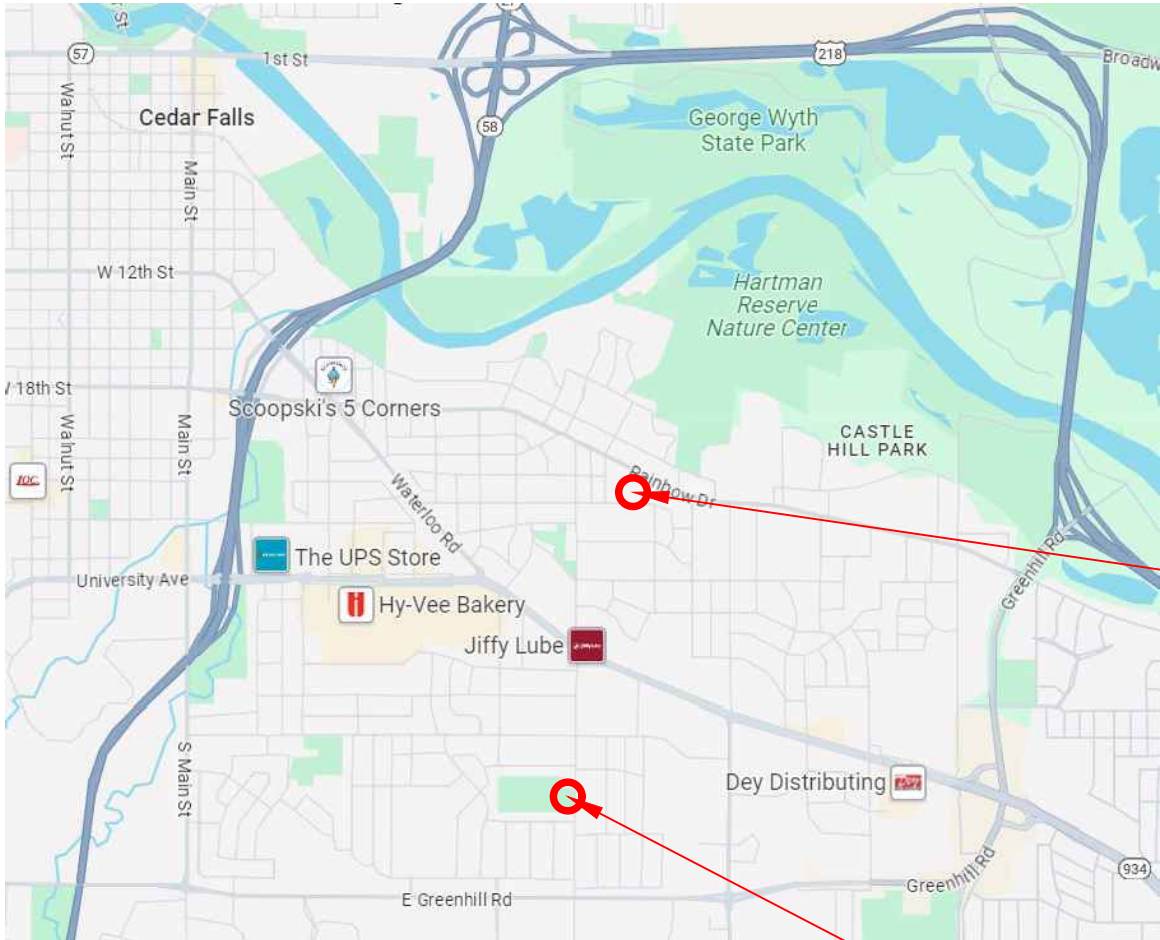


CEDAR FALLS COMMUNITY SCHOOLS
CEDAR FALLS, IOWA
2024 ROOF IMPROVEMENTS



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CEDAR FALLS VICINITY MAP




CEDAR HEIGHTS ELEMENTARY
2417 RAINBOW DRIVE
CEDAR FALLS, IA 50613




ORCHARD HILL ELEMENTARY
3909 ROWND STREET
CEDAR FALLS, IA 50613

| DRAWING INDEX | |
|---------------|---|
| SHEET NO. | DRAWING TITLE |
| R0 | COVER SHEET |
| R1 | GENERAL NOTES |
| R2 | CEDAR HEIGHTS ELEMENTARY - LEVEL H ROOF PLAN |
| R3 | ORCHARD HILL ELEMENTARY - LEVEL A ROOF PLAN |
| R4 | CEDAR HEIGHTS ELEMENTARY - DETAILS |
| R5 | ORCHARD HILL ELEMENTARY - DETAILS |

 SCOPE OF WORK AREA



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

 January 17, 2024
(SIGNATURE) (DATE)

