
D04 Wood decking and roof insulation to remian; repair or replace damaged.  
D05 Damaged clay tiles to be removed and disposed of. Provide min. 20% replacement decking, tiles, and insulation. New replacement tiles to match profile and color of exitsing tiles.  
D06 Remove damaged or deteriorated fascia and soffit. Remove chipped and peeling paint. Repair fascia and soffit, prepare, and finish paint; typical.

-  INDICATES EXISTING LOW SLOPE ADHERED MEMBRANE ROOF  
 INDICATES EXISTING CLAY TILE ROOF



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## Historic Roof Replacement

No.	Description	Date

## Roof Demolition

Project number 22-109330

Date 04/03/2024

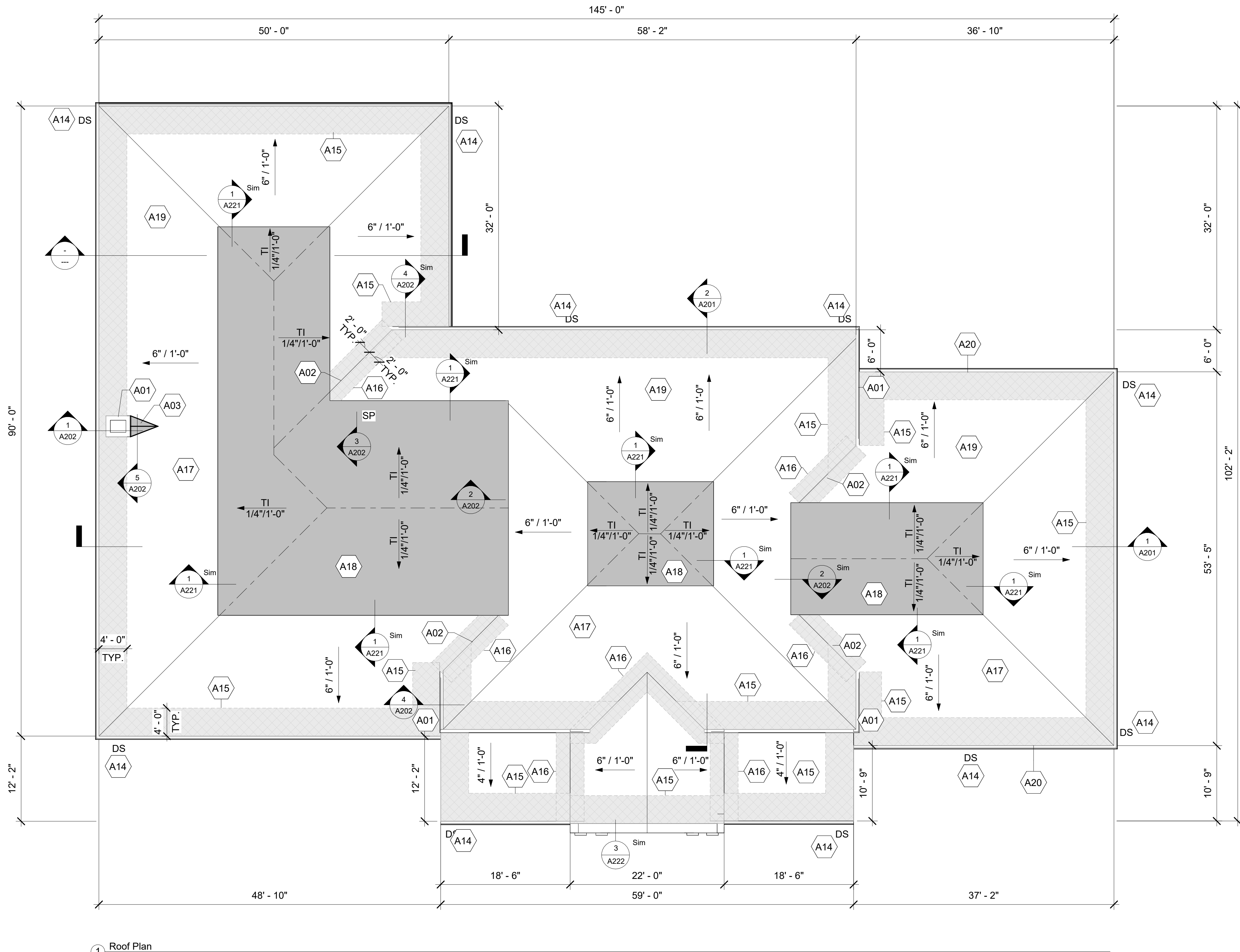
Drawn by CS

Checked by JM

D101

Scale 1/8" = 1'-0"





1 Roof Plan  
1/8" = 1'-0"

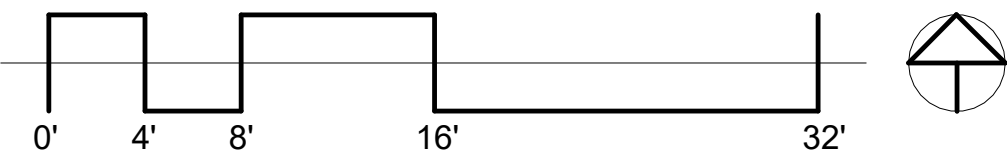
ROOF PLAN GENERAL NOTES:

1. Notify owner of discrepancies between existing conditions (including dimensions) and Drawings before proceeding with re-roofing.
2. Coordinate street closures with owner and city of Brookings. A minimum of 72 hour notice is reqd.
3. Coordinante sidewalk closures and building utility outages with owner in advance.
4. Create a tree protection zone, as shown on G001. Coordinate zone location and size with owner.
5. Contractor to locate the construction staging zone in the parking lot N of the museum as shown on G001. Staging zone not to impede sidewalks.
6. Provide protection to ensure safety of people in and around the museum and to prevent damage to adjacent buildings and facilities.
7. Owner to tuckpoint brick as required on sidewalls and chimney. Contractor to notify owner of required repairs and coordinate masonry work with owner.
8. Existing items to be removed and reinstalled include copper gutters/downspouts and french clay roof tiles and trim pieces. Carefully detach clay tiles in a manner to prevent damage. Contractor to provide 20% new french clay roof tile to replace damaged roof tiles.
9. Existing items to remain include wood tongue and groove decking, sheet decking and roof insulation. Inspect remaining roof substrates for damage and make repairs or replace as required. Deck surfaces to be stable, clean, and dry prior to installation of new membrane.

KEYNOTES

- A01 Brick to be pointed and repaired by owner as required.
- A02 Provide 26 gauge lead flashing at all roof valleys, sidewalls, parapets, and material transitions. Extend minimum of 11" from centerline of valley; 4" minimum flash overlap.
- A03 Provide treated 2x framing, 3/4" treated plywood decking, rubber ice and water shield, and counter flashing at new cricket location. Tie into ceramic tile roof
- A14 Provide concrete splash blocks at all downspout locations.
- A15 Apply 48" wide 30 mil. adhered rubber membrane to deck for roof perimeter and 48" from sidewall locations and valleys.
- A16 Apply 48" wide 30 mil. adhered ice and water shield to deck, centered on all valleys.
- A17 Self-adhered sheet underlayment, polyethylene faced, min. 40-mil. thickness, slip resistant, polyethylene reinforced top surface, laminated to SBS modified asphalt adhesive, with replease paper backing.
- A18 Self-adhered sheet underlayment bonded HDPE or polyethylene sheet.
- A19 Salvaged French clay roof tile; provide 20% new and 30 new ridge tiles in unbroken bundles. New tile to match existing tile profile and color.
- A20 Repair and replace damaged wood fascia and soffit; prepare and finish paint, typical.

- INDICATES ADHERED ICE AND WATER SHIELD 48" MIN. FROM EXT. WALLS AND ALL VALLEYS,SEE KEY NOTE A15
- INDICATES LOW SLOPE ADHERED MEMBRANE ROOF
- INDICATES CLAY TILE ROOF



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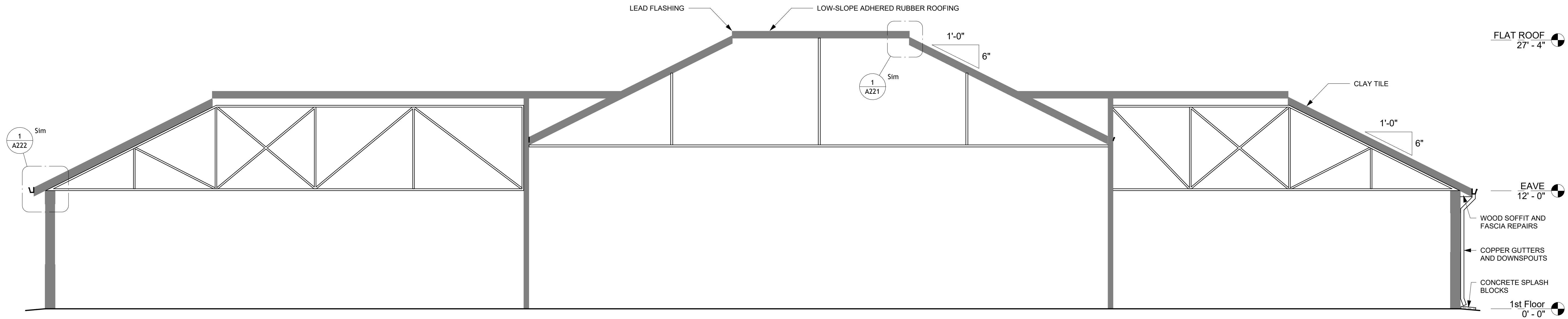
Agricultural Heritage Museum  
Historic Roof Replacement

