

2024 Waterford School District Pierce Middle School Roofing Replacement 5145 Hatchery Road Waterford Twp., Michigan 48329



Orientation	Scale
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Project
**2024 WATERFORD SCHOOL DISTRICT
PIERCE MIDDLE SCHOOL
ROOFING REPLACEMENT**

Project Location
**5145 HATCHERY RD.,
WATERFORD TWP., MI 48329**

Sheet Name
COVER SHEET

Seal

REV	ISSUED FOR	DATE	BY
	OWNER REVIEW	12-22-23	KMD
	BIDS	1-16-24	KMD

Revisions

SME Project No.
094776.02

Project Manager:
KMD

Designer:
KMD

CADD:
GUS

Checked By:
KMD

Reviewed By:
LD

Sheet No.
G0.1

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GENERAL NOTES:

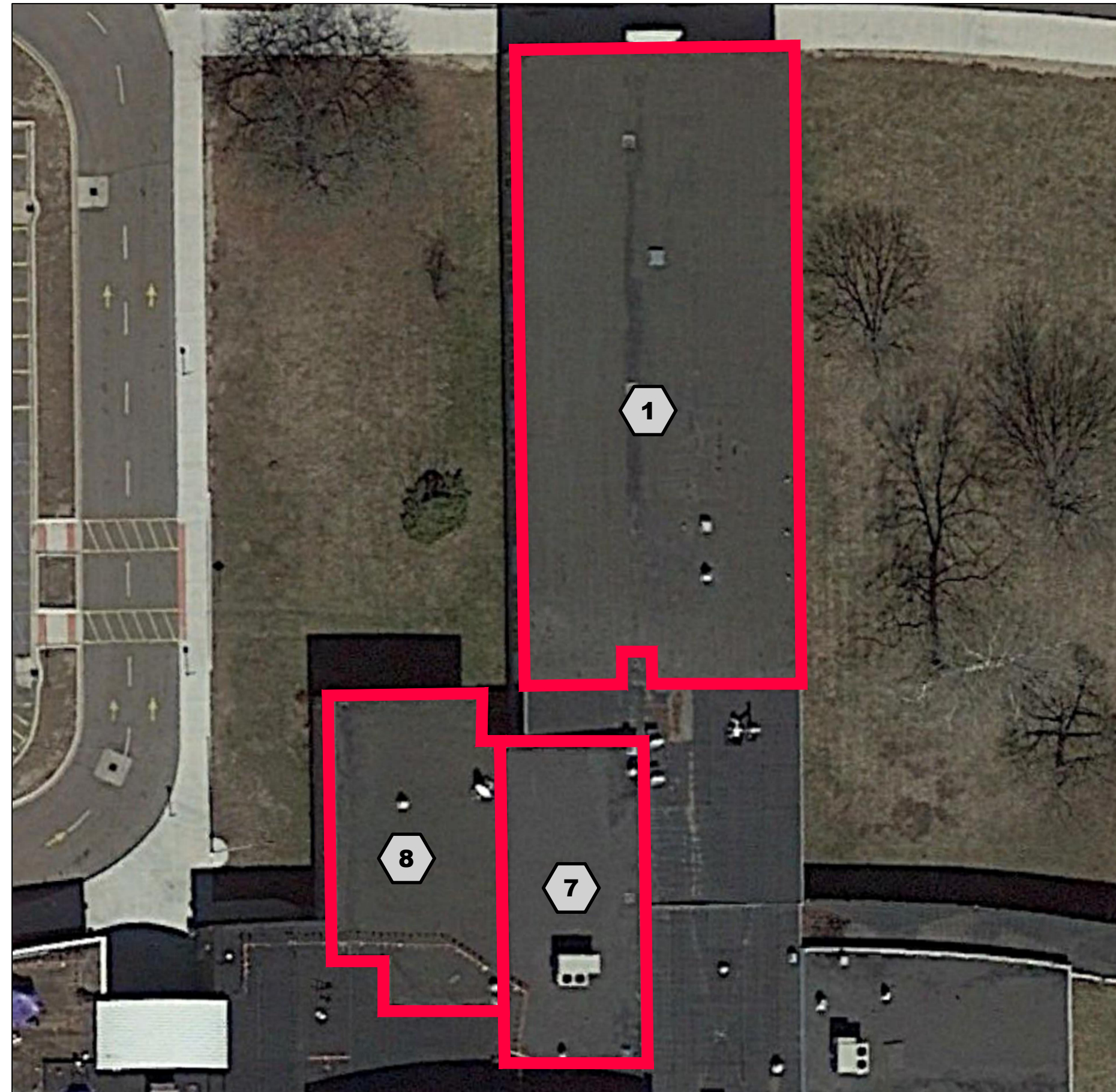
- THE SUMMARY OF WORK CONTAINED IN THESE NOTES AND SHOWN ON THE PLANS MAY NOT INCLUDE ALL ITEMS AND ACTIVITIES NECESSARY TO COMPLETE THE WORK. IN ADDITION TO THE REQUIREMENTS SHOWN IN THE DRAWINGS, TAKE MEASURES REASONABLY NECESSARY TO PROVIDE THE DESIRED WORK RESULT AND TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
- ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS, INCLUDING SAFETY, AND PROTECTION OF PROPERTY AND PEDESTRIANS. PROVIDE AND MAINTAIN SAFETY DEVICES IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
- DO NOT SCALE DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, DIMENSIONS SHOWN ON DRAWINGS ARE BASED UPON LIMITED FIELD VERIFICATION, AND HAVE NOT BEEN COMPLETELY FIELD VERIFIED. THE OWNER AND ENGINEER TAKE NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING DIMENSIONS SHOWN ON THE DRAWINGS.
- NOTIFY THE OWNER AND ENGINEER OF ANTICIPATED CHANGES OR ADDITIONS TO THE WORK PRIOR TO THE START OF ACTIVITIES. THE GENERAL LIMITS OF THE WORK ARE NOTED ON THE PROJECT DRAWINGS WITH WORK BOUNDARIES TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- PROMPTLY REPORT UNANTICIPATED CONDITIONS UNCOVERED THAT ARE CONTRARY TO THE DRAWINGS OR WILL ADVERSELY IMPACT THE WORK TO THE OWNER AND ENGINEER FOR ADVICE.
- PROVIDE TEMPORARY PROTECTION, BARRICADES, TEMPORARY STRUCTURES, AND OTHER MEASURES AS NEEDED TO PROTECT THE PEDESTRIAN AND VEHICULAR TRAFFIC ADJACENT TO AND IN THE VICINITY OF THE WORK AREA.
- PROVIDE TEMPORARY PROTECTION WATERPROOFING, TIE-INS, WATER BLOCKS, AND INTERIOR PROTECTION AS NEEDED DURING THE WORK TO PREVENT LEAKAGE INTO THE BUILDING AND WATER DAMAGE TO THE INTERIOR. PROVIDE TARPULINS OR PLASTIC SHEETING FOR TEMPORARY PROTECTION INSIDE THE BUILDING AS NEEDED DURING CONSTRUCTION.
- PROVIDE TEMPORARY PROTECTION OF EXISTING EQUIPMENT DURING THE WORK, SATISFYING OWNER'S REQUIREMENTS. RESTORE EXISTING EQUIPMENT, BUILDING COMPONENTS, SIDEWALK, AND GROUNDS DAMAGED DURING THIS WORK TO ORIGINAL CONDITION OR REPLACE WITH NEW MATERIALS AS DIRECTED BY THE OWNER. DAMAGED EQUIPMENT/COMPONENTS WILL BE REPLACED AT NO COST TO THE OWNER.
- FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR DELIVERY, STORAGE, MIXING, SURFACE PREPARATION, APPLICATION, AND CURING OF MATERIALS USED FOR RESTORATION WORK.
- SECURE SITE STAGING AREA FOR STORAGE TO BE COORDINATED WITH OWNER PRIOR TO BEGINNING WORK.
- STORAGE OF MATERIALS INSIDE THE BUILDING IS PROHIBITED. DO NOT STORE FLAMMABLE MATERIALS ON THE ROOFS OR IN THE STAGING AREA. REMOVE FLAMMABLE MATERIALS FROM THE SITE AND SECURELY STORE THEM AT THE END OF EACH WORK DAY.
- TAKE DUE CARE AND CAUTION TO AVOID TRACKING DUST, DEBRIS, OR LOOSE MATERIALS TO AREAS OUTSIDE OF THE CONSTRUCTION AREA. REMOVE MATERIALS TRACKED TO AREAS OUTSIDE OF THE CONSTRUCTION AREA AS SOON AS POSSIBLE, AT NO ADDITIONAL COST TO THE OWNER. CONDUCT AN INSPECTION AT THE END OF EACH WORK DAY OF THE PROJECT AREA AND TAKE STEPS TO ENSURE THAT THE ENTIRE WORK AREA IS CLEAN. THIS REQUIREMENT INCLUDES DEBRIS FROM THE CONTRACTOR'S EMPLOYEES EATING LUNCH OR ON BREAKS.
- REMOVE WASTE MATERIALS AND DEBRIS RESULTING FROM THE WORK FROM THE SITE AND DISPOSE OF IN A LEGAL MANNER.
- REMOVE STAINING/CONTAMINANTS FROM BUILDING SURFACES AND THE GROUNDS, INCLUDING SPILLED OR SMEARED SEALANTS, BITUMINOUS MATERIALS, GASOLINE AND FUEL SPILLS, AND HYDRAULIC LEAKAGE FROM THE EQUIPMENT USED ONSITE.
- PROVIDE PROTECTION OF SIDEWALKS OR OTHER PAVEMENTS AGAINST BREAKAGE DUE TO MANLIFT USE OR OTHER EQUIPMENT. RESTORE DAMAGED SIDEWALKS AND PAVEMENTS TO PRE-PROJECT CONDITIONS.
- MAINTAIN UP-TO-DATE SET OF PROJECT DOCUMENTS AT THE JOB-SITE. KEEP ACCURATE AND LEGIBLE RECORDS OF CHANGES TO THE WORK THAT OCCUR DURING CONSTRUCTION AND INFORMATION ON 'AS-BUILT' EXISTING OR CONSTRUCTED CONDITIONS. KEEP RECORDS OF CHANGES AND AS-BUILT CONDITIONS DOCUMENTED ON A SET OF DRAWINGS TO BE PROVIDED TO THE ENGINEER AT CONSTRUCTION COMPLETION.
- UPON COMPLETION OF THE WORK, CLEAR THE ENTIRE SITE OF EQUIPMENT, UNUSED MATERIALS, AND RUBBISH. RESTORE DISTURBED AREAS TO THE SATISFACTION OF THE OWNER.

SCOPE OF WORK:

- REMOVE AND REPLACE ROOFING ASSEMBLY ON EACH ROOF WITH NEW FULLY ADHERED, BLACK, 60-MIL EPDM MEMBRANE, INSULATION, PERIMETER FLASHINGS, EDGE METAL FLASHINGS, 20-YEAR ROOFING MANUFACTURER'S WARRANTY, AND 2-YEAR CONTRACTOR'S WARRANTY. EDGE METAL TO BE INCLUDED IN ROOFING MANUFACTURER'S 20-YEAR WARRANTY.
- REPLACE EACH DRAIN AS INDICATED ON PROJECT DRAWINGS AND SPECIFICATIONS.
- REPLACE DETERIORATED WOOD BLOCKING TO MATCH EXISTING TYPE AND THICKNESS.
- ADD WOOD BLOCKING ON CURBS AND PERIMETERS TO ACCOMMODATE NEW INSULATION HEIGHTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE NUMBER OF NAILERS REQUIRED TO PROVIDE A MINIMUM OF 8-INCHES FLASHING HEIGHT.
- PROVIDE LICENSED ELECTRICAL, PLUMBING, OR HVAC SUBCONTRACTORS TO DISCONNECT AND RECONNECT MECHANICAL UNITS, ADJUST OR RELOCATE UTILITIES, RAISE CURBS, ABANDON DESIGNATED CURBS, RAISE DUCTWORK, INSTALL NEW DRAINS OR SCUPPER COMPONENTS, AND ABANDON DESIGNATED DRAINS AND PIPING. IN-PLACE SYSTEMS SHALL ACCOMMODATE NEW INSULATION THICKNESSES AND MEET WARRANTY REQUIREMENTS FOR FLASH HEIGHT BY ROOFING MANUFACTURER.
 - ALL MECHANICAL UNITS AND UTILITIES MUST BE OPERATIONAL AND DRAINS FREE-FLOWING AT THE COMPLETION OF THE PROJECT. THIS INCLUDES CONDUITS DAMAGED BY SCREWS OR OTHER ITEMS THAT MAY DAMAGE UTILITIES.
 - WORK TO BE COMPLETED IN ACCORDANCE WITH LOCAL CODES AND JURISDICTION(S) OF AUTHORITY. DO NOT SHUT OFF OR INHIBIT UTILITY SERVICES WITHOUT NOTIFYING OWNER'S REPRESENTATIVE IN ADVANCE.