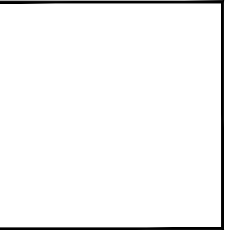
PRINTED OR TYPED NAME Joelle E. Lattimer
LICENSE NUMBER P28351
MY LICENCE RENEWAL DATE IS DECEMBER 31, 2024.
PAGES OR SHEETS COVERED BY THIS SEAL:
R0-R5

COVER SHEET

2024 ROOF IMPROVEMENTS
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BID SET



Terracon Project No: F1236179

Scale:

Date: 01/17/2024

Drawn By: SR

Designed By: AT

R0

GENERAL NOTES:

1. PROVIDE ALL SUPPORTING DOCUMENTS INCLUDING SHOP DRAWINGS, LABOR, EQUIPMENT, AND MATERIALS REQUIRED AND SPECIFIED IN THE CONSTRUCTION DOCUMENTS TO PERFORM THE SCOPE OF WORK.
2. COMPLY WITH ALL APPLICABLE STATE AND LOCAL CODES AND LAWS. IN ADDITION, COMPLY WITH MANUFACTURER'S GUIDELINES TO OBTAIN MANUFACTURER'S CERTIFICATE OF WARRANTY.
3. SUBMIT LOGISTIC PLAN, PRODUCT DATA, TAPERED PLAN, AND SHOP DRAWINGS TO OWNER AND TERRACON FOR APPROVAL BEFORE STARTING CONSTRUCTION WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS RELATED TO THE PROJECT SCOPE OF WORK. NOTIFY THE TERRACON AND OWNER OF EXISTING CONDITIONS THAT DIFFER FROM THOSE SPECIFIED OR EXISTING CONDITIONS THAT MAY IMPACT THE SCOPE OF WORK, PERFORMANCE, SCHEDULE, OR PROJECT COSTS.
5. WHERE NEW SHEET METAL COMPONENTS ARE REQUIRED, COMPLY WITH THE FOLLOWING REQUIREMENTS:

A. SHEET METAL WORK IS TO COMPLY WITH SMACNA AND ANSI/SPRI ES-1, WHETHER SHOWN ON THESE PLANS AND DETAILS OR NOT.

B. SHEET METAL EDGING, GRAVEL GUARD, FASCIA, AND COPING ARE TO HAVE CONTINUOUS CLEATS FASTENED AT A MINIMUM OF 4" O.C. CLEATS ARE TO BE ONE GAUGE HEAVIER THAN THE MATERIAL BEING ATTACHED. WHENEVER THE FASCIA WIDTH EXCEEDS 7 INCHES, THE FASCIA MUST BE MADE IN MULTIPLE PIECES WITH NO SINGLE PIECE BEING WIDER THAN 7 INCHES.

C. EXPOSED SHEET METAL EDGES ARE TO BE HEMMED.

D. SHEET METAL RECEIVING AN ELASTOMERIC SEALANT IS TO BE PRIMED AS REQUIRED IN THE MANUFACTURER'S PRINTED SPECIFICATIONS. SEALANT COLORS ARE TO BE FROM THE MANUFACTURER'S STANDARD COLORS THAT MOST CLOSELY MATCH THE MATERIAL TO WHICH IT IS APPLIED.
6. CLEAN THE BUILDING, GROUNDS, AND ANY SURROUNDING STRUCTURES AND RESTORE THE LANDSCAPING TO ITS ORIGINAL CONDITION USING APPROVED MATERIALS.
7. ELECTRICAL DISCONNECTS AND RE-CONNECTS: ALL ELECTRICAL DISCONNECTS AND RE-CONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.

CEDAR HEIGHTS LEVEL H ROOF CONSTRUCTION NOTES

1. EXISTING ROOFING SYSTEM ON ROOF LEVEL H AS FOLLOWS: ARCHITECTURAL SHINGLES ON DOUBLE LAYER OF ASPHALT FELT WITH ICE/WATER BARRIER ALONG EAVES THAT EXTENDS 24 INCHES ABOVE EXTERIOR WALL UNDER ROOF. EXISTING ROOF SLOPE ON MAIN ROOF IS APPROXIMATELY 2 INCHES PER 12 INCHES.
2. BASE BID


