

Roof, Tuckpoint Repair & Interior Renovation Rolla Readiness Center, Rolla, Missouri



OWNER:

STATE OF MISSOURI
MIKE KEHOE, GOVERNOR

MISSOURI NATIONAL GUARD
OFFICE OF THE ADJUTANT GENERAL
FACILITIES MANAGEMENT OFFICE

PROJECT
MANAGEMENT:

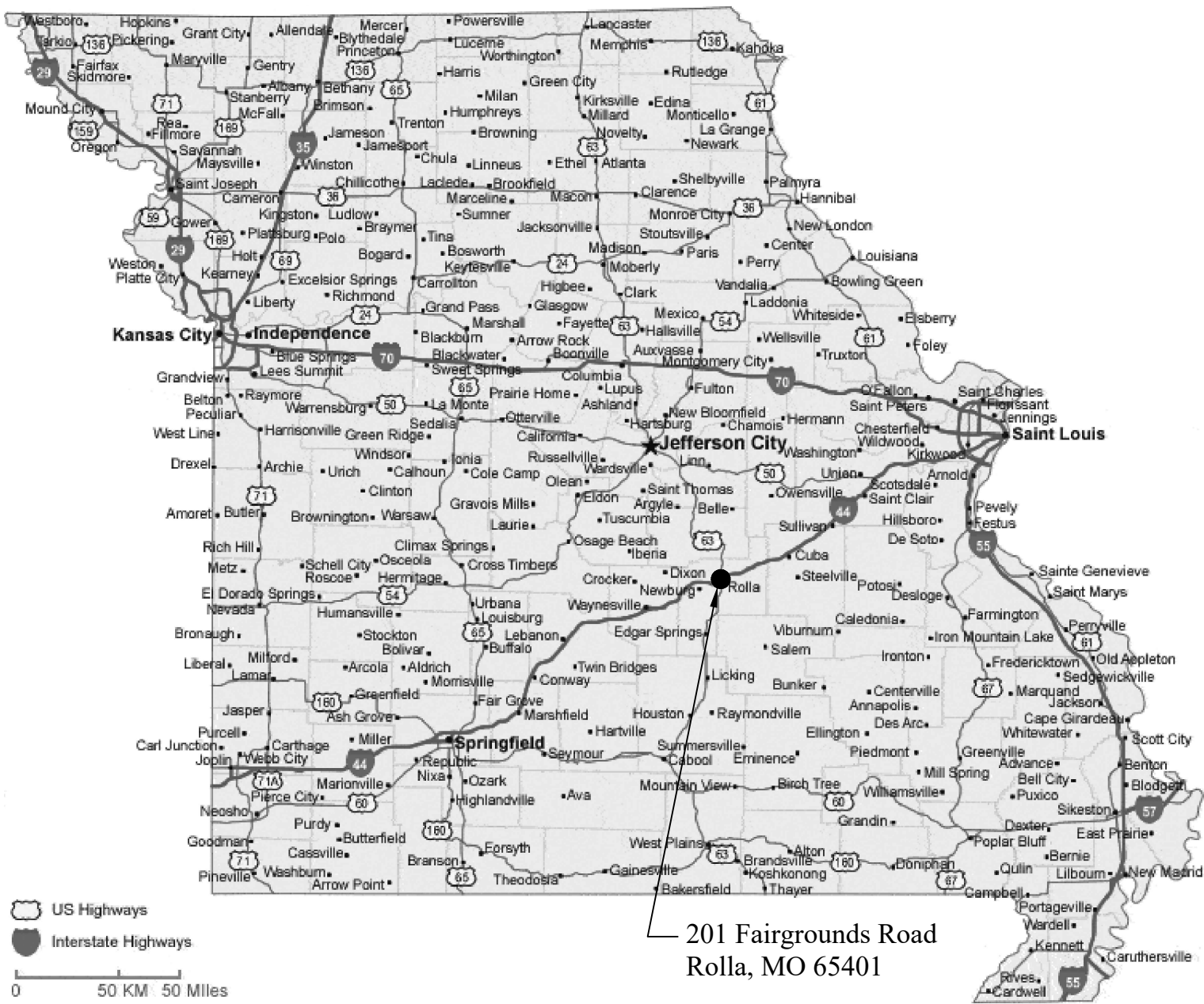
OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT
DESIGN AND CONSTRUCTION

ARCHITECT &
MECHANICAL



PROJECT NUMBER: T2238-01
SITE NUMBER: 6297
ASSET NUMBER: 8136297001

June 24, 2025



1
G-001

SITE LOCATION
N.T.S.



SHEET NUMBER:

G-001
Page 1 of 35

PROJECT DESCRIPTION

THIS IS A RENOVATION PROJECT OF AN EXISTING READINESS CENTER BUILDING IN ROLLA, MISSOURI. THE EXISTING FACILITY WAS CONSTRUCTED IN MULTIPLE PHASES FROM THE 1960s THROUGH THE 1980s AND WAS MOST RECENTLY UPDATED WITH NEW FINISHES APPROXIMATELY TWENTY YEARS AGO.

THE STRUCTURE IS PRIMARILY CMU AND BRICK WITH A LOW-SLOPE ROOF DRAINING TO PERIMETER GUTTERING. SOME INTERIOR WALLS ARE FORMER EXTERIOR MASONRY WALLS DUE TO THE PHASED CONSTRUCTION.

THE EXTERIOR RENOVATION WORK PRINCIPALLY INCLUDES (BUT IS NOT LIMITED TO) THE FOLLOWING SCOPE. SEE ALL DRAWINGS AND SPECIFICATIONS FOR THE PROPOSED SCOPE OF WORK:

- ROOF REPLACEMENT
- GUTTER & DOWNSPOUT REPLACEMENT
- NEW WINDOWS AND DOORS
- BRICK TUCKPOINT & SEALING
- INFLUENCE/REPLACEMENT OF LIMITED PORTIONS OF EXTERIOR WALLS AS RELATED TO INTERIOR DEVELOPMENT CHANGES
- CHANGES TO THE SITE LIGHTING
- NEW WATER SERVICE LINE FROM THE STREET/METER TO THE BUILDING

THE INTERIOR RENOVATION PRINCIPALLY INCLUDES (BUT IS NOT LIMITED TO) THE FOLLOWING SCOPE. SEE ALL DRAWINGS AND SPECIFICATIONS FOR THE PROPOSED SCOPE OF WORK:

- DEMOLITION AND COMPLETE REPLACEMENT OF THE MEN AND WOMEN'S LATRINES IN THE CENTER OF THE BUILDING INCLUDING ALL PLUMBING FIXTURES, REWORK OF SUPPLY/WASTE LINES, NEW CEILINGS, ELECTRICAL, LIGHTING, AND RELATED.
- NEW ROOFTOP HVAC FOR LATRINES WITH EXTERIOR-RATED DUCTWORK AND GAS LINE
- STRUCTURAL MODIFICATIONS FOR NEW RTU
- NEW MINI-SPLIT HVAC SYSTEM FOR SMALL EQUIPMENT ROOM
- NEW WATER HEATERS FOR LATRINES
- NEW INTERIOR DOORS AND HARDWARE
- NEW INTERIOR ACOUSTIC GRID CEILINGS (REUSE MECHANICAL DIFFUSERS AND LIGHTS)
- REPAINT INTERIOR WALLS AND CEILING SOFFITS
- NEW FLOOR FINISHES AND BASE
- REPLACE LIGHT SWITCHES AND RECEPTACLES
- NEW FIRE ALARM SYSTEM WITH VOICE SYSTEM

THE WORK INDICATED UNDER THIS COVER IS INTENDED TO BE BID AS A SINGLE PHASE OF CONSTRUCTION. ANY OCCUPANCY OF THE BUILDING BY THE NATIONAL GUARD OFFICE PERSONNEL WILL BE INCIDENTAL AND CAN BE COORDINATED DURING CONSTRUCTION. THE GUARD DOES NOT PROPOSE USING THE FACILITY FOR TRAINING DURING CONSTRUCTION. THE GENERAL CONTRACTOR WILL NOT BE REQUIRED TO PROVIDE TEMPORARY TOILET FACILITIES FOR NATIONAL GUARD FUNCTIONS, ONLY FOR CONSTRUCTION WORKERS.

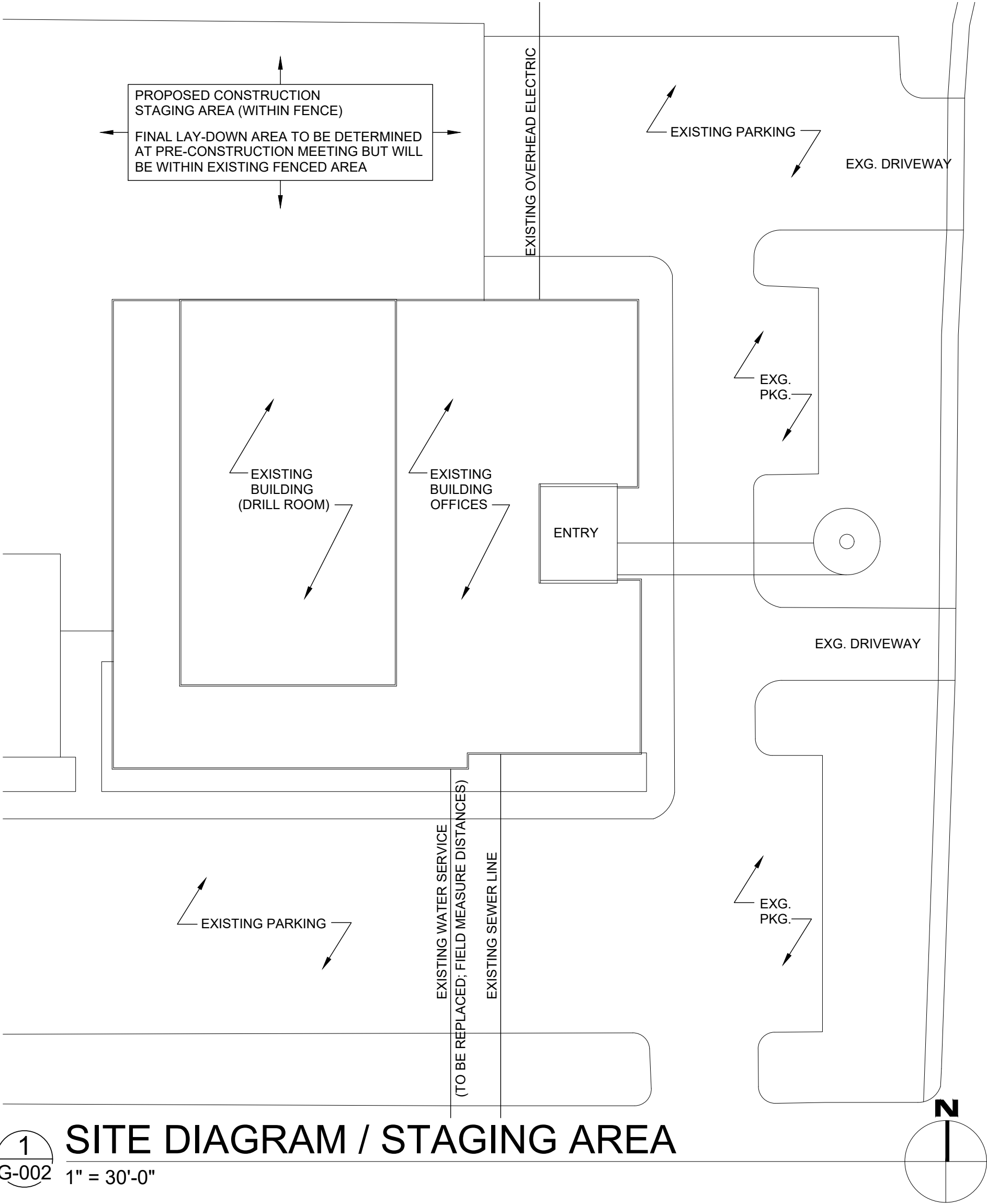
THIS PROJECT MODIFIES MULTIPLE SYSTEMS AND FINISHES OF A PRESENTLY OPERATING FACILITY THAT WILL BE EXPECTED TO RETURN TO IMMEDIATE OPERATION AT SUBSTANTIAL COMPLETION. WHILE EVERY EFFORT HAS BEEN MADE TO DESCRIBE THE TECHNICAL AND FINISH REQUIREMENTS, IT IS NOT POSSIBLE TO DESCRIBE ALL THE IMPLICATIONS OF ANY PORTION OF THE WORK.

THE GENERAL CONTRACTOR IS EXPECTED TO LEAVE SUFFICIENT ALLOWANCE IN THE FIXED BID AMOUNT TO ADDRESS MINUTE OR INCIDENTAL WORK THAT IS CUSTOMARILY RELATED TO THE RENOVATION WORK AND SYSTEMS DESCRIBED UNDER THIS COVER. SEALANTS, CAULKING, CUSTOM FLASHING, CUSTOM FINISH METAL TRIM, MINOR MASONRY REPAIRS, DAMAGE TO ADJACENT FINISHES, FITTINGS, MINOR ACCESSORIES, AND ANY OTHER TECHNICAL OR FINISH DETAILS ORDINARY REQUIRED TO PROVIDE A COMPLETE, FINISHED, SEALED, AND FUNCTIONAL FACILITY WILL BE EXPECTED, WHETHER OR NOT EACH INCIDENTAL ITEM OR MATERIAL TRANSITION IS DESCRIBED IN THE DRAWINGS OR SPECIFICATIONS.

THE CONTRACTOR IS REQUIRED TO ANTICIPATE ALL SHORING, TEMPORARY STRUCTURAL COMPONENTS, SECURITY MEASURES, WEATHER PROTECTION, AND STABILIZATION REQUIRED FOR THE WORK ILLUSTRATED. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION REGARDING ALL READILY OBSERVABLE CONDITIONS, INCLUDING INTERSTITIAL SPACES ABOVE EXISTING CEILINGS WITH REMOVABLE TILES.

UNFORESEEN CONDITIONS DISCOVERED BEHIND EXISTING PERMANENT CONSTRUCTION WILL BE ADDRESSED AS DISCOVERED DURING CONSTRUCTION; NO DESTRUCTIVE MODIFICATIONS TO THE BUILDING MAY BE MADE DURING THE BIDDING PROCESS.

SCOPE OF WORK							
PROJECT MANUAL (CSI) SECTION REF. NUMBER	SECTION NAME REFERENCE (SECTIONS OWNER FURNISHED AND INSTALLED NOT INCLUDED IN PROJECT MANUAL - FOR REFERENCE ONLY)	FURNISHED BY CONTRACTOR	INSTALLED BY CONTRACTOR	FURNISHED BY OWNER	INSTALLED BY OWNER	CONTACT INFORMATION	
						COMPANY & ADDRESS	POINT OF CONTACT, PHONE (P), CELL (C), OR EMAIL (E)
01 11 00	SUMMARY OF WORK GENERAL BUILDING PERMIT (NOT REQUIRED) STATE DEPARTMENT OF NATURAL RESOURCES PERMIT (NOT REQUIRED)			X		STATE OF MISSOURI OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT DESIGN & CONSTRUCTION HARRY S TRUMAN STATE OFFICE BUILDING RM. 730 JEFFERSON CITY, MO 65102	BILL EDWARDS, PROJECT MANAGER (C): 573-578-2612 (E): billy.j.edwards66.nfg@army.mil
01 11 00	SUMMARY OF WORK (ALL TRADE PERMITS, UTILITY IMPACT AND CONNECTION FEES, OR PERMITS AND FEES REQUIRED FOR PROJECT COMPLETION)	X				(TO BE DETERMINED)	(TO BE DETERMINED)
01 45 33	SPECIAL INSPECTIONS AND PROCEDURES (REFER TO SECTION FOR ADDITIONAL REQUIREMENTS)	X				(TO BE DETERMINED)	(TO BE DETERMINED)
08 70 00	DOOR HARDWARE (LOCK CORES AND KEYS - CONTRACTOR TO SUBMIT LIST OF MATERIALS REQUIRED FOR OWNER TO SUBMIT ORDER TO HARDWARE MANUFACTURER, COST OF MATERIALS AND DELIVERY BY CONTRACTOR)	X			X	STATE OF MISSOURI DEPARTMENT OF PUBLIC SAFETY MISSOURI ARMY NATIONAL GUARD CONSTRUCTION AND FACILITIES MANAGEMENT OFFICE 6819 NORTH BOUNDARY ROAD JEFFERSON CITY, MISSOURI 65101	BILL EDWARDS, PROJECT MANAGER (C): 573-578-2612 (E): billy.j.edwards66.nfg@army.mil
10 28 00	SHOWER CURTAINS (SHOWER CURTAINS AND HOOKS) SOAP DISPENSERS HAND TOWEL DISPENSERS			X	X	STATE OF MISSOURI DEPARTMENT OF PUBLIC SAFETY MISSOURI ARMY NATIONAL GUARD CONSTRUCTION AND FACILITIES MANAGEMENT OFFICE 6819 NORTH BOUNDARY ROAD JEFFERSON CITY, MISSOURI 65101	BILL EDWARDS, PROJECT MANAGER (C): 573-578-2612 (E): billy.j.edwards66.nfg@army.mil
28 46 00	FIRE DETECTION AND ALARM (ENTIRE SYSTEM INCLUDING HARDWARE, CONDUIT, WIRING, EQUIPMENT)	X	X			(TO BE DETERMINED)	(TO BE DETERMINED)
28 46 00	FIRE DETECTION AND ALARM (REMOTE MONITORING SERVICE)			X	X	STATE OF MISSOURI DEPARTMENT OF PUBLIC SAFETY MISSOURI ARMY NATIONAL GUARD CONSTRUCTION AND FACILITIES MANAGEMENT OFFICE 6819 NORTH BOUNDARY ROAD JEFFERSON CITY, MISSOURI 65101	BILL EDWARDS, PROJECT MANAGER (C): 573-578-2612 (E): billy.j.edwards66.nfg@army.mil
SCOPE OF WORK SCHEDULE NOTES: 1. CONTRACTOR TO COORDINATE WORK SCHEDULE WITH OWNER FURNISHED MATERIALS.							



1 SITE DIAGRAM / STAGING AREA
G-002 1" = 30'-0"

GENERAL NOTES

- A REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- B THE ARCHITECT'S AND ENGINEERS' RESPONSIBILITY IS ONLY FOR THE INFORMATION INCLUDED WITHIN THE CONSTRUCTION DOCUMENTS. ALL OTHER DOCUMENTS AND INSTRUMENTS REQUIRED FOR COMPLETION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF OTHERS AND ARE HEREBY DISCLAIMED.
- C QUALITY STANDARD AND BUILDING CODES - ALL CONTRACTORS SHALL BE RESPONSIBLE FOR KNOWING THE QUALITY AND PUBLIC SAFETY REGULATIONS SET FORTH IN THE GOVERNING CODES AND OTHER APPLICABLE REGULATIONS OF LOCAL AND STATE AGENCIES HAVING JURISDICTION WHICH GOVERN EACH CONTRACTOR'S WORK.
- D THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR FIELD ACTIVITIES ON THIS PROJECT WITHOUT DIRECT OBSERVATION OF THE WORK IN PROGRESS. IF FIELD CONDITIONS ARE UNCOVERED THAT REQUIRE A CHANGE OR ADDITIONAL INFORMATION, THE ARCHITECT AND ENGINEER DOES NOT DELEGATE THEIR AUTHORITY TO ANYONE ELSE FOR DETERMINING THE MEANING OF THEIR PLANS OR SPECIFICATIONS.
- E FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING WORK. NOTIFY ARCHITECT IF EXISTING CONDITIONS DEVIATE SUBSTANTIALLY FROM THOSE INDICATED HEREIN.

SHEET INDEX

SHEET NO.	SHEET NAME
G-001	COVER SHEET
G-002	SHEET INDEX / SCOPE OF WORK
G-101	CODE ANALYSIS PLAN
A-100	DEMOLITION FLOOR PLAN
A-101	FLOOR PLAN
A-102	CLERESTORY PLAN
A-103	ROOF PLAN
A-104	ROOF DETAILS
A-105	ROOF STRUCTURAL DETAILS FOR RTU
A-200	DEMOLITION ELEVATIONS
A-201	EXTERIOR ELEVATIONS
A-202	WINDOW SCHEDULE & DETAILS
A-401	ENLARGED TOILET PLAN, DETAILS
A-402	INTERIOR DETAILS
A-403	INTERIOR DETAILS
A-601	DOOR SCHEDULE & DETAILS
A-700	INTERIOR FINISH DEMOLITION PLAN
A-701	REFLECTED CEILING PLAN
A-702	INTERIOR FINISH PLAN
P-001	PLUMBING GENERAL NOTES & LEGEND
P-100	PLUMBING DEMOLITION PLAN
P-101	WASTE PIPING PLAN
P-102	SUPPLY PIPING PLAN
P-103	ROOF GAS PIPING PLAN
P-201	PLUMBING ISOMETRICS
P-301	PLUMBING DETAILS & SCHEDULES
P-302	PLUMBING DETAILS
M-001	HVAC GENERAL NOTES & LEGEND
M-101	HVAC PLAN
M-201	HVAC DETAILS
M-301	HVAC SCHEDULES
E-101	ELECTRICAL PLAN
E-102	ELECTRICAL EXISTING SITE LIGHTING
E-103	ELECTRICAL SITE LIGHTING PLAN (ALT1)
FA-101	FIRE ALARM

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

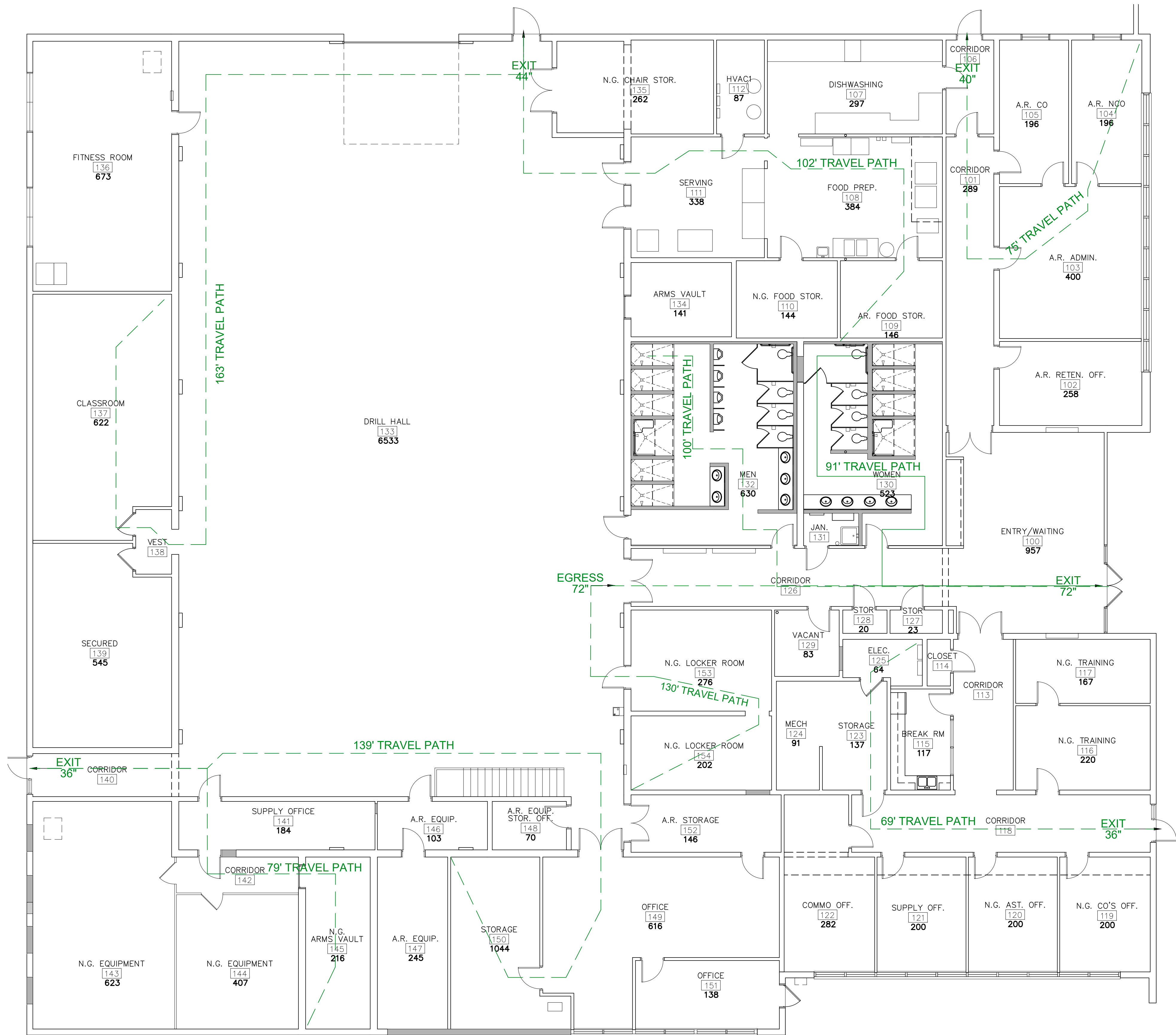
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-G-002
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:
SHEET INDEX /
SCOPE OF WORK
SCHEDULE

SHEET NUMBER:

G-002



1 EGRESS ANALYSIS PLAN
1/8" = 1'-0"

GENERAL NOTES

- A REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- B CONTRACTOR TO PROVIDE PORTABLE FIRE EXTINGUISHERS DURING CONSTRUCTION AS REQUIRED TO PROTECT THE WORK AREA AND EACH STORAGE UNIT AND JOB TRAILER PER THE FIRE CODE.