SYMBOL AND ABBREVIATION INDEX

#	PARTIAL SECTION INDICATOR TYPICAL				
A4.1					
ACC	ACCESSIBLE	EQ	EQUAL	OPT	OPTIONAL
ADDL	ADDITIONAL	EQL SP	EQUALLY SPACED	PROJ	PROJECT
ADH	ADHESIVE	EQUIP	EQUIPMENT	QTY	QUANTITY
ADJ	ADJACENT	EXT	EXTERNAL/EXTERIOR	SIM	SIMILAR
ADMIN	ADMINISTRATION	FIG	FIGURE	STD	STANDARD
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FT	FEET	SYMM	SYMMETRICAL
ALT	ALTERNATE	GA	GAUGE	SYS	SYSTEM
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE	GL	GROUND LEVEL	TYP	TYPICAL
APPX	APPENDIX	GR LN	GRADE LINE	UNO	UNLESS NOTED OTHERWISE
REQD	REQUIRED	GRAD	GRADIENT	VIF	VERIFY IN FIELD
ASYM	ASYMMETRICAL	IBC	INTERNATIONAL BUILDING CODE		
BLDG	BUILDING	INT	INTERIOR		
BLW	BELOW	KIP	THOUSAND POUNDS		
BOT	BOTTOM	KLF	KIP PER LINEAR FOOT		
BTWN	BETWEEN	LBF	POUND FORCE		
CL	CENTER LINE	LN	LINEAR		
CG	CENTER OF GRAVITY	LN	LINE		
CTRL	CONTROL	LYR	LAYER		
DEMO	DEMOLITION	MAT	MATERIAL		
DIA	DIAMETER	MBR	MEMBER		
DIM	DIMENSION	MFR	MANUFACTURER		
DWG	DRAWING	NBC	NATIONAL BUILDING CODE		
EL	ELEVATION	OC	ON CENTER		
ELEM	ELEMENT	OPNG	OPENING		
ENCL	ENCLOSURE	OPP	OPPOSITE		



OVERALL SITE AERIAL IMAGE
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

ENGINEER

SME
43980 PLYMOUTH OAKS BLVD.
PLYMOUTH, MI 48170

CONTACT: KYLE DAMEROW, PE
PHONE: 734-454-9900
EMAIL: KYLE.DAMEROW@SME-USA.COM



OWNER / CLIENT

WATERFORD SCHOOL DISTRICT
501 N. CASS LAKE ROAD
WATERFORD, MICHIGAN 48328

OWNER REPRESENTATIVE: MR. SIDNEY TIPPETT
PHONE: 248-674-3193
EMAIL: TIPPES01@WSDMI.ORG



APPLICABLE CODES

2015 MICHIGAN REHAB CODE

LIST OF DRAWINGS

SHEET NO.	SHEET TITLE
G0.1	COVER SHEET
G1.1	ROOF AREA 1 WIND DESIGN LOADING / ZONE PLAN
G1.2	ROOF AREAS 7 AND 8 WIND DESIGN LOADING / ZONE PLAN
A1.1	ROOF PLAN AREA 1
A1.2	ROOF PLAN AREAS 7 AND 8
A4.1	FLASHING DETAILS
A4.2	FLASHING DETAILS

PORT DATE: Jan 10, 2024 - 11:28am - by: gus.korhonen@etec.com
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Orientation Scale

Project
**2024 WATERFORD SCHOOL DISTRICT
 PIERCE MIDDLE SCHOOL
 ROOFING REPLACEMENT**

Project Location
**5145 HATCHERY RD.,
 WATERFORD TWP., MI 48329**

Sheet Name
**ROOF AREA 1
 WIND DESIGN LOADING /
 ZONE PLAN**

Seal

Revisions

REV.	ISSUED FOR	DATE	BY
	OWNER REVIEW	12-22-23	KMD
	BIDS	1-16-24	KMD

SME Project No.
094776.02

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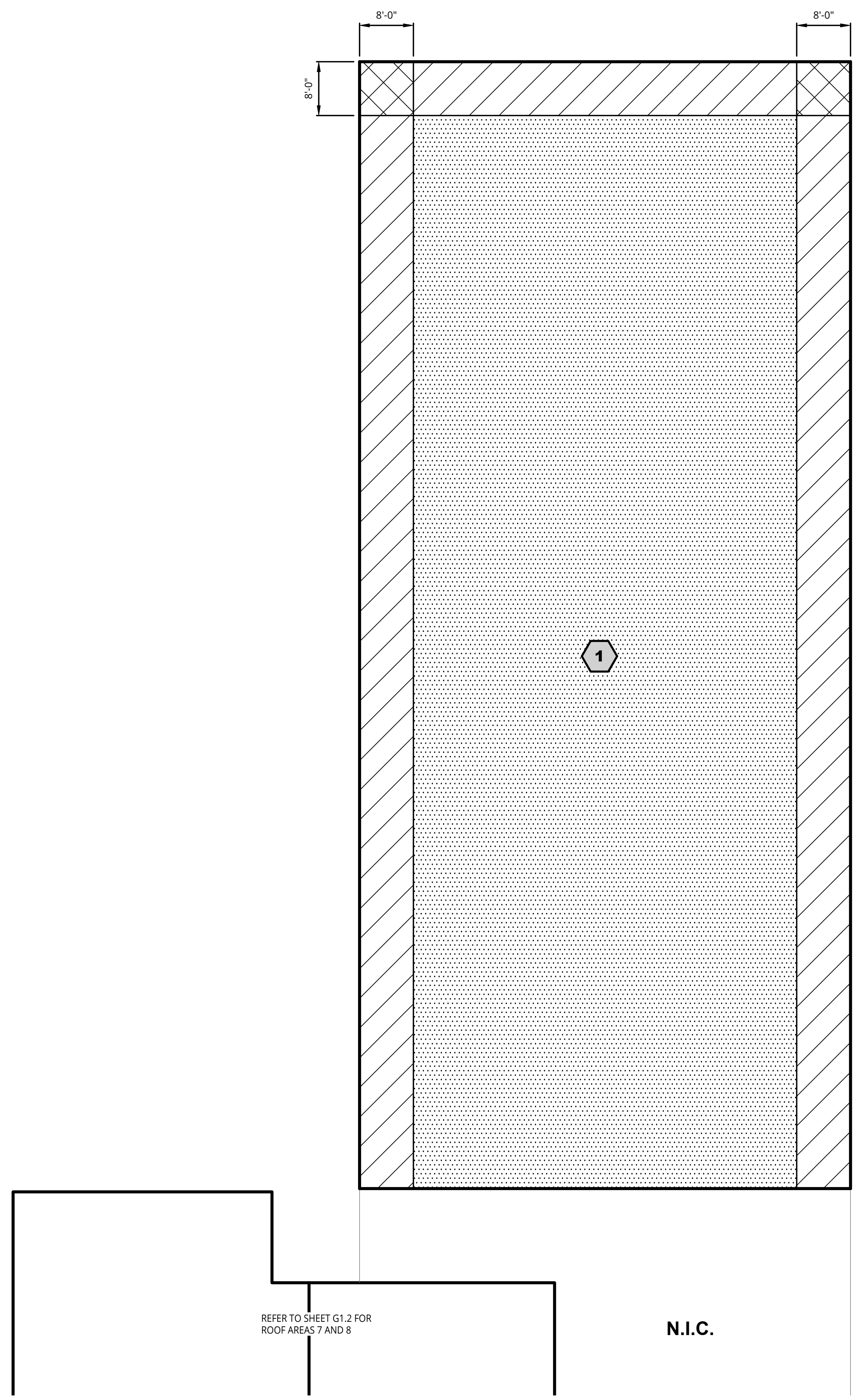
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LD

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G1.1

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LEGEND

- ROOF AREA
- ZONE 1
- ZONE 2
- ZONE 3

WIND DESIGN CRITERIA (MBC 2015)
 PIERCE MIDDLE SCHOOL
 ULTIMATE DESIGN (FACTORED) BASIC WIND SPEED (3 SECOND GUST) = 120 MPH
 NOMINAL WIND SPEED = 93 MPH
 EXPOSURE CATEGORY = C
 RISK CLASSIFICATION = III
 INTERNAL PRESSURE COEFFICIENT (ENCLOSED BUILDING) = +/- 0.18

- NOTES:
- WORK WIND DESIGN LOADING ZONE PLAN WITH TABLE 1, THIS SHEET.
 - WIND UPLIFT PRESSURE GIVEN IN TABLE 1 TO BE USED FOR DESIGN OF ROOFING FASTENING SYSTEM(S).
 - DESIGN PRESSURES BASED ON EFFECTIVE WIND AREA OF 10FT² OR LESS.

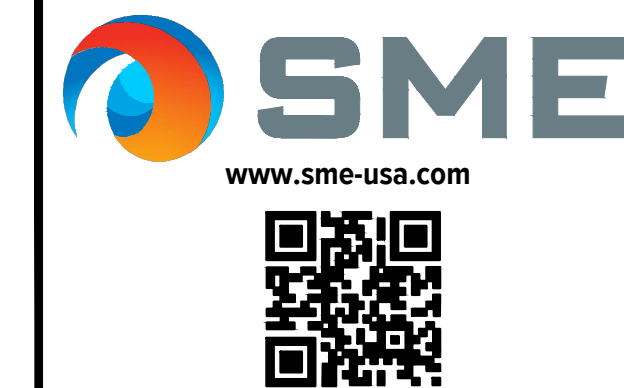
TABLE 1
 SERVICE (UNFACTORED) DESIGN WIND LOADS - COMPONENTS AND CLADDING

ROOF SURFACE VERTICAL PRESSURE (PSF)	
ZONE 1	-20
ZONE 2 AND TOP/SIDE OF PARAPET	-33
ZONE 3 AND TOP/SIDE OF PARAPET	-49

NOTE:
 "- " NEGATIVE SIGN INDICATES PRESSURE ACTING AWAY FROM ROOF SURFACE, I.E. SUCTION

**ROOF AREA 1
 WIND DESIGN LOADING /
 ZONE PLAN**
 SCALE: 3/32" = 1'-0"

Jan 10, 2024 1:48pm - by: gus - by: gus - Location: I:\sme\inc\proj\WP094776.02\CD\Design\Final\Rev\Bids\094776.02_WIND_UPLIFT.dwg



