STATE PROJECT #: H59-6198-PD
AIKEN TECHNICAL COLLEGE
BUILDING 900 ROOF REPLACEMENT
2276 JEFFERSON DAVIS HWY, GRANITEVILLE, SC 29829

PROJECT DATA

A. PROJECT DESIGNED IN ACCORDANCE WITH:
1. INTERNATIONAL BUILDING CODE - 2021 EDITION
2. INTERNATIONAL PLUMBING CODE - 2021 EDITION
3. INTERNATIONAL FIRE CODE - 2021 EDITION
4. INTERNATIONAL EXISTING BUILDING CODE - 2021 EDITION
5. INTERNATIONAL ENERGY CONSERVATION CODE - 2009 EDITION
6. NATIONAL FIRE PROTECTION ASSOCIATION 10 - 2021 EDITION

B. BASIC REVIEW INFORMATION
1. EXISTING BUILDING IS A 1-STORY REINFORCED CONCRETE MASONRY UNIT (CMU) AND BRICK LOAD BEARING WALL CONSTRUCTION WITH STEEL BAR JOISTS SUPPORTING A METAL "B" DECK. RIGID POLYISOCYANURATE IS MECHANICALLY ATTACHED TO THE METAL DECK AND IS COVERED BY BALLASTED EPDM ROOF ASSEMBLY.
2. AREA OF AFFECTED ROOF (ACTUAL AREA): 41,426 SF
   a. ROOF AREA 1: 14,470 SF
   b. ROOF AREA 2: 2,537 SF
   c. ROOF AREA 3: 837 SF
   d. ROOF AREA 4: 780 SF
   e. ROOF AREA 5: 13,632 SF
   f. ROOF AREA 6: 5,827 SF
   g. ROOF AREA 7: 3,343 SF
3. EAVE HEIGHT ABOVE GRADE:
   a. ROOF AREA 1: 33'
   b. ROOF AREA 2: 17'
   c. ROOF AREA 3: 17'
   d. ROOF AREA 4: 14'
   e. ROOF AREA 5: 17'
   f. ROOF AREA 6: 17'
   g. ROOF AREA 7: 17'
4. PRIMARY OCCUPANCY CLASS: GROUP "E" EDUCATION
5. CLASS "A" ROOF COVERING

C. PROJECT IN FIRE DISTRICT: YES

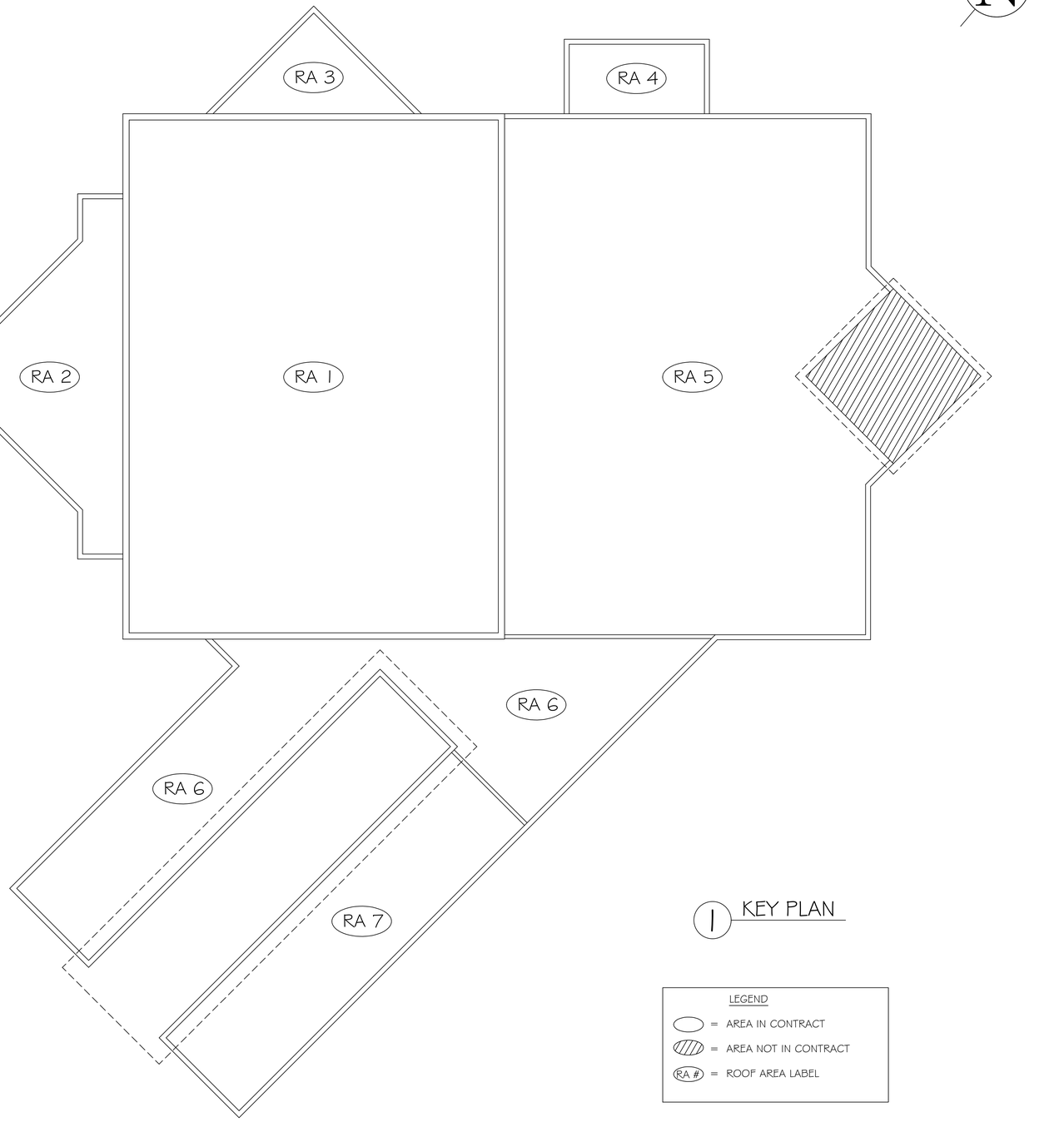
D. STRUCTURAL INFORMATION:
1. RAs 1, 2, 3, 5, & 7 DESIGN LOADS:
   a. ORIGINAL DEAD LOAD INCLUDED BALLASTED EPDM ROOF ASSEMBLY, RIGID INSULATION & METAL "B" DECK
   ESTIMATED WEIGHT: 14lbs/SF
   b. PROPOSED DEAD LOAD INCLUDING MECHANICALLY ATTACHED FLEXIBLE SHEET MEMBRANE, RIGID INSULATION & METAL "B" DECK
   DESIGN WEIGHT: 5lbs/SF
   c. NET DEAD LOAD REDUCTION OF 9lbs/SF
2. RA 4 DESIGN LOADS:
   a. ORIGINAL DEAD LOAD INCLUDED AGGREGATE SURFACED BUILT-UP ROOF ASSEMBLY, RIGID INSULATION & METAL "B" DECK
   ESTIMATED WEIGHT: 14lbs/SF
   b. PROPOSED DEAD LOAD INCLUDING MECHANICALLY ATTACHED FLEXIBLE SHEET MEMBRANE, RIGID INSULATION & METAL "B" DECK
   DESIGN WEIGHT: 5lbs/SF
   c. NET DEAD LOAD REDUCTION OF 9lbs/SF