BUILDING CODE SUMMARY

JURISDICTION:	MISSOURI OFFICE OF ADMINISTRATION - FACILITIES MANAGEMENT, DESIGN & CONSTRUCTION
CITY:	ROLLA, MISSOURI
COUNTY:	PHELPS
ZIP CODE:	65401
GOVERNING CODES AND STANDARDS	
EXISTING BUILDING CODE:	2018 IBCB
BUILDING CODE:	2018 IBC & Appendix C, F, G, I & J
PLUMBING CODE:	2018 IPC
MECHANICAL CODE:	2018 IMC
ELECTRICAL CODE:	2017 NEC
FIRE CODE:	2018 IFC
FUEL / GAS CODE:	2018 IFGC
ENERGY CODE:	2018 IECC (less Chapter 13)
ACCESSIBLE CODE:	2009 ICC A117.1
ACCESSIBILITY CODE:	2010 ADA
2018 IBCB CLASSIFICATION OF WORK:	ALTERATION LEVEL 3
NEW FINISHES SHALL COMPLY BE CLASS C, WITH A FLAME SPREAD INDEX OF 76-200 AND SMOKE DEVELOPED INDEX OF 0-45 PER ASTM E84 OR UL 723.	

USE GROUP & CONSTRUCTION TYPE	
PRIMARY USE GROUP:	B
CONSTRUCTION TYPE:	II-B (NON-COMBUSTIBLE / UNPROTECTED)

BUILDING HEIGHT & AREA	
EXISTING (UNCHANGED)	21,300 SF FOOTPRINT
APPEARS TO COMPLY WITH ALLOWABLE AREAS WHEN FRONTAGE INCREASE CALCULATION IS APPLIED	

FIRE PROTECTION SYSTEMS	
AUTOMATIC SPRINKLER SYSTEM:	NOT PROVIDED
PORTABLE FIRE EXTINGUISHERS:	EXISTING / COMPLIANT
MANUAL FIRE ALARM:	PROPOSED
EGRESS	
NO CHANGES TO BUILDING OCCUPANCY COUNT OR EGRESS/CIRCULATION SYSTEM ARE PROPOSED BY THIS PROJECT. THE LOCATION OF EXISTING EXITS APPEARS TO COMPLY WITH THE MINIMUM EXIT TRAVEL DISTANCE REQUIREMENT OF 200 FEET AS INDICATED ON THE PLAN AT LEFT.	

CONTRACTOR SHALL MAINTAIN OPEN ACCESS TO EXIT DOORS DURING CONSTRUCTION UNLESS MAKING SPECIAL ARRANGEMENTS WITH THE OWNER FOR A TEMPORARY CLOSURE WITH CONCURRENCE OF THE ARCHITECT.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

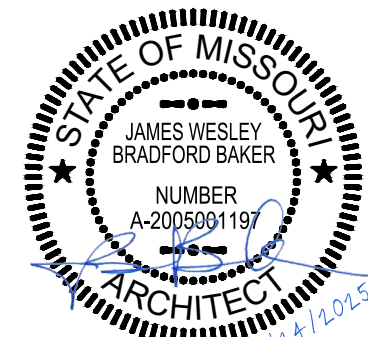
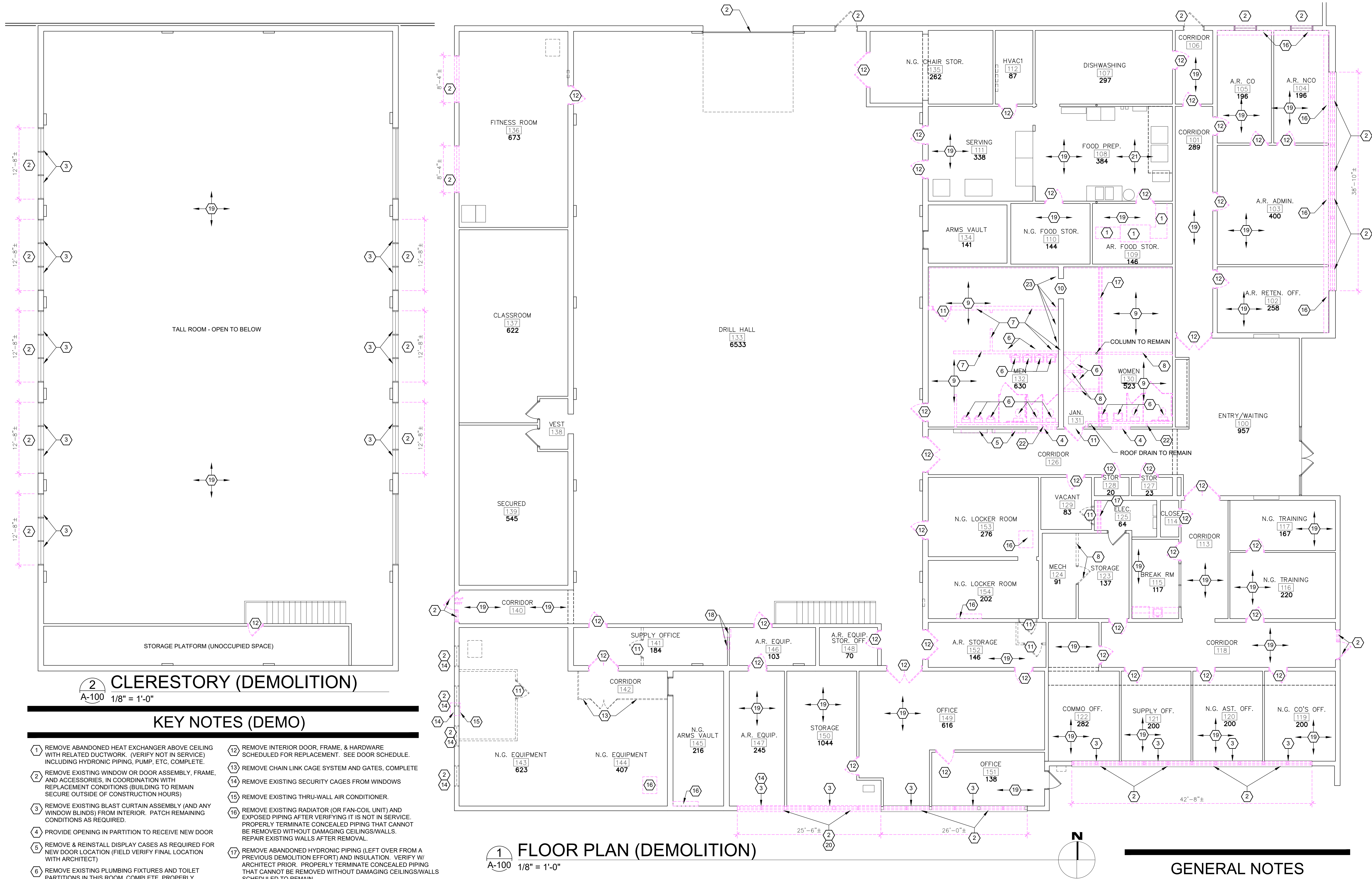
CAD DWG FILE: T2238-01 6297 8136297001-G-101
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:

CODE
ANALYSIS
PLAN

SHEET NUMBER:

G-101



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-100
DRAWN BY: BB
CHECKED BY: JB

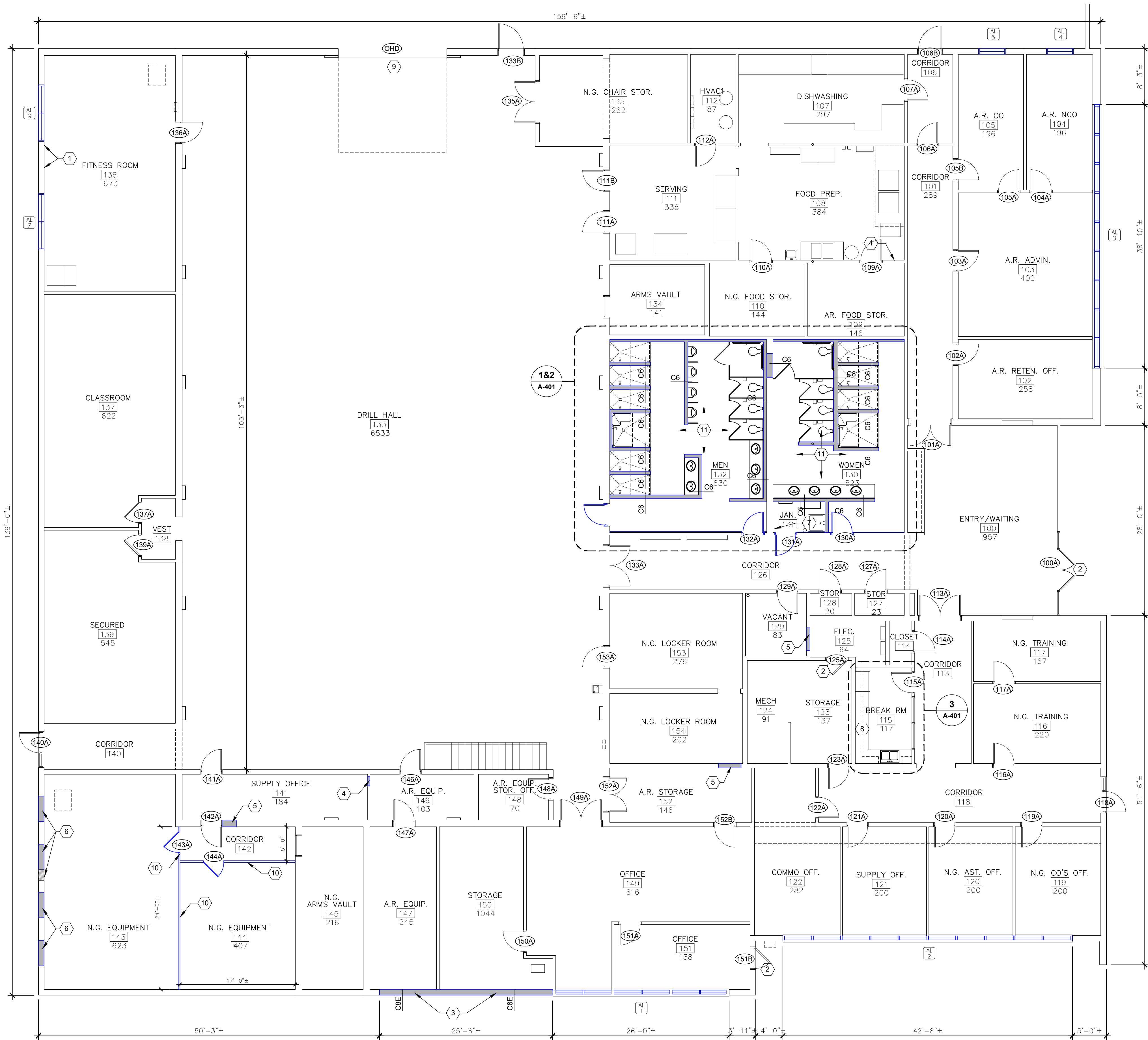
SHEET TITLE:
DEMOLITION
FLOOR PLAN

SHEET NUMBER:

A-100

GENERAL NOTES

- (A) REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- (B) THIS DEMOLITION PLAN IS PROVIDED FOR BIDDING CONVENIENCE AND MAY NOT EXHAUSTIVELY DESCRIBE ALL ITEMS REQUIRED TO BE REMOVED OR TEMPORARILY DISPLACED IN ORDER TO PERFORM ALL THE WORK INDICATED IN THIS SET OF CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT IF ANY DISCREPANCIES OR QUESTIONS ARISE. THE INTENT IS FOR THE CONTRACTOR TO PROVIDE ALL INCIDENTAL DEMOLITION REQUIRED TO FURNISH THE RENOVATIONS INDICATED UNDER THIS COVER AND RETAIN THE FUNCTIONALITY OF ALL SYSTEMS NOT SPECIFICALLY DESCRIBED.



1 FLOOR PLAN
A-101 1/8" = 1'-0"

SYMBOLS LEGEND

- 101 DOOR MARK, REFER TO DOOR SCHEDULE.
- 2 KEY NOTE, REFER TO KEY NOTES
- AL WINDOW MARK, REFER TO WINDOW SCHEDULE
- ENTRY/WAITING 1 957 ROOM MARK
- C8 WALL TYPE, REFER TO WALL TYPES

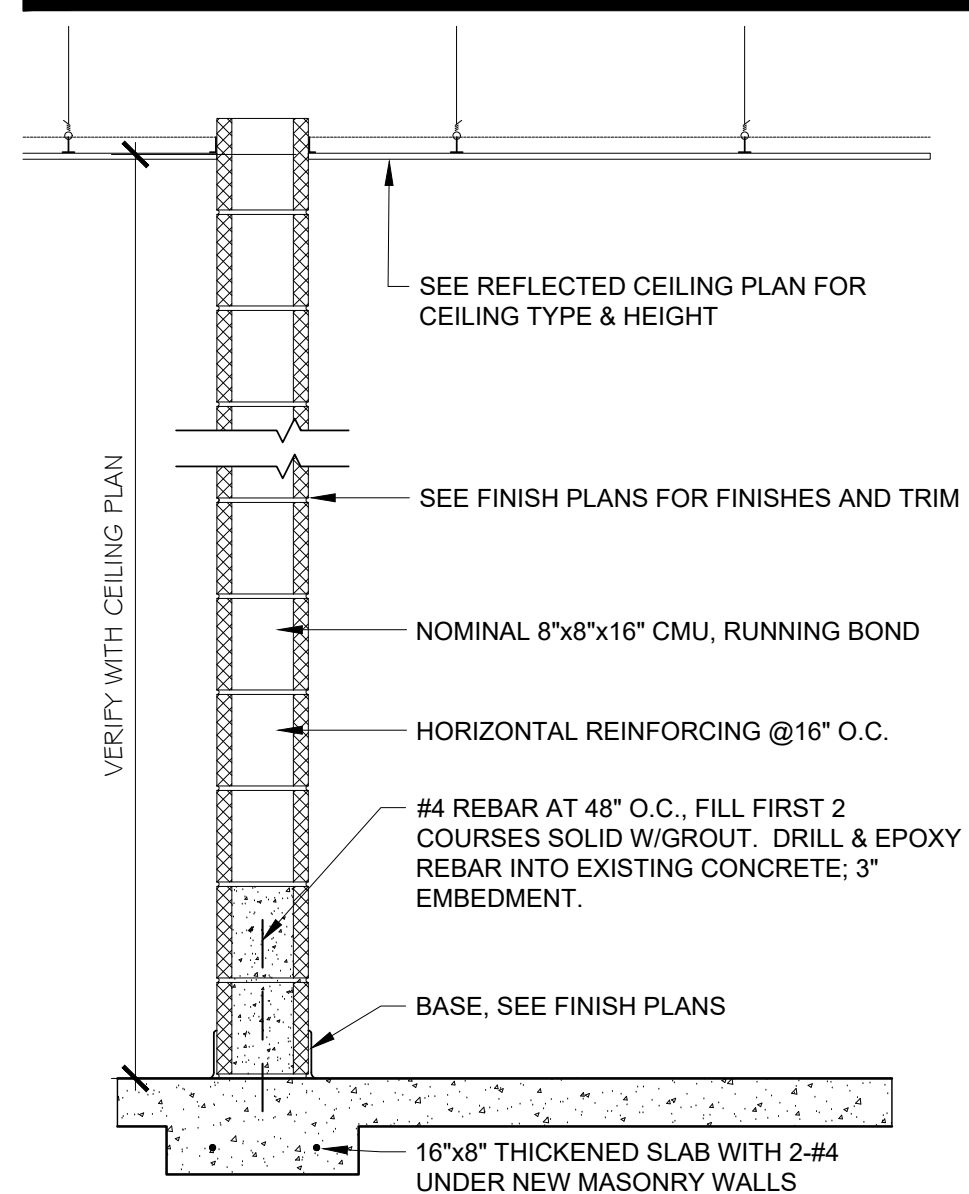
GENERAL NOTES

- A REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- B DIMENSIONS ARE TO FACE EXISTING WALLS OR FACE OF PROPOSED FINISH WALLS. FIELD VERIFY ALL EXISTING CONDITIONS.
- C WINDOW KEYS REFERENCE SHEET A-202
DOOR KEYS REFERENCE SHEET A-601

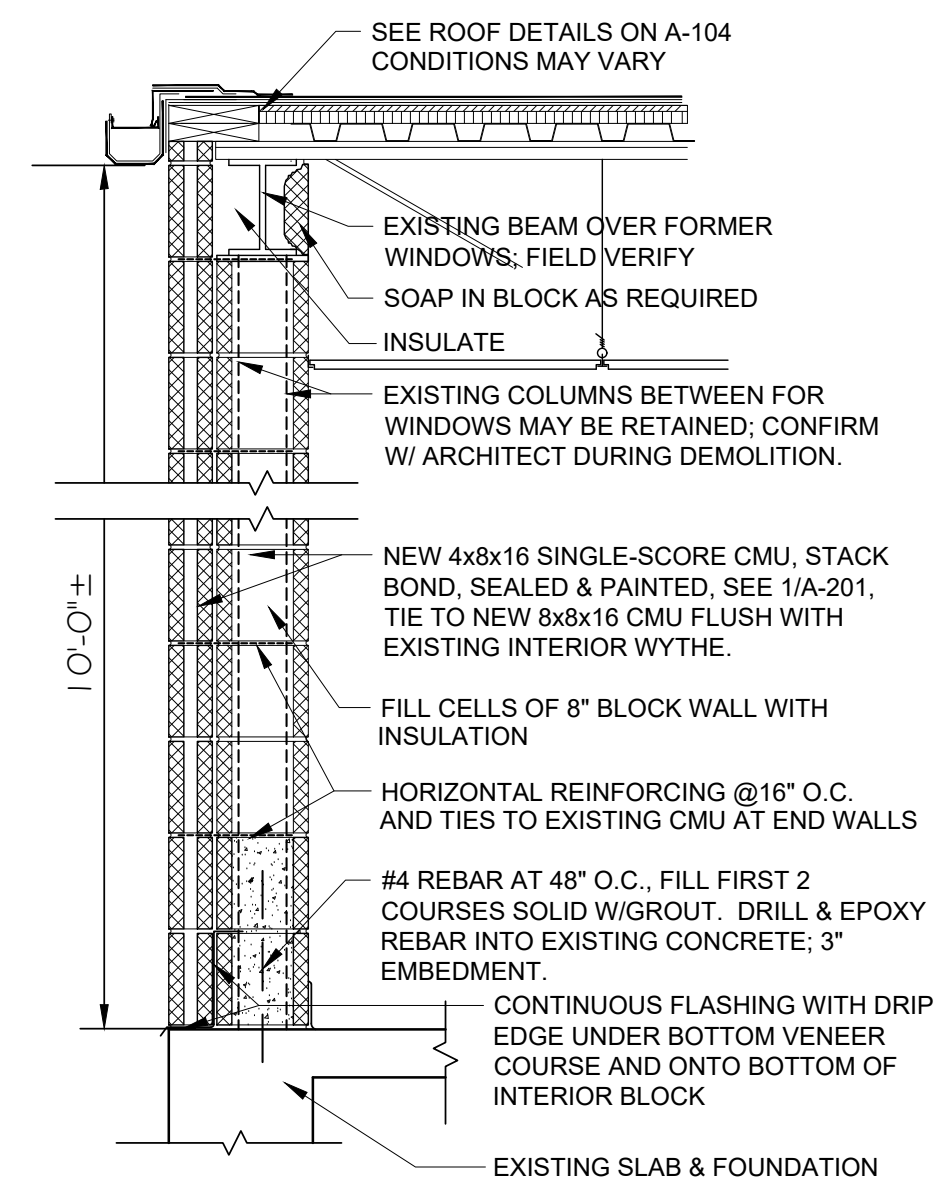
KEY NOTES

- 1 TUCKPOINT AND REPAIR INTERIOR CRACKS IN CMU AS PART OF EXTERIOR TUCKPOINTING OPERATIONS
- 2 NO CHANGES TO THIS DOOR / FRAME / ASSEMBLY
- 3 NEW SINGLE-SCORE CMU WALL, SEE WALL TYPE C8E. DESIGN INTENT IS TO PRESERVE ANY SUPPORTING COLUMNS AFTER WINDOW DEMOLITION, THEN PROVIDE A NEW 8" WALL TO INFILL FORMER WINDOW AND WAINSCOT AREA UP TO BEARING POINT OF ROOF. MAINTAIN ANY EXISTING BEAMS/COLUMNS AND ALL EXISTING PLUMBING PENETRATIONS IN THIS AREA.
- 4 REPAIR WALL FROM REMOVAL OF HVAC DEVICES
- 5 NOT USED
- 6 INFILL OPENING WITH MULTI-WYTHE BRICK/CMU TO MATCH EXISTING THICKNESS, COURSING, AND BOND PATTERN. APPLIES TO 4 FORMER WINDOWS AND FORMER OPENING FOR WINDOW AIR CONDITIONER.
- 7 STORAGE SHELVES, SEE 18/A-403
- 8 NEW MILLWORK AND SINK, SEE 16/A-403 AND 17/A-403
- 9 NEW OVERHEAD DOOR AND OPENER, SEE DOOR SCHEDULE. CONNECT TO EXISTING ELECTRICAL CIRCUIT AND PROVIDE CONTROLS ON WALL NEXT TO DOOR.
- 10 SECURITY CAGING WITH INTEGRAL CAGE DOORS. SEE SPECIFICATION SECTION 10 2213. EXTEND TO STRUCTURE ABOVE AND PROVIDE CAGE CEILING IN WALKWAY 142.
- 11 REPLACE SLAB WITH MATCHING THICKNESS CONCRETE ON MIN 4" GRAVEL. PROVIDE 6X6 WWM W1.4X1.4 AND 10 MIL POLYETHYLENE VAPOR BARRIER. CONTROL JOINTS MAX 10'X10'

WALL TYPES



- C8 PARTITION: 8" CMU (SEE ABOVE)
- C6 PARTITION: SAME AS C8 EXCEPT 6" CMU
- C4 PARTITION: SAME AS C8 EXCEPT 4" CMU
MAY BE REQUIRED FOR INFILL OF EXISTING OPENINGS, SUCH AS THE MEN'S ACCESSIBLE SHOWER AND OTHER EXISTING MULTI-WYTHE CONFIGURATIONS