REMOVE EXISTING SHINGLES, UNDERLYING ASPHALTIC FELT SHEET, AND SELF-ADHERED UNDERLAYMENT. INSTALL NEW ONE-INCH THICK POLYISOCYANURATE INSULATION WITH MECHANICAL FASTENERS TO DECK, 0.5-INCH THICK GYPSUM BASED COVER BOARD IN INSULATION ADHESIVE AND NEW 80 MIL PVC ADHERED SHEET WITH CONTOUR RIBS HEAT WELDED TO SHEET AS SHOWN. INSTALL NEW RIBS OVER MEMBRANE SHEET LAPS. INSTALL MEMBRANE SO SHEET LAPS ARE PARALLEL TO ROOF SLOPE. PROVIDE 30 YEAR MANUFACTURER'S WARRANTY.
3. REMOVE DETERIORATED PLYWOOD DECKING. INSTALL NEW 5/8-INCH THICK PLYWOOD TO SPAN EXISTING LIGHT GAGE METAL TRUSSES SPACED AT 2-FEET ON CENTER. ATTACH TO TRUSSES AT 8-INCHES ON CENTER. BID QUANTITY-500 SQUARE FEET. SEE BID FORM FOR UNIT PRICE.
4. AT THE AREAS WHERE THE SELF-ADHERED UNDERLAYMENT CAN NOT BE REMOVED REPLACE THE PLYWOOD DECK.
5. ENTIRE ROOF DECK AREA. INSTALL NEW SELF-DRILLING FLAT HEAD SCREWS WITH WINGS BY SIMPSON STRONG TIE OR APPROVED EQUAL AT 12 INCHES ON-CENTER.
6. INSTALL NEW WOOD NAILER ALONG THE PERIMETER TO MATCH THE INSULATION AND COVER BOARD HEIGHT. FASTEN TO THE EXISTING WOOD NAILER PER SPECIFICATION SECTION 06100.
7. CONTRACTOR TO VERIFY THE EXISTING SOFFIT VENTS ARE OPEN AND NOT COVERED WITH INSULATION FOR PROPER VENTILATION BELOW THE DECK.
8. APPLY NEW THOROLASTIC WATERPROOF COATING OVER EXISTING STUCCO WALL.
9. ACCESS TO ALL ROOFS FOR CONSTRUCTION SHALL BE AS DESIGNATED BY OWNER. STORAGE AREA FOR MATERIALS SHALL BE IN PARKING LOT AS DESIGNATED BY FACILITY STAFF.

10. CONTRACTOR TO PROVIDE BARRICADES, DETOUR SIGNS, AND ORANGE FLEXIBLE FENCING AS REQUIRED AND PROTECTION FOR MATERIALS AND TRAFFIC. MAINTAIN PEDESTRIAN AND OCCUPANT ACCESS AND EGRESS TO AND FROM BUILDINGS AT ALL TIMES.
11. COORDINATE LOCATION OF DUMPSTER CHUTE WITH FACILITY STAFF.
12. DRAWINGS ARE PRODUCED AT TABLOID (11-INCHES by 17-INCHES) SIZE. ANY SCALE SHOWN IS APPLICABLE WHEN PRINTED AT THIS SIZE. NOTE THAT ROOF DETAILS ARE NOT SCALED.
13. CONTRACTOR RESPONSIBLE FOR ANY AND ALL PERMITS REQUIRED BY LOCAL GOVERNMENTAL AGENCIES.
14. CONTRACTOR RESPONSIBLE FOR PROTECTING EXISTING ADJACENT LAWN AREAS, ABOVE GROUND AND UNDERGROUND UTILITIES, PAVING, AND EXTERIOR BUILDING WALLS FROM DAMAGE. ANY DAMAGE DUE TO CONTRACTOR OPERATIONS SHALL BE REPAIRED TO MATCH EXISTING CONDITIONS AT CONTRACTOR'S EXPENSE.
15. CONTRACTOR RESPONSIBLE TO VERIFY ALL ROOF MEASUREMENTS. NO ADDITIONAL PAYMENT FOR INCORRECT MEASUREMENTS SHOWN ON PLANS WILL BE PROVIDED.

ORCHARD HILL ELEMENTARY LEVEL A ROOF CONSTRUCTION NOTES

1. EXISTING ROOFING SYSTEM ON ROOF LEVEL A AS FOLLOWS: STRUCTURAL FIBER CEMENT DECK, ASPHALTIC BASE SHEET, MULTIPLE LAYERS OF FLAT AND TAPERED POLYISOCYANURATE (ISO) INSULATION VARIES (CONTRACTOR TO VERIFY INSULATION THICKNESS) AND 0.75 INCH THICK PERLITE. THERE MAY BE INTERMEDIATE APSHALTIC SHEET BETWEEN LAYERS OF TAPERED ISO. ALL INSULATION IS HOT MOPPED APPLIED. MEMBRANE IS AGGREGATE SURFACED BUILT-UP ROOF PLIES.
2. ASBESTOS WAS IDENTIFIED IN THE SILVER COATING OVER THE FLASHING MEMBRANE SEAMS. REFER TO TERRACON REPORT WAS PROVIDED BY ENVIRONMENTAL DEPARTMENT FOR PROJECT # F1236179 ON DECEMBER 7, 2023.
3. BASE BID