No.	Description	Date

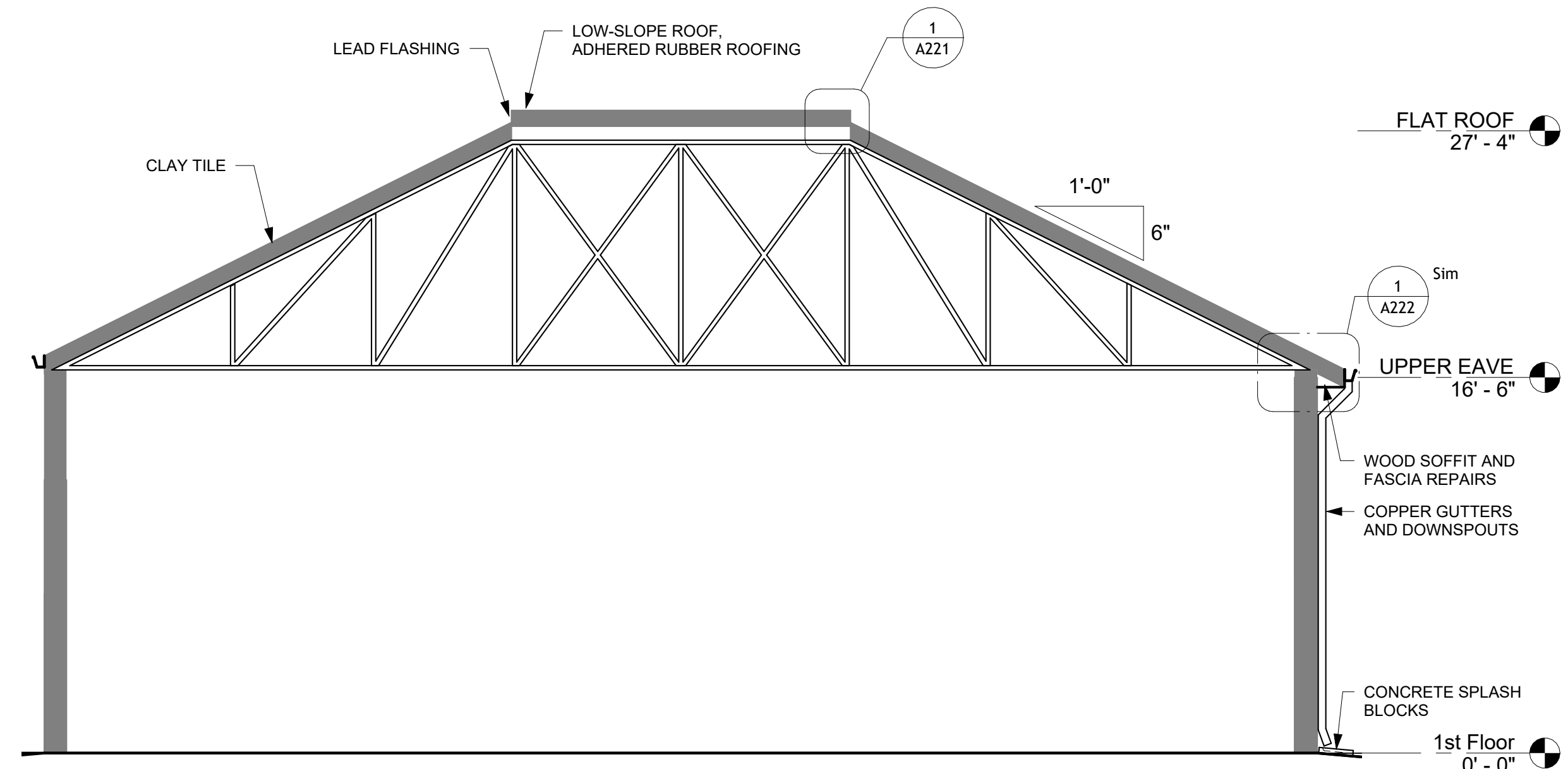
Roof Plan

Project number	22-109330
Date	04/03/2024
Drawn by	CS
Checked by	JM

A101  
Scale 1/8" = 1'-0"