C8E EXT WALL: NEW MULTI-WYTHE CMU PANEL TO REPLACE FORMER WINDOW WALL

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

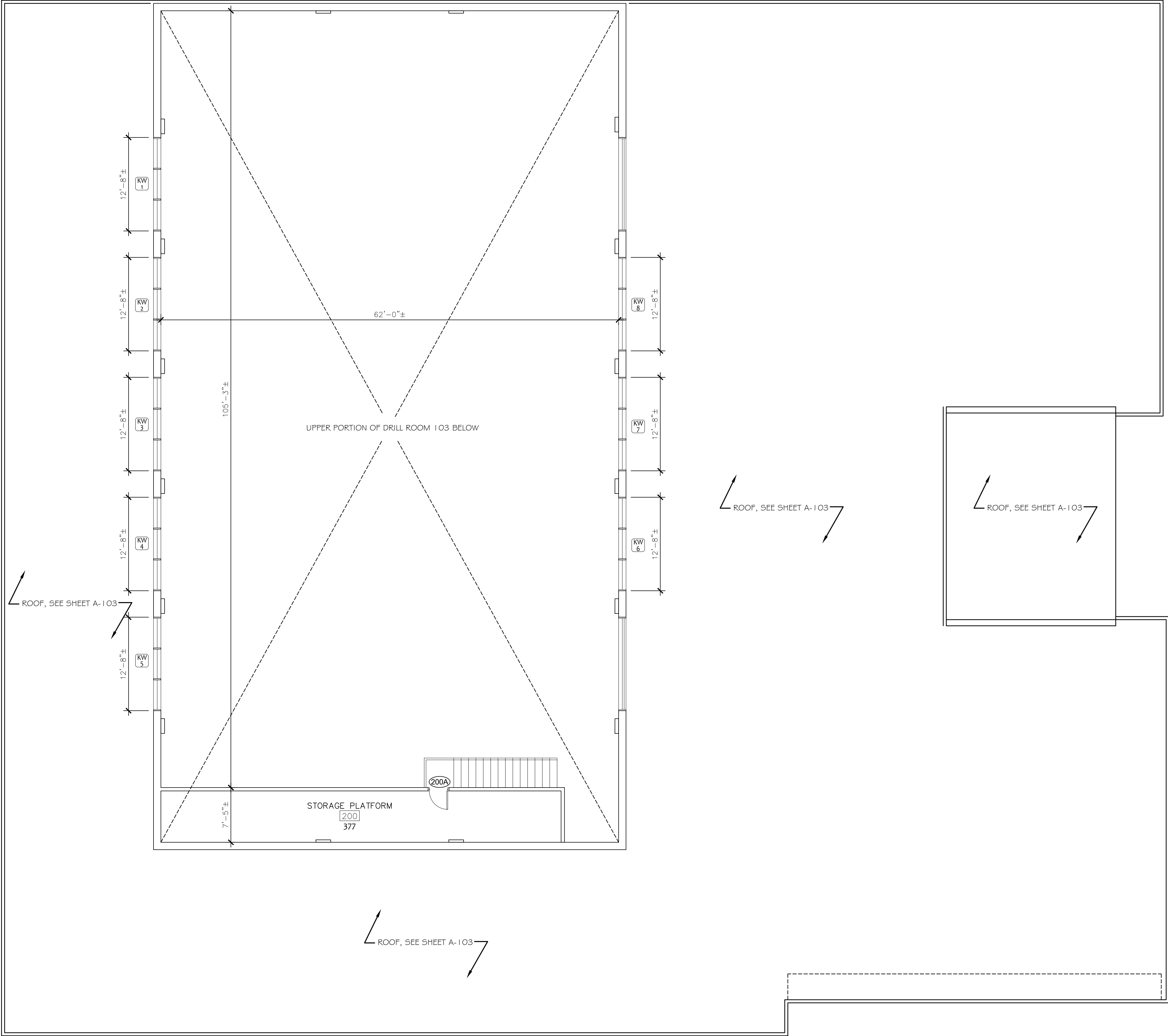
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-101
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:
FLOOR PLAN

SHEET NUMBER:

A-101



GENERAL NOTES

- (A) THIS PLAN PROVIDED FOR GENERAL REFERENCE ABOUT THE UPPER PORTIONS OF THE DRILL ROOM WALLS, WHICH EXTEND ABOVE THE ADJACENT ROOF SURFACES AND ARE REFERRED TO AS THE "CLERESTORY" IN THESE DOCUMENTS. SEE EXTERIOR ELEVATIONS FOR MORE INFORMATION.
- (B) INFORMATION CONCERNING THE DRILL ROOM CEILING APPLIES EQUALLY WHETHER INDICATED ON THE MAIN LEVEL FLOOR PLAN OR CLERESTORY PLAN AS THIS IS THE SAME ROOM.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

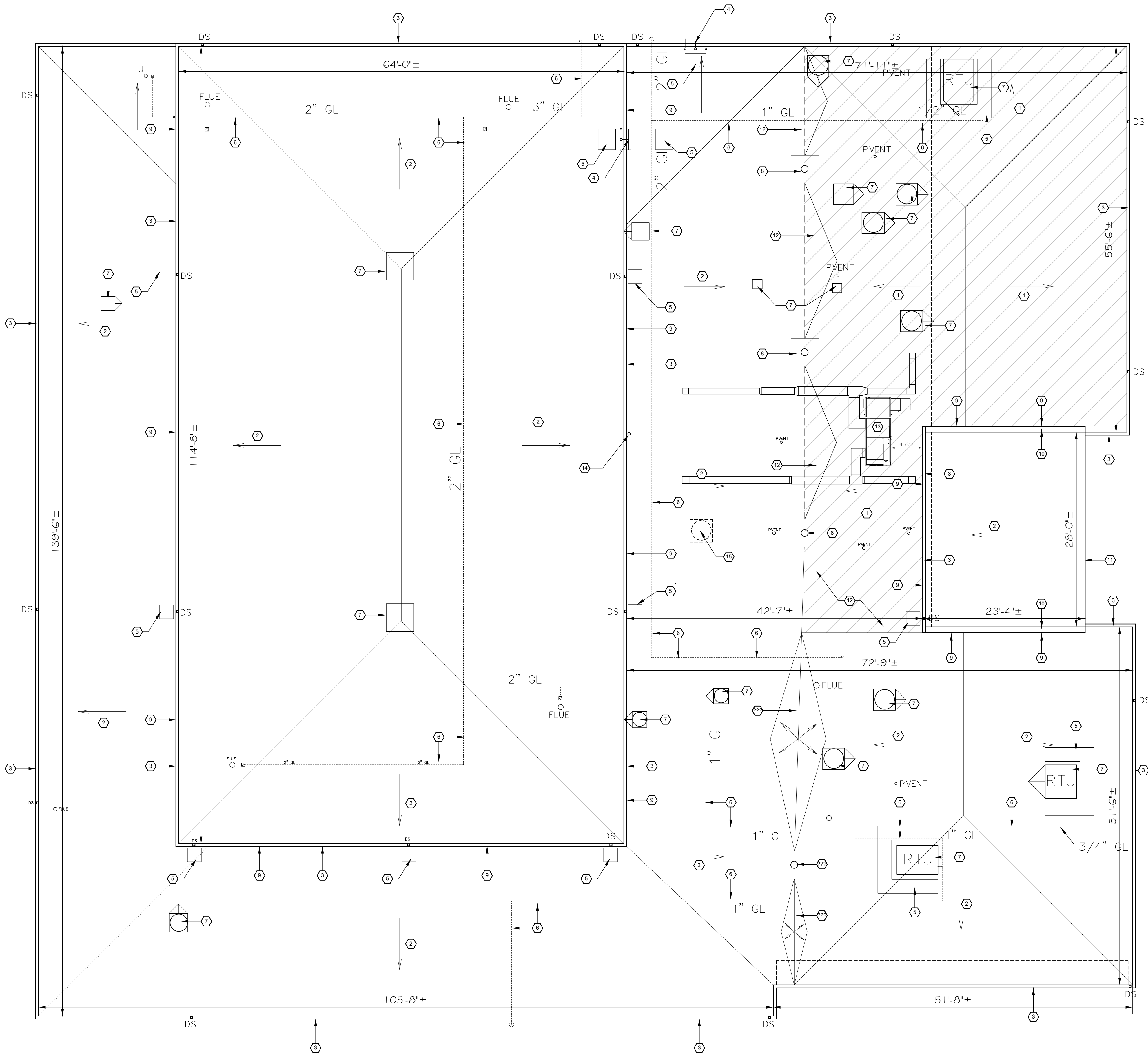
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-A-102
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:
CLERESTORY PLAN

SHEET NUMBER:

A-102



1 ROOF PLAN
A-103 1/8" = 1'-0"

KEY NOTES

EXISTING ROOFING SYSTEM: DEMO EXISTING EPDM ROOFING MEMBRANE, INSULATION DOWN TO EXISTING METAL DECK. DEMO EXISTING METAL GUTTERS, DOWNSPOUTS, FLASHING, CAPS, ETC. PROVIDE NEW. (WHOLE BUILDING)

NEW ROOFING: FULLY ADHERED 60 MIL TPO ROOFING; BASIS OF DESIGN IS CARLISLE SURE-WELD REINFORCED MEMBRANE, WHITE, ON 1/2" HIGH DENSITY FIBERBOARD COVER BOARD, SCREWED DOWN ON R-30 INSULATION. PROVIDE 1/2" CRICKETS BEHIND ALL ROOF TOP ITEMS AND PENETRATIONS. SEE LIST OF ALTERNATE MANUFACTURERS IN TPO ROOFING SPECIFICATION OR PROVIDE A SUBSTITUTION REQUEST FORM DURING BIDDING FOR OTHER PROPOSED ALTERNATIVES.

WARRANTY REQUIREMENTS: 75 MPH UPLIFT, 20 YEAR MINIMUM.

VERIFY EQUIPMENT, CURB, AND FLASHING CLEARANCES REQUIRED FOR INSULATION BOARD INDICATED. NOTIFY ARCHITECT IF ANY DISCREPANCY IS FOUND PRIOR TO TEAROFF.

BASE BID TO INCLUDE UP TO 500 SQUARE FEET OF METAL ROOF DECK REPLACEMENT FROM ANY DAMAGE THAT IS FOUND DURING THE ROOFING OPERATIONS. SEE SPECIFICATION MANUAL FOR UNIT PRICING REQUIREMENTS THAT MAY AFFECT THIS BASE VALUE.

- 1 ROOF DECK BELOW HATCHED AREA ALREADY SLOPES 1/2" IN 12" BELOW THE INSULATION BOARD
- 2 TAPER ALL OTHER AREAS AS INDICATED TO MAINTAIN 1/4" IN 12" ROOF SLOPE DOWN IN THE DIRECTIONS INDICATED. THE INTENTION IS TO MATCH THE EXISTING ROOF SLOPES PRIOR TO TEAR-OFF EXCEPT AS NOTED OR AS FIELD COORDINATED WITH ARCHITECT.
- 3 DEMO GUTTER, DOWNSPOUTS AND FLASHING, REPLACE AND MATCH EXISTING PROFILES, SIZES, STRAPS AND DOWNSPOUT LOCATIONS. SEAL ALL JOINTS AND CONNECTIONS IN GUTTER SYSTEM. COMPLETE.
- 4 REMOVE AND REINSTALL LADDER GUIDE AS REQUIRED FOR NEW ROOF
- 5 PROVIDE HOUSEKEEPING PADS AS INDICATED
- 6 DEMO EXISTING WOOD GAS PIPING SUPPORTS, PROVIDE NEW FABRICATED PIPE SUPPORTS AND CLAMPS PER DETAIL 2/A-103
- 7 ROOF TOP HVAC UNIT, OR EXHAUST FAN, ETC. PROVIDE 1/2" TAPERED 45° INSULATION CRICKET, FLASHING AND TERMINATION
- 8 REUSE EXISTING ROOF DRAIN

- 9 DEMO EXISTING WALL FLASHING AND TERMINATION BAR. PROVIDE NEW IN PREFINISHED METAL. CLEAN AND PREPARE BRICK FOR NEW SEALANT
- 10 DEMO EXISTING, PROVIDE NEW PREFINISHED METAL COPING CAP WITH 4" FASCIA, PROVIDE NEW TREATED BLOCKING AS REQUIRED
- 11 DEMO EXISTING, PROVIDE NEW PREFINISHED METAL ROOF EDGE FLASHING AND FASCIA, MATCH EXISTING PROFILE.
- 12 FIELD VERIFY AND COORDINATE PROPER TAPERED INSULATION CRICKETS TO DRAINS AND ROOF TRANSITIONS. VERIFY WITH ARCHITECT DURING SHOP DRAWING PROCESS. PROVIDE POSITIVE 1/4"/1'-0"
- 13 NEW ROOF-TOP MECHANICAL UNIT WITH CURB. SEE MECHANICAL SHEETS FOR MORE INFORMATION. NEW SYSTEM WILL HAVE ABOVE-ROOF DUCTWORK WITH PENETRATIONS DOWN TO BUILDING INTERIOR AS THE SPACE ABOVE THE LATRINE CEILINGS IS LIMITED.
- 14 REMOVE AND REINSTALL HF ANTENNA/MAST WITH GUY WIRES AS PART OF THE RE-ROOFING OPERATIONS.
- 15 REMOVE EXHAUST SYSTEM FROM ORIGINAL LATRINE AREA AND PATCH ROOF DECK TO MATCH.

GENERAL NOTES

A CONTRACTOR TO INCLUDE 2,000 SF OF METAL DECKING REPLACEMENT AS PART OF THE BASE BID TO COVER UNFORESEEN DAMAGE IF REQUIRED. SEE SPECIFICATION SECTION 01 2200 "UNIT PRICES" FOR MORE INFORMATION AND IDENTIFY THE REQUIRED VALUES ON THE BID FORM.

B REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.

C REFER TO PRE-ENGINEERED METAL BUILDING SUBMITTALS FOR ADDITIONAL REQUIREMENTS.

D REFER TO PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ALL ROOF-MOUNTED EQUIPMENT SIZES AND TYPES, INCLUDING VENT PIPES, FLUES, AND EXHAUST. ALL PIPE FLASHING PENETRATIONS THROUGH ROOF SHALL BE TYPE APPROVED BY PRE-ENGINEERED METAL BUILDING MANUFACTURER WITH SHEET METAL FINISHES TO MATCH ROOF PANEL. PENETRATIONS WITH DIAMETER LESS THAN SPACING OF ROOF PANEL RIBS SHALL PENETRATE IN THE CENTER OF THE ROOF PANEL.

E ALL SUPPORTS FOR EXPOSED ROOF MOUNTED PIPING, CONDUIT, FALL PROTECTION DEVICES, SNOW GUARDS, ETC. TO BE MOUNTED ON PRE-MANUFACTURED ALUMINUM S-S CLAMPS ATTACHED TO TOP OF PRE-ENGINEERED METAL BUILDING ROOF SEAMS. ALL FRAMING, SUPPORTS, AND FASTENERS SHALL BE NON-CORROSIVE MATERIAL TYPES. EXPOSED FINISHES TO MATCH ROOF COLOR, UNLESS OTHERWISE INDICATED.

G ALL ROOF PENETRATIONS TO BE 3'-6" MINIMUM FROM ROOF EDGE PERIMETERS.

H SHEET METAL CONSTRUCTION SHALL COMPLY WITH SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) DESIGN STANDARDS AND RECOMMENDATIONS.

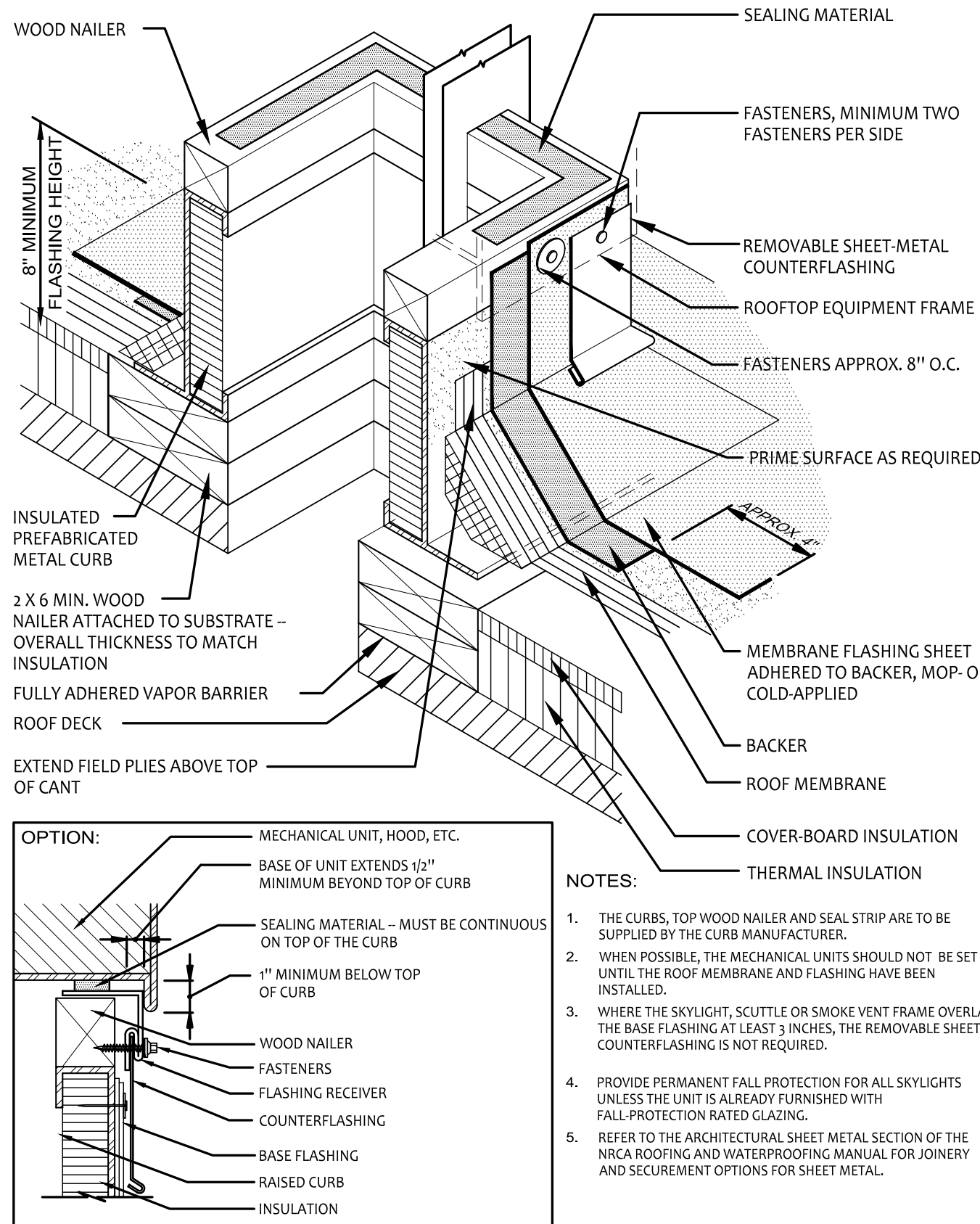
I ROOFING CONSTRUCTION SHALL COMPLY WITH NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA) DESIGN STANDARDS AND RECOMMENDATIONS.

J REFER TO EXTERIOR FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS.

K PROVIDE FALL PROTECTION AS REQUIRED BY OSHA AND OTHER APPLICABLE STANDARDS. PROTECT OVERHEAD ELECTRIC WIRES DURING ROOFING OPERATIONS.

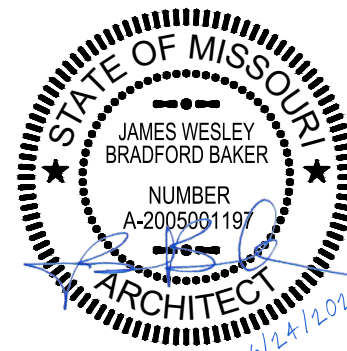
L ROOF REPLACEMENT MAY NOT OCCUR BETWEEN NOVEMBER 1 AND MARCH 1 WITHOUT SPECIFIC APPROVAL FROM THE OWNER.

M THE MECHANICAL AND PLUMBING DESIGN FOR THE LATRINES REQUIRE NEW PENETRATIONS OF THE ROOF DECK AND THE ABANDONMENT OF CERTAIN EXISTING VENTS AND EXHAUST FANS. THE CONTRACTOR SHALL SEQUENCE THE WORK SUCH THAT THESE CHANGES IN PENETRATION OCCUR BEFORE, OR IN CONJUNCTION WITH THE RE-ROOF OPERATIONS AND NOT AFTER THE FACT.



