

MARYSVILLE PUBLIC SCHOOLS

MARYSVILLE MIDDLE SCHOOL

ROOF REPLACEMENT 2025

400 Collard Drive
Marysville, MI 48040

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PREPARED BY:

NTH CONSULTANTS, LTD.

PROJECT NO. 24002588-00
JANUARY 2025

ISSUED FOR BIDS

OWNER:
Marysville Public Schools
495 E Huron Blvd.
Marysville, Michigan 48040
Contact: Mike Roehl
Phone: 810-455-6290

CONSULTANT:
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Northville, Michigan 48168
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KEY MAP: NORTH ARROW:

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PROJECT NAME:
MARYSVILLE MIDDLE
SCHOOL 2025 ROOF
REPLACEMENT

PROJECT LOCATION:
400 COLLARD DRIVE
MARYSVILLE, MI 48040

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| DESIGNED BY: TML | NTH PROJECT NO.: 24002588 |
| DRAWN BY: OH | SHEET SIZE: ARCH D (24"x36") |
| CHECKED BY: MLN | DATE: 01/10/2025 |

CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:

01

GENERAL NOTES

- ALL COMPONENTS SHOWN IN THE DETAILS ARE "NEW" UNLESS OTHERWISE INDICATED.
- DETAILS OF EXISTING COMPONENTS INCLUDED IN THESE PLANS ARE CONCEPTUAL AND MAY NOT BE THE SAME AS ENCOUNTERED IN THE FIELD. THEY ARE BASED ON AVAILABLE INFORMATION AT THE TIME OF PREPARATION OF THESE DOCUMENTS AND NON DESTRUCTIVE INVESTIGATIONS IN THE FIELD. NTH HAS CONDUCTED ALL REASONABLE INVESTIGATION INTO THE FIELD CONDITIONS OF THE STRUCTURE TO PROVIDE THE CONTRACTOR WITH ACCURATE INFORMATION. ANY ERRORS OR OMISSIONS ARE UNINTENTIONAL AND THE CONTRACTOR IS ADVISED TO DOCUMENT SUCH VARIATIONS AND SUBMIT TO OWNER FOR REVIEW VIA PHOTOS, SKETCHES, OR OTHER APPROPRIATE MEANS.
- CONTRACTOR SHALL CHECK ACTUAL CONDITIONS BY FIELD MEASUREMENT BEFORE FABRICATION TO ENSURE PROPER FIT AND ALIGNMENT OF NEW COMPONENTS WITH EXISTING CONDITIONS. FIELD MEASUREMENTS ARE TO BE INDICATED ON SHOP DRAWINGS IF REQUESTED BY OWNER.
- CONTRACTOR SHALL SUBMIT A WORK PLAN AND SCHEDULE FOR REVIEW PRIOR TO STARTING WORK AND WILL NOTIFY THE OWNER AND OWNER'S REPRESENTATIVES OF ANY DEVIATIONS FROM THAT PLAN OR SCHEDULE AS SOON AS THEY ARE APPARENT.
- CONTRACTOR IS RESPONSIBLE FOR ALL WORK INCIDENTAL TO OR INDICATED IN THESE PLANS AND PERFORMED OR CONDUCTED BY THEMSELVES, THEIR SUB-CONTRACTORS, OR THEIR AGENTS.
- CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS, PROCEDURES AND SEQUENCING OF WORK.
- CONTRACTOR SHALL PROVIDE FIRE WATCH COMPLYING WITH THE OWNERS REQUIREMENTS DURING ALL HOT WORK SUCH AS CUTTING, WELDING, GRINDING, ETC.
- CONTRACTOR SHALL PROTECT OWNER PROPERTY NOT INCLUDED IN THIS WORK BUT IN THE IMPACTED AREA FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
- CONTRACTOR IS RESPONSIBLE FOR SECURING AND PAYMENT OF ALL REQUIRED PERMITS PERTAINING TO THIS WORK.
- CONTRACTOR WILL ENSURE ALL WORK IS CONDUCTED WITHIN THE REQUIREMENTS OF APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAWS.
- VERIFY IN THE FIELD (VIF) ALL MEASUREMENTS INDICATED ON THESE PLANS. MEASUREMENTS ARE PROVIDED FOR ESTIMATION PURPOSES ONLY. DIMENSIONS OF COMMON ELEMENTS MAY VARY FOR EACH LOCATION.
- CONTRACTOR WILL REPLACE IN KIND, ANY EQUIPMENT, MATERIALS OR PROPERTY DAMAGED BY THE CONTRACTOR OR THEIR AGENTS AT NO ADDITIONAL CHARGE TO OWNER.
- EXISTING CONDITIONS WHICH REQUIRE MODIFICATIONS TO THE DESIGN OF THE PROPOSED CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER.

DEMOLITION NOTES

- COORDINATE DEMOLITION WORK WITH OWNER TO MINIMIZE DISRUPTIONS OF FACILITY OPERATIONS
- CONTRACTOR(S) TO MEET WITH OWNER PRIOR TO BEGINNING WORK TO DETERMINE RESPONSIBILITIES OF REMOVAL OR MODIFICATION OF SPECIFIC PIECES OF EQUIPMENT NOTED OR OTHERWISE.
- CONTRACTOR SHALL COORDINATE SEQUENCE OF WORK, SCHEDULE, UTILITY SHUT DOWNS, STAGING AREAS, ETC., WITH OWNER FOR ALL EQUIPMENT INVOLVED IN OR AFFECTED BY HIS WORK.
- VERIFY LOCATIONS OF CONCEALED EXISTING UTILITIES AND CONDUITS BEFORE START OF DEMOLITION WORK.

PROJECT SPECIFIC NOTES

- A** WITHIN AREAS G AND J, PROVIDE 24-FOOT BY 24-FOOT TAPERED SUMP AREAS WITH A MINIMUM SLOPE OF 1/8-INCH PER FOOT TO THE ROOF DRAIN.
- B** WITHIN AREAS D, E, L AND K, PROVIDE 8-FOOT BY 8-FOOT TAPERED SUMP AREAS WITH A MINIMUM SLOPE OF 1/8-INCH PER FOOT TO THE ROOF DRAIN.
- C** REFER TO DETAIL NO. 4 (SIM) FOR FLASHING REQUIREMENTS AT SOUTHEAST CORNER OF AREA J.
- D** WHERE INDICATED, PROVIDE 4-FOOT TAPERED EDGE STRIPS AT THE ROOF PERIMETER. REFER TO THE PERIMETER EDGE DETAIL.
- E** WITHIN AREAS D, E, L AND K, PROVIDE INSULATION SADDLES AT THE LOCATIONS INDICATED ON THE ROOF PLANS.
- F** EXISTING GAS LINE. DISPLACE GAS LINE AT AREA ENTRY POINTS TO ALLOW FOR INSTALLATION OF NEW ROOF SYSTEM. MODIFY THE GAS LINE, IF NECESSARY, TO ACCOMMODATE NEW ROOF SYSTEM THICKNESS AND ELEVATION VARIATIONS RESULTING FROM TAPERED INSULATION. THE GAS LINE SHALL HAVE A 4-INCH MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE LINE AND THE COMPLETED ROOF MEMBRANE SURFACE. MODIFICATIONS TO THE GAS LINE SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR, AND SHALL BE CLOSELY COORDINATED WITH THE OWNER. AFTER COMPLETION OF THE WORK, SUPPORT THE GAS LINE ON PRE-MANUFACTURED SUPPORTS SET ON WALKPADS; SPACE SUPPORTS AS RECOMMENDED BY THE SUPPORT MANUFACTURER.
- G** AT THE NARROW AREA LOCATED AT THE EAST PORTION OF AREA G, PROVIDE 1/8-INCH PER FOOT TAPERED INSULATION. CONFIGURE THE TAPERED SYSTEM IN A MANNER TO RESULT IN SLOPE TO AREAS B AND G, WITH A RIDGE AT THE MIDPOINT.
- H** ON VERTICAL TERMINATION OF ROOF MEMBRANE PROVIDE SURFACE MOUNT COUNTERFLASHING SIMILAR TO DETAIL 5.
- I** EXISTING A/C UNITS/PENETRATIONS ON LARGE CAPPED CURB. TEMPORARILY DISPLACE A/C UNITS AND PROVIDE AN ACRYLIC COATING OVER THE CAP SURFACE. REFER TO MANUFACTURER REQUIREMENTS FOR SURFACE PREPARATION AND COATING APPLICATION. REINSTALL UNITS UPON COMPLETION OF WORK; RESEAL PENETRATIONS TO A WATERTIGHT CONDITION.
- J** EXISTING OBSOLETE CAPPED ROOF CURB; REMOVE AND DISCARD. REPAIR RESULTING DECK OPENING AS SPECIFIED. IF CURB CANNOT BE REMOVED, REFER TO THE "CAPPED CURB" FLASHING DETAIL FOR FLASHING REQUIREMENTS. **NOTE:** NAILERS SHALL BE ADDED TO CURBS AS NECESSARY TO RESULT IN A MINIMUM 8-INCH FLASHING HEIGHT.
- K** TEMPORARILY DISPLACE UNIT ON SUPPORT CURBS. FLASH SUPPORT CURBS AND PROVIDE A NEW PREFINISHED 24 GA. CURB CAP. REINSTALL UNIT AFTER COMPLETION OF WORK TO ITS ORIGINAL POSITION AND CONDITION.
- L** NOT USED
- M** NOT USED
- N** LOW MECHANICAL UNIT OR VENT. RAISE TO ALLOW FOR A MINIMUM FLASHING HEIGHT OF 8-INCHES. EXTEND SERVICE LINES, IF NECESSARY, TO ACCOMMODATE RAISING OF CURB.
- O** NOT USED.
- P** EXISTING CONDUIT LINE AND JUNCTION BOX; RE-WORK/REPLACE CONDUIT AND BOX TO RESULT IN A MIN. 4-INCH CLEARANCE ABOVE THE COMPLETED ROOF SURFACE AND MATERIALS APPROPRIATE FOR OUTDOOR APPLICATIONS. COMPLETED WORK SHALL COMPLY WITH APPLICABLE ELECTRIC CODES. THIS WORK SHALL BE COMPLETED BY A LICENSED ELECTRICIAN AND COORDINATED WITH THE OWNER.
- Q** AT SOUTH PERIMETER EDGE OF AREA G "BRIDGE", PROVIDE ADDITIONAL PERIMETER WOOD NAILERS AS NECESSARY TO ACCOMMODATE SPECIFIED TAPERED INSULATION (APPROX. 20 LINEAL FEET OF PERIMETER EDGE).