1 Building Section E/W  
3/16" = 1'-0"



2 Building Section N/S  
3/16" = 1'-0"



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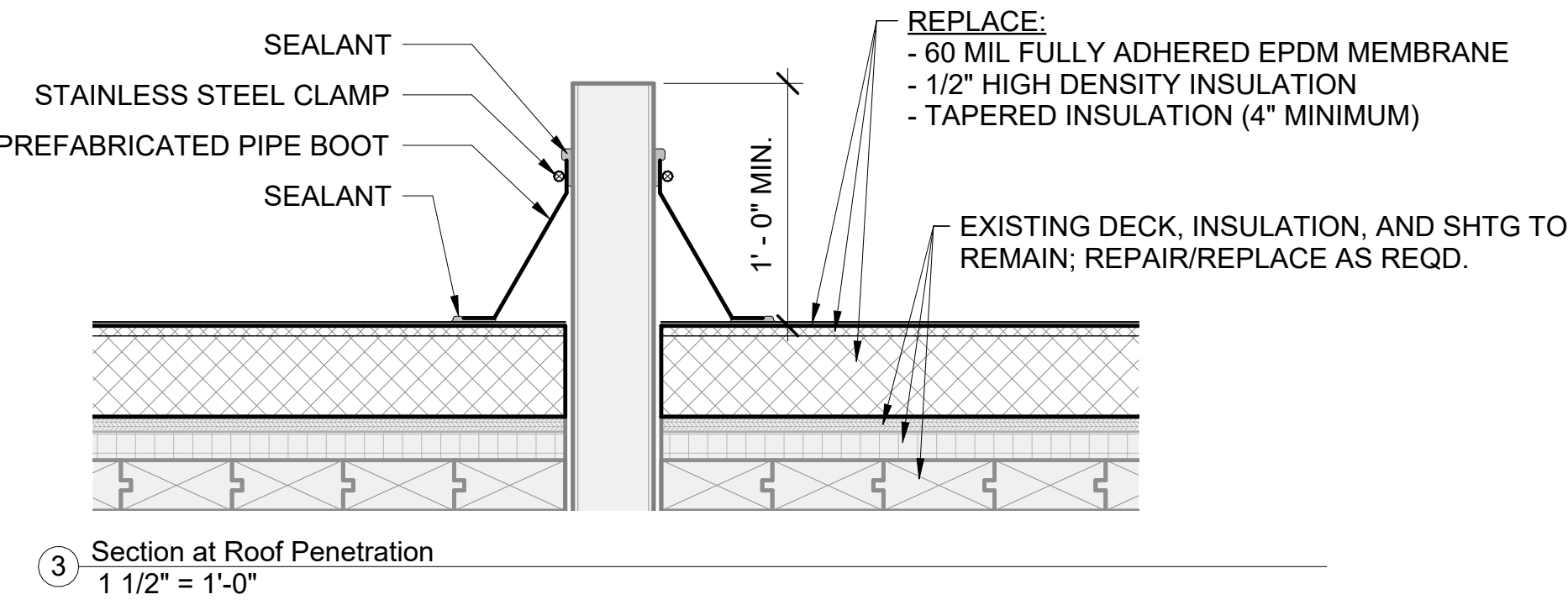
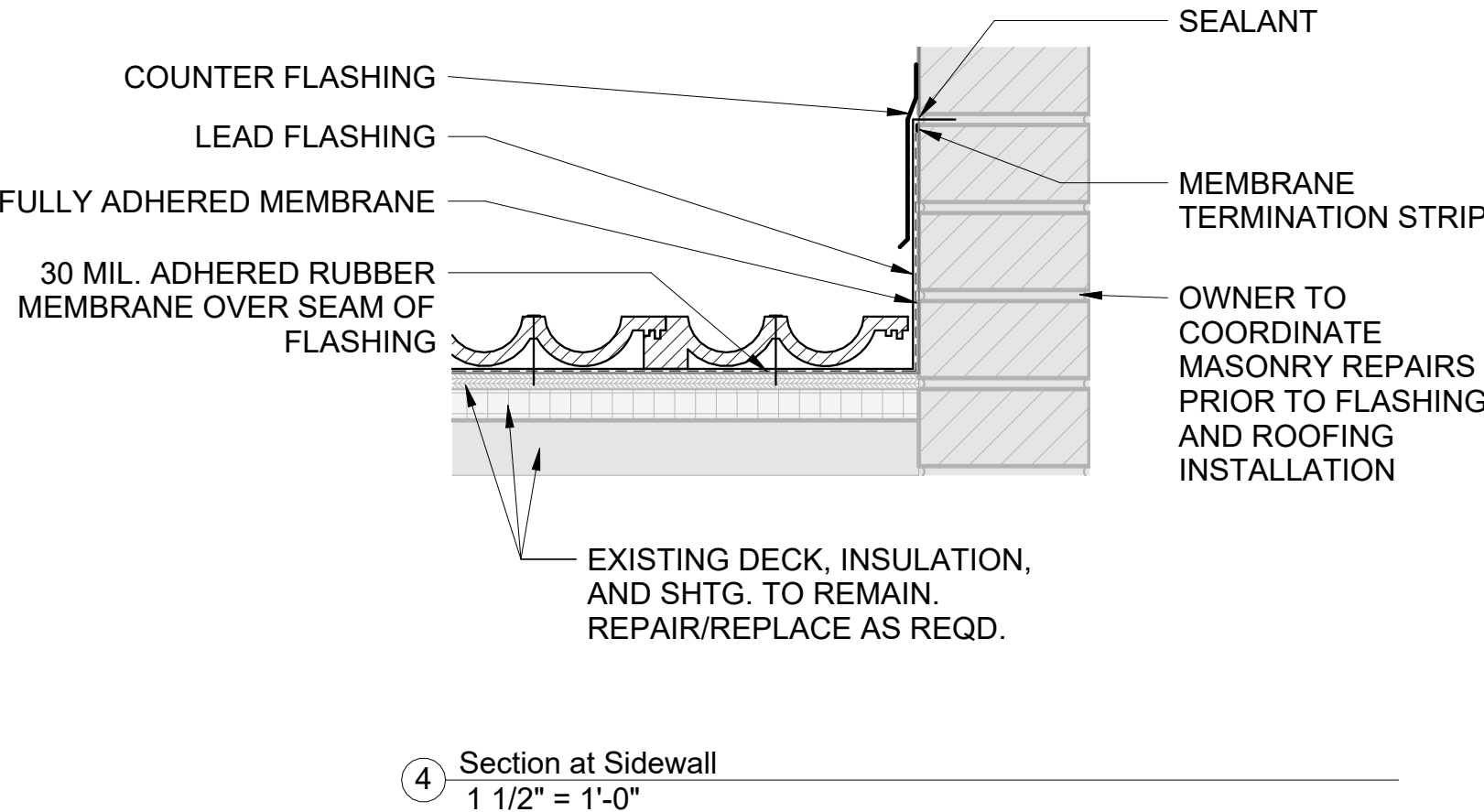
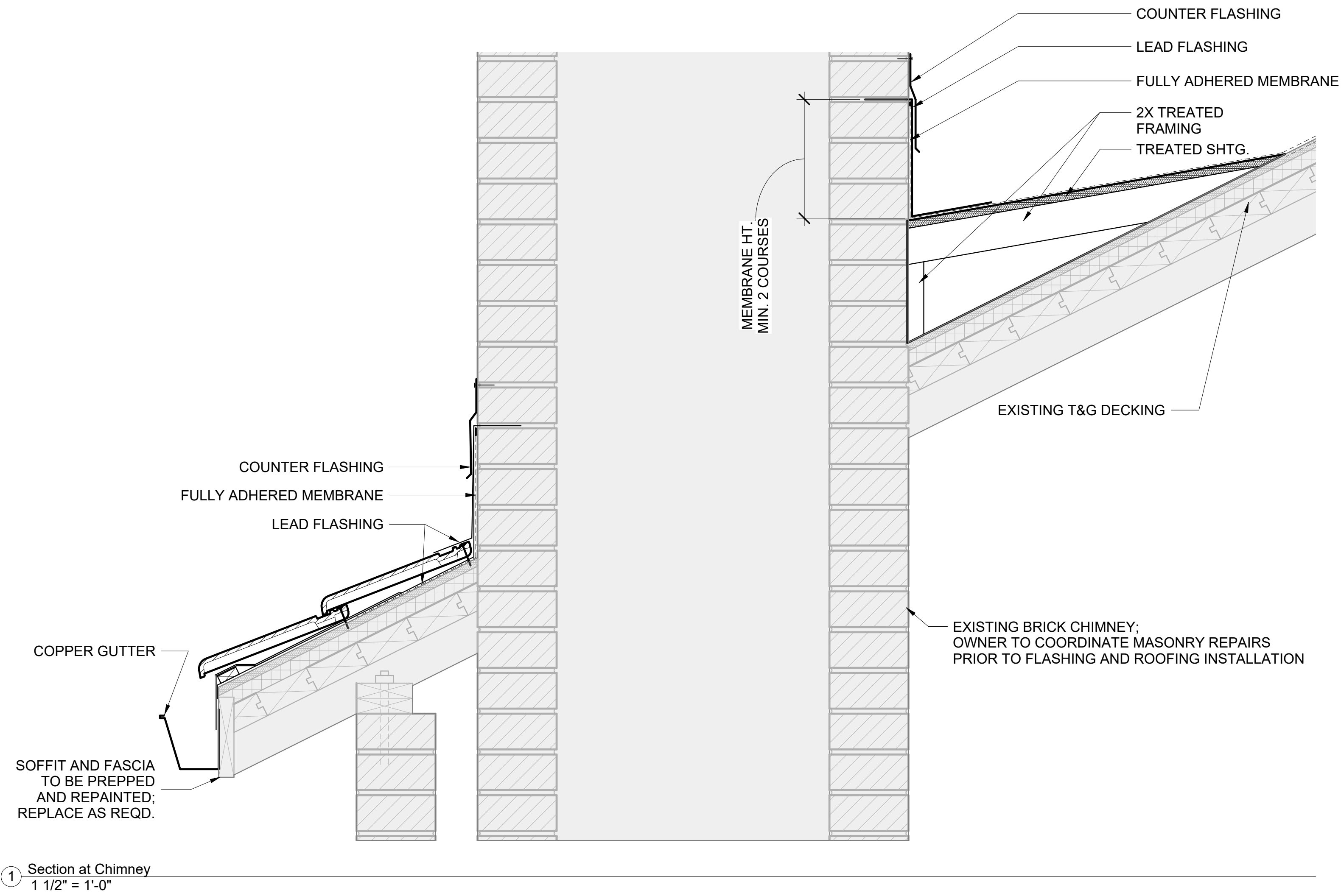
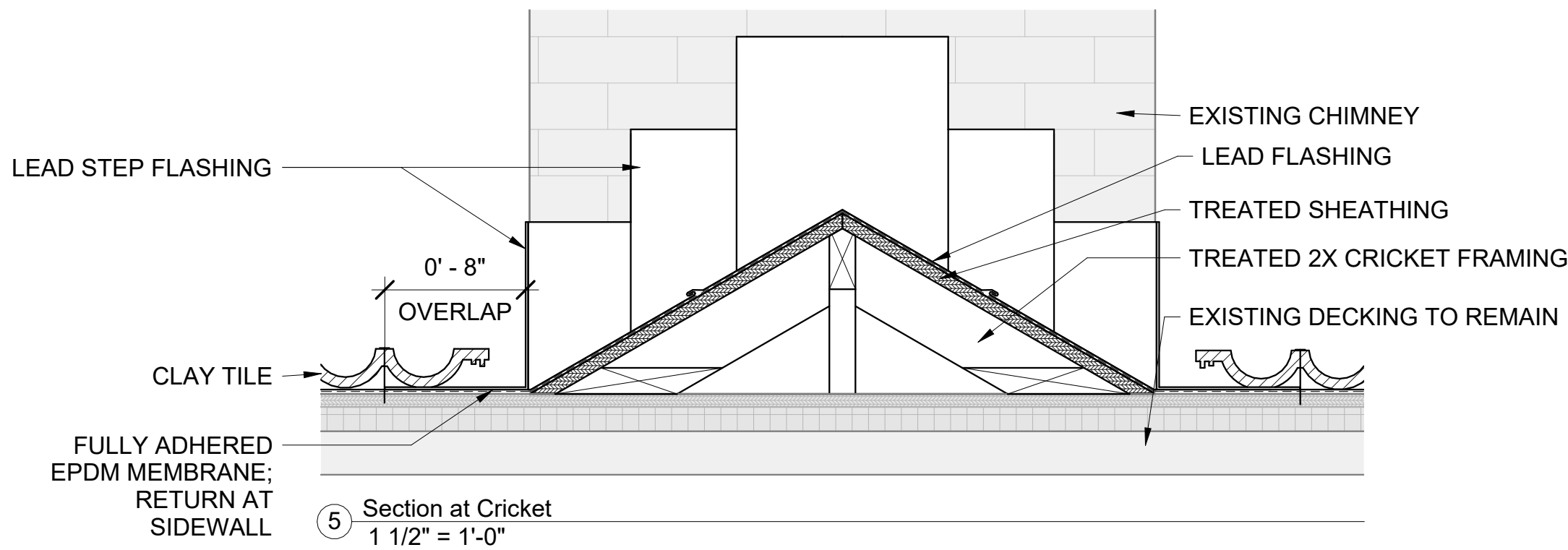
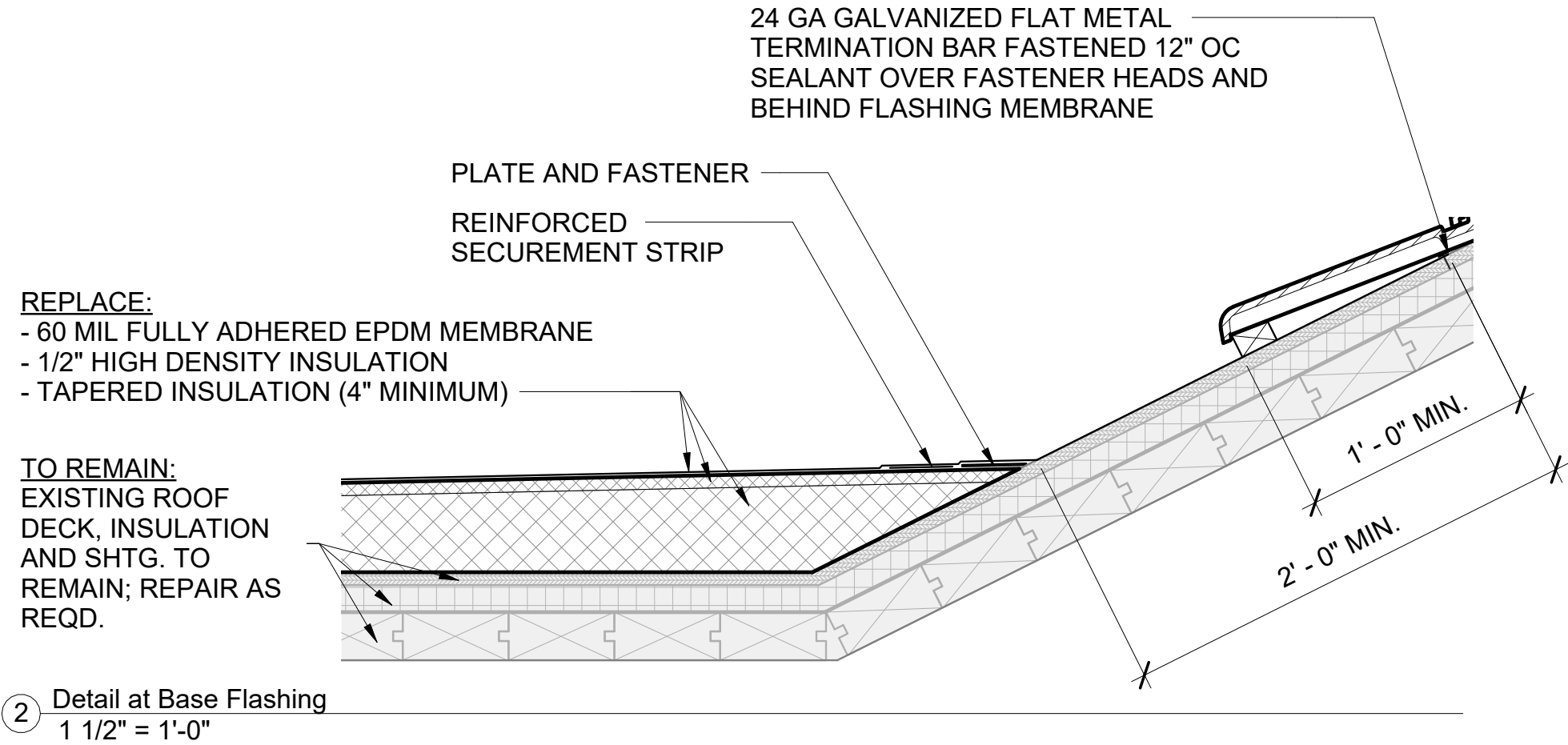
## Building Sections