DRAWING INDEX

K1	KEY PLAN, BUILDING CODE ANALYSIS, DRAWING INDEX & SITE VICINITY MAP
R1	ROOF PLAN
R2	ROOF PLAN
D1	DETAILS
D2	DETAILS
D3	DETAILS
D4	DETAILS
D5	DETAILS



2 SITE VICINITY MAP



1 KEY PLAN

LEGEND
= AREA IN CONTRACT
= AREA NOT IN CONTRACT
RA # = ROOF AREA LABEL

Shepard & Associates, LLC
3547 Dreher Shoals Road, Suite 6
Irmo, South Carolina 29063
Phone: (803) 407-8284
Fax: (803) 407-8206

KEY PLAN

SHEET TITLE:
PROJECT DESCRIPTION: State Project #: H59-6198-PD
AIKEN TECHNICAL COLLEGE 900 BUILDING ROOF REPLACEMENT
CLIENT NAME: AIKEN TECHNICAL COLLEGE

REVISIONS

REVISION	DATE	APPROVED

Richard C. Parrish
07 78
RCI, Inc.

PF No. 22006.001.004
DATE: 12/16/2022
SCALE: NTS
DRAWN BY: RCP
CHECKED BY: JAW

SHEET
K1

LEGEND

= AREAS IN CONTRACT
= AREAS NOT IN CONTRACT
= SLOPE IN STRUCTURE
= SLOPE IN INSULATION
= TAPERED CRICKETS & SADDLES
= EXPANSION JOINT
= MAIN ROOF DRAIN
= OVERFLOW SCUPPER
= POWER VENTILATOR
= EXHAUST FAN
= FRESH AIR INTAKE
= KITCHEN HOOD PACKAGE UNIT
= CURB MOUNTED HVAC UNIT
= NEW CONDENSATE DRAIN LINE
= SANITARY VENT
= ELECTRICAL PENETRATION
= HOT VENT STACK
= ABANDONED EQUIPMENT CURB

N

1 ROOF PLAN - RAs 1, 2, 3, 4 & 5

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SHEET TITLE: ROOF PLAN

PROJECT DESCRIPTION: State Project #: H59-6198-PD
AIKEN TECHNICAL COLLEGE 900 BUILDING ROOF REPLACEMENT

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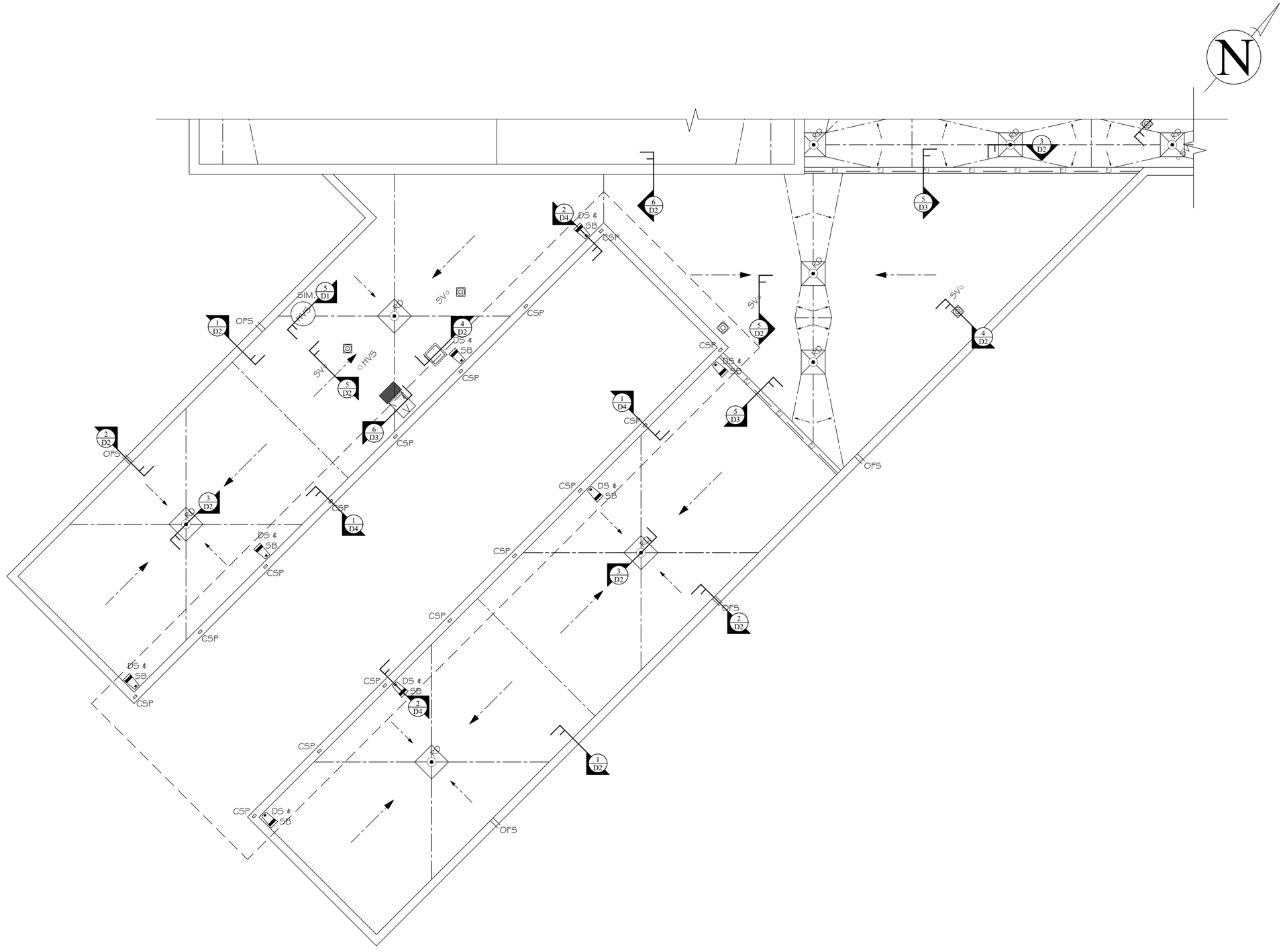
Richard C. Parrish
07 78
RCI, Inc.