2 CURB DETAIL
A-103 AT NEW EQUIPMENT

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

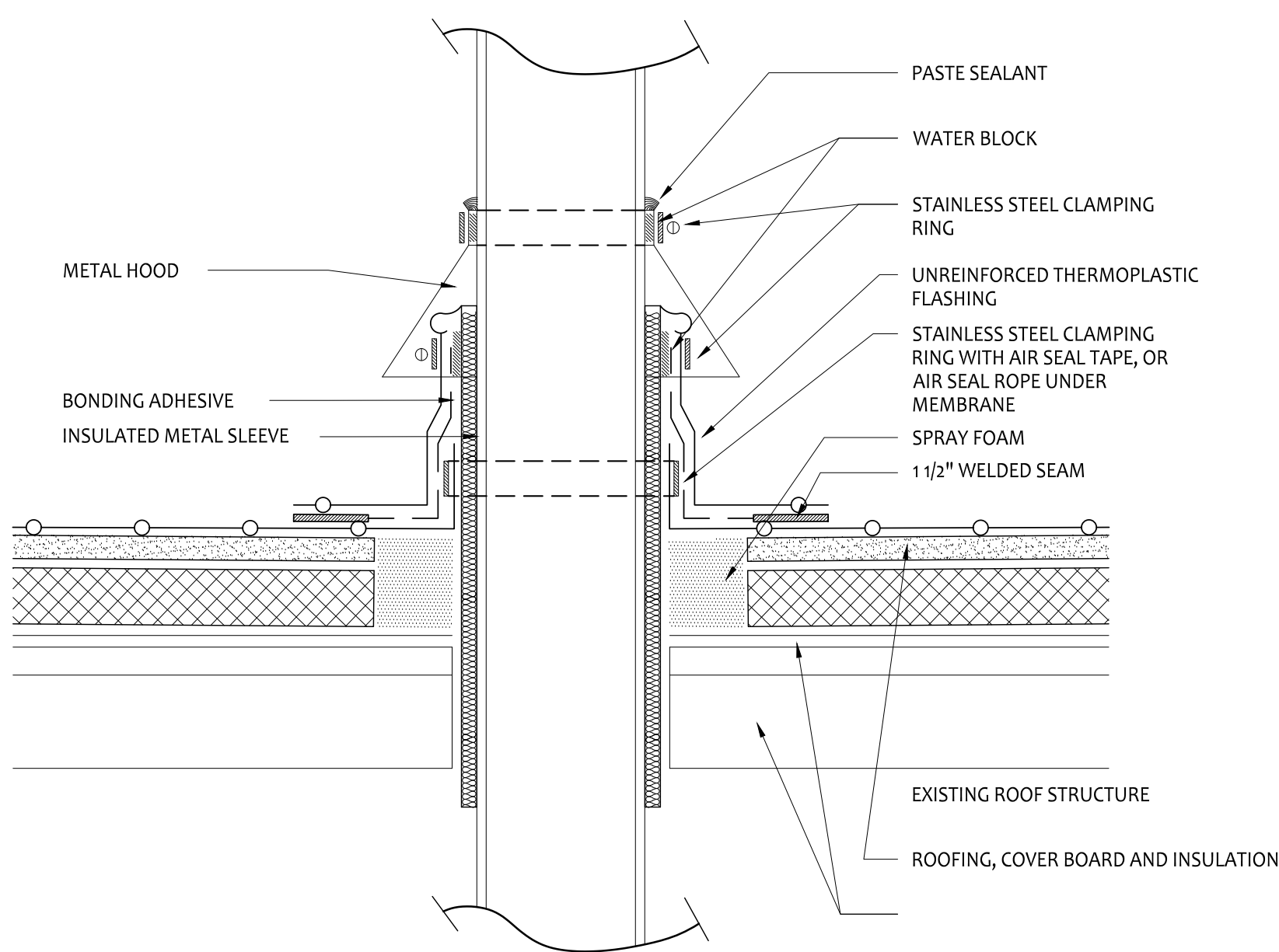
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-103
DRAWN BY: BB
CHECKED BY: JB

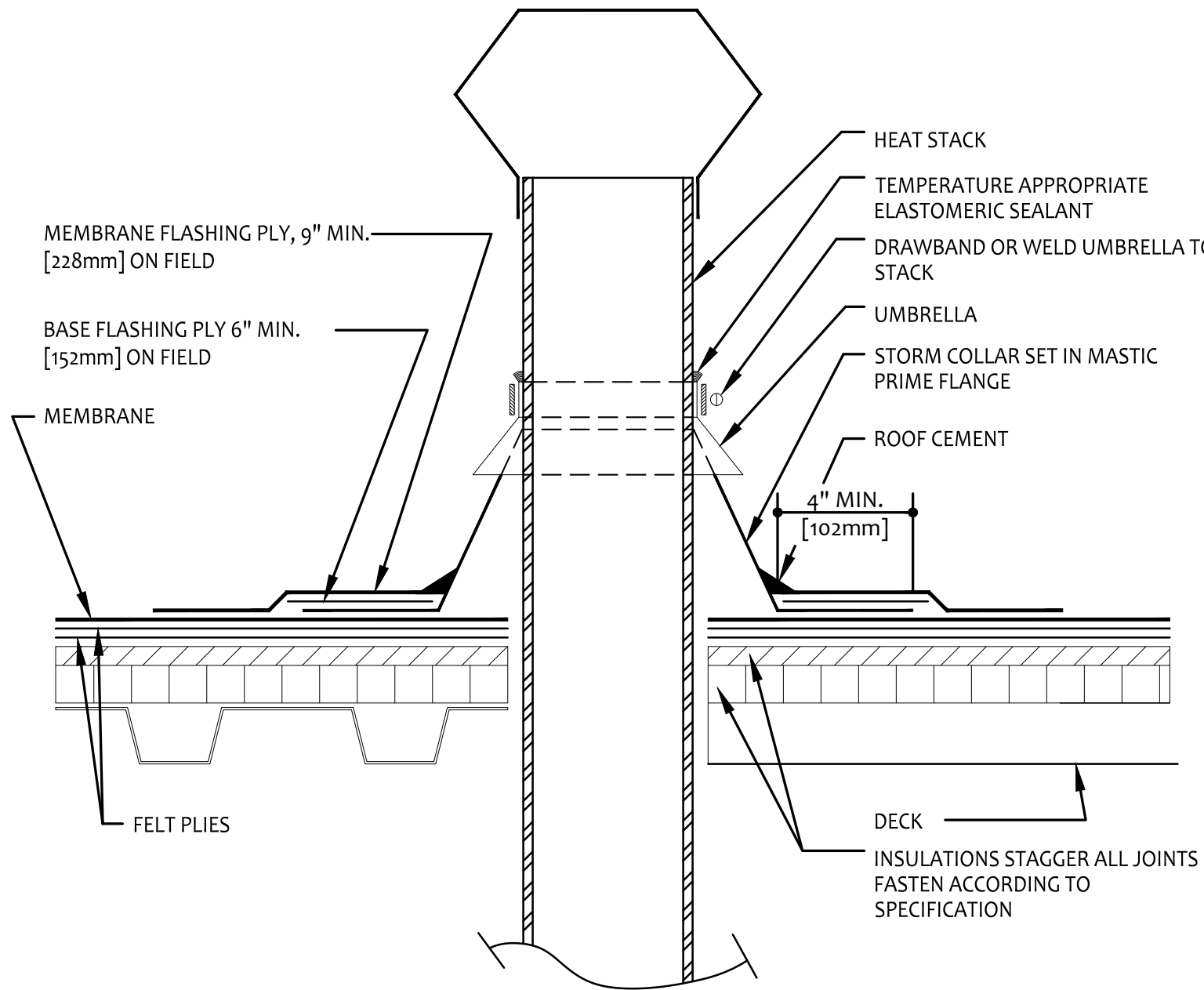
SHEET TITLE:
ROOF PLAN

SHEET NUMBER:

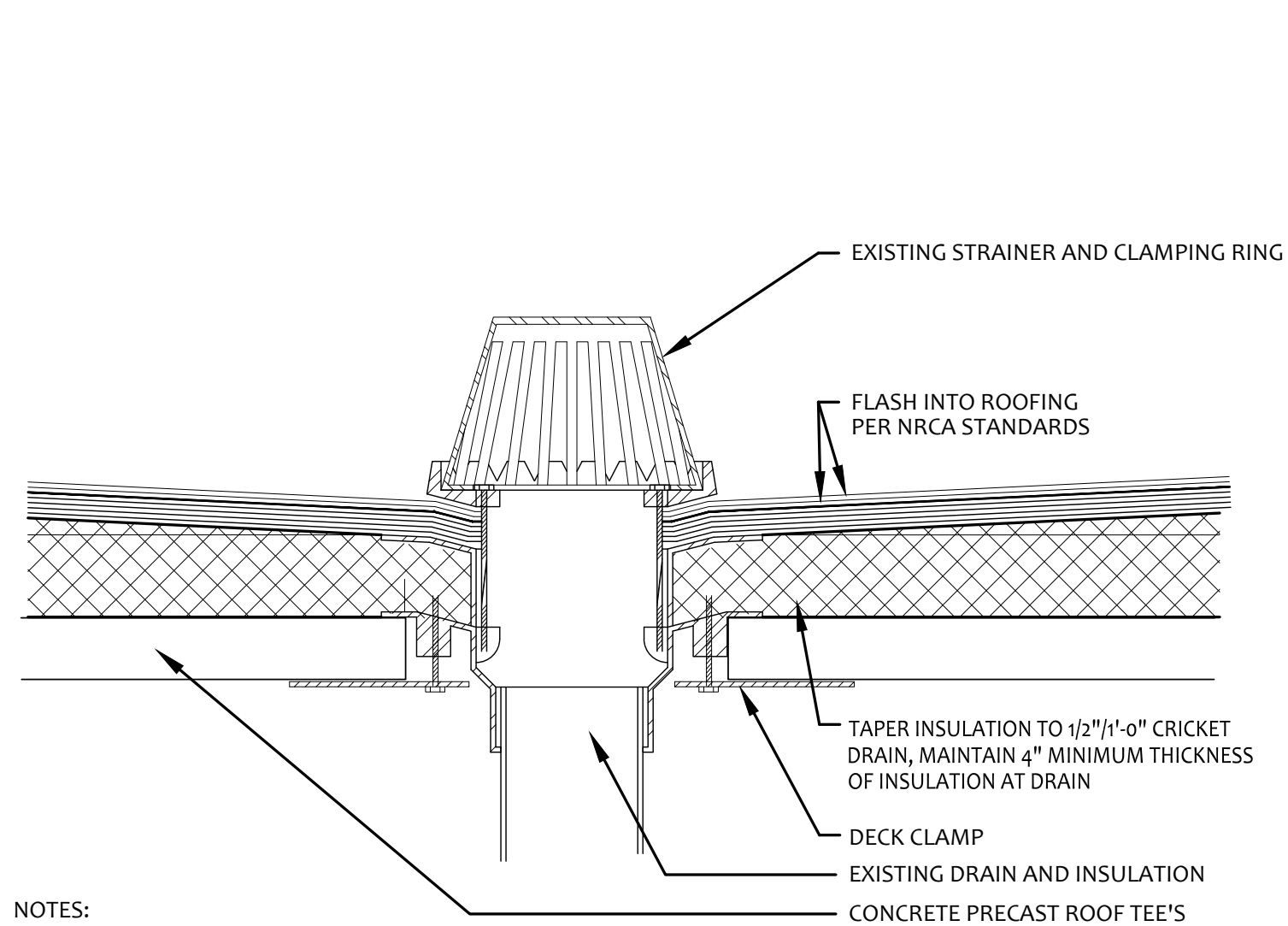
A-103



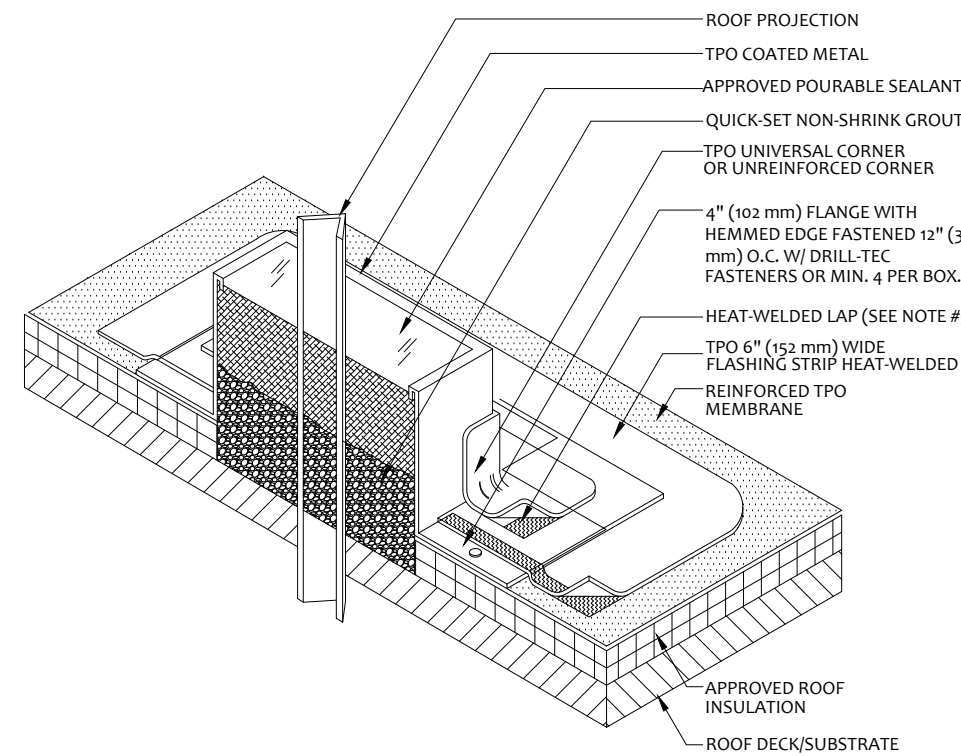
1
A-104 PIPING DETAIL



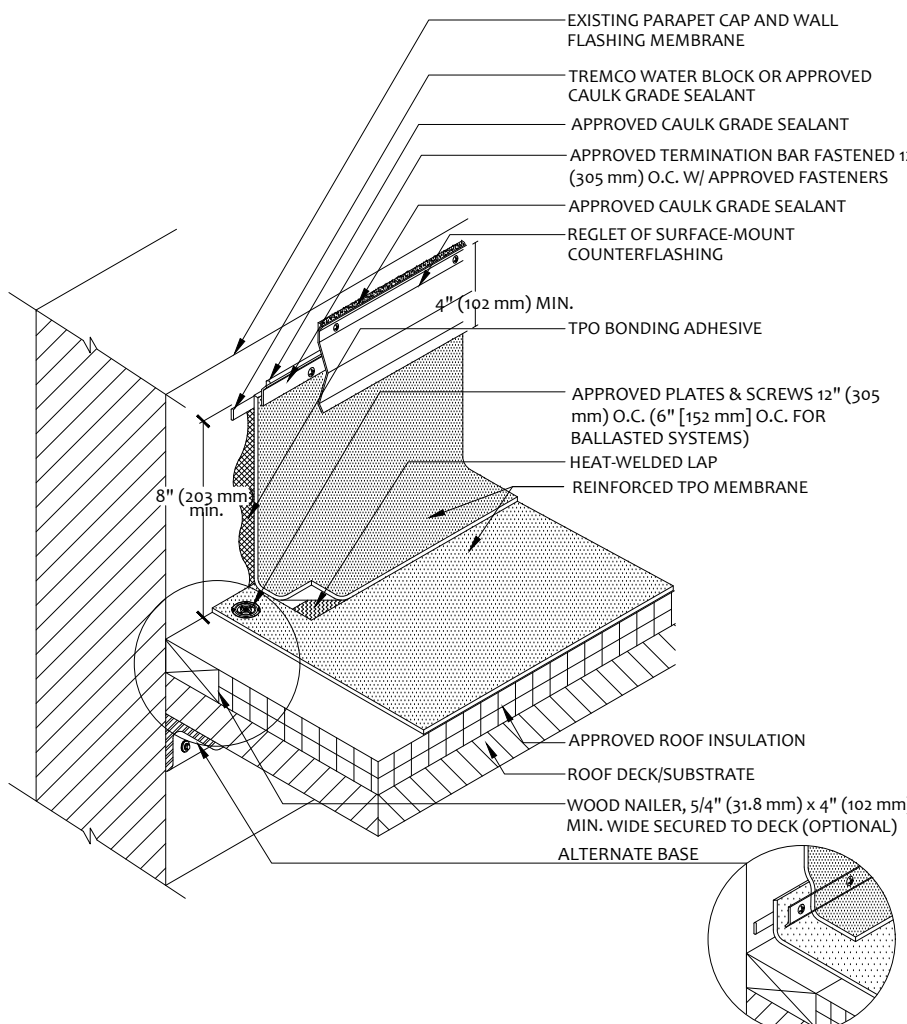
2
A-104 VENT DETAIL



3
A-104 ROOF DRAIN DETAIL AT EXISTING DRAINS

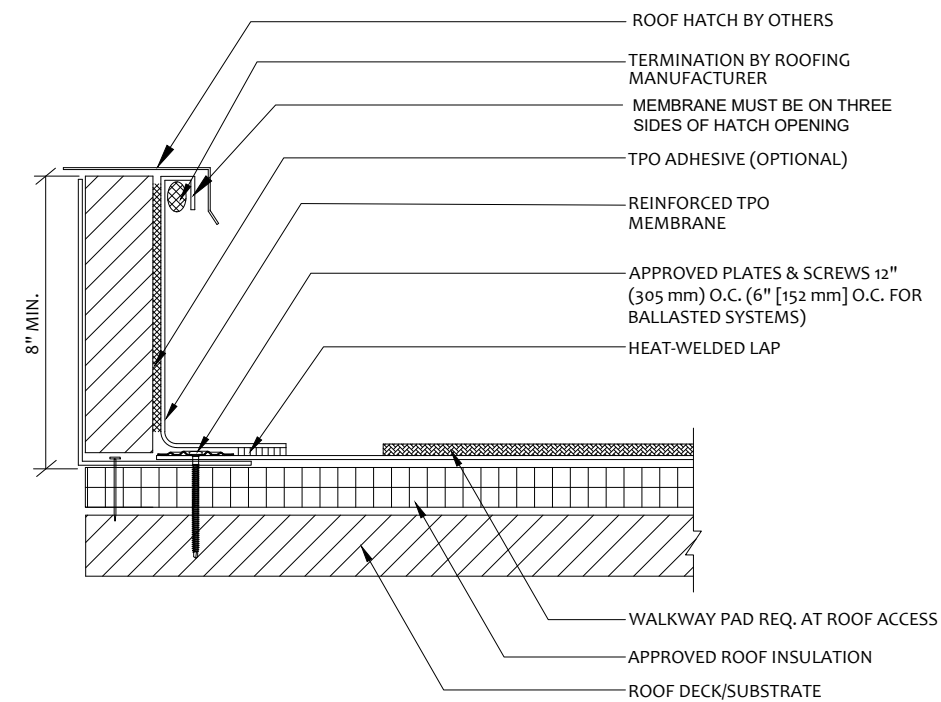


4
A-104 PENETRATION FLASHING AT SEALANT BOX



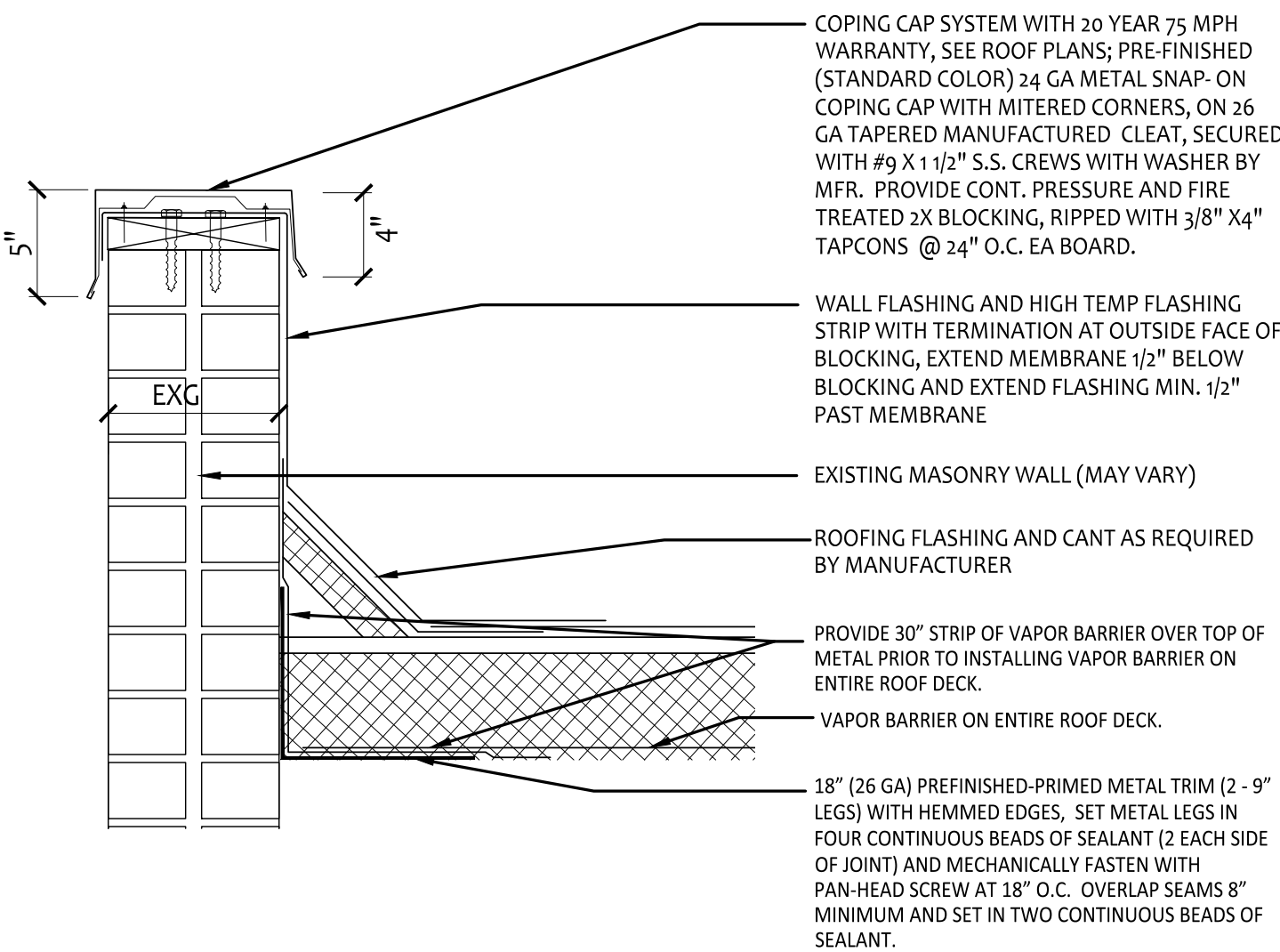
- NOTES
1. APPLY TPO CUT EDGE SEALANT TO ALL CUT REINFORCED TPO EDGES.

5
A-104 WALL FLASHING WITH COUNTER FLASHING

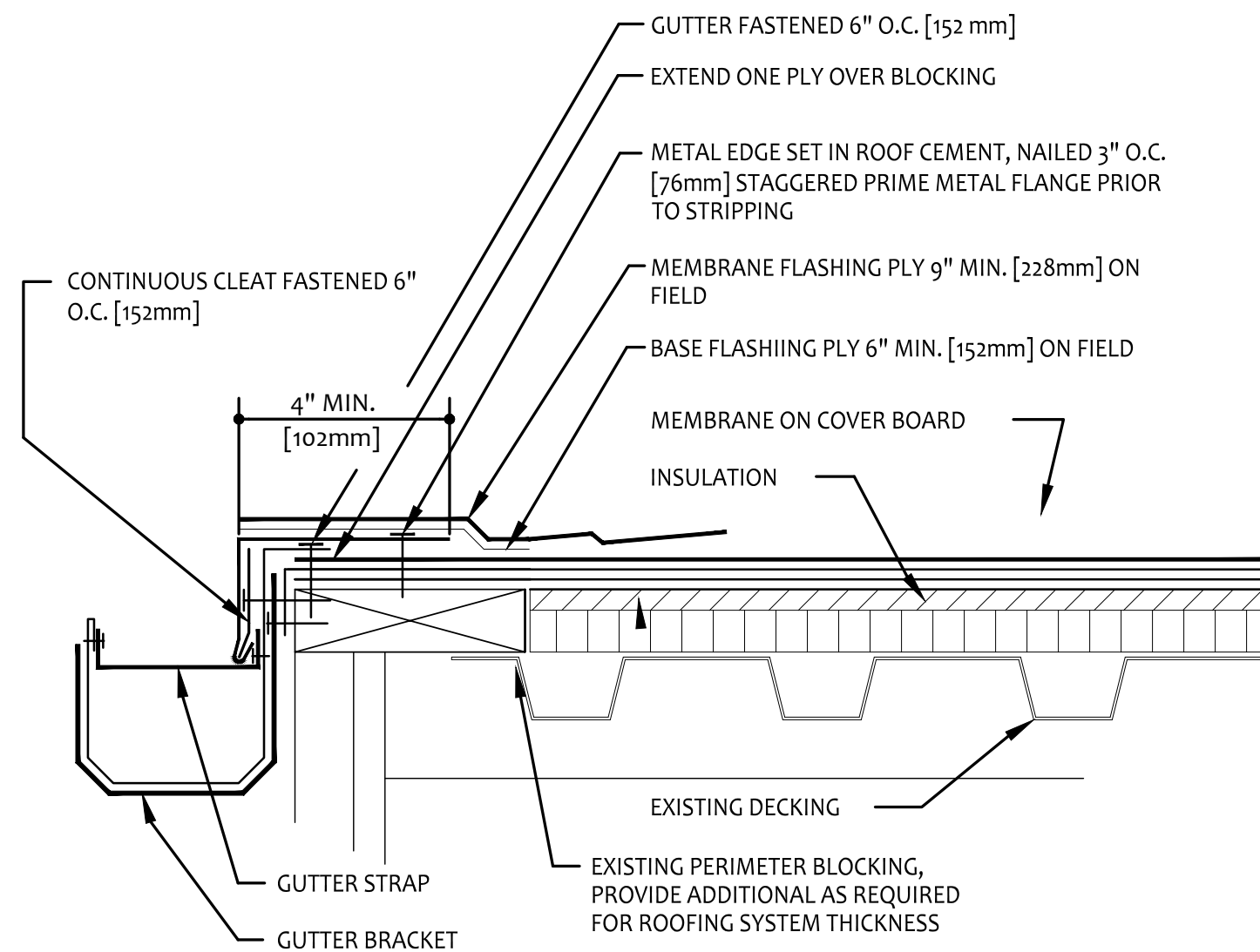


- NOTES
1. FOR INSULATION THICKNESS GREATER THAN 8" (203 mm), A HARD BOARD IS REQUIRED ON MECHANICAL SYSTEMS ONLY.
 2. IF TPO MEMBRANE IS USED, BONDING ADHESIVE IS NOT NEEDED AND WALL MUST BE PRIMED.
 3. APPLY TPO CUT EDGE SEALANT TO ALL CUT REINFORCED TPO EDGES.