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A201

Scale 3/16" = 1'-0"

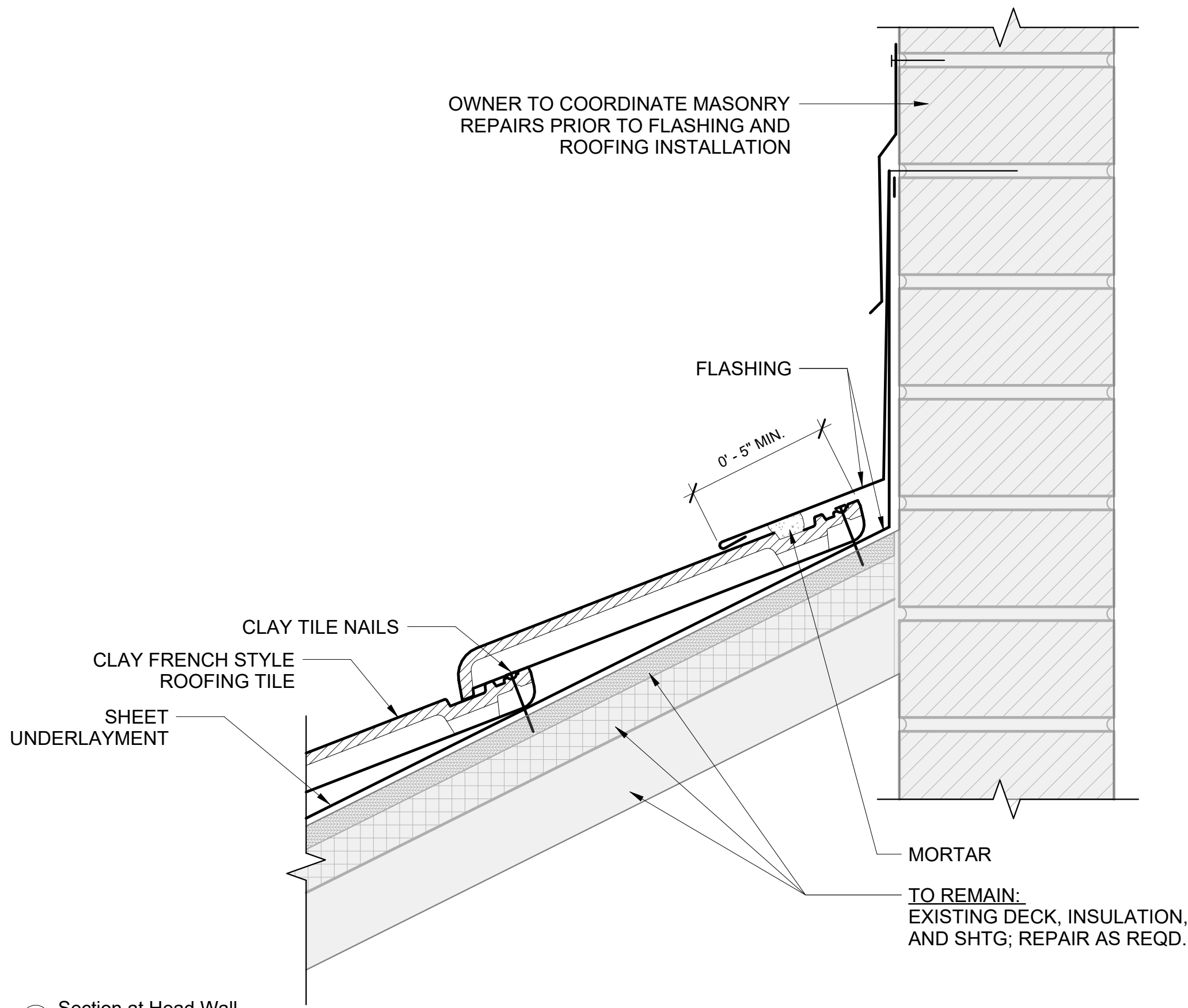




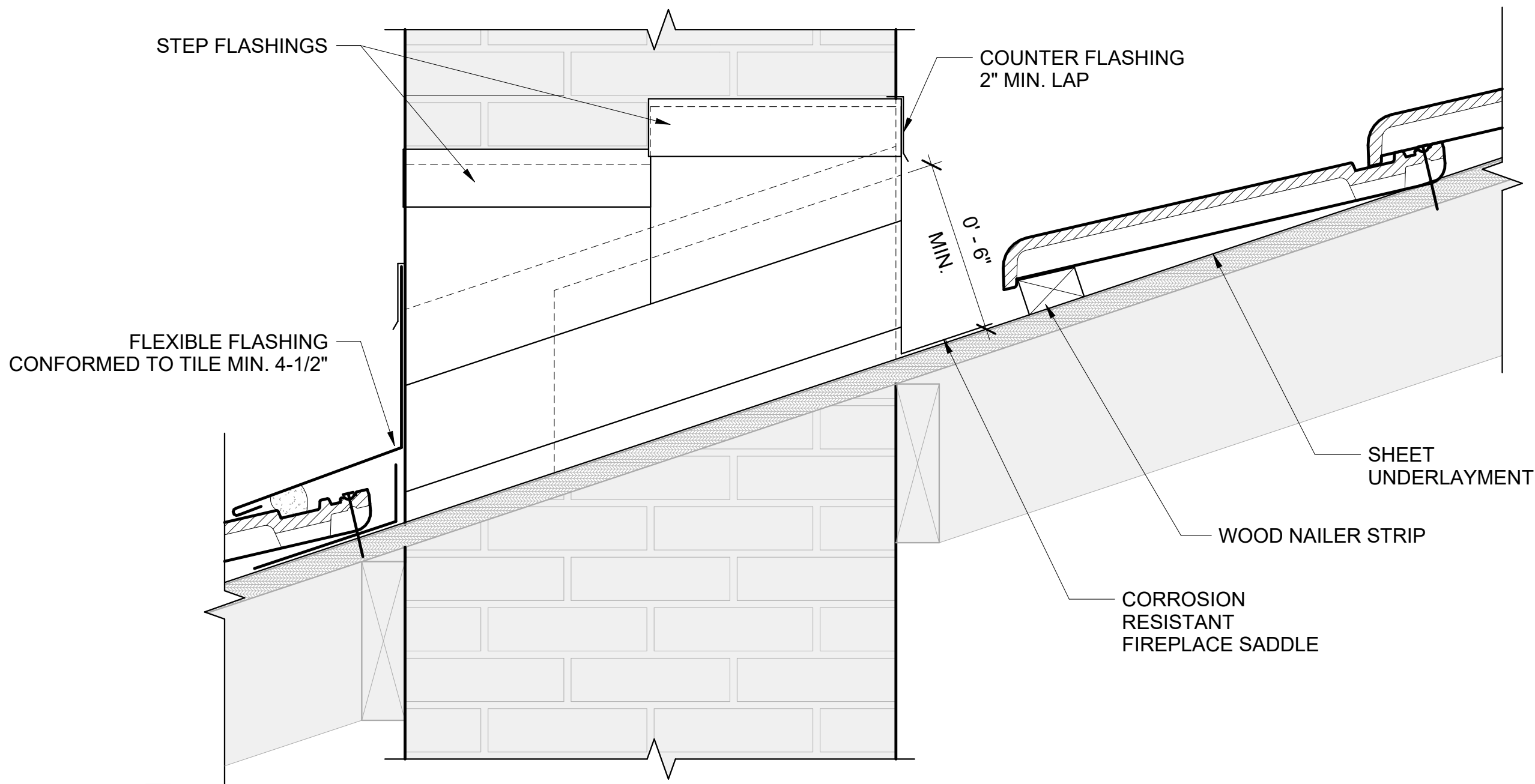
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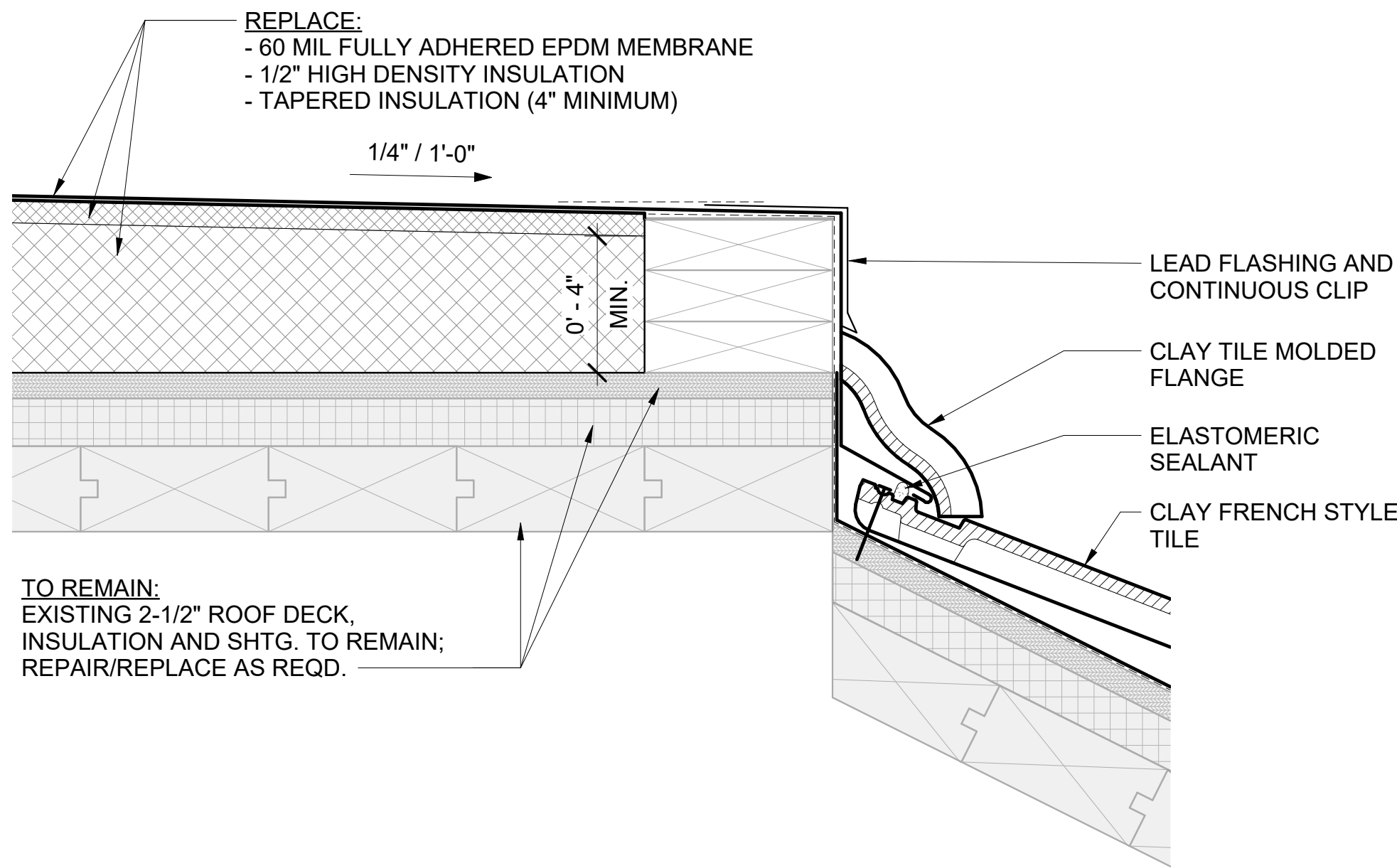