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For the location of public utility lines.
ALTERNATE NUMBER (811)
COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|----------|-------|----------------|
| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Storm Drain |
| Red | Fire | Brown | Sanitary Sewer |
| | | Pink | Other |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

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PROJECT LOCATION:
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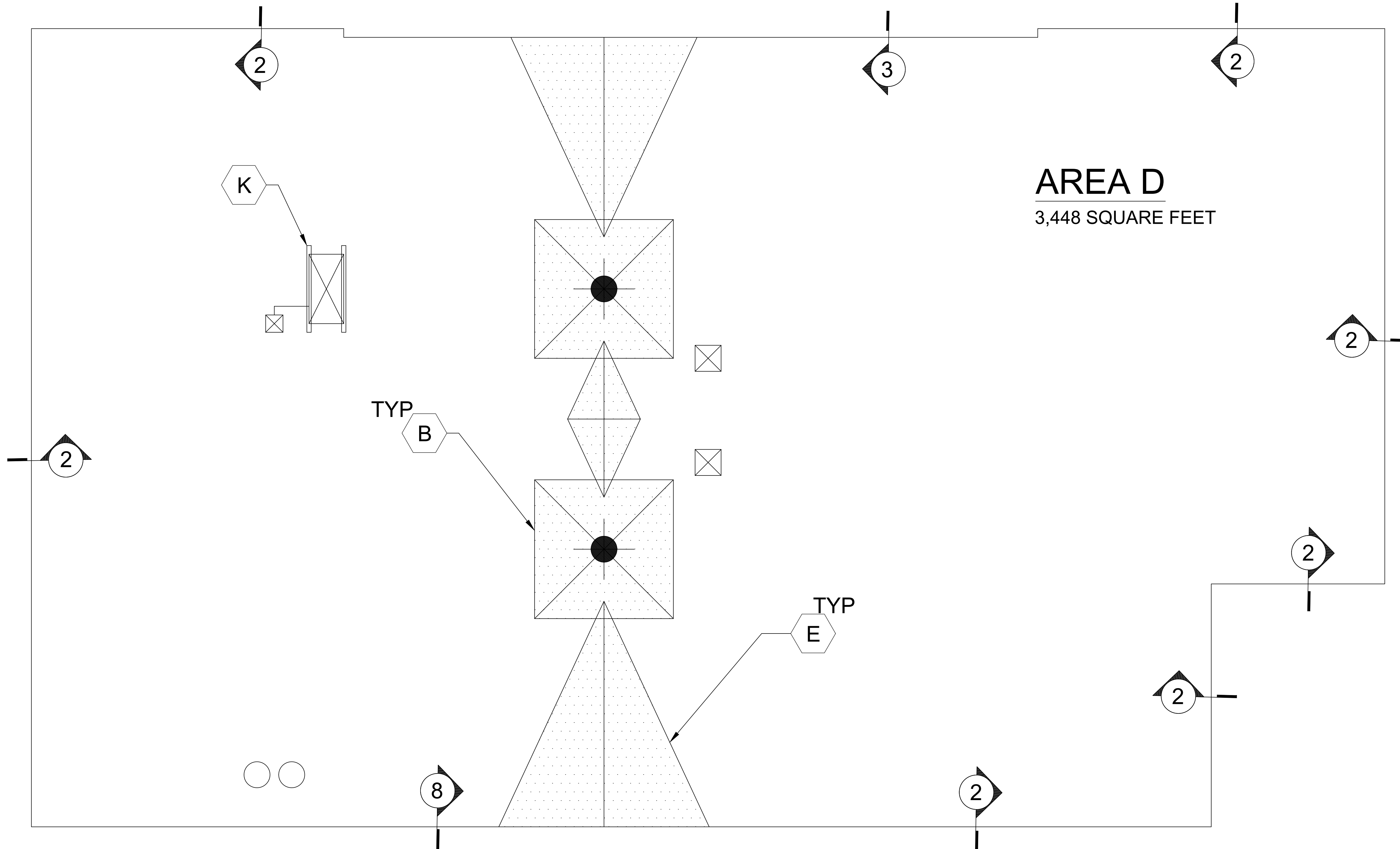
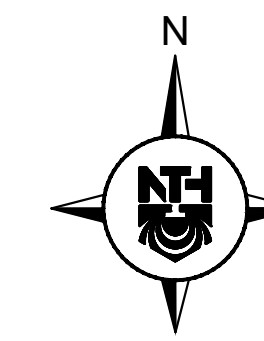
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24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
GENERAL NOTES,
DEMOLITION NOTES, AND
PROJECT SPECIFIC
NOTES

SHEET NUMBER:
02

SYMBOL LEGEND:

- ☒ ROOF CURB
- ☒ ROOF DRAIN WITH TAPERED INSULATION SUMP
- TUBULAR PENETRATION
- || PERIMETER EDGE
- || PARAPET WALL
- || WALL TRANSITION



NOTE: REFER TO SHEET 2 "GENERAL NOTES, DEMOLITION NOTES, AND PROJECT SPECIFIC NOTES" SHEET FOR FURTHER CLARIFICATION OF PROJECT REQUIREMENTS. REFER TO PROJECT SHEETS 7-13 FOR ADDITIONAL CLARIFICATION OF DETAIL REQUIREMENTS.

○ ENLARGED ROOF PLAN - ROOF AREA D
ALTERNATE NO.1

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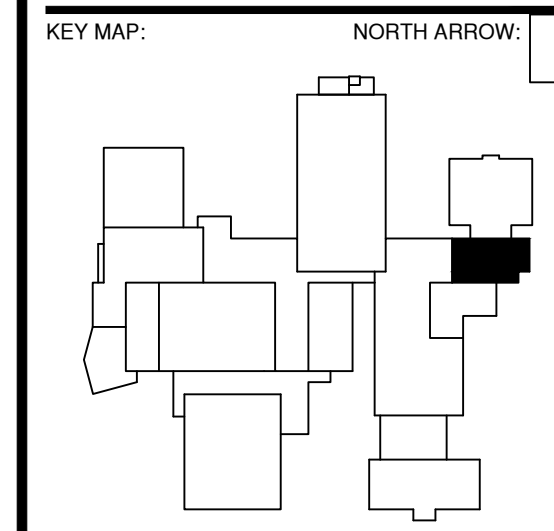
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 COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|----------|-------|-------|
| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Sewer |
| Red | Other | White | Other |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

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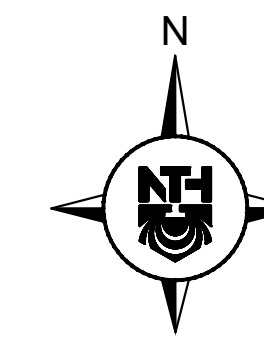
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 ENLARGED ROOF PLAN -
 ROOF AREA D
 ALTERNATE NO.1

SHEET NUMBER:
03

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SYMBOL LEGEND:

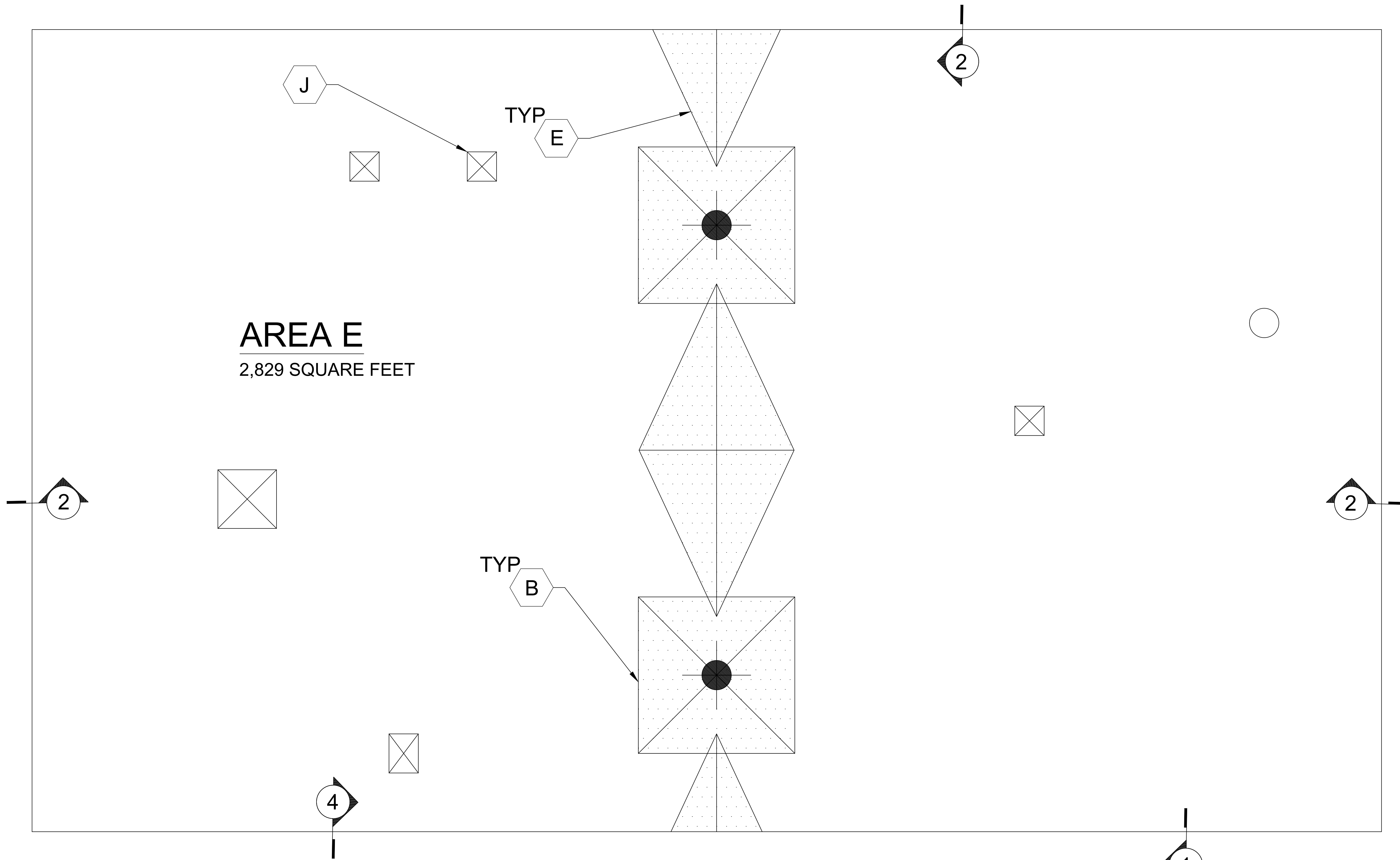
- ☒ ROOF CURB
- ☒ ROOF DRAIN WITH TAPERED INSULATION SUMP
- TUBULAR PENETRATION
- || PERIMETER EDGE
- || PARAPET WALL
- || WALL TRANSITION



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 ALTERNATE NUMBER (811)
 COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|-----------|-------|-------------|
| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Sewer |
| Red | Telephone | Black | Storm Drain |

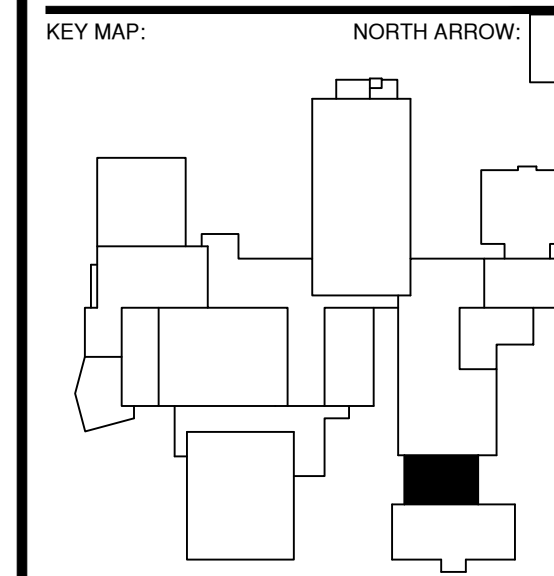
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○ ENLARGED ROOF PLAN - ROOF AREA E
ALTERNATE NO.2

SEAL/STAMP:



