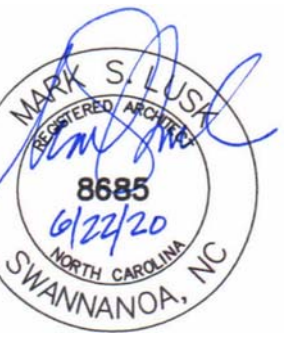
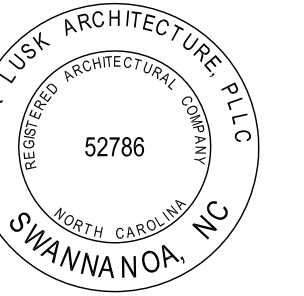


# RMS & FRMS GYMS, WHHS BLDG Y & HCPS C.O. ROOF REPLACEMENTS

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HENDERSON COUNTY PUBLIC SCHOOLS

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### ARCHITECT

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LIST OF DRAWINGS	
T101	COVER SHEET
ARCHITECTURAL	
A201	RUGBY MIDDLE SCHOOL GYM ROOF PLAN
A202	RMS & FRMS OVERALL ROOF PLANS
A203	FLAT ROCK MIDDLE SCHOOL GYM ROOF PLAN
A204	CENTRAL OFFICE ROOF PLAN
A205	BUILDING Y ROOF PLAN - WEST HENDERSON HIGH
A301	DETAILS
A302	DETAILS

### NORTH CAROLINA BUILDING CODE SUMMARY

- PER N.C.G.S. 143-138(b15): BUILDINGS CONSTRUCTED BEFORE 2012 ARE EXCLUDED FROM THE CURRENT CODE AND ARE SUBJECT TO THE 2009 NC ENERGY CONSERVATION CODE. R-VALUE MIN. SHALL BE R-15, FOR CLIMATE ZONE 4 (NON-MARINE)
- NC ENERGY CONSERVATION CODE 503.1 EXCEPTION 2.e: REROOF SHALL NOT BE LESS THAN THE CONDITIONS/DESIGN PRIOR TO ROOF REPLACEMENT
- 1511.1 EXCEPTIONS 1&2: REPLACEMENT SHALL NOT BE REQUIRED TO MEET THE SLOPE REQUIREMENT OF 1/4" PER FOOT OR PROVIDE SECONDARY DRAINS OR SCUPPERS
- 1511.3.1.1 EXCEPTIONS 3: ROOF RECOVERING SHALL NOT BE PERMITTED OVER WATER SOAKED ROOFING OR OVER 2 OR MORE ROOF APPLICATIONS

### NOTES:

- RMS GYM APPROXIMATE ROOF SQUARE FOOTAGE: 9,837 SF
- FRMS GYM APPROXIMATE ROOF SQUARE FOOTAGE: 9,837 SF
- WHHS BLDG Y APPROXIMATE ROOF SQUARE FOOTAGE: 9,500 SF
- CONTROL OFFICE APPROXIMATE ROOF SQUARE FOOTAGE: 8,912 SF

### ABBREVIATIONS:

- REPLACE= REMOVE EXISTING AND PROVIDE AS SHOWN AND SPECIFIED
- MB= MODIFIED BITUMEN
- RD= ROOF DRAIN
- CMU= CONCRETE MASONRY UNITS
- CWFD= CEMENTITIOUS WOOD FIBER DECK
- POLYISO= POLYISOCYANURATE
- DS= DOWNSPOUT

**RMS & FRMS  
GYMS,  
WHHS BLDG Y &  
HCPS C.O.  
ROOF  
REPLACEMENTS**

Project Number: 20004

Checked: \_\_\_\_\_

Drawn: A. Rognas

Date: 6/22/20

Revisions: \_\_\_\_\_

COVER SHEET

T101

**ROOFING NOTES**

**1. EXISTING ROOFING COMPONENTS:**

MODIFIED BITUMEN  
MECHANICALLY ATTACHED 1½" POLYISO INSULATION  
BUILT-UP ROOFING  
30# FELT  
CWFD- 3" THICK

**BASE BID**

2. DEMOLITION: REMOVE EXISTING MODIFIED BITUMEN & POLYISO INSULATION. REMOVE EXISTING ROOFING SYSTEM COMPONENTS INCLUDING FLASHING. EXISTING B.U. ROOFING SHALL REMAIN.

3. PROVIDE FULLY ADHERED 60 MIL TPO MEMBRANE ROOFING SYSTEM, AND 2.6" POLYISO INSULATION OVER EXISTING BUILT-UP ROOFING. ATTACH INSULATION THROUGH INTO EXISTING CWFD.

**ALTERNATE NO.1**

2. DEMOLITION: REMOVE EXISTING MODIFIED BITUMEN. REMOVE EXISTING ROOFING SYSTEM COMPONENTS INCLUDING FLASHING. EXISTING B.U. ROOFING & POLYISO INSULATION SHALL REMAIN.

3. PROVIDE FULLY ADHERED 60 MIL TPO MEMBRANE ROOFING SYSTEM, AND ½" HD BOARD OVER EXISTING POLYISO INSULATION. ATTACH INSULATION THROUGH INTO EXISTING CWFD.

**GENERAL NOTES**

1. EXISTING WOOD NAILER SHALL REMAIN UNLESS DETERMINED TO BE DAMAGED BY OWNER. REMOVAL AND REPLACEMENT SHALL BE PERFORMED AT UNIT PRICE.

2. VERIFY DIMENSIONS, QUANTITIES, SIZES, AND OTHER EXISTING CONDITIONS PRIOR TO DEMOLITION WORK. DISCREPANCIES BETWEEN DOCUMENTS AND EXISTING CONDITIONS SHALL BE REPORTED TO THE ARCHITECT.

3. CRICKETS SHALL SLOPE AT ½" PER FOOT.

4. SITE ACCESS, STAGING AND SCHEDULE TO BE COORDINATED WITH PRINCIPAL.

5. PROVIDE 18-8 OR 304 STAINLESS STEEL FASTENERS WHERE IN CONTACT WITH PRESSURE TREATED WOOD.

6. CONTRACTOR SHALL TAKE MEASURES TO PROTECT EXISTING ROOFING NIC AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING WORK TO PROVIDE WARRANTY REPAIR.

7. CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH THE AHJ. COSTS FOR PERMITS SHALL BE INCLUDED IN WORK. PROVIDE INSPECTION DOCUMENTS TO THE OWNER.