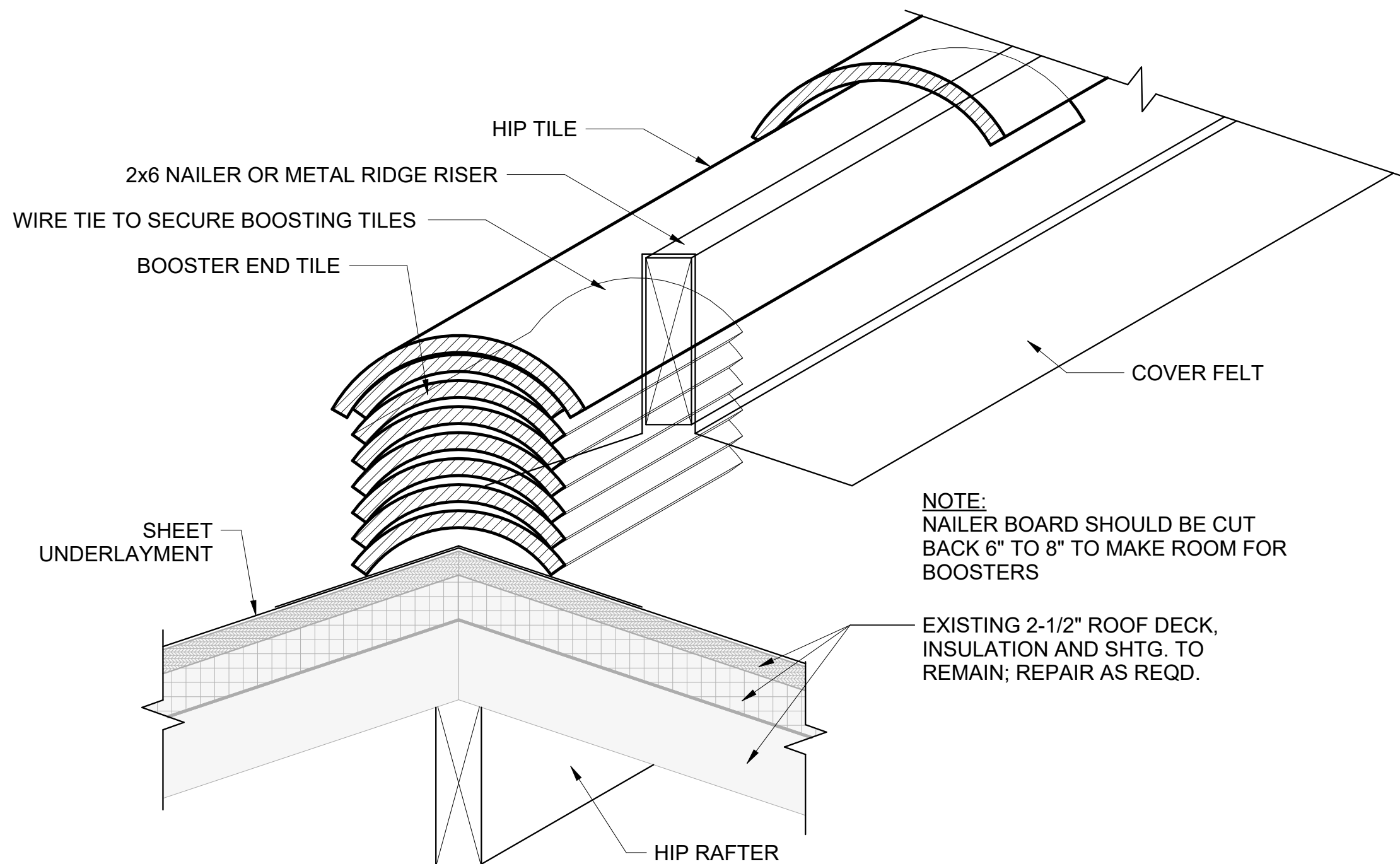
④ Section at Head Wall  
3" = 1'-0"



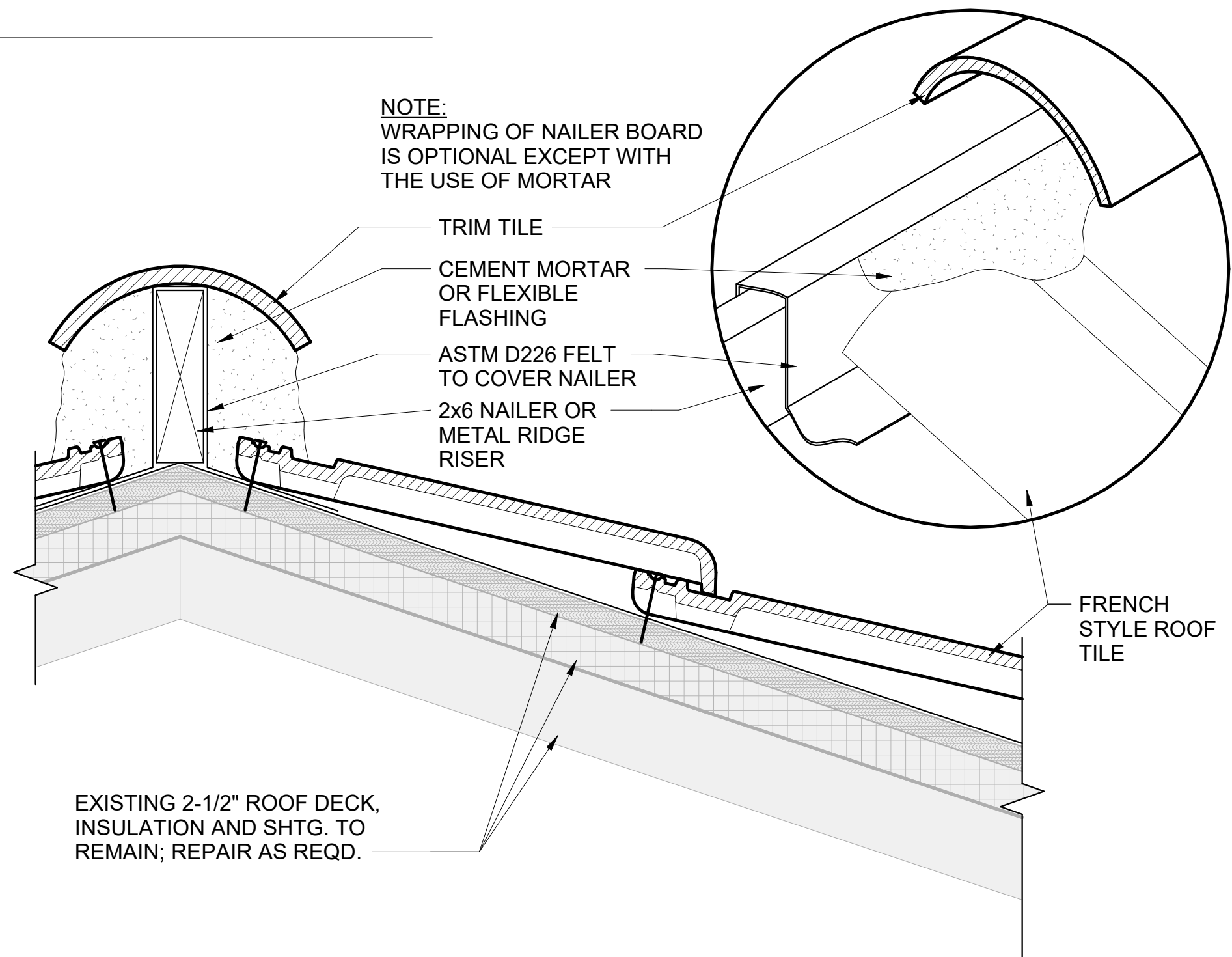
⑤ Chimney Flashing Detail  
3" = 1'-0"



① Roof Curb Detail  
3" = 1'-0"



② Ridge and Hip End Booster  
3" = 1'-0"



③ Ridge and Hip Plate End Detail  
3" = 1'-0"