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SHEET
R1

LEGEND

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= SLOPE IN STRUCTURE
= SLOPE IN INSULATION
= TAPERED CRICKETS & SADDLES
= EXPANSION JOINT
= MAIN ROOF DRAIN
= OVERFLOW SCUPPER
= POWER VENTILATOR
= EXHAUST FAN
= ROOF HATCH
= WALK PAD
= SANITARY VENT
= CANOPY SUPPORT POST
= HOT VENT STACK
= DOWNSPOUT AND SPLASH BLOCK



1 ROOF PLAN - RAs 6 & 7

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SHEET TITLE: ROOF PLAN

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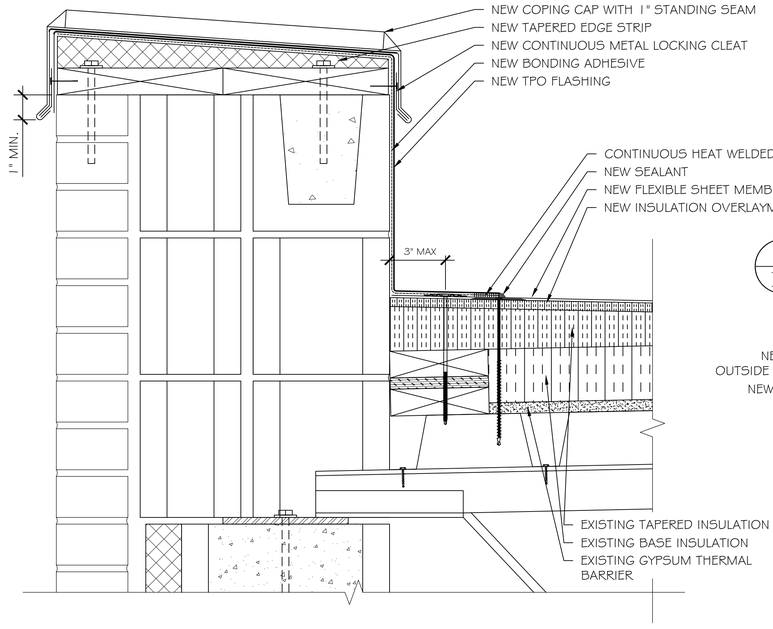
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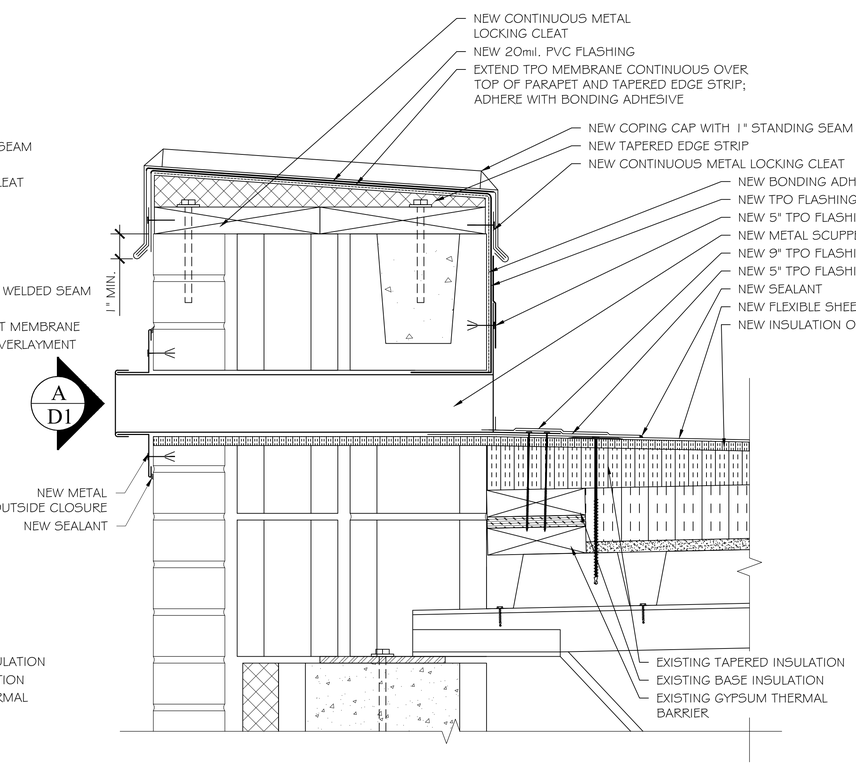
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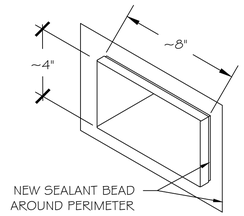
SHEET
R2