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PROJECT NAME:
MARYSVILLE MIDDLE SCHOOL 2025 ROOF REPLACEMENT

PROJECT LOCATION:
 400 COLLARD DRIVE
 MARYSVILLE, MI 48040

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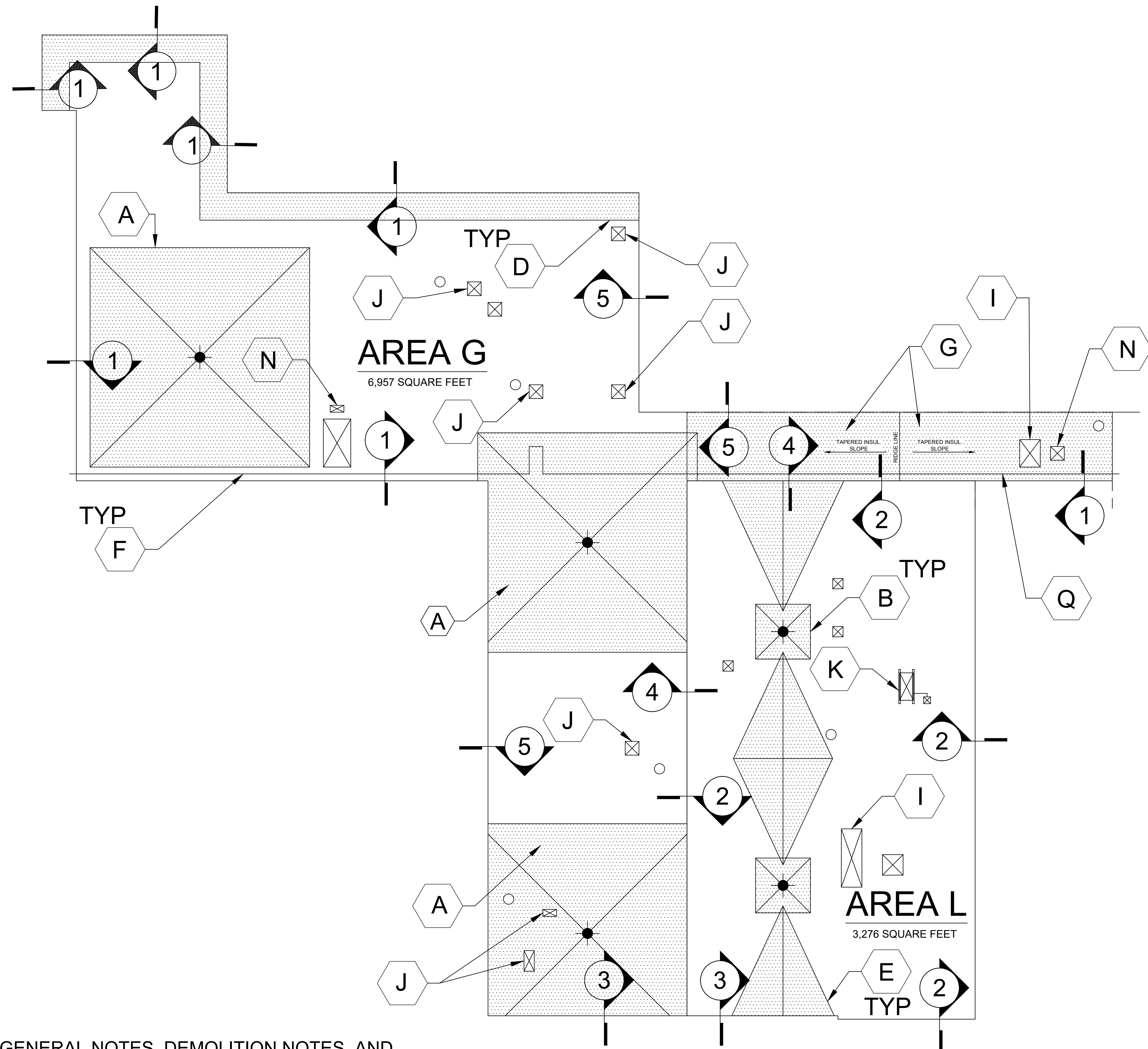
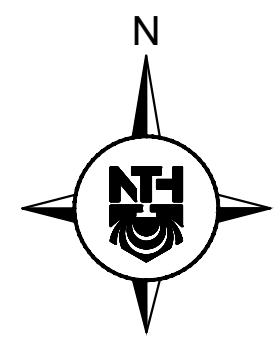
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**ENLARGED ROOF PLAN - ROOF AREA E
ALTERNATE NO.2**

SHEET NUMBER:
04

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SYMBOL LEGEND:

- ☒ ROOF CURB
- ☒ ROOF DRAIN WITH TAPERED INSULATION SUMP
- TUBULAR PENETRATION
- || PERIMETER EDGE
- || PARAPET WALL
- || WALL TRANSITION



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○ ENLARGED ROOF PLAN - ROOF AREA G AND ROOF PLAN- ROOF AREA L, ALTERNATE NO.3

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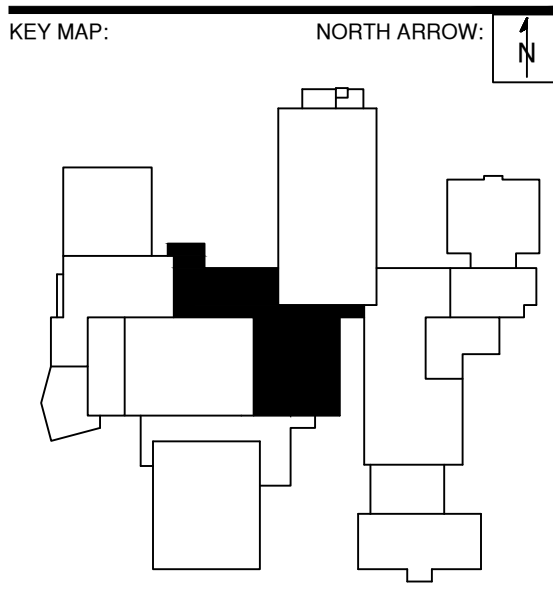
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 ALTERNATE NUMBER (811)
 COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|---------------|-------|-------------|
| Yellow | OIL & GAS | Blue | WATER |
| Orange | PHONE & CABLE | Green | SEWER DRAIN |
| Red | ELECTRIC | Brown | SEWER |
| | | Pink | CONCRETE |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

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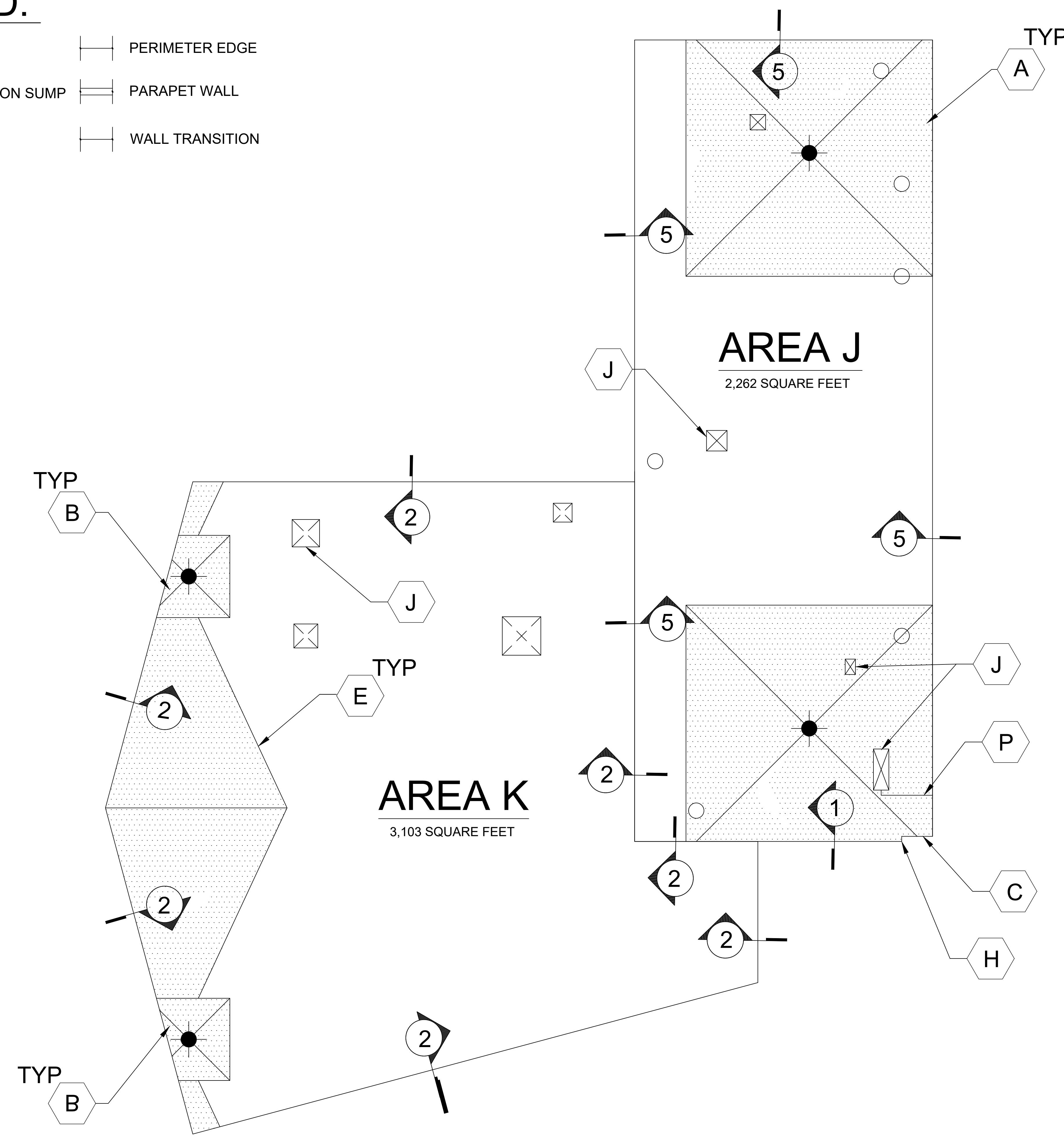
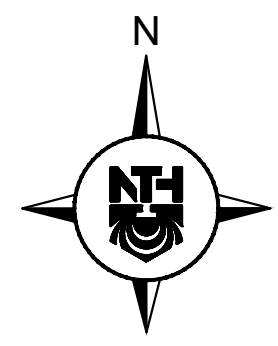
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ENLARGED ROOF PLAN - ROOF AREA G AND ROOF PLAN- ROOF AREA L, ALTERNATE NO.3

SHEET NUMBER:
05

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SYMBOL LEGEND:

- ☒ ROOF CURB
- ☒ ROOF DRAIN WITH TAPERED INSULATION SUMP
- TUBULAR PENETRATION
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○ ENLARGED ROOF PLAN - ROOF AREAS J AND K

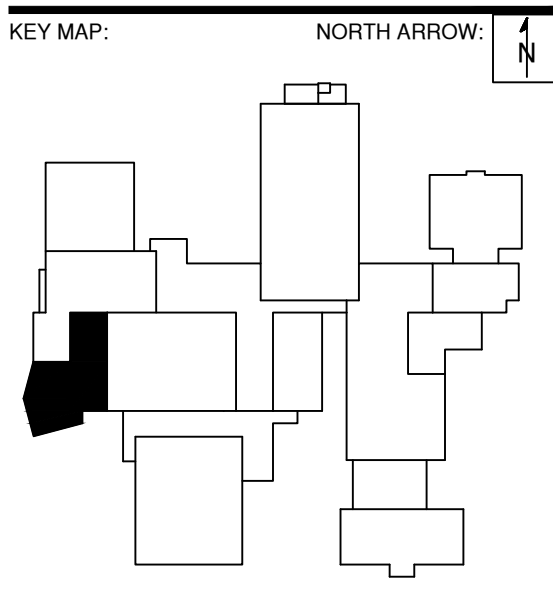
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 ALTERNATE NUMBER (611)
 COLOR CODES FOR UTILITY LOCATING