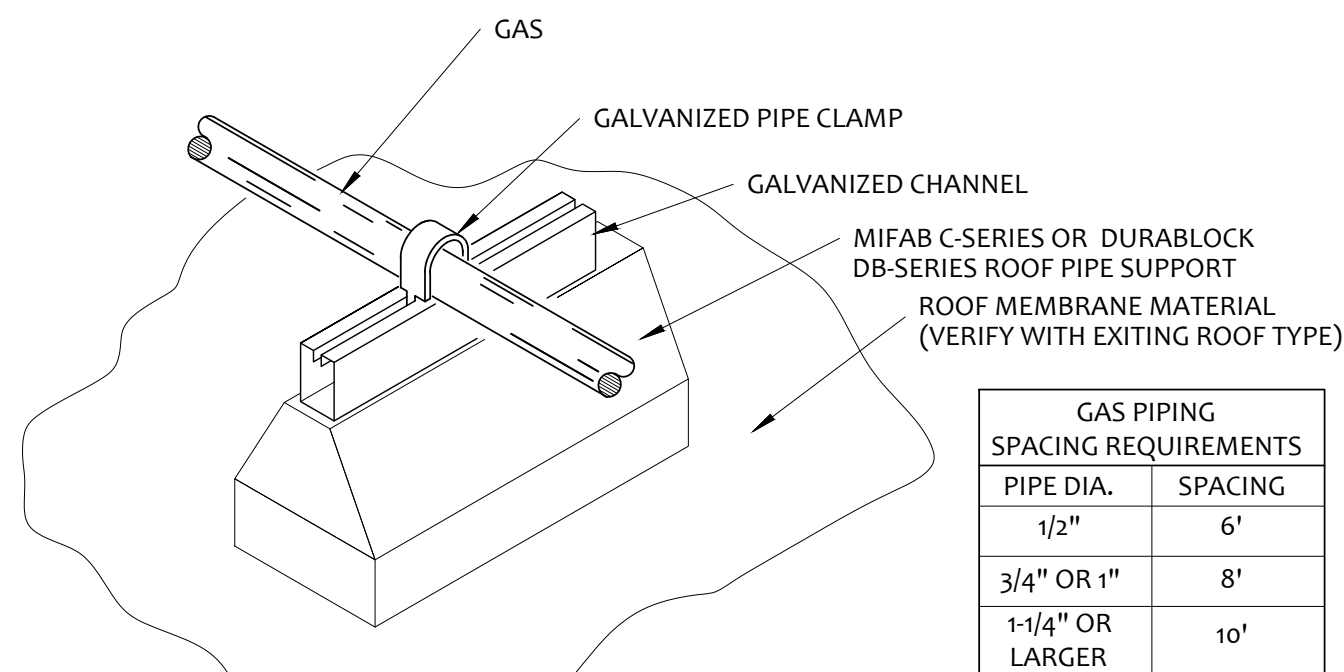
6
A-104 CURB DETAIL AT EXISTING EQUIPMENT



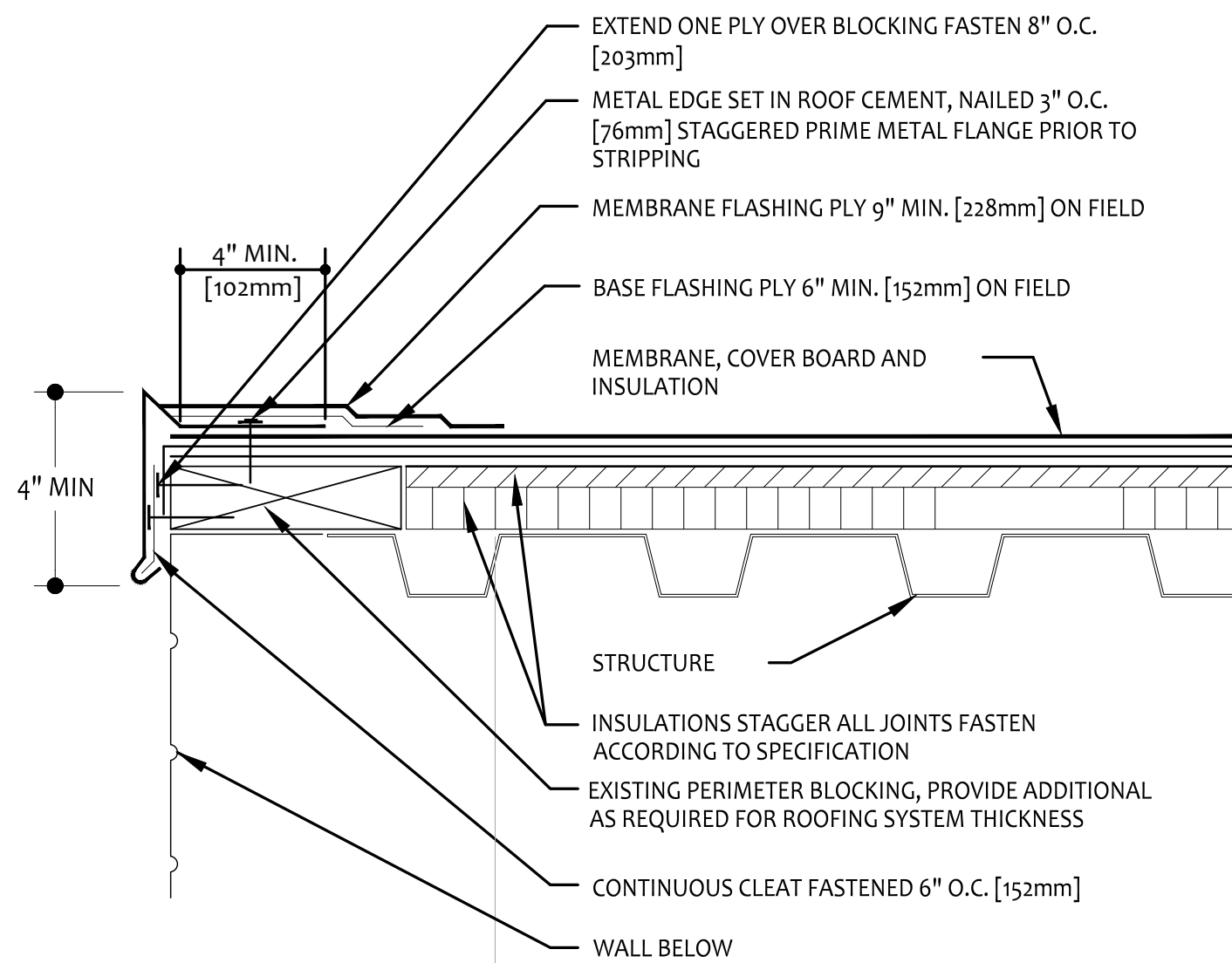
9
A-104 PARAPET DETAIL FIELD ADJUST FOR EXISTING CONDITIONS



7
A-104 GUTTER @ EDGE DETAIL



10
A-104 PIPE SUPPORT DETAIL



8
A-104 EDGE DETAIL

GENERAL NOTES

- Ⓐ DETAILS ON THIS PAGE ARE OFFERED TO ILLUSTRATE THE DESIGN INTENT FOR BIDDING PURPOSES AND MAY REQUIRE ADJUSTMENTS TO COMPLY WITH THE WARRANTY REQUIREMENTS OF THE FINAL ROOFING SYSTEM USED ON THE PROJECT AND TO COORDINATE WITH EXISTING CONDITIONS.
- Ⓑ SEE ROOF PLAN AND MECHANICAL/PLUMBING SHEETS FOR ADDITIONAL INFORMATION

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001


REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-104
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:
ROOF DETAILS

SHEET NUMBER:

A-104



RTM
engineering
consultants

RTM Engineering Consultants, LLC
3045 S Kansas Expressway
Springfield, MO 65807
417.708.9315
MO CoIA 2014035826

MEMORANDUM

DATE

July 26, 2024

TO

Brad Baker – GHN Architects + Engineers

FROM

Harrison Schober

COPY

John Miller

REGARDING

Missouri National Guard Armory – New Roof Top Unit

Brad,

This memo serves as a follow up to the site visit we made to review the existing roof framing at the Missouri National Guard Armory in Rolla on July 17, 2024. We reviewed the existing roof bar joists in preparation for a new 1,600 lb roof top unit.

In the area of the new roof top unit, the roof is framed with 14" deep bar joists at approximately 4'-6" on center. The bar joists in this area bear on a W12 beam at one end of the span, and a CMU wall at the other end. The joists penetrate through a non-load bearing wall. The bottom chord of the bar joists consists of 1-1/4"x1-1/4"x1/8" angles, and the top chord consists of 1-1/2"x1-1/2"x1/8" angles. The joist web members are round bars of approximately 5/8" diameter. A top chord extension of (2) 3"x2"x1/4" angles is present to support the roof past the W12 beam. The new roof top unit is expected to be located approximately 12' from the CMU bearing end of the span.

Our review determined that the existing bar joists should be adequate to support the required loading from the new roof top unit. See attached details for reinforcing requirements if curb is not positioned at a joist panel point and reinforcing requirements at roof penetrations.

Thank you for the opportunity to be of assistance. If you have any questions, please do not hesitate to contact us.

STATE OF MISSOURI

REGISTERED PROFESSIONAL ENGINEER

JOHN CHARLES MILLER

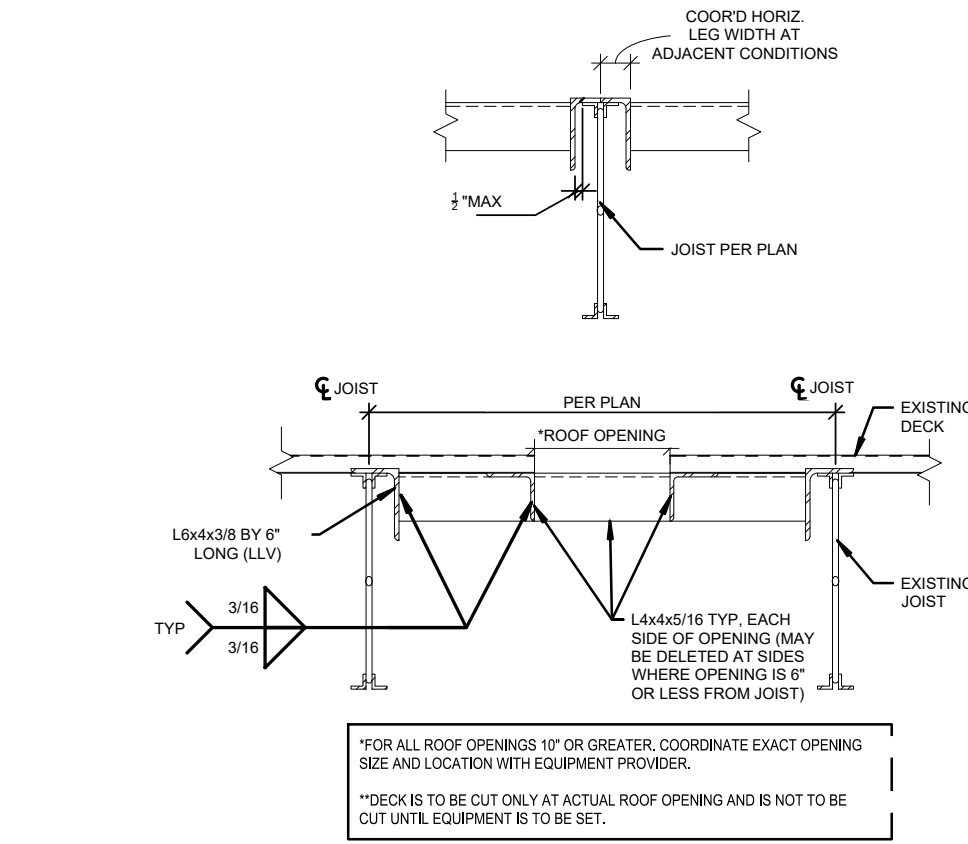
NUMBER E-29518

7.26.2024

PAGE 1 OF 1

1A-105

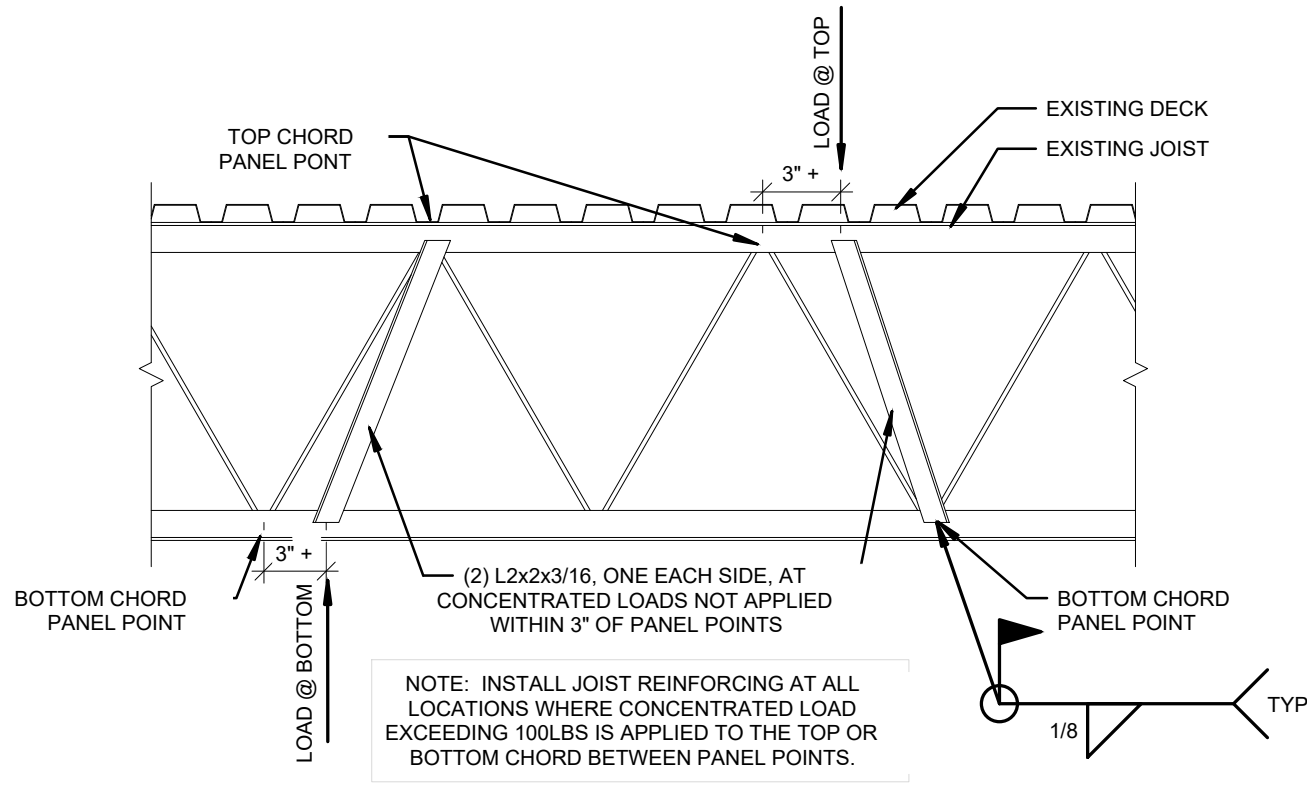
RTU STRUCTURAL ANALYSIS



2A-105

ANGLE "H" FRAME DETAIL

SCALE 3/4" = 1'-0"



3A-105

JOIST REINFORCING DETAIL

SCALE 3/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

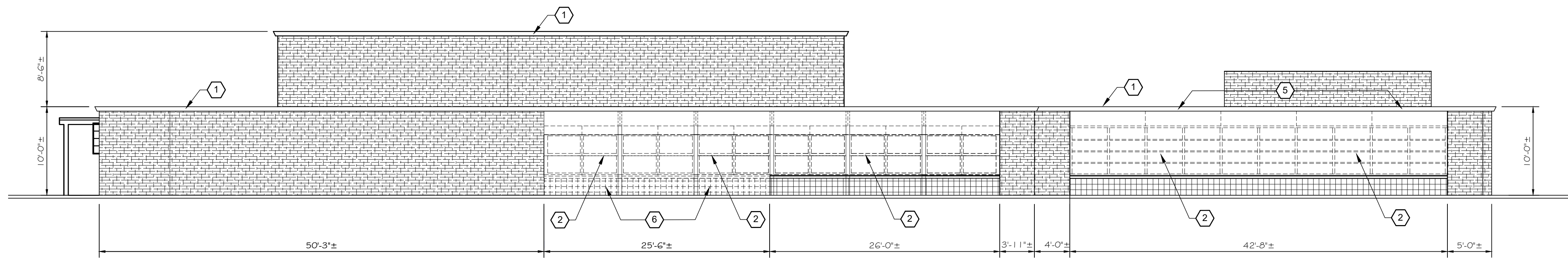
CAD DWG FILE: T2238-01 6297 8136297001-A-104
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:

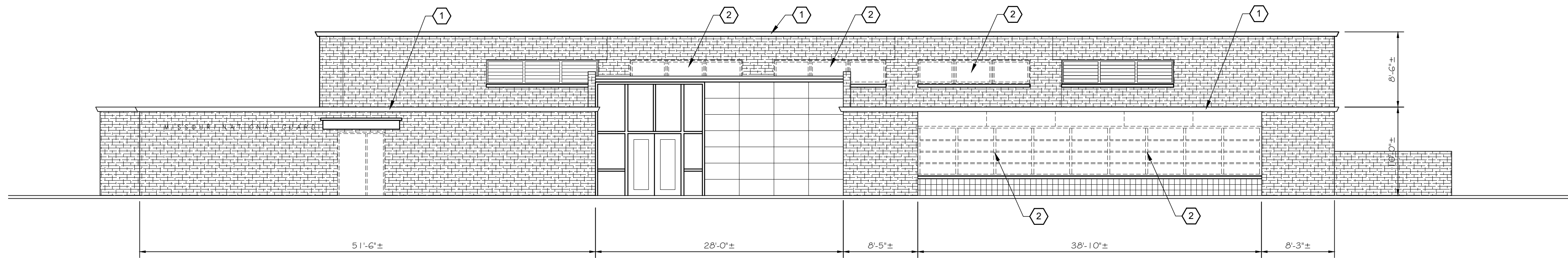
ROOF STRUCTURAL
DETAILS FOR RTU

SHEET NUMBER:

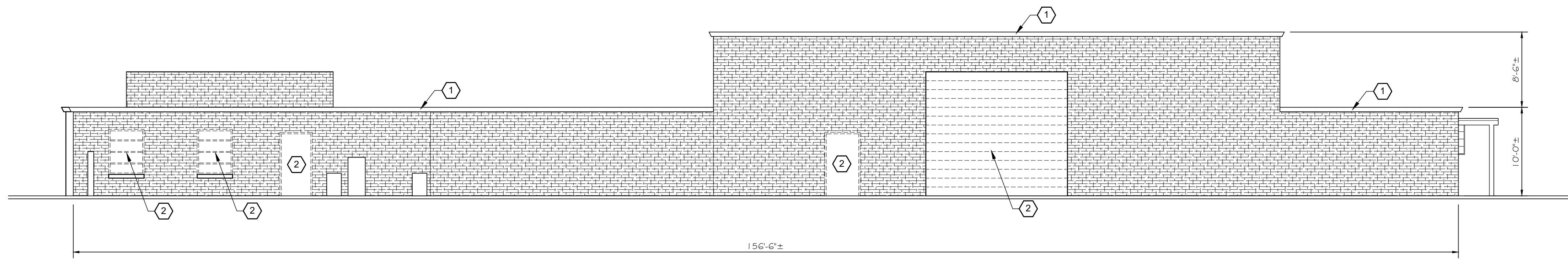
A-105



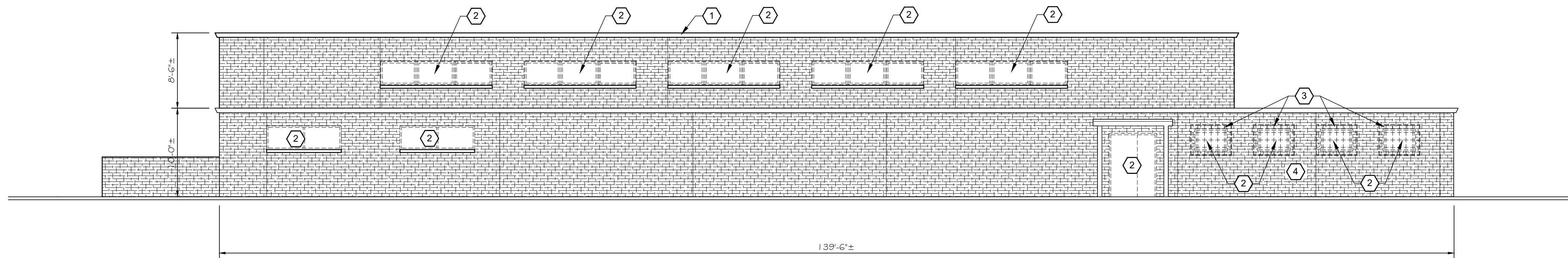
1 SOUTH ELEVATION (DEMOLITION)
A-200 1/8" = 1'-0"



2 EAST ELEVATION (DEMOLITION)
A-200 1/8" = 1'-0"



3 NORTH ELEVATION (DEMOLITION)
A-200 1/8" = 1'-0"



4 WEST ELEVATION (DEMOLITION)
A-200 1/8" = 1'-0"

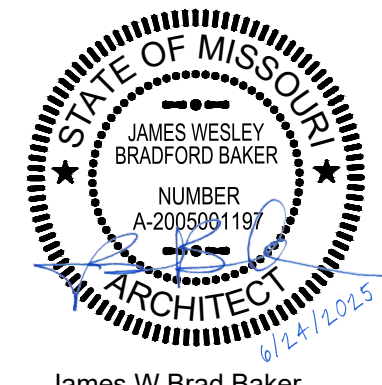
GENERAL NOTES

- (A) REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- (B) DIMENSIONS ARE TO FACE EXISTING WALLS OR FACE OF PROPOSED FINISH WALLS. FIELD VERIFY ALL EXISTING CONDITIONS.
- (C) REFER TO SCOPE OF WORK SCHEDULE FOR ADDITIONAL REQUIREMENTS. OWNER'S FURNISHED AND INSTALLED FURNITURE AND EQUIPMENT SHOW FOR REFERENCE ONLY (N.I.C.).