REMOVE EXISTING AGGREGATE SURFACING AND BUILT-UP ROOF PLIES. ROOFING MATERIALS WERE TESTED FOR ASBESTOS CONTENT AND ASBESTOS WAS DETECTED ON FLASHING COATING . REMOVE AND DISPOSE OF ASBESTOS ON FLASHINGS PER SPECIFICATIONS AND CURRENT IDNR REGULATIONS. REMOVE ALL INSULATION TO ROOF DECK. REMOVE ALL ASPHALT CONTAMINATION OR COVER WITH A SUITABLE SUBSTRATE ACCEPTABLE BY ROOFING MEMBRANE MANUFACTURER AT AREAS WHERE IS IN CONTACT WITH EPDM MEMBRANE. MECHANICALLY FASTEN NEW FLAT BASE LAYER ISO AND ADHERE REST OF INSULATION, NEW TAPERED ISO (1/4 INCH FOOT SLOPE) AND 0.5 INCH HIGH-DENSITY ISO (80 PSI)WITH LOW-RISE ADHESIVE. BASE LAYER AT DRAINS (20 PSI) TO BE AT LEAST 1.5 INCHES THICK MECHANICALLY FASTENED, TOTAL INSULATION THICKNESS TO MEET MINIMUM OF R 30 VALUE. INSTALL NEW 90 MIL FULLY ADHERED EPDM. PROVIDE MANUFACTURER'S 30-YEAR WARRANTY.
4. CONTRACTOR SHALL WATER TEST THE DRAINS PER ASTM D5957 (MODIFIED FLOOD TEST, 1" OF WATER AT THE SHALLOWEST PART OF THE ROOF DRAIN) TO ENSURE PROPER DRAINAGE BEFORE INSTALLING NEW ROOFING SYSTEM.
5. TIE-IN NEW ROOFING TO EXISTING EPDM AROUND LEVEL A PER EPDM MANUFATURERS RECOMMENDATIONS AND DETAILS.
6. INSTALL NEW PADS/SUPPORTS FOR PIPES AND CONDUITS. INSTALL WALKPAD PROTECTION UNDER THE DUCT SUPPORTS.
7. RAISE THE ELECTRICAL CONDUIT AND GAS LINE IF NEEDED TO ACCOMMODATE WITH NEW INSULATION HEIGHT.
8. ACCESS TO ROOF FOR CONSTRUCTION SHALL BE AS DESIGNATED BY OWNER STORAGE AREA FOR MATERIALS SHALL BE IN PARKING LOT AS DESIGNATED BY FACILITY STAFF.
9. CONTRACTOR TO PROVIDE BARRICADES, DETOUR SIGNS AND ORANGE FLEXIBLE FENCING AS REQUIRED AND PROTECTION FOR MATERIALS AND TRAFFIC. MAINTAIN PEDESTRIAN AND OCCUPANT ACCESS AND EGRESS TO AND FROM BUILDINGS AT ALL TIMES.
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12. CONTRACTOR RESPONSIBLE FOR ANY AND ALL PERMITS REQUIRED BY LOCAL GOVERNMENTAL AGENCIES.
13. CONTRACTOR RESPONSIBLE FOR PROTECTING EXISTING ADJACENT LAWN AREAS, ABOVE GROUND AND UNDERGROUND UTILITIES, PAVING, AND EXTERIOR BUILDING WALLS FROM DAMAGE. ANY DAMAGE DUE TO CONTRACTOR OPERATIONS SHALL BE REPAIRED TO MATCH EXISTING CONDITIONS AT CONTRACTOR'S EXPENSE.
14. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL ROOF MEASUREMENTS. NO ADDITIONAL PAYMENT FOR INCORRECT MEASUREMENTS SHOWN ON PLANS WILL BE PROVIDED.