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| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Sewer |
| Red | Other | Black | Other |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

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 ENLARGED ROOF PLAN - ROOF AREAS J AND K

SHEET NUMBER:
 06

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ALTERNATE NUMBER (811)
CALL 811 FOR UTILITY LOCATING

Yellow OIL & GAS Blue WATER
Orange FRESH & COLD Green STORM DRAIN
Red ELECTRIC Brown SEWER
Purple SINKING

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

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SCHOOL 2025 ROOF
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**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

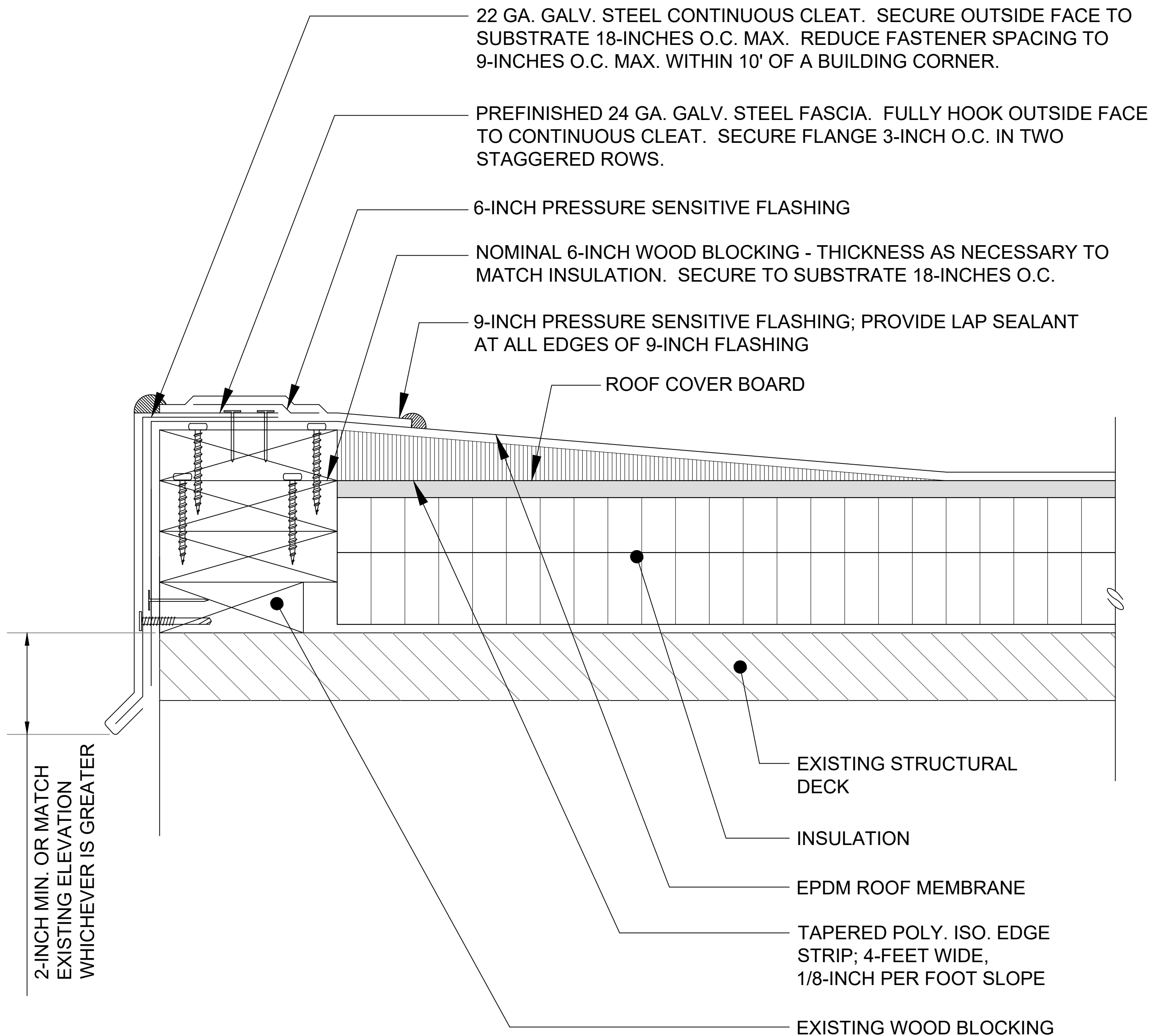
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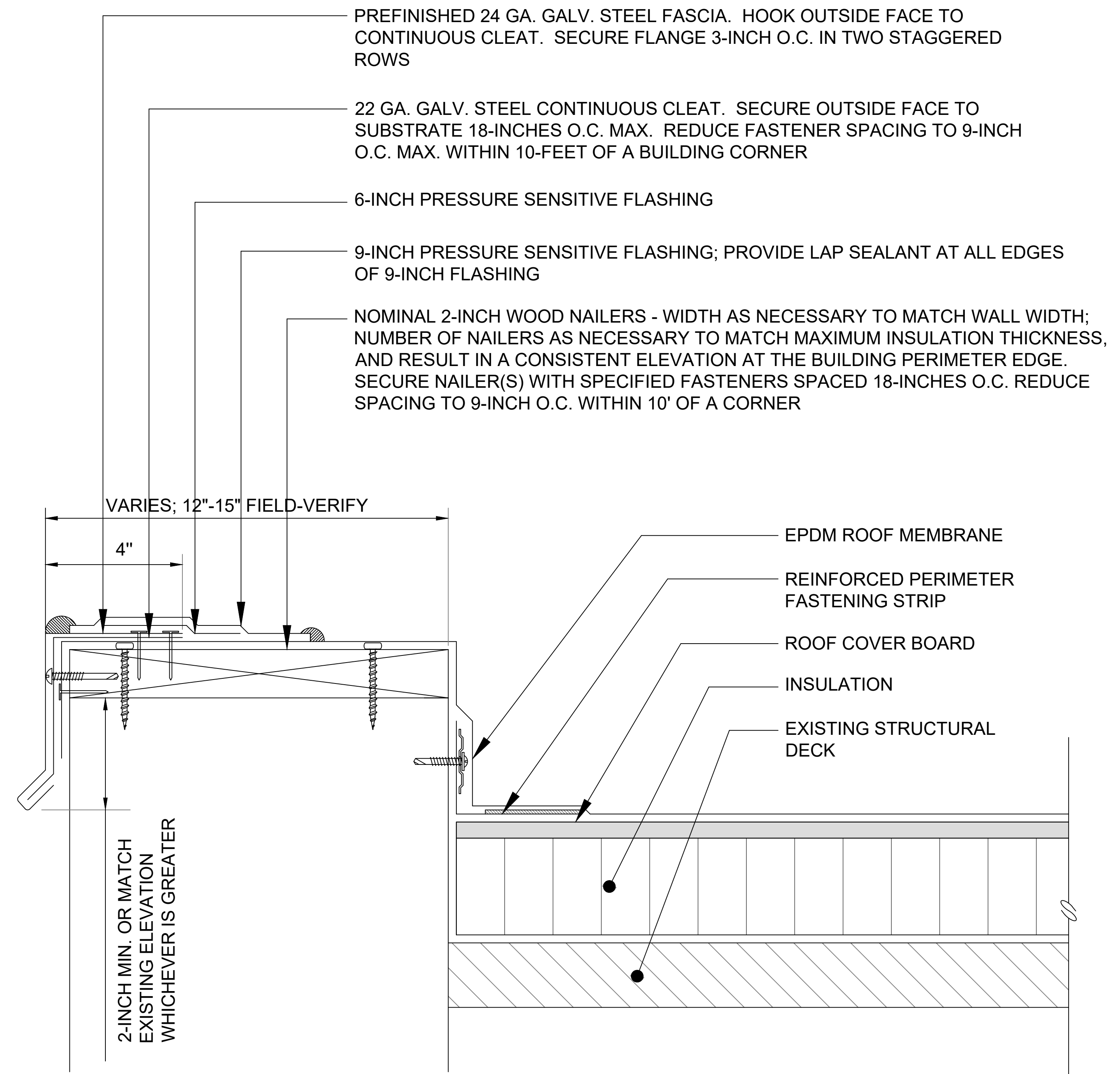
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ROOF DETAILS 1-2

SHEET NUMBER:

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DETAIL NO. 1 - PERIMETER EDGE



DETAIL NO. 2 - CURBED EDGE

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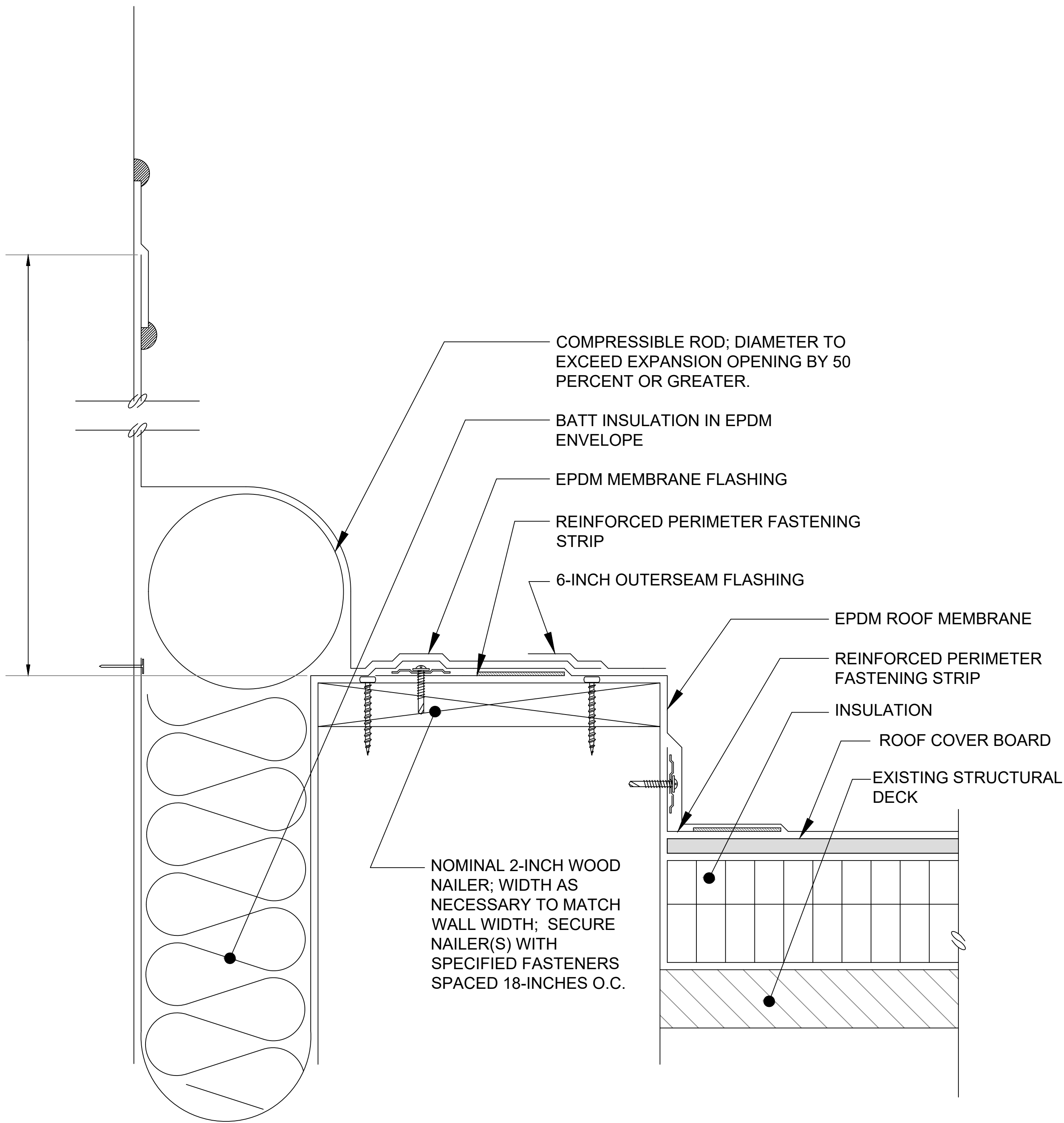
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ALTERNATE NUMBER (811)
COLOR CODES FOR UTILITY LOCATING