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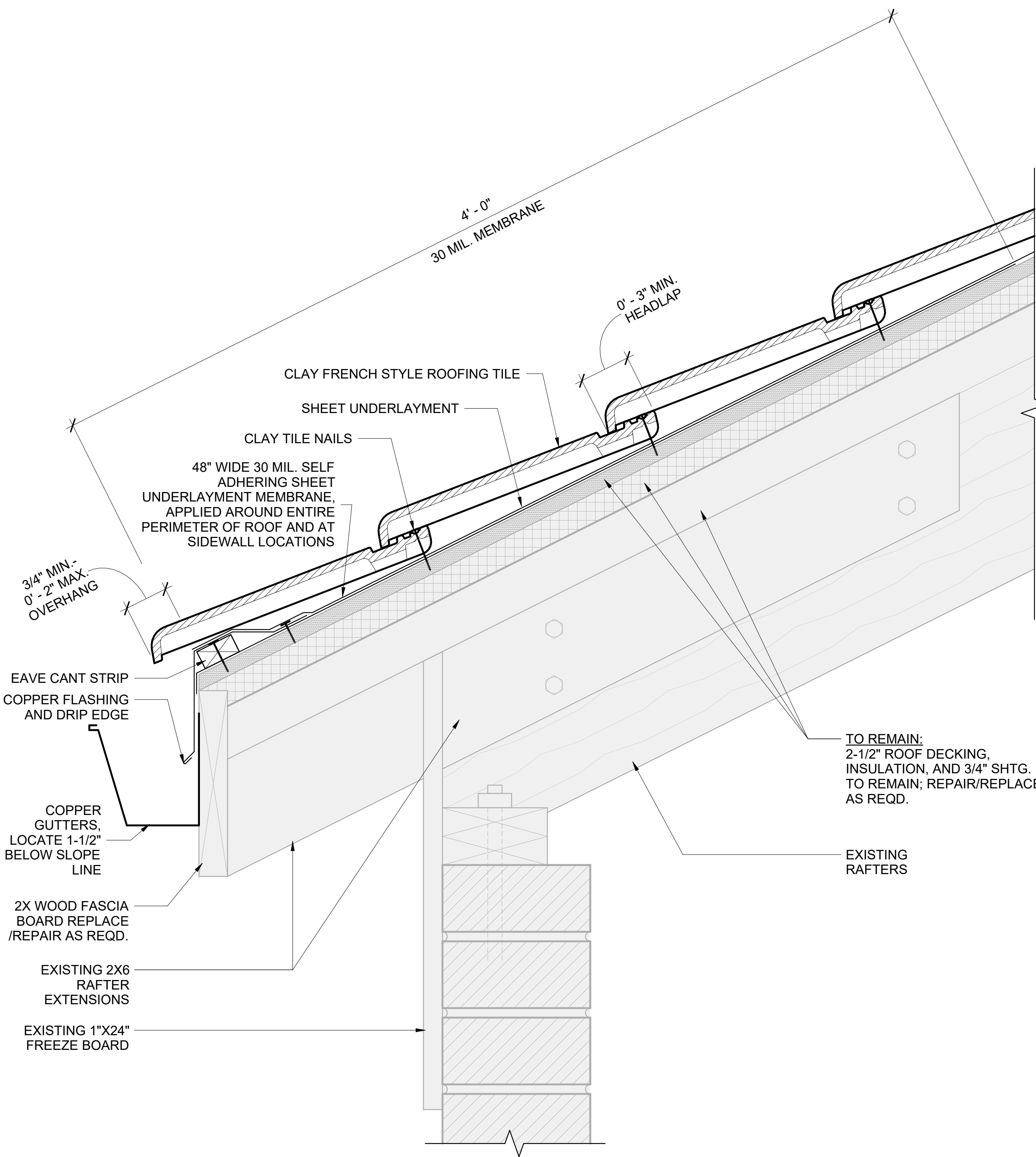
No.	Description	Date

## Details

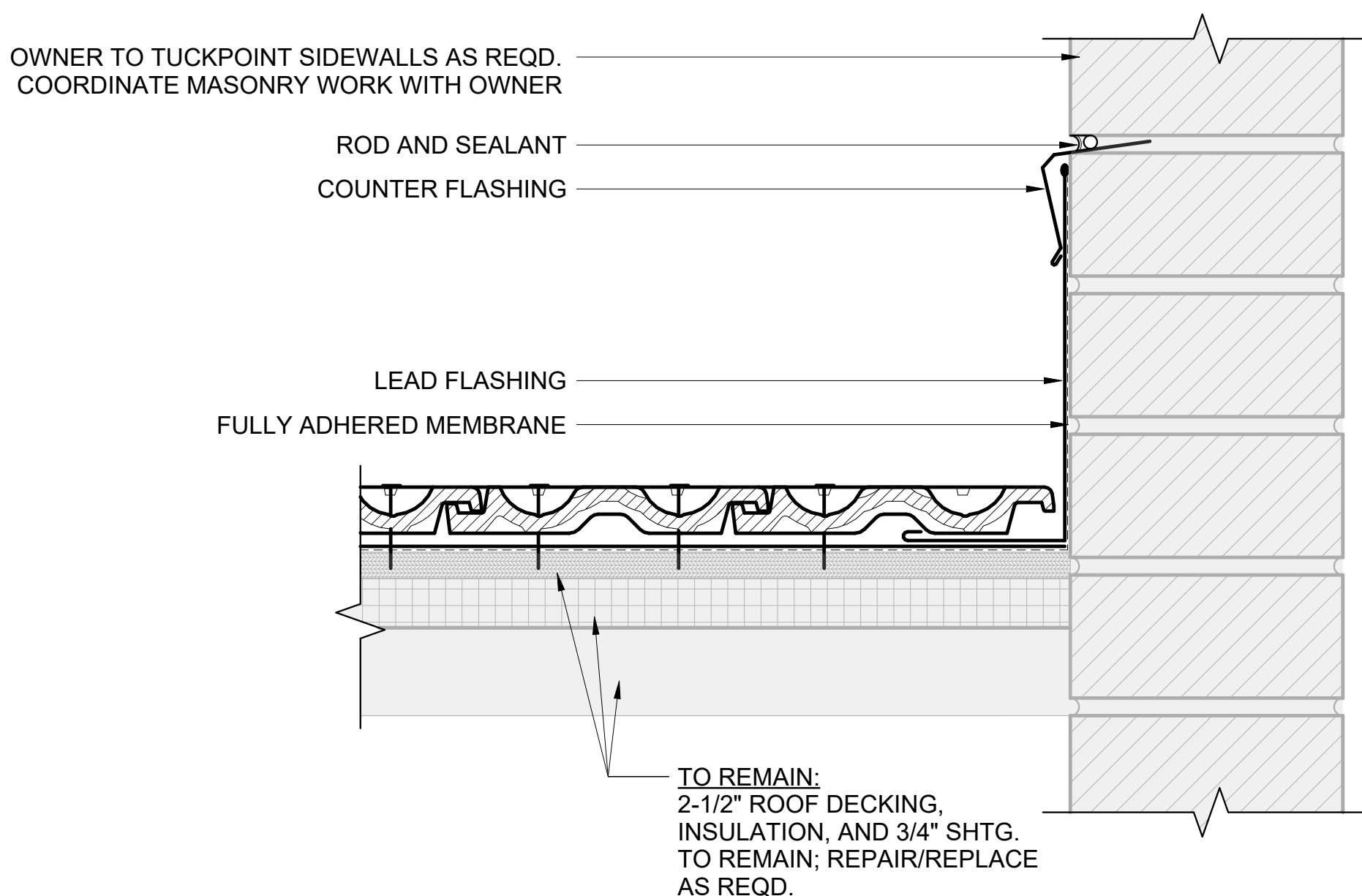
Project number	22-109330
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A221  
Scale 3" = 1'-0"