KEY NOTES (DEMO)

- (1) REMOVE EXISTING GUTTERS AND DOWNSPOUTS AS PART OF ROOF WORK; DOWNSPOUTS NOT SHOWN.
- (2) REMOVE EXISTING WINDOW OR DOOR ASSEMBLY, FRAME, AND ACCESSORIES, IN COORDINATION WITH REPLACEMENT CONDITIONS (BUILDING TO REMAIN SECURE OUTSIDE OF CONSTRUCTION HOURS)
- (3) REMOVE EXISTING SECURITY BARS AND FRAME
- (4) REMOVE EXISTING THRU-WALL A/C UNIT
- (5) REPLACE 2x FASCIA BOARD(S) IF REQUIRED FROM PREVIOUS WATER DAMAGE BEFORE REINSTALLATION OF GUTTER. PAINT TO MATCH EXISTING AND TOUCH UP SOFFIT IN THIS AREA IN GENERAL
- (6) REMOVE EXISTING CMU DOWN TO SLAB IN AREAS SCHEDULED TO RECEIVE THE NEW CMU WALL. SAW CUT AGAINST ADJACENT CMU AS REQUIRED. NOTIFY ARCHITECT IF STEEL COLUMNS BEAR ON THIS CMU PRIOR TO DEMOLITION AS THIS WILL REQUIRE A DESIGN CHANGE.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

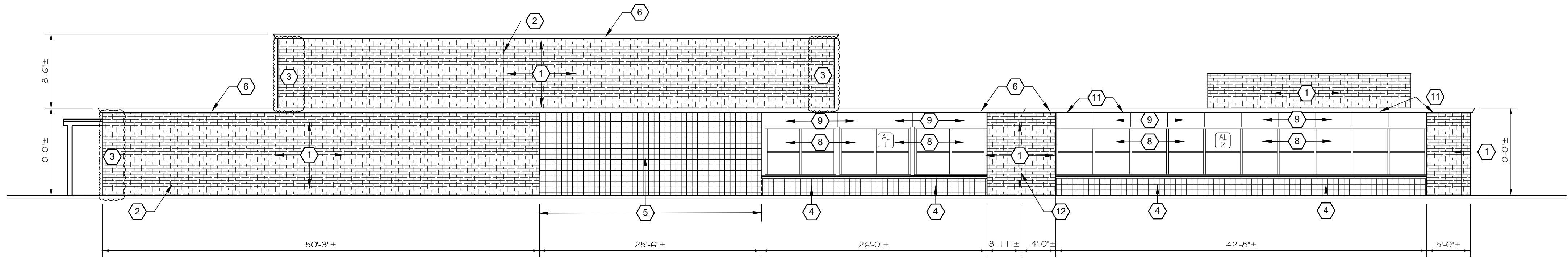
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-200
DRAWN BY: BB
CHECKED BY: JB

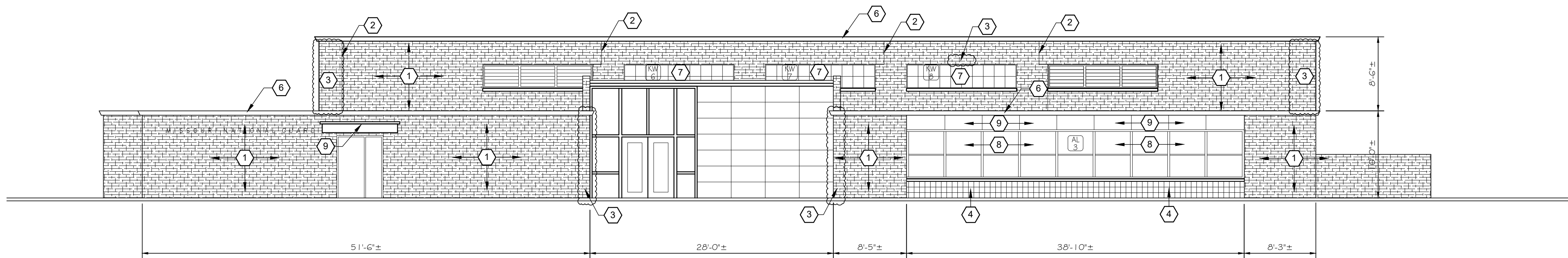
SHEET TITLE:
DEMOLITION
ELEVATIONS

SHEET NUMBER:

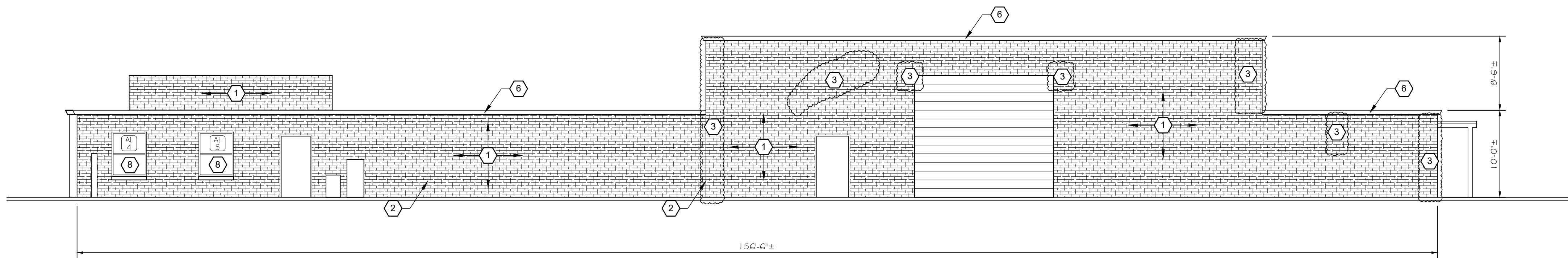
A-200



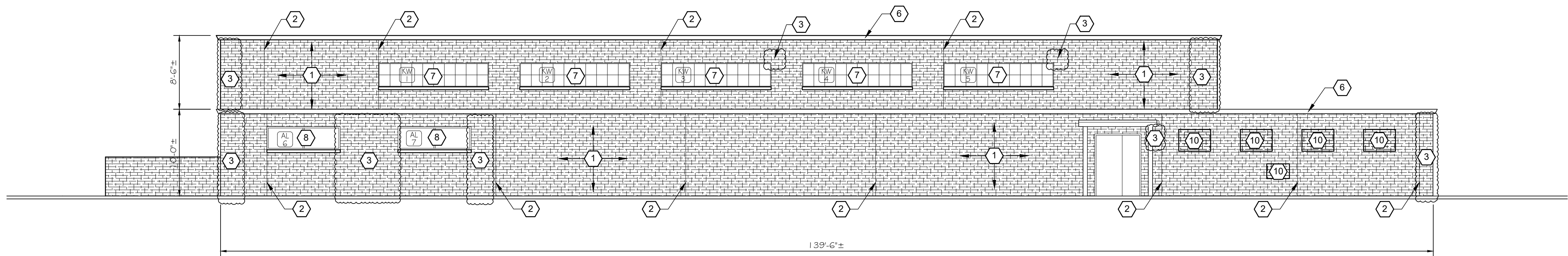
1 SOUTH ELEVATION
A-201 1/8" = 1'-0"



2 EAST ELEVATION
A-201 1/8" = 1'-0"



3 NORTH ELEVATION
A-201 1/8" = 1'-0"

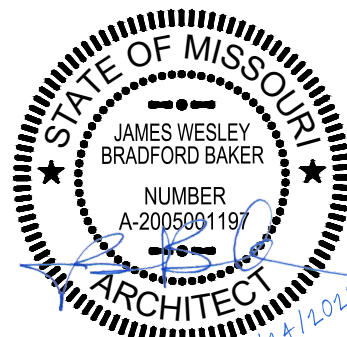


4 WEST ELEVATION
A-201 1/8" = 1'-0"

KEY NOTES

- 1 CLEAN AND SEAL ALL MASONRY VENEERS, ALL EXTERIOR MASONRY SURFACES ON THE BUILDING, WHETHER OR NOT KEYED ON THE DRAWINGS OR VISIBLE IN THESE ELEVATION VIEWS.
- 2 REPLACE ALL VERTICAL MASONRY EXPANSION JOINT SEALS
- 3 TUCKPOINT MASONRY JOINTS AND CRACKS. BASE BID SHALL INCLUDE A TUCKPOINTING IMPACT AREA OF 1,000 SQUARE FEET OF WALL SURFACE. SEE SPECIFICATION SECTION 01 2200 "UNIT PRICES" FOR MORE INFORMATION AND IDENTIFY THE REQUIRED VALUES ON THE BID FORM. ARCHITECT HAS HIGHLIGHTED AREAS OF SPECIAL CONCERN WITH CLOUDS ON THIS ELEVATION, BUT THE CONTRACTOR WILL BE RESPONSIBLE FOR EXAMINING ALL SURFACES AND PROPOSING THE FINAL AREA FOR ARCHITECT/OWNER CONCURRENCE AND A PROPOSED MODIFICATION TO THE CONTRACT SUM BASED ON THE UNIT PRICE.
- 4 CLEAN AND PAINT EXISTING SINGLE SCORE CMU
- 5 NEW SINGLE-SCORE CMU WALL AREA, PAINTED
- 6 NEW GUTTERS AND DOWNSPOUTS (NOT SHOWN, SEE ROOF PLAN FOR LOCATIONS)
- 7 NEW SPECIAL TRANSLUCENT WINDOW SYSTEM, SEE A-202
- 8 NEW WINDOWS, SEE SCHEDULE & DETAILS, SEE A-202
- 9 CLEAN AND PAINT EXISTING SHEET METAL SPANDREL PANELS; CAULK AROUND PERIMETER
- 10 INFILL FORMER OPENING WITH BRICK. MATCH COLOR, COURSING, AND BOND PATTERN
- 11 REPLACE 2x FASCIA BOARD AND REPAINT TO MATCH EXISTING. REPAIR AND TOUCH UP ADJACENT PAINTED WOOD PANELS UNDER SOFFIT OVERHANG IN THIS AREA
- 12 CLEAN AND PAINT EXTERIOR DOOR IN OFFICE 151 (NOT VISIBLE ON ELEVATION VIEWS)

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

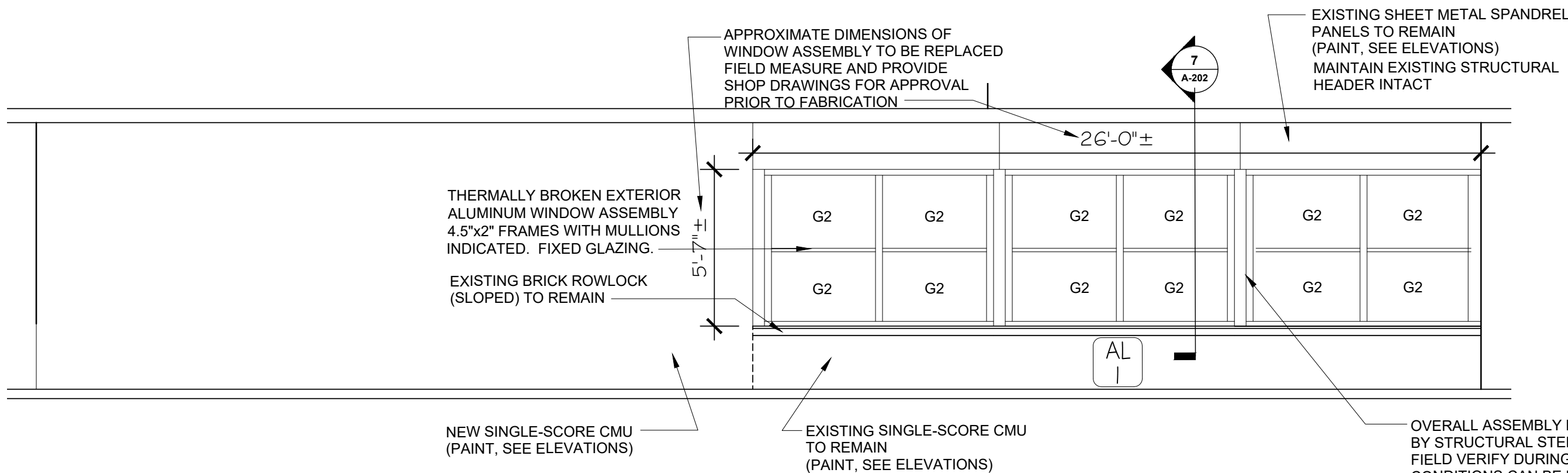
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-201
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:
EXTERIOR
ELEVATIONS

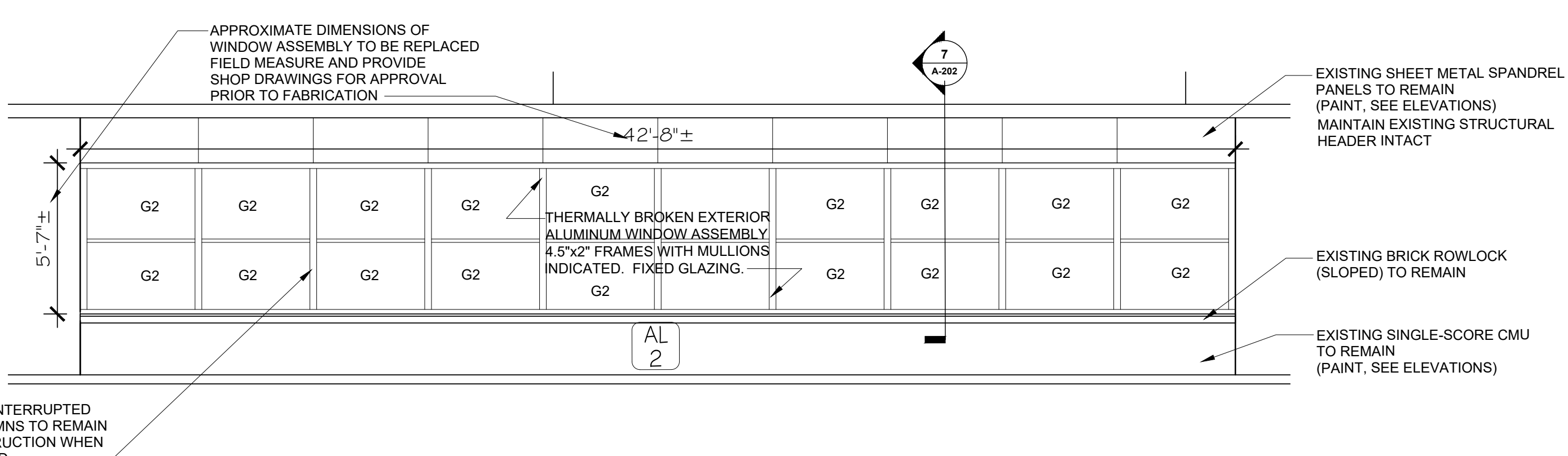
SHEET NUMBER:

A-201



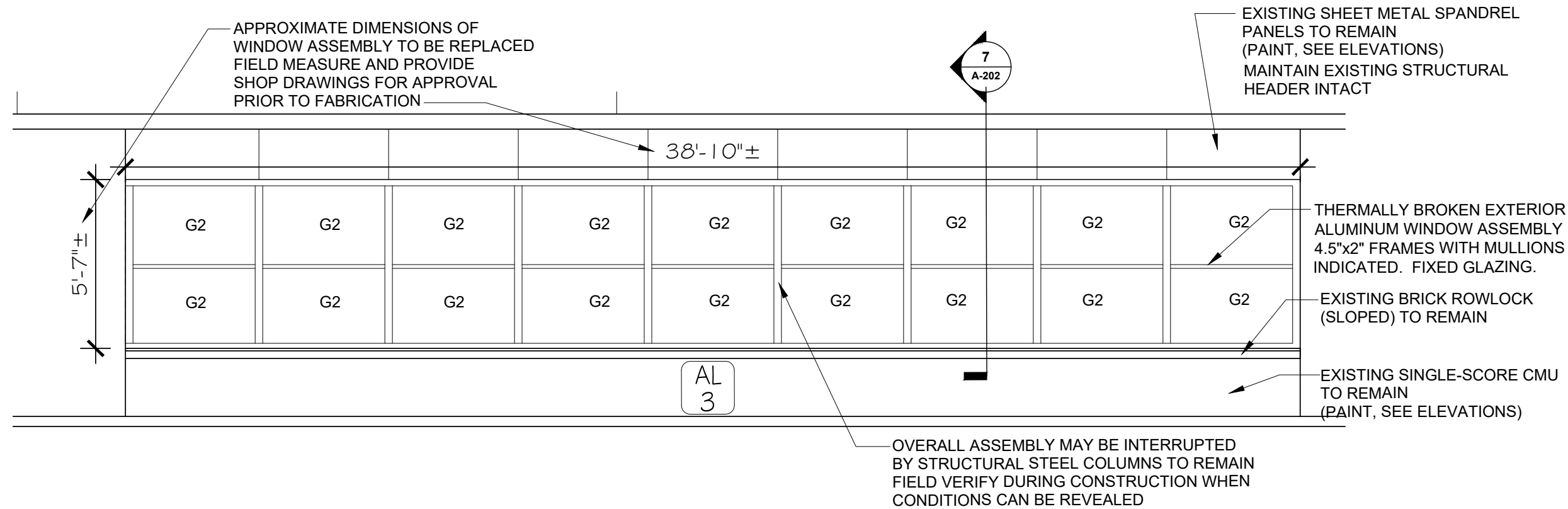
1
A-202
1/4" = 1'-0"

ENLARGED WINDOW ELEVATION (SOUTH)



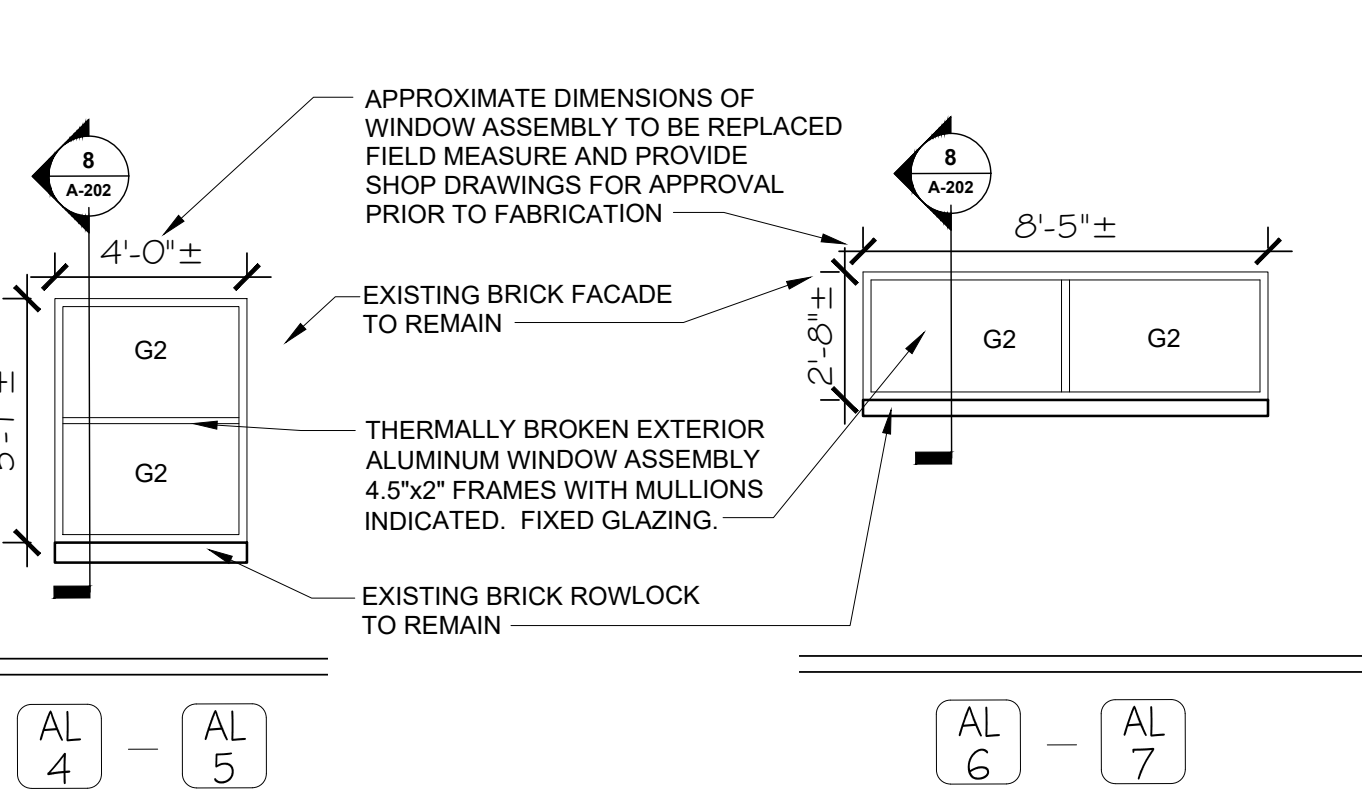
2
A-202
1/4" = 1'-0"

ENLARGED WINDOW ELEVATION (SOUTH)



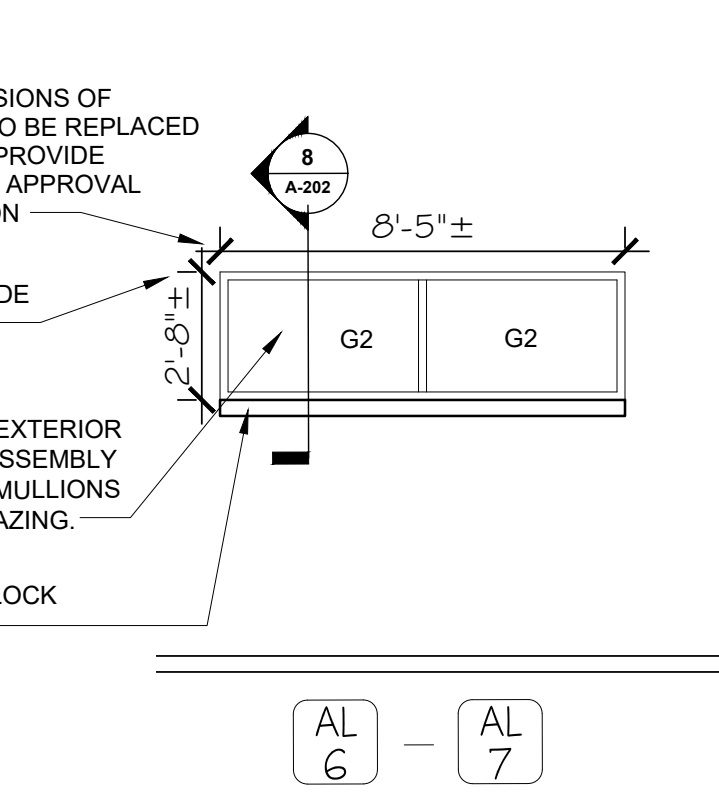
3
A-202
1/4" = 1'-0"

ENLARGED WINDOW ELEVATION (EAST)



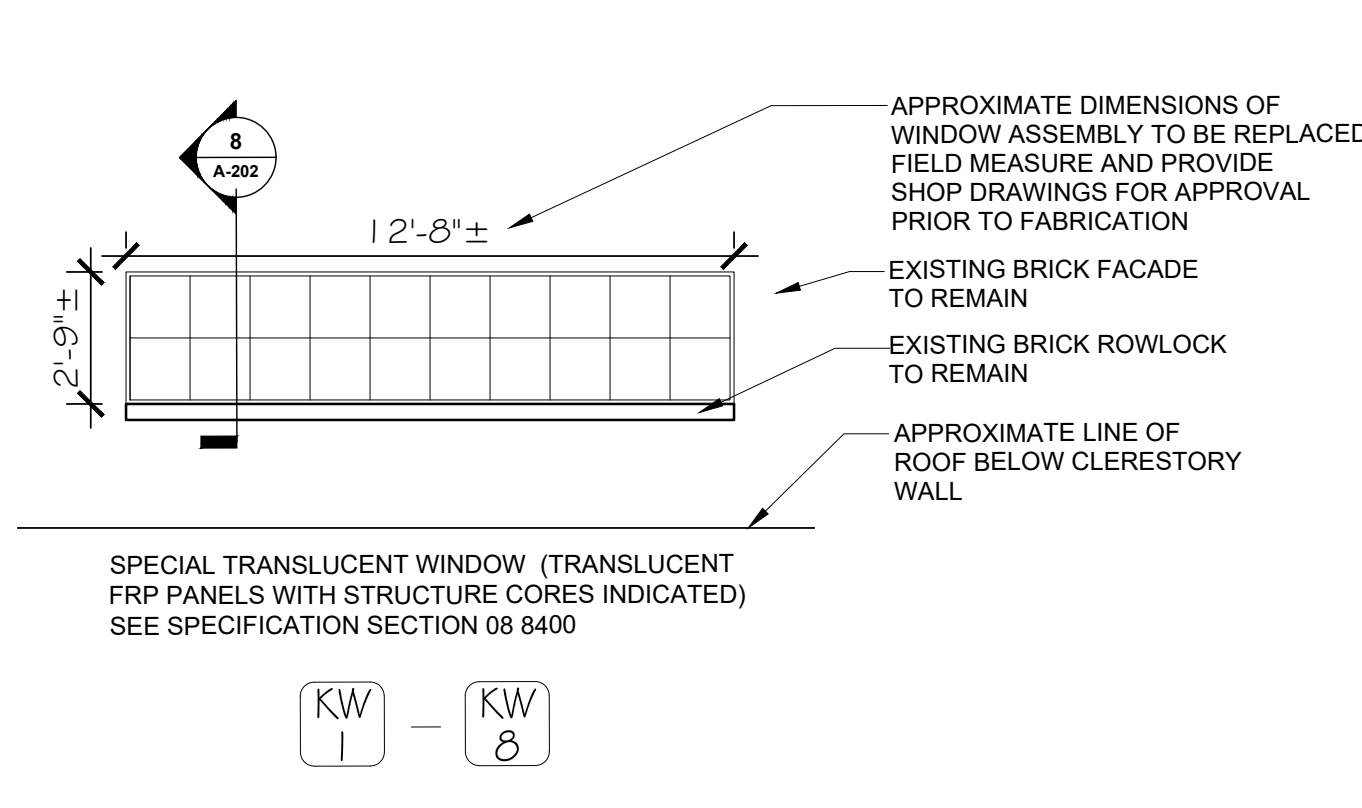
4
A-202
1/4" = 1'-0"