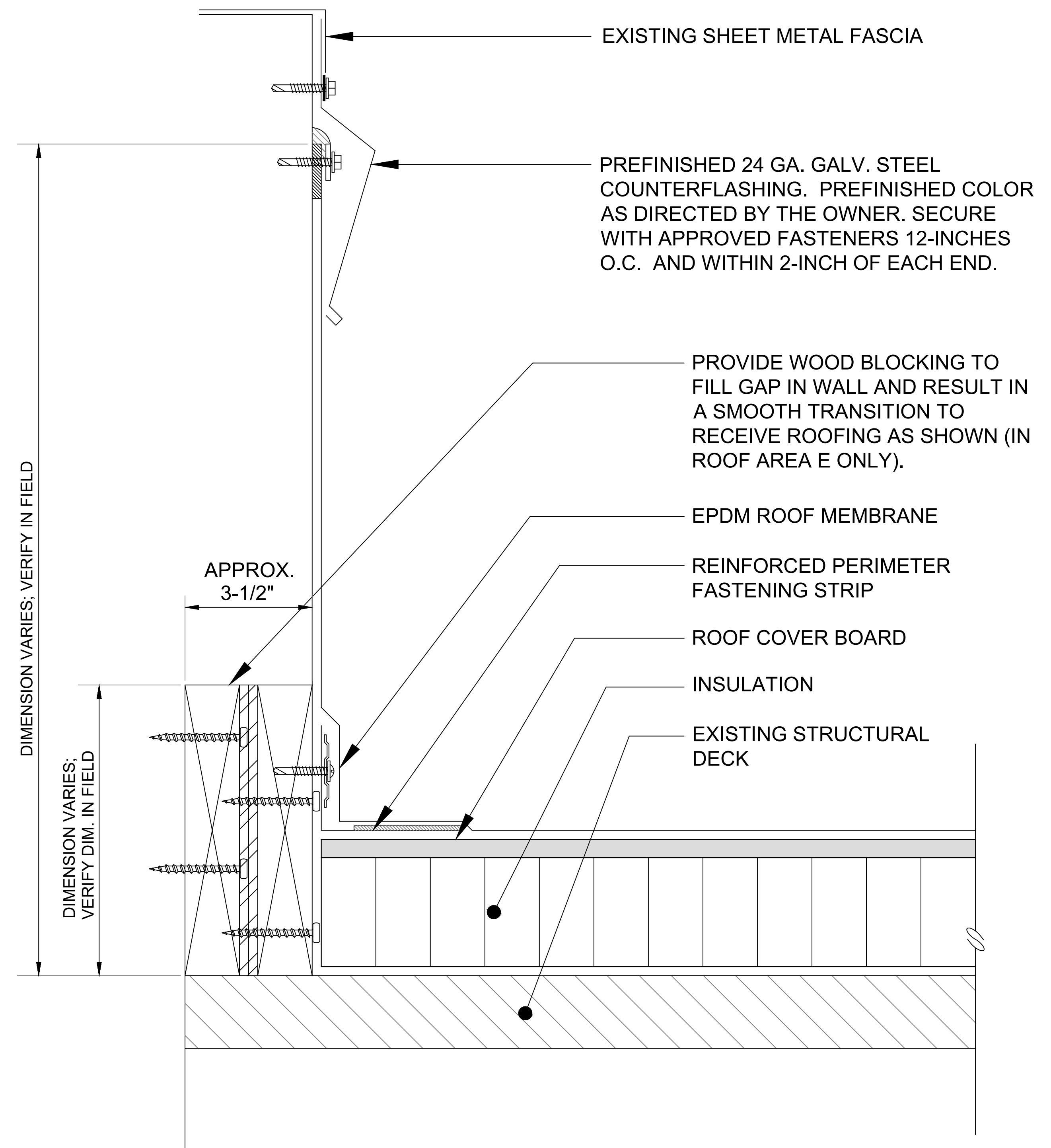
| | | | |
|--------|-------------|-------|------------|
| Yellow | OIL & GAS | Blue | WATER |
| Orange | SEWER & GUY | Green | STEEL DOWN |
| Red | ELECTRIC | Brown | SEWER |
| | | Pink | CONCRETE |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

EXTEND EPDM FLASHING UP WALL 24-INCHES,
MINIMUM. APPLY PRESSURE-SENSITIVE
FLASHING OVER TERMINATED EPDM FLASHING
AND SEAL ALL EDGES OF P.S. FLASHING STRIP



DETAIL NO. 3 - EXPANSION JOINT



DETAIL NO. 4 - ROOF-TO-WALL TRANSITION

SEAL/STAMP:

KEY MAP: NORTH ARROW:

| SUBMITTAL | |
|-----------|------------------|
| REV | DATE/DESCRIPTION |
| | |
| | |
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| | |
| | |

PROJECT NAME:
MARYSVILLE MIDDLE SCHOOL 2025 ROOF REPLACEMENT

PROJECT LOCATION:
**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

| | |
|---------------------|---------------------------------|
| DESIGNED BY: TML | NTH PROJECT NO.: 24002588 |
| DRAWN BY: OH | SHEET SIZE: ARCH D (24"x36") |
| CHECKED BY: MLN | DATE: 01/10/2025 |

CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
ROOF DETAILS 3-4

SHEET NUMBER:
08



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3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
For the location of public utility lines.
ALTERNATE NUMBER (811)
COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|-----------|-------|-------------|
| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Storm Drain |
| Red | Telephone | Brown | Sewer |
| | | Pink | Sanitary |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

SEAL/STAMP:

KEY MAP: NORTH ARROW:

| SUBMITTAL | |
|-----------|------------------|
| REV | DATE/DESCRIPTION |
| | |
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PROJECT NAME:
MARYSVILLE MIDDLE SCHOOL 2025 ROOF REPLACEMENT

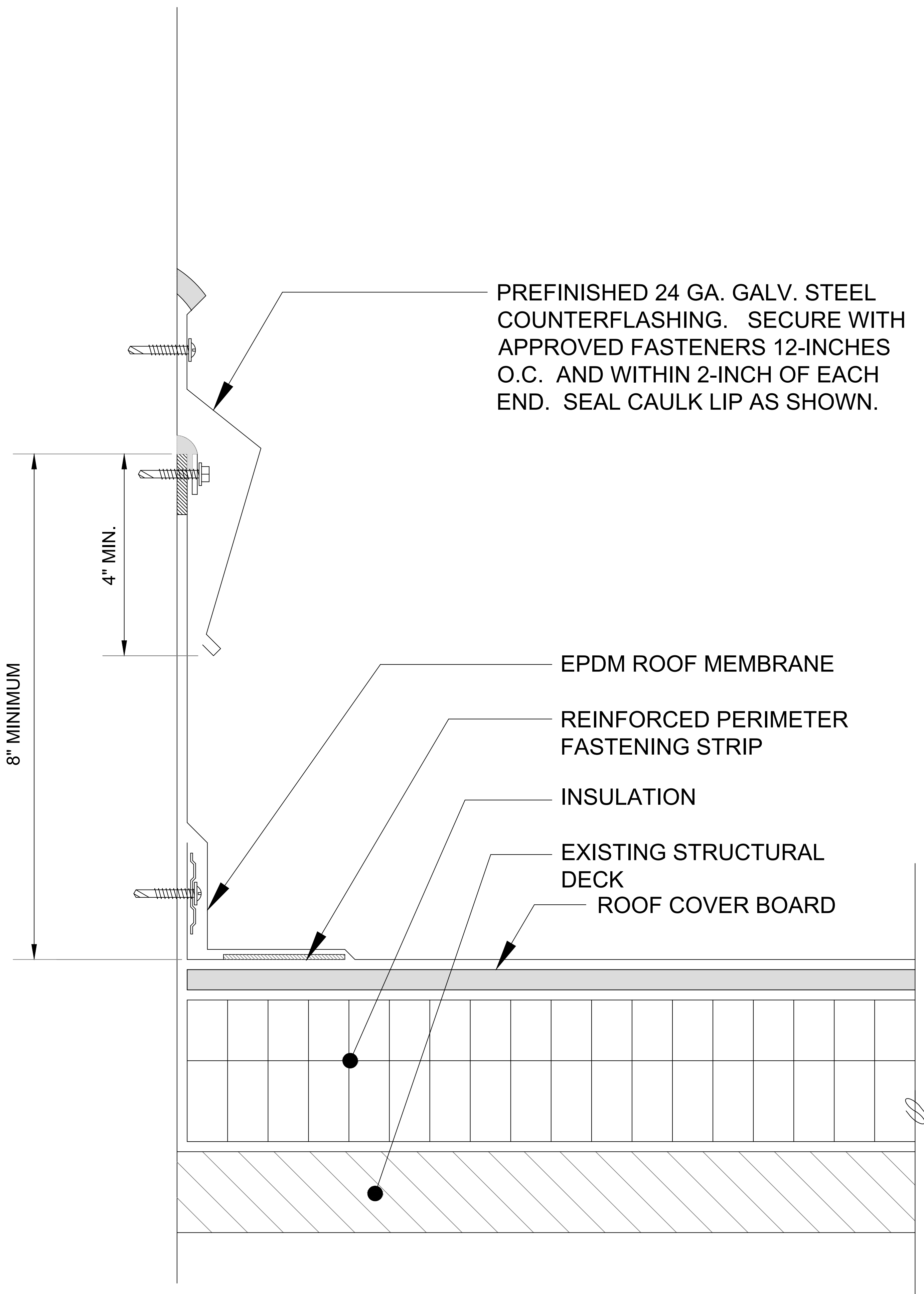
PROJECT LOCATION:
**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

| | |
|---------------------|---------------------------------|
| DESIGNED BY: TML | NTH PROJECT NO.: 24002588 |
| DRAWN BY: OH | SHEET SIZE: ARCH D (24"x36") |
| CHECKED BY: MLN | DATE: 01/10/2025 |