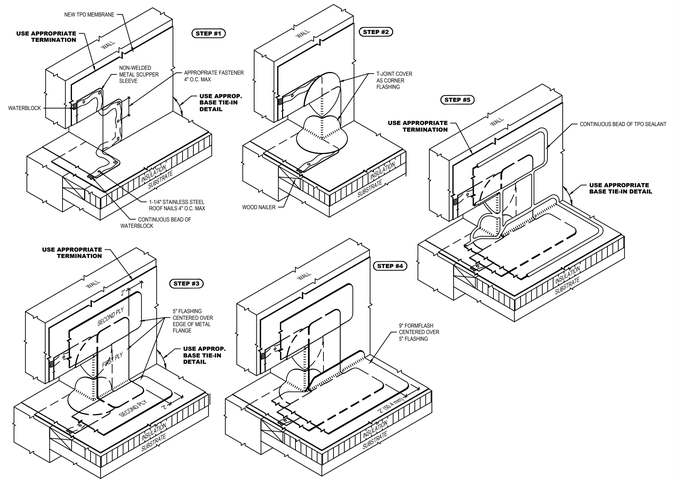
1 RA 1 PARAPET WALL DETAIL



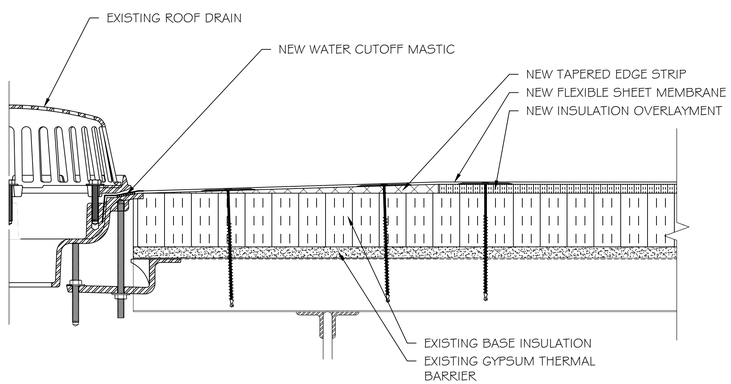
2 RA 1 OVERFLOW SCUPPER DETAIL



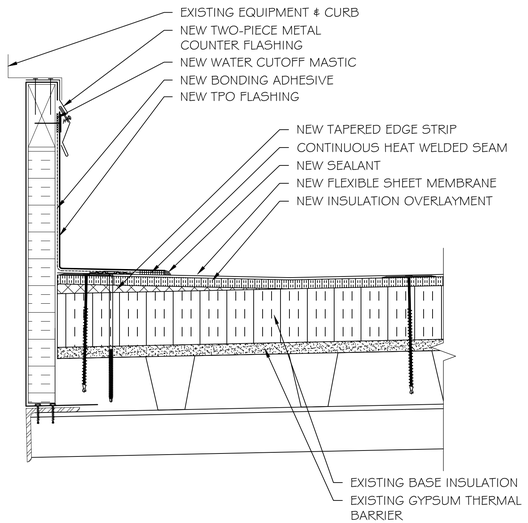
A ISOMETRIC OF OVERFLOW SCUPPER OUTLET



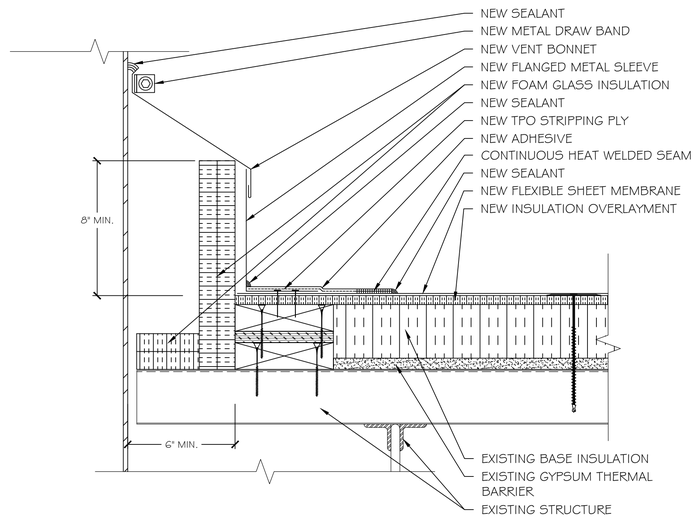
B OVERFLOW SCUPPER FLASHING INSTALLATION STEPS



3 ROOF DRAIN DETAIL



4 EQUIPMENT CURB DETAIL



5 HOT VENT STACK DETAIL

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SHEET TITLE: DETAILS

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CLIENT NAME: AIKEN TECHNICAL COLLEGE

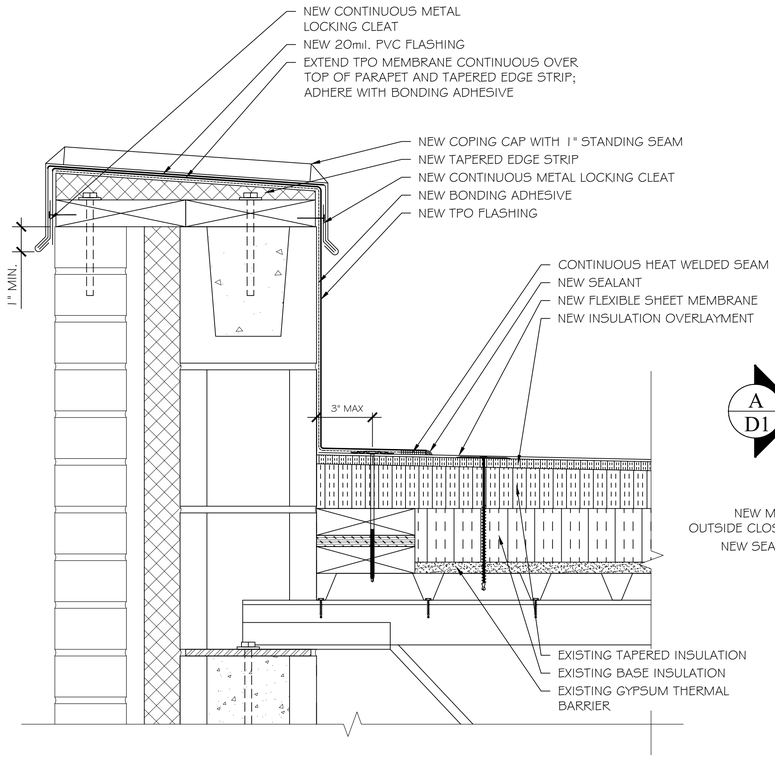
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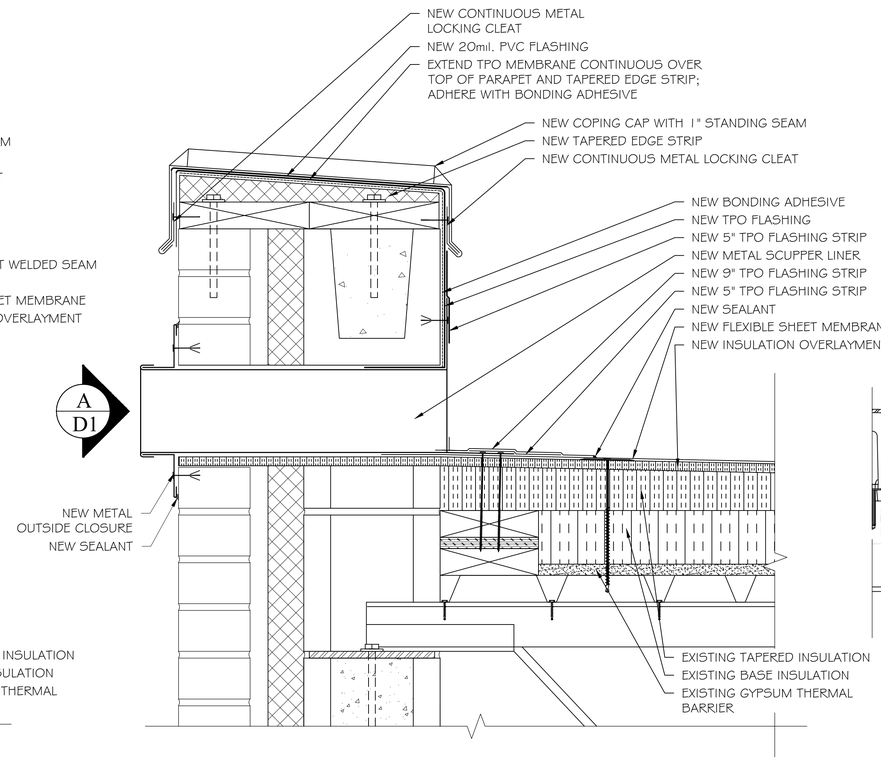
Richard C. Parrish 07218 RCI, Inc. 12/16/22