WIN. ELEV. (NORTH)



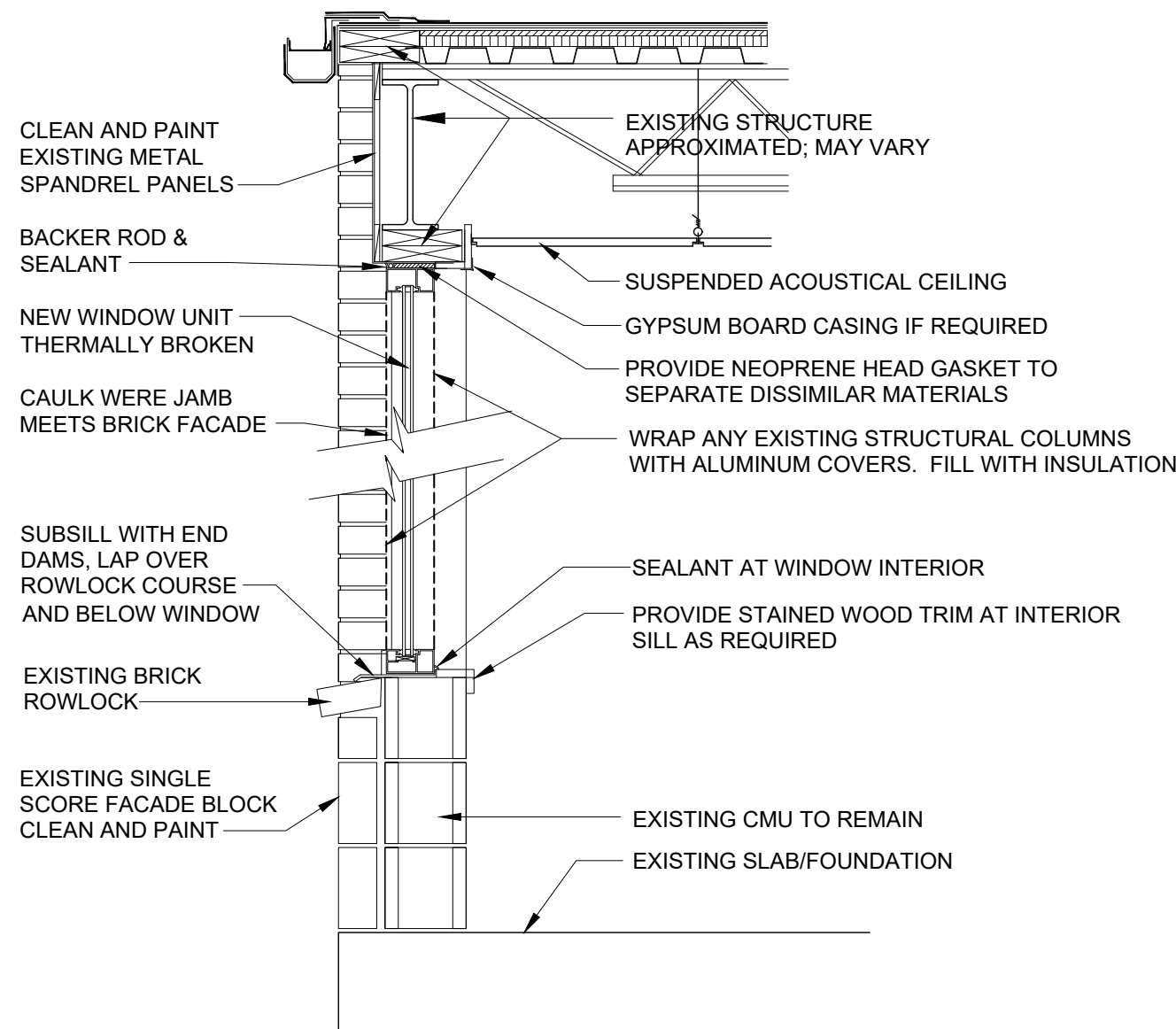
5
A-202
1/4" = 1'-0"

WIN. ELEV. (WEST)



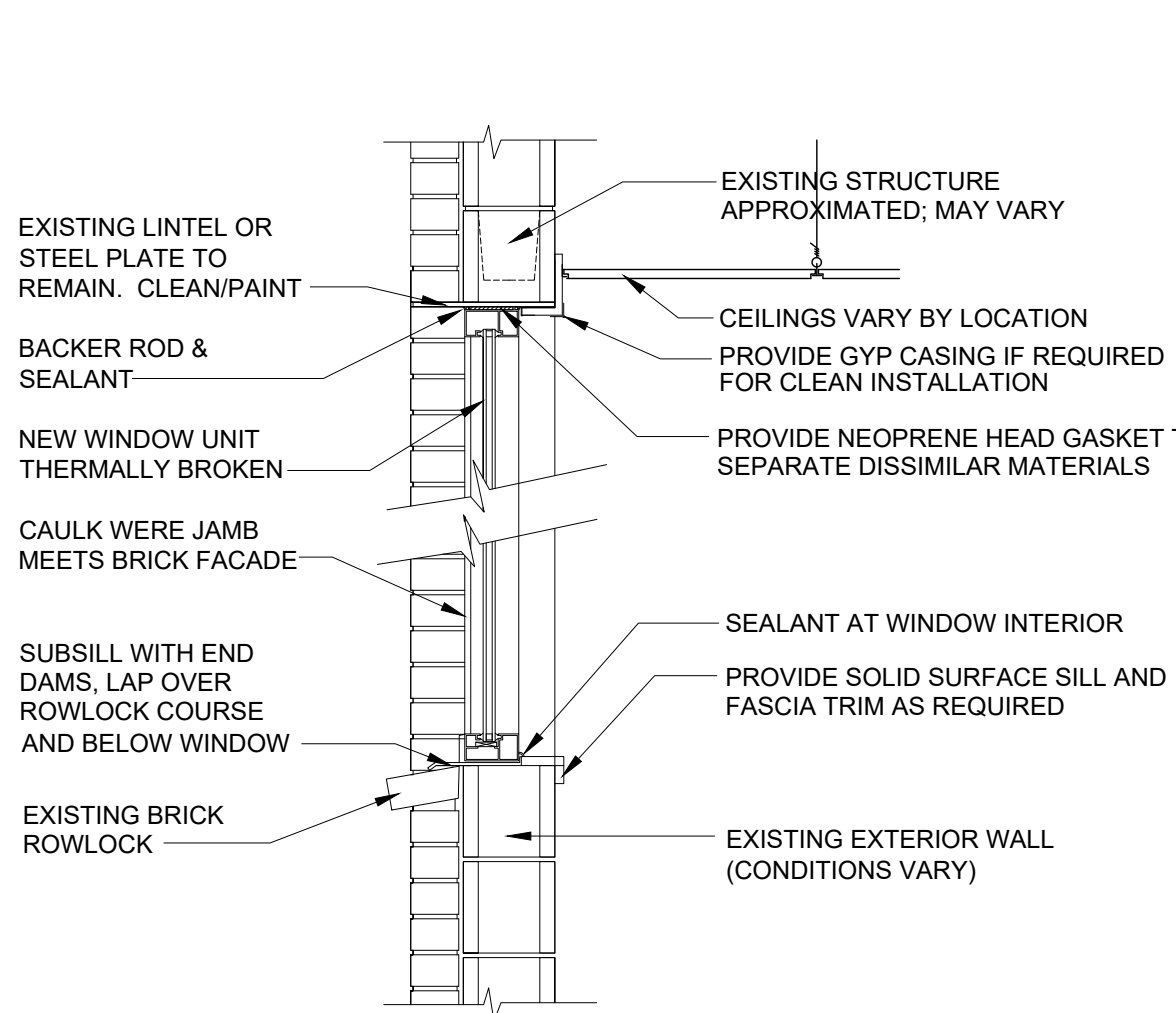
6
A-202
1/4" = 1'-0"

WIN. ELEV. (CLERESTORY)



7
A-202
3/4" = 1'-0"

WINDOW DETAIL SECTION



8
A-202
3/4" = 1'-0"

TYP. WINDOW DETAIL SECTION

GLAZING SCHEDULE

ALSO APPLIES TO DOOR SCHEDULE ON A-601

TYPE G1: 1/4" SAFETY GLASS - CLEAR

TYPE G2: 1" INSULATED SAFETY (FULLY TEMPERED) GLAZING: (REFER TO PROJECT MANUAL SECTION 08 00 00 GLAZING FOR ADDITIONAL REQUIREMENTS).

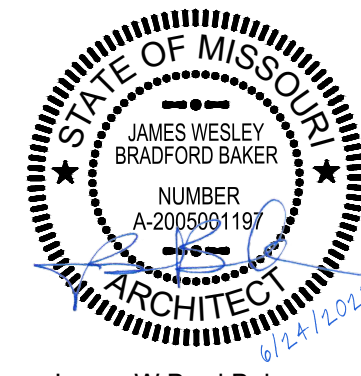
EXTERIOR PANE: 1/4" TINTED (SOLARGRAY) (2) SURFACE (LOW-E), HEAT-TREATED (FT) AIR CAVITY: 1/2" INTERIOR PANE: 1/4" CLEAR, HEAT-TREATED (FT)

PERFORMANCE REQUIREMENTS: VISIBLE LIGHT TRANSMITTANCE (VLT): 35 VISIBLE LIGHT REFLECTANCE (EXTERIOR %): 7 VISIBLE LIGHT REFLECTANCE (INTERIOR %): 10 (NFRC) U-VALUE (WINTER NIGHTTIME): 0.29 SOLAR HEAT GAIN COEFFICIENT (SHGC): 0.25 LIGHT TO SOLAR GAIN (LSG): 1.65

GENERAL NOTES

- PROVIDE ALUMINUM SUBSILLS FOR ALL NEW WINDOWS, TYPICAL.
- FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO ORDERING NEW WINDOWS. THE FINAL WINDOW DESIGNS WILL REQUIRE COORDINATION WITH THE INDIVIDUAL OPENING SIZES BETWEEN STEEL COLUMNS AND CMU TO REMAIN..
- SEE DOOR SCHEDULE FOR INFORMATION ABOUT ALUMINUM LITES ADJACENT TO DOORS.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-202
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:

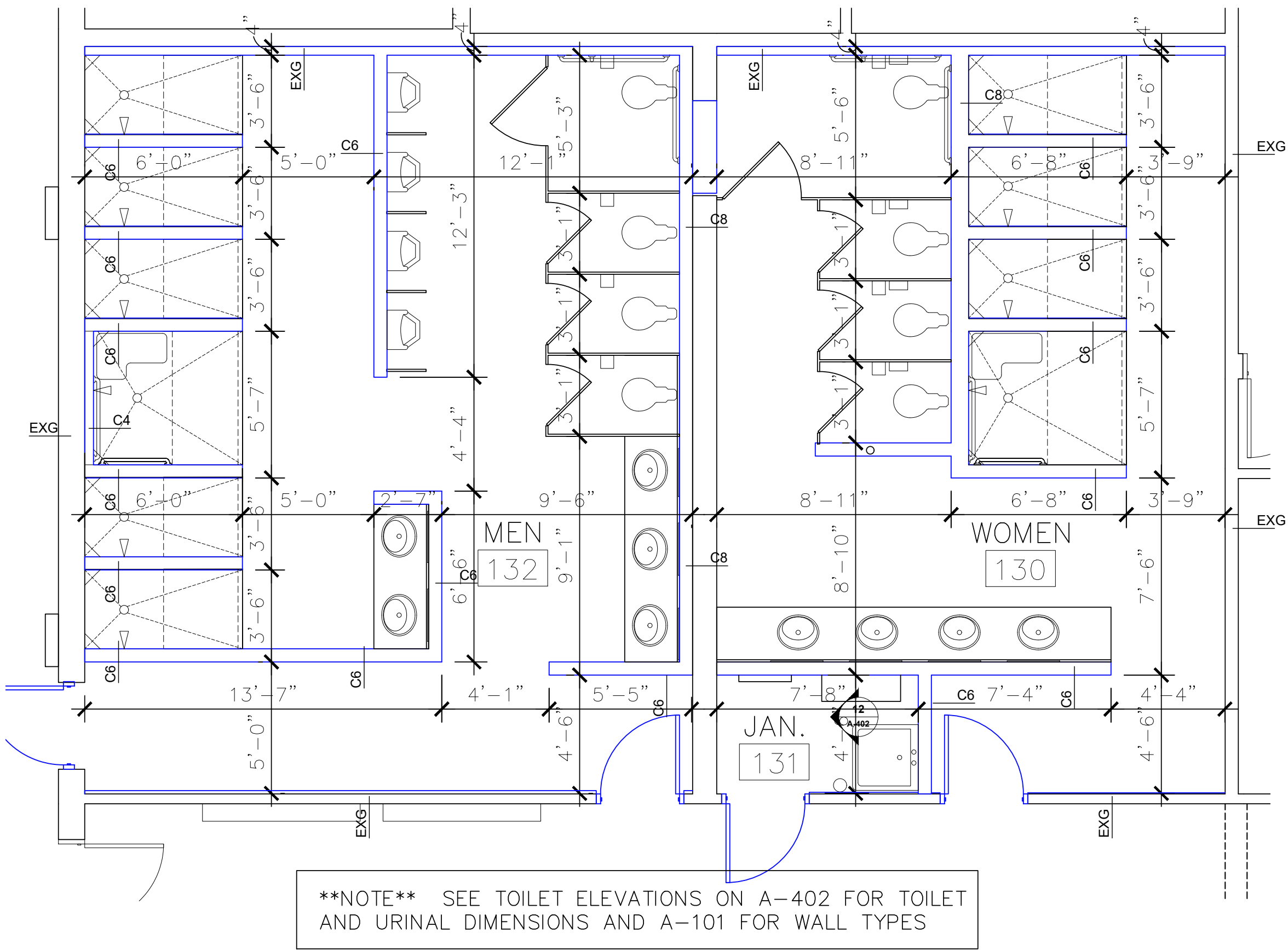
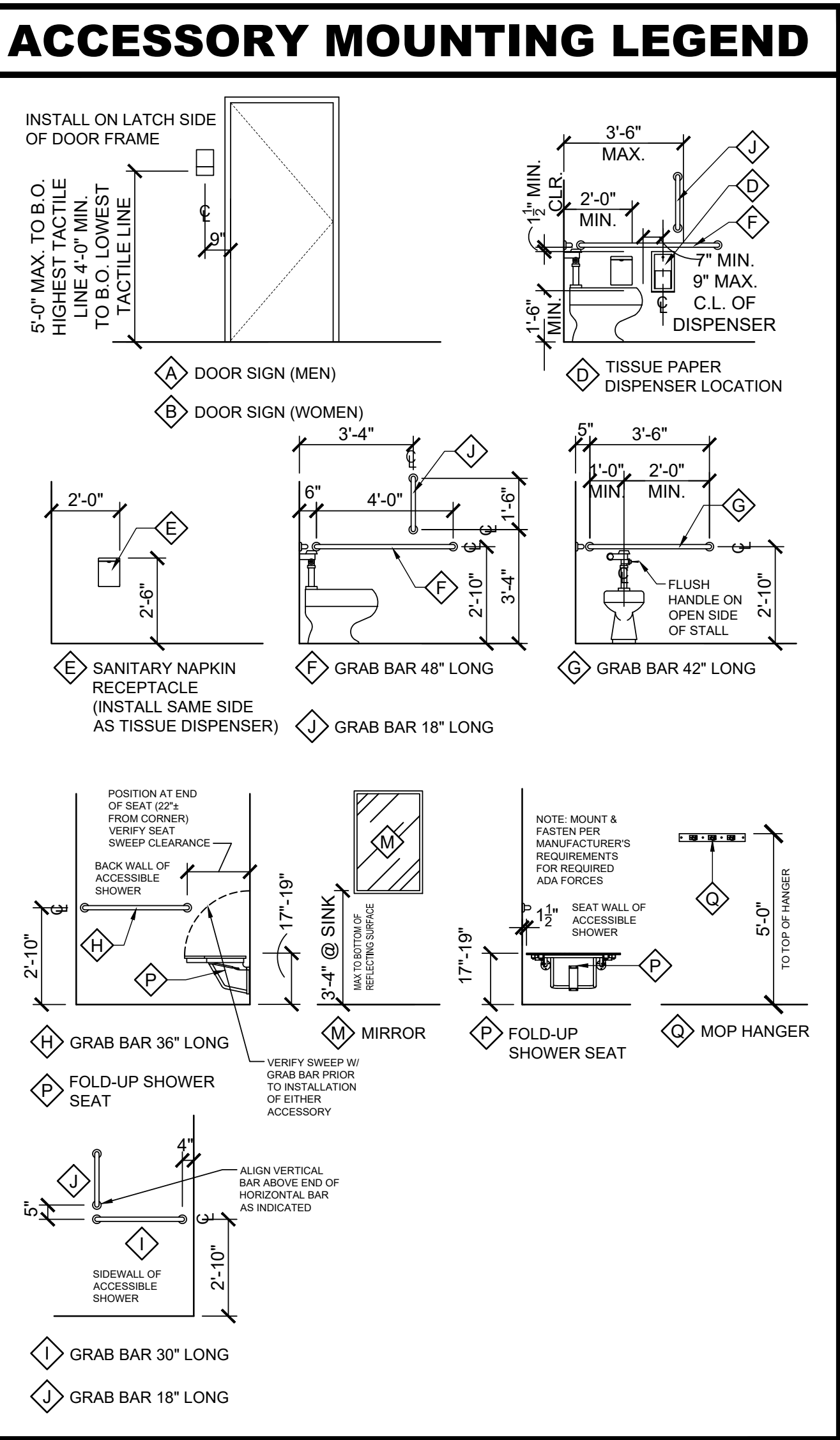
WINDOW
SCHEDULE &
DETAILS

SHEET NUMBER:

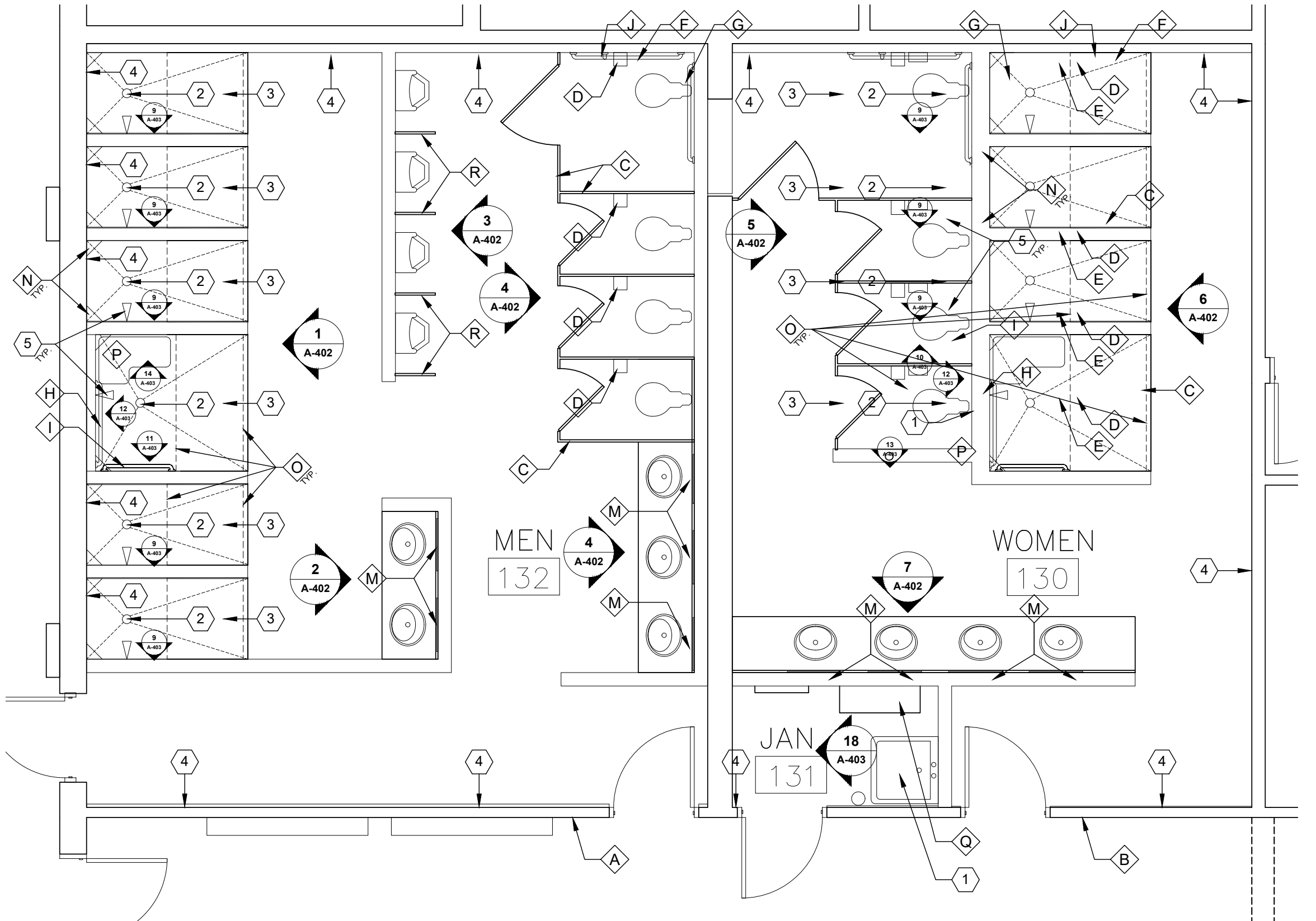
A-202

ACCESSORY SCHEDULE					
MK	DESCRIPTION	MANUFACTURER	SERIES / MODEL	MOUNTING LOCATION	ACCESSORY NOTES
A	ACCESSIBLE R.R. SIGN (MEN)	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS & DETAIL 4/A-401	---
B	ACCESSIBLE R.R. SIGN (WOMEN)	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS & DETAIL 4/A-401	---
C	TOILET PARTITIONS	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	NOTE 1
D	TISSUE PAPER DISPENSER	(REFER TO PROJECT MANUAL)	DOUBLE ROLL, STACKED	REFER PLANS, ELEVATIONS, LEGEND	---
E	SANITARY NAPKIN RECEPTACLE	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	---
F	GRAB BAR	(REFER TO PROJECT MANUAL)	48" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
G	GRAB BAR	(REFER TO PROJECT MANUAL)	42" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
H	GRAB BAR	(REFER TO PROJECT MANUAL)	36" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
I	GRAB BAR	(REFER TO PROJECT MANUAL)	30" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
J	GRAB BAR	(REFER TO PROJECT MANUAL)	18" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
K	ACCESSIBLE UNIT DOUBLE ROBE HOOK	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	48" MAX. A.F.F. TO CENTER	---
L	DOUBLE ROBE HOOK	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	68" A.F.F. TO CENTER	2-PER SHOWER
M	MIRROR	(REFER TO PROJECT MANUAL)	24" W. x 36" H.	REFER PLANS, ELEVATIONS, LEGEND	1 PER LAVATORY
N	STAINLESS CORNER SHOWER TRAY	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	48" MAX. A.F.F. TOP OF TRAY	2-PER SHOWER (ONE EACH SIDE)
O	SHOWER CURTAIN ROD	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER TO DETAILS	NOTES 2 & 3
P	FOLD-UP SHOWER SEAT	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	---
Q	MOP HANGER	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	TOP OF SHELF 60" A.F.F.	---
R	URINAL SCREENS	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	NOTE 4