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CEDAR FALLS, IOWA

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01/17/2024

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Designed By:
AT

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CEDAR HEIGHTS ELEMENTARY SCHOOL
ROOF PLAN

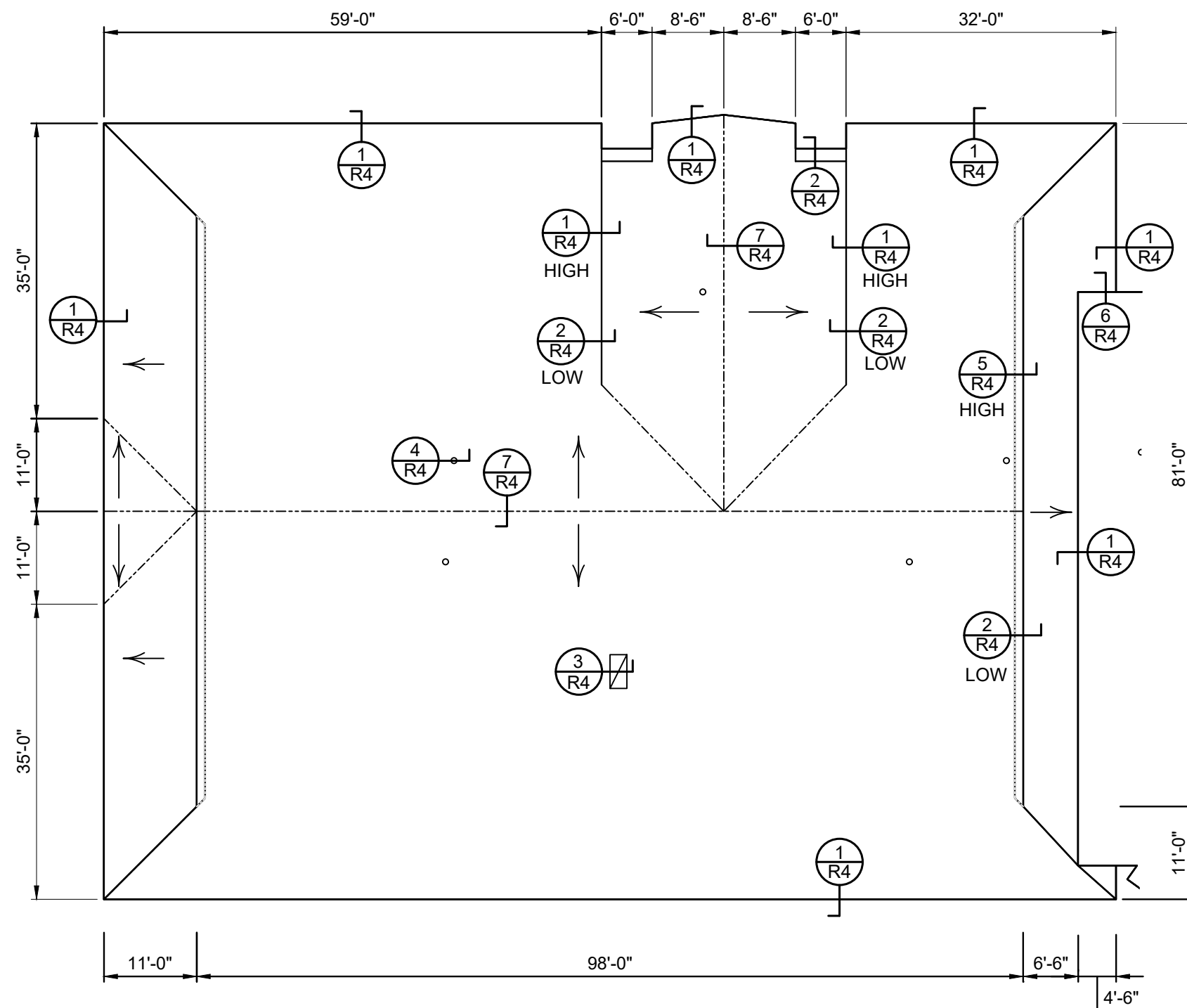
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




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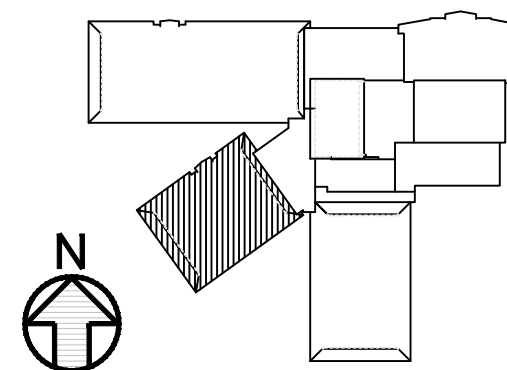


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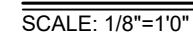
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|---|-------------------------|--|-------------------|
|  | PARAPET WALL |  | CRICKET/SADDLE |
|  | METAL EDGE |  | RIDGE/VALLEY LINE |
|  | CONTROL JOINT |  | SLOPE DIRECTION |
|  | EXPANSION JOINT |  | ROOF LEVEL |
|  | OVERFLOW SCUPPER |  | SLEEPER |
|  | PIPE PENETRATION |  | CHIMNEY |
|   | FLANGED PENETRATION |  | HOT STACK |
|  | ROOF DRAIN |  PS | PIPE SUPPORT |
|  | OVERFLOW DRAIN |  H | HVAC UNIT |
|  | ROOF CURB |  A | AC UNIT |
|  | ELEVATED UNIT/EQUIPMENT |  EF | EXHAUST FAN |

