

Roof Replacement Missouri School for the Blind Saint Louis, Missouri

patterhn ives llc

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st louis missouri 63105



OWNER:

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
ELEMENTARY AND SECONDARY
EDUCATION

PROJECT
MANAGEMENT:

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN AND
CONSTRUCTION



01 AERIAL LOCATION MAP
MISSOURI SCHOOL FOR THE BLIND - 3815 MAGNOLIA AVENUE, SAINT LOUIS MISSOURI



DESIGNER:

PATTERHN IVES, LLC

PROJECT NUMBER:

E1908-01

ASSET NUMBERS:

5012011007
5012011009

LIST OF DRAWINGS:

G-001	COVER
A-100	OVERALL ROOF PLAN
A-101	ENLARGED ROOF PLAN
A-102	ENLARGED ROOF PLAN
A-103	ENLARGED ROOF PLANS
A-500	EXISTING ROOF ASSEMBLIES
A-501	ROOF ASSEMBLIES
A-502	ROOF DETAILS
A-503	ROOF DETAILS
A-504	ROOF DETAILS

SHEET NUMBER:

G-001

1 OF 10 SHEETS
01/24/2020

ABBREVIATIONS

A	ANCHOR BOLT	D	DIRECT APPLIED FINISH	G	GAUGE	M	MAXIMUM	Q	QTY	T	TOP AND BOTTOM
AB	ADJACENT	DAF	DEGREE	GA	GALVANIZED	MECH	MECHANICAL	R	RISER	T & B	TEMPORARY
AFF	ABOVE FINISHED FLOOR	DEMO (D)	DEMOLISH / DEMOLITION / REMOVE	GC	GENERAL CONTRACTOR	MEMB	MEMBRANE	RA	RETURN AIR	THK	TONGUE & GROOVE
AGGR	AGGREGATE	DIAG	DIAGONAL	GL / GLAZ	GLASS / GLAZING	MFR	MANUFACTURER	RD	ROOF DRAIN	TR	TRANSITION
ALT	ALTERNATE	DIA	DIAMETER	GR	GRADE	MIN	MINIMUM	RDO	ROOF DRAIN OUTLET	TO	TOP OF
ALUM	ALUMINUM	DIM	DIMENSION	GYP / GYPBD	GYP / GYPBD GYPSUM / GYPSUM BOARD	MINL	MINERAL	REC	RECOMMENDATION	TOC	TOP OF CONCRETE
AP	ACCESS PANEL	DN	DOWN			MISC	MISCELLANEOUS	REF	REFER TO / REFERENCE	TOS	TOP OF PARAPET
APPROX	APPROXIMATE	DR	DOOR			MO	MOUNTED	REIN	REINFORCED	TOW	TOP OF WALL
ARCH	ARCHITECTURAL (ARCHITECT)	DSP	DOWNSPOUT	H	HOSE BIBB	MTL	METAL	REQ	REQUIREMENT(S)	TPO	ROOFING (REF SPEC)
		DTL	DETAIL	HC	HOLLOW CORE	MUL	MULLION	REQD	REQUIRED	TR	TREAD
		DWG	DRAWING	HCP	HANDICAPPED			RH	ROUGH OPENING	TYP	TYPICAL
B	BOARD			HD	HEAVY DUTY			RO	ROUGH OPENING		
BD	BULKHEAD	E	EAST	HDWD	HARDWOOD	N	NORTH	RTU	ROOF TOP UNIT	U	UNLESS OTHERWISE NOTED
BKHD	BUILDING	EA	EACH	HW	HARDWARE	NA	NOT APPLICABLE			USL	UNIT SKYLIGHT
BLK	BLOCK	EJ	EXPANSION JOINT	HM	HOLLOW METAL	NIC	NOT IN CONTRACT			V	VERIFY
BLKG	BLOCKING	EJ	EXPANSION JOINT	HORZ	HORIZONTAL	NO	NUMBER			VER	VERTICAL
BM	BEAM	EL	ELEVATION	HR	HOUR	NOM	NOMINAL			VIF	VERIFY IN FIELD
BO	BOTTOM OF	ELEC	ELECTRICAL	HT	HEIGHT	NTS	NOT TO SCALE			VTR	VENT THROUGH ROOF
BOS	BOTTOM OF STEEL	ELEV	ELEVATOR	HVAC	HEATING VENTILATION & AIR CONDITIONING					W	WEST
BOD	BASIS OF DESIGN	EMER	EMERGENCY							W	WITH
BOT	BOTTOM	ENCL	ENCLOSURE							WD	WINDOW
BRG	BEARING	EQ	EQUAL							W/O	WITHOUT
BRD	BOARD	EQUIP	EQUIPMENT							WP	WORKPOINT
BTWN	BETWEEN	EW	EACH WAY							WPM	WATERPROOFING MEMBRANE SYS
BUR	BUILT UP ROOFING	EO	EDGE OF							WRB	WEATHER (AIR) BARRIER
BW	BOTH WAYS	EXH	EXHAUST								
BYD	BEYOND	EXP	EXPANSION								
		EXPS	EXPOSED STRUCTURE								
		EXIST (E)	EXISTING								
		EXT	EXTERIOR								
C	CAMERA (SECURITY)	F	FINISH								
CAM	CAST IN PLACE	FL	FLOW LINE								
CIP	CONTROL JOINT	FLR	FLOOR								
CJ	COLD FORMED METAL FRAMING	FND	FOUNDATION								
CFMF	CENTERLINE	FO	FACE OF								
CL	CEILING	FOB	FACE OF BRICK								
CLG	CEILING	FOC	FACE OF CONCRETE								
CLJ	CENTERLINE OF JOIST	FOF	FACE OF FINISH								
CLR	CLEAR	FOG	FACE OF GLAZING								
CMU	CONCRETE MASONRY UNIT	FOS	FACE OF SLAB								
CNSK	COUNTERSINK (COUNTERSUNK)	FR	FRAME								
COL	COLUMN	FRT	FIRE RETARDANT TREATED								
CON / CONC	CONCRETE	FS	FULL SIZE								
CONN	CONNECTION	FSNTR	FASTENER								
CONSTR	CONSTRUCTION	FT	FOOT OR FEET								
CONT	CONTINUOUS	FURR	FURRING								
CONTR	CONTRACTOR	FV	FIELD VERIFY								
COORD	COORDINATE										
CW	CURTAIN WALL										

GENERAL NOTES

- STANDARDS AND REGULATIONS**
- CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH APPLICABLE BUILDING CODES, REGULATIONS, ORDINANCES, UTILITY PROVIDER REQUIREMENTS, AND SIMILAR STANDARDS.
 - CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND SIMILAR RELEASES REQUIRED FOR CONSTRUCTION AND OCCUPANCY. CONTRACTOR SHALL FURNISH COPIES OF ALL SUCH ITEMS TO OWNER AND ARCHITECT WITHIN 10 DAYS OF RECEIPT. IF PERMITS ARE ISSUED SUBJECT TO CERTAIN CONDITIONS OR REVISIONS TO THE WORK OR IF PERMITS ARE DELAYED FOR ANY REASON, CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY.
 - CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONTRACTOR SHALL REGULARLY UPDATE OWNER AND ARCHITECT REGARDING THE STATUS OF INSPECTIONS.
 - IF APPLICABLE, CONTRACTOR SHALL FILE NOTICE OF INTENT WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA).
 - CONTRACTOR SHALL COORDINATE WORK WITH ALL APPLICABLE UTILITY PROVIDERS.
 - CONTRACTOR SHALL BE FAMILIAR WITH ALL DOCUMENTS AND WORK SHALL BE IN COMPLIANCE WITH REFERENCED FIRE-RATED ASSEMBLY TESTS & STANDARDS.
 - IF UNANTICIPATED HAZARDOUS MATERIALS ARE ENCOUNTERED, CONTRACTOR SHALL CEASE WORK IN THE AREA AND CONTACT ARCHITECT IMMEDIATELY.

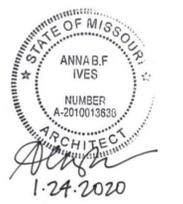
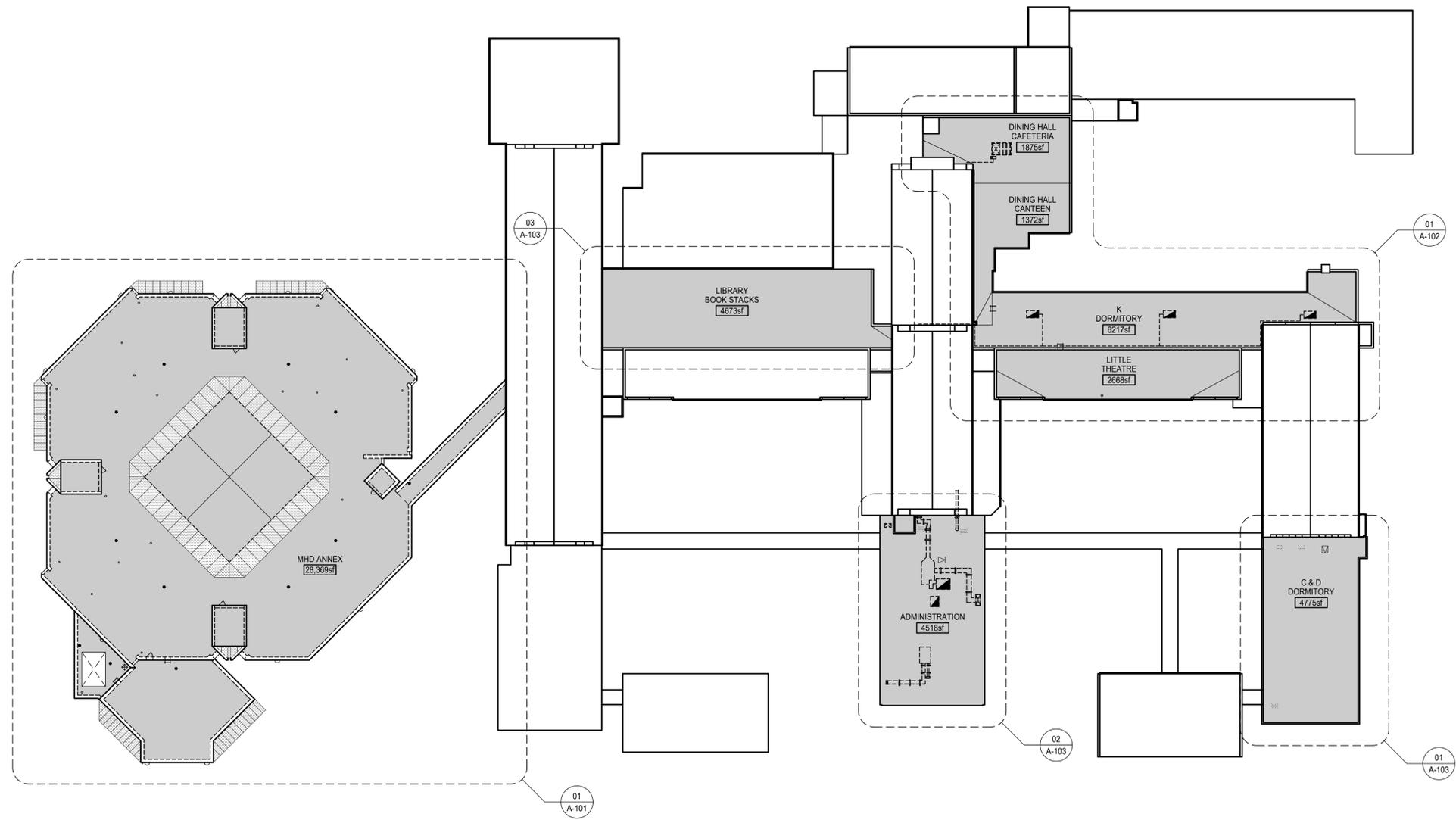
- ADMINISTRATION OF THE WORK**
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION.
 - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION PERSONNEL AND AUTHORIZED VISITORS.
 - CONTRACTOR SHALL BE FULLY ACQUAINTED WITH ALL DOCUMENTS AND CONDITIONS RELATED TO THE WORK. ANY KNOWN DISCREPANCIES BETWEEN THE DOCUMENTS AND ACTUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORK RELATED TO THE DISCREPANCY.
 - CONTRACTOR SHALL TAKE PRECAUTIONS TO MAINTAIN AND PROTECT EXISTING SYSTEMS AND FINISHES WHICH ARE TO REMAIN. ANY DAMAGES TO SUCH CONDITIONS, SYSTEMS, AND FINISHES SHALL BE IMMEDIATELY REPAIRED IN A MANNER ACCEPTABLE TO THE ARCHITECT. IF SATISFACTORY REPAIRS CANNOT BE MADE, CONTRACTOR SHALL REPLACE CONDITIONS, SYSTEMS, AND FINISHES WITH LIKE NEW QUALITY CONSTRUCTION ACCEPTABLE TO THE ARCHITECT. ALL REPAIRS AND REPLACEMENT COSTS SHALL BE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL CONSTRUCTION AND DEMOLITION DEBRIS. CONTRACTOR SHALL OBTAIN APPROVAL OF OWNER AND BUILDING OWNER, IF APPLICABLE, FOR DETAILS RELATED TO REMOVAL OF TRASH, INCLUDING SUCH ISSUES AS PATH OF TRAVEL, USE OF STAIRS AND ELEVATORS, REMOVAL OF WINDOWS, LOCATION OF CHUTES AND DUMPSTERS, ETC., PRIOR TO REMOVAL OF DEBRIS. CONTRACTOR SHALL CLEAN AND REPAIR ANY DAMAGES TO EXISTING SYSTEMS SOILED OR DAMAGED BY DEBRIS REMOVAL PROCESS. IF CLEANING AND REPAIR DOES NOT RETURN SYSTEM(S) TO ORIGINAL CONDITION, CONTRACTOR SHALL INSTALL ALL NEW SYSTEM(S) AT NO COST TO OWNER.
 - CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH OWNER'S (OR BUILDING OWNER'S) PROCEDURES FOR MAINTAINING A SECURE SITE AND BUILDING.
 - WITH AN EXISTING BUILDING, CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH OWNER'S (OR BUILDING OWNER'S) PROCEDURES FOR DISABLING AND REACTIVATING EXISTING BUILDING SYSTEMS.
 - EACH INSTALLER SHALL EXAMINE SUBSTRATE CONDITIONS AND/OR SITE CONDITIONS WHICH AFFECT THE QUALITY OF EACH PRODUCT TO BE INSTALLED. IF ANY CONDITIONS EXIST WHICH WILL HAVE A DETRIMENTAL EFFECT ON THE QUALITY OF THE INSTALLATION, THE INSTALLER SHALL IMMEDIATELY NOTIFY THE CONTRACTOR. INSTALLATION SHALL NOT PROCEED UNTIL THE UNSATISFACTORY CONDITIONS ARE CORRECTED. INSTALLATION SHALL SIGNIFY ACCEPTANCE OF THE CONDITIONS.
 - CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE AT ALL TIMES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COORDINATION EFFORTS OF ALL SUBCONTRACTORS.
 - ALL FIRE SAFETY SYSTEMS (i.e., AUTOMATIC SPRINKLERS, FIRE ALARM, EMERGENCY POWER & LIGHTING, SMOKE CONTROL, FIRE DAMPERS, LABEL DOORS, ETC.) SHALL REMAIN IN OPERATION TO THE MAXIMUM EXTENT POSSIBLE. IF SYSTEMS ARE TAKEN OUT OF OPERATION DURING CONSTRUCTION WORKING HOURS, THE SYSTEMS SHALL BE PLACED BACK INTO SERVICE DURING NON-CONSTRUCTION HOURS. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 - CONTRACTOR SHALL LAY OUT WORK AS SOON AS POSSIBLE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

- USE OF CONSTRUCTION DOCUMENTS**
- CONTRACTOR SHALL NOT SCALE DRAWINGS. ONLY WRITTEN DIMENSIONS OR KEYED NOTES SHALL BE USED. CONTACT ARCHITECT IF CLARIFICATION OR ADDITIONAL INFORMATION IS REQUIRED.
 - INFORMATION REGARDING EXISTING SITE CONDITIONS INDICATED IN THESE DOCUMENTS IS BASED UPON INFORMATION FURNISHED TO THE ARCHITECT BY THE OWNER AND/OR PERCEIVED CONDITIONS IN THE FIELD. THE INFORMATION IS NOT INTENDED TO GUARANTEE EXACT CONDITIONS BEFORE WORK IS STARTED. NOTIFY THE ARCHITECT IF ANY DISCREPANCIES ARE FOUND.
 - DRAWINGS ARE SCHEMATIC IN NATURE. MODIFICATIONS IN DUCTS, PIPING, CONDUIT AND WIRING MAY BE REQUIRED TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
 - DRAWINGS SHALL NOT BE REPRODUCED FOR SUBMITTALS. DRAWINGS OR PORTIONS OF DRAWINGS USED FOR SUBMITTALS WILL BE REJECTED AND RETURNED TO THE CONTRACTOR.
 - ROOF NAMES AND NUMBERS ARE FOR CONSTRUCTION PURPOSES ONLY.

- DEFINITIONS**
- "TYPICAL" OR "TYP" INDICATES IDENTICAL COMPLETE SYSTEM SHALL BE PROVIDED FOR EACH OCCURRENCE OF THE CONDITION NOTED.
 - "SIMILAR" INDICATES COMPLETE SYSTEMS AND COMPONENTS SHALL BE PROVIDED COMPARABLE TO THE CHARACTERISTICS FOR THE CONDITION NOTED.
 - "AS REQUIRED" INDICATES COMPONENTS REQUIRED TO COMPLETE THE NOTED SYSTEM AS INDICATED IN THE PROJECT DOCUMENTS SHALL BE PROVIDED.
 - "ALIGN" AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE AND FINISH FACES OF MATERIALS IN STRAIGHT, TRUE, AND PLUMB RELATION TO ADJACENT MATERIALS; AND/OR TO INSTALL NEW CONSTRUCTION ADJACENT TO EXISTING CONSTRUCTION WITHOUT ANY VISIBLE JOINTS OR SURFACE IRREGULARITIES.
 - "CLEAR" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT. CLEAR DIMENSIONS ARE TYPICALLY TO FINISH FACE.
 - "MAXIMUM" OR "MAX" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY GREATER THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
 - "MINIMUM" OR "MIN" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY LESS THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
 - "HOLD" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT, AND IN SOME CASES IT MAY REQUIRE EXCEEDING TOLERANCES DEFINED IN SPECIFICATIONS.

- DIMENSIONS**
- DIMENSIONS ARE AS FOLLOWS UNLESS OTHERWISE NOTED. A) TO FINISHED FACE OF PARTITION OR EXTERIOR WALL. B) TO CENTERLINE OF COLUMNS AND STRUCTURAL GRID. C) TO TOP OF STRUCTURAL FLOOR. D) TO BOTTOM (INTERIOR FACE) OF FINISHED CEILING.
 - DIMENSIONS INDICATED AS "O CMU" ARE FROM FACE OF CMU TO WORKPOINT (WP); "FO WD" ARE FROM FACE OF WOOD FINISH TO WORKPOINT (WP).
 - ALIGNMENT OF PARTITIONS AND FINISHES AS SCHEDULED SHALL BE STRAIGHT, TRUE & PLUMB. THE PRIORITY FOR PROJECT DIMENSIONS SHALL BE IN THE FOLLOWING ORDER:
A. MINIMUM DIMENSION FOR ACCESSIBILITY CLEARANCE & BUILDING CODE REQUIREMENT
B. LARGE SCALE DETAILS
C. SMALL SCALE DETAILS
D. ENLARGED VIEWS
E. FLOOR PLANS & ELEVATIONS
 - DIMENSIONS SHOWN ON THE DRAWINGS INDICATE THE REQUIRED SIZE, CLEARANCE, AND DIMENSIONAL RELATIONSHIP BETWEEN PROJECT SYSTEMS AND COMPONENTS. DIMENSIONS SHALL NOT BE DETERMINED BY SCALING THE DRAWINGS.

ROOF PLAN LEGEND



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DEPARTMENT OF
ELEMENTARY AND
SECONDARY EDUCATION

ROOF REPLACEMENT

MISSOURI
SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
SAINT LOUIS, MO 63110

PROJECT # E1908-01
ASSET # 5012011007
5012011009

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 01/24/2020

CAD DWG FILE: E1908-01 2011 A-100
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP / MG

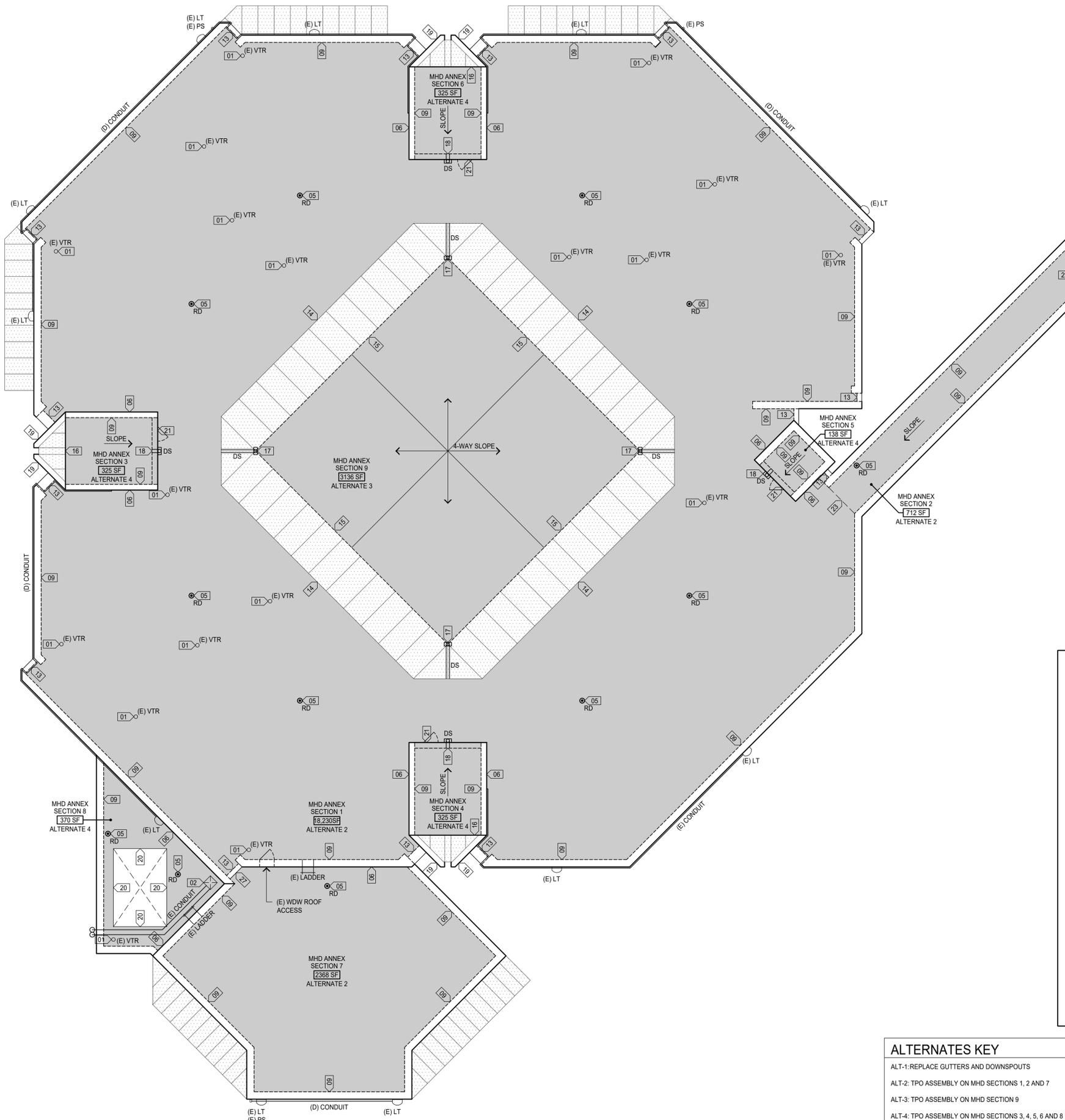
SHEET TITLE:

OVERALL
ROOF PLAN

SHEET NUMBER:

A-100

2 OF 10 SHEETS
01/24/2020



ALTERNATES KEY	
ALT-1:	REPLACE GUTTERS AND DOWNSPOUTS
ALT-2:	TPO ASSEMBLY ON MHD SECTIONS 1, 2 AND 7
ALT-3:	TPO ASSEMBLY ON MHD SECTION 9
ALT-4:	TPO ASSEMBLY ON MHD SECTIONS 3, 4, 5, 6 AND 8



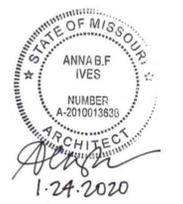
ROOF PLAN GENERAL NOTES

- A. REFERENCE SHEET A-100 FOR PROJECT GENERAL NOTES AND CONDITIONS.
- B. REFERENCE SHEET A-500 FOR EXISTING ROOF ASSEMBLY TYPES. CONTRACTOR TO FIELD VERIFY EXISTING CONSTRUCTION AND CONDITIONS, PROVIDED INFORMATION REPRESENTS ONLY CORED AREAS.
- C. REFERENCE SHEET A-501 FOR NEW ROOF ASSEMBLY TYPES.
- D. ALL ROOF AREAS WITHIN PROJECT SCOPE ARE TO MEET FM GLOBAL REQUIREMENTS FOR FM 1A-99. INCREASE FASTENER RATES AND ADHESIVE BEAD PATTERN DENSITIES AT PERIMETERS PER TESTED FM GLOBAL ASSEMBLY. SUBMIT ADHESIVE SHOP DRAWINGS ILLUSTRATING PATTERNS AND PERIMETER WIDTHS FOR APPROVAL PRIOR TO COMMENCING WORK.
- E. PROVIDE AND INSTALL WALK PADS AT EACH OF THE FOLLOWING ON ALL ROOF AREAS UNLESS OTHERWISE NOTED: LADDERS, ACCESS POINTS, DOWNSPOUT DISCHARGE POINTS, ACCESS DOORS, AND ROOFTOP EQUIPMENT REQUIRING MAINTENANCE.
- F. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, CALCULATE ALL QUANTITIES, AND DETERMINE SUITABILITY.
- G. CONTRACTOR TO INSTALL NEW WOOD BLOCKING AND/OR ADJUST/REMOVE EXISTING BLOCKING TO HEIGHTS NECESSARY TO ACCOMMODATE THE HEIGHT OF NEW ROOF ASSEMBLIES AND EDGE PROFILES. PERIMETER DETAILING AND SECUREMENT TO COMPLY WITH FM GLOBAL 1-49.
- H. METAL TRIM FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS UNLESS OTHERWISE NOTED.
- I. ALL REQUIRED DISCONNECTIONS AND RECONNECTIONS OF EQUIPMENT, PLUMBING, MECHANICAL, AND ELECTRICAL AS REQUIRED AS PART OF PROPER INSTALLATION OF ROOF ASSEMBLIES AND DETAILS SHALL BE PROVIDED BY CONTRACTOR.
- J. INSTALL PRE-MANUFACTURED SUPPORTS UNDER ALL ELEC CONDUIT AND CONDENSATE LINES SERVING EQUIPMENT TO REMAIN AND SPACE 6'-0" OC. PROVIDE NEW CONDENSATE LINES FOR EQUIPMENT TO REMAIN AND RUN LINES TO NEAREST GUTTER / DRAIN.
- K. ALL LADDERS, UNIT SKYLIGHTS, EXHAUST FANS AND ROOF HATCHES TO REMAIN. REMOVE AND REINSTALL FOR ROOF REPLACEMENT. ADJUST CURBS TO MEET ROOF ASSEMBLY REQUIREMENTS.

ROOF PLAN KEY NOTES

- 01 FLASH EXIST ROOF PENETRATION - PIPE. REF 01/A-502 FOR DETAIL. REMOVE EXIST FLASHING, SEALANT AND ASSOCIATED COMPONENTS. CLEAN, PREPARE AND APPLY FIELD WRAP FLASHING OR BOOT FLASHING PER MEMBRANE MANUFACTURER'S RECOMMENDATIONS. EXTEND ALL PIPES TO 12" MIN ABOVE NEW ROOF ASSEMBLY HEIGHT.
- 02 FLASH EXIST BASE CURB. REF 04/A-502 FOR DETAIL. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS. CLEAN AND PREPARE CURB AS REQUIRED TO ACCEPT NEW FLASHING. RAISE EQUIPMENT AS REQUIRED FOR 12" MIN FLASHING HEIGHT. FULLY ADHERE AND TERMINATE NEW FLASHING TO THE CURB AS REQUIRED. INSTALL FLASHING UP AND OVER TOP OF CURB.
- 03 FLASH EXIST ROOF PENETRATION - HOT FLUE. REF 02/A-502 FOR DETAIL. REMOVE EXIST FLASHING. GAP INSULATION AT HOT STACK TO DISSIPATE HEAT AND INSTALL OVERSIZED FLANGE AS REQUIRED TO GAP AND DISSIPATE HEAT.
- 04 SEALANT POCKET. REF DETAIL 03/A-502. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS FROM PENETRATIONS. CLEAN, PREPARE AND PRIME ALL SURFACES AS REQUIRED. TOP OFF SEALANT AT PROJECT COMPLETION.
- 05 EXISTING ROOF DRAIN. REF DETAIL 05/A-502. REMOVE ALL EXIST FLASHING AND ASSOCIATED COMPONENTS. SALVAGE EXIST CLAMPING COLLAR AND STRAINER FOR REUSE. REPLACE DRAIN BOWL UNDER UNIT COST AS APPROVED. EXIST DRAINS SIT ABOVE DECK. INSTALL SUMPS ACCORDINGLY TO PROVIDE POSITIVE SLOPE TO DRAIN.
- 06 BASE BID & ALTERNATE 2: SURFACE-MOUNT COUNTERFLASHING. REF 01/A-503. REMOVE EXIST FLASHING. TERMINATION BAR AND COUNTERFLASHING. DO NOT COVER OR RESTRICT WEEPS. REFERENCE A-101 FOR ALTERNATE 2 LOCATIONS.
- 07 SLIP FLASHING AT EXIST GUTTER. REF DETAIL 04/A-503. REMOVE EXIST FLASHING AND TERMINATION BAR. PROTECT IN PLACE EXIST GUTTER AND FLASHING BEHIND. DO NOT COVER OR RESTRICT WEEPS.
- 08 FLASHING AT EXIST PLYWOOD WALL ENCLOSURE. REF 05/A-503. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS DOWN TO PLYWOOD SHEATHING. PREP FOR NEW WORK. DO NOT COVER OR RESTRICT WEEPS.
- 09 BASE BID & ALTERNATES: METAL EDGE AT PARAPET. REF 02/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION. CONTINUE METAL EDGE AND COUNTERFLASHING DOWN VERTICAL SIDES OF PARAPET AT CRENNELS TO COVER TERMINATION BAR. REMOVE AND REINSTALL CONDUIT AND FIXTURES AS REQUIRED TO INSTALL COPING. REPLACE CONDUIT UNDER UNIT COST AS APPROVED. REFERENCE A-101 FOR LOCATIONS OF ASSOCIATED ALTERNATE.
- 10 METAL EDGE AT STEP TRANSITION. REF 03/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
- 11 METAL EDGE EXTENSION AT COPING. REF 06/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
- 12 TPO-COATED METAL EDGE. REF 07/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING.
- 13 ALTERNATE 2: CRENNEL GLAZING DETAIL. REF 08/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION. REMOVE AND REINSTALL CONDUIT AS REQUIRED TO INSTALL ROOF ASSEMBLY. REPLACE CONDUIT UNDER UNIT COST AS APPROVED.
- 14 BASE BID & ALTERNATE 2: SKYLIGHT CURB FLASHING. REF 09/A-503. REMOVE MODIFIED BITUMEN FLASHING. CLEAN AND PREPARE METAL FLASHING FOR REUSE.
- 15 BASE BID & ALTERNATE 3: METAL EDGE AT SKYLIGHT. REF 10/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. SECURE WOOD BLOCKING AS REQUIRED PER FM 1-49. INSTALL ALL COMPONENTS ACCORDING TO MFR'S REC FOR WARRANTY INCLUSION.
- 16 ALTERNATE 4: GRAVEL STOP AT SKYLIGHT. REF 11/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. SECURE WOOD BLOCKING AS REQUIRED PER FM 1-49. INSTALL ALL COMPONENTS ACCORDING TO MFR'S REC FOR WARRANTY INCLUSION.
- 17 REMOVE AND REPLACE COLLECTOR HEAD AND DOWNSPOUTS WITH NEW METAL COLLECTOR HEAD AND DOWNSPOUTS. MATCH SIZE AND PROFILE OF EXIST, REF SPEC FOR METAL FINISH.
- 18 ALTERNATE 4: SCUPPER AND COLLECTOR HEAD. REF 01/A-504. REMOVE EXISTING SCUPPER, COLLECTOR HEAD AND DOWNSPOUT.
- 19 ALTERNATE 4: REMOVE EXIST COPING CAP ALONG SKYLIGHTS. SECURE EXIST BLOCKING PER FM 1-49 PRIOR TO INSTALLATION OF NEW METAL COPING SYSTEM TO MATCH EXIST IN SIZE AND EXTENT, FINISH TO MATCH NEW METAL EDGE AT SKYLIGHT GRAVEL STOP.
- 20 ALTERNATE 4: METAL EDGE DETAIL. REF 02/A-504. REMOVE EXIST MEMBRANE AND EDGE METAL. INSTALL WOOD BLOCKING TO MATCH HEIGHT OF NEW ROOF ASSEMBLY. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
- 21 ALTERNATE 2: THRESHOLD DETAIL. REF 03/A-504. REMOVE THRESHOLD HARDWARE AT EXIST OPENING.
- 22 ALTERNATE 2: ROOF TO WALL EXPANSION JOINT. REF 08/A-504. REMOVE ALL EXIST COMPONENTS TO DECK.
- 23 ALTERNATE 2: ROOF TO ROOF EXPANSION JOINT. REF 07/A-504. REMOVE ALL EXIST COMPONENTS TO DECK.
- 24 BASE BID & ALTERNATE 1: TYPICAL GUTTER DETAIL. REF 04/A-504. BLOCKING AND GUTTER ATTACHMENT TO COMPLY WITH SMACNA, FM 1-49, AND ANSIS/SPRI ES-1 AS APPLICABLE.
- 25 BASE BID & ALTERNATE 1: GUTTER DETAIL AT K DORMITORY. REF 05/A-504. BLOCKING AND GUTTER ATTACHMENT TO COMPLY WITH SMACNA, FM 1-49, AND ANSIS/SPRI ES-1 AS APPLICABLE.
- 26 STEP TRANSITION DETAIL. REF 06/A-504. REMOVE EXIST FLASHING AND GUTTER SYSTEM.
- 27 ALTERNATE 2: WINDOW SILL FLASHING. REF 09/A-504. REMOVE EXIST MEMBRANE, FLASHING, METAL TRANSITIONS AND SEALANT.
- 28 REMOVE CONDUIT / EXT DUCTWORK AND ASSOCIATED SUPPORTS / CURBS PRIOR TO NEW ROOF INSTALLATION. INFILL OPENINGS TO MATCH ADJACENT CONDITIONS AND MATERIALS. REF NOTE 29 FOR INFILL REQS IN DECK OPENINGS.
- 29 REMOVE EXIST NON-FUNCTIONING EQUIPMENT, ASSOCIATED SUPPORTS / CURBS, AND CONDUIT. INSTALL 3/16" STEEL PLATE OVER DECK OPENING. EXTEND PLATE 6" MIN BEYOND OPENING DIMENSIONS AND FASTEN AT CORNERS & 12" OC AT SIDES.

STATE OF MISSOURI
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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
ELEMENTARY AND
SECONDARY EDUCATION

ROOF REPLACEMENT

MISSOURI
SCHOOL FOR THE BLIND
3815 MAGNOLIA AVENUE
SAINT LOUIS, MO 63110

PROJECT # E1908-01
ASSET # 5012011007
5012011009

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 01/24/2020

CAD DWG FILE: E1908-01 2011 A-101
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP / MG

SHEET TITLE:

ENLARGED
ROOF PLAN

SHEET NUMBER:

A-101

3 OF 10 SHEETS
01/24/2020



ARCHITECT:

patterhn ives llc
7751 carondelet avenue
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st louis missouri 63105
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www.patterhn-ives.com
MO State Certificate of Authority #A2014032538

ROOF CONSULTANT:

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REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 01/24/2020

CAD DWG FILE: E1908-01 2011 A-102
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP / MG

SHEET TITLE:

ENLARGED
ROOF PLAN

SHEET NUMBER:

A-102

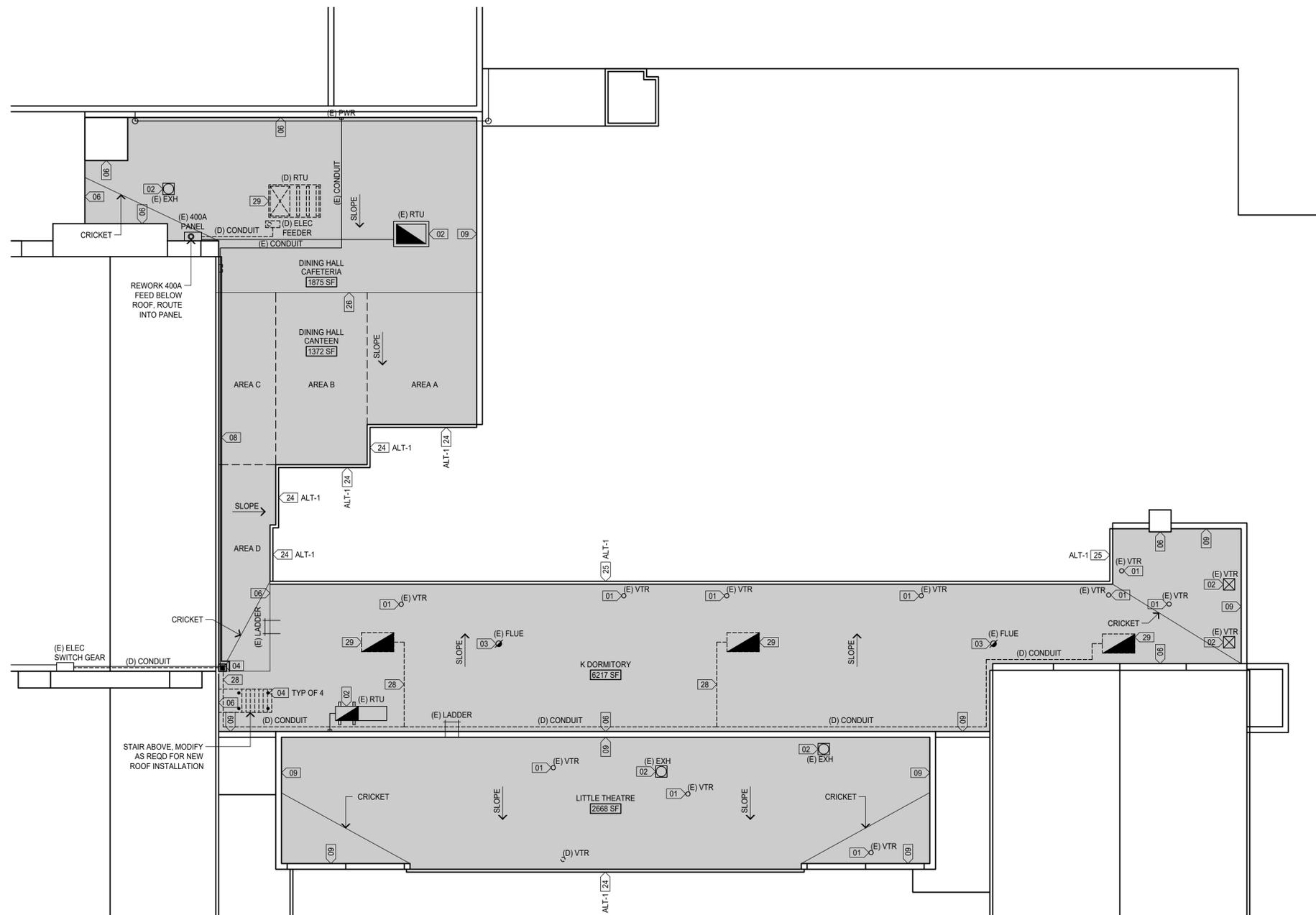
4 OF 10 SHEETS
01/24/2020

ROOF PLAN GENERAL NOTES

- A. REFERENCE SHEET A-100 FOR PROJECT GENERAL NOTES AND CONDITIONS.
- B. REFERENCE SHEET A-500 FOR EXISTING ROOF ASSEMBLY TYPES. CONTRACTOR TO FIELD VERIFY EXISTING CONSTRUCTION AND CONDITIONS. PROVIDED INFORMATION REPRESENTS ONLY CORED AREAS.
- C. REFERENCE SHEET A-501 FOR NEW ROOF ASSEMBLY TYPES.
- D. ALL ROOF AREAS WITHIN PROJECT SCOPE ARE TO MEET FM GLOBAL REQUIREMENTS FOR FM 1A-99. INCREASE FASTENER RATES AND ADHESIVE BEAD PATTERN DENSITIES AT PERIMETERS PER TESTED FM GLOBAL ASSEMBLY. SUBMIT ADHESIVE SHOP DRAWINGS ILLUSTRATING PATTERNS AND PERIMETER WIDTHS FOR APPROVAL PRIOR TO COMMENCING WORK.
- E. PROVIDE AND INSTALL WALK PADS AT EACH OF THE FOLLOWING ON ALL ROOF AREAS UNLESS OTHERWISE NOTED: LADDERS, ACCESS POINTS, DOWNSPOUT DISCHARGE POINTS, ACCESS DOORS, AND ROOFTOP EQUIPMENT REQUIRING MAINTENANCE.
- F. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, CALCULATE ALL QUANTITIES, AND DETERMINE SUITABILITY.
- G. CONTRACTOR TO INSTALL NEW WOOD BLOCKING AND/OR ADJUST/REMOVE EXISTING BLOCKING TO HEIGHTS NECESSARY TO ACCOMMODATE THE HEIGHT OF NEW ROOF ASSEMBLIES AND EDGE PROFILES. PERIMETER DETAILING AND SECUREMENT TO COMPLY WITH FM GLOBAL 1-49.
- H. METAL TRIM FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS UNLESS OTHERWISE NOTED.
- I. ALL REQUIRED DISCONNECTIONS AND RECONNECTIONS OF EQUIPMENT, PLUMBING, MECHANICAL, AND ELECTRICAL AS REQUIRED AS PART OF PROPER INSTALLATION OF ROOF ASSEMBLIES AND DETAILS SHALL BE PROVIDED BY CONTRACTOR.
- J. INSTALL PRE-MANUFACTURED SUPPORTS UNDER ALL ELEC CONDUIT AND CONDENSATE LINES SERVING EQUIPMENT TO REMAIN AND SPACE 6'-0" OC. PROVIDE NEW CONDENSATE LINES FOR EQUIPMENT TO REMAIN AND RUN LINES TO NEAREST GUTTER / DRAIN.
- K. ALL LADDERS, UNIT SKYLIGHTS, EXHAUST FANS AND ROOF HATCHES TO REMAIN. REMOVE AND REINSTALL ROOF FOR ROOF REPLACEMENT. ADJUST CURBS TO MEET ROOF ASSEMBLY REQUIREMENTS.

ROOF PLAN KEY NOTES

- 01 FLASH EXIST ROOF PENETRATION - PIPE. REF 01/A-502 FOR DETAIL. REMOVE EXIST FLASHING, SEALANT AND ASSOCIATED COMPONENTS. CLEAN, PREPARE AND APPLY FIELD WRAP FLASHING OR BOOT FLASHING PER MEMBRANE MANUFACTURER'S RECOMMENDATIONS. EXTEND ALL PIPES TO 12" MIN ABOVE NEW ROOF ASSEMBLY HEIGHT.
- 02 FLASH EXIST BASE CURB. REF 04/A-502 FOR DETAIL. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS. CLEAN AND PREPARE CURB AS REQUIRED TO ACCEPT NEW FLASHING. RAISE EQUIPMENT AS REQUIRED FOR 12" MIN FLASHING HEIGHT. FULLY ADHERE AND TERMINATE NEW FLASHING TO THE CURB AS REQUIRED. INSTALL FLASHING UP AND OVER TOP OF CURB.
- 03 FLASH EXIST ROOF PENETRATION - HOT FLUE. REF 02/A-502 FOR DETAIL. REMOVE EXIST FLASHING. GAP INSULATION AT HOT STACK TO DISSIPATE HEAT AND INSTALL OVERSIZED FLANGE AS REQUIRED TO GAP AND DISSIPATE HEAT.
- 04 SEALANT POCKET. REF DETAIL 03/A-502. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS FROM PENETRATIONS. CLEAN, PREPARE AND PRIME ALL SURFACES AS REQUIRED. TOP OFF SEALANT AT PROJECT COMPLETION.
- 05 EXISTING ROOF DRAIN. REF DETAIL 05/A-502. REMOVE ALL EXIST FLASHING AND ASSOCIATED COMPONENTS. SALVAGE EXIST CLAMPING COLLAR AND STRAINER FOR REUSE. REPLACE DRAIN BOWL UNDER UNIT COST AS APPROVED. EXIST DRAINS SIT ABOVE DECK. INSTALL SUMPS ACCORDINGLY TO PROVIDE POSITIVE SLOPE TO DRAIN.
- 06 BASE BID & ALTERNATE 2: SURFACE-MOUNT COUNTERFLASHING. REF 01/A-503. REMOVE EXIST FLASHING. TERMINATION BAR AND COUNTERFLASHING. DO NOT COVER OR RESTRICT WEEPS. REFERENCE A-101 FOR ALTERNATE 2 LOCATIONS.
- 07 SLIP FLASHING AT EXIST GUTTER. REF DETAIL 04/A-503. REMOVE EXIST FLASHING AND TERMINATION BAR. PROTECT IN PLACE EXIST GUTTER AND FLASHING BEHIND. DO NOT COVER OR RESTRICT WEEPS.
- 08 FLASHING AT EXIST PLYWOOD WALL ENCLOSURE. REF 05/A-503. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS DOWN TO PLYWOOD SHEATHING. PREP FOR NEW WORK. DO NOT COVER OR RESTRICT WEEPS.
- 09 BASE BID & ALTERNATES: METAL EDGE AT PARAPET. REF 02/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION. CONTINUE METAL EDGE AND COUNTERFLASHING DOWN VERTICAL SIDES OF PARAPET AT CRENNELS TO COVER TERMINATION BAR. REMOVE AND REINSTALL CONDUIT AND FIXTURES AS REQUIRED TO INSTALL COPING. REPLACE CONDUIT UNDER UNIT COST AS APPROVED. REFERENCE A-101 FOR LOCATIONS OF ASSOCIATED ALTERNATE.
- 10 METAL EDGE AT STEP TRANSITION. REF 03/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
- 11 METAL EDGE EXTENSION AT COPING. REF 06/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
- 12 TPO-COATED METAL EDGE. REF 07/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING.
- 13 ALTERNATE 2: CRENNEL GLAZING DETAIL. REF 08/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION. REMOVE AND REINSTALL CONDUIT AS REQUIRED TO INSTALL ROOF ASSEMBLY. REPLACE CONDUIT UNDER UNIT COST AS APPROVED.
- 14 BASE BID & ALTERNATE 2: SKYLIGHT CURB FLASHING. REF 09/A-503. REMOVE MODIFIED BITUMEN FLASHING. CLEAN AND PREPARE METAL FLASHING FOR REUSE.
- 15 BASE BID & ALTERNATE 3: METAL EDGE AT SKYLIGHT. REF 10/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. SECURE WOOD BLOCKING AS REQUIRED PER FM 1-49. INSTALL ALL COMPONENTS ACCORDING TO MFR'S REC FOR WARRANTY INCLUSION.
- 16 ALTERNATE 4: GRAVEL STOP AT SKYLIGHT. REF 11/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. SECURE WOOD BLOCKING AS REQUIRED PER FM 1-49. INSTALL ALL COMPONENTS ACCORDING TO MFR'S REC FOR WARRANTY INCLUSION.
- 17 REMOVE AND REPLACE COLLECTOR HEAD AND DOWNSPOUTS WITH NEW METAL COLLECTOR HEAD AND DOWNSPOUTS. MATCH SIZE AND PROFILE OF EXIST, REF SPEC FOR METAL FINISH.
- 18 ALTERNATE 4: SCUPPER AND COLLECTOR HEAD. REF 01/A-504. REMOVE EXISTING SCUPPER, COLLECTOR HEAD AND DOWNSPOUT.
- 19 ALTERNATE 4: REMOVE EXIST COPING CAP ALONG SKYLIGHTS. SECURE EXIST BLOCKING PER FM 1-49 PRIOR TO INSTALLATION OF NEW METAL COPING SYSTEM TO MATCH EXIST IN SIZE AND EXTENT, FINISH TO MATCH NEW METAL EDGE AT SKYLIGHT GRAVEL STOP.
- 20 ALTERNATE 4: METAL EDGE DETAIL. REF 02/A-504. REMOVE EXIST MEMBRANE AND EDGE METAL. INSTALL WOOD BLOCKING TO MATCH HEIGHT OF NEW ROOF ASSEMBLY. INSTALL ALL COMPONENTS ACCORDING TO ANSIS/SPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
- 21 ALTERNATE 2: THRESHOLD DETAIL. REF 03/A-504. REMOVE THRESHOLD HARDWARE AT EXIST OPENING.
- 22 ALTERNATE 2: ROOF TO WALL EXPANSION JOINT. REF 08/A-504. REMOVE ALL EXIST COMPONENTS TO DECK.
- 23 ALTERNATE 2: ROOF TO ROOF EXPANSION JOINT. REF 07/A-504. REMOVE ALL EXIST COMPONENTS TO DECK.
- 24 BASE BID & ALTERNATE 1: TYPICAL GUTTER DETAIL. REF 04/A-504. BLOCKING AND GUTTER ATTACHMENT TO COMPLY WITH SMACNA, FM 1-49, AND ANSIS/SPRI ES-1 AS APPLICABLE.
- 25 BASE BID & ALTERNATE 1: GUTTER DETAIL AT K DORMITORY. REF 05/A-504. BLOCKING AND GUTTER ATTACHMENT TO COMPLY WITH SMACNA, FM 1-49, AND ANSIS/SPRI ES-1 AS APPLICABLE.
- 26 STEP TRANSITION DETAIL. REF 06/A-504. REMOVE EXIST FLASHING AND GUTTER SYSTEM.
- 27 ALTERNATE 2: WINDOW SILL FLASHING. REF 09/A-504. REMOVE EXIST MEMBRANE, FLASHING, METAL TRANSITIONS AND SEALANT.
- 28 REMOVE CONDUIT / EXT DUCTWORK AND ASSOCIATED SUPPORTS / CURBS PRIOR TO NEW ROOF INSTALLATION. INFILL OPENINGS TO MATCH ADJACENT CONDITIONS AND MATERIALS. REF NOTE 29 FOR INFILL REQ IN DECK OPENINGS.
- 29 REMOVE EXIST NON-FUNCTIONING EQUIPMENT, ASSOCIATED SUPPORTS / CURBS, AND CONDUIT. INSTALL 3/16" STEEL PLATE OVER DECK OPENING. EXTEND PLATE 6" MIN BEYOND OPENING DIMENSIONS AND FASTEN AT CORNERS & 12" OC AT SIDES.



ALTERNATES KEY

- ALT-1: REPLACE GUTTERS AND DOWNSPOUTS
- ALT-2: TPO ASSEMBLY ON MHD SECTIONS 1, 2 AND 7
- ALT-3: TPO ASSEMBLY ON MHD SECTION 9
- ALT-4: TPO ASSEMBLY ON MHD SECTIONS 3, 4, 5, 6 AND 8



3/32"=1'-0" 0 3' 6' 12' 24'



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PROJECT # E1908-01
ASSET # 5012011007
5012011009

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 01/24/2020

CAD DWG FILE: E1908-01 2011 A-103
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP / MG

SHEET TITLE:

ENLARGED
ROOF PLANS

SHEET NUMBER:

A-103

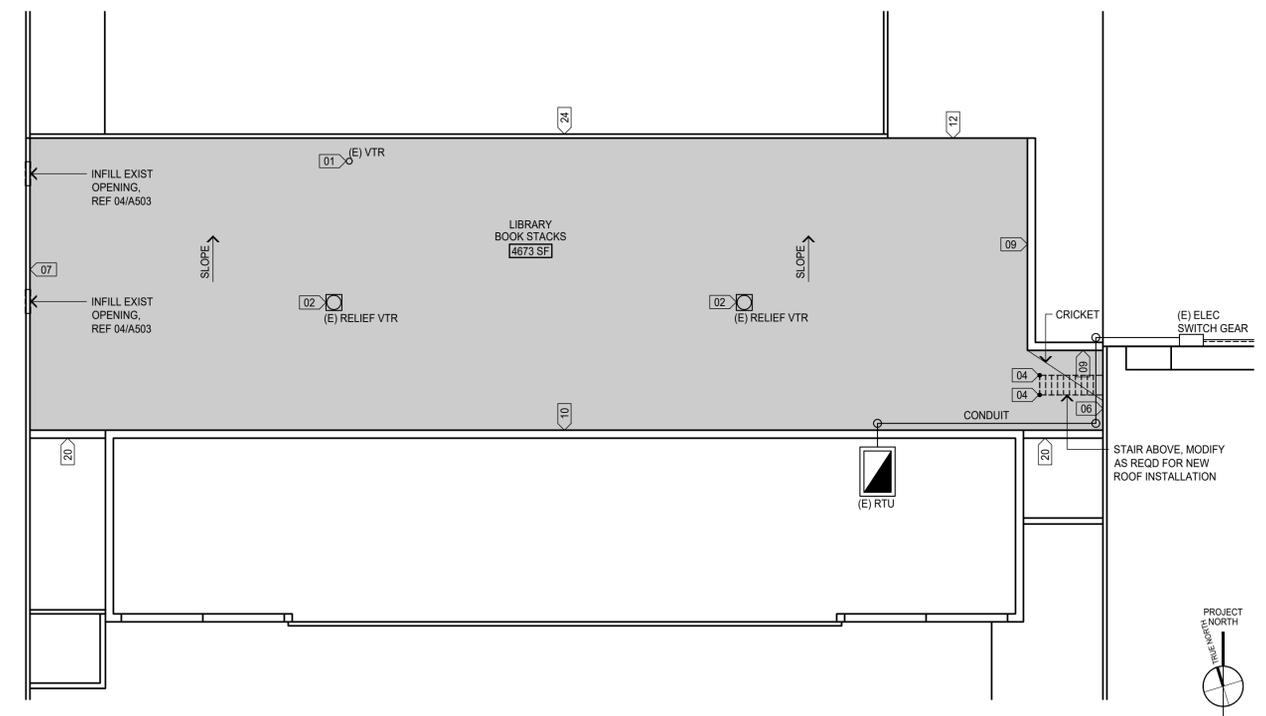
5 OF 10 SHEETS
01/24/2020

ROOF PLAN GENERAL NOTES

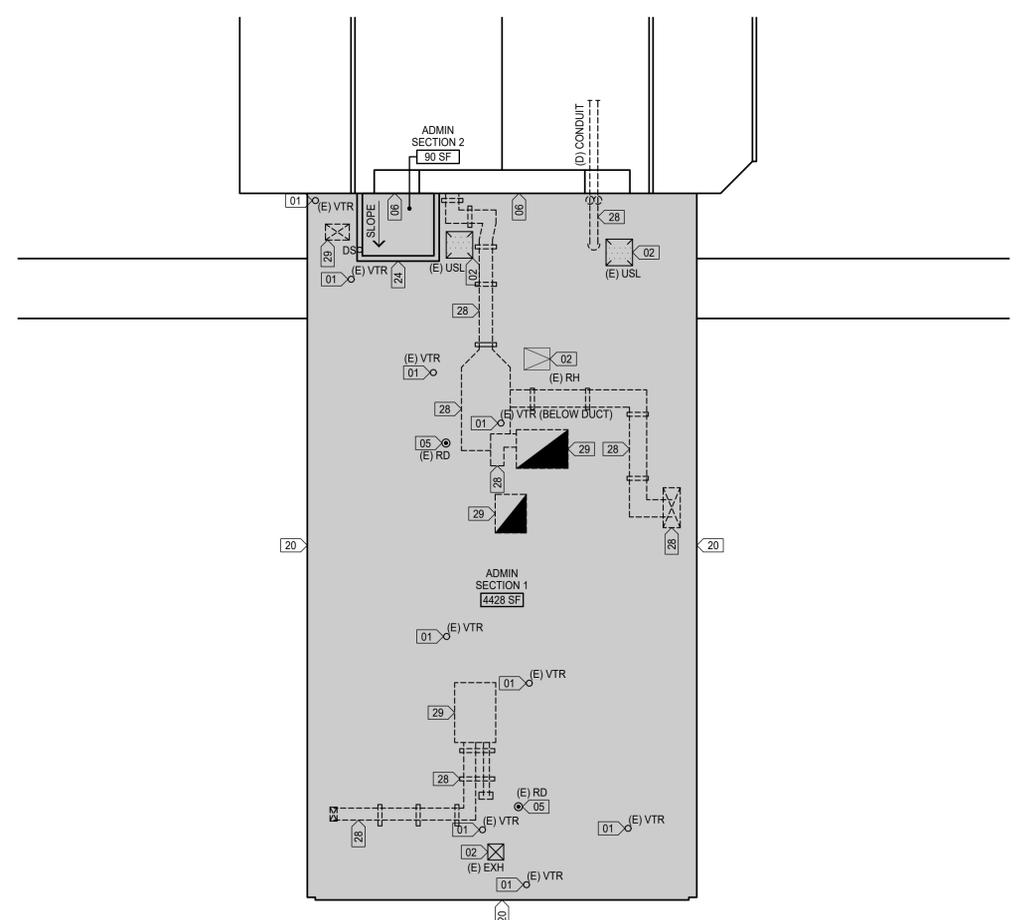
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- D. ALL ROOF AREAS WITHIN PROJECT SCOPE ARE TO MEET FM GLOBAL REQUIREMENTS FOR FM 1A-90. INCREASE FASTENER RATES AND ADHESIVE BEAD PATTERN DENSITIES AT PERIMETERS PER TESTED FM GLOBAL ASSEMBLY. SUBMIT ADHESIVE SHOP DRAWINGS ILLUSTRATING PATTERNS AND PERIMETER WIDTHS FOR APPROVAL PRIOR TO COMMENCING WORK.
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- F. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, CALCULATE ALL QUANTITIES, AND DETERMINE SUITABILITY.
- G. CONTRACTOR TO INSTALL NEW WOOD BLOCKING AND/OR ADJUST/REMOVE EXISTING BLOCKING TO HEIGHTS NECESSARY TO ACCOMMODATE THE HEIGHT OF NEW ROOF ASSEMBLIES AND EDGE PROFILES. PERIMETER DETAILING AND SECUREMENT TO COMPLY WITH FM GLOBAL 1-49.
- H. METAL TRIM FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS UNLESS OTHERWISE NOTED.
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- J. INSTALL PRE-MANUFACTURED SUPPORTS UNDER ALL ELEC CONDUIT AND CONDENSATE LINES SERVING EQUIPMENT TO REMAIN AND SPACE 6'-0" OC. PROVIDE NEW CONDENSATE LINES FOR EQUIPMENT TO REMAIN AND RUN LINES TO NEAREST GUTTER / DRAIN.
- K. ALL LADDERS, UNIT SKYLIGHTS, EXHAUST FANS AND ROOF HATCHES TO REMAIN. REMOVE AND REINSTALL FOR ROOF REPLACEMENT. ADJUST CURBS TO MEET ROOF ASSEMBLY REQUIREMENTS.

ROOF PLAN KEY NOTES

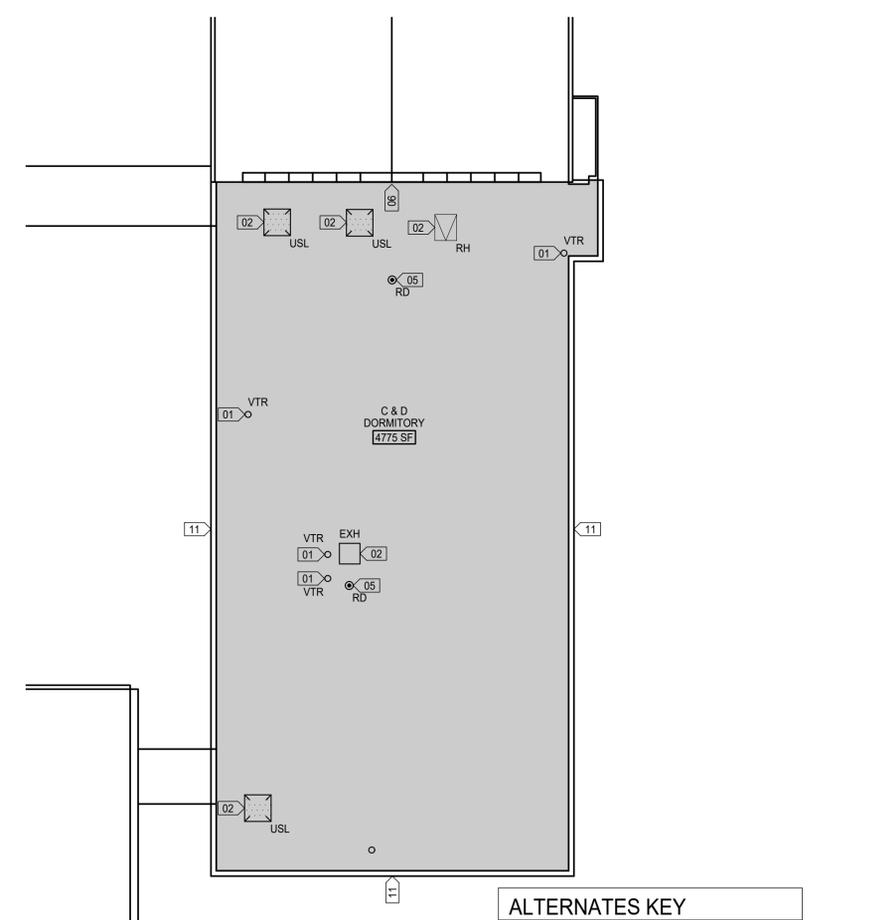
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- 05 EXISTING ROOF DRAIN. REF DETAIL 05/A-502. REMOVE ALL EXIST FLASHING AND ASSOCIATED COMPONENTS. SALVAGE EXIST CLAMPING COLLAR AND STRAINER FOR REUSE. REPLACE DRAIN BOWL UNDER UNIT COST AS APPROVED. EXIST DRAINS SIT ABOVE DECK. INSTALL SUMPS ACCORDINGLY TO PROVIDE POSITIVE SLOPE TO DRAIN.
- 06 BASE BID & ALTERNATE 2: SURFACE-MOUNT COUNTERFLASHING. REF 01/A-503. REMOVE EXIST FLASHING. TERMINATION BAR AND COUNTERFLASHING. DO NOT COVER OR RESTRICT WEEPS. REFERENCE A-101 FOR ALTERNATE 2 LOCATIONS.
- 07 SLIP FLASHING AT EXIST GUTTER. REF DETAIL 04/A-503. REMOVE EXIST FLASHING AND TERMINATION BAR. PROTECT IN PLACE EXIST GUTTER AND FLASHING BEHIND. DO NOT COVER OR RESTRICT WEEPS.
- 08 FLASHING AT EXIST PLYWOOD WALL ENCLOSURE. REF 05/A-503. REMOVE EXIST FLASHING AND ASSOCIATED COMPONENTS DOWN TO PLYWOOD SHEATHING. PREP FOR NEW WORK. DO NOT COVER OR RESTRICT WEEPS.
- 09 BASE BID & ALTERNATES: METAL EDGE AT PARAPET. REF 02/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSISPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION. CONTINUE METAL EDGE AND COUNTERFLASHING DOWN VERTICAL SIDES OF PARAPET AT CRENNELS TO COVER TERMINATION BAR. REMOVE AND REINSTALL CONDUIT AND FIXTURES AS REQUIRED TO INSTALL COPING. REPLACE CONDUIT UNDER UNIT COST AS APPROVED. REFERENCE A-101 FOR LOCATIONS OF ASSOCIATED ALTERNATE.
- 10 METAL EDGE AT STEP TRANSITION. REF 03/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. INSTALL ALL COMPONENTS ACCORDING TO ANSISPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
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- 14 BASE BID & ALTERNATE 2: SKYLIGHT CURB FLASHING. REF 09/A-503. REMOVE MODIFIED BITUMEN FLASHING. CLEAN AND PREPARE METAL FLASHING FOR REUSE.
- 15 BASE BID & ALTERNATE 3: METAL EDGE AT SKYLIGHT. REF 10/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. SECURE WOOD BLOCKING AS REQUIRED PER FM 1-49. INSTALL ALL COMPONENTS ACCORDING TO MFR'S REC FOR WARRANTY INCLUSION.
- 16 ALTERNATE 4: GRAVEL STOP AT SKYLIGHT. REF 11/A-503. REMOVE EXIST MEMBRANE, FLASHING AND METAL COPING. SECURE WOOD BLOCKING AS REQUIRED PER FM 1-49. INSTALL ALL COMPONENTS ACCORDING TO MFR'S REC FOR WARRANTY INCLUSION.
- 17 REMOVE AND REPLACE COLLECTOR HEAD AND DOWNSPOUTS WITH NEW METAL COLLECTOR HEAD AND DOWNSPOUTS. MATCH SIZE AND PROFILE OF EXIST, REF SPEC FOR METAL FINISH.
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- 19 ALTERNATE 4: REMOVE EXIST COPING CAP ALONG SKYLIGHTS. SECURE EXIST BLOCKING PER FM 1-49 PRIOR TO INSTALLATION OF NEW METAL COPING SYSTEM TO MATCH EXIST IN SIZE AND EXTENT, FINISH TO MATCH NEW METAL EDGE AT SKYLIGHT GRAVEL STOP.
- 20 ALTERNATE 4: METAL EDGE DETAIL. REF 02/A-504. REMOVE EXIST MEMBRANE AND EDGE METAL. INSTALL WOOD BLOCKING TO MATCH HEIGHT OF NEW ROOF ASSEMBLY. INSTALL ALL COMPONENTS ACCORDING TO ANSISPRI ES-1 GUIDELINES AND MFR'S REC FOR WARRANTY INCLUSION.
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03 ENLARGED ROOF PLAN: LIBRARY BOOK STACKS
A-103
3/32"=1'-0" 0 3' 6' 12' 24'



02 ENLARGED ROOF PLAN: ADMINISTRATION
A-103
3/32"=1'-0" 0 3' 6' 12' 24'



01 ENLARGED ROOF PLAN: C & D DORMITORY
A-103
3/32"=1'-0" 0 3' 6' 12' 24'

ALTERNATES KEY

ALT-1: REPLACE GUTTERS AND DOWNSPOUTS
ALT-2: TPO ASSEMBLY ON MHD SECTIONS 1, 2 AND 7
ALT-3: TPO ASSEMBLY ON MHD SECTION 9
ALT-4: TPO ASSEMBLY ON MHD SECTIONS 3, 4, 5, 6 AND 8



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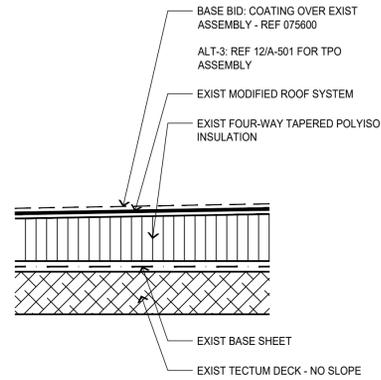
CAD DWG FILE: E1908-01 2011 A-500
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP

SHEET TITLE:
**EXISTING
ROOF ASSEMBLIES**

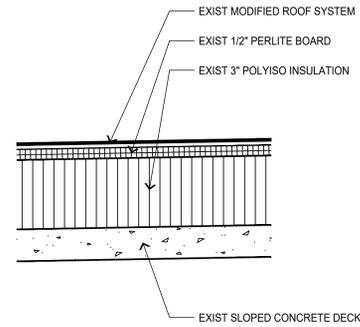
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A-500

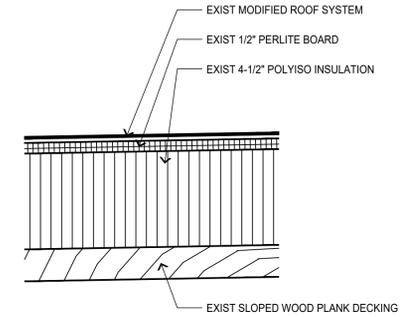
6 OF 10 SHEETS
01/24/2020



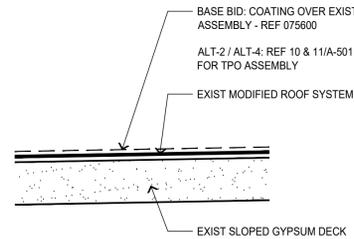
09 EXIST ROOF ASSEMBLY - MHD ANNEX (AREA 9)
A-500 3"=1'-0" 0 1 2 4 8 IN



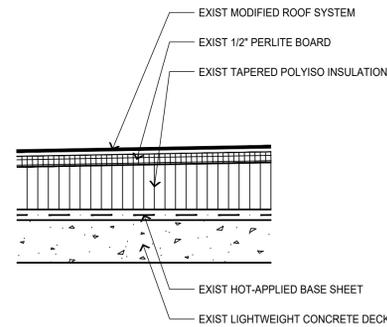
06 EXIST ROOF ASSEMBLY - C & D DORMITORY
A-500 3"=1'-0" 0 1 2 4 8 IN



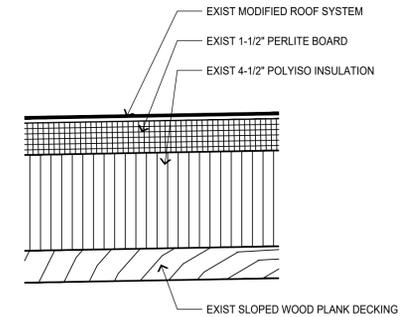
03 EXIST ROOF ASSEMBLY - DINING CANTEEN (AREA B)
A-500 3"=1'-0" 0 1 2 4 8 IN



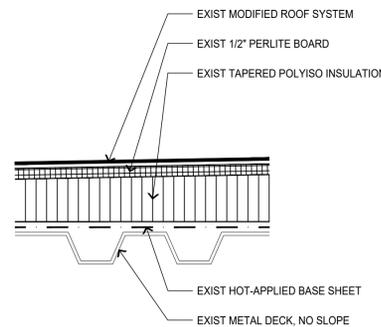
08 EXIST ROOF ASSEMBLY - MHD ANNEX (AREAS 1 - 8)
A-500 3"=1'-0" 0 1 2 4 8 IN



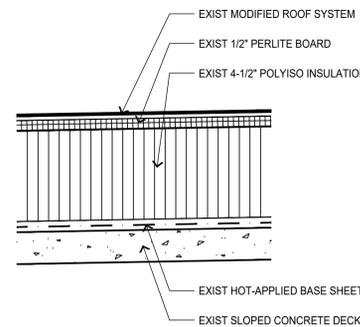
05 EXIST ROOF ASSEMBLY - DINING CAFETERIA / ADMINISTRATION (AREA 1) / LIBRARY
A-500 3"=1'-0" 0 1 2 4 8 IN



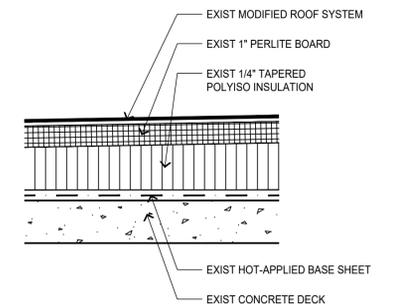
02 EXIST ROOF ASSEMBLY - LITTLE THEATRE
A-500 3"=1'-0" 0 1 2 4 8 IN



07 EXIST ROOF ASSEMBLY - ADMINISTRATION (AREA 2)
A-500 3"=1'-0" 0 1 2 4 8 IN



04 EXIST ROOF ASSEMBLY - DINING CANTEEN (AREA C)
A-500 3"=1'-0" 0 1 2 4 8 IN



01 EXIST ROOF ASSEMBLY - K DORMITORY / DINING CANTEEN (AREAS A & D)
A-500 3"=1'-0" 0 1 2 4 8 IN



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ROOF REPLACEMENT

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3815 MAGNOLIA AVENUE
SAINT LOUIS, MO 63110

PROJECT # E1908-01
ASSET # 5012011007
5012011009

REVISION: _____
DATE: _____
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DATE: _____

ISSUE DATE: 01/24/2020

CAD DWG FILE: E1908-01 2011 A-501
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP / MG

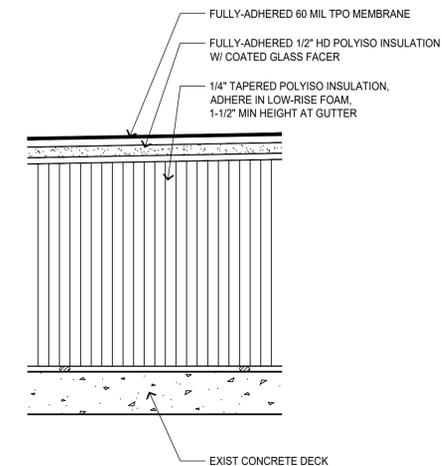
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ROOF ASSEMBLIES

SHEET NUMBER:

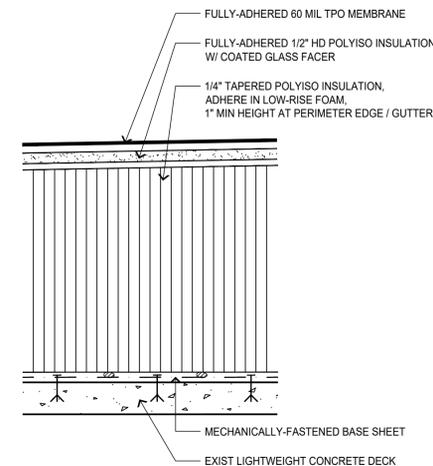
A-501

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01/24/2020



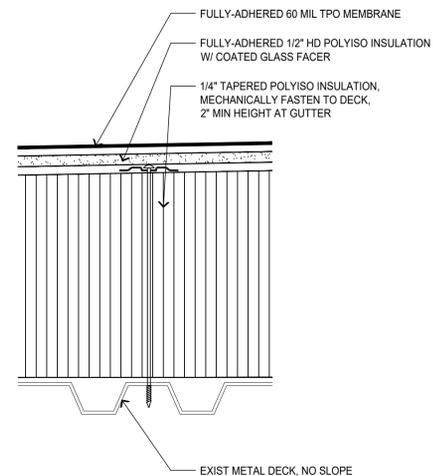
- NOTES:
- ADHERE TO MANUFACTURER-APPROVED SURFACE.
 - MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.
 - INSTALL CRICKETS AS SHOWN IN PLAN FOR POSITIVE SLOPE, TRANSITION INTO ADJOINING ROOF AREAS.

03 ROOF ASSEMBLY - DINING CANTEEN (AREAS A & D)
A-501

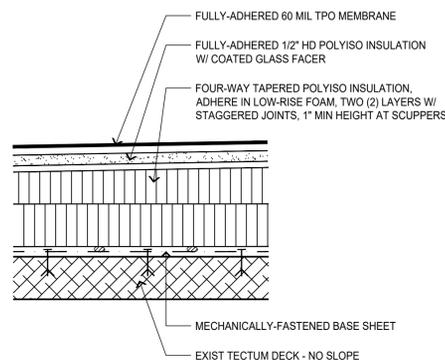


- NOTES:
- MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.
 - INSTALL CRICKETS AS SHOWN IN PLAN FOR POSITIVE SLOPE, TRANSITION INTO ADJOINING ROOF AREAS.

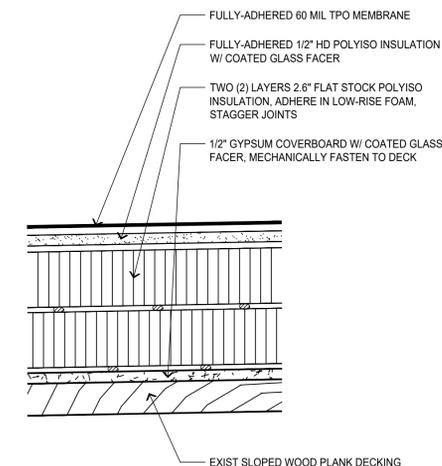
06 ROOF ASSEMBLY - DINING CAFETERIA / LIBRARY
A-501



09 ROOF ASSEMBLY - ADMINISTRATION (AREA 2)
A-501

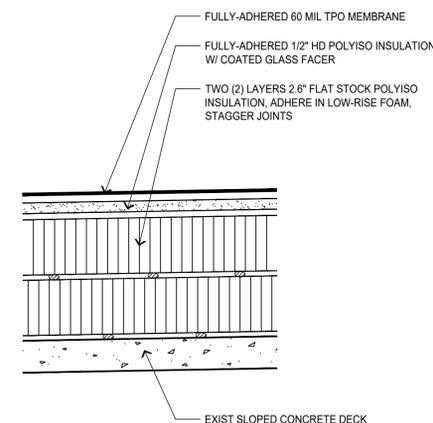


12 ROOF ASSEMBLY - MHD ANNEX (AREA 9) - ALTERNATE 3
A-501



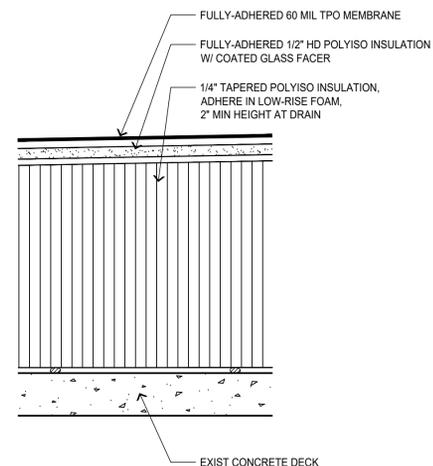
- NOTES:
- ADHERE TO MANUFACTURER-APPROVED SURFACE.
 - MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.

02 ROOF ASSEMBLY - LITTLE THEATRE
A-501

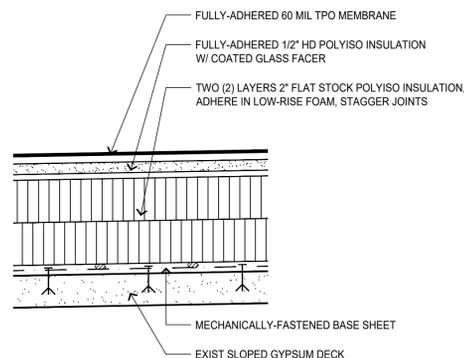


- NOTES:
- ADHERE TO MANUFACTURER-APPROVED SURFACE.
 - MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.
 - INSTALL CRICKETS AS SHOWN IN PLAN FOR POSITIVE SLOPE, TRANSITION INTO ADJOINING ROOF AREAS.

05 ROOF ASSEMBLY - DINING CANTEEN (AREA C)
A-501

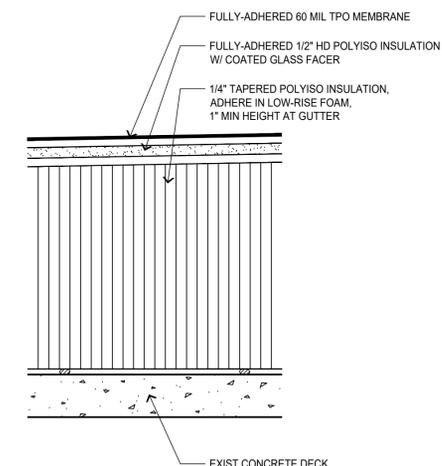


08 ROOF ASSEMBLY - ADMINISTRATION (AREA 1)
A-501



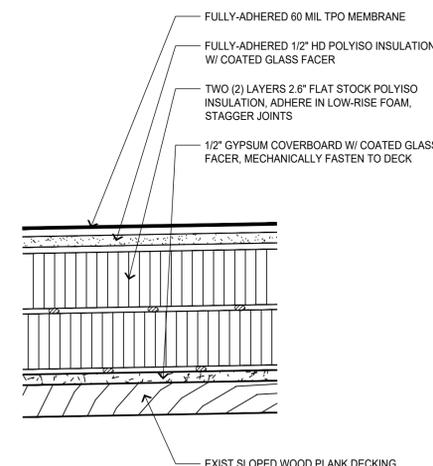
- NOTES:
- INSTALL CRICKETS AS REQUIRED FOR POSITIVE SLOPE TO DRAIN, REF PLAN.

11 ROOF ASSEMBLY - MHD ANNEX (AREAS 1, 2 & 7) - ALTERNATE 2
A-501



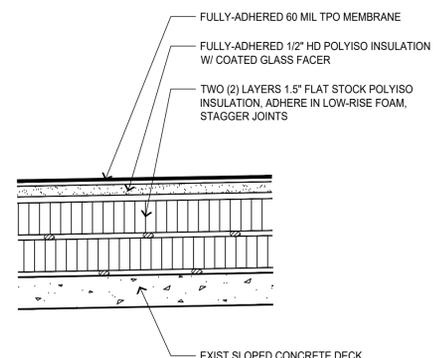
- NOTES:
- ADHERE TO MANUFACTURER-APPROVED SURFACE.
 - MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.

01 ROOF ASSEMBLY - K DORMITORY
A-501



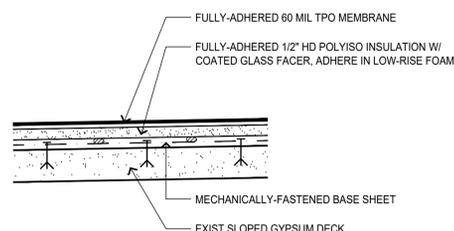
- NOTES:
- MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.
 - INSTALL CRICKETS AS SHOWN IN PLAN FOR POSITIVE SLOPE, TRANSITION INTO ADJOINING ROOF AREAS.

04 ROOF ASSEMBLY - DINING CANTEEN (AREA B)
A-501



- NOTES:
- ADHERE TO MANUFACTURER-APPROVED SURFACE.
 - MINIMUM TWO (2) LAYERS INSULATION, STAGGER JOINTS.

07 ROOF ASSEMBLY - C & D DORMITORY
A-501



- NOTES:
- INSTALL CRICKETS AS REQUIRED FOR POSITIVE SLOPE TO DRAIN, REF PLAN.

10 ROOF ASSEMBLY - MHD ANNEX (AREAS 3 - 6 & 8) - ALTERNATE 4
A-501

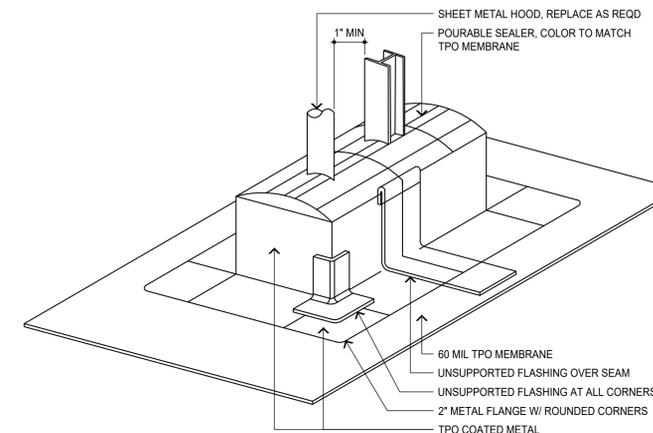


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ROOF CONSULTANT:

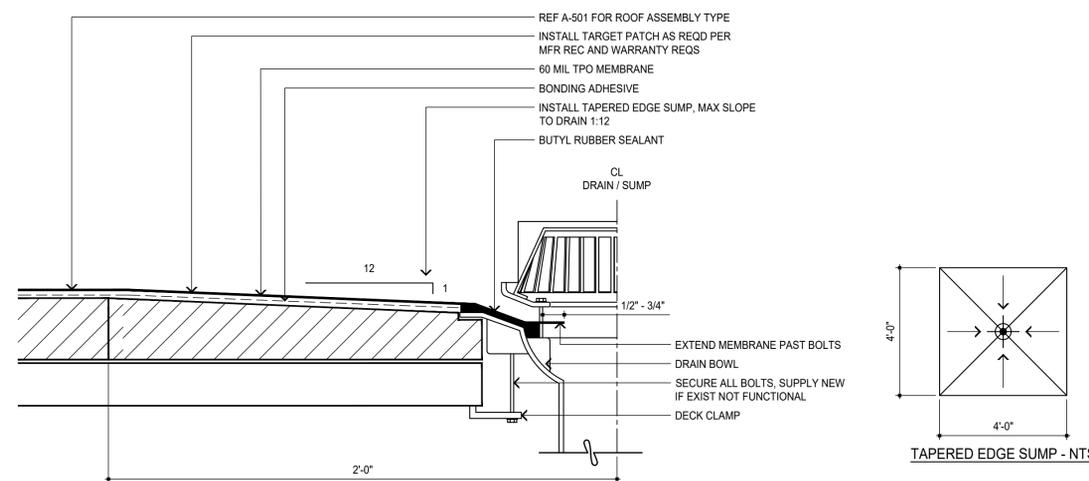
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- NOTES:
1. IF MULTIPLE PENETRATIONS EXIST, THERE MUST BE 1" BETWEEN PENETRATIONS.
2. USE HOT DIPPED GALVANIZED NAILS 1-1/4" LONG WITH 3/8"-1/2" DIA. HEAD.
3. IF REINFORCEMENT IS EXPOSED, APPLICATION OF CUT EDGE SEALANT IS REQUIRED.
4. PREP AND CLEAN ALL PENETRATIONS TO INSTALL NEW DETAIL.

03 TYPICAL SEALANT POCKET
A-502

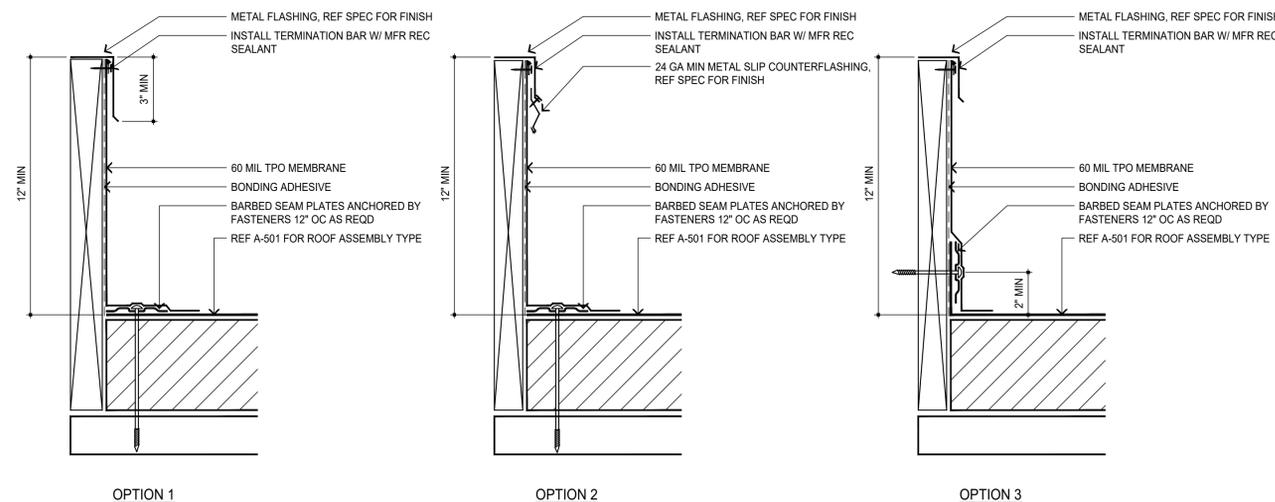
NTS



- NOTES:
1. IF ROOF MEMBRANE SEAMS RUN WITHIN 18" OF DRAIN, INSTALL 4"x4" PATCH ON TOP OF MEMBRANE ASSURING SEAM IS COVERED OR STRIP-IN SEAM WITH 6" WIDE MEMBRANE.
2. REMOVE EXISTING FLASHINGS DOWN TO METAL SUMP. REPAIR OR REPLACE BROKEN CLAMPING RING. DRILL AND TAP BROKEN DRAIN BOLTS AND REPLACE AS NEEDED.
3. INSTALL 4'-0" TAPERED EDGE SUMPS. MODIFICATIONS TO SUMP TO BE APPROVED BY ARCHITECT PRIOR TO INSTALL.
4. DRAIN INSERTS ARE NOT ACCEPTABLE. COMPROMISED DRAINS TO BE REPLACED AT PROVIDED UNIT COST.

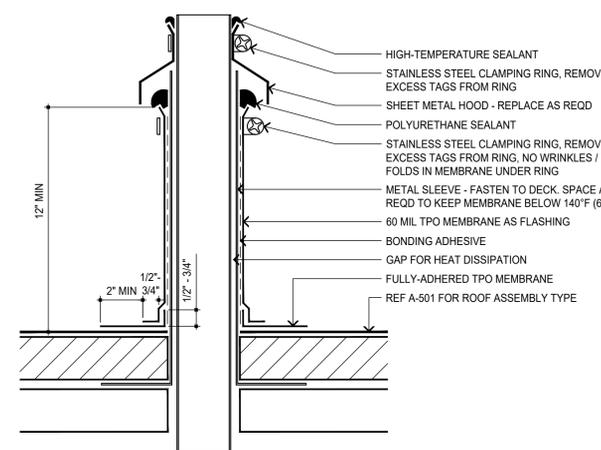
05 TYPICAL INTERNAL DRAIN DETAIL
A-502

3"=1'-0" 0 1 2 4 8 IN



04 TYPICAL BASE CURB FLASHING DETAILS
A-502

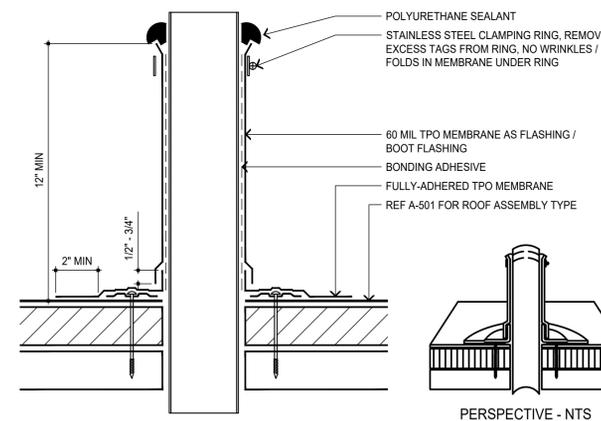
3"=1'-0" 0 1 2 4 8 IN



- NOTES:
1. REMOVE ALL EXIST FLASHING, LEAD, AND SURFACE TO BE FREE OF ALL RUST, GREASE, ETC PRIOR TO NEW WORK.
2. ANCHOR PIPE TO BOTTOM SIDE OF DECK FOR STABILITY.
3. INSTALL NEW HOOD AS REQUIRED.
4. PROVIDE COATED METAL AS REQUIRED.

02 TYPICAL HOT FLUE FLASHING
A-502

3"=1'-0" 0 1 2 4 8 IN



- NOTES:
1. REMOVE ALL EXIST FLASHING, LEAD, AND SURFACE TO BE FREE OF ALL RUST, GREASE, ETC PRIOR TO NEW WORK.
2. ANCHOR PIPE TO BOTTOM SIDE OF DECK FOR STABILITY.
3. APPLY POLYURETHANE SEALANT TO ALL EXPOSED REINFORCEMENTS.
4. EXTEND PIPE AS REQUIRED TO MAINTAIN 12" MIN ABOVE NEW ROOF ASSEMBLY.

01 TYPICAL PIPE FLASHING
A-502

3"=1'-0" 0 1 2 4 8 IN

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ROOF REPLACEMENT

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PROJECT # E1908-01
ASSET # 5012011007
5012011009

REVISION:
DATE:
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CAD DWG FILE: E1908-01 2011 A-502
DRAWN BY: MER / MG
CHECKED BY: CP / AI
DESIGNED BY: CP

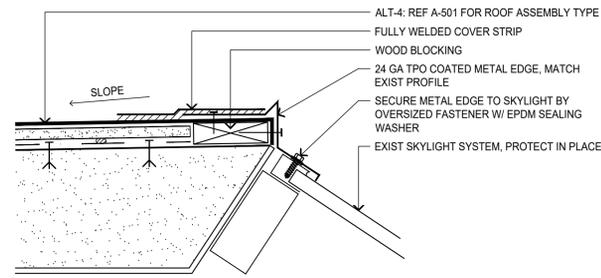
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ROOF DETAILS

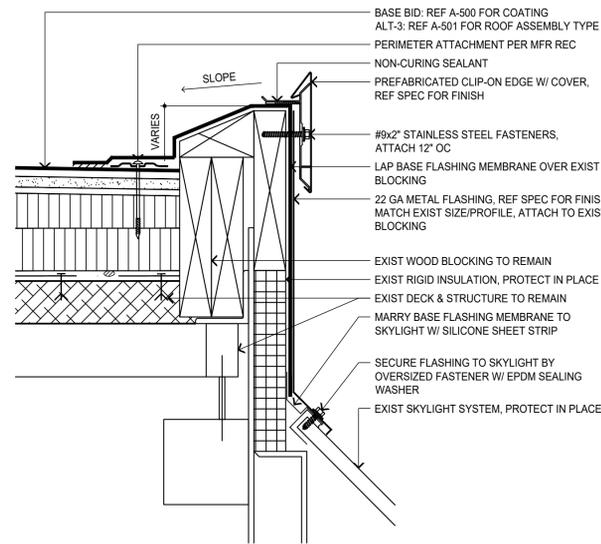
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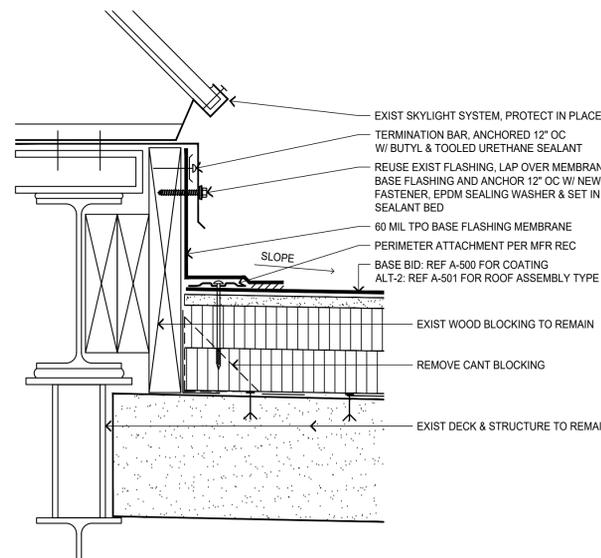
8 OF 10 SHEETS
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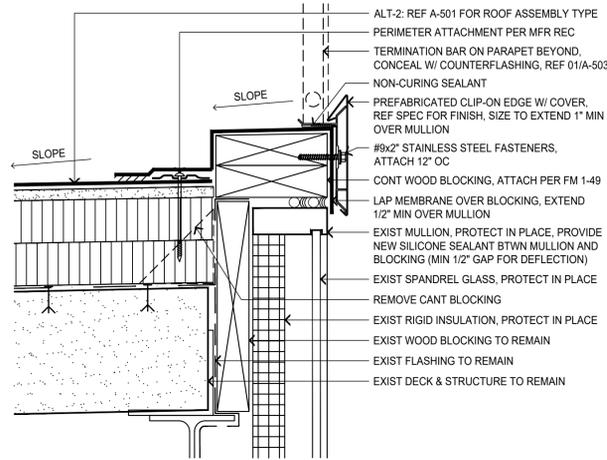
11 GRAVEL STOP DETAIL AT SKYLIGHTS - ALTERNATE 4
A-503 3"=1'-0" 0 1 2 4 8 IN



10 METAL EDGE AT SKYLIGHT DETAIL - BASE BID / ALTERNATE 3
A-503 3"=1'-0" 0 1 2 4 8 IN

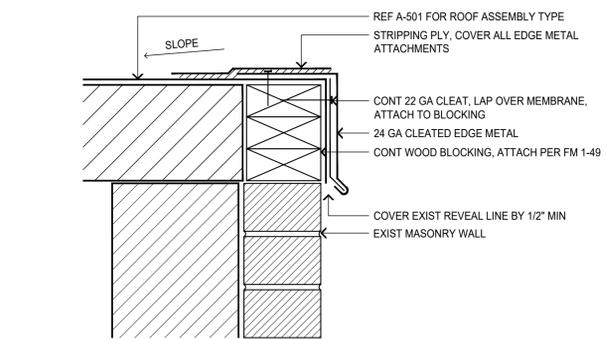


09 SKYLIGHT CURB FLASHING DETAIL - BASE BID / ALTERNATE 2
A-503 3"=1'-0" 0 1 2 4 8 IN

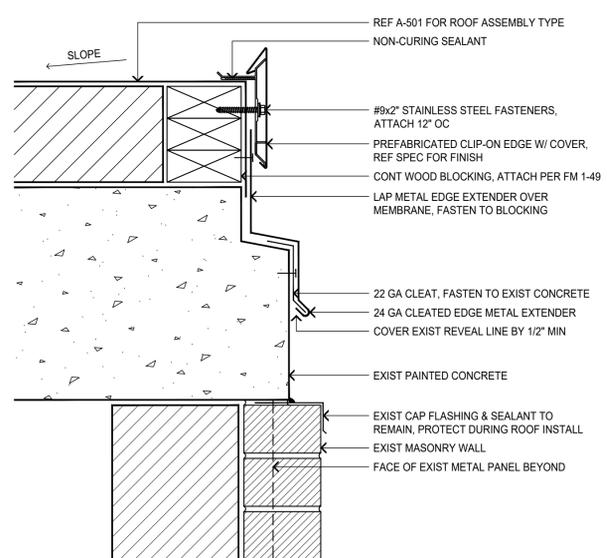


NOTES:
1. REMOVE ELECTRICAL CONDUIT / DEVICES / FIXTURES AS REQD TO INSTALL METAL EDGE SYSTEM. REINSTALL DEVICES / FIXTURES W/ NEW SPLICED CONDUIT (WHERE REMOVED), REF GENERAL NOTES.
2. METAL FLASHING TO COVER ALL VERTICAL TERMINATION BARS.

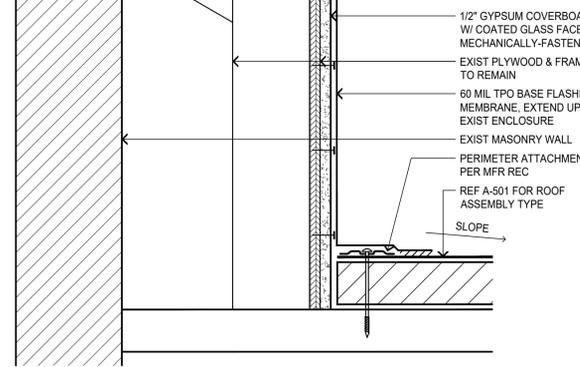
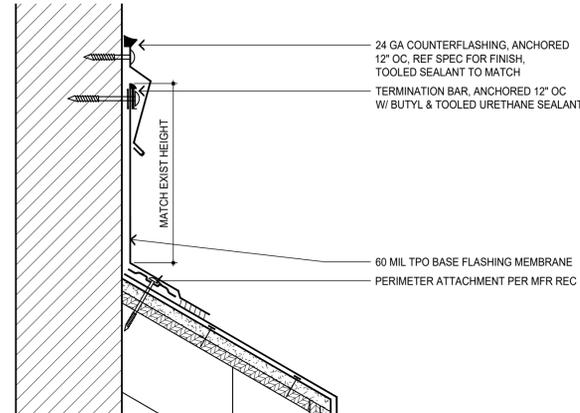
08 CRENNEL GLAZING DETAIL - ALTERNATE 2
A-503 3"=1'-0" 0 1 2 4 8 IN



07 TPO-COATED METAL EDGE DETAIL
A-503 3"=1'-0" 0 1 2 4 8 IN

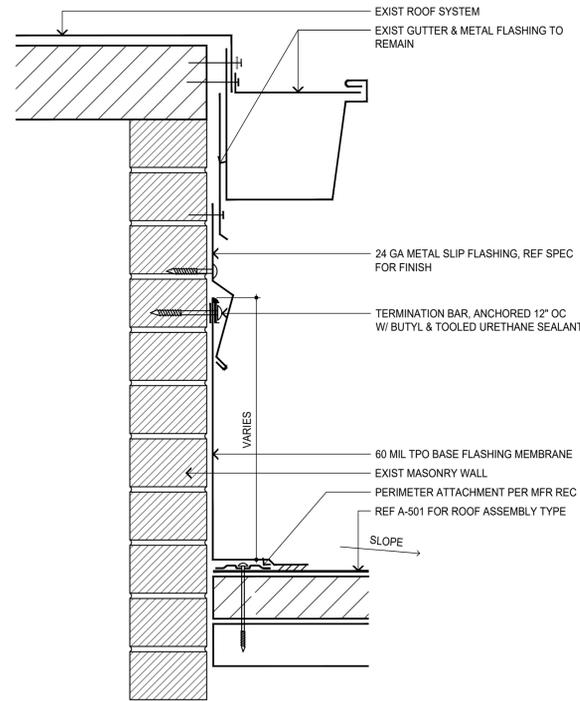


06 METAL EDGE EXTENSION COPING DETAIL
A-503 3"=1'-0" 0 1 2 4 8 IN



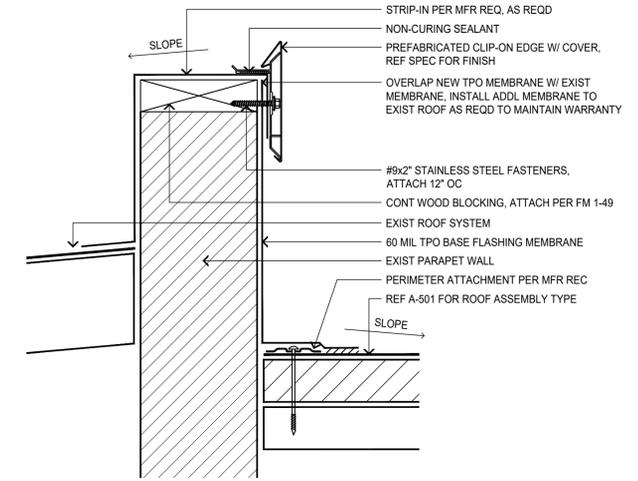
NOTES:
1. FLASH PENETRATIONS WITHIN THIS DETAIL PER MANUFACTURER STANDARD DETAILS.
2. WALL SURFACE VARIES IN AND OUT.
3. ALL TERMINATION BAR TO BE COVERED WITH COUNTERFLASHING IN VERTICAL APPLICATIONS.
4. RELOCATE ELECTRICAL BOX AND CONDUIT TO ALLOW FOR PROPER FLASHING HEIGHTS.

05 WALL SECTION
A-503 3"=1'-0" 0 1 2 4 8 IN

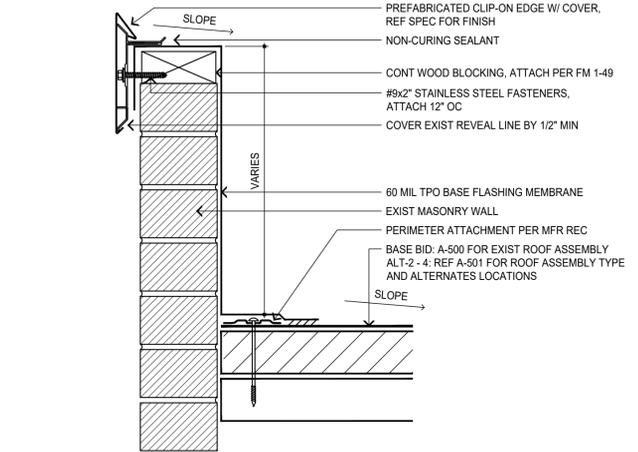


NOTES:
1. INFILL EXIST TWO (2) VENT OPENINGS WITH WOOD BLOCKING AND GYPSUM COVERBOARD PRIOR TO NEW MEMBRANE INSTALLATION.

04 SLIP FLASHING AT EXIST GUTTER DETAIL
A-503 3"=1'-0" 0 1 2 4 8 IN

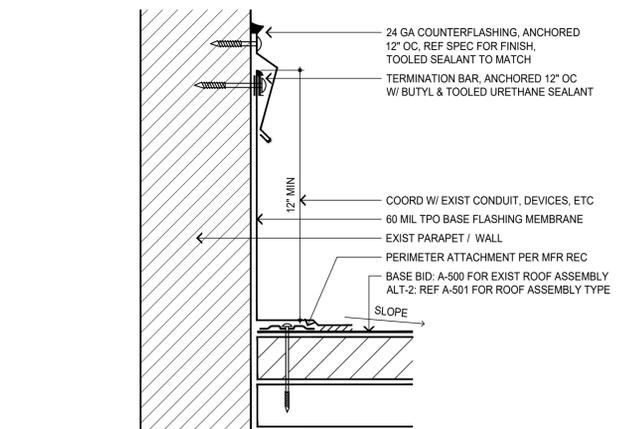


03 STEP TRANSITION DETAIL
A-503 3"=1'-0" 0 1 2 4 8 IN



NOTES:
1. REMOVE ELECTRICAL CONDUIT / DEVICES / FIXTURES AS REQD TO INSTALL METAL EDGE SYSTEM. REINSTALL DEVICES / FIXTURES W/ NEW SPLICED CONDUIT (WHERE REMOVED), REF GENERAL NOTES.
2. COUNTERFLASHING TO COVER ALL TERMINATION BARS.

02 METAL EDGE DETAIL - BASE BID / ALTERNATES 2-4
A-503 3"=1'-0" 0 1 2 4 8 IN



NOTES:
1. COMPLY WITH FM GLOBAL 1-49 AND ANSI SPRI ES-1 REQUIREMENTS WHERE APPLICABLE.
2. USE FASTENERS APPROPRIATE FOR WALL MATERIAL / CONDITIONS.

01 SURFACE-MOUNT COUNTERFLASHING - BASE BID / ALTERNATE 2
A-503 3"=1'-0" 0 1 2 4 8 IN



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PROJECT # E1908-01
ASSET # 5012011007
5012011009

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ISSUE DATE: 01/24/2020

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CHECKED BY: CP / AI
DESIGNED BY: CP / MG

SHEET TITLE:

ROOF DETAILS

SHEET NUMBER:

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9 OF 10 SHEETS
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CHECKED BY: CP / AI
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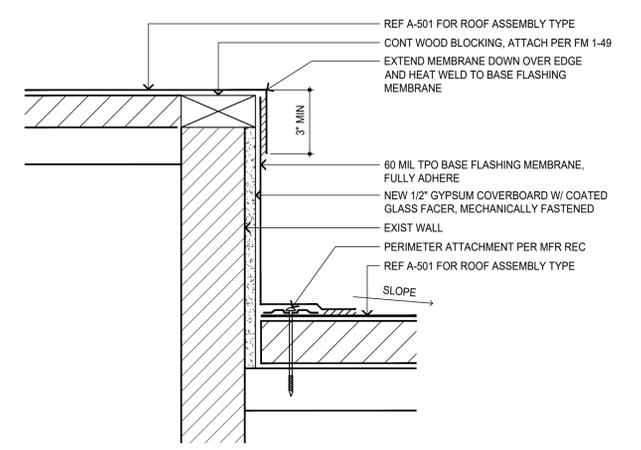
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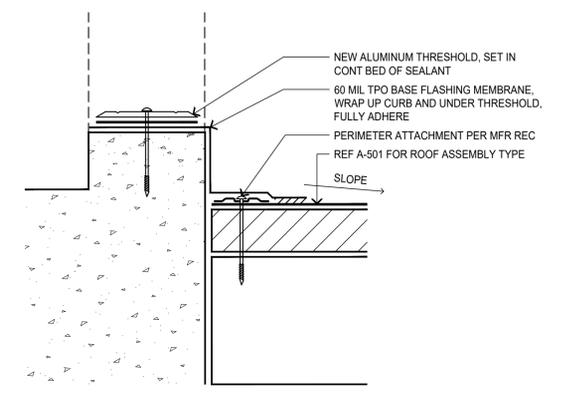
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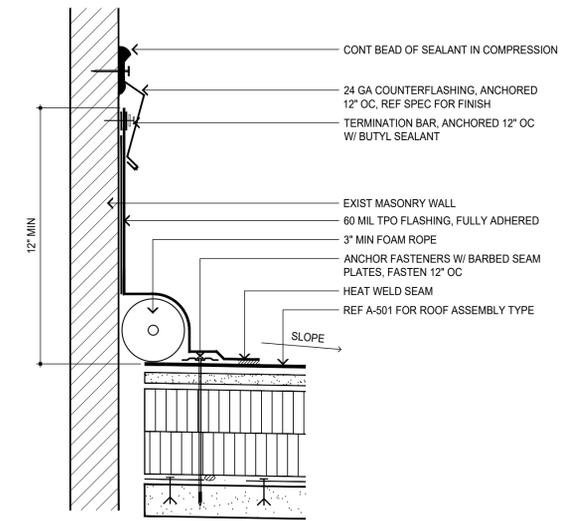
10 OF 10 SHEETS
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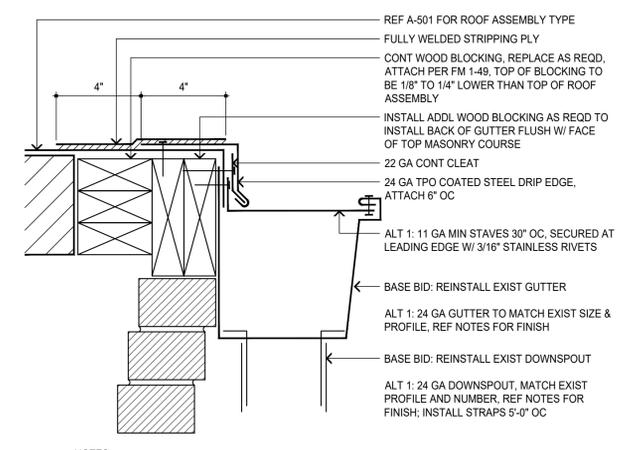
06 STEP TRANSITION DETAIL
A-504 3"=1'-0" 0 1 2 4 8 IN



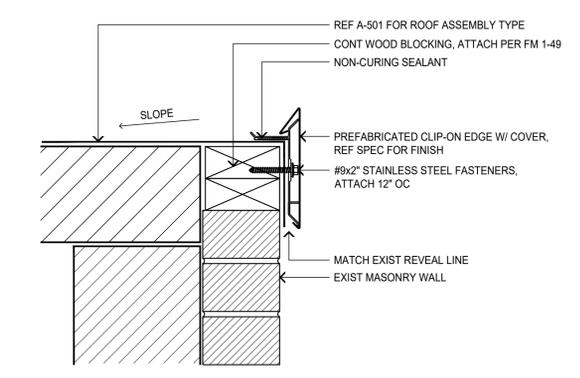
03 THRESHOLD DETAIL - ALTERNATE 2
A-504 3"=1'-0" 0 1 2 4 8 IN



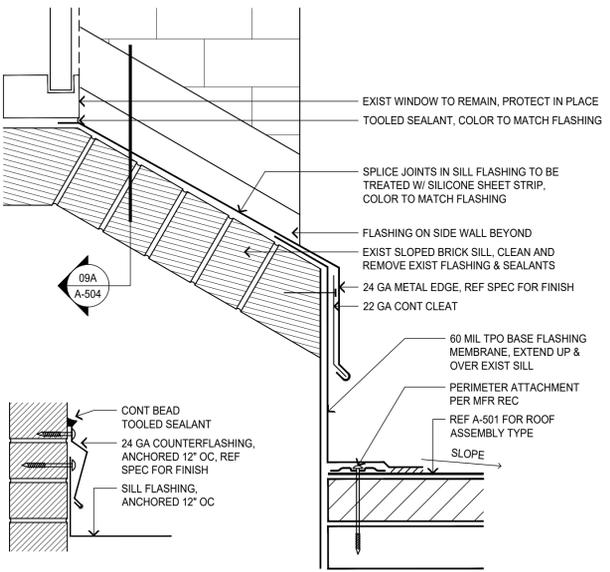
08 ROOF TO WALL EXPANSION JOINT DETAIL - ALTERNATE 2
A-504 3"=1'-0" 0 1 2 4 8 IN



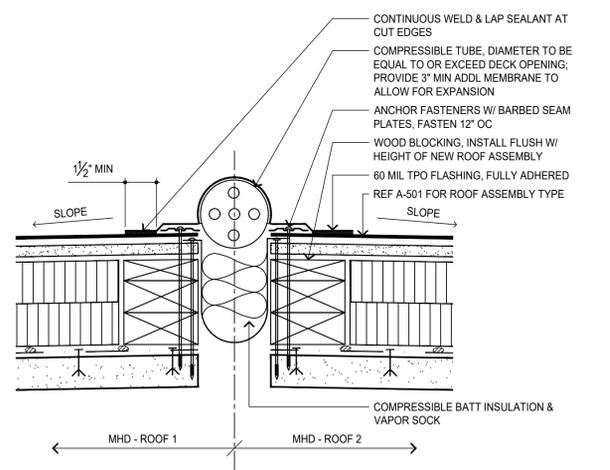
05 GUTTER DETAIL AT K DORMATORY - BASE BID / ALTERNATE 1
A-504 3"=1'-0" 0 1 2 4 8 IN



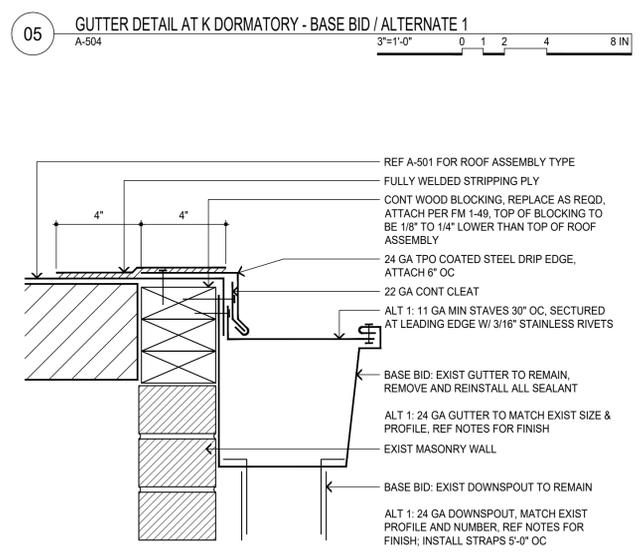
02 METAL EDGE DETAIL - ALTERNATE 4
A-504 3"=1'-0" 0 1 2 4 8 IN



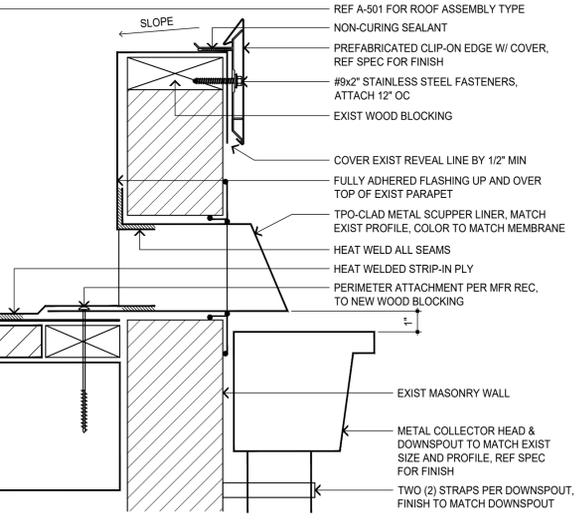
09A: FLASHING SIDE SECTION - NTS



07 ROOF TO ROOF EXPANSION JOINT DETAIL - ALTERNATE 2
A-504 3"=1'-0" 0 1 2 4 8 IN



04 TYPICAL GUTTER DETAIL - BASE BID / ALTERNATE 1
A-504 3"=1'-0" 0 1 2 4 8 IN



01 SCUPPER DETAIL - ALTERNATE 4
A-504 3"=1'-0" 0 1 2 4 8 IN

NOTES:
1. ALL WEEPS TO REMAIN OPEN AND FREE.

09 WINDOW SILL FLASHING - ALTERNATE 2
A-504 3"=1'-0" 0 1 2 4 8 IN

NOTES:
1. REMOVE ALL EXISTING EXPANSION JOINT DETAIL COMPONENTS AND REPLACE WITH NEW COMPONENTS.
2. SECURE ALL BLOCKING PER FM 1-49.

NOTES:
1. SIZE AND STYLE OF GUTTERS VARIES FROM BUILDING TO BUILDING. IF ALT 1 ACCEPTED, DIMENSIONS OF REPLACEMENT GUTTERS AND DOWNSPOUTS TO MATCH EXISTING SIZES ON EACH ROOF AREA IN PROJECT SCOPE.
2. ALT 1: GUTTER AND DOWNSPOUT COLOR TO BE SELECTED BY ARCHITECT FROM MFR'S STANDARD RANGE, PROFILE PER SMACNA REQS, AND CONSTRUCTED OF SAME GAUGE METAL.

NOTES:
1. INSTALL SUMP WHENEVER POSSIBLE TO PREVENT PONDING.