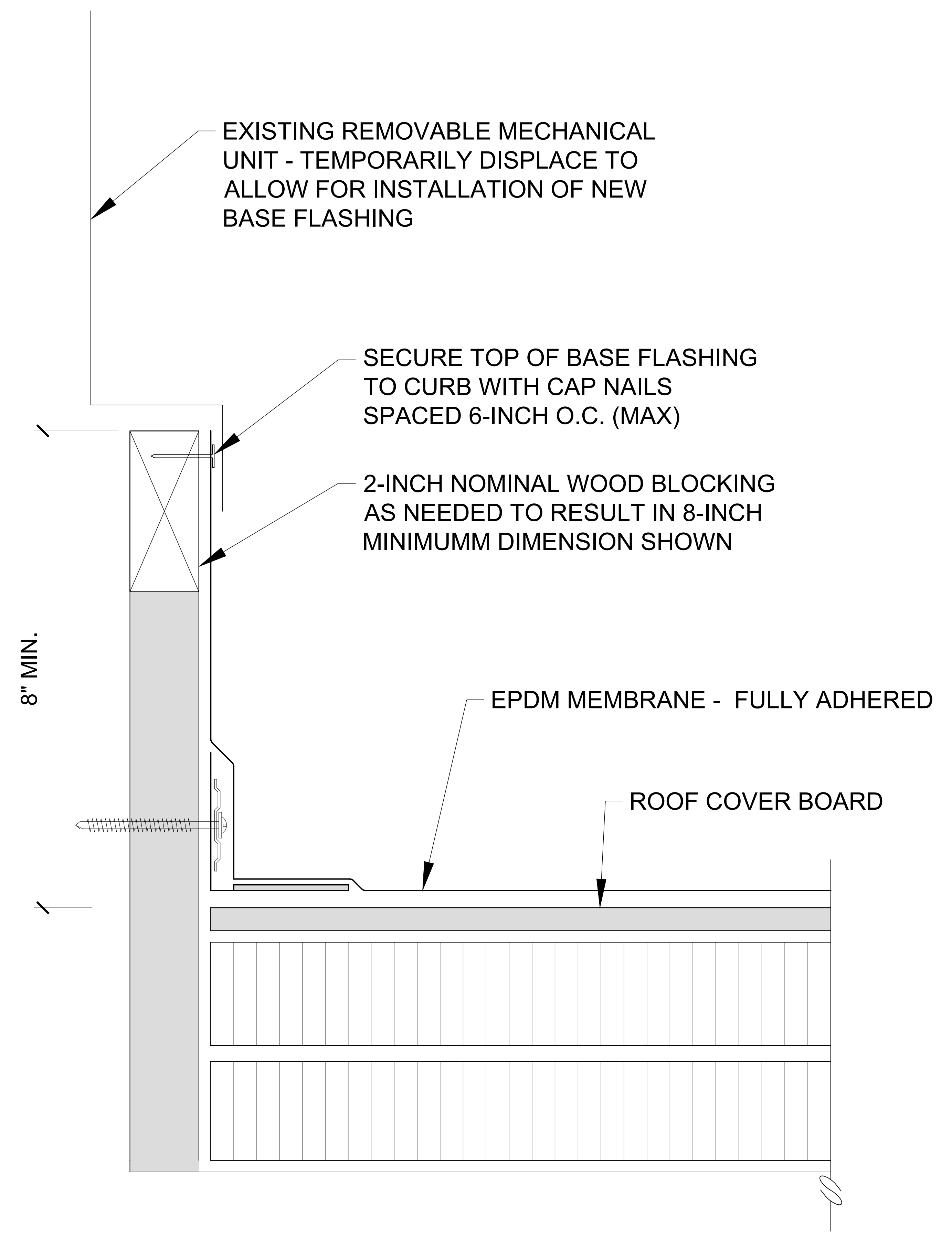
CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
ROOF DETAILS 5-6

SHEET NUMBER:



DETAIL NO. 5 - ROOF-TO-WALL TRANSITION



DETAIL NO. 6 - MECHANICAL UNIT CURB (REMOVABLE UNIT)

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1-800-482-7171
For the location of public utility lines.
ALTERNATE NUMBER (811)
COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|----------|-------|-------------|
| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Storm Drain |
| Red | Other | Brown | Sewer |
| | | Pink | Sanitary |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

SEAL/STAMP:

KEY MAP: NORTH ARROW:

| SUBMITTAL | |
|-----------|------------------|
| REV | DATE/DESCRIPTION |
| | |
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| | |

PROJECT NAME:
MARYSVILLE MIDDLE SCHOOL 2025 ROOF REPLACEMENT

PROJECT LOCATION:
**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

| | |
|---------------------|---------------------------------|
| DESIGNED BY: TML | NTH PROJECT NO.: 24002588 |
| DRAWN BY: OH | SHEET SIZE: ARCH D (24"x36") |
| CHECKED BY: MLN | DATE: 01/10/2025 |

CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
ROOF DETAILS 7-8

SHEET NUMBER:

1.5-INCH INSULATION SECURED TO WOOD WITH 1 FASTENER PER 2 SQ. FT.

EPDM UNDERLAYMENT - FULLY ADHERED

NOMINAL 2X4 WOOD NAILER

SHEET METAL CURB CAP - SECURE EACH FACE TO CURB WITH GASKETED FASTENERS SPACED 12-INCHES O.C. (MAX.)

FASTEN TOP EDGE OF BASE FLASHING INTO WOOD NAILER WITH CAP NAILS SPACED 6-INCH O.C.

3/4-INCH PLYWOOD OVER ADDITIONAL 2X6 NOMINAL WOOD SUPPORTS

3/4-INCH PLYWOOD

NON-REMOVABLE STRUCTURAL STEEL CURB

EXISTING NON-REMOVABLE MECHANICAL UNIT

SHEET METAL SLIP COUNTERFLASHING SECURED WITH GASKETED FASTENERS SPACED 18-INCHES O.C. (MAX)

EPDM MEMBRANE - FULLY ADHERED

ROOF COVER BOARD

8" MIN.

DETAIL NO. 7 - MECHANICAL UNIT CURB (NON-REMOVABLE UNIT)

DETAIL NO. 8 - OBSOLETE CURB CLOSURE (LESS THAN 48-INCH BY 48-INCH)



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3 WORKING DAYS
**BEFORE YOU DIG
CALL MISS DIG**
1-800-482-7171
For the location of public utility lines,
ALTERNATE NUMBER (811)
CALL 811 FOR UTILITY LOCATING

Yellow OIL & GAS Blue WATER
Orange PROPE. & CITY Green SEWER DRAIN
Red ELECTRIC Pink GAS

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

SEAL/STAMP:

KEY MAP: NORTH ARROW:

SUBMITTAL

| REV | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
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| | | |
| | | |

PROJECT NAME:
MARYSVILLE MIDDLE SCHOOL 2025 ROOF REPLACEMENT

PROJECT LOCATION:
**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

| | |
|---------------------|---------------------------------|
| DESIGNED BY: TML | NTH PROJECT NO.: 24002588 |
| DRAWN BY: OH | SHEET SIZE: ARCH D (24"x36") |
| CHECKED BY: MLN | DATE: 01/10/2025 |

CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
ROOF DETAILS 9-10

SHEET NUMBER:

11

TAPERED INSULATION 3-INCH MINIMUM THICKNESS
SECURED TO DECK WITH 1 FASTENER PER 2 SQ.FT.

EPDM UNDERLAYMENT-FULLY
ADHERED

NOMINAL 2X4 WOOD NAILER

SHEET METAL CURB CAP -
SECURE EACH FACE TO CURB
WITH GASKETED FASTENERS
SPACED 12-INCHES O.C. (MAX.)

3/4 -INCH PLYWOOD

TYPE B STEEL DECK

FASTEN TOP EDGE OF BASE
FLASHING INTO WOOD
NAILER WITH CAP NAILS
SPACED 6-INCH O.C.

REINFORCED PERIMETER
FASTENING STRIP

FILL VOID WITH
BATT INSULATION

ROOF COVER BOARD

NON-REMOVABLE
STRUCTURAL STEEL
CURB

WOOD BLOCKING AS
REQUIRED FOR
PLYWOOD BACKING

DRAIN STRAINER - INSTALL NEW
CAST IRON STRAINER WHERE
EXISTING IS MISSING, BROKEN,
OR PLASTIC.

EXTEND EPDM MEMBRANE INTO
BOWL 1/2-INCH MIN. OR 3/4-INCH
MAX. APPLY WATERBLOCK
BETWEEN EPDM MEMBRANE
AND SUBSTRATE.

ROOF COVER BOARD

8-FOOT BY 8-FOOT TAPERED AND
HINGED INSULATION TARGET SUMP
AROUND ROOF DRAIN

**DETAIL NO. 9 - OBSOLETE CURB CLOSURE
(GREATER THAN 48-INCH BY 48-INCH)**

DETAIL NO. 10 - TYPICAL ROOF DRAIN

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For the location of public utility lines,
ALTERNATE NUMBER (811)
CALL 811 FOR UTILITY LOCATING

Yellow OIL & GAS Blue WATER
Orange FURNACE & CITY Green SEWER DRAIN
Red ELECTRIC Pink SCHEDULE
If you are going to work near overhead wires - CALL MISS DIG

SEAL/STAMP:

KEY MAP: NORTH ARROW:

SUBMITTAL
REV DATE DESCRIPTION

PROJECT NAME:
**MARYSVILLE MIDDLE
SCHOOL 2025 ROOF
REPLACEMENT**

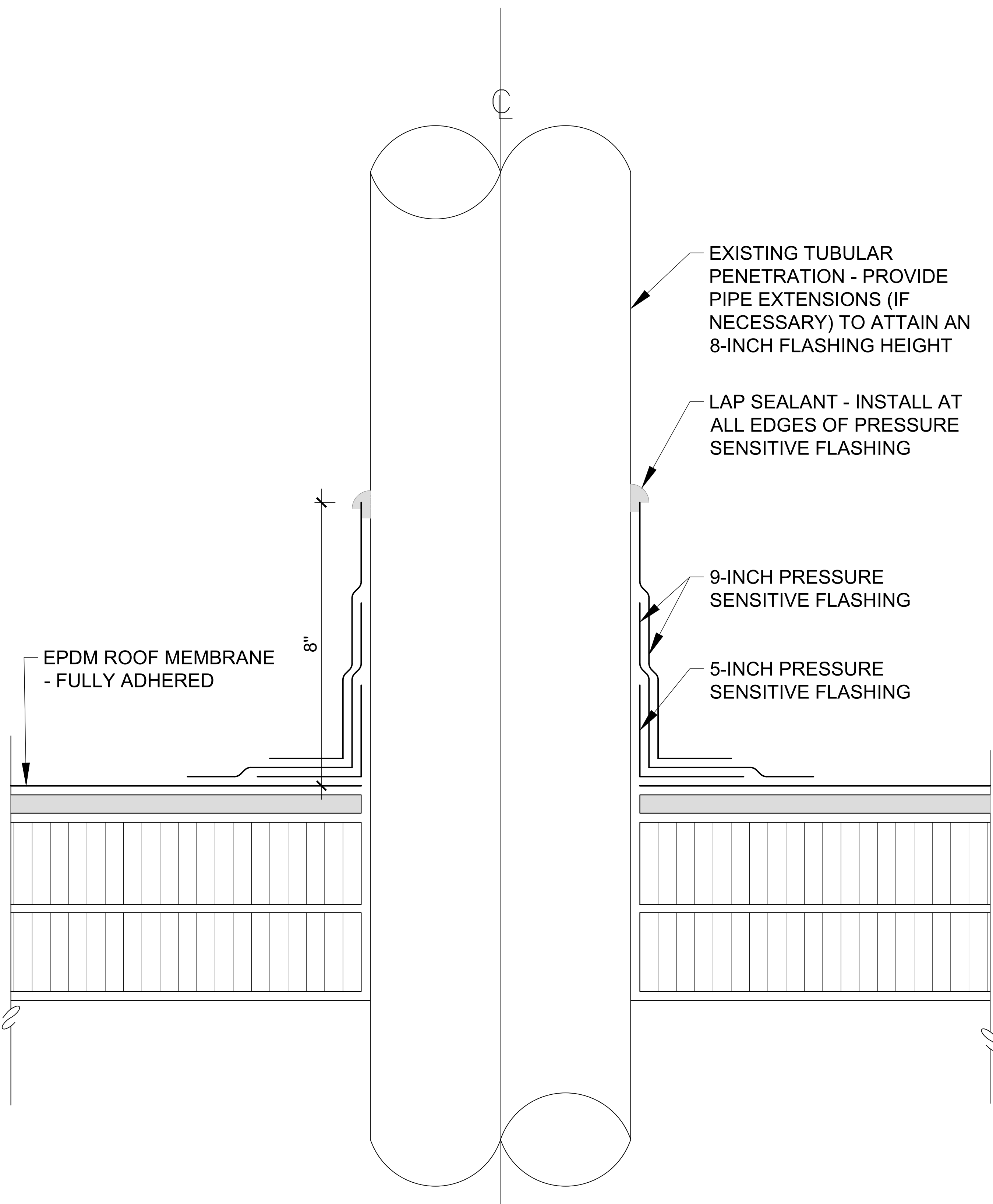
PROJECT LOCATION:
**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