CEDAR HEIGHTS ELEMENTARY SCHOOL
LEVEL H ROOF PLAN

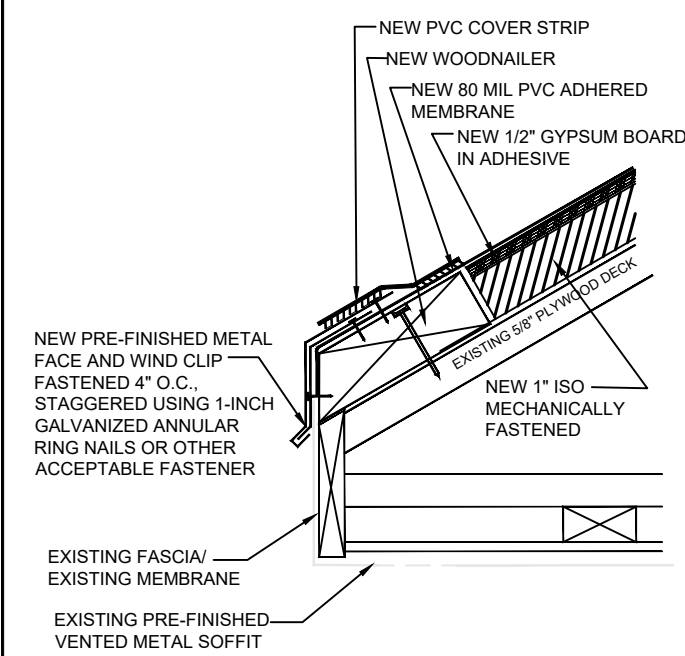
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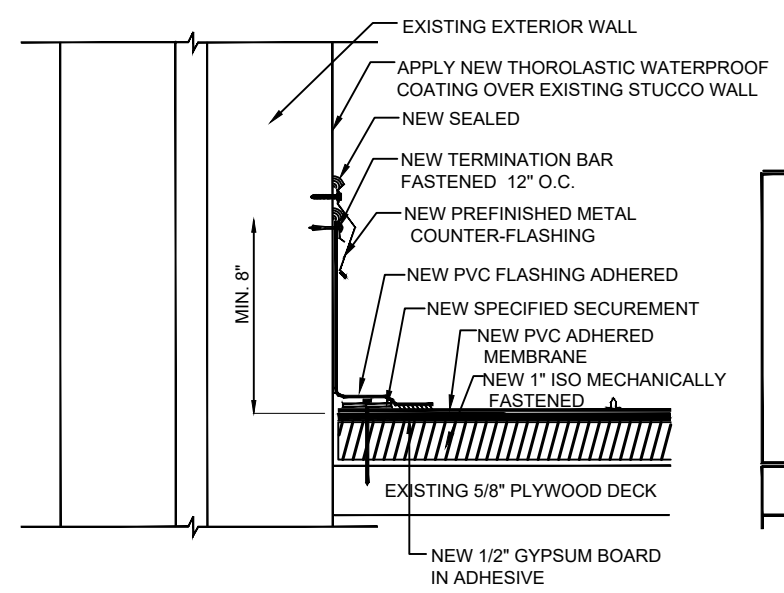
NOTE : CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS.