**RMS & FRMS  
GYMS,  
WHHS BLDG Y &  
HCPS C.O.  
ROOF  
REPLACEMENTS**

Project Number: 20004

Checked: \_\_\_\_\_

Drawn: A. Rognas

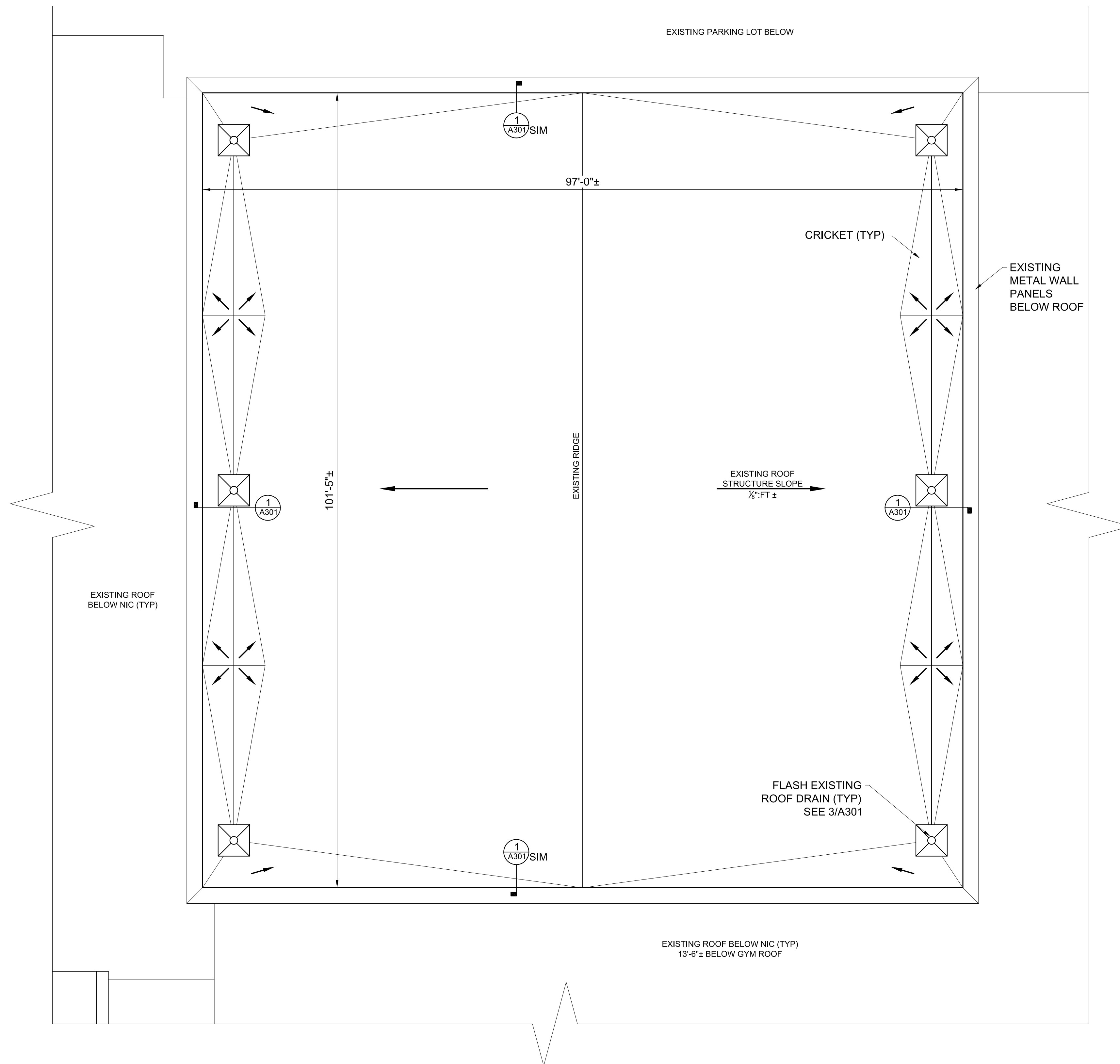
Date: 6/22/20

Revisions: \_\_\_\_\_

**RUGBY MIDDLE  
SCHOOL GYM  
ROOF PLAN**

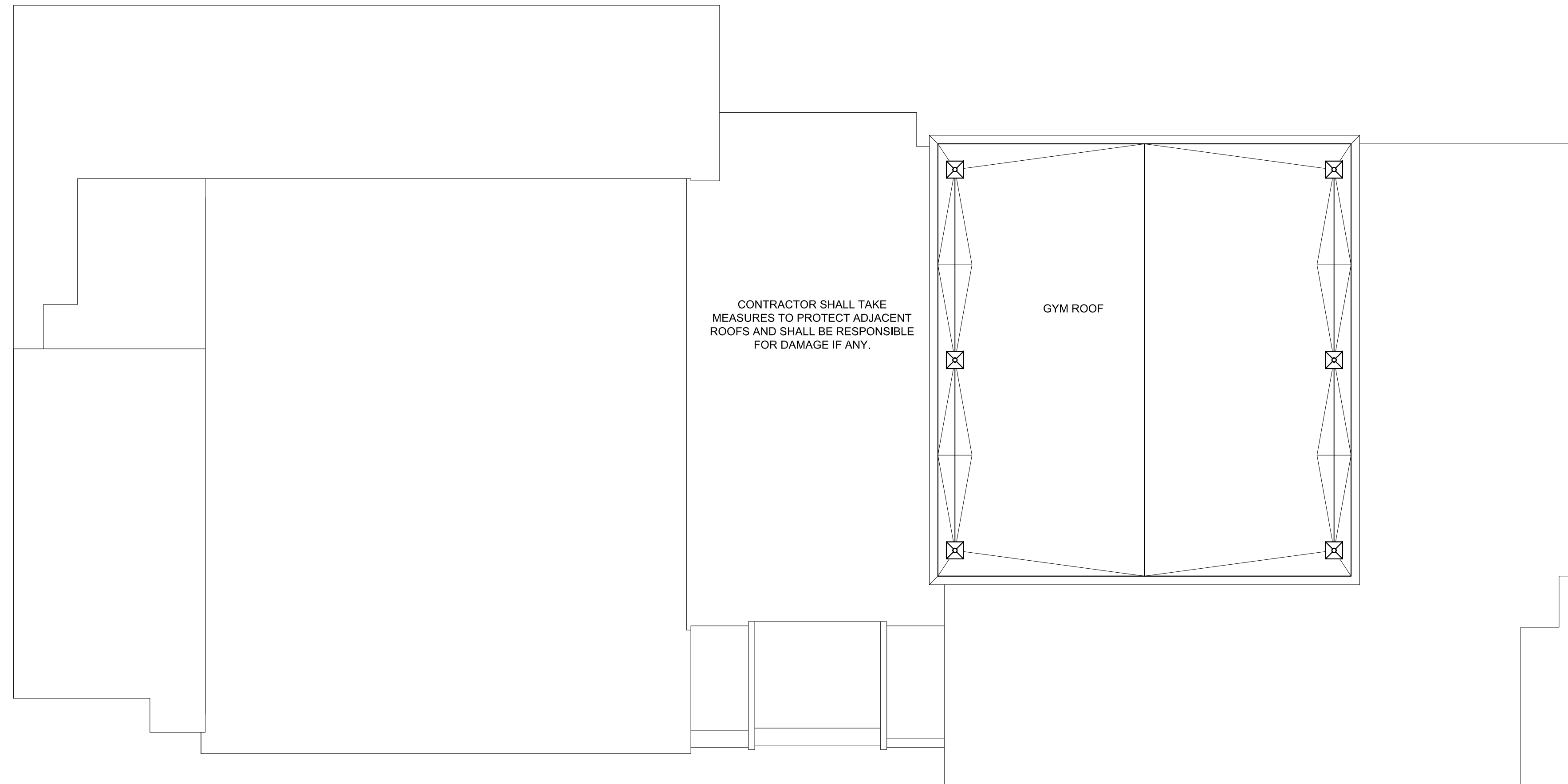
**A201**

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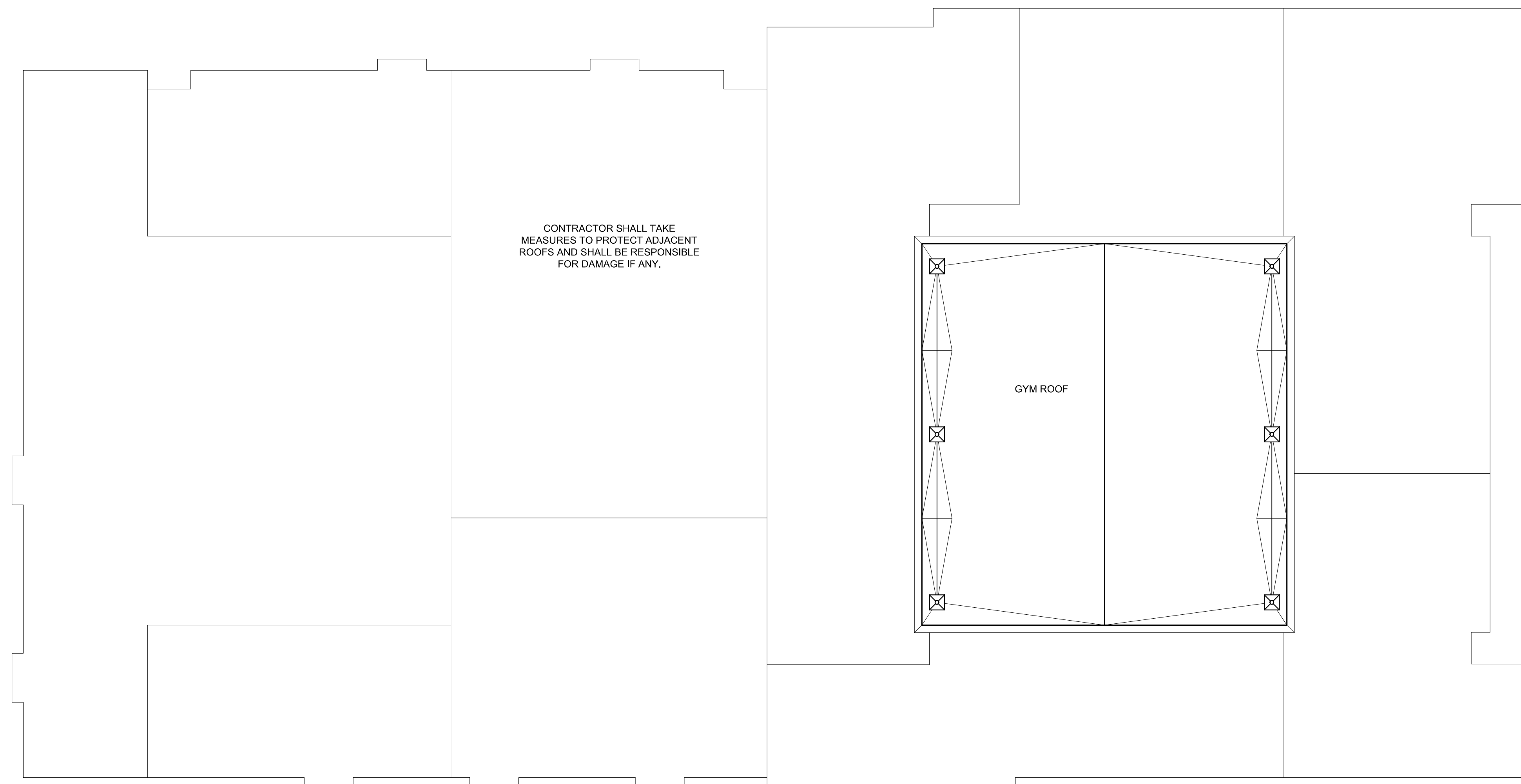


**RUGBY MIDDLE GYM ROOF PLAN**  
SCALE: 1/8"=1'-0"

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**RUGBY MIDDLE OVERALL ROOF PLAN**  
SCALE: 1"=20'-0"



**FLAT ROCK MIDDLE OVERALL ROOF PLAN**  
SCALE: 1"=20'-0"

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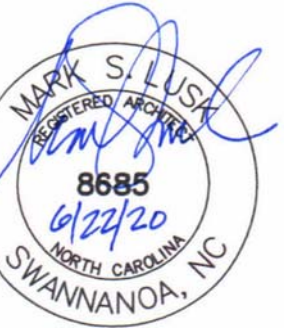


**RMS & FRMS  
GYMS,  
WHHS BLDG Y &  
HCPS C.O.  
ROOF  
REPLACEMENTS**

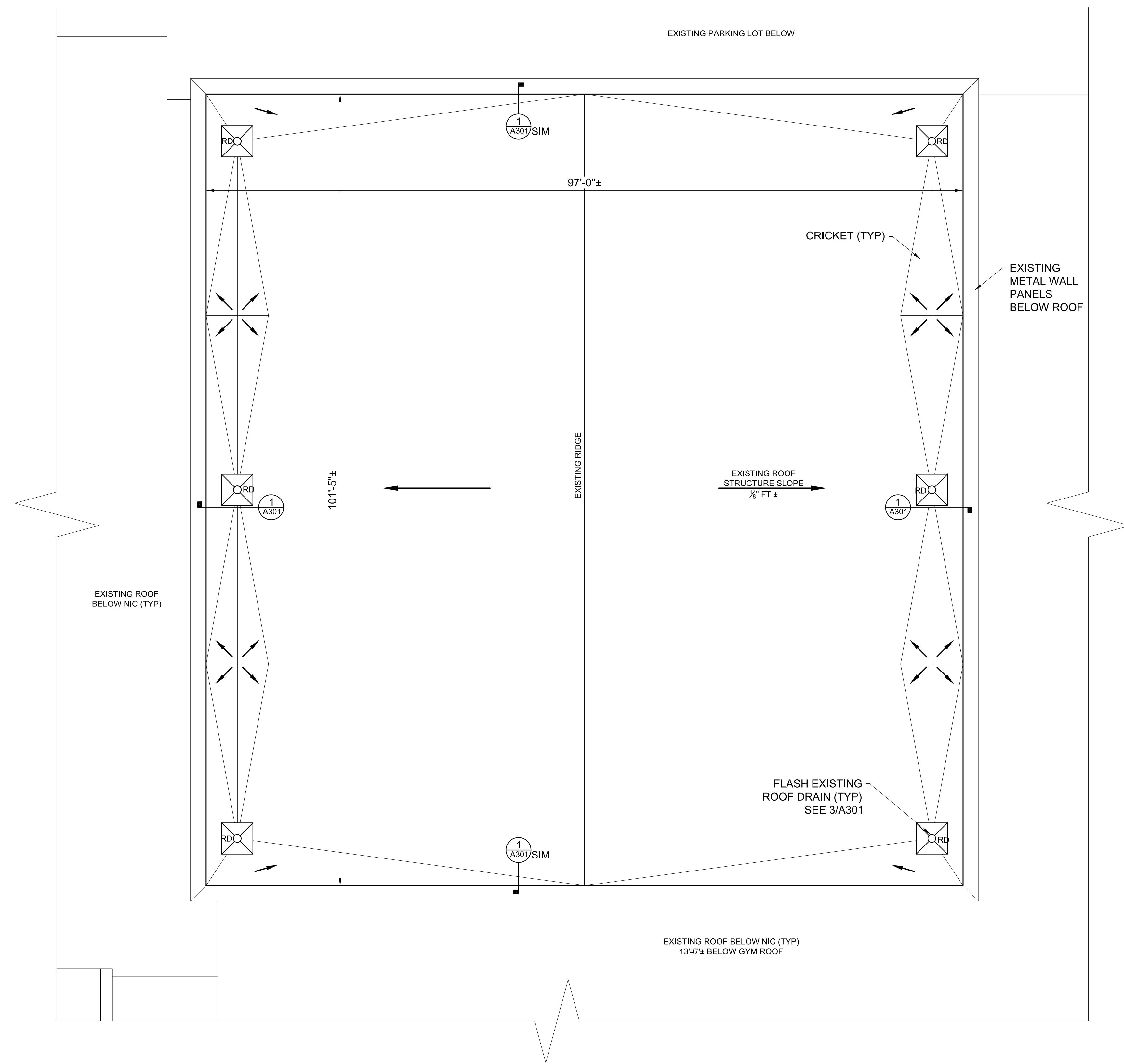
Project Number: 20004  
Checked: \_\_\_\_\_  
Drawn: A. Rognas  
Date: 6/22/20  
Revisions: \_\_\_\_\_  
\_\_\_\_\_

**RMS & FRMS  
OVERALL ROOF  
PLANS**

**A202**



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FLAT ROCK MIDDLE GYM ROOF PLAN  
 SCALE: 1/8"=1'-0"

**ROOFING NOTES**

1. EXISTING ROOFING COMPONENTS:
- MECHANICALLY ATTACHED SPM SYSTEM
  - MECHANICALLY ATTACHED 1/2" UNDERLAYMENT BOARD
  - 1 1/2" POLYISO INSULATION
  - BUILT-UP ROOFING
  - CWFD- 3" THICK
2. DEMOLITION: REMOVE EXISTING SPM & UNDERLAYMENT BOARD. REMOVE EXISTING ROOFING SYSTEM COMPONENTS INCLUDING FLASHING. EXISTING B.U. ROOFING & POLYISO INSULATION SHALL REMAIN.
3. PROVIDE FULLY ADHERED 60 MIL TPO MEMBRANE ROOFING SYSTEM, AND 1/2" UNDERLAYMENT BOARD OVER EXISTING POLYISO INSULATION. ATTACH INSULATION THROUGH INTO EXISTING CWFD.

**GENERAL NOTES**

1. EXISTING WOOD NAILER SHALL REMAIN UNLESS DETERMINED TO BE DAMAGED BY OWNER. REMOVAL AND REPLACEMENT SHALL BE PERFORMED AT UNIT PRICE.
2. VERIFY DIMENSIONS, QUANTITIES, SIZES, AND OTHER EXISTING CONDITIONS PRIOR TO DEMOLITION WORK. DISCREPANCIES BETWEEN DOCUMENTS AND EXISTING CONDITIONS SHALL BE REPORTED TO THE ARCHITECT.
3. CRICKETS SHALL SLOPE AT 1/2" PER FOOT.
4. SITE ACCESS, STAGING AND SCHEDULE TO BE COORDINATED WITH PRINCIPAL.
5. PROVIDE 18-8 OR 304 STAINLESS STEEL FASTENERS WHERE IN CONTACT WITH PRESSURE TREATED WOOD.
6. CONTRACTOR SHALL TAKE MEASURES TO PROTECT EXISTING ROOFING NIC AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING WORK TO PROVIDE WARRANTY REPAIR.
7. CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH THE AHJ. COSTS FOR PERMITS SHALL BE INCLUDED IN WORK. PROVIDE INSPECTION DOCUMENTS TO THE OWNER.

**RMS & FRMS  
 GYMS,  
 WHHS BLDG Y &  
 HCPS C.O.  
 ROOF  
 REPLACEMENTS**

Project Number: 20004  
 Checked: \_\_\_\_\_  
 Drawn: A. Rognas  
 Date: 6/22/20  
 Revisions: \_\_\_\_\_

**FLAT ROCK  
 MIDDLE  
 SCHOOL GYM  
 ROOF PLAN**

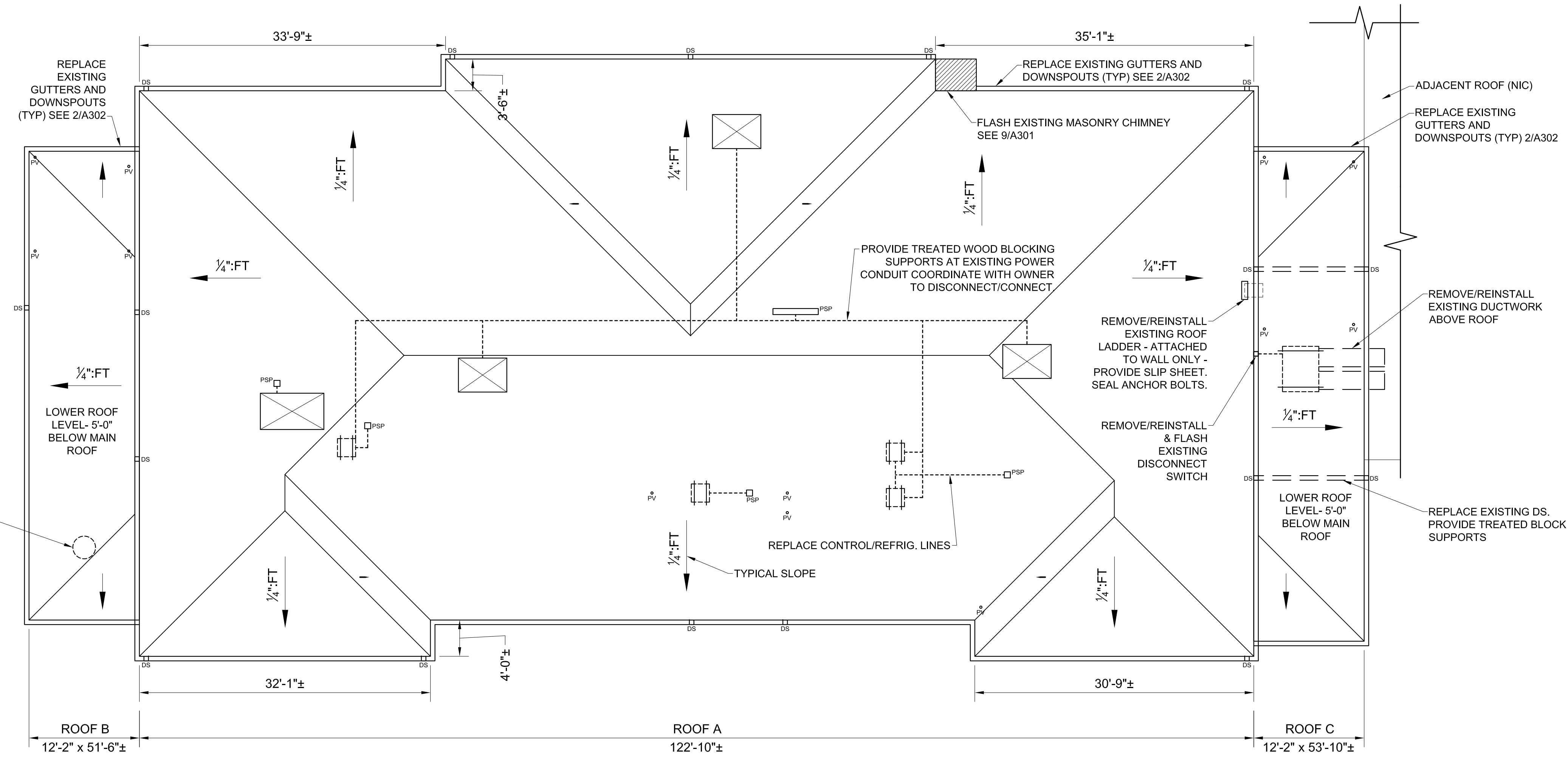
**A203**

**GENERAL NOTES**

- EXISTING WOOD NAILER SHALL REMAIN UNLESS DETERMINED TO BE DAMAGED BY OWNER. REMOVAL AND REPLACEMENT SHALL BE PERFORMED AT UNIT PRICE.
- VERIFY DIMENSIONS, QUANTITIES, SIZES, AND OTHER EXISTING CONDITIONS PRIOR TO DEMOLITION WORK. DISCREPANCIES BETWEEN DOCUMENTS AND EXISTING CONDITIONS SHALL BE REPORTED TO THE ARCHITECT.
- RAISE EXISTING VP'S AND MECHANICAL CURBS TO 8" ABOVE ROOFING. ELECTRICAL WORK, IF REQUIRED TO REMOVE VENTILATORS, SHALL BE PERFORMED BY LICENSED CONTRACTOR.
- CRICKETS SHALL SLOPE AT 1/2" PER FOOT.
- EXISTING ELECTRIC COMPONENTS, REFRIGERANT LINES, MECHANICAL UNITS, SHALL BE TEMPORARILY RELOCATED FOR FULL ROOFING INSTALLATION.
- SITE ACCESS, STAGING AND SCHEDULE TO BE COORDINATED WITH PRINCIPAL.
- PROVIDE 18-8 OR 304 STAINLESS STEEL FASTENERS WHERE IN CONTACT WITH PRESSURE TREATED WOOD.
- CONTRACTOR SHALL TAKE MEASURES TO PROTECT EXISTING ROOFING NIC AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING WORK TO PROVIDE WARRANTY REPAIR.
- CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH THE AHJ. COSTS FOR PERMITS SHALL BE INCLUDED IN WORK. PROVIDE INSPECTION DOCUMENTS TO THE OWNER.

**ROOF PLAN LEGEND**

- FLASH PLUMBING VENT. SEE 6/A301
- REPLACE POURABLE SEALER POCKET AT CONDUITS. SEE 3/A302
- EXISTING MECHANICAL UNIT. REPLACE EXISTING SLEEPERS WITH TREATED WOOD SLEEPERS. PROVIDE PROTECTIVE SLIP SHEETS. REMOVE/REINSTALL MECH. UNIT & CONNECTIONS
- MECHANICAL UNIT CURB. FLASH CURB. SEE 4/A302



**CENTRAL OFFICE ROOF PLAN**  
SCALE: 1/8"=1'-0"

**ROOFING NOTES**

1. EXISTING ROOFING COMPONENTS:

**ROOF A**  
BUILT-UP ROOFING  
1/2" PERLITE INSULATION  
1 1/2" FIBERBOARD  
METAL ROOF DECK

**ROOF B & C**  
BUILT-UP ROOFING  
1/2" PERLITE INSULATION  
LIGHTWEIGHT CONCRETE  
CONCRETE PLANK ROOF DECK

- DEMOLITION: REMOVE ALL EXISTING ROOFING COMPONENTS DOWN TO ROOF DECK. REMOVE EXISTING ROOFING SYSTEM COMPONENTS INCLUDING FLASHING, PITCH POCKETS.
- PROVIDE FULLY ADHERED 60 MIL TPO MEMBRANE ROOFING SYSTEM, AND TAPERED INSULATION OVER ROOF DECK. MECHANICALLY ATTACH TAPERED INSULATION THROUGH INTO EXISTING METAL DECK. FULLY ADHERE TAPERED INSULATION TO CONCRETE ROOF DECK.
- MINIMUM INSULATION THICKNESS AT ROOF EDGE SHALL BE 2.6"

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**RMS & FRMS  
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HCPS C.O.  
ROOF  
REPLACEMENTS**

Project Number: 20004  
Checked: \_\_\_\_\_  
Drawn: A. Rognas  
Date: 6/22/20  
Revisions: \_\_\_\_\_

**CENTRAL  
OFFICE  
ROOF PLAN**

**A204**

**GENERAL NOTES**

- EXISTING WOOD NAILER SHALL REMAIN UNLESS DETERMINED TO BE DAMAGED BY OWNER. REMOVAL AND REPLACEMENT SHALL BE PERFORMED AT UNIT PRICE.
- VERIFY DIMENSIONS, QUANTITIES, SIZES, AND OTHER EXISTING CONDITIONS PRIOR TO DEMOLITION WORK. DISCREPANCIES BETWEEN DOCUMENTS AND EXISTING CONDITIONS SHALL BE REPORTED TO THE ARCHITECT.
- RAISE EXISTING VP'S AND MECHANICAL CURBS TO 8" ABOVE ROOFING. ELECTRICAL WORK, IF REQUIRED TO REMOVE VENTILATORS, SHALL BE PERFORMED BY LICENSED CONTRACTOR.
- CRICKETS SHALL SLOPE AT 1/2" PER FOOT.
- EXISTING ELECTRIC COMPONENTS, REFRIGERANT LINES, MECHANICAL UNITS, SHALL BE TEMPORARILY RELOCATED FOR FULL ROOFING INSTALLATION.
- SITE ACCESS, STAGING AND SCHEDULE TO BE COORDINATED WITH PRINCIPAL.
- PROVIDE 18-8 OR 304 STAINLESS STEEL FASTENERS WHERE IN CONTACT WITH PRESSURE TREATED WOOD.
- CONTRACTOR SHALL TAKE MEASURES TO PROTECT EXISTING ROOFING NIC AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING WORK TO PROVIDE WARRANTY REPAIR.
- CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH THE AHJ. COSTS FOR PERMITS SHALL BE INCLUDED IN WORK. PROVIDE INSPECTION DOCUMENTS TO THE OWNER.

**ROOFING NOTES**

1. EXISTING ROOFING COMPONENTS:

- FULLY ADHERED SPM MEMBRANE
- 1/2" UNDERLAYMENT BOARD
- BUILT-UP ROOFING
- 3/4" PERLITE INSULATION
- VAPOR BARRIER
- CWFD

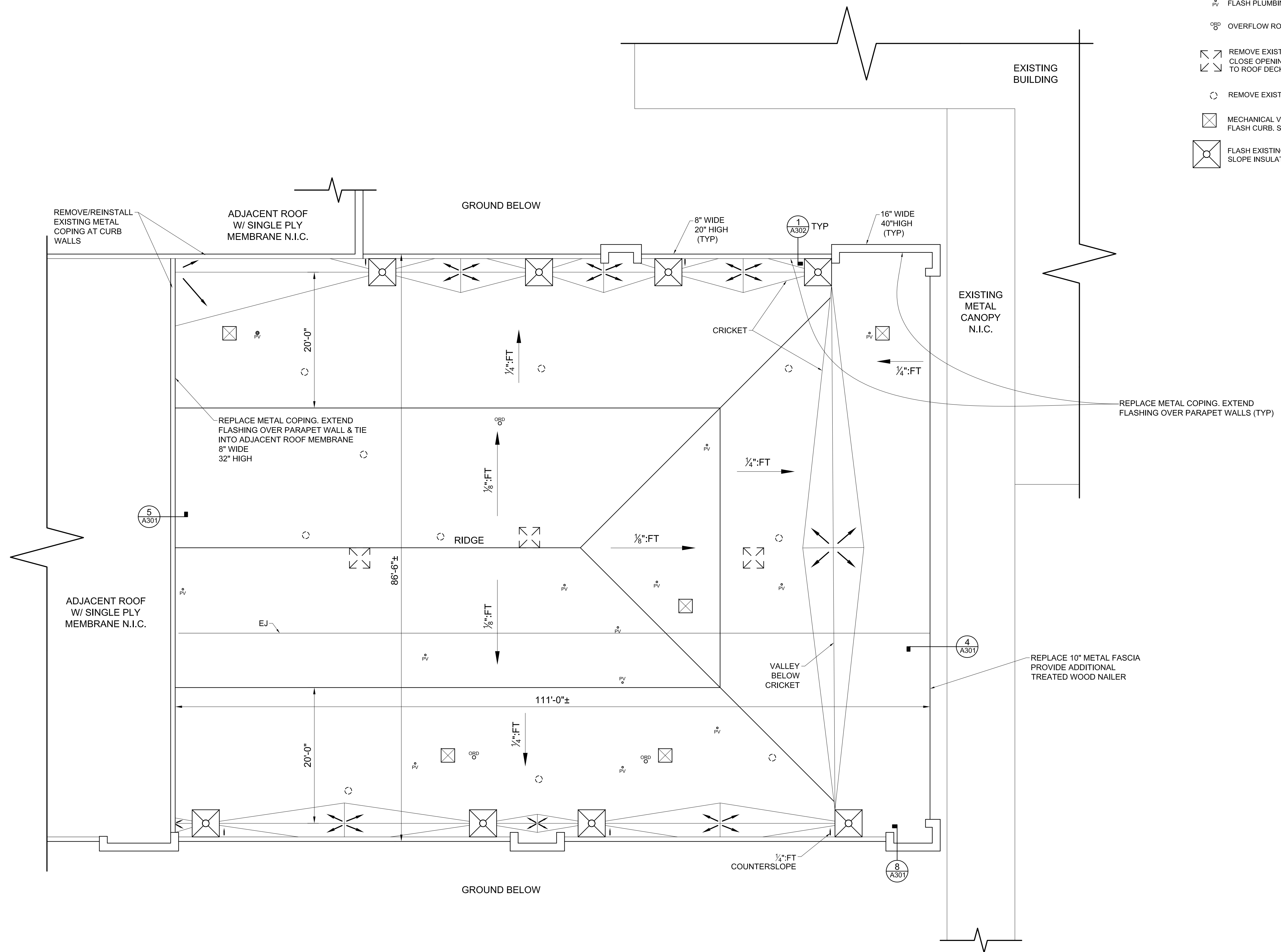
2. DEMOLITION: REMOVE ALL EXISTING ROOFING COMPONENTS DOWN TO VAPOR BARRIER. REMOVE EXISTING ROOFING SYSTEM COMPONENTS INCLUDING TERMINATION BARS, FLASHING. THE EXISTING VAPOR BARRIER SHALL REMAIN.

3. PROVIDE FULLY ADHERED 60 MIL TPO MEMBRANE ROOFING SYSTEM, AND TAPERED INSULATION OVER EXISTING VAPOR BARRIER. ATTACH TAPERED INSULATION THROUGH INTO EXISTING CWFD.

4. MINIMUM INSULATION THICKNESS AT RD'S & VALLEY'S SHALL BE 2.6"

**ROOF PLAN LEGEND**

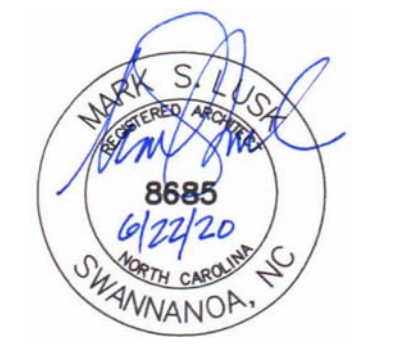
- FLASH PLUMBING VENT. SEE 6/301.
- OVERFLOW ROOF DRAIN. SEE 6/301 SIMILAR
- REMOVE EXISTING CAPPED CURB AND CLOSE OPENING WITH 1/2" PLYWOOD. FASTEN TO ROOF DECK AT CORNERS.
- REMOVE EXISTING ROUND VENTS
- MECHANICAL VENTILATOR ON CURB. FLASH CURB. SEE 7/A301.
- FLASH EXISTING ROOF DRAIN SQUARE: SLOPE INSULATION DOWN TO RD. SEE 3/A301



BUILDING Y ROOF PLAN- WEST HENDERSON HIGH  
SCALE: 1/8"=1'-0"

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**RMS & FRMS  
GYMS,  
WHHS BLDG Y &  
HCPS C.O.  
ROOF  
REPLACEMENTS**

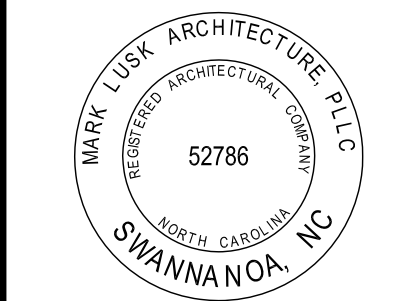
Project Number: 20004  
Checked:  
Drawn: A. Rognas  
Date: 6/22/20  
Revisions:

**BUILDING Y  
ROOF PLAN-  
WEST  
HENDERSON  
HIGH**

**A205**

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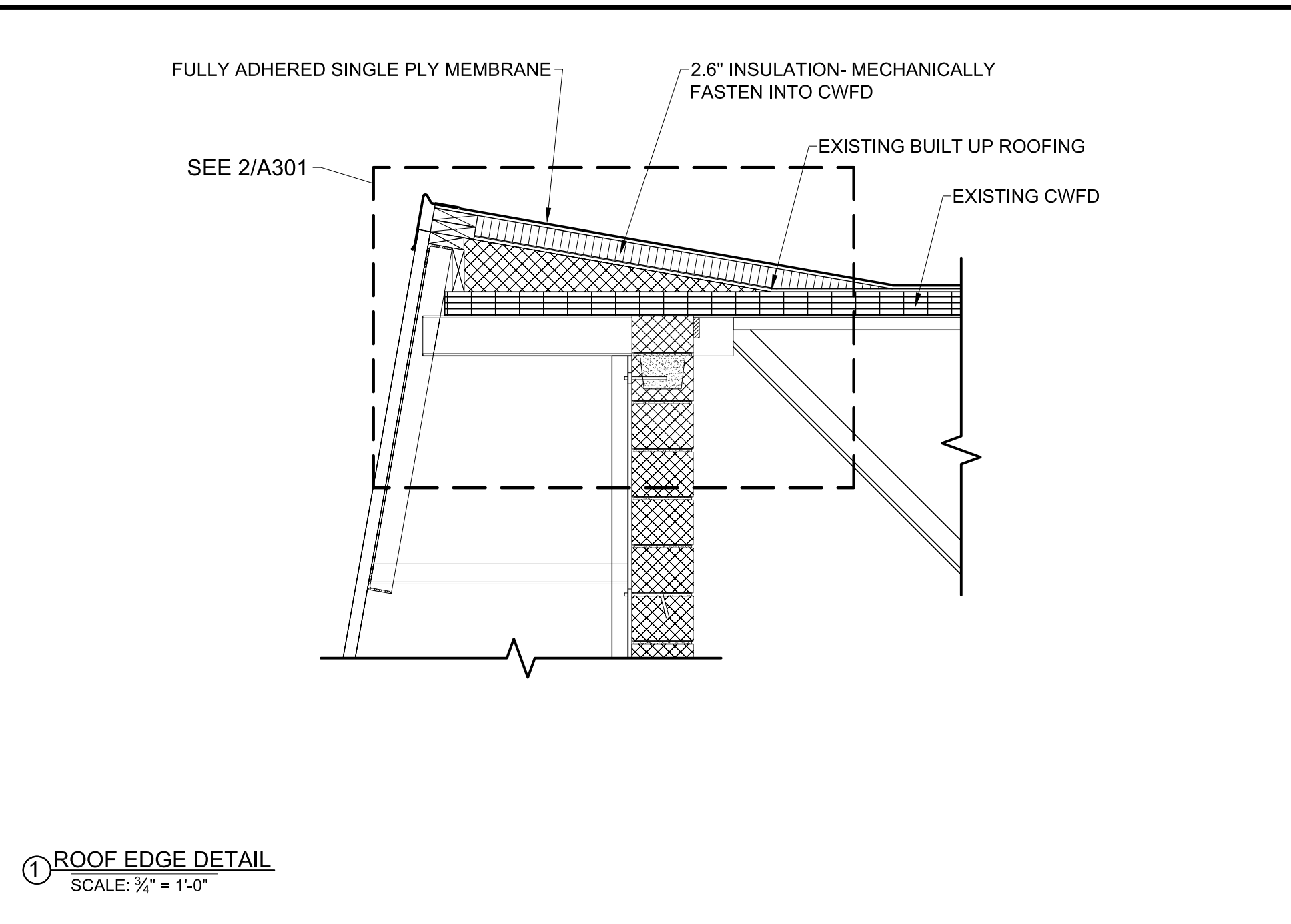
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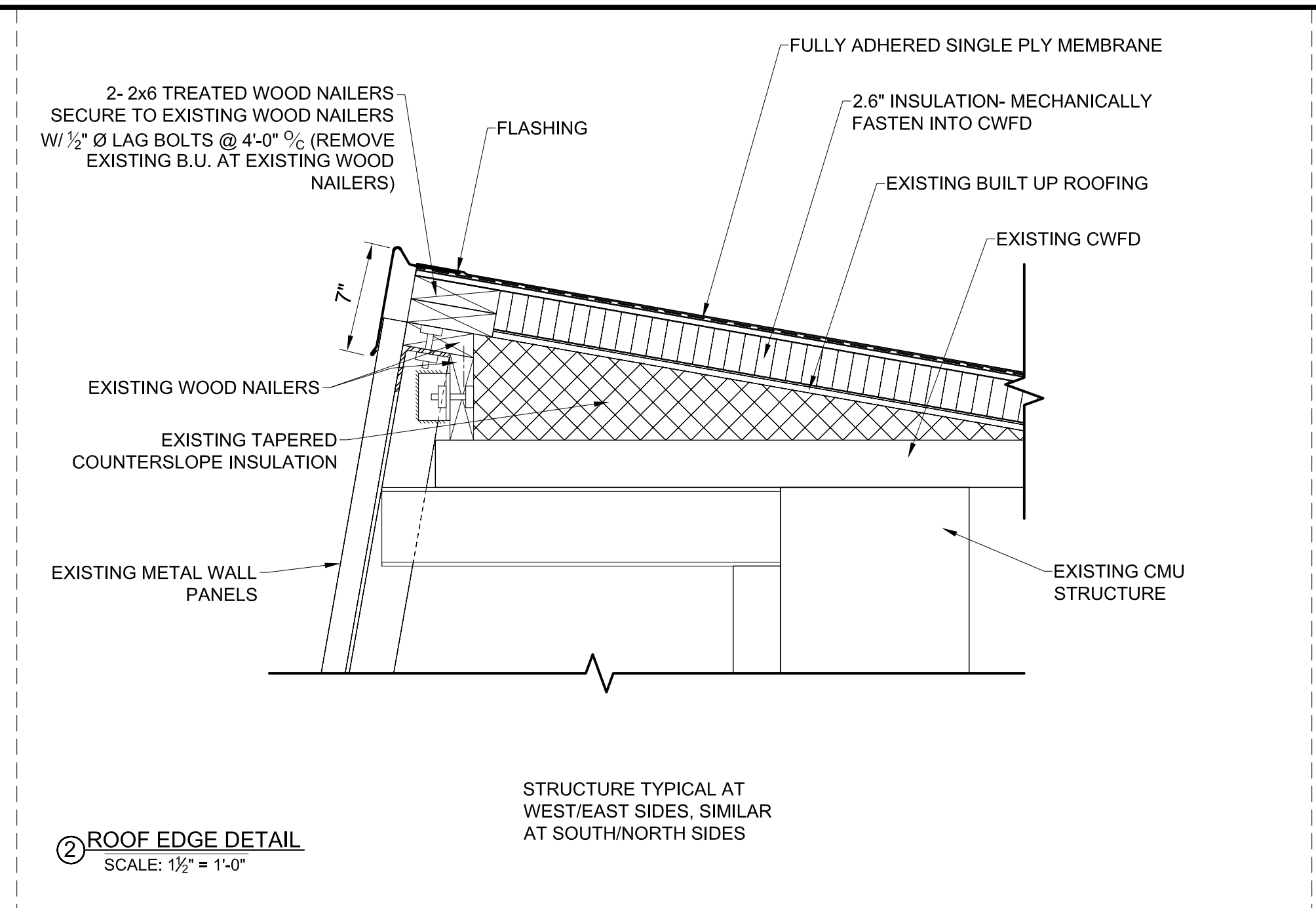
**RMS & FRMS  
GYMS,  
WHHS BLDG Y &  
HCPS C.O.  
ROOF  
REPLACEMENTS**

Project Number: 20004  
Checked: \_\_\_\_\_  
Drawn: A. Rognas  
Date: 6/22/20  
Revisions: \_\_\_\_\_

**DETAILS  
A301**

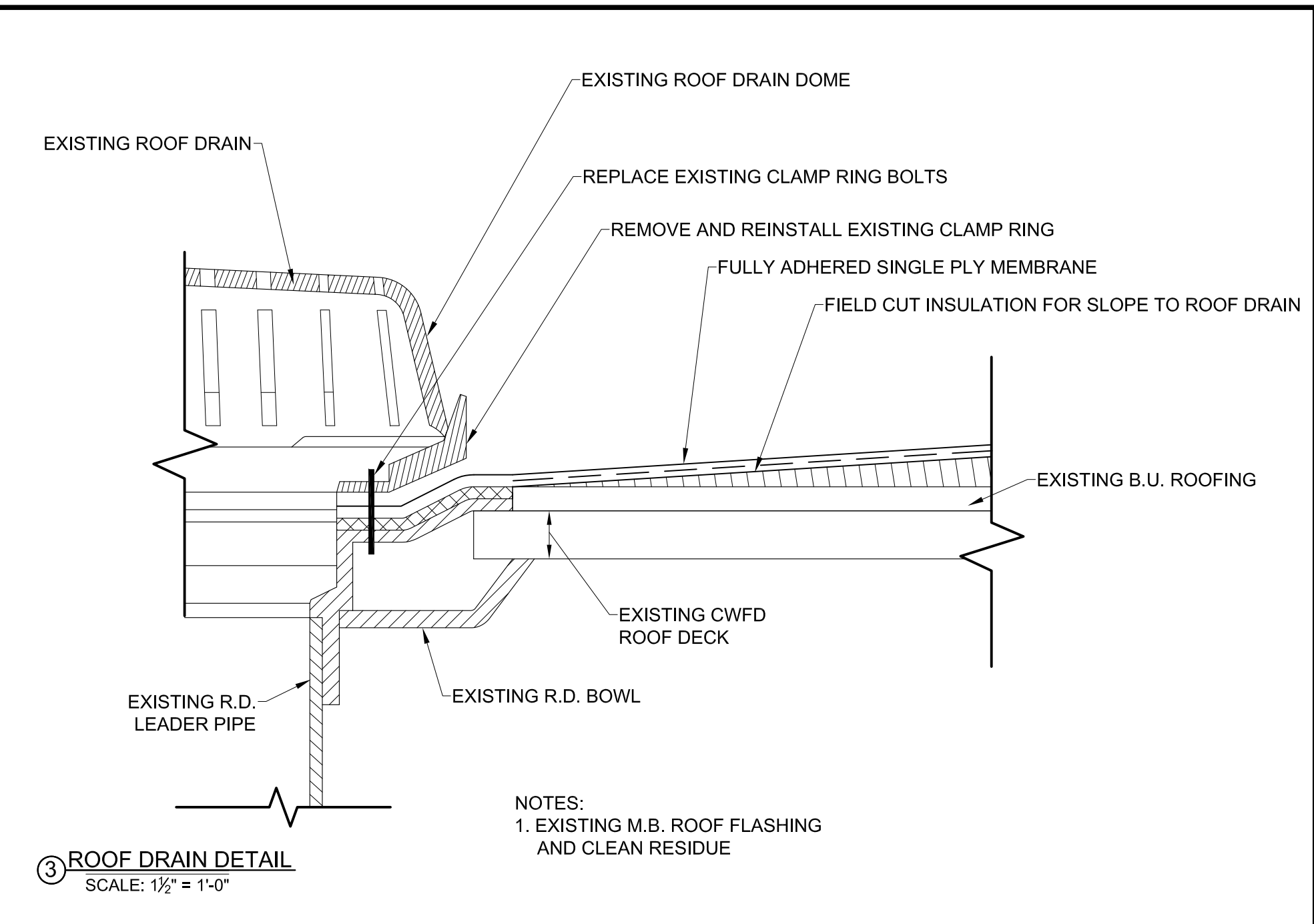


**1 ROOF EDGE DETAIL**  
SCALE: 3/4" = 1'-0"



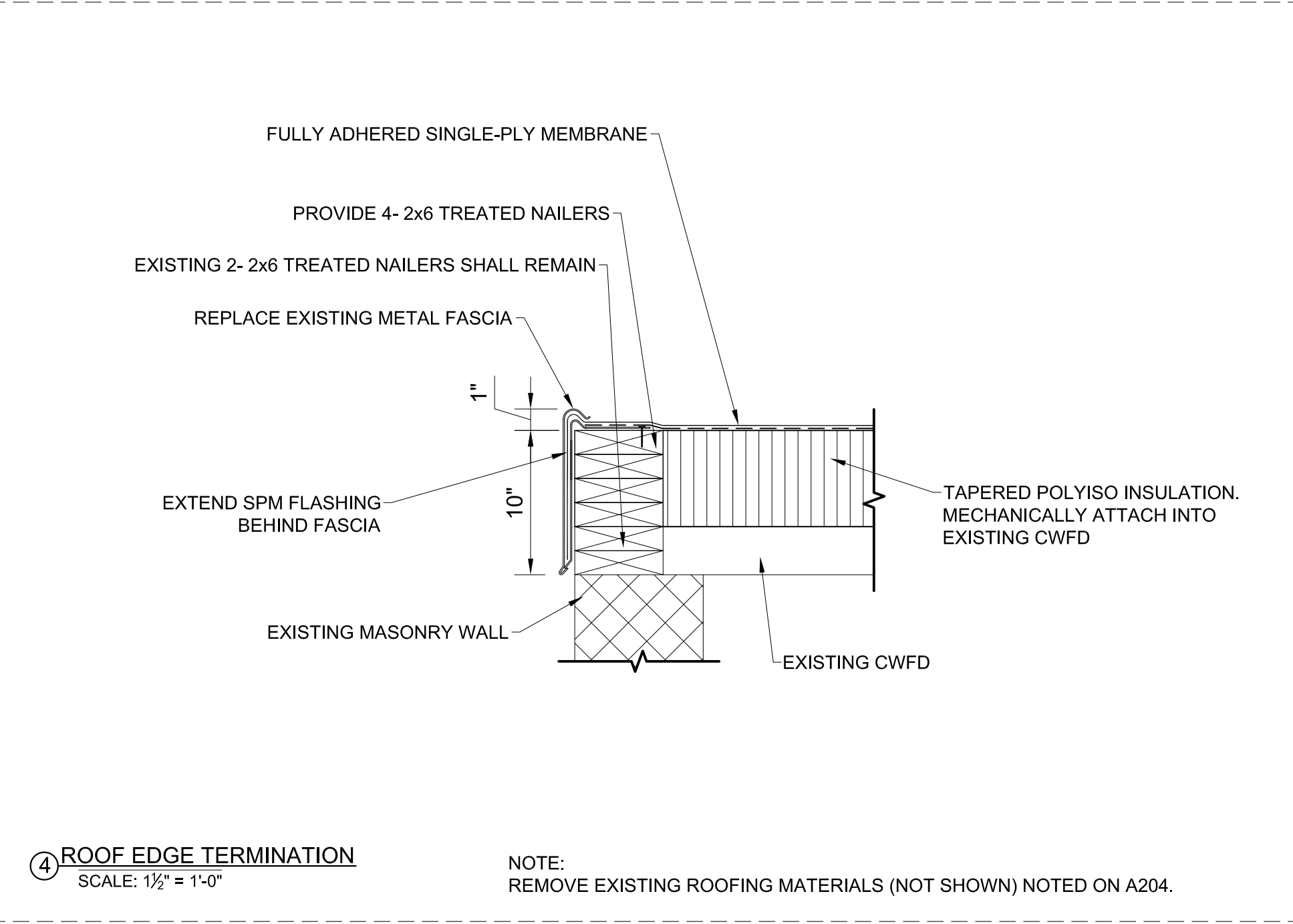
**2 ROOF EDGE DETAIL**  
SCALE: 1/2" = 1'-0"

STRUCTURE TYPICAL AT WEST/EAST SIDES, SIMILAR AT SOUTH/NORTH SIDES



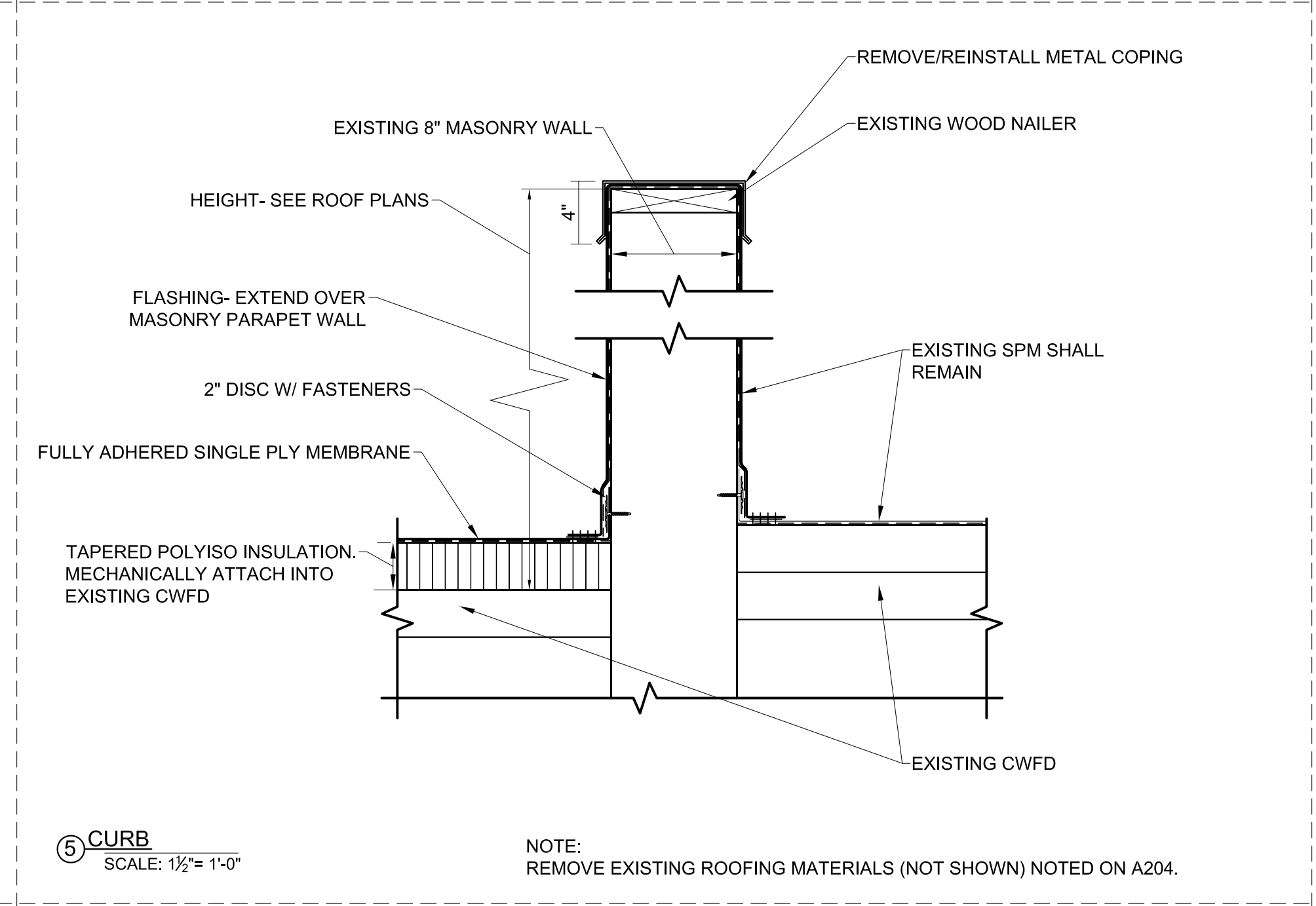
**3 ROOF DRAIN DETAIL**  
SCALE: 1/2" = 1'-0"

NOTES:  
1. EXISTING M.B. ROOF FLASHING AND CLEAN RESIDUE



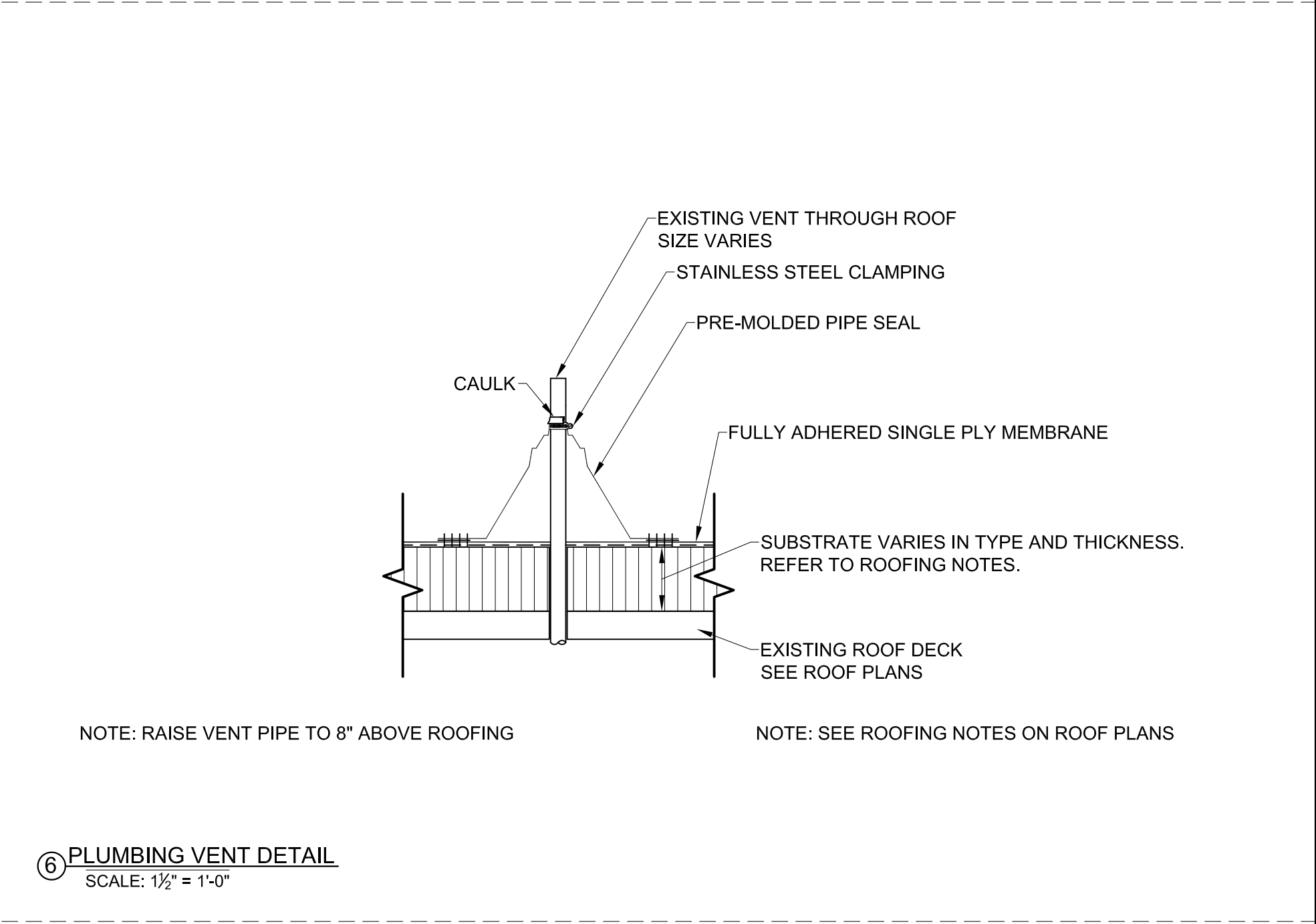
**4 ROOF EDGE TERMINATION**  
SCALE: 1/2" = 1'-0"

NOTE:  
REMOVE EXISTING ROOFING MATERIALS (NOT SHOWN) NOTED ON A204.



**5 CURB**  
SCALE: 1/2" = 1'-0"

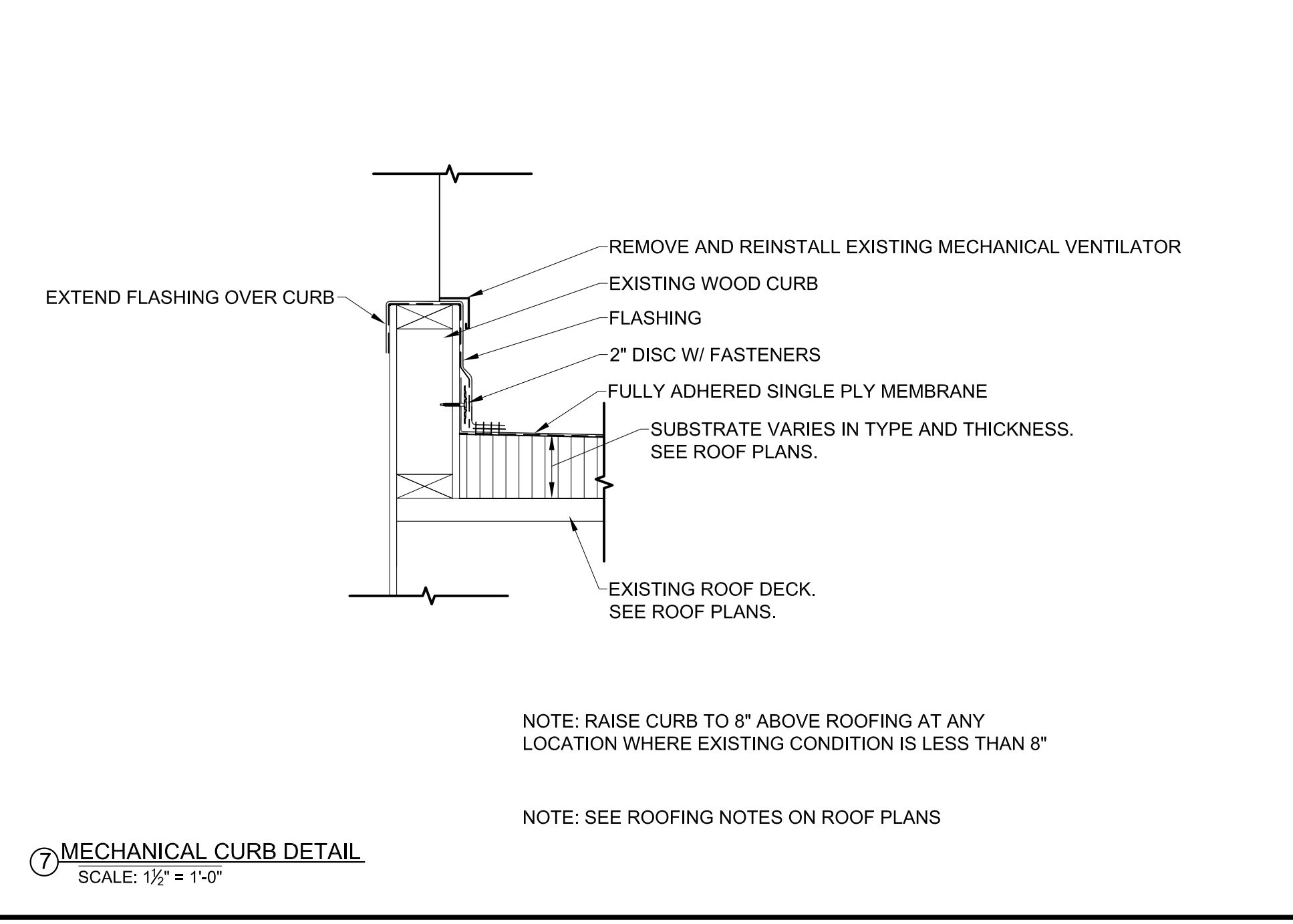
NOTE:  
REMOVE EXISTING ROOFING MATERIALS (NOT SHOWN) NOTED ON A204.



**6 PLUMBING VENT DETAIL**  
SCALE: 1/2" = 1'-0"

NOTE: RAISE VENT PIPE TO 8" ABOVE ROOFING

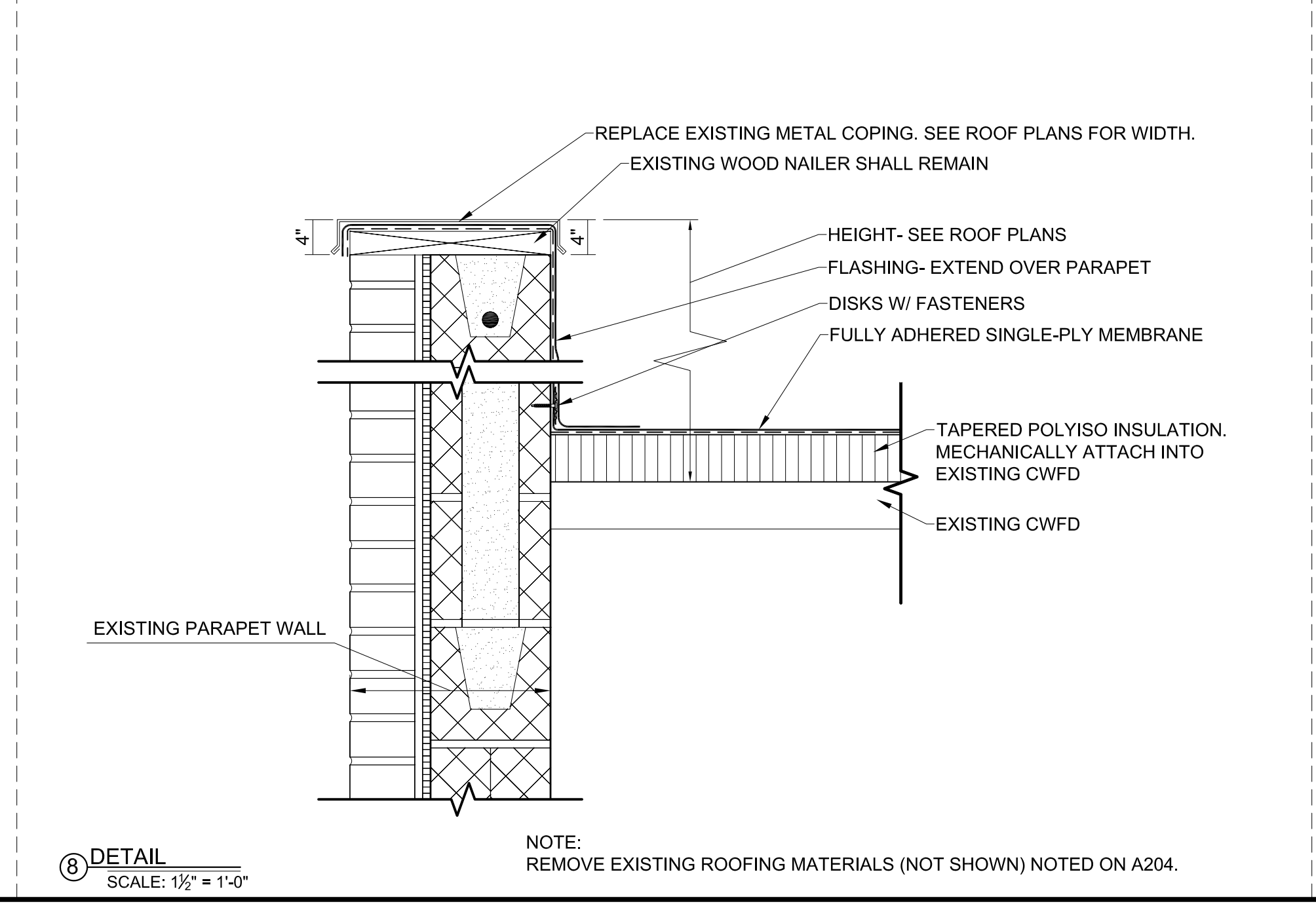
NOTE: SEE ROOFING NOTES ON ROOF PLANS



**7 MECHANICAL CURB DETAIL**  
SCALE: 1/2" = 1'-0"

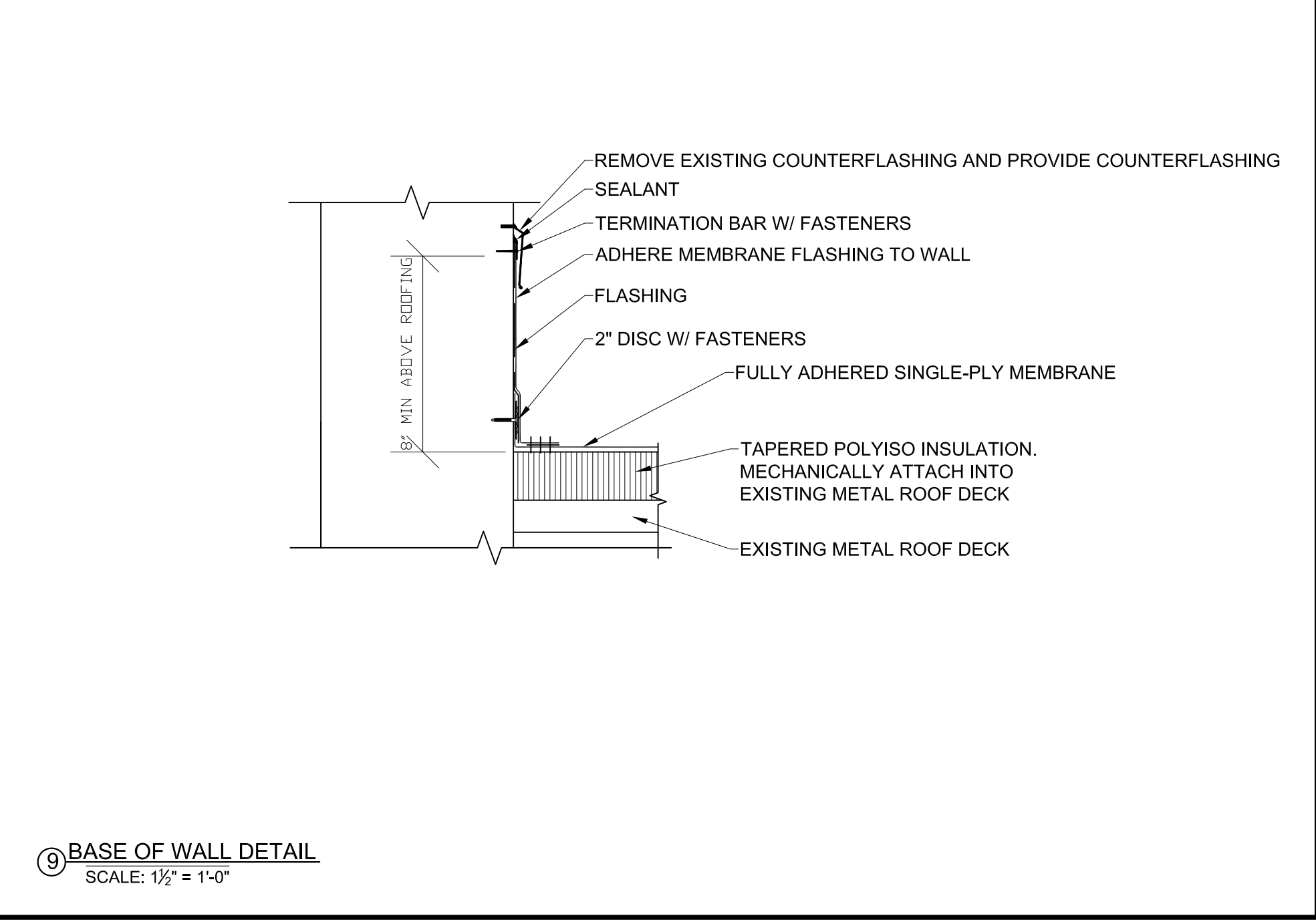
NOTE: RAISE CURB TO 8" ABOVE ROOFING AT ANY LOCATION WHERE EXISTING CONDITION IS LESS THAN 8"

NOTE: SEE ROOFING NOTES ON ROOF PLANS

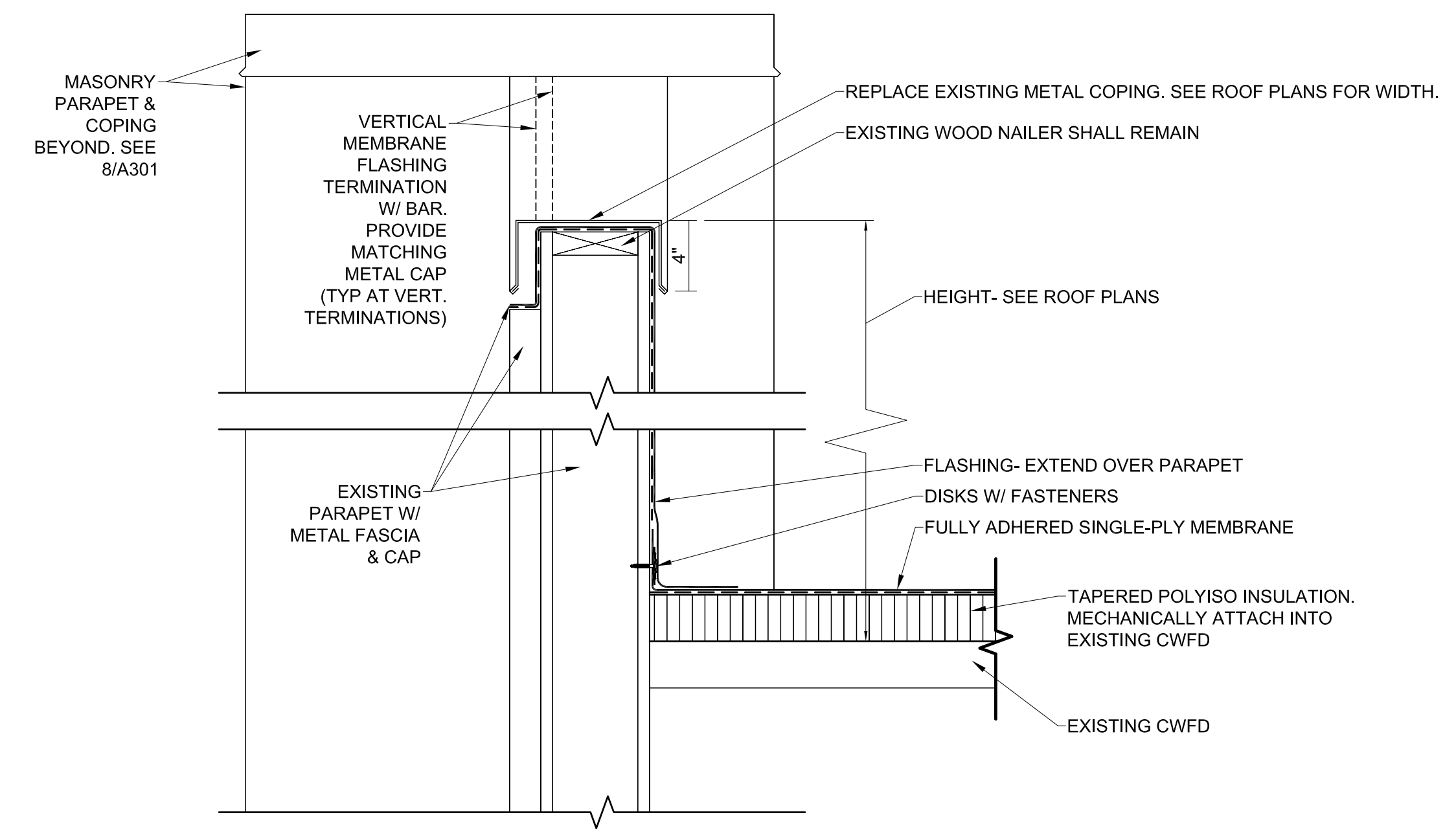
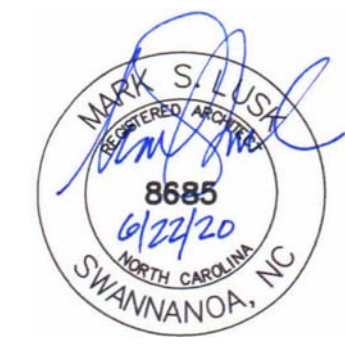


**8 DETAIL**  
SCALE: 1/2" = 1'-0"

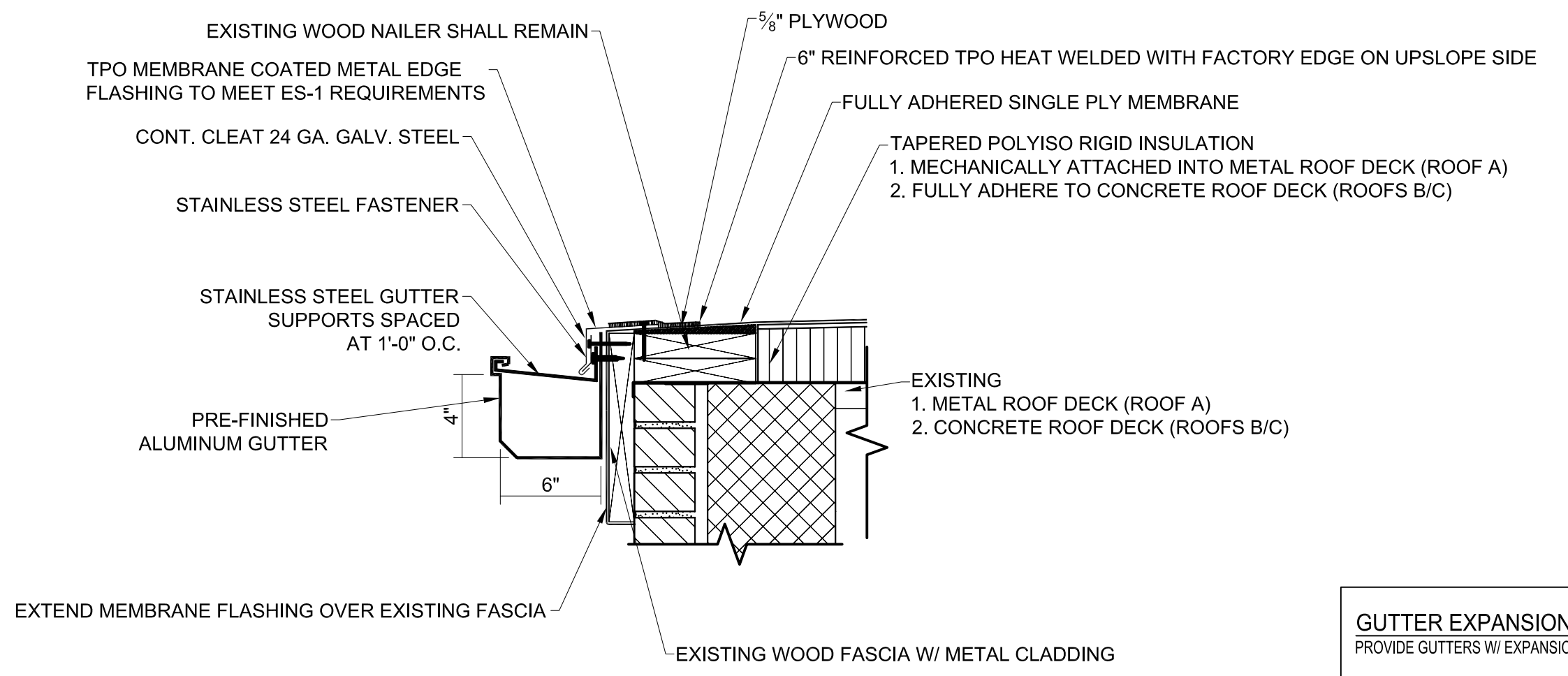
NOTE:  
REMOVE EXISTING ROOFING MATERIALS (NOT SHOWN) NOTED ON A204.



**9 BASE OF WALL DETAIL**  
SCALE: 1/2" = 1'-0"



① DETAIL  
 SCALE: 1/2" = 1'-0"

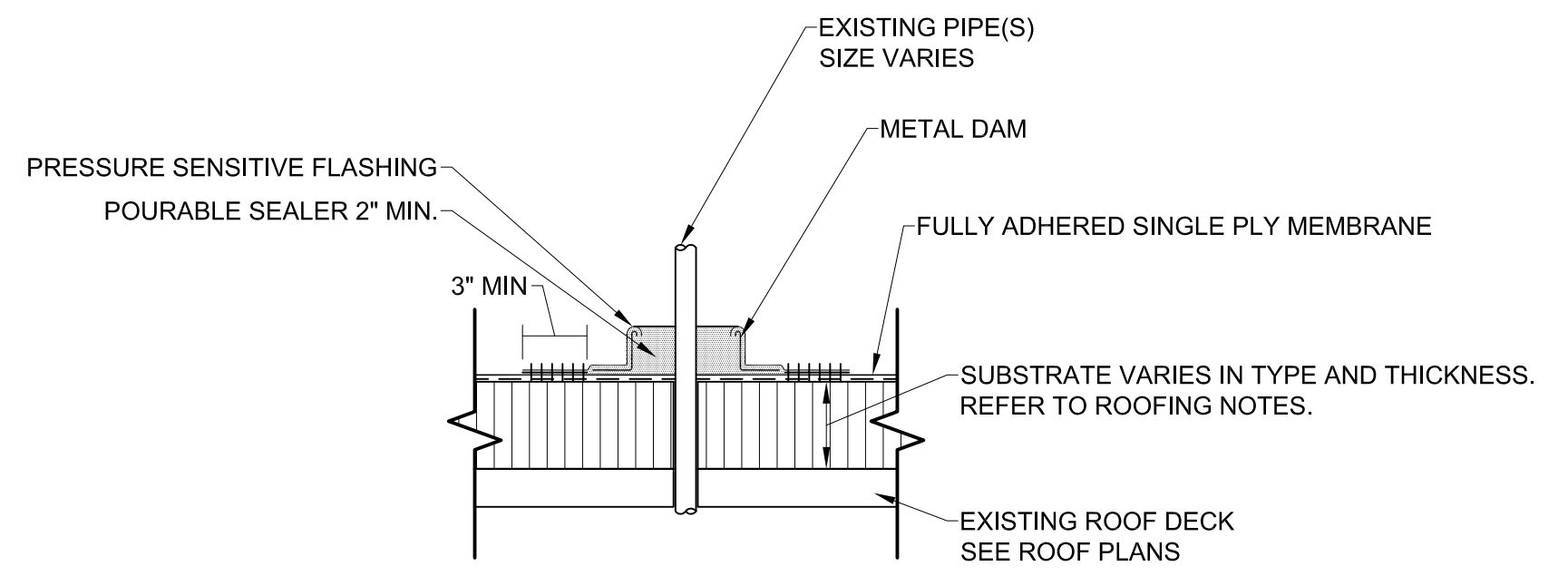


② GUTTER/ ROOF EDGE DETAIL  
 SCALE: 1/2" = 1'-0"

**GUTTER EXPANSION JOINTS:**  
 PROVIDE GUTTERS W/ EXPANSION JOINTS AT 50FT OC MAX. PER SMACNA 1

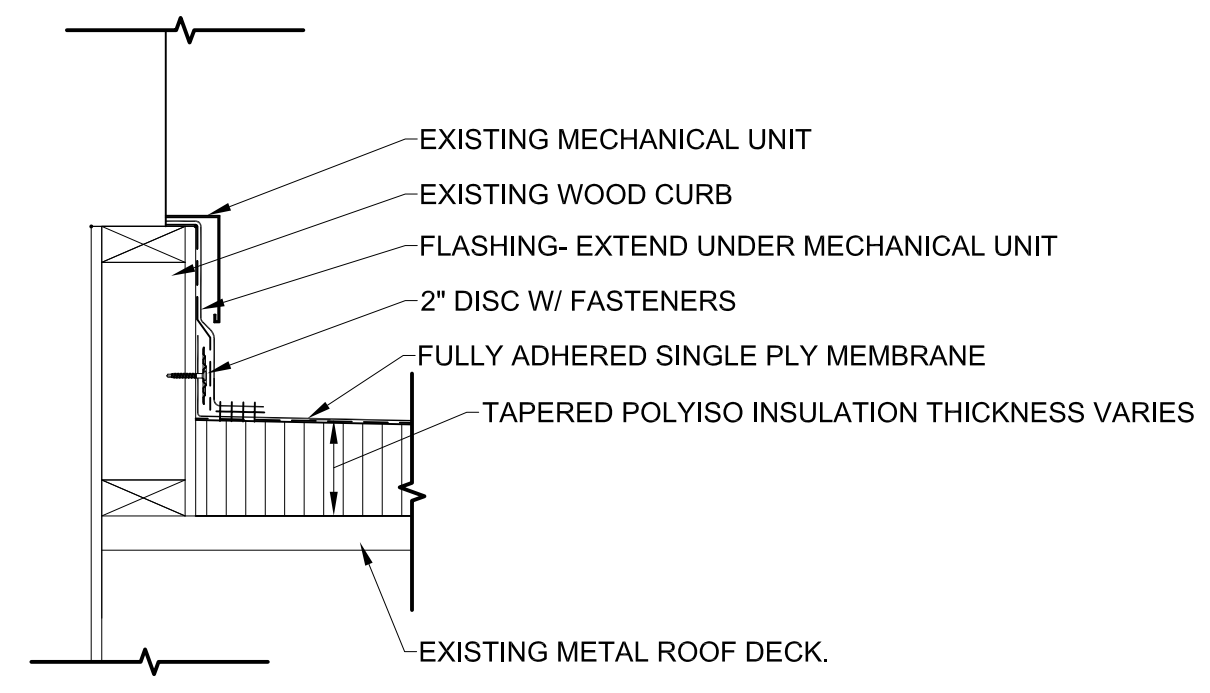
**DOWNSPOUTS:**  
 PROVIDE ALUMINUM PREFIN. DOWNSPOUTS.  
 CONNECT TO SUB-GRADE STORM DRAINAGE SYSTEM. PROVIDE STANDOFF TYPE  
 ATTACH TO STRUCTURE PROVIDING MIN 3/4" GAP BETWEEN BUILDING & DOWNSPOUT

**COLOR:**  
 PROVIDE SELECTION OF MANUFACTURERS STANDARD COLORS.



③ POURABLE SEALER POCKET  
 SCALE: 1/2" = 1'-0"

NOTE: SEE ROOFING NOTES ON ROOF PLANS



④ MECHANICAL CURB DETAIL  
 SCALE: 1/2" = 1'-0"

**RMS & FRMS  
 GYMS,  
 WHHS BLDG Y &  
 HCPS C.O.  
 ROOF  
 REPLACEMENTS**

Project Number: 20004  
 Checked: \_\_\_\_\_  
 Drawn: A. Rognas  
 Date: 6/22/20  
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**DETAILS**

**A302**

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