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DRAWN BY: RCP
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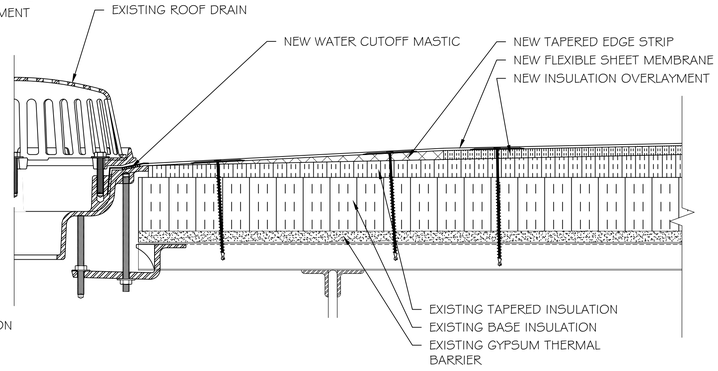
SHEET D1



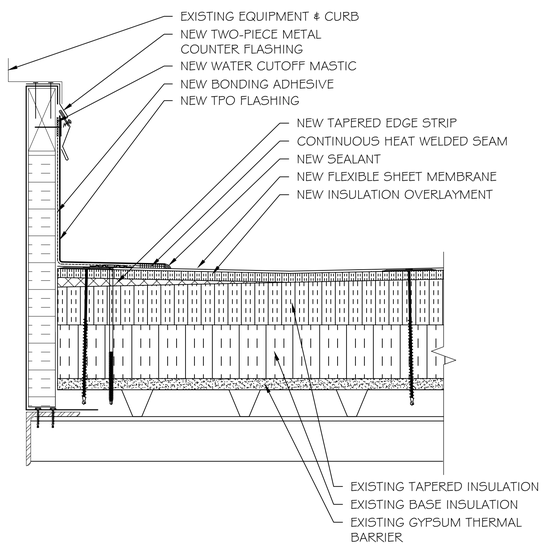
1 PARAPET WALL DETAIL (TYP.)



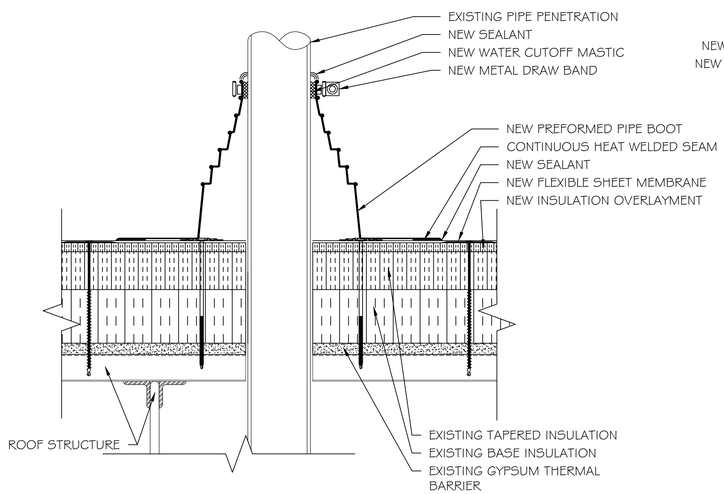
2 OVERFLOW SCUPPER DETAIL (TYP.)



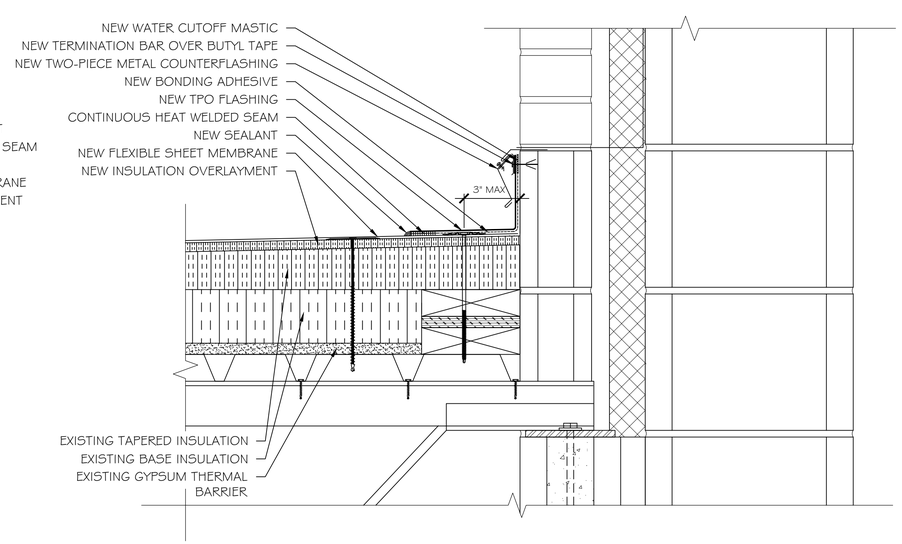
3 ROOF DRAIN DETAIL (TYP.)



4 EQUIPMENT CURB DETAIL (TYP.)



5 PIPE PENETRATION DETAIL (TYP.)



6 BASE FLASHING DETAIL (TYP.)

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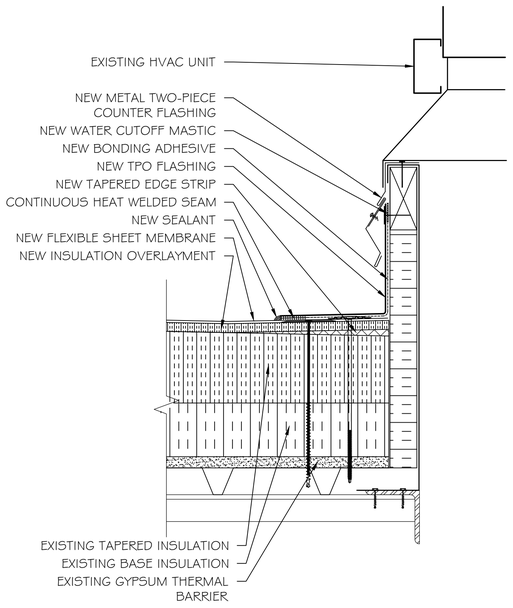
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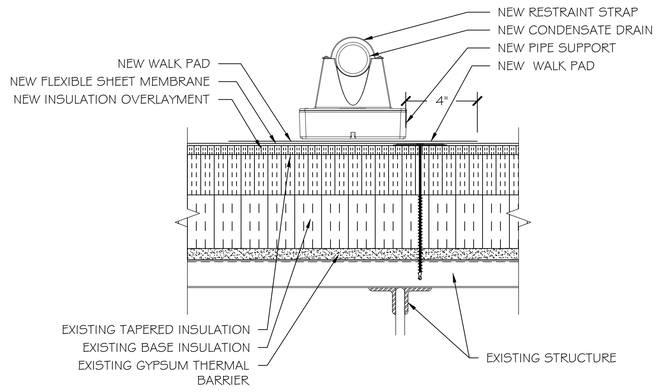
Richard C. Parrish
REGISTERED ROOFING CONSULTANT
RCI
07 76
RCI, Inc.