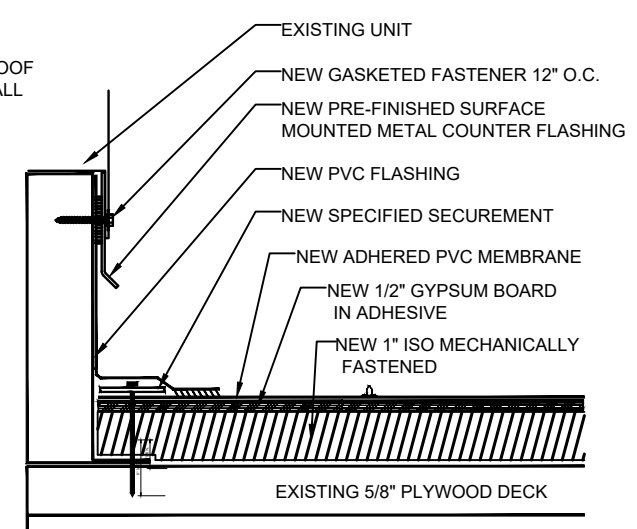
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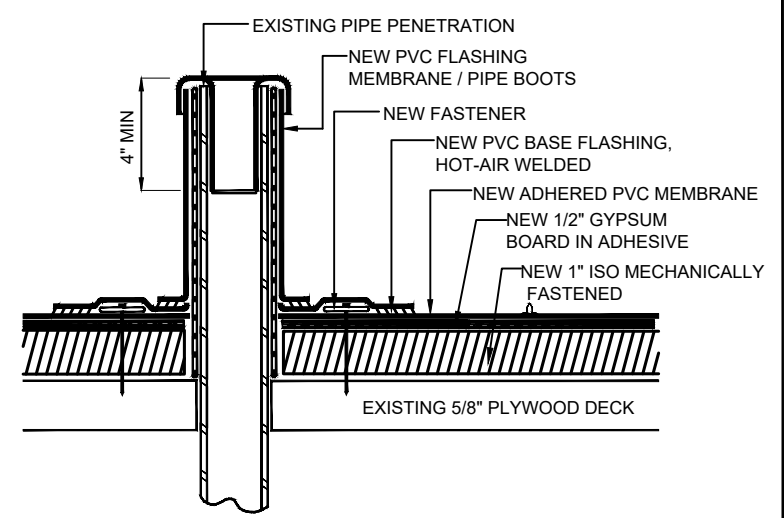
1 EAVE EDGE DETAIL
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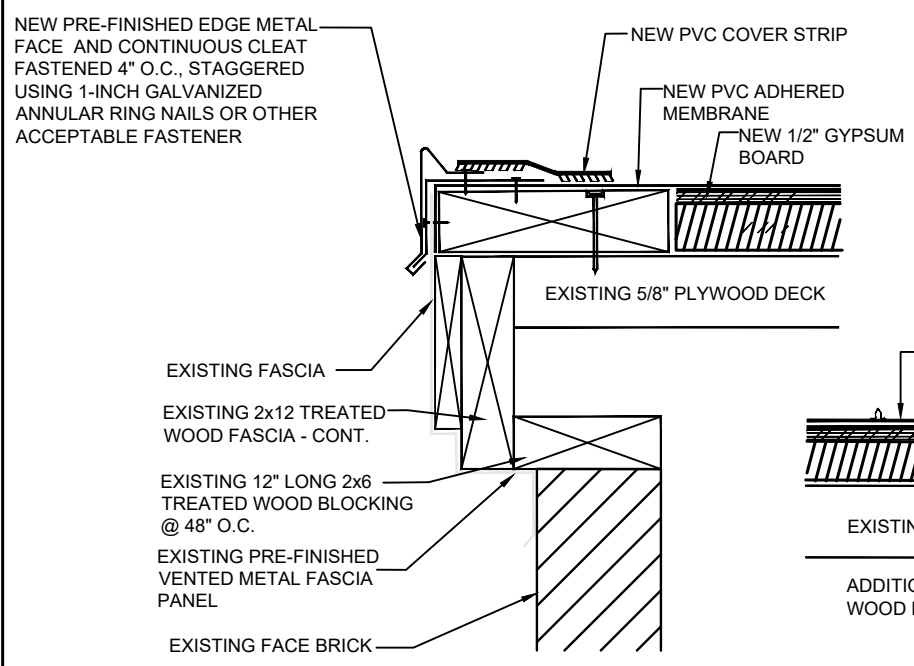
2 SURFACE MOUNTED COUNTERFLASHING
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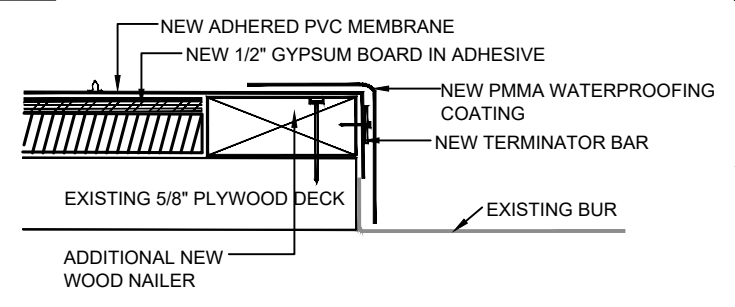
3 CURB FLASHING
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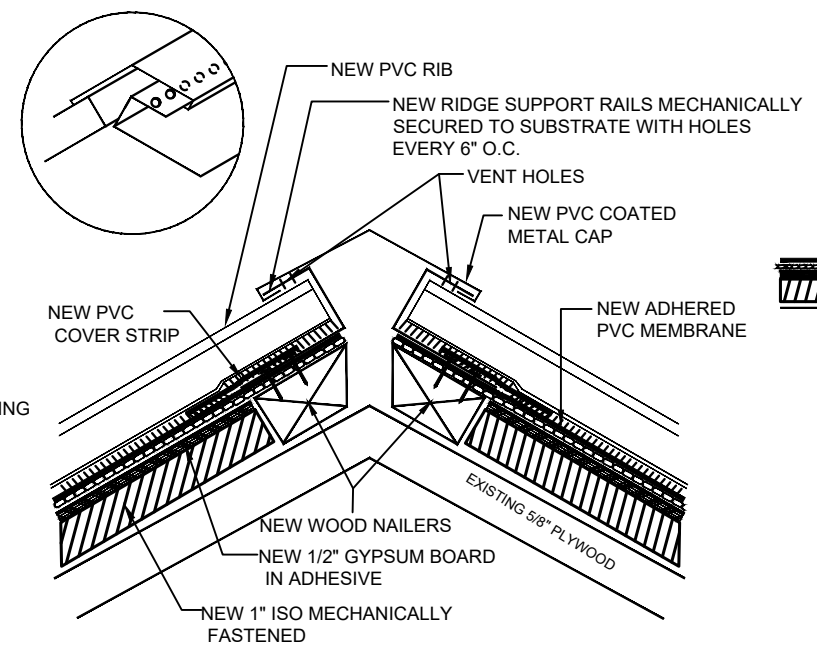
4 VENT STACK FLASHING
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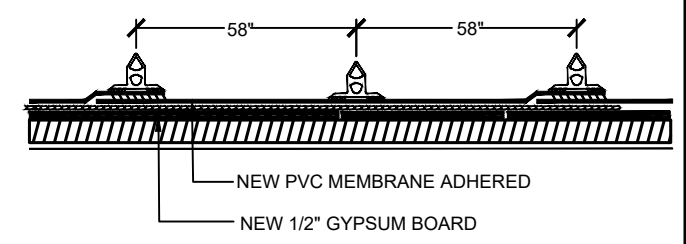
5 FASCIA DETAIL
Scale: NTS