| | |
|--------------|------------------|
| DESIGNED BY: | NTH PROJECT NO.: |
| TML | 24002588 |
| DRAWN BY: | SHEET SIZE: |
| OH | ARCH D (24"x36") |
| CHECKED BY: | DATE: |
| MLN | 01/10/2025 |

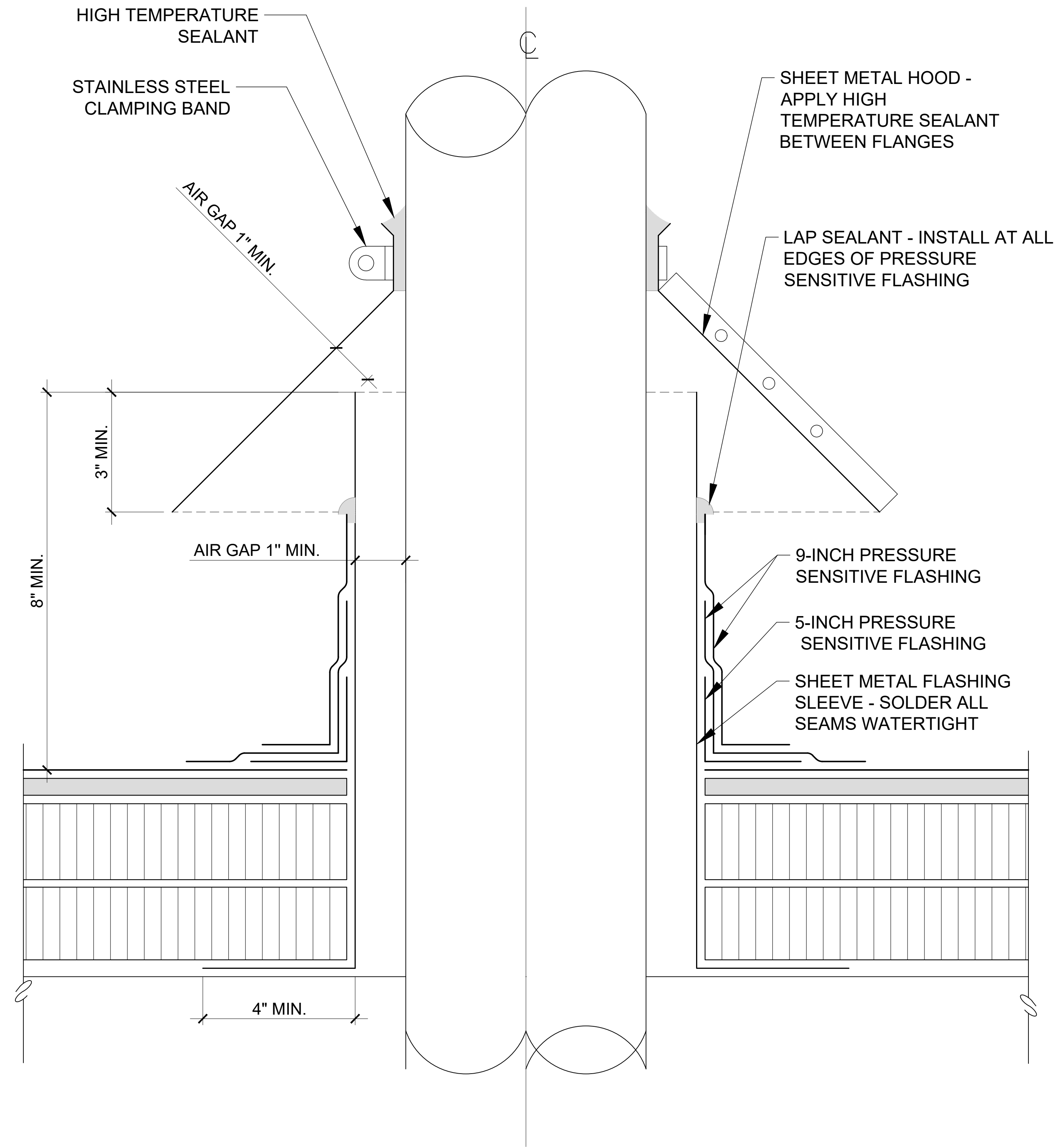
CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
ROOF DETAILS 11-12

SHEET NUMBER:



DETAIL NO. 11 - TUBULAR PENETRATION



DETAIL NO. 12 - TUBULAR PENETRATION (HOT STACK)



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ALTERNATE NUMBER (811)
COLOR CODES FOR UTILITY LOCATING

| | | | |
|--------|----------|-------|-------------|
| Yellow | Gas | Blue | Water |
| Orange | Electric | Green | Storm Drain |
| Red | Electric | Brown | Sewer |
| | | Pink | Sanitary |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES - CALL MISS DIG

SEAL/STAMP:

KEY MAP: NORTH ARROW:

| SUBMITTAL | |
|-----------|------------------|
| REV | DATE/DESCRIPTION |
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PROJECT NAME:
MARYSVILLE MIDDLE SCHOOL 2025 ROOF REPLACEMENT

PROJECT LOCATION:
**400 COLLARD DRIVE
MARYSVILLE, MI 48040**

DESIGNED BY: TML NTH PROJECT NO.: 24002588

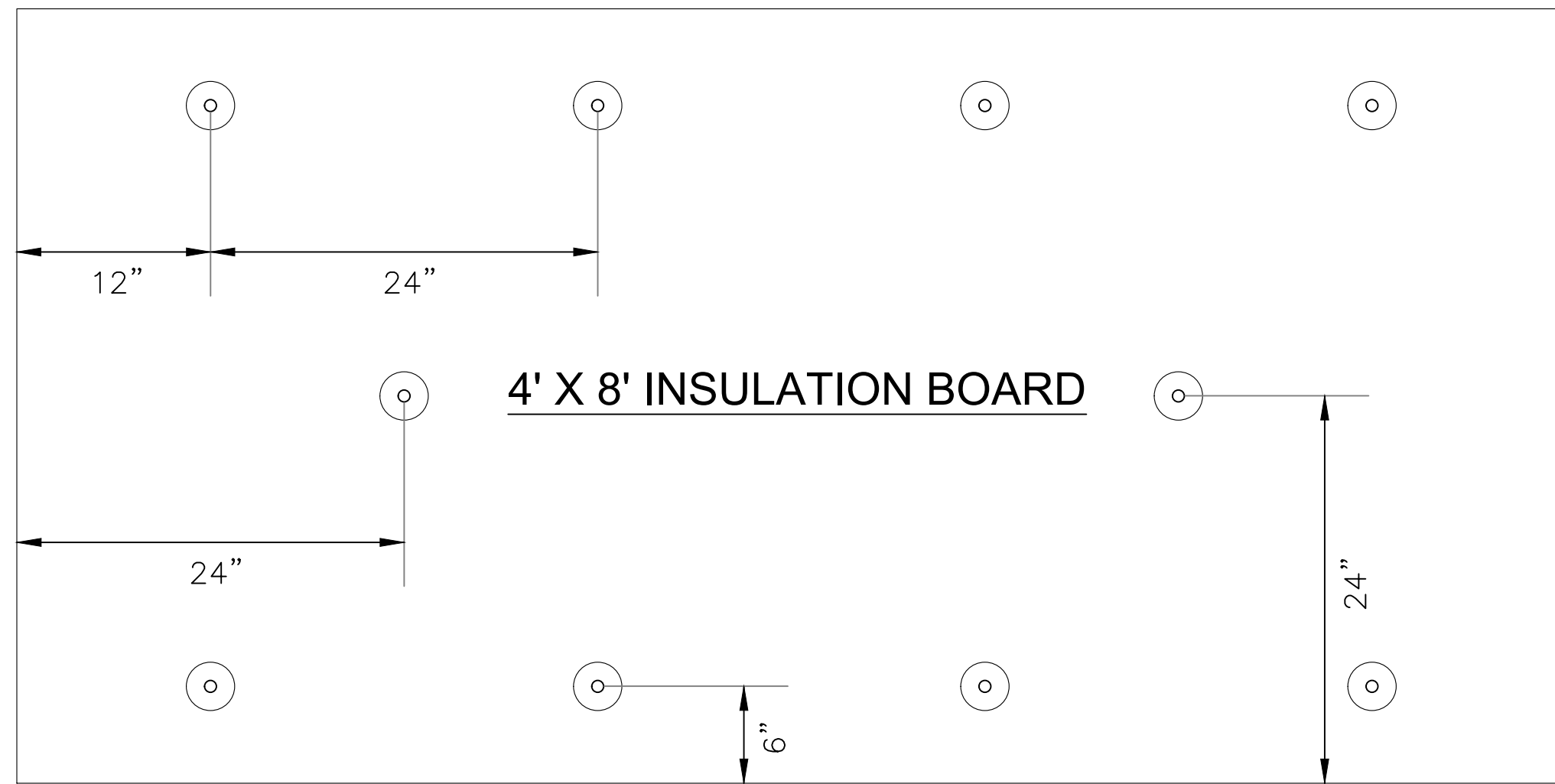
DRAWN BY: OH SHEET SIZE: ARCH D (24"x36")

CHECKED BY: MLN DATE: 01/10/2025

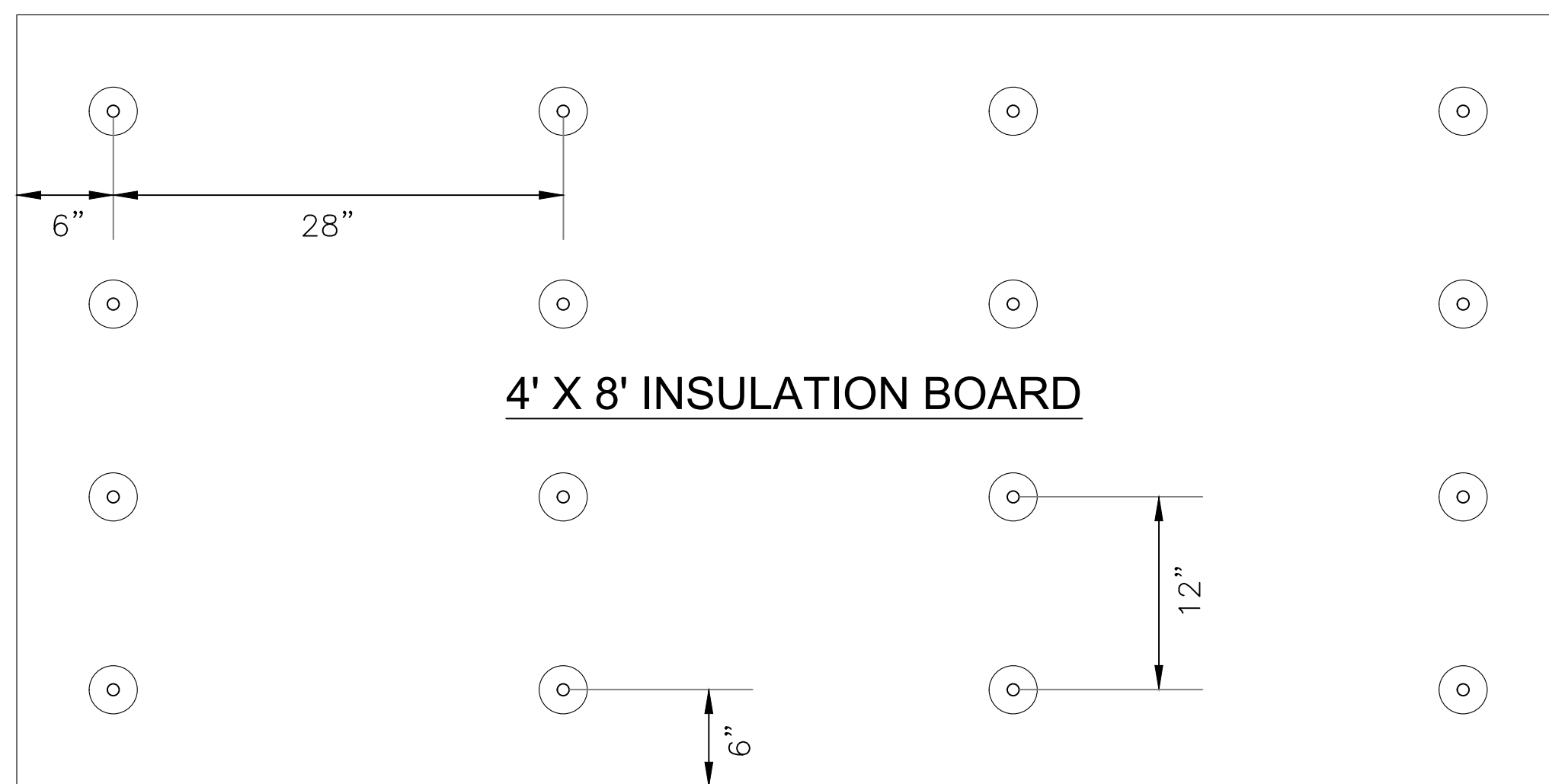
CAD FILE NAME:
24002588 MARYSVILLE MIDDLE SCHOOL 2025

SHEET TITLE:
ROOF DETAILS 13-14

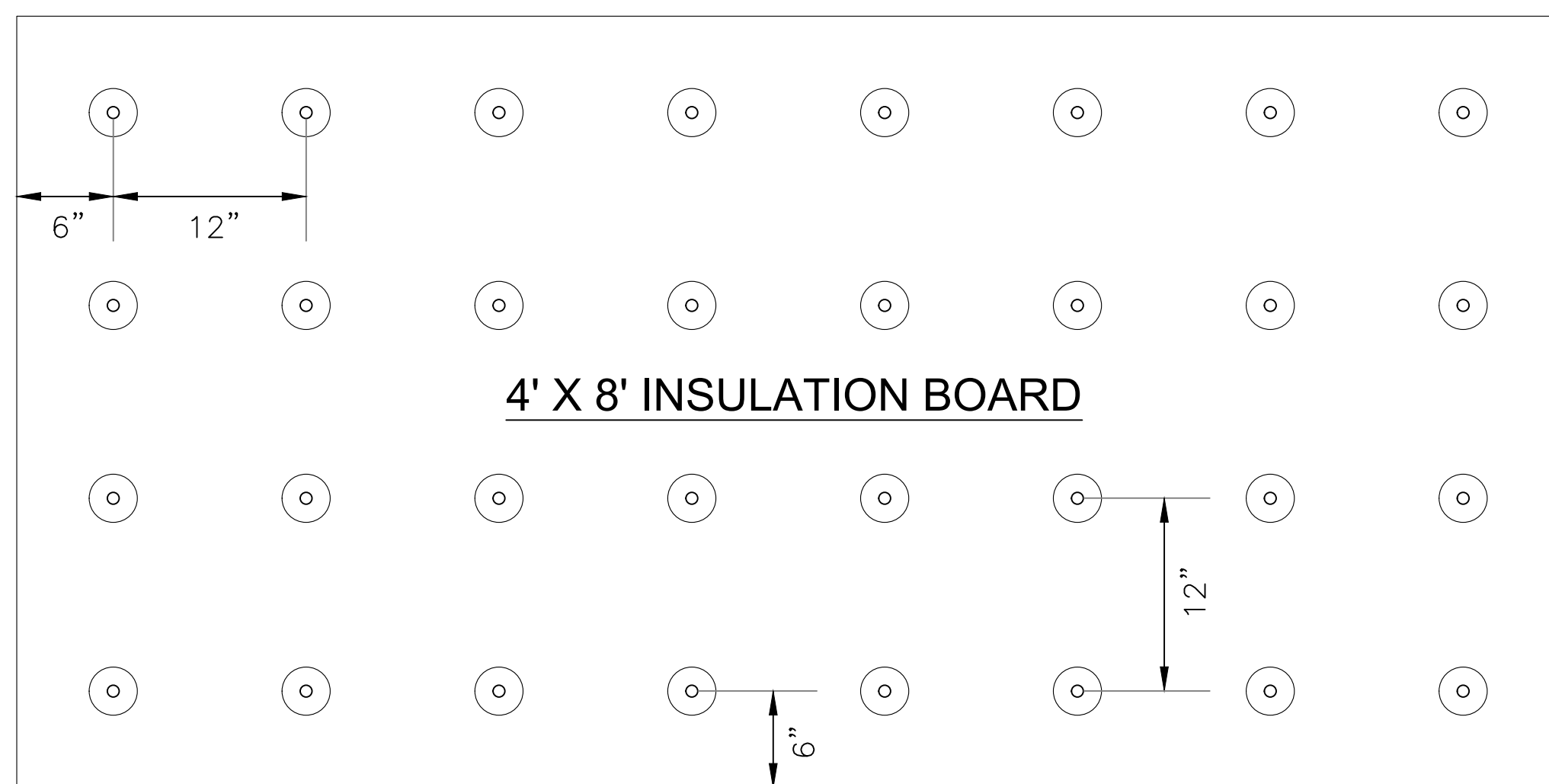
SHEET NUMBER:



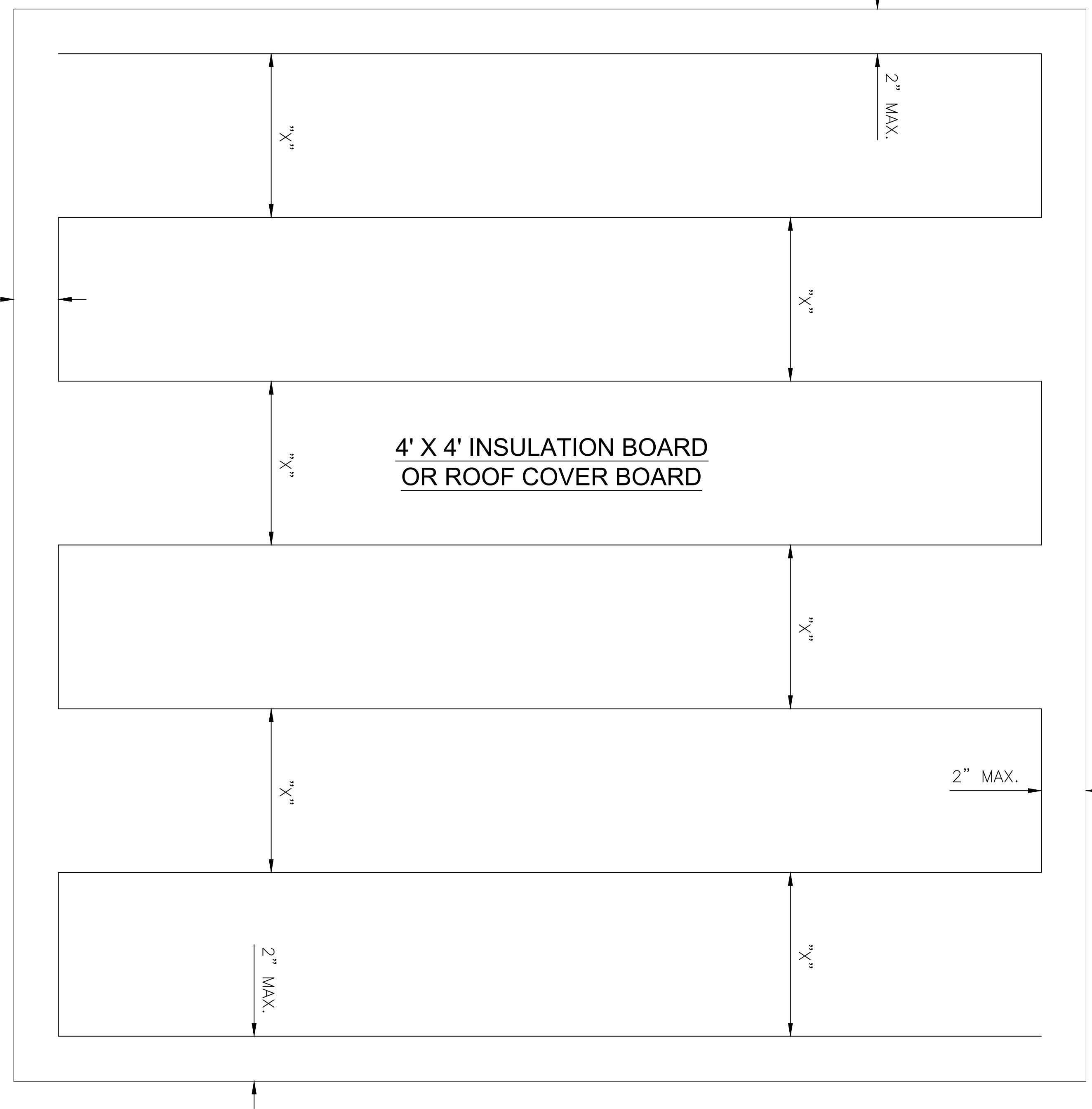
**FIELD OF ROOF
(10 FASTENERS)**



**PERIMETER OF ROOF
(16 FASTENERS)**



**CORNERS OF ROOF
(32 FASTENERS)**



| "X" DIMENSION | |
|---------------|-----------------------|
| LOCATION | MAXIMUM "X" DIMENSION |
| FIELD | 12" |
| PERIMETER | 6" |
| CORNERS | 4" |

DETAIL NO. 13 - FASTENER INSTALLATION PATTERN

DETAIL NO. 14 - INSUL. ADHESIVE APPLICATION PATTERN

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