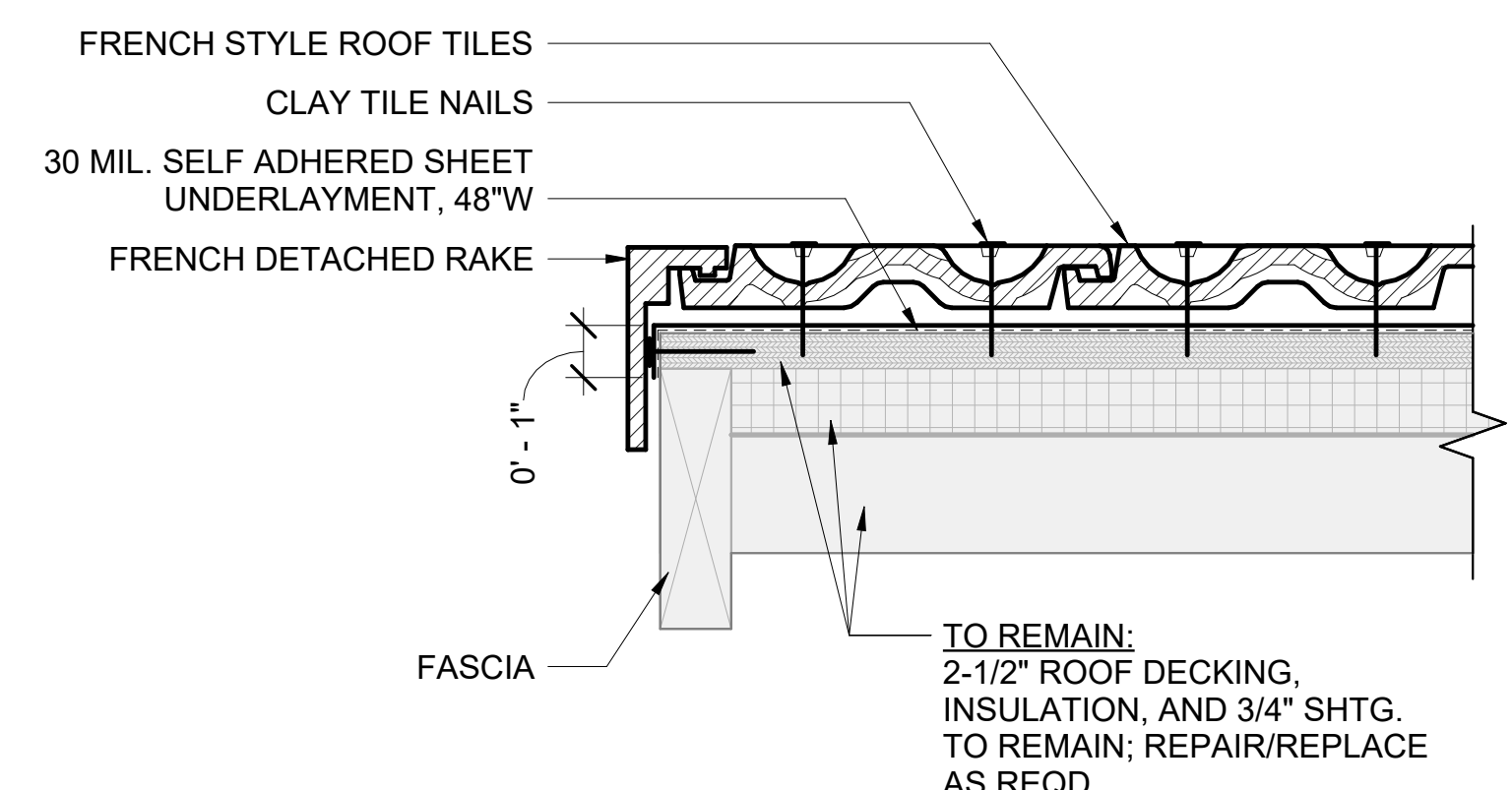




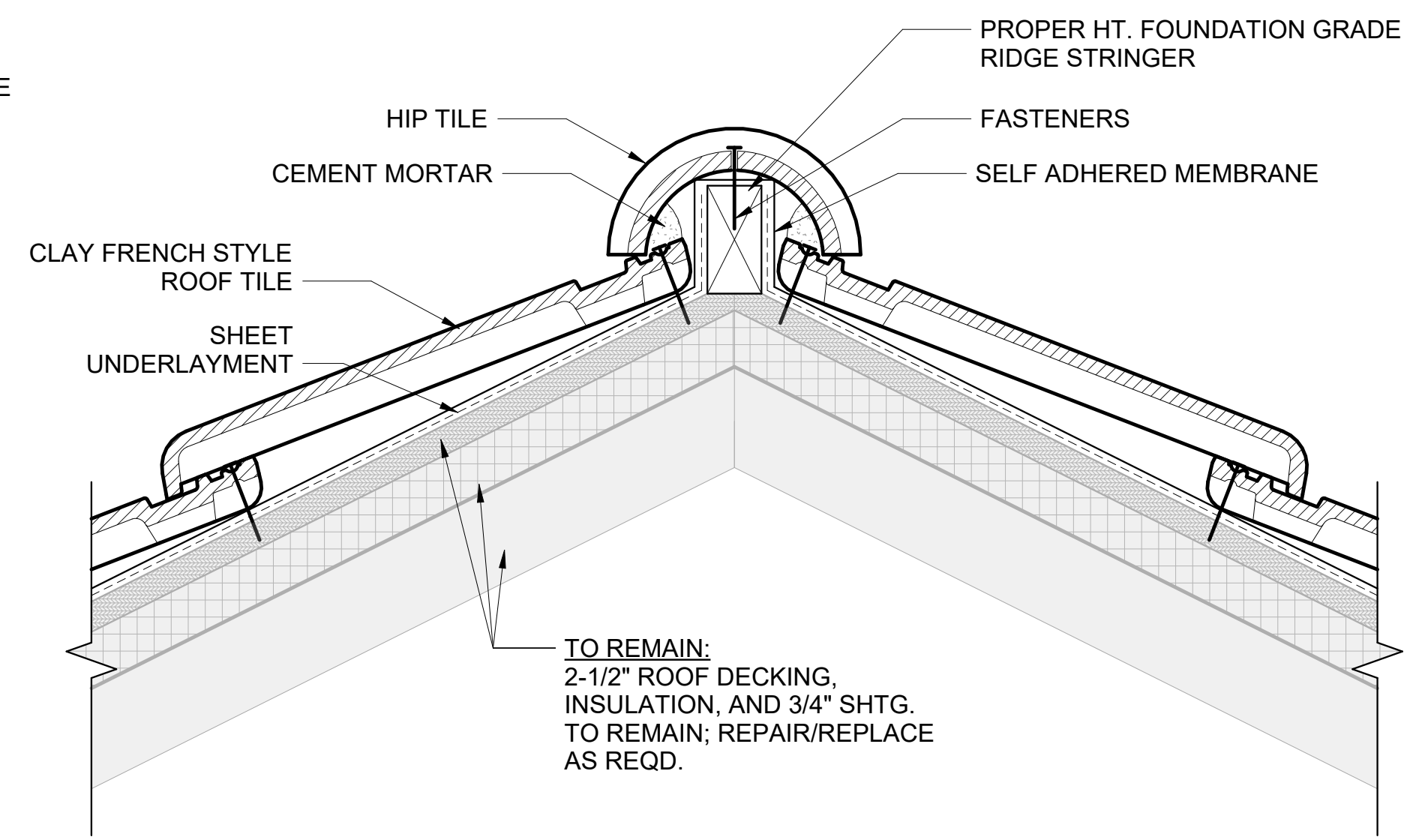
① Eave Detail  
3" = 1'-0"



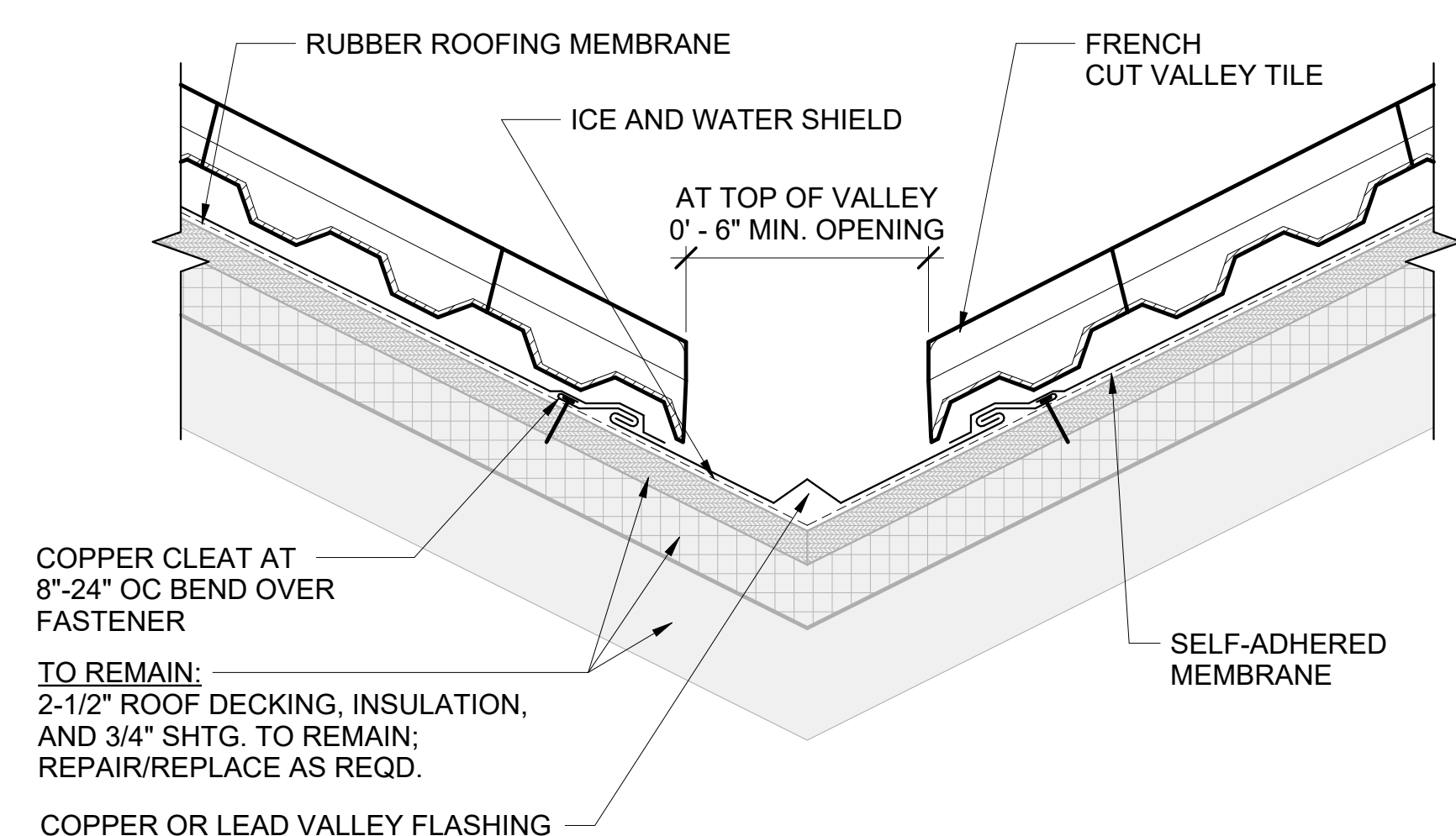
② Section at Sidewall  
3" = 1'-0"



③ Rake Detail  
3" = 1'-0"



④ Hip Section  
3" = 1'-0"



⑤ Section at Valley  
3" = 1'-0"



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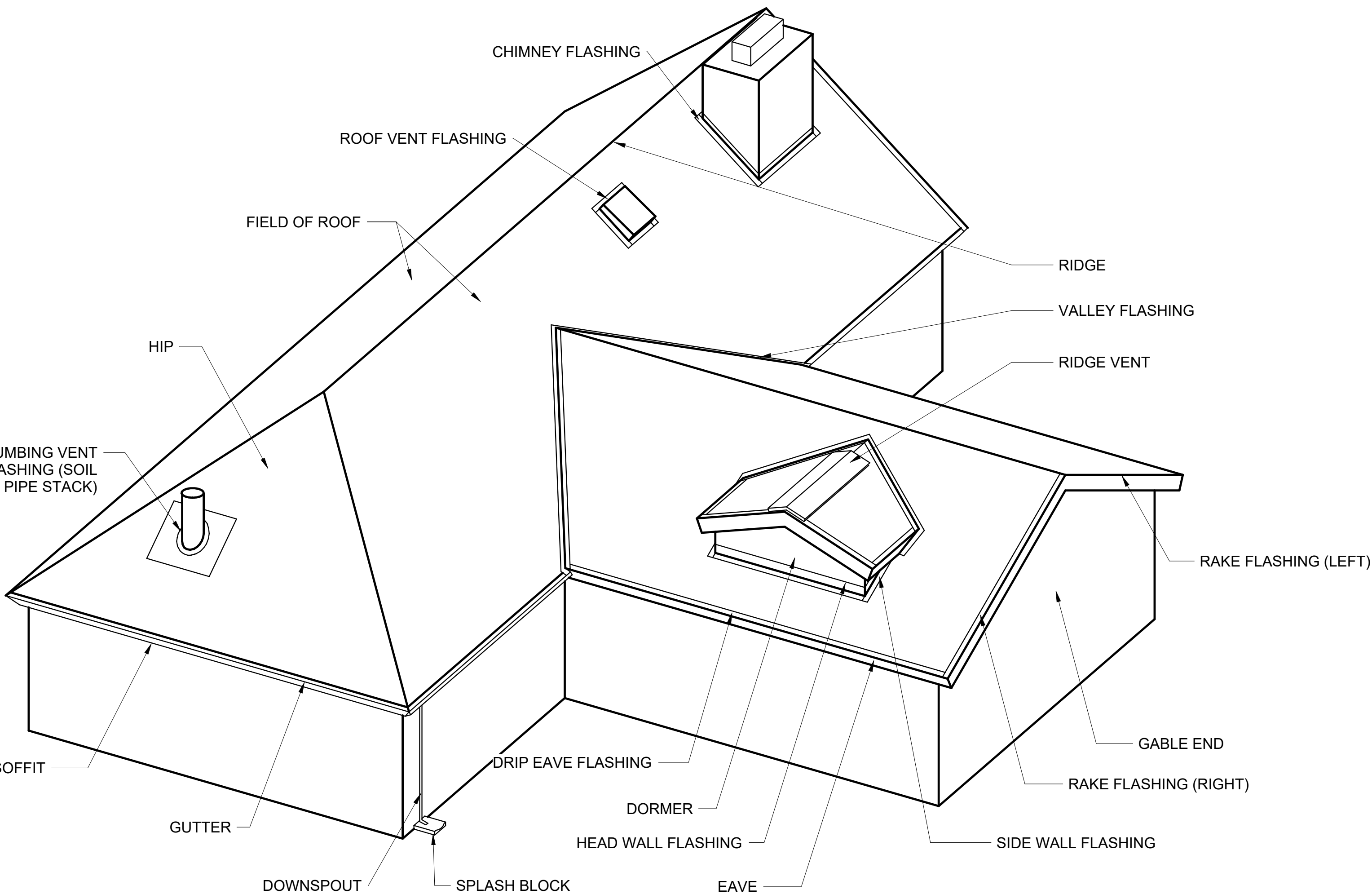
No.	Description	Date

Details

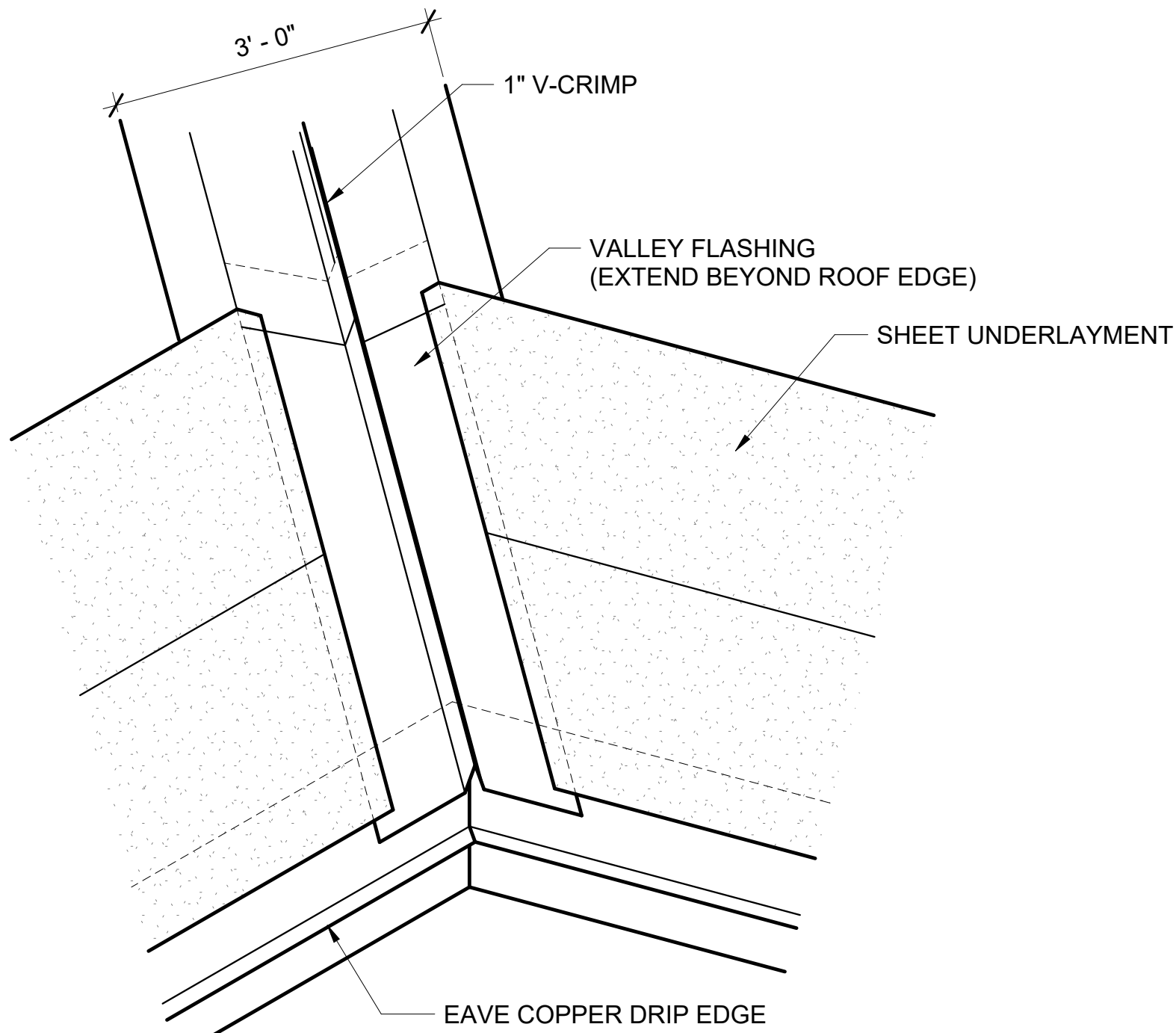
Project number	22-109330
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A222  
Scale 3" = 1'-0"

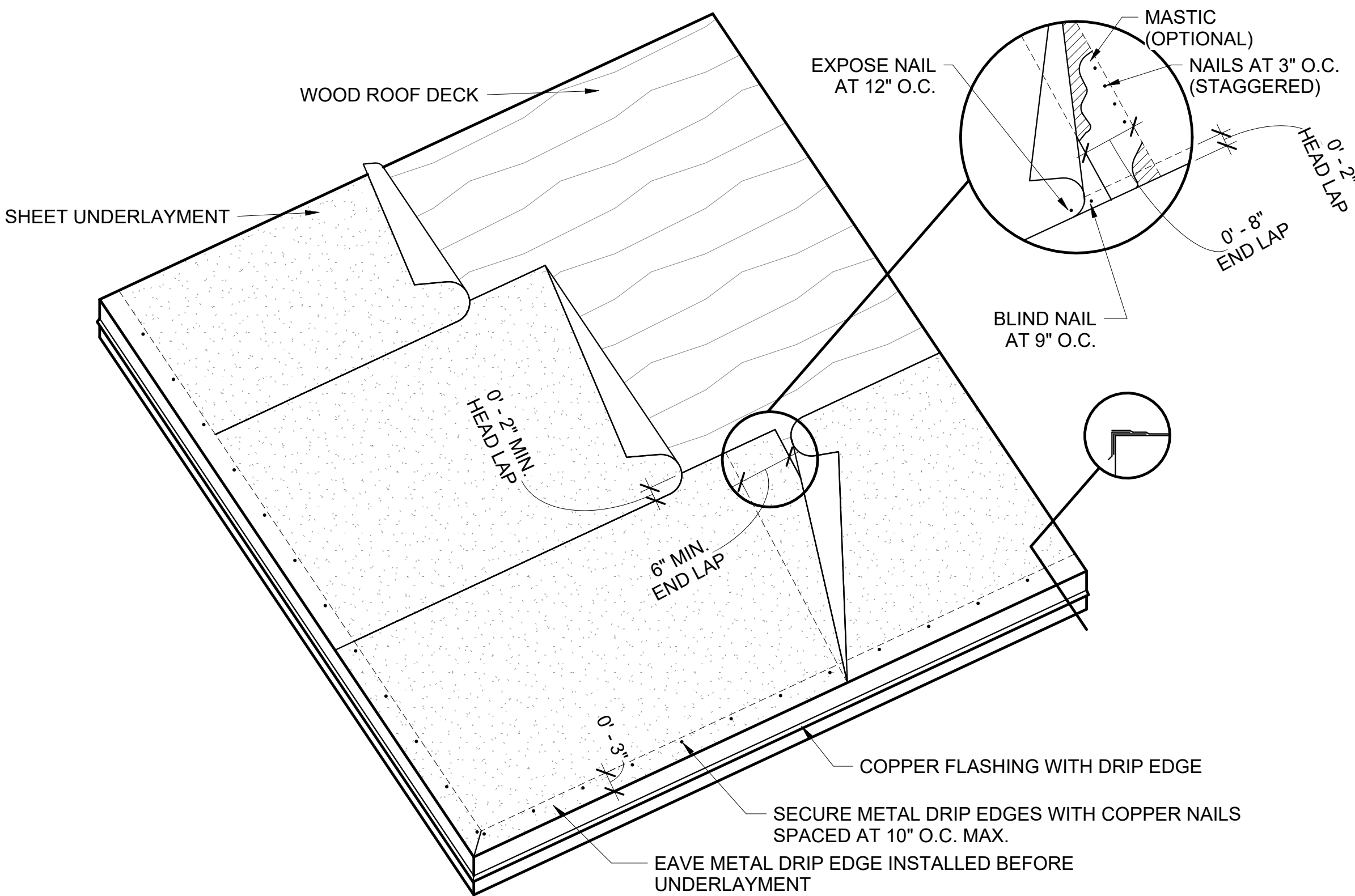




① Roof Area Flashing Identification  
3" = 1'-0"



③ Valley Underlayment  
3/4" = 1'-0"



② Felt Underlayment  
3/4" = 1'-0"



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A223  
Scale As indicated