6 WALL TRANSITION
Scale: NTS



7 PEAK/RIDGE VENT DETAIL
Scale: NTS



8 RIB PROFILE SPACING LAYOUT
Scale: NTS



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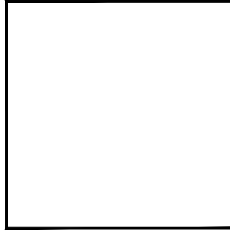
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ROOF DETAILS

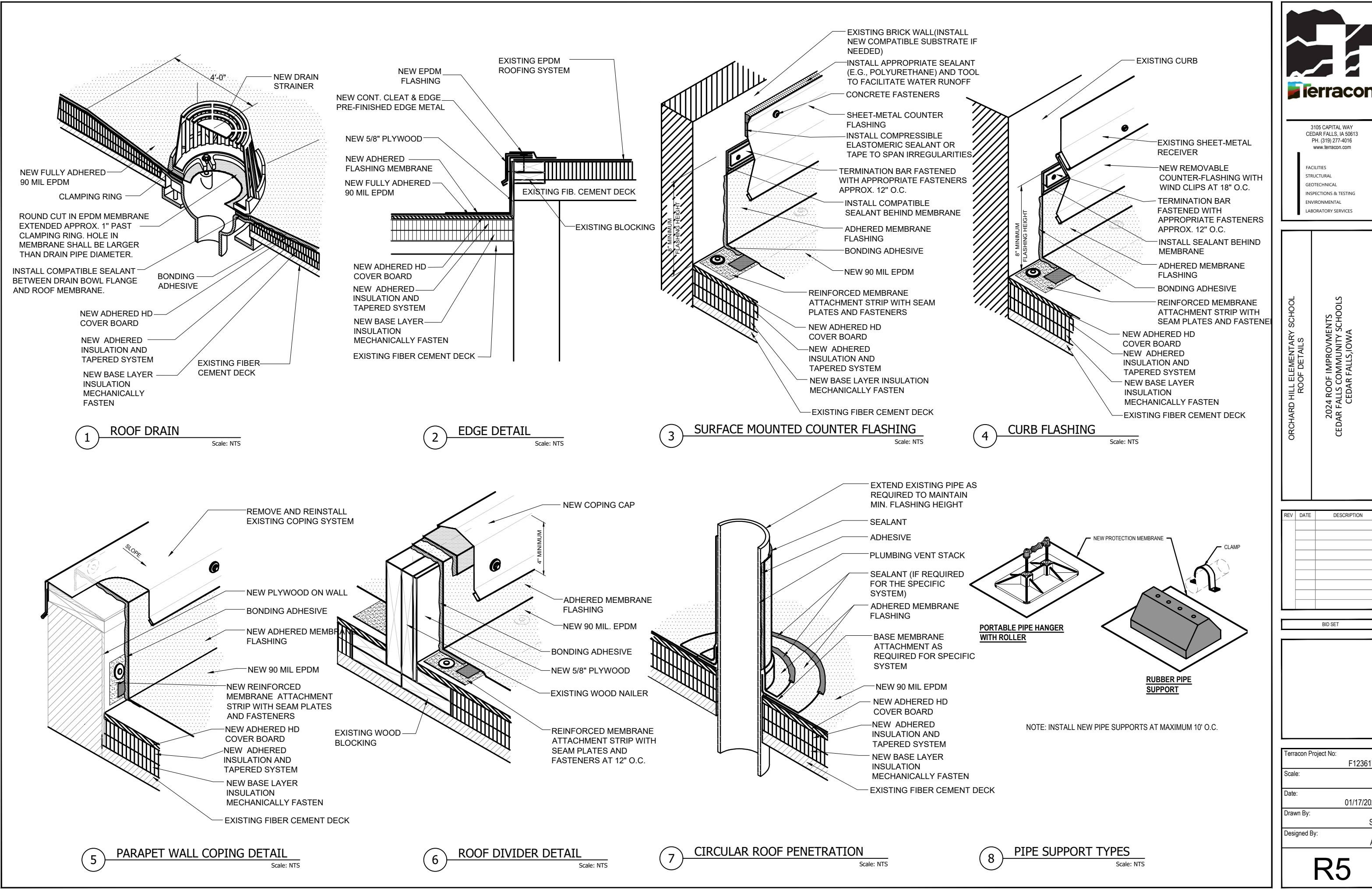
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