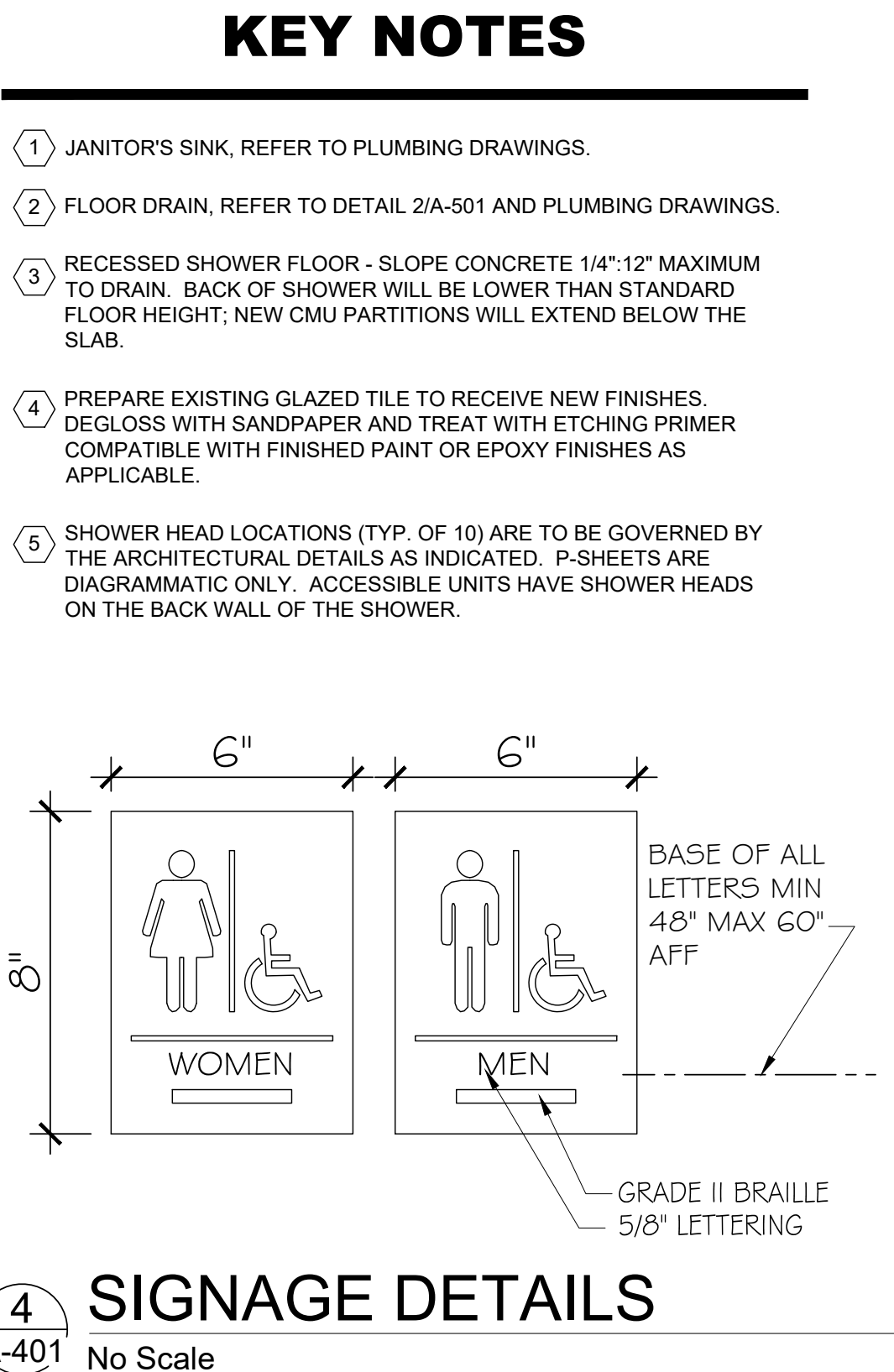
ACCESSORY GENERAL NOTES:
1. PHENOLIC OVERHEAD BRACED TOILET PARTITIONS WITH GAP FREE PRIVACY DOORS AND STYLES. THROUGH-BOLTED STAINLESS STEEL HARDWARE IN US32D FINISH. REFER TO FINISH SCHEDULE. ACCESSIBLE STALL DOORS TO BE 32" MINIMUM CLEAR WIDTH PER ADA/ANSI STANDARDS AND NON-ACCESSIBLE STALL DOORS TO BE 24" MINIMUM CLEAR WIDTH.
2. SHOWER CURTAIN & RINGS TO BE FURNISHED AND INSTALLED BY OWNER.
3. PROVIDE LENGTH REQUIRED FOR UNIT.
4. PHENOLIC URINAL SCREEN TO MATCH OTHER PARTITIONS



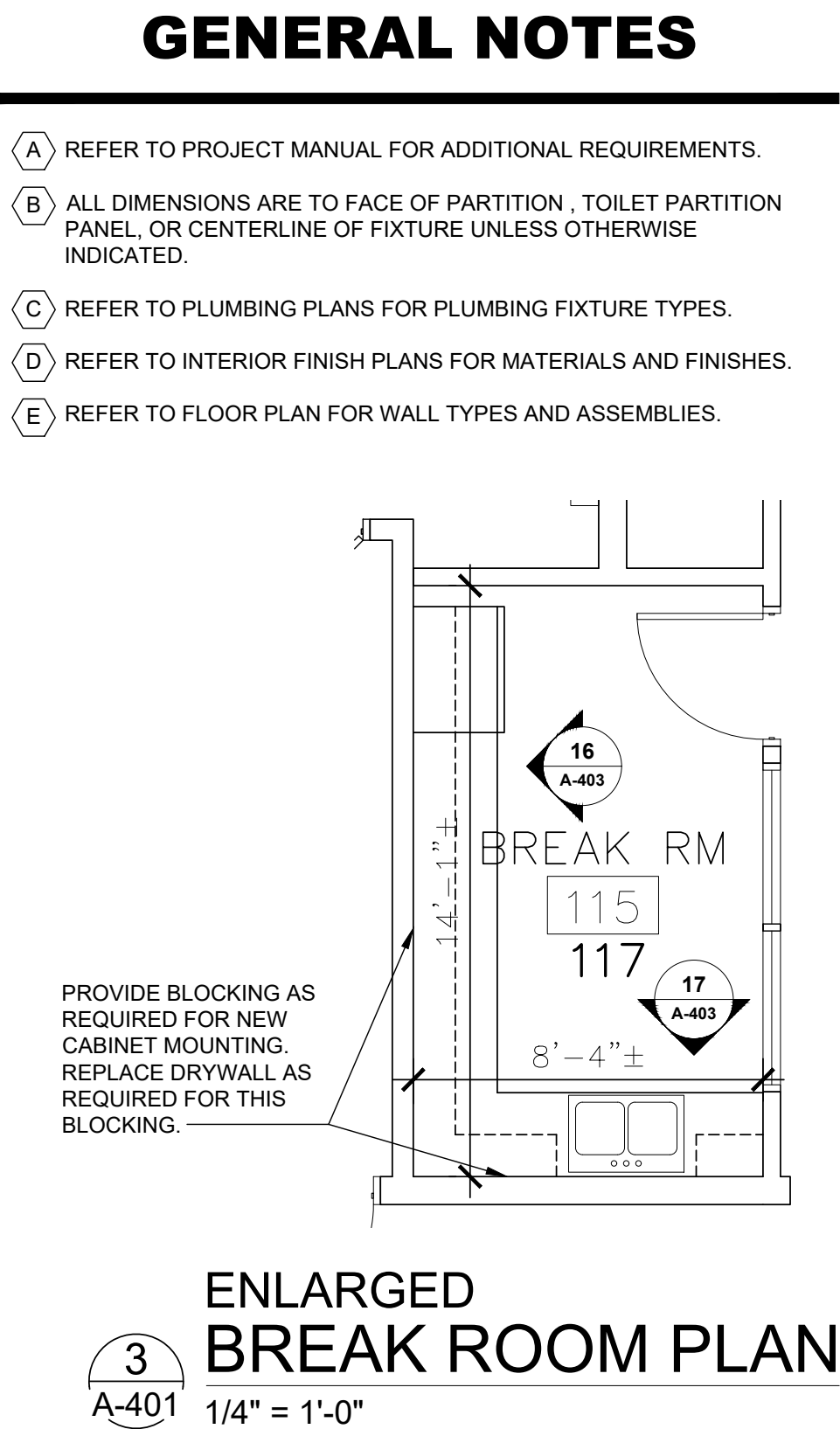
1 A-401 ENLARGED LATRINE DIMENSION PLAN
1/4" = 1'-0" - SEE A-101 FOR WALL TYPES



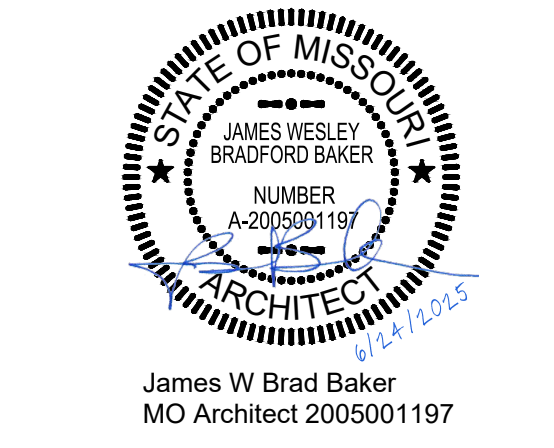
2 A-401 ENLARGED LATRINE REFERENCE PLAN
1/4" = 1'-0" - SEE SCHEDULE, DETAILS, AND SPECIFICATIONS FOR MORE INFORMATION



4 A-401 SIGNAGE DETAILS
No Scale



3 A-401 ENLARGED BREAK ROOM PLAN
1/4" = 1'-0"



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-401
DRAWN BY: BB
CHECKED BY: JB

SHEET TITLE:
ENLARGED TOILET
PLAN, DETAILS

SHEET NUMBER:
A-401

STATE OF MISSOURI

JAMES WESLEY
BRADFORD BAKER

NUMBER
A-2005061197

ARCHITECT

6/24/2025



GHN
GASKIN HILL NORCROSS
OF MISSOURI, INC.
 300 South Jefferson Avenue, Suite 301, Springfield, MO 65806
 417.869.0719
www.ghnae.com

A-402

STATE OF MISSOURI
JAMES WESLEY
BRADFORD BAKER
NUMBER
A-2005001197
ARCHITECT



GHN

**GASKIN HILL NORCROSS
OF MISSOURI, INC.**

300 South Jefferson Avenue, Suite 301, Springfield, MO 65806
417.869.0719 www.ghnae.com

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

SHEET TITLE:

SHEET NUMBER:

Page 15 of 35

ACCESSORY SCHEDULE					
MK	DESCRIPTION	MANUFACTURER	SERIES / MODEL	MOUNTING LOCATION	ACCESSORY NOTES
A	ACCESSIBLE R.R. SIGN (MEN)	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS & DETAIL 4/A-401	---
B	ACCESSIBLE R.R. SIGN (WOMEN)	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS & DETAIL 4/A-401	---
C	TOILET PARTITIONS	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	NOTE 1
D	TISSUE PAPER DISPENSER	(REFER TO PROJECT MANUAL)	DOUBLE ROLL, STACKED	REFER PLANS, ELEVATIONS, LEGEND	---
E	SANITARY NAPKIN RECEPTACLE	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	---
F	GRAB BAR	(REFER TO PROJECT MANUAL)	48" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
G	GRAB BAR	(REFER TO PROJECT MANUAL)	42" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
H	GRAB BAR	(REFER TO PROJECT MANUAL)	36" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
I	GRAB BAR	(REFER TO PROJECT MANUAL)	30" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
J	GRAB BAR	(REFER TO PROJECT MANUAL)	18" LENGTH	REFER PLANS, ELEVATIONS, LEGEND	---
K	ACCESSIBLE UNIT DOUBLE ROBE HOOK	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	48" MAX. A.F.F. TO CENTER	---
L	DOUBLE ROBE HOOK	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	68" A.F.F. TO CENTER	2-PER SHOWER
M	MIRROR	(REFER TO PROJECT MANUAL)	24" W. x 36" H.	REFER PLANS, ELEVATIONS, LEGEND	1 PER LAVATORY
N	STAINLESS CORNER SHOWER TRAY	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	48" MAX. A.F.F. TOP OF TRAY	2-PER SHOWER (ONE EACH SIDE)
O	SHOWER CURTAIN ROD	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER TO DETAILS	NOTES 2 & 3
P	FOLD-UP SHOWER SEAT	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	---
Q	MOP HANGER	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	TOP OF SHELF 60" A.F.F.	---
R	URINAL SCREENS	(REFER TO PROJECT MANUAL)	(REFER TO PROJECT MANUAL)	REFER PLANS, ELEVATIONS, LEGEND	NOTE 4

ACCESSORY GENERAL NOTES:

- PHENOLIC OVERHEAD BRACED TOILET PARTITIONS WITH GAP FREE PRIVACY DOORS AND STYLES, THROUGH-BOLTED STAINLESS STEEL HARDWARE IN US32D FINISH. REFER TO FINISH SCHEDULE. ACCESSIBLE STALL DOORS TO BE 32" MINIMUM CLEAR WIDTH PER ADA/ANSI STANDARDS AND NON-ACCESSIBLE STALL DOORS TO BE 24" MINIMUM CLEAR WIDTH.
- SHOWER CURTAIN & RINGS TO BE FURNISHED AND INSTALLED BY OWNER.
- PROVIDE LENGTH REQUIRED FOR UNIT.
- PHENOLIC URINAL SCREEN TO MATCH OTHER PARTITIONS

ACCESSORY MOUNTING LEGEND

INSTALL ON LATCH SIDE OF DOOR FRAME

5'-0" MAX. TO B.O. HIGHEST TACTILE LINE 4'-0" MIN. TO B.O. LOWEST TACTILE LINE

3'-6" MAX.
3'-6" MIN.
2'-0" MIN.
7" MIN. 9" MAX. C.L. OF DISPENSER
1'-6" MIN. C.L.B.

A DOOR SIGN (MEN)
B DOOR SIGN (WOMEN)

3'-4" MAX.
6" MIN.
4'-0" MIN.
1'-6" MIN.
3'-4" MIN.
2'-10" MIN.

E SANITARY NAPKIN RECEPTACLE (INSTALL SAME SIDE AS TISSUE DISPENSER)
F GRAB BAR 48" LONG
G GRAB BAR 42" LONG

2'-0" MAX.
2'-6" MIN.
3'-6" MAX.
1'-0" MIN.
2'-0" MIN.
2'-10" MIN.

H GRAB BAR 36" LONG
I FOLD-UP SHOWER SEAT
J MOP HANGER

POSITION AT END OF SEAT (2" FROM CORNER) VERIFY SEAT SWEEP CLEARANCE
BACK WALL OF ACCESSIBLE SHOWER
3'-4" @ SINK
MIN. 18" CLEARANCE REQUIRED TO SPACE
NOTE: MOUNT & FASTEN PER MANUFACTURER'S REQUIREMENTS FOR REQUIRED AIR FORCES
SEAT WALL OF ACCESSIBLE SHOWER
5'-0" TO TOP OF HANGER

K GRAB BAR 30" LONG
L GRAB BAR 18" LONG

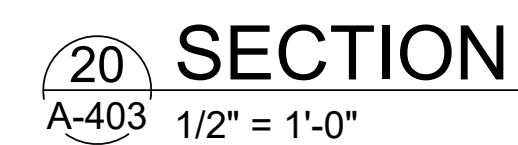
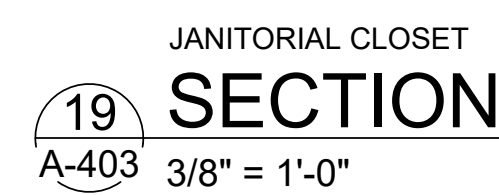
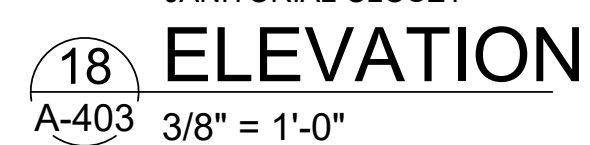
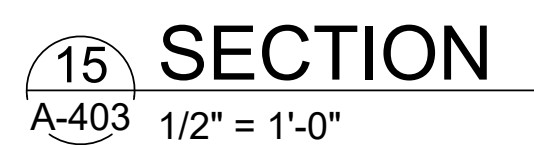
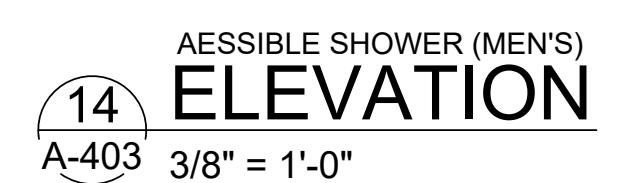
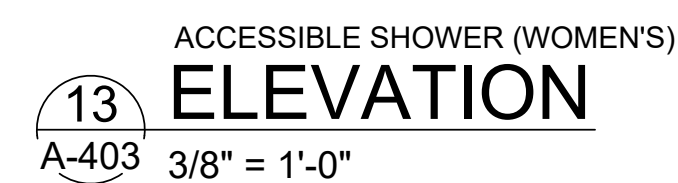
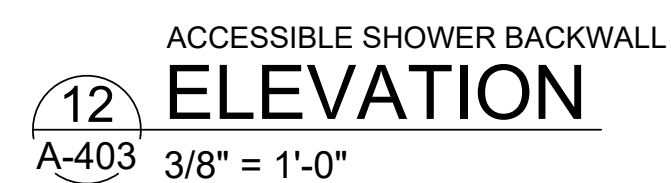
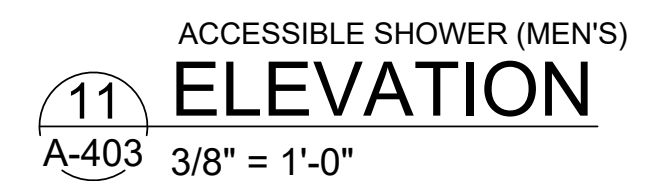
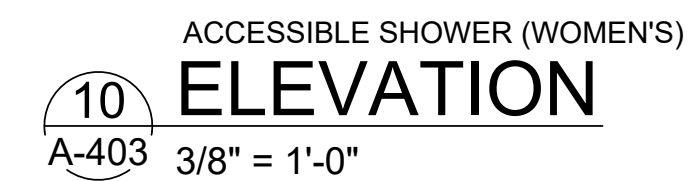
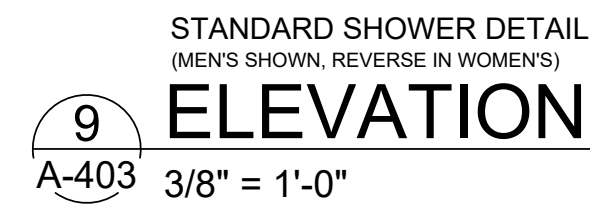
2'-10" MAX.
17"-19" MIN.
3'-4" @ SINK
17"-19" MIN.
5'-0" TO TOP OF HANGER

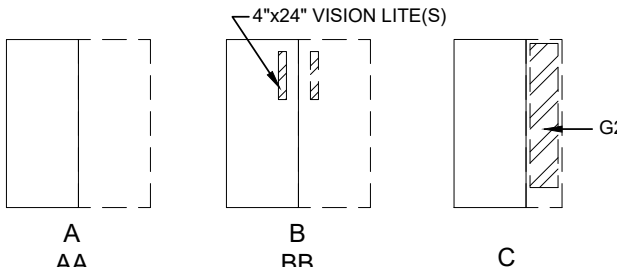
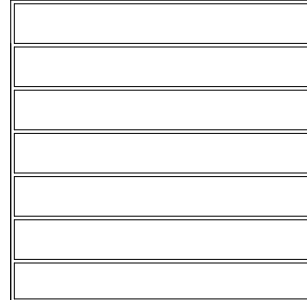
M MIRROR
N FOLD-UP SHOWER SEAT
O MOP HANGER

4" MIN.
5" MIN.
2'-10" MIN.

ALIGN VERTICAL BAR ABOVE END OF HORIZONTAL BAR AS INDICATED

SIDEWALL OF ACCESSIBLE SHOWER



DOOR SCHEDULE LEGEND		
1. DOOR TYPES: (NO SCALE)	<div><div>NOTE: DOORS SHOWN IN DOOR AND FRAME LOCATIONS. DOUBLE LETTER INDICATES PAINTED DOOR LOCATION.</div></div>	2. DOOR THICKNESS 1-3/4" TYPICAL UNLESS NOTED OTHERWISE
		3. DOOR CONSTRUCTION: SC = SOLID CORE WOOD HM = HOLLOW METAL HM-IN = HOLLOW METAL INSULATED
		4. FACE & FINISH MP = METAL, PAINTED WS = WOOD, STAINED
		5. GLASS TYPES: <u>TYPE G1:</u> 1/4" SAFETY GLASS - CLEAR <u>TYPE G2:</u> 1" INSULATED SAFETY (FULLY TEMPERED) GLAZING: (REFER TO PROJECT MANUAL SECTION 08 80 00 GLAZING FOR ADDITIONAL REQUIREMENTS). EXTERIOR PANE: 1/4" TINTED (SOLARGRAY) (2) SURFACE (LOW-E), HEAT-TREATED (FT) AIR CAVITY: 1/2" INTERIOR PANE: 1/4" CLEAR, HEAT-TREATED (FT) PERFORMANCE REQUIREMENTS: VISIBLE LIGHT TRANSMITTANCE (VLT): 35 VISIBLE LIGHT REFLECTANCE (EXTERIOR %): 7 VISIBLE LIGHT REFLECTANCE (INTERIOR %): 10 (NFR) U-VALUE (WINTER NIGHTTIME): 0.29 SOLAR HEAT GAIN COEFFICIENT (SHGC): 0.25 LIGHT TO SOLAR GAIN (LSG): 1.65
		6. FIRE RATED DOORS 20, 30, 60, 180 ETC. INDICATES MINUTES OF U. L. FIRE RATING
 OH1	7. FRAME CONSTRUCTION E = EXISTING TO REMAIN. CLEAN UP AND REPAINT. FIELD VERIFY HINGE AND HARDWARE DIMENSIONS REQUIRED FOR DOOR LEAF BEFORE ORDERING HMW = HOLLOW METAL - WELDED AND PAINTED	
	8. MISC. ITEMS FILL DOOR FRAME WITH BATT INSULATION VERIFY EXISTING OPENING DIMENSIONS	
	GENERAL NOTES: 1. VERIFY EXISTING OPENING DIMENSIONS 2. PAINT ALL METAL DOORS AND FRAMES TYPICAL 3. COORDINATE FRAME SIZES AND TYPES FOR WALL TYPE AND THICKNESS 4. PROVIDE 2" HEAