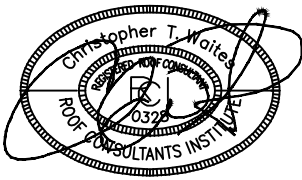


# UNIVERSITY OF SOUTH CAROLINA SUMTER SCIENCE BUILDING ROOF REPLACEMENT

WMBE PROJECT NUMBER: 2016-50



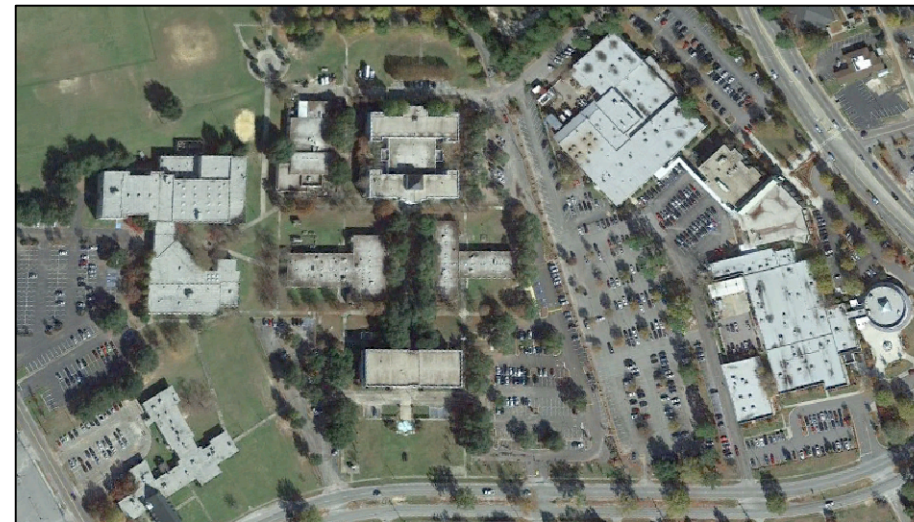
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**UNIVERSITY OF SOUTH CAROLINA SUMTER  
SCIENCE BUILDING  
SELECTIVE ROOF REPLACEMENT**  
  
**ADDRESS: 200 MILLER ROAD  
SUMTER, SC 29150**

## DRAWING LEGEND

- RD ⊗ ROOF DRAIN
- OF OVERFLOW SCUPPER
- A.P. ABANDONED PENETRATION
- PARAPET WALL
- SK SKYLIGHT
- GRAVITY VENT ROOF CURB
- HVAC MECHANICAL UNIT
- CHIMNEY
- VTR ● VENT THROUGH ROOF
- PP PITCH PAN
- SLOPE

## SITE LOCATIONS



### SCIENCE BUILDING USC SUMTER CAMPUS

ADDRESS: 200 MILLER ROAD, SUMTER SC 29150

## SUMMARY OF WORK

1. SCOPE OF WORK INCLUDES REMOVAL OF THE ENTIRE EXISTING ROOF ASSEMBLY ON ALL ROOF AREAS AND REPLACEMENT WITH NEW ROOF INSULATION SYSTEM AND A FULLY ADHERED TPO ROOF MEMBRANE SYSTEM..
2. ALL NEW SHEET METAL ITEMS ASSOCIATED WITH THE INSTALLATION OF THE NEW ROOF ASSEMBLY AND SHOWN IN THE DRAWINGS ARE REQUIRED.
3. REPAIRS TO EXISTING GYPSUM DECK ASSEMBLY WHERE DAMAGED OR DETERIORATED SHALL BE PERFORMED USING UNIT PRICES.
4. WHERE SKYLIGHTS AND OTHER ROOF PENETRATIONS HAVE BEEN PERMANENTLY REMOVED, THE REPAIR OF THE GYPSUM DECK ASSEMBLY IS TO BE INCLUDED IN THE BASE BID WORK.

## TABLE OF CONTENTS

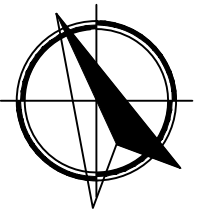
R-1.0 COVER PAGE	D-1.1 DETAILS
R-1.1 EXISTING ROOF PLAN	D-1.2 DETAILS
R-1.2 NEW ROOF PLAN	D-1.3 DETAILS
R-1.3 TAPER ROOF PLAN	



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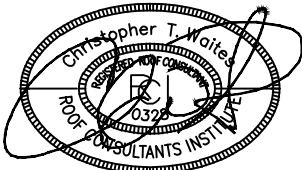
CONSTRUCTION DOCUMENTS

DATE: 3-08-2017

COVER PAGE

PAGE:

**R-1.0**



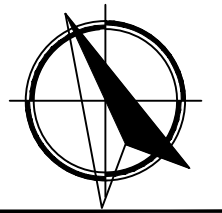
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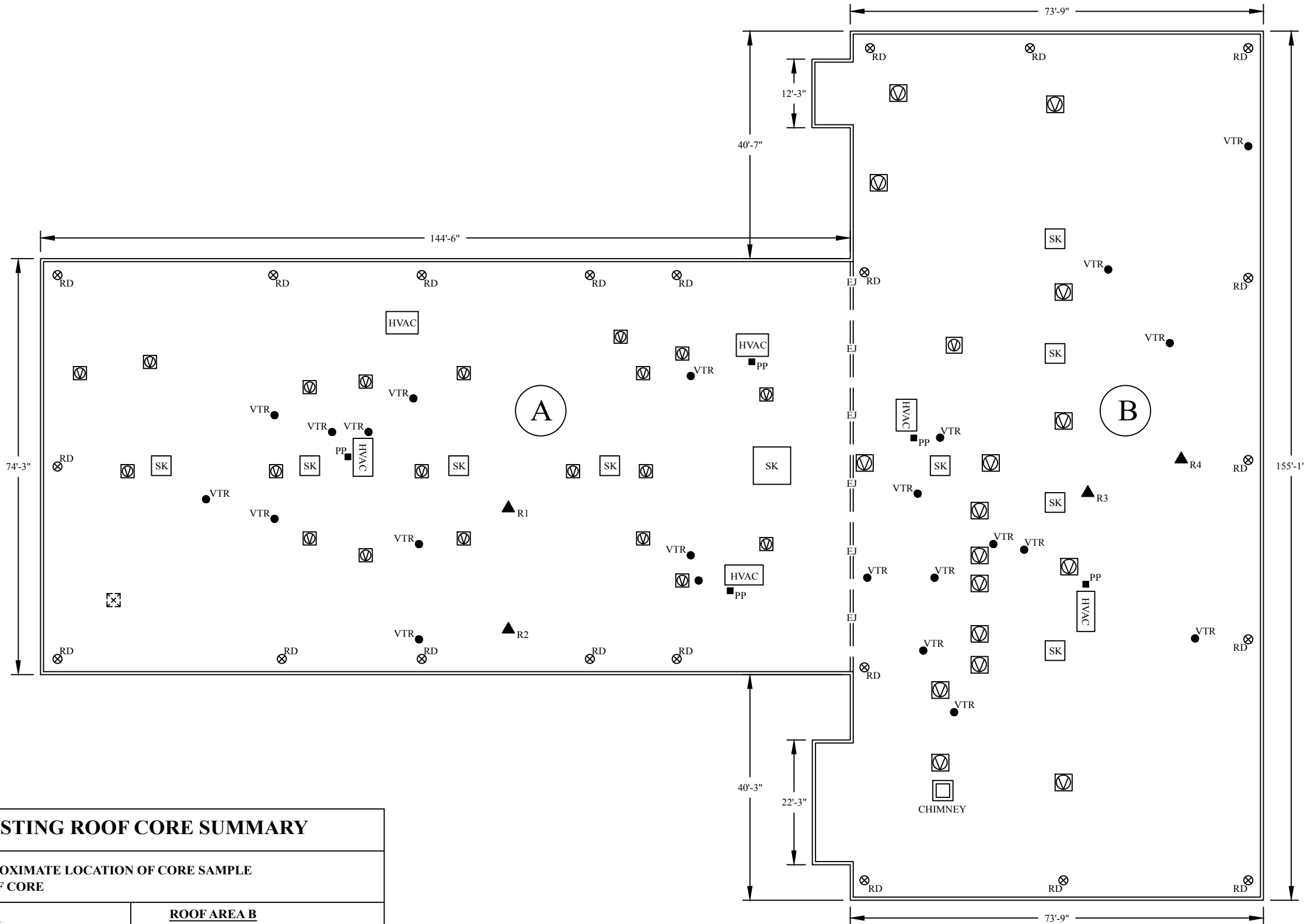
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EXISTING  
 ROOF PLAN

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SHEET 2 OF 7



**EXISTING ROOF CORE SUMMARY**

▲ = APPROXIMATE LOCATION OF CORE SAMPLE  
 R = ROOF CORE

**ROOF AREA A**

R1= GBUR  
 3/4" FIBERGLASS INSULATION  
 4-1/4" PERLITE  
 BASE SHEET  
 GYPSUM DECK  
 TOTAL THICKNESS 5-1/2"

R2= GBUR

3/4" FIBERGLASS INSULATION  
 1" PERLITE  
 BASE SHEET  
 GYPSUM DECK  
 TOTAL THICKNESS 2-1/4"

**ROOF AREA B**

R3= GBUR  
 3/4" FIBERGLASS INSULATION  
 4" PERLITE  
 BASE SHEET  
 GYPSUM DECK  
 TOTAL THICKNESS 5-1/4"

R4= GBUR

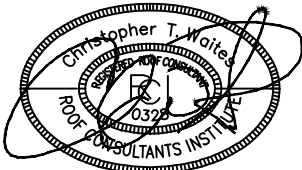
3/4" FIBERGLASS INSULATION  
 1-1/2" PERLITE  
 BASE SHEET  
 GYPSUM DECK  
 TOTAL THICKNESS 2-3/4"

EXISTING ROOF PLAN

SCALE 1" = 20'

**NOTE:**

- ALL EXISTING SKYLIGHTS (SK) TO BE REMOVED ON ALL ROOF AREAS.



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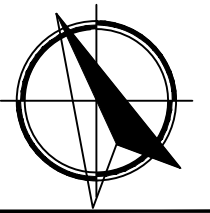
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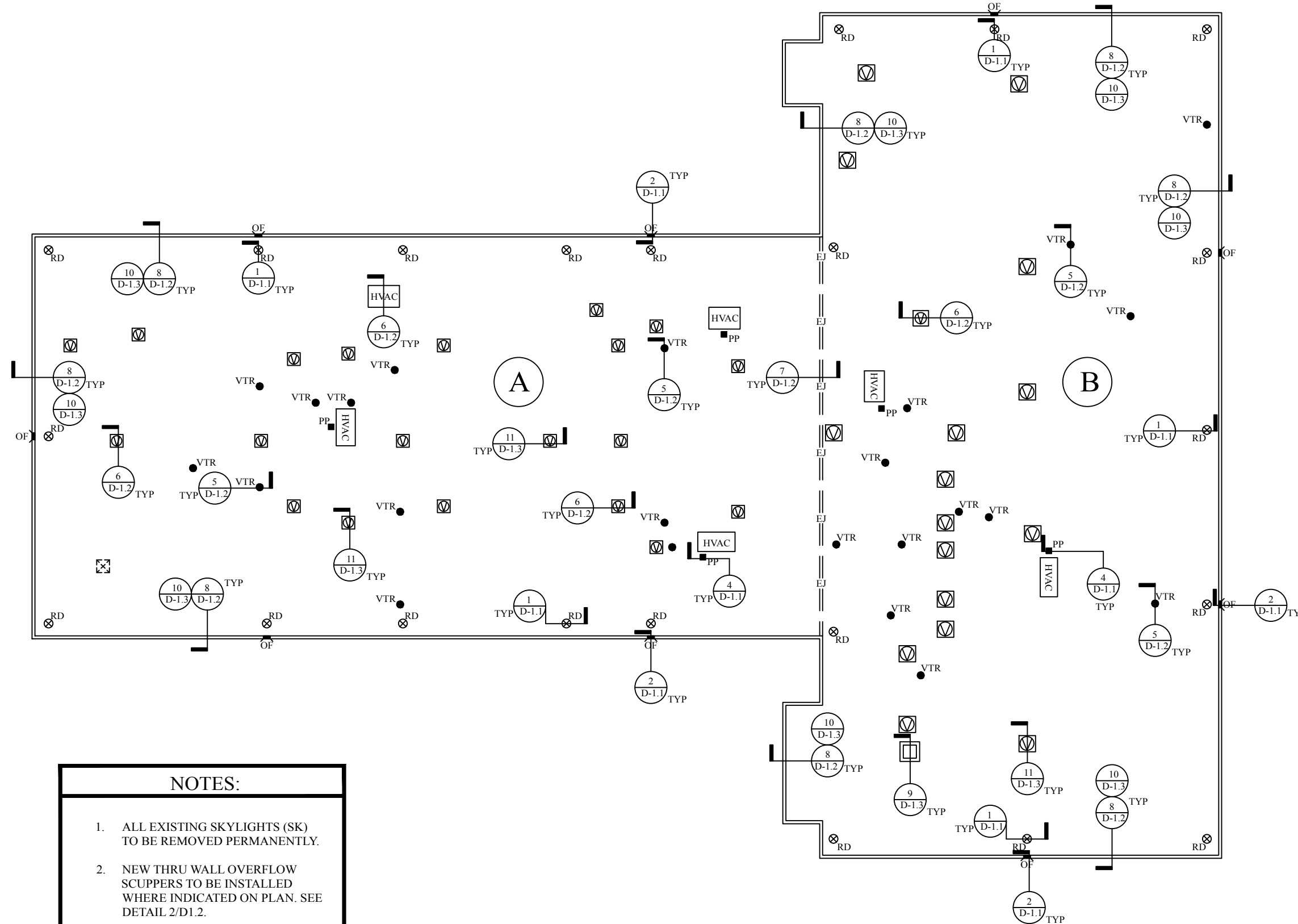
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NEW ROOF PLAN

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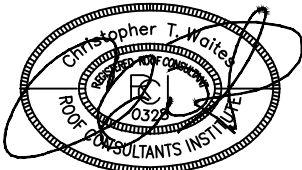


**NOTES:**

1. ALL EXISTING SKYLIGHTS (SK) TO BE REMOVED PERMANENTLY.
2. NEW THRU WALL OVERFLOW SCUPPERS TO BE INSTALLED WHERE INDICATED ON PLAN. SEE DETAIL 2/D1.2.
3. WALK PADS TO BE INSTALLED AROUND HVAC UNITS. NOT SHOWN ON DRAWING FOR CLARITY.

NEW ROOF PLAN

SCALE 1" = 20'



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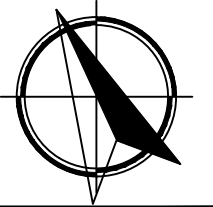
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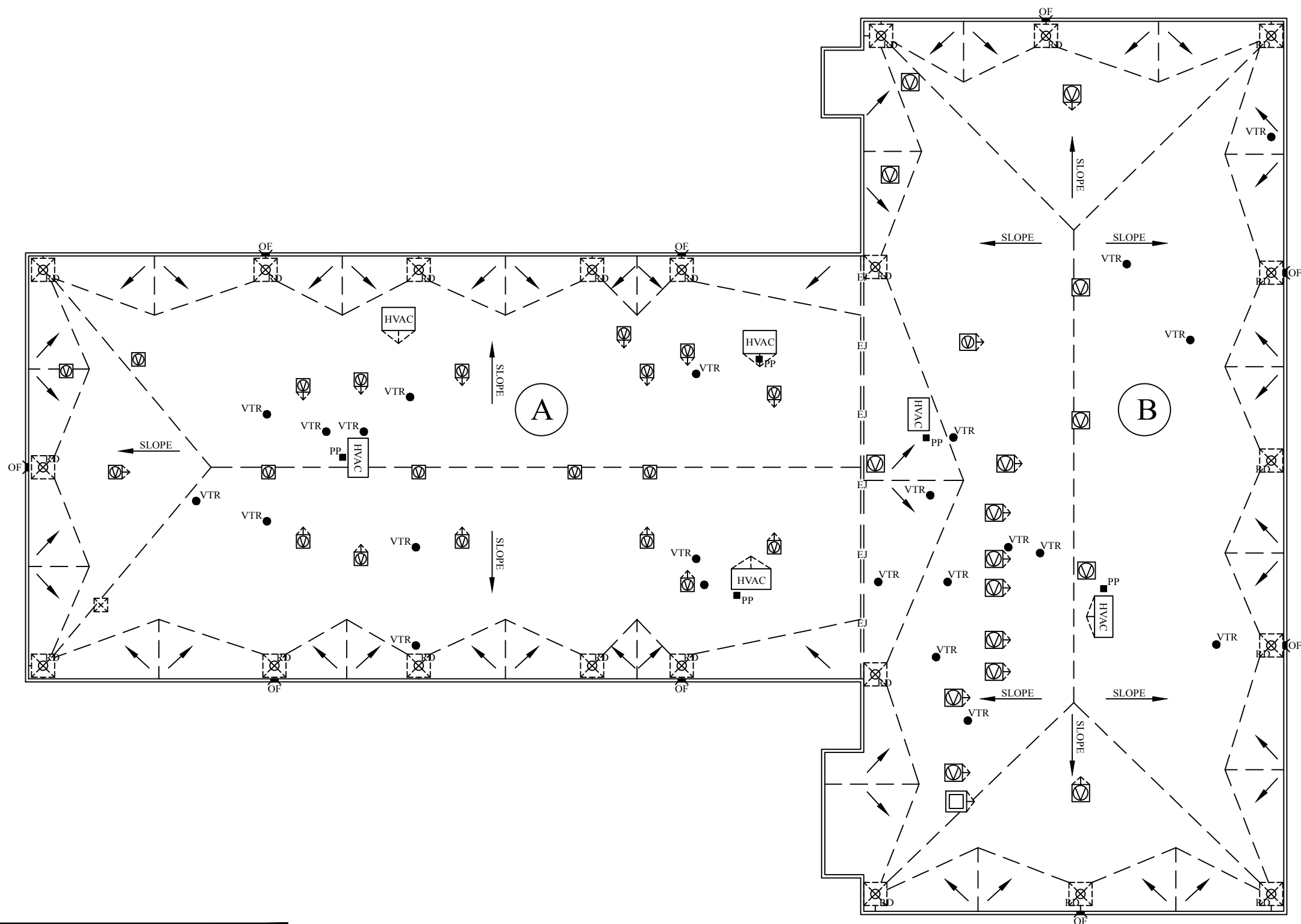
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TAPER  
ROOF PLAN

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SHEET 4 OF 7



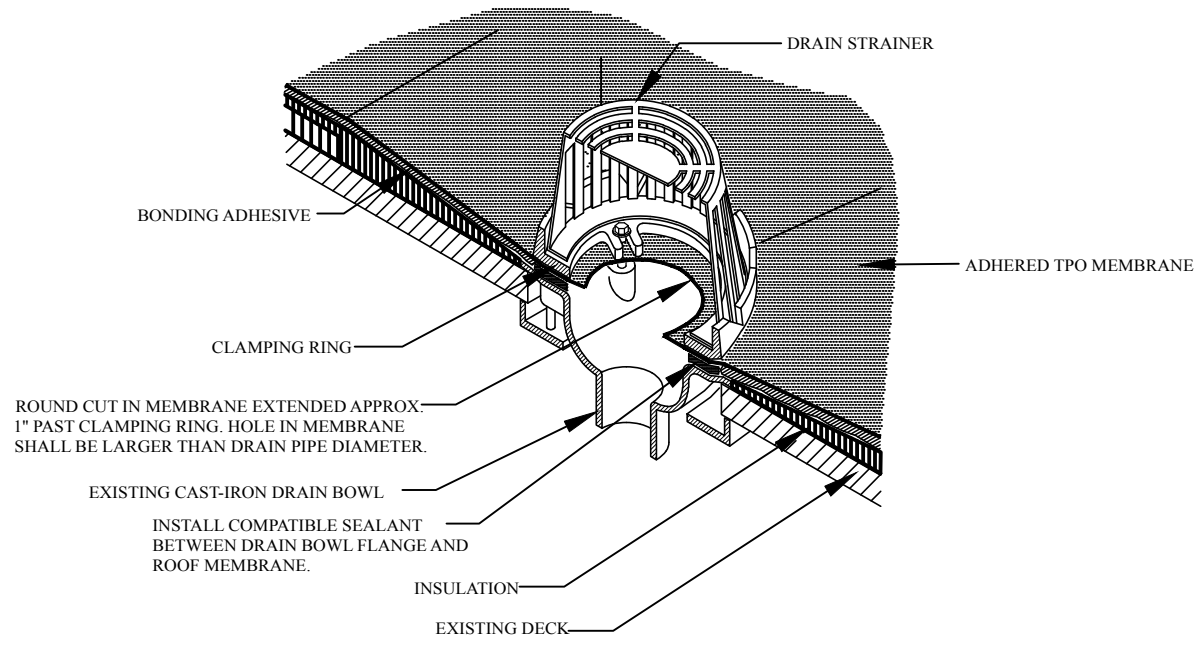
NOTE:

- 1. TAPERED INSULATION AND CRICKETS TO BE INSTALLED AT HIGH SIDE OF ALL UNITS, ALL CANOPIES, AND BEHIND PARAPET WALLS WHERE SHOWN AS REQUIRED.

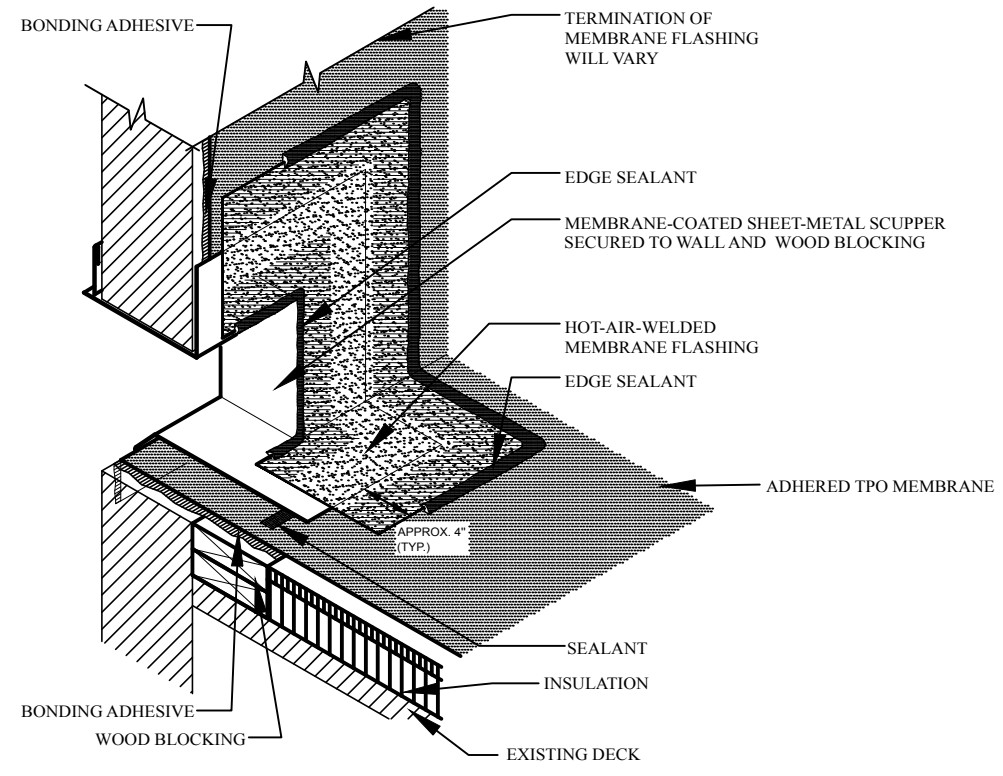
TAPER ROOF PLAN

SCALE 1" = 20'

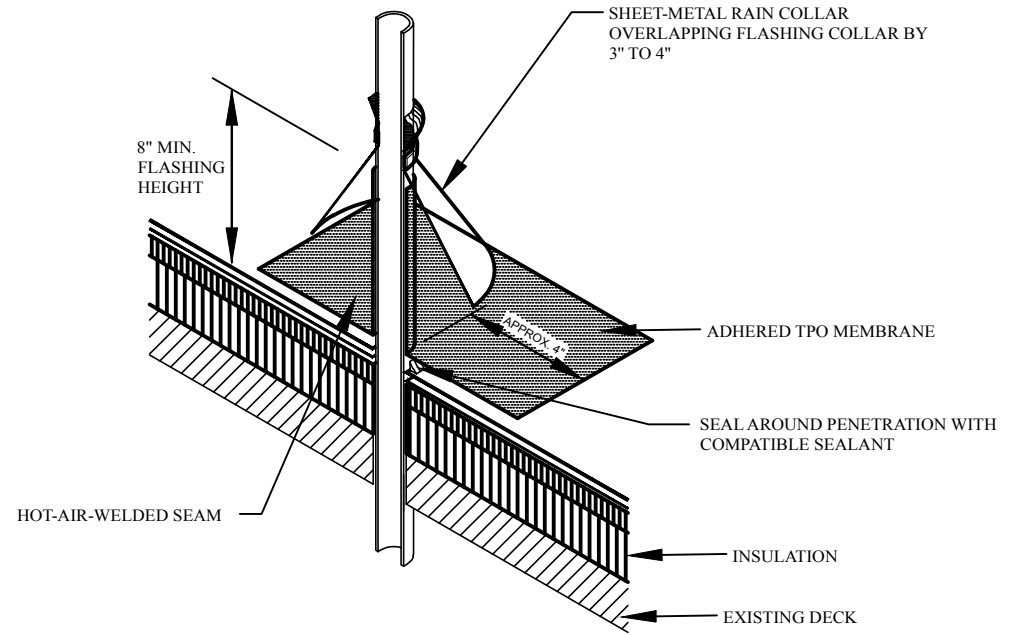




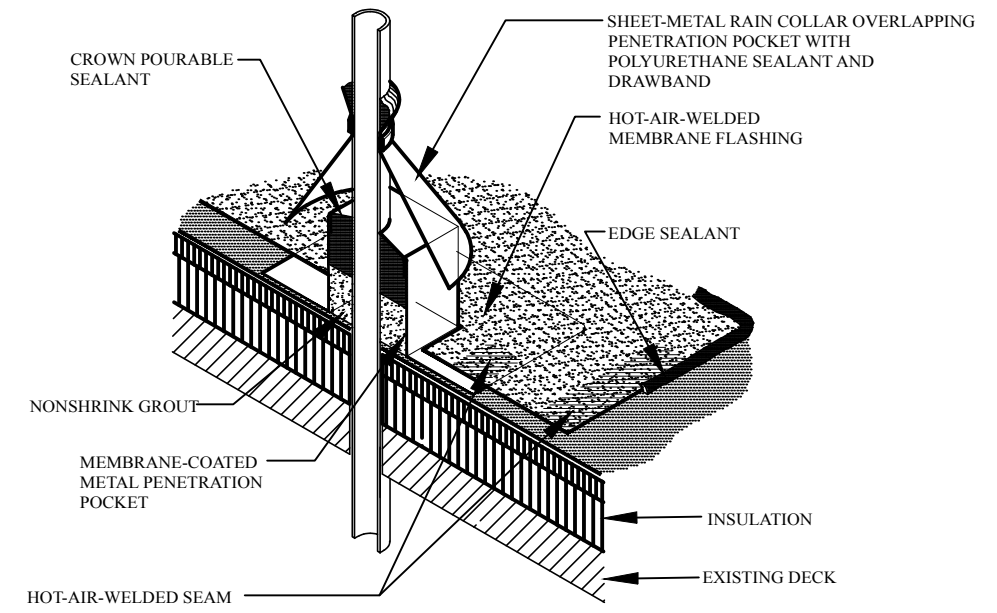
**ROOF DRAIN**  
**DETAIL 1 / D1.1**



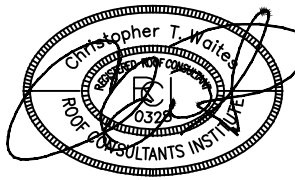
**THRU-WALL DRAIN SCUPPER**  
**DETAIL 2 / D1.1**



**PIPE PENETRATION**  
**DETAIL 3 / D1.1**



**PITCH-PAN**  
**DETAIL 4 / D1.1**



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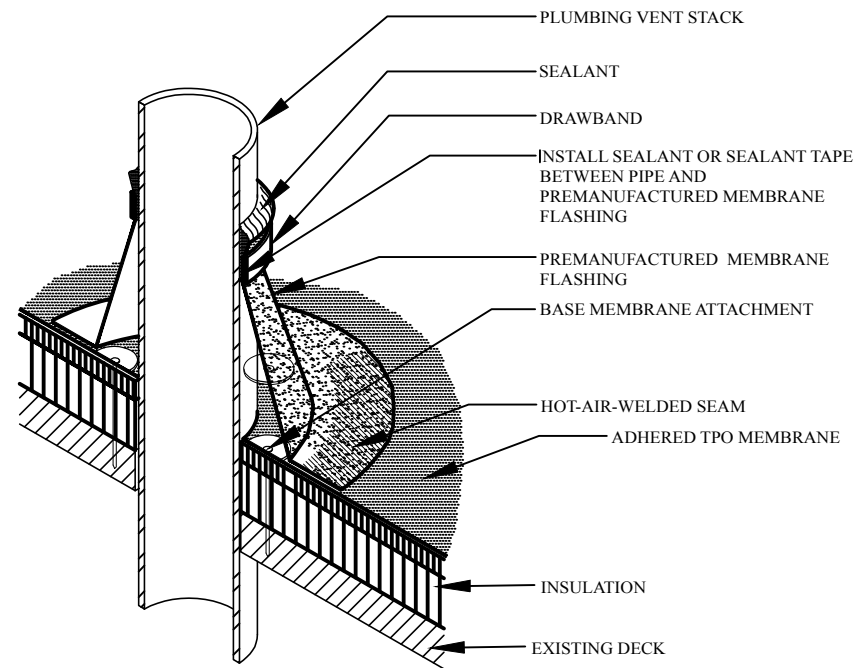
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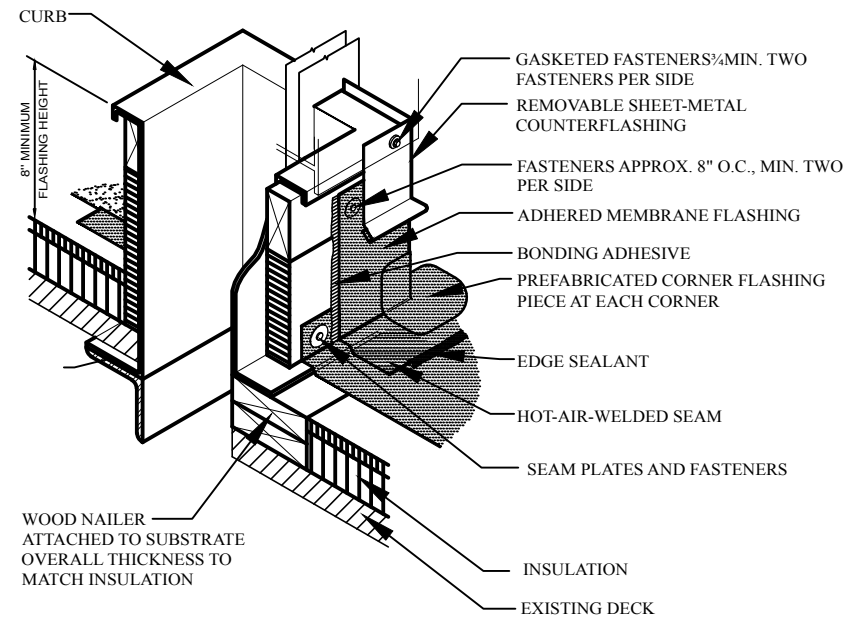
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DETAILS  
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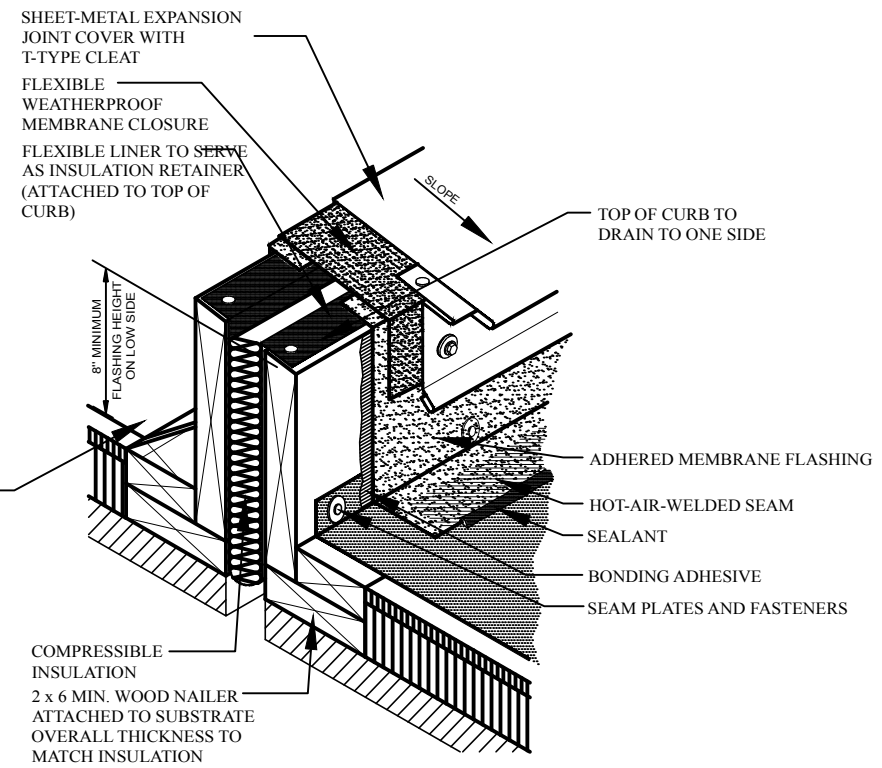
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**D-1.1**



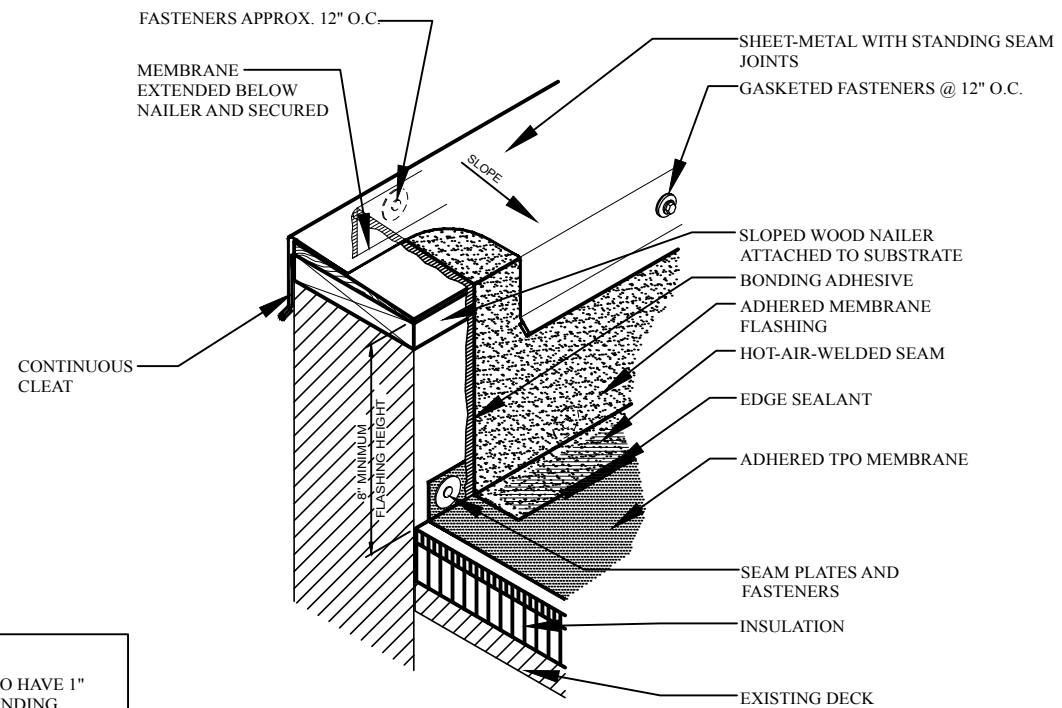
**PLUMBING VENT / VTR**  
**DETAIL 5 / D1.2**



**CURB BASE FLASHING**  
**DETAIL 6 / D1.2**



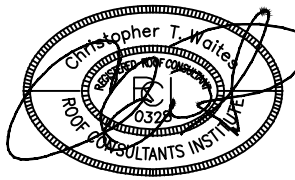
**EXPANSION JOINT**  
**DETAIL 7 / D1.2**



**PARAPET WALL WITH METAL COPING**  
**DETAIL 8 / D1.2**

NOTES:  
1. JOINTS TO BE 1" HIGH STANDING SEAMS.  
2. SELECTIVE DEMOLITION AND REPAIR OF EXISTING GBUR ON ROOF AREA B AS REQUIRED TO INSTALLED EXPANSION JOINT DETAIL.

NOTE:  
1. COPING TO HAVE 1" HIGH STANDING SEAMS.



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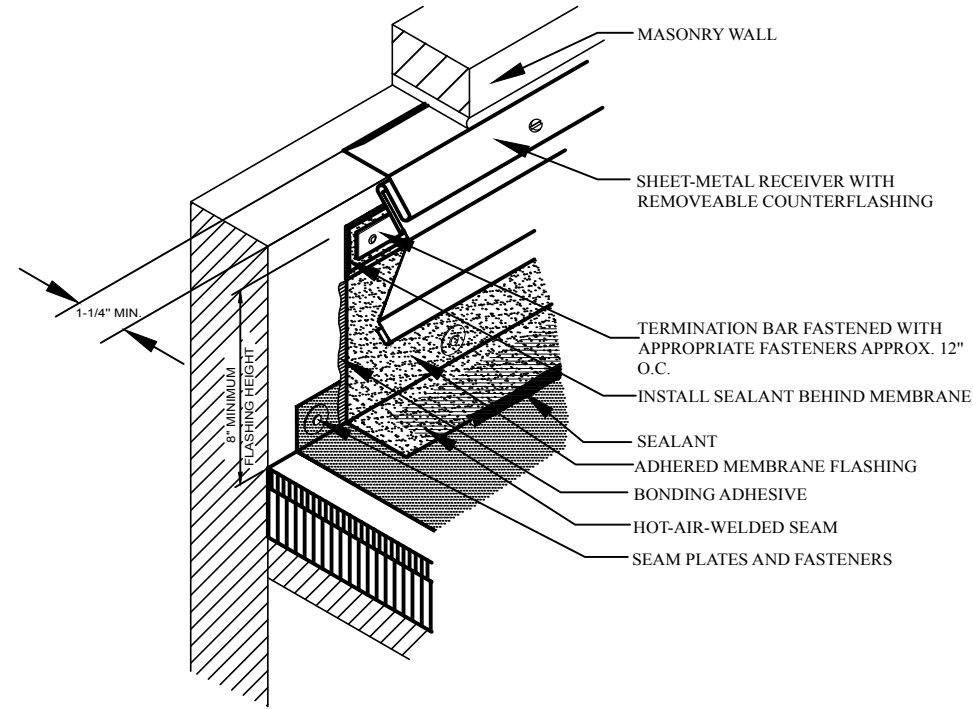
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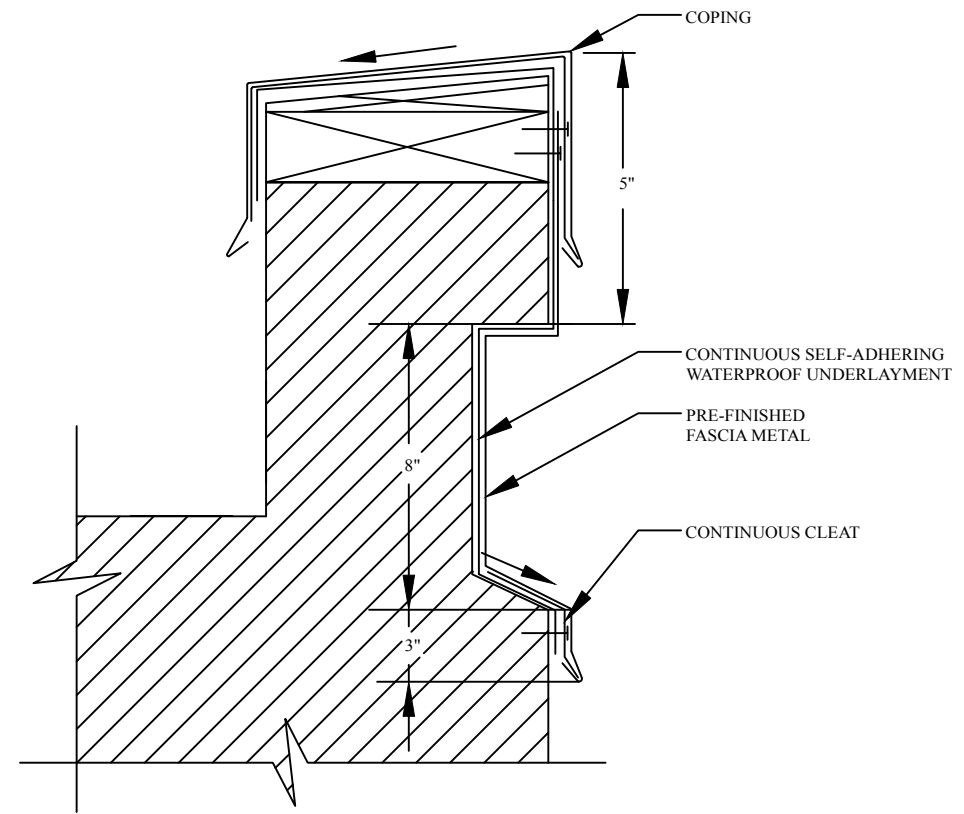
DETAILS  
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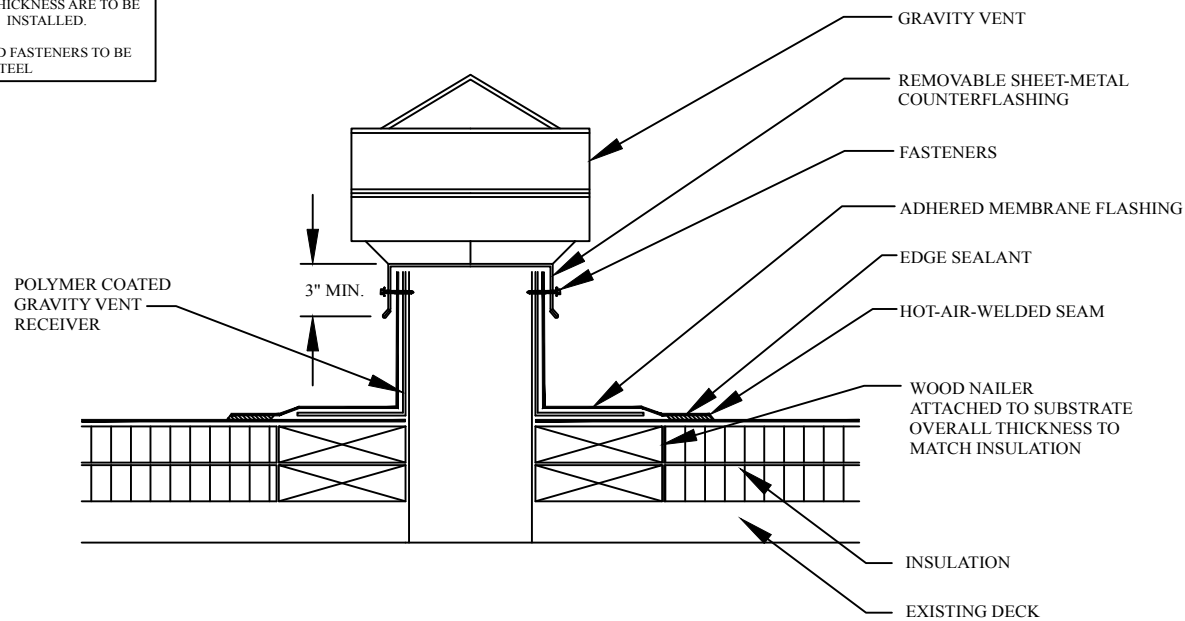
**BASE FLASHING @ MASONRY**  
**DETAIL 9 / D1.3**

NOTE:  
1. SEE DETAIL 8/R1.2 FOR COPING REQUIREMENTS.

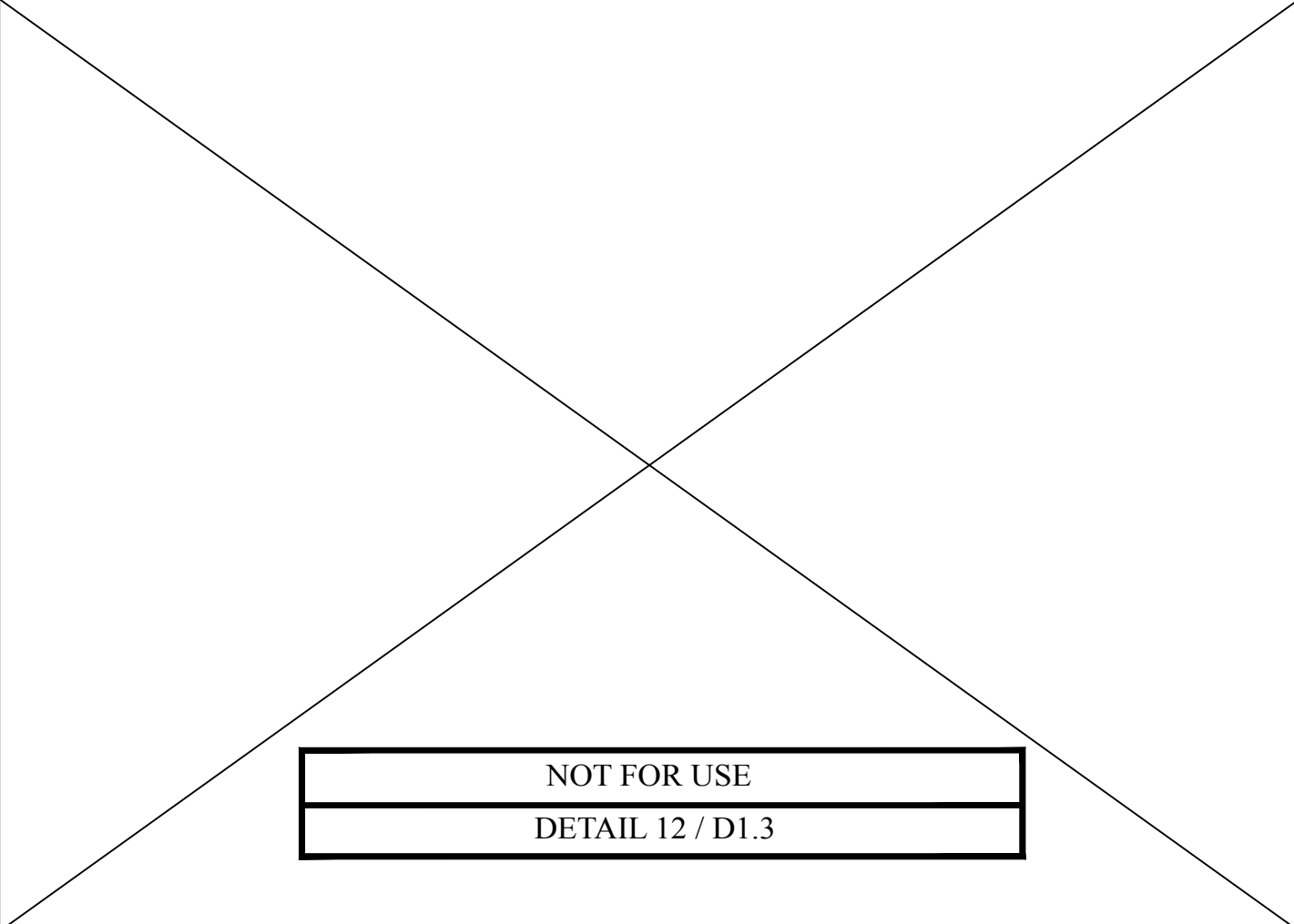


**EXISTING EDGE CONDITION**  
**DETAIL 10 / D1.3**

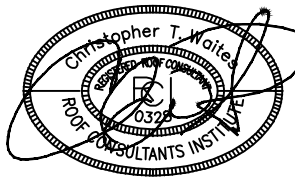
NOTES:  
1. NEW ALUMINUM GRAVITY VENT TO MATCH EXISTING IN TYPE & MATERIAL THICKNESS ARE TO BE PROVIDED & INSTALLED.  
2. ALL EXPOSED FASTENERS TO BE STAINLESS STEEL



**GRAVITY VENT**  
**DETAIL 11 / D1.3**



**NOT FOR USE**  
**DETAIL 12 / D1.3**



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DETAILS  
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