Orientation Scale

Project
**2024 WATERFORD SCHOOL DISTRICT
 PIERCE MIDDLE SCHOOL
 ROOFING REPLACEMENT**

Project Location
**5145 HATCHERY RD.,
 WATERFORD TWP., MI 48329**

Sheet Name
**ROOF AREAS 7 AND 8
 WIND DESIGN LOADING /
 ZONE PLAN**

Seal

Revisions

REV	ISSUED FOR	DATE	BY
	OWNER REVIEW	12-22-23	KMD
	BIDS	1-16-24	KMD

SME Project No.
094776.02

Project Manager:
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Designer:
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CADD:
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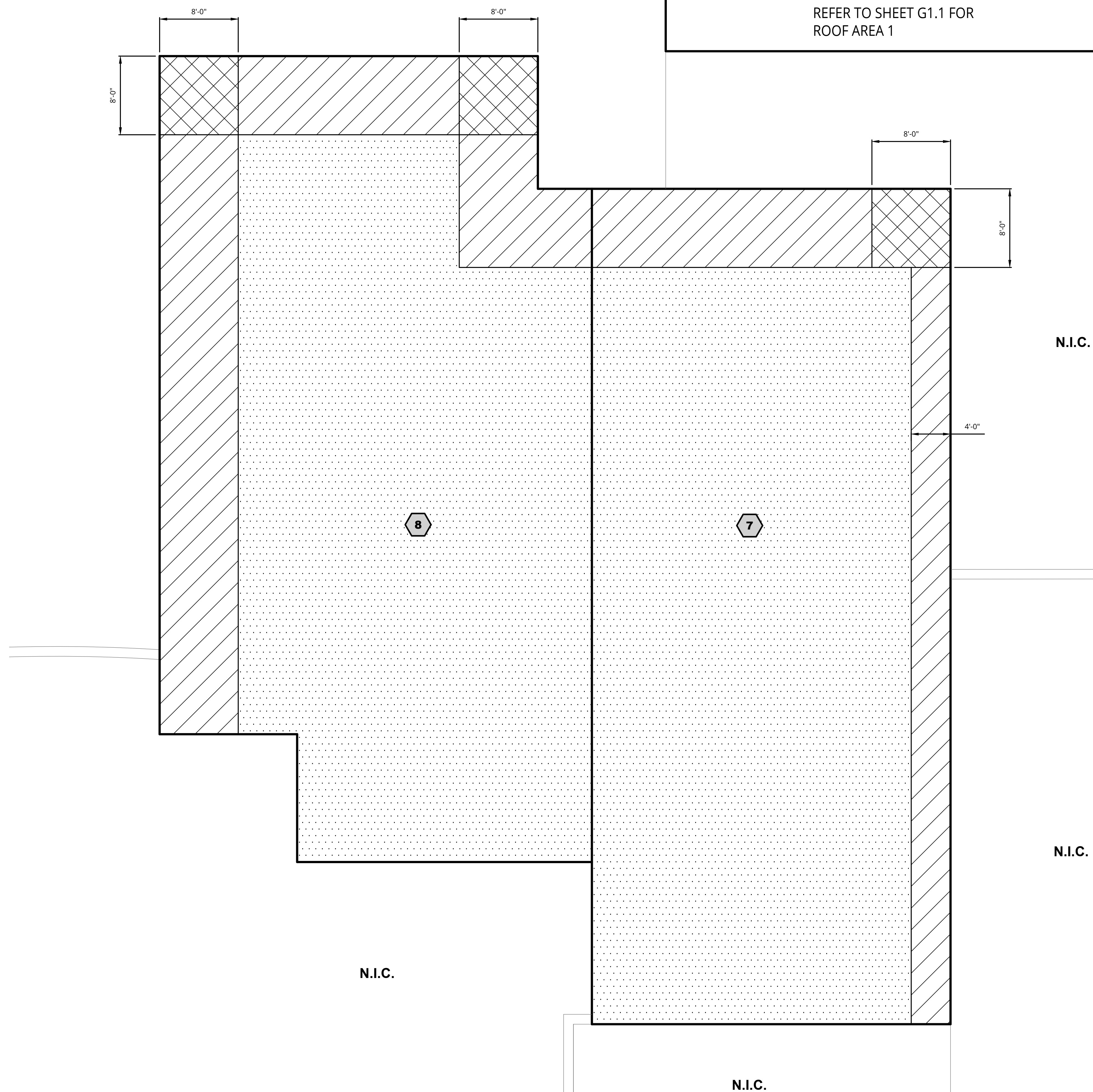
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G1.2

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REFER TO SHEET G1.1 FOR
 ROOF AREA 1



LEGEND

- ROOF AREA
- ZONE 1
- ZONE 2
- ZONE 3

WIND DESIGN CRITERIA (MBC 2015)

PIERCE MIDDLE SCHOOL
 ULTIMATE DESIGN (FACTORED) BASIC WIND SPEED (3 SECOND GUST) = 120 MPH
 NOMINAL WIND SPEED = 93 MPH
 EXPOSURE CATEGORY = C
 RISK CLASSIFICATION = III
 INTERNAL PRESSURE COEFFICIENT (ENCLOSED BUILDING) = +/- 0.18

NOTES:

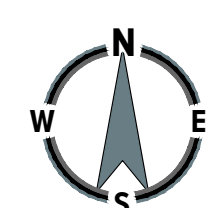
1. WORK WIND DESIGN LOADING ZONE PLAN WITH TABLE 1, THIS SHEET.
2. WIND UPLIFT PRESSURE GIVEN IN TABLE 1 TO BE USED FOR DESIGN OF ROOFING FASTENING SYSTEM(S).
3. DESIGN PRESSURES BASED ON EFFECTIVE WIND AREA OF 10FT² OR LESS.

TABLE 1

SERVICE (UNFACTORED) DESIGN WIND LOADS - COMPONENTS AND CLADDING	
ROOF SURFACE VERTICAL PRESSURE (PSF)	
ZONE 1	-20
ZONE 2 AND TOP/SIDE OF PARAPET	-33
ZONE 3 AND TOP/SIDE OF PARAPET	-49

NOTE:

"-" NEGATIVE SIGN INDICATES PRESSURE ACTING AWAY FROM ROOF SURFACE, I.E. SUCTION

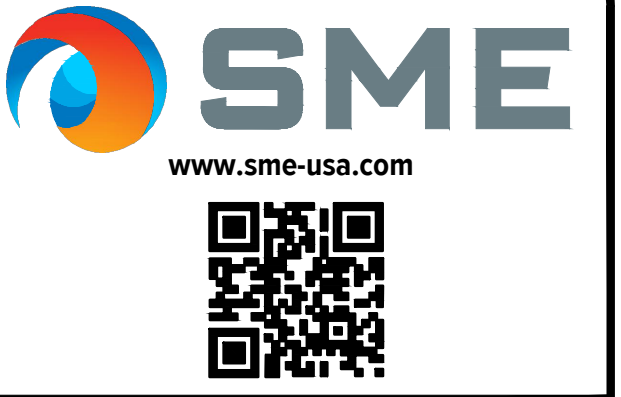


**ROOF AREAS 7 AND 8
 WIND DESIGN LOADING / ZONE PLAN**

SCALE: 3/16" = 1'-0"

Jan 10, 2024 1:18pm - by: gus - by: gus - Location: I:\sme\inc\p\WP\094776.02\CD\Design\Final\Rev\Bids\094776.02.WIND UPLIFT.dwg

ROOF AREA(S)	ROOF ASSEMBLY (MEMBRANE TO DECK)
1	MEMBRANE: BLACK, 60-MIL, REINFORCED EPDM MEMBRANE AS SPECIFIED, FULLY ADHERED IN BONDING ADHESIVE COVER BOARD: 1/2" DENSDECK PRIME COVER BOARD, ADHERED IN LOW-RISE FOAM TAPERED INSULATION SYSTEM (AS NEEDED): 1/8" FT TAPERED POLYSTYRENE INSULATION SYSTEM, ADHERED IN LOW-RISE FOAM BASE INSULATION: 2 LAYERS OF 2.0" POLYSTYRENE INSULATION, ADHERED IN LOW-RISE FOAM VAPOR RETARDER: VAPOR RETARDER ADHERED IN PRIMER, AS SPECIFIED SUBSTRATE BOARD: 1/2" DENSDECK PRIME BOARD, MECHANICALLY ATTACHED



Orientation	Scale
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Project
**2024 WATERFORD SCHOOL DISTRICT
 PIERCE MIDDLE SCHOOL
 ROOFING REPLACEMENT**

Project Location
**5145 HATCHERY RD.,
 WATERFORD TWP., MI 48329**

Sheet Name
**ROOF PLAN
 AREA 1**

Seal

REV	ISSUED FOR	DATE	BY
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094776.02

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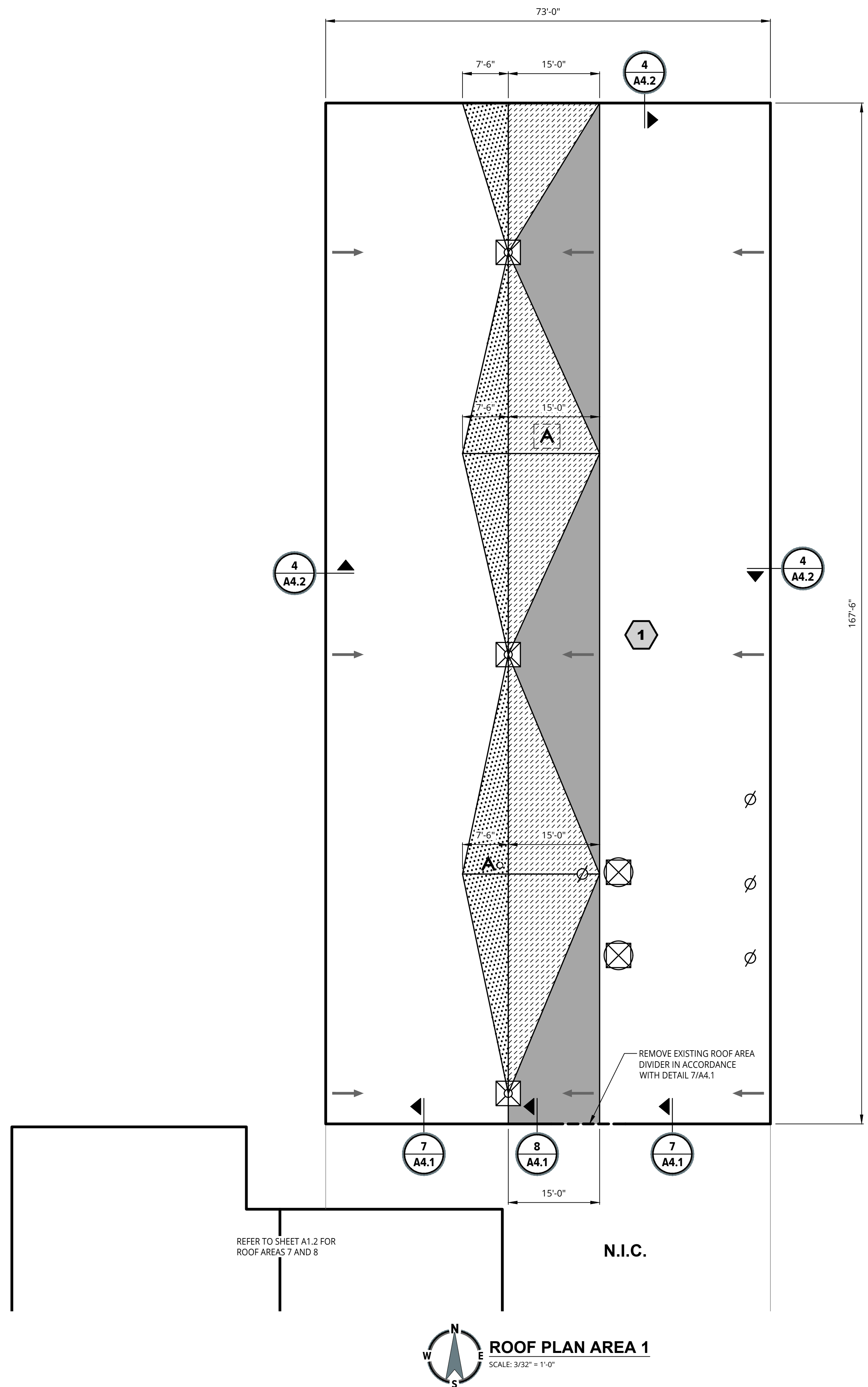
Designer:
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KMD

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Sheet No.
A1.1



LEGEND

- ROOF AREA
- EXISTING ROOF DRAIN, REFER TO DETAIL 1 ON SHEET A4.1
- SOIL VENT PIPE, PER DETAIL 2 ON SHEET A4.1
- CURBED MOUNT POWERED VENT (24"x24"), PER DETAIL 3 ON SHEET A4.1
- WATER SHED DIRECTION
- N.I.C.** ROOF AREA NOT IN CONTRACT
- VERIFY ABANDONMENT WITH OWNERS REPRESENTATIVE REFER TO NOTE 2
- 1/2" PER FOOT TAPERED SADDLE
- 1/4" PER FOOT TAPERED SADDLE
- 1/8" PER FOOT TAPERED SYSTEM
- DETAIL CALL OUT

- NOTES:
 1. FIELD VERIFY ALL DIMENSIONS.
 2. AT ABANDONED CURBS, AND EQUIPMENT INFILL STEEL DECK AS SPECIFIED.

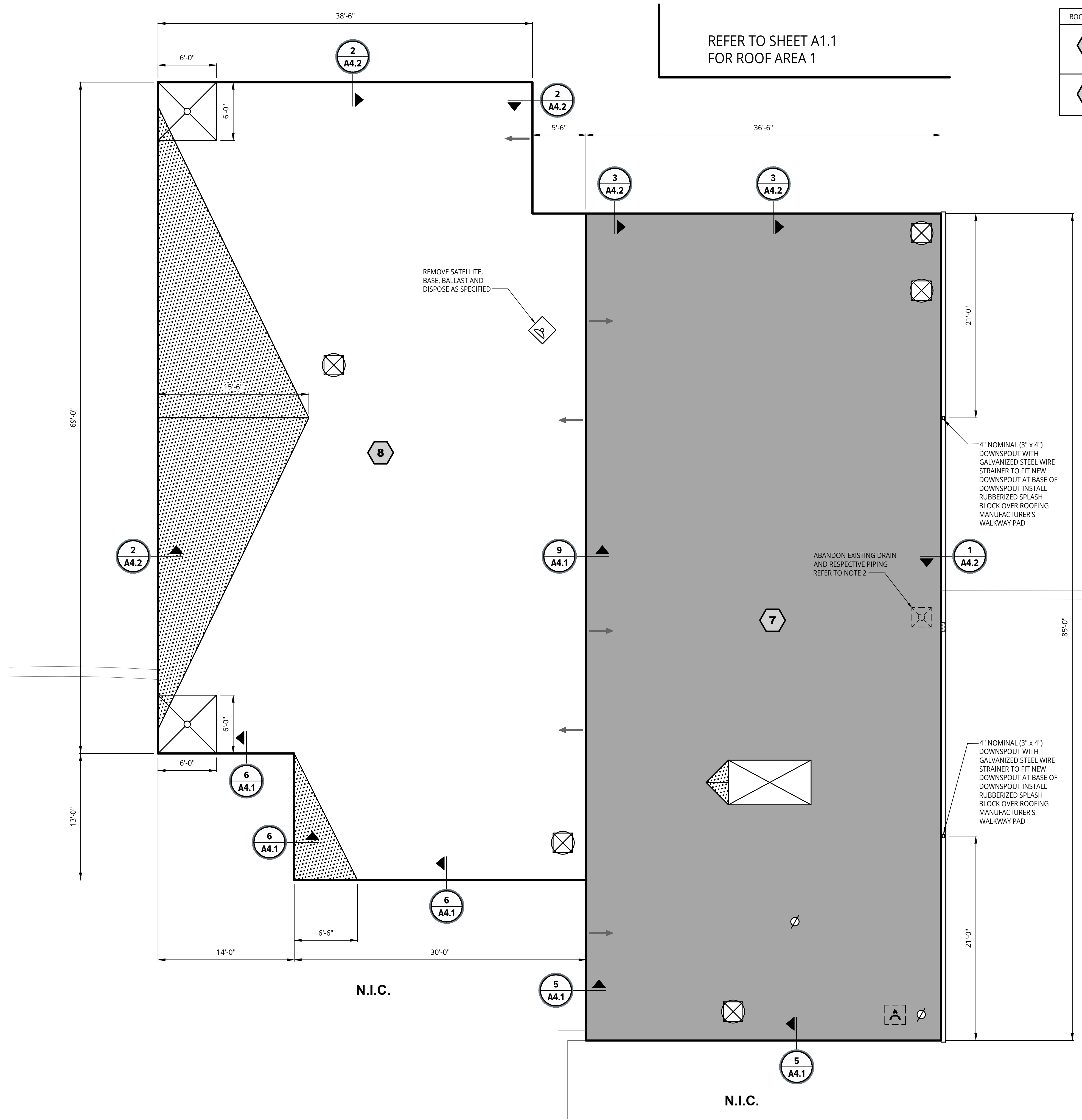
REFER TO SHEET A1.2 FOR ROOF AREAS 7 AND 8

REMOVE EXISTING ROOF AREA DIVIDER IN ACCORDANCE WITH DETAIL 7/A4.1

ROOF PLAN AREA 1
 SCALE: 3/32" = 1'-0"

Jan 10, 2024 4:17pm - by: gus.gardner@eet.com Location: I:\sme-inc\proj\WP094776.02\CD\Design\Final\Rev\Bids\094776.02-ROOF-PLAN.dwg

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ROOF AREA(S)	ROOF ASSEMBLY (MEMBRANE TO DECK)
7	MEMBRANE: BLACK, 60-MIL, REINFORCED EPDM MEMBRANE AS SPECIFIED, FULLY ADHERED IN BONDING ADHESIVE COVER BOARD: 1/2" DENSOCK PRIME COVER BOARD, ADHERED IN LOW-RISE FOAM TAPERED INSULATION SYSTEM: 1/8" TAPERED POLYISOCYANURATE INSULATION SYSTEM, ADHERED IN LOW-RISE FOAM BASE INSULATION: 2 LAYERS OF 2.5" POLYISOCYANURATE INSULATION, ADHERED IN LOW-RISE FOAM VAPOR RETARDER: VAPOR RETARDER ADHERED IN PRIMER, AS SPECIFIED SUBSTRATE BOARD: 1/2" DENSOCK PRIME BOARD, MECHANICALLY ATTACHED
8	MEMBRANE: BLACK, 60-MIL, REINFORCED EPDM MEMBRANE AS SPECIFIED, FULLY ADHERED IN BONDING ADHESIVE COVER BOARD: 1/2" DENSOCK PRIME COVER BOARD, ADHERED IN LOW-RISE FOAM BASE INSULATION: 2 LAYERS OF 2.5" POLYISOCYANURATE INSULATION, ADHERED IN LOW-RISE FOAM VAPOR RETARDER: VAPOR RETARDER ADHERED IN PRIMER, AS SPECIFIED SUBSTRATE BOARD: 1/2" DENSOCK PRIME BOARD, MECHANICALLY ATTACHED

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Project
2024 WATERFORD SCHOOL DISTRICT PIERCE MIDDLE SCHOOL ROOFING REPLACEMENT

Project Location
5145 HATCHERY RD., WATERFORD TWP., MI 48329

Sheet Name
ROOF PLAN AREAS 7 AND 8

Seal

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- EXISTING ROOF DRAIN, REFER TO DETAIL 1 ON SHEET A4.1
- SOIL VENT PIPE, PER DETAIL 2 ON SHEET A4.1
- CURBED MOUNT POWERED VENT (24"x24"), PER DETAIL 3 ON SHEET A4.1
- ROOF TOP UNIT ON CURB, PER DETAIL 4 ON SHEET A4.1
- ← WATER SHED DIRECTION
- N.I.C. ROOF AREA NOT IN CONTRACT
- A VERIFY ABANDONMENT WITH OWNERS REPRESENTATIVE REFER TO NOTE 2
- D SATELLITE DISH, VERIFY ABANDONMENT WITH OWNERS REPRESENTATIVE REFER TO NOTE 2
- 1/2" PER FOOT TAPERED SADDLE
- 1/8" PER FOOT TAPERED SYSTEM
- # A4.1 DETAIL CALL OUT
- GUTTER EXPANSION JOINT

NOTES:
1. FIELD VERIFY ALL DIMENSIONS.
2. ABANDON DRAIN, CURBS, AND EQUIPMENT AND INFILL STEEL DECK AS SPECIFIED. EXISTING PLUMBING TO BE CAPPED AND SEALED BY A PLUMBING CONTRACTOR LICENSED IN THE STATE OF MICHIGAN.

ROOF PLAN AREAS 7 AND 8
SCALE: 3/16" = 1'-0"

SME Project No.	094776.02
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Sheet Name
FLASHING DETAILS

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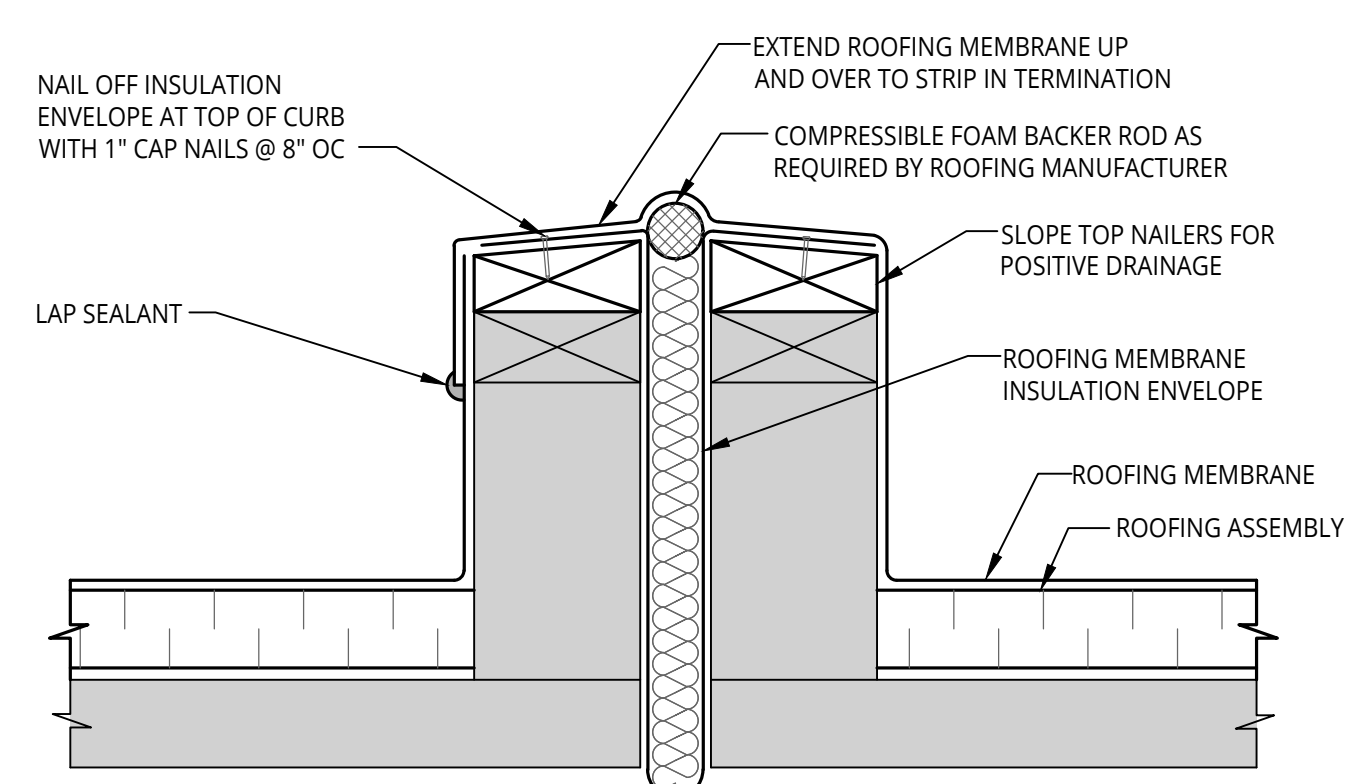
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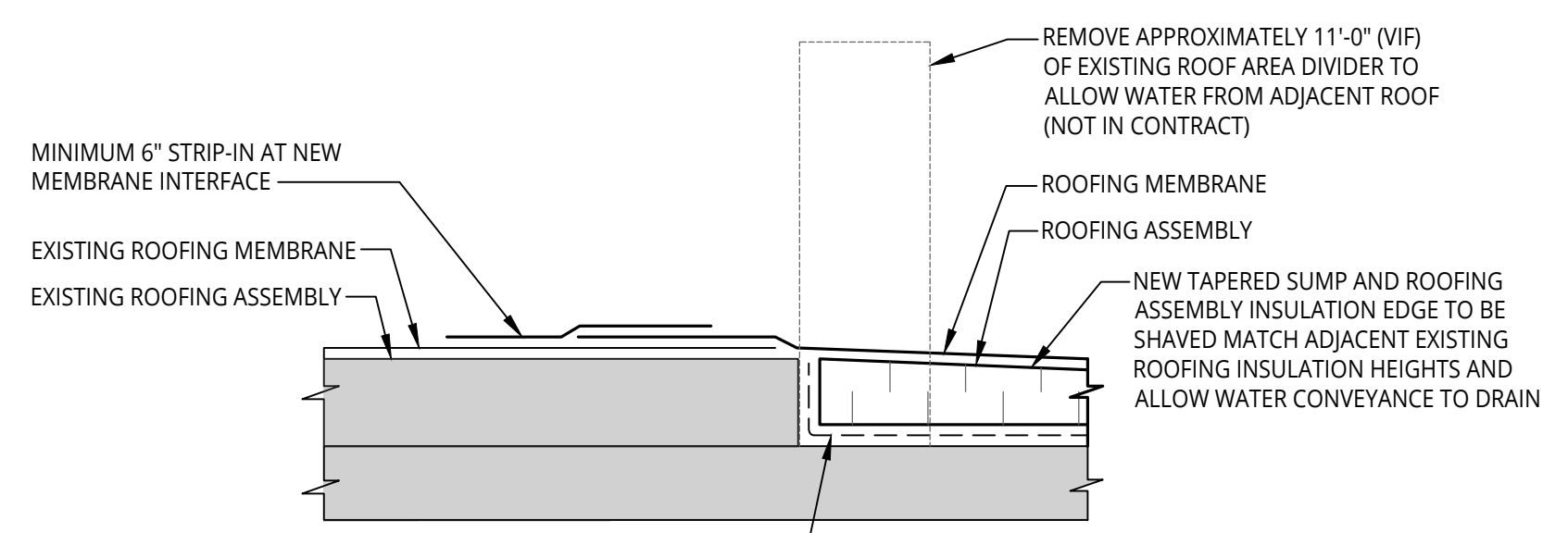
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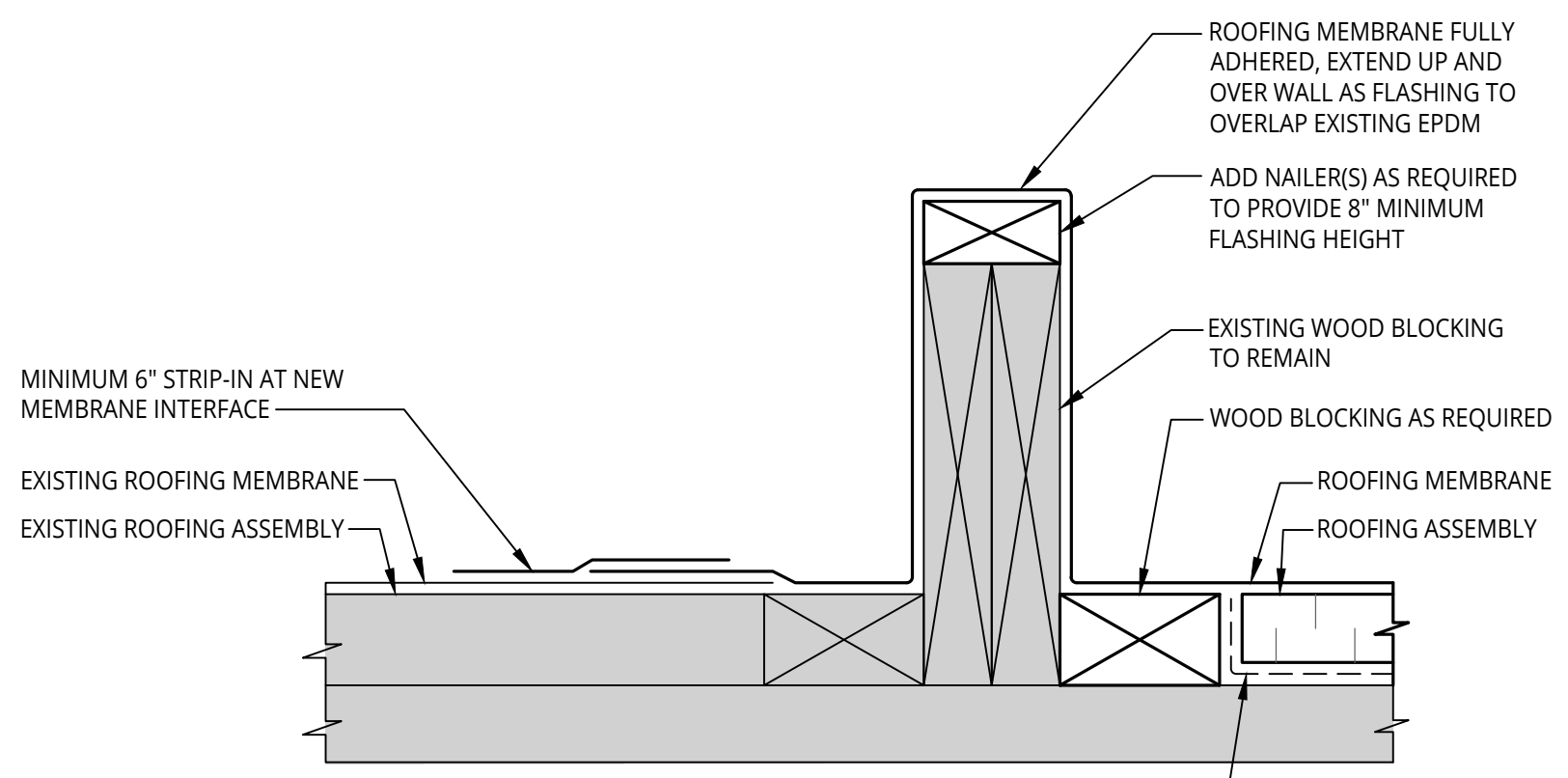
- NOTES:**
1. ADD NEW NAILER(S) AS REQUIRED TO PROVIDE MINIMUM 8" FLASHING HEIGHT ABOVE FINISHED ROOF SURFACE.
 2. INSTALL INSULATION ON INSIDE OF EXPANSION JOINT AS NEEDED BASED ON CONDITIONS UNCOVERED DURING DEMOLITION.
 3. INSULATION ENVELOPE TO BE SEALED WATERTIGHT, INCLUDING ENDS, PROVIDE A SECONDARY WATERPROOF BARRIER.

9 RAISED EXPANSION JOINT
 A1.1 NOT TO SCALE



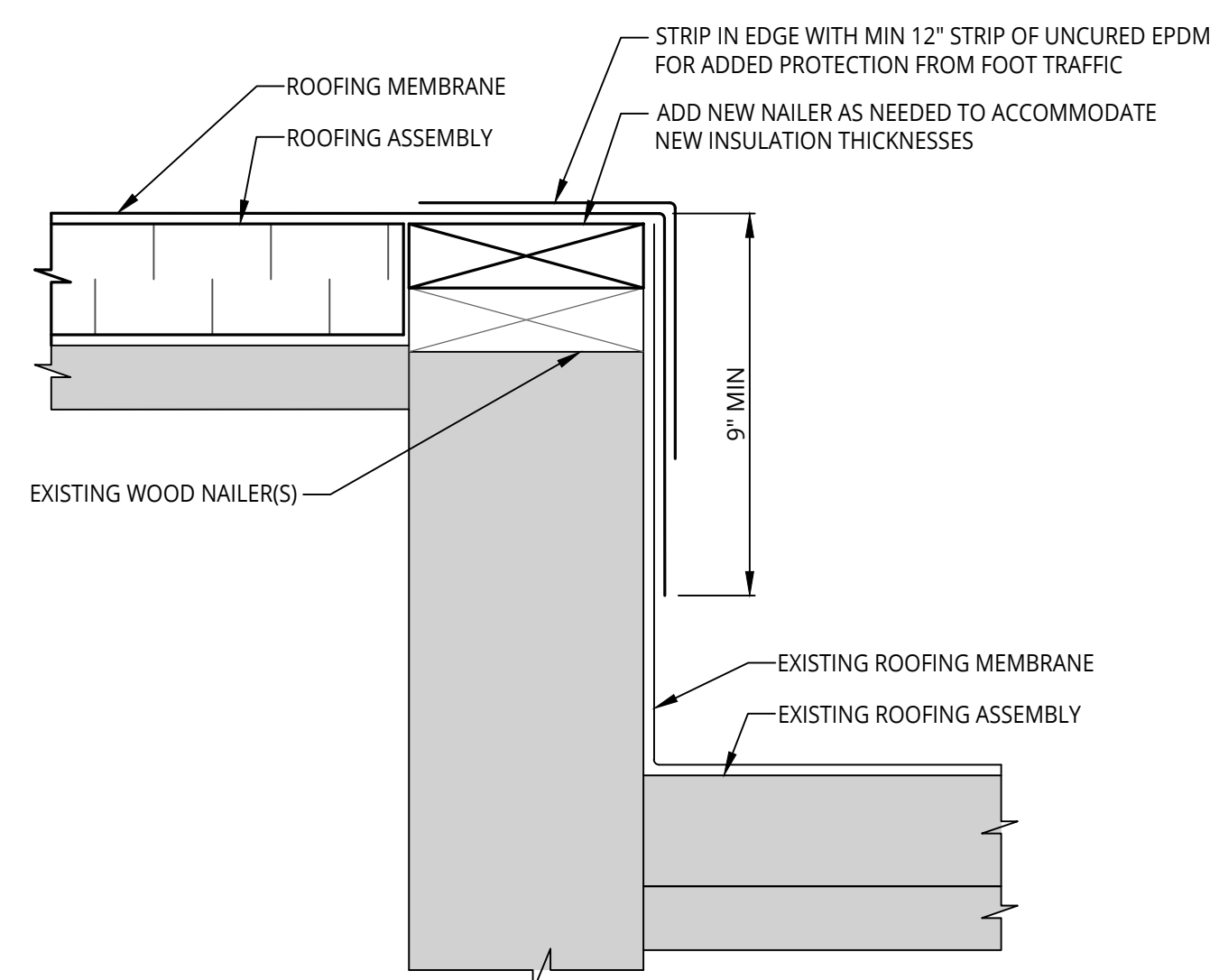
- VAPOR RETARDER**
- EXTEND MIN 3" UP EXISTING INSULATION
 - VAPOR RETARDER MUST NOT COME IN CONTACT WITH NEW ROOFING MEMBRANE

8 PERMANENT TIE-IN BETWEEN EXISTING AND NEW ROOFING
 A1.1 NOT TO SCALE

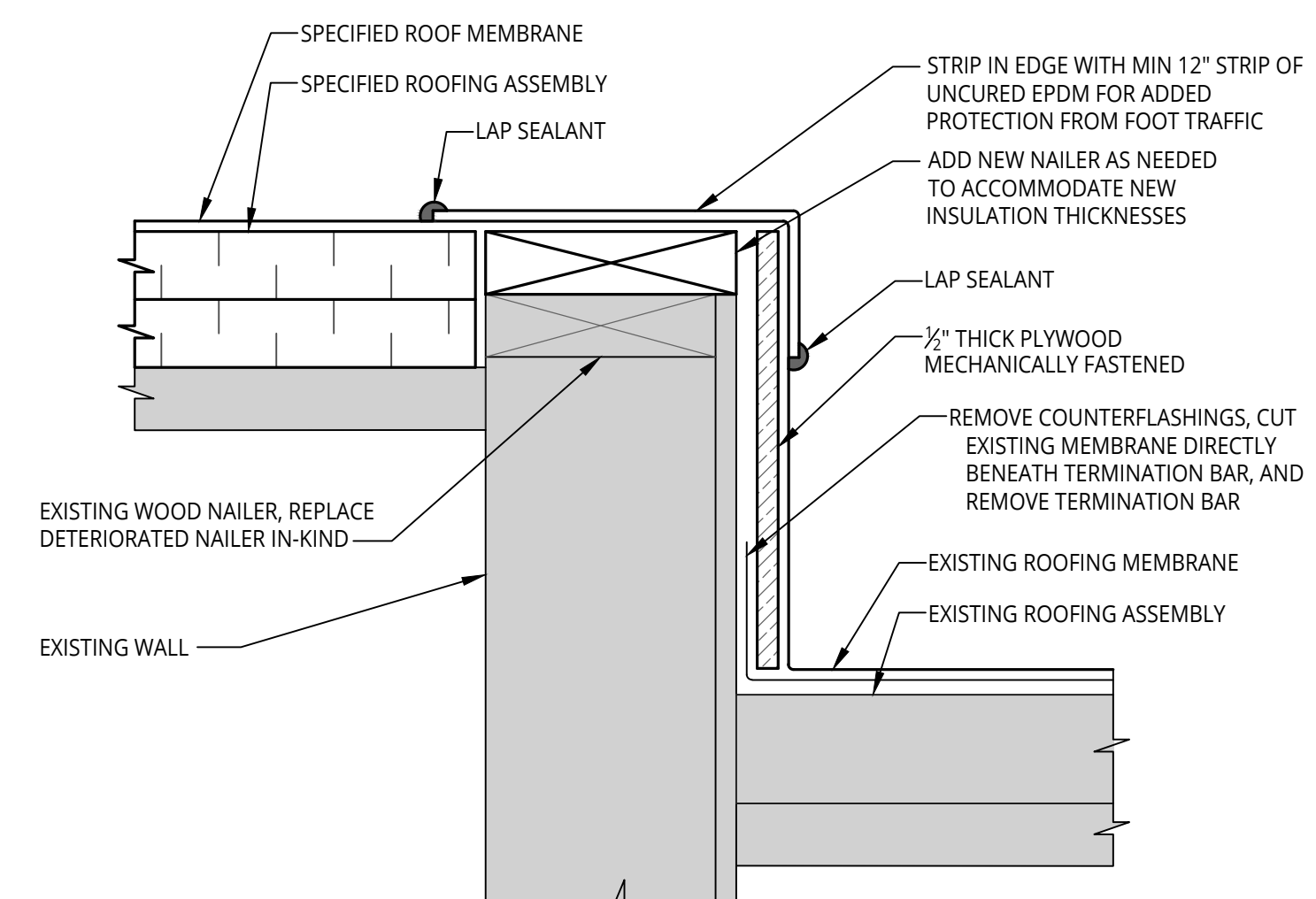


- VAPOR RETARDER**
- EXTEND MIN 3" UP NEW BLOCKING
 - VAPOR RETARDER MUST NOT COME IN CONTACT WITH NEW ROOFING MEMBRANE

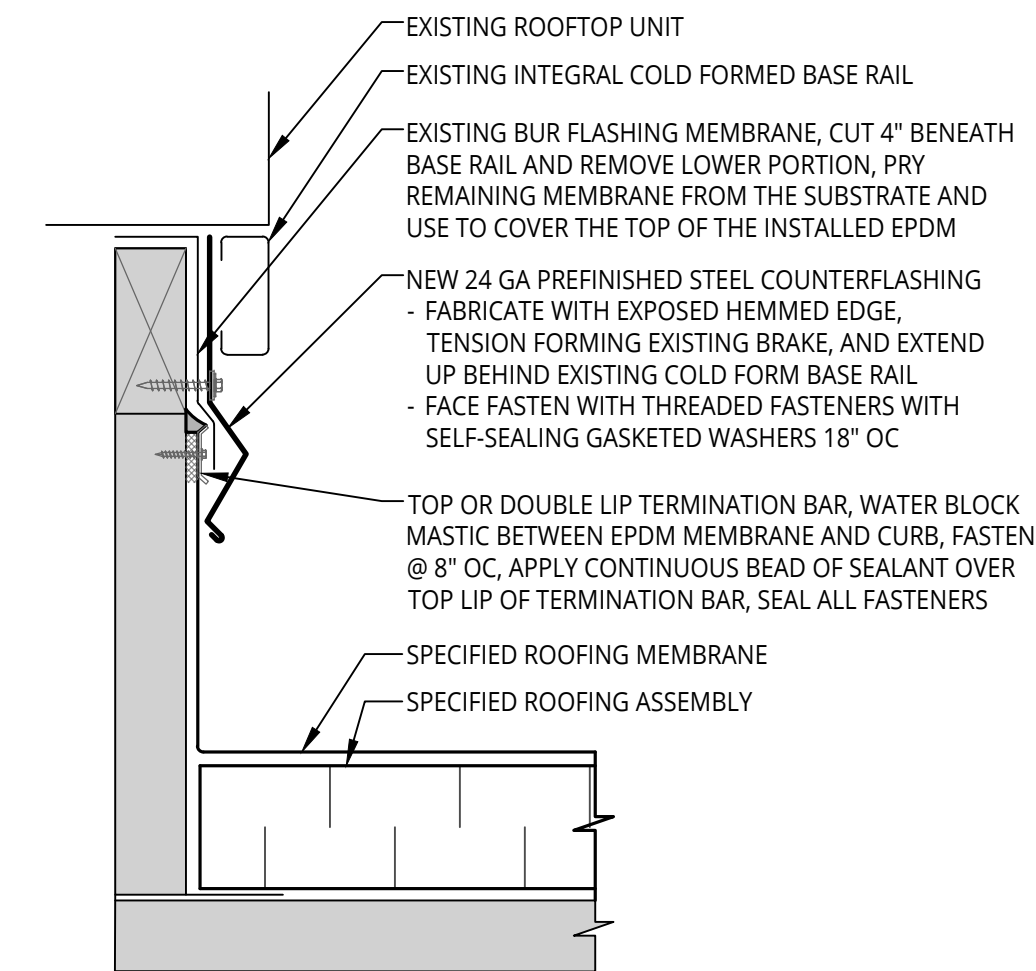
7 KNEE WALL FLASHING
 A1.1 NOT TO SCALE



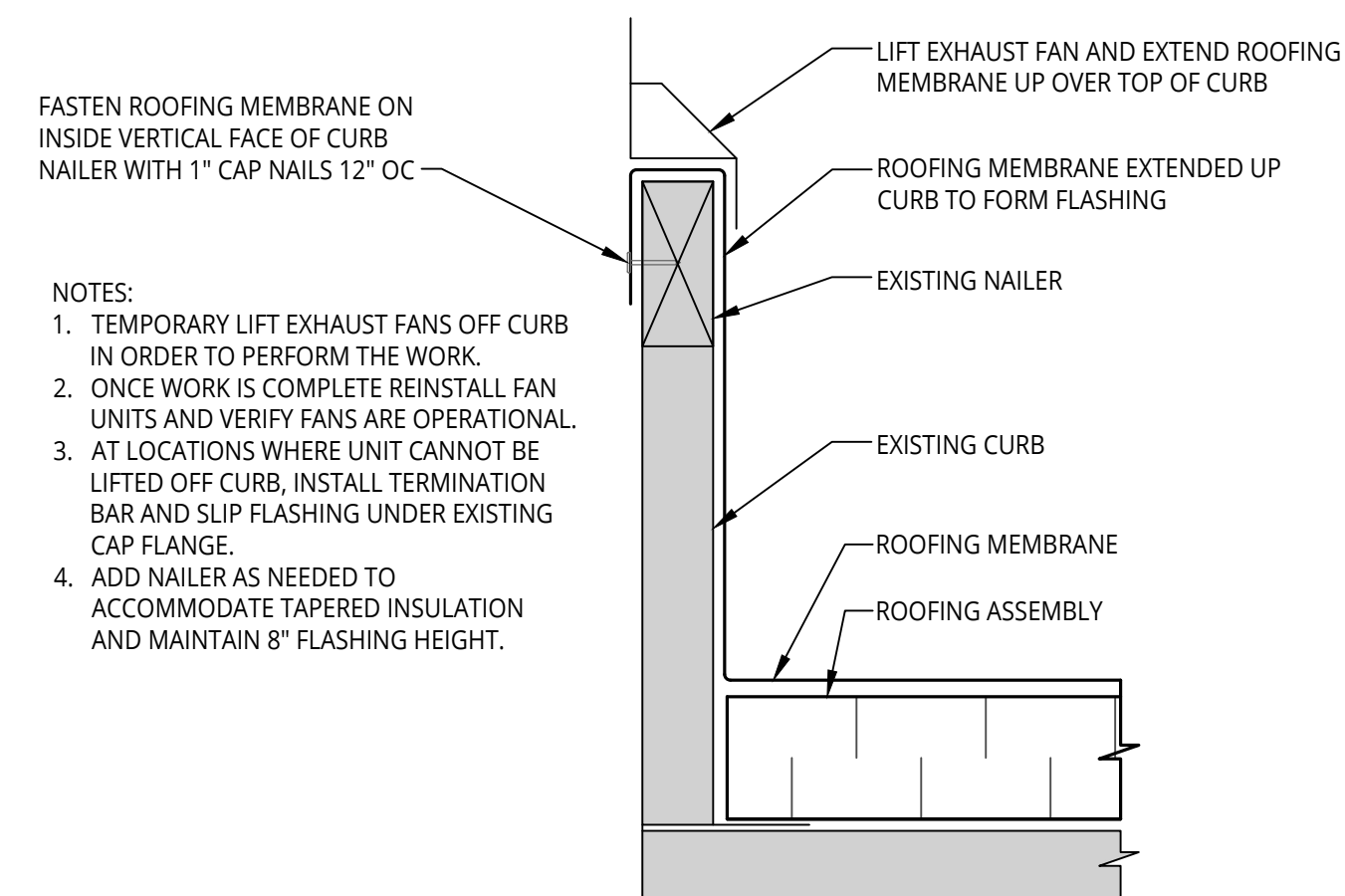
6 ROOF TO ROOF TRANSITION
 A1.1 NOT TO SCALE



5 ROOF LEVEL TRANSITION
 A1.1 NOT TO SCALE

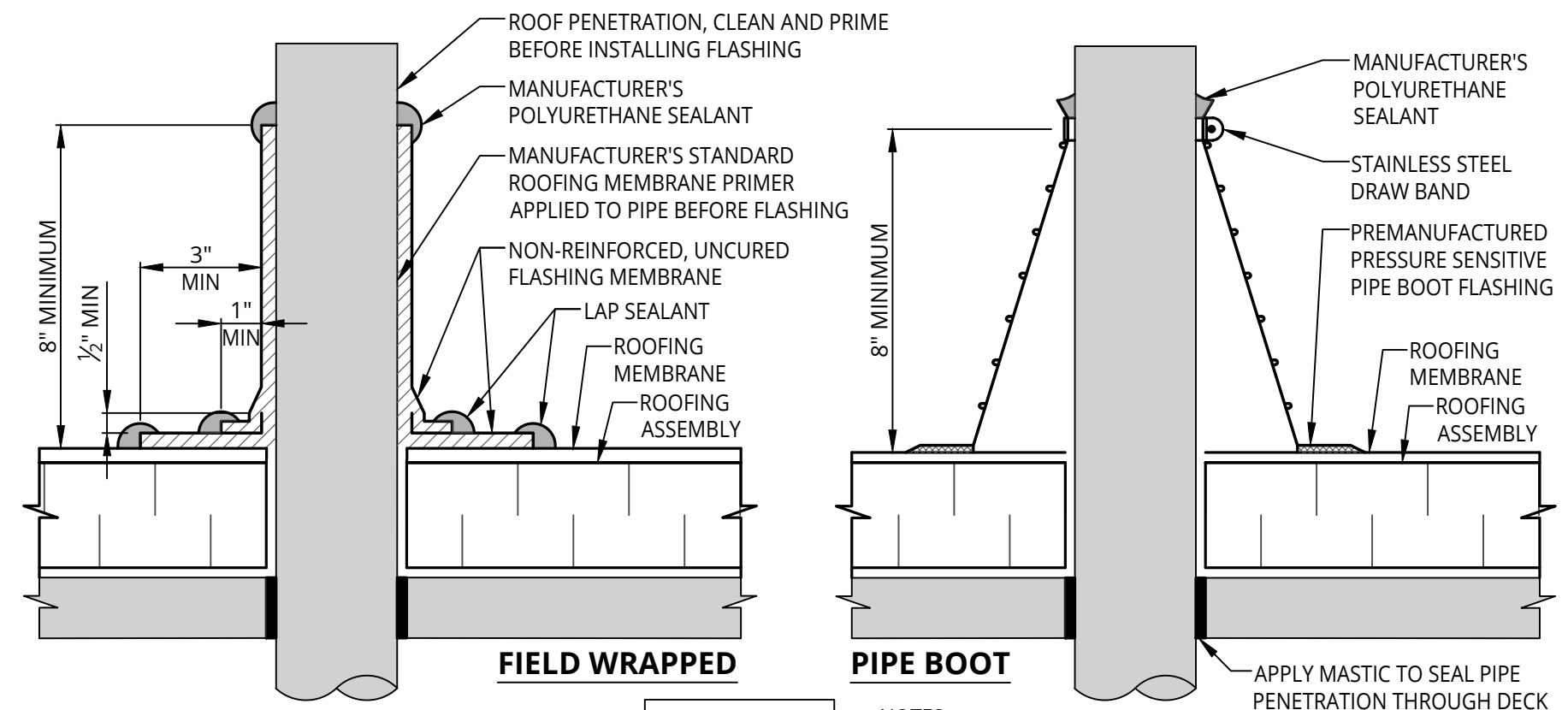


4 TYPICAL CURB WITH SLIP FLASHING
 A1.1 NOT TO SCALE



- NOTES:**
1. TEMPORARY LIFT EXHAUST FANS OFF CURB IN ORDER TO PERFORM THE WORK.
 2. ONCE WORK IS COMPLETE REINSTALL FAN UNITS AND VERIFY FANS ARE OPERATIONAL.
 3. AT LOCATIONS WHERE UNIT CANNOT BE LIFTED OFF CURB, INSTALL TERMINATION BAR AND SLIP FLASHING UNDER EXISTING CAP FLANGE.
 4. ADD NAILER AS NEEDED TO ACCOMMODATE TAPERED INSULATION AND MAINTAIN 8" FLASHING HEIGHT.

3 TYPICAL CURB UP AND OVER FLASHING
 A1.1 NOT TO SCALE

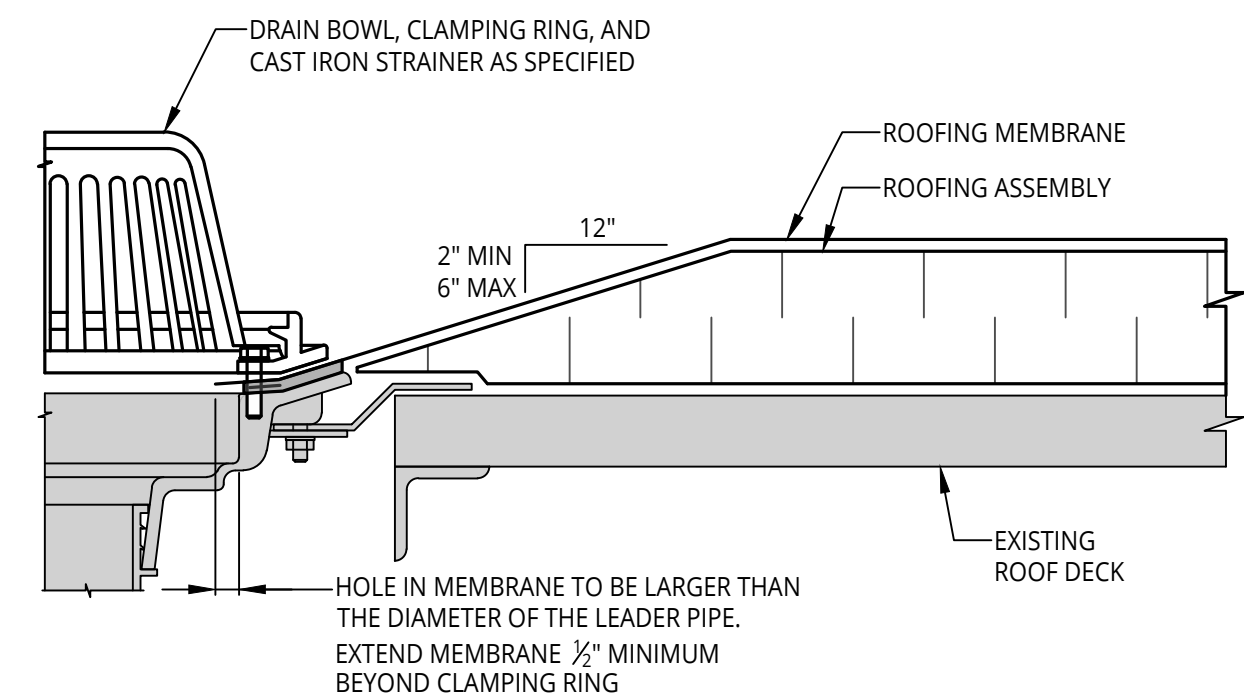


- NOTES:**
1. REMOVE ALL EXISTING FLASHING BEFORE INSTALLING FIELD-FABRICATED PIPE SEAL.
 2. NAILER REQUIRED TO STABILIZE STEEL DECK AROUND ALL PIPES GREATER THAN 12" DIA.
 3. MANUFACTURER'S PREFABRICATED PIPE BOOT MAY BE INSTALLED IN LIEU OF THIS DETAIL WHERE APPLICABLE.
 4. DO NOT USE FOR HOT EXHAUST STACKS.
 5. FASTENERS AROUND PIPES 4" DIA MAY BE OMITTED IF APPROVED BY ROOFING MEMBRANE MANUFACTURER.

NOTE:
 CAN USE EITHER OF THESE DETAILS

- NOTES:**
1. THE USE OF LAP SEALANT TO SEAL TOP EDGE OF PIPE BOOT IS NOT PERMITTED. CONTRACTOR SHALL USE ROOFING MANUFACTURER'S MULTIPURPOSE POLYURETHANE SEALANT.
 2. PIPE BOOTS ARE NOT TO BE APPLIED DIRECTLY TO HOT VENTS.
 3. NAILERS REQUIRED TO STABILIZE STEEL DECK AT PENETRATIONS LARGER THAN 12" DIA.
 4. FASTENERS MAY BE OMITTED AT PENETRATIONS LESS THAN 18" DIA OR AS OTHERWISE INDICATED BY THE ROOFING MANUFACTURER.

2 ROUND PENETRATION FLASHING
 A1.1 NOT TO SCALE



- NOTES:**
1. DO NOT RUN SEAMS THROUGH DRAINS OR SUMPS.
 2. WHERE FIELD SEAMS ARE WITHIN 18" OF DRAINS, THEY SHALL BE STRIPPED IN WITH 5" WIDE UNCURVED EPDM.
 3. DRAIN AND OVERFLOW DRAIN HEIGHTS TO REMAIN AS-IS. INSTALL TAPERED INSULATION TO CREATE 4"x4" SUMP UNO AROUND EACH ROOF DRAIN WITH MODIFICATIONS AS NEEDED AT EXPANSION JOINTS AND TIGHT SPACES. NEW INSULATION MAY NEED TO BE OMITTED TO ALLOW SUMPED AREA. OMIT TAPERED INSULATION SUMP AT ROOF OVERFLOWS.
 4. AT EXISTING DRAIN LOCATIONS, REPLACE DRAIN PIPING TO FIRST CONTINUOUS STRETCH. DIAMETER TO MATCH EXISTING.

1 ROOF DRAIN
 A1.1 NOT TO SCALE

Orientation	Scale
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Project
2024 WATERFORD SCHOOL DISTRICT
PIERCE MIDDLE SCHOOL
ROOFING REPLACEMENT

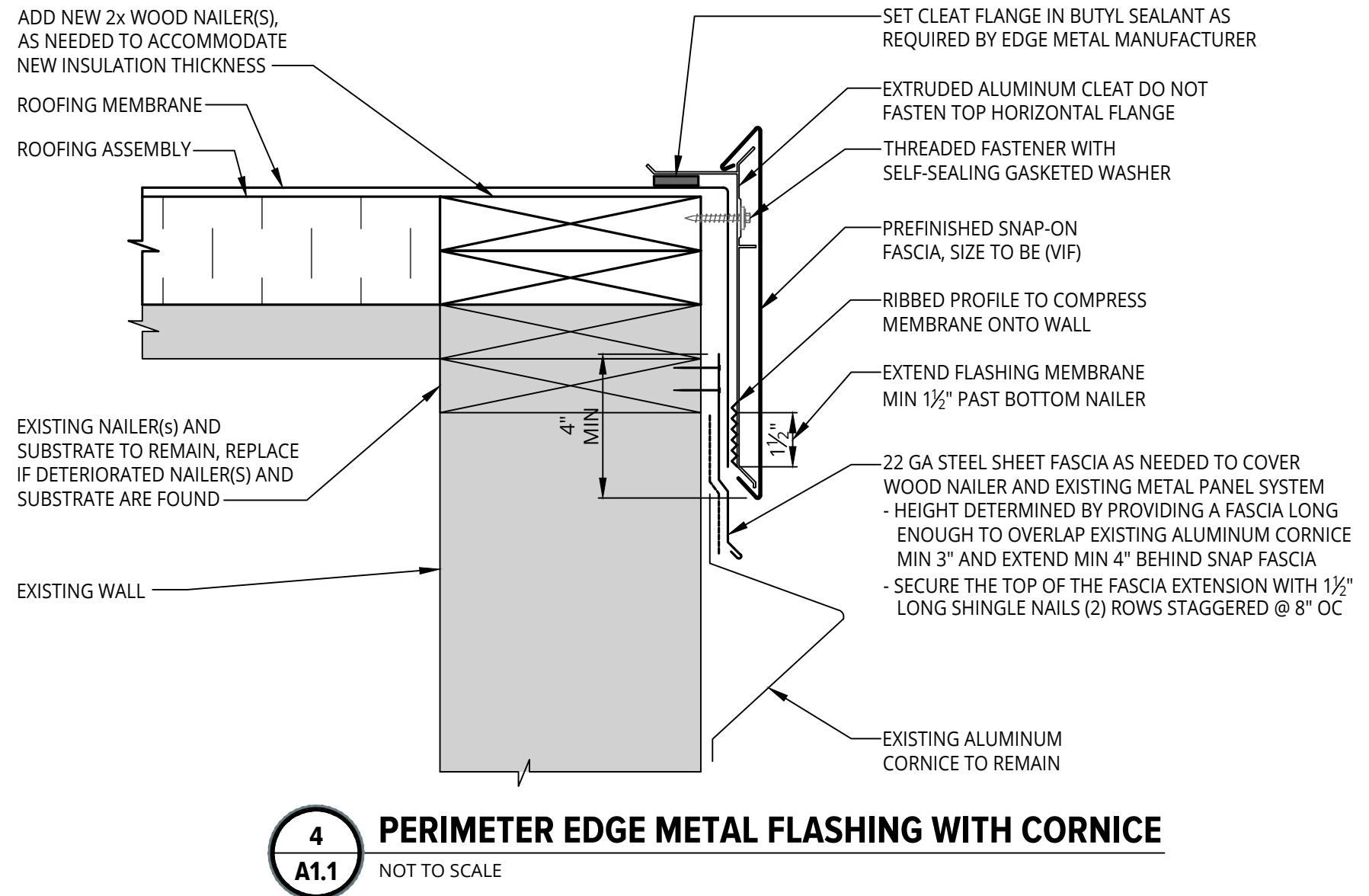
Project Location
5145 HATCHERY RD.,
WATERFORD TWP., MI 48329

Sheet Name
FLASHING DETAILS

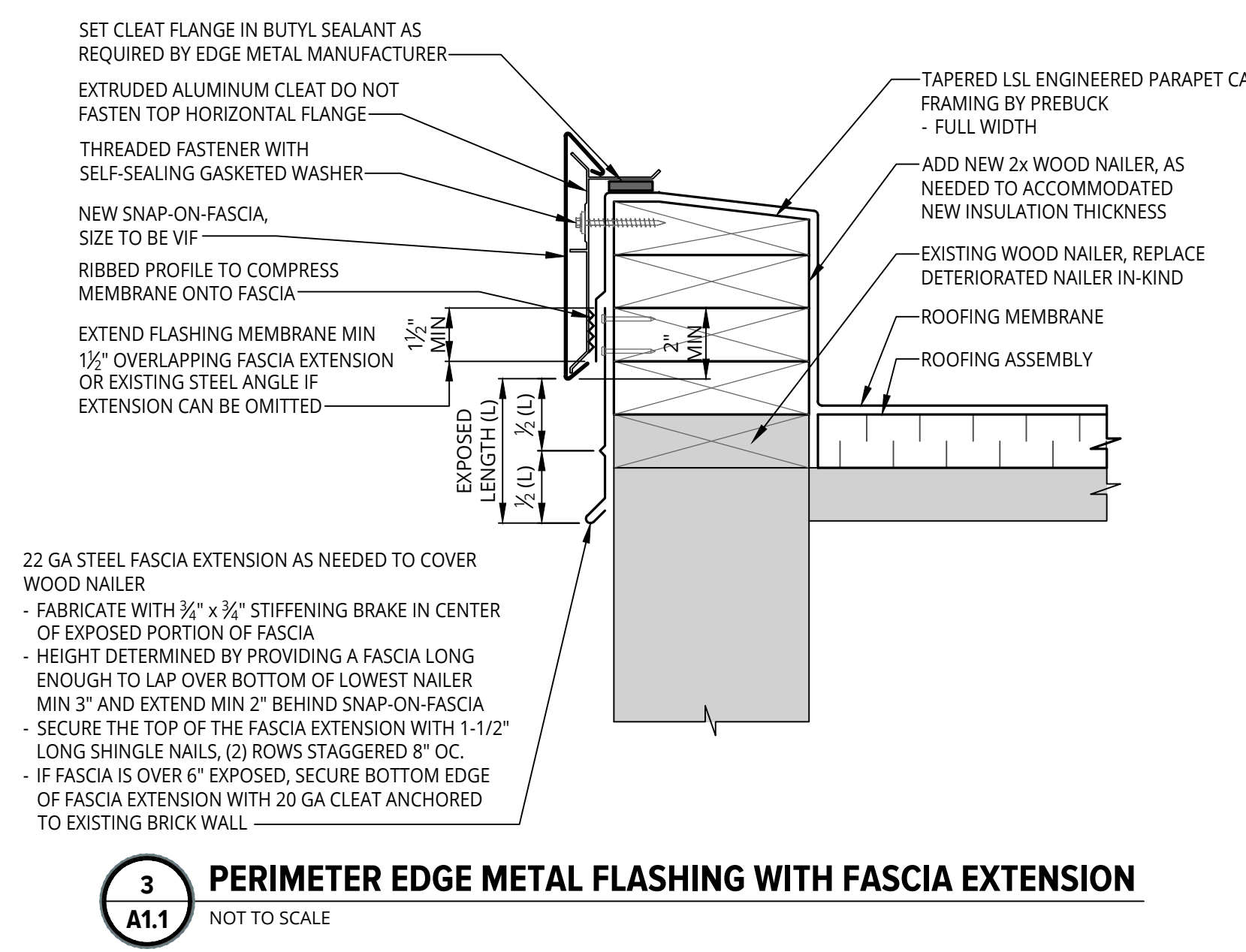
Seal

Revisions

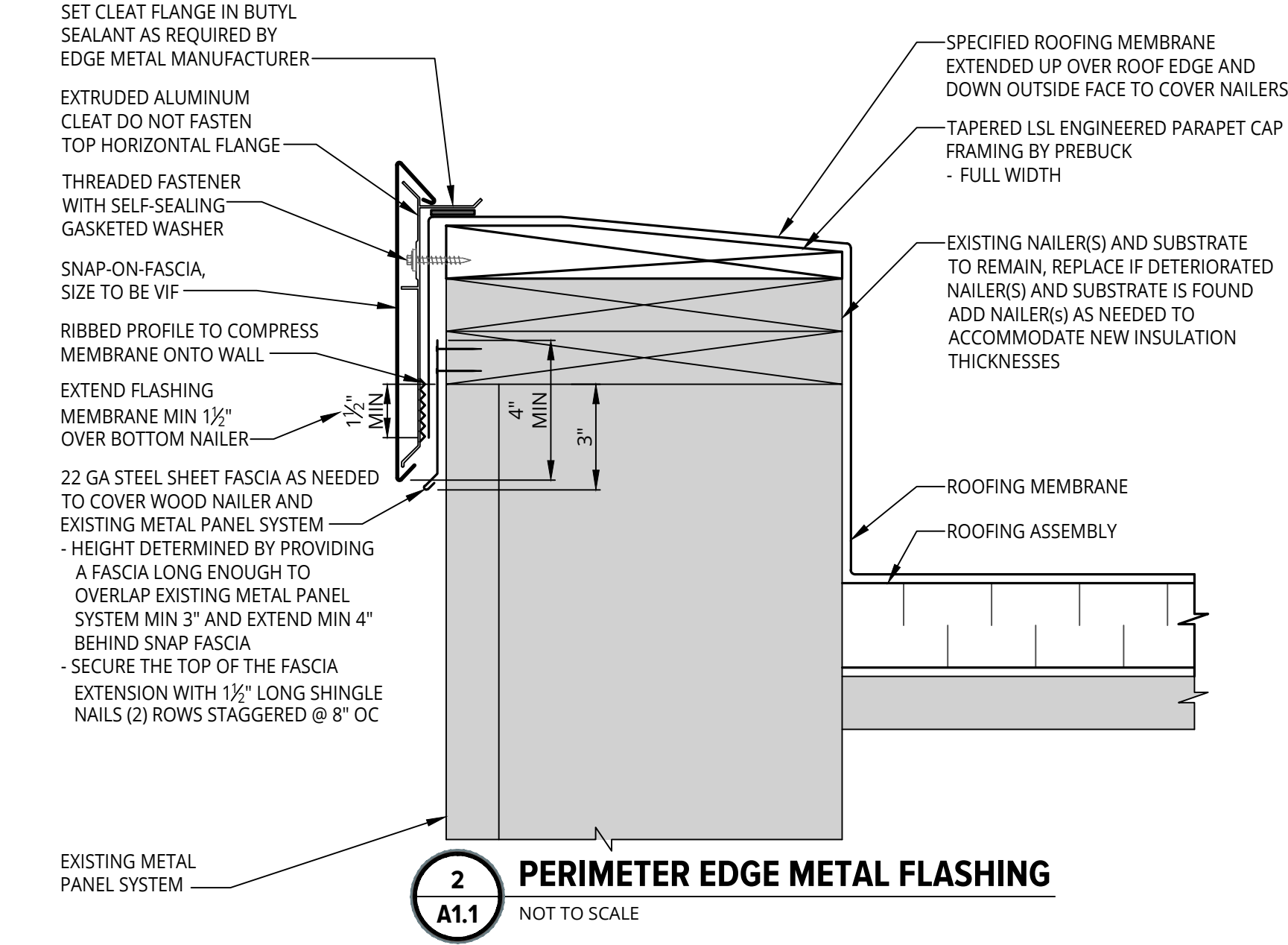
REV	ISSUED FOR	DATE	BY
1	OWNER REVIEW	12-22-23	KMD
2	BIDS	1-16-24	KMD



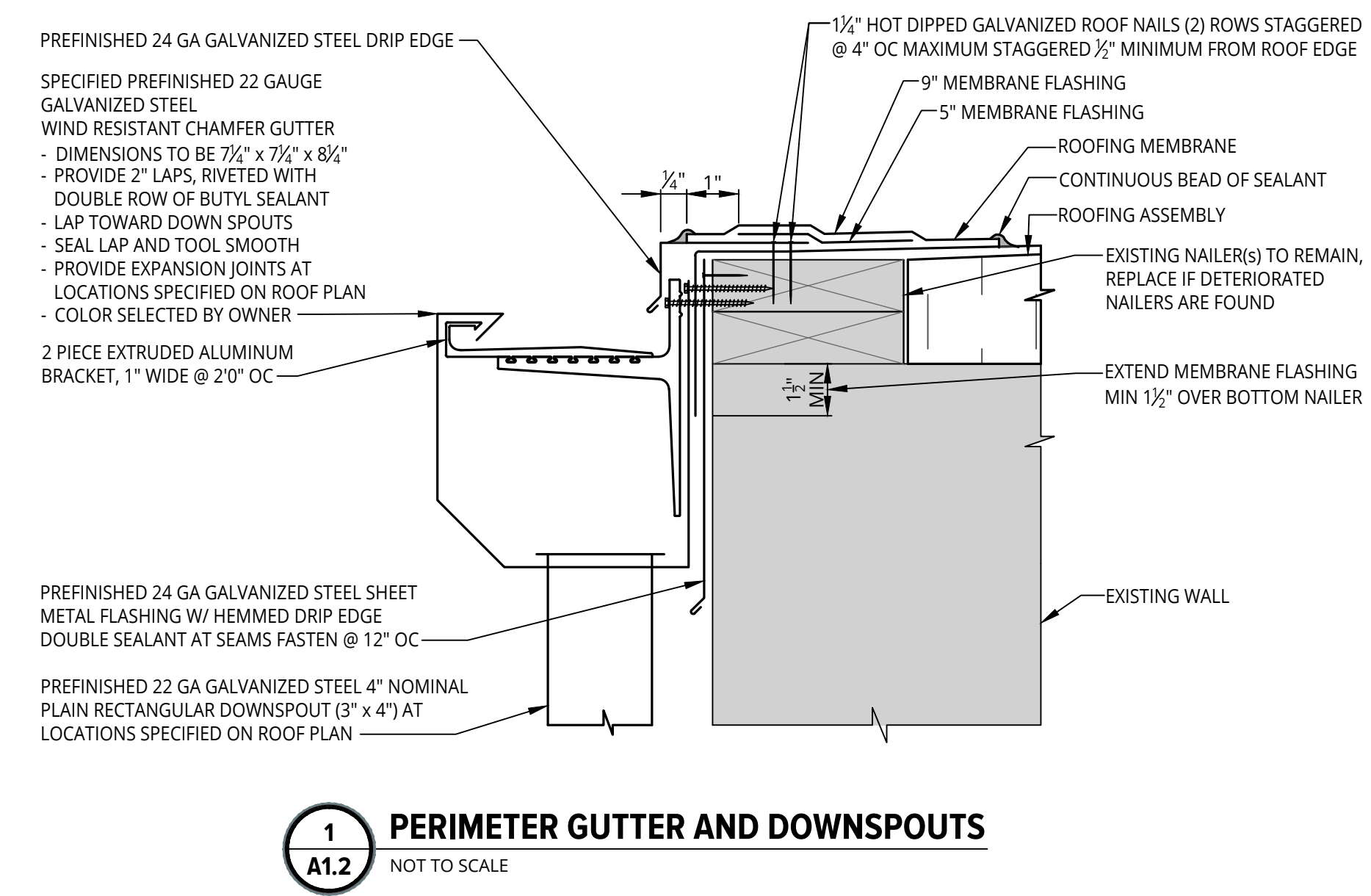
4
A1.1 PERIMETER EDGE METAL FLASHING WITH CORNICE
 NOT TO SCALE



3
A1.1 PERIMETER EDGE METAL FLASHING WITH FASCIA EXTENSION
 NOT TO SCALE



2
A1.1 PERIMETER EDGE METAL FLASHING
 NOT TO SCALE



1
A1.2 PERIMETER GUTTER AND DOWNSPOUTS
 NOT TO SCALE

FILED: 15:46:18 1/16/24 1:23pm - Bryan, Aurelie E Location: I:\sme\in\proj\WP94776\03\03\03\Design\Flash\Mat Rev\Bids\094776_03_03\DETAILS.dwg