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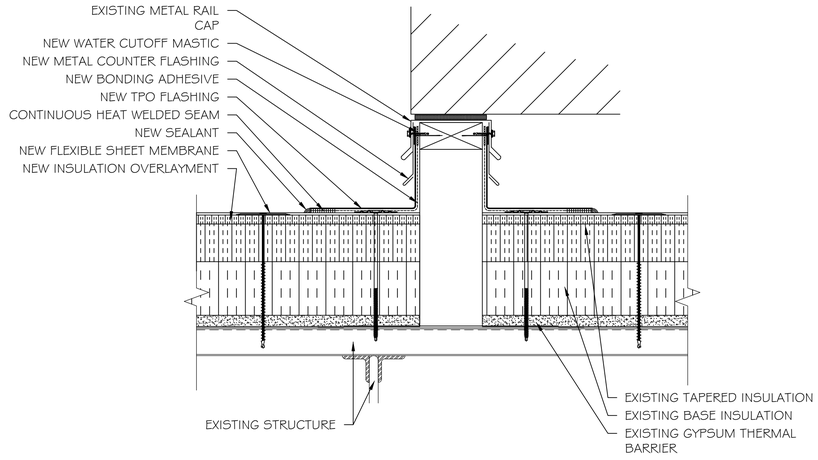
SHEET
D2



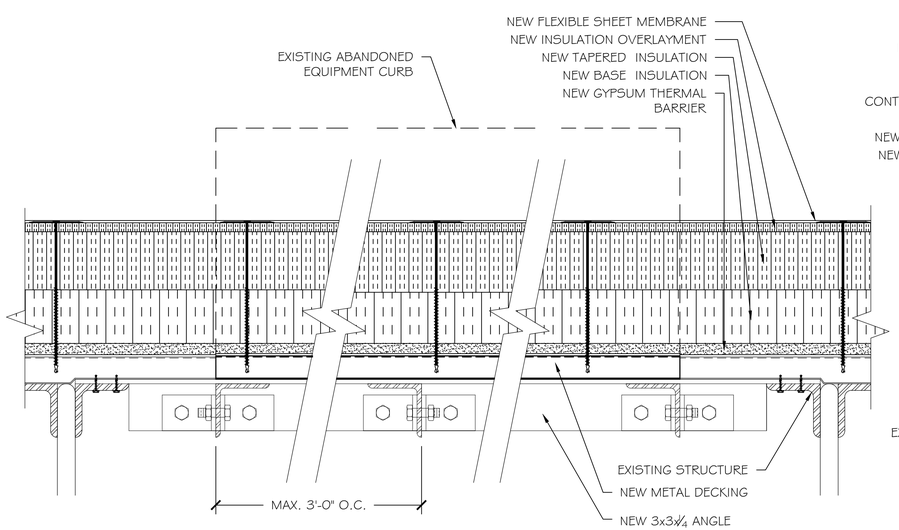
1 HVAC CURB DETAIL



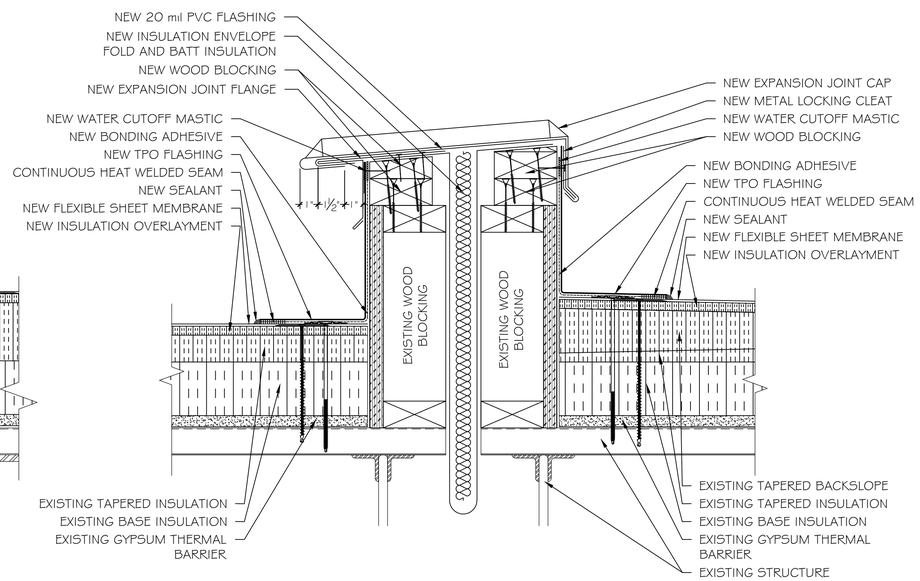
2 CONDENSATE DRAIN SUPPORT DETAIL



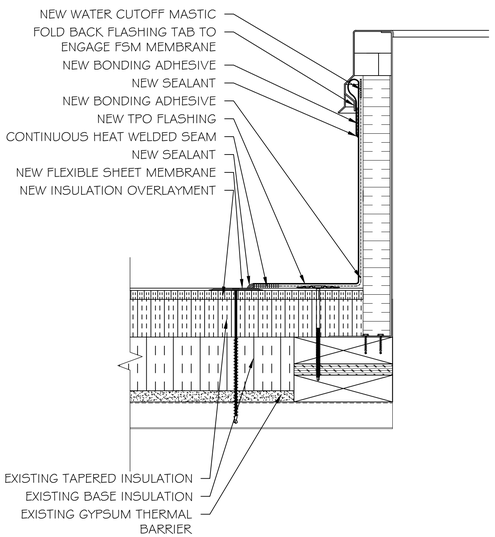
3 EQUIPMENT RAIL DETAIL



4 ABANDONED EQUIPMENT CURB DETAIL
> 18" OPENING WIDTH



5 EXPANSION JOINT DETAIL



6 ROOF HATCH DETAIL

Shepard & Associates, LLC
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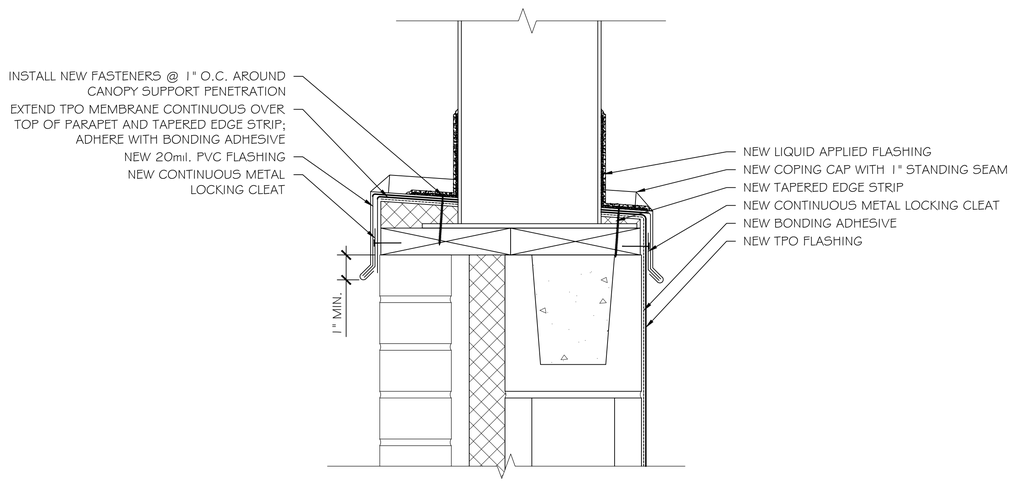
REVISIONS

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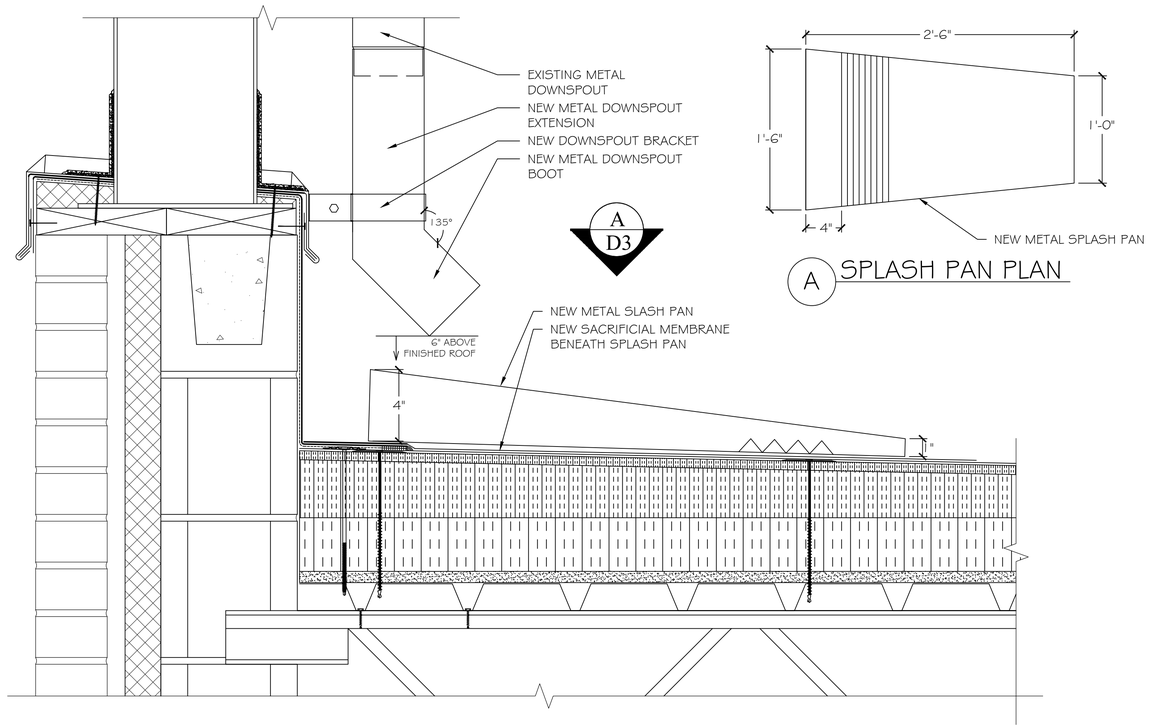
Richard C. Parrish
REGISTERED ROOFING CONSULTANT
RCI 0778
RCI, Inc.

PF No. 22006.001.004	
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SHEET
D3

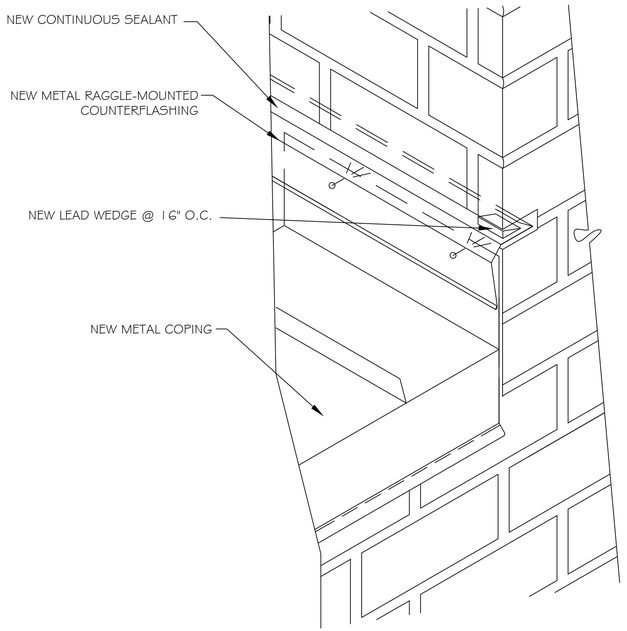


1 CANOPY SUPPORT PENETRATION DETAIL (TYP.)

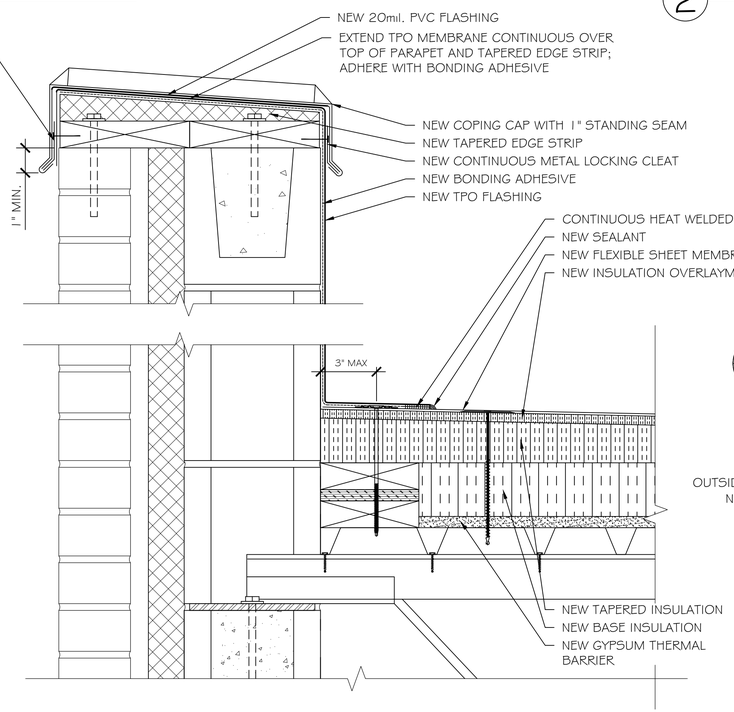


A SPLASH PAN PLAN

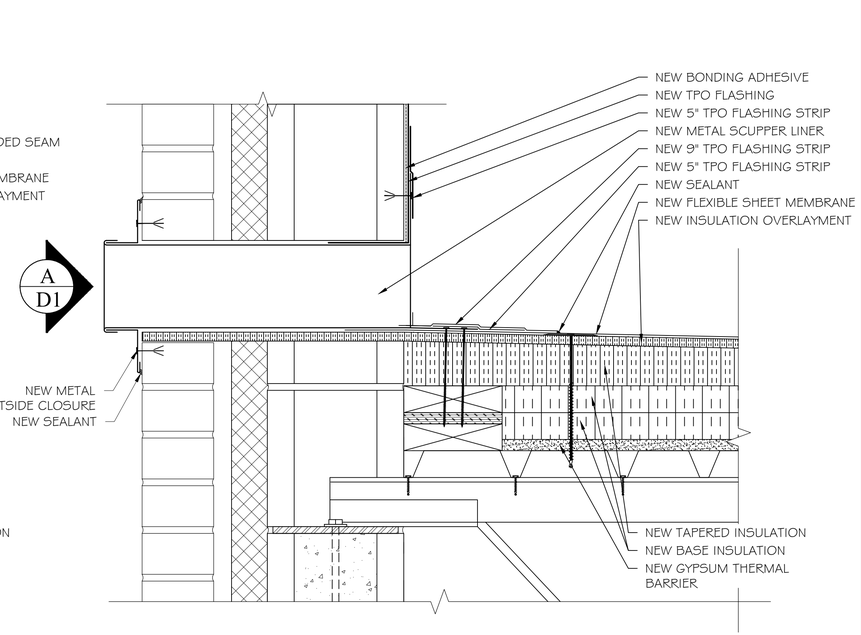
2 D.S. EXTENSION AND SPLASH PAN DETAIL



3 DETAIL AT COPING END, VERTICAL WALL



4 PARAPET WALL DETAIL (RA 4)



5 OVERFLOW SCUPPER DETAIL (RA 4)

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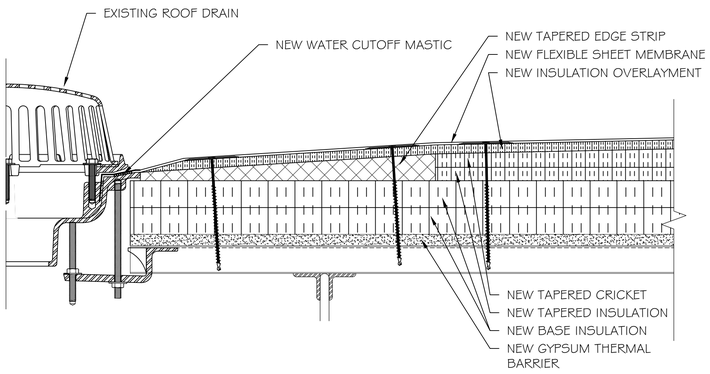
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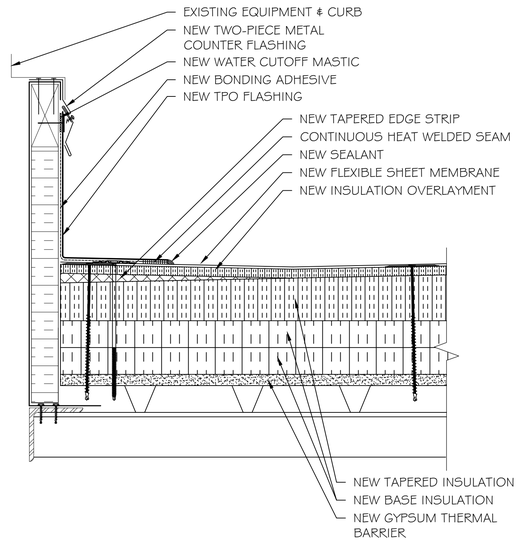
Richard C. Parrish — 07 78 — RCI, Inc.

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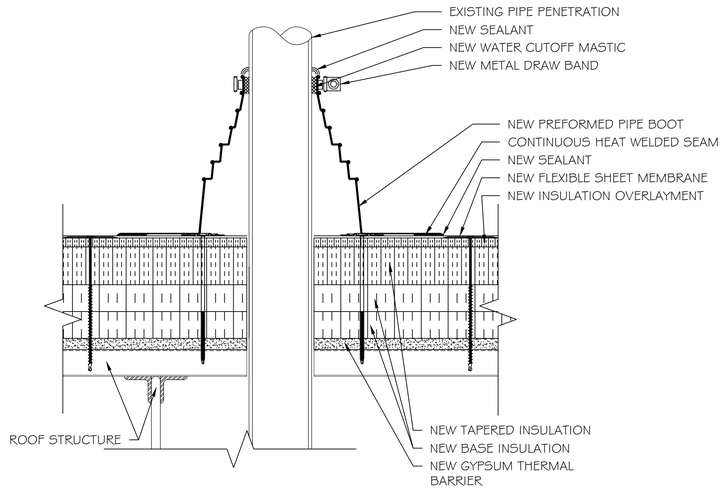
SHEET
D4



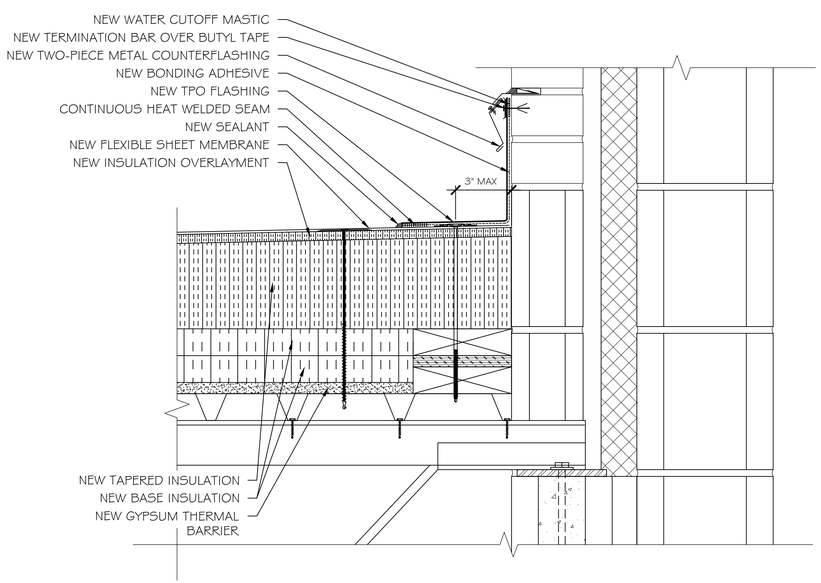
1 ROOF DRAIN DETAIL (RA 4)



2 EQUIPMENT CURB DETAIL (RA 4)



3 PIPE PENETRATION DETAIL (RA 4)



4 BASE FLASHING DETAIL (RA 4)

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Richard C. Parrish
Registered Roof Consultant
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0778
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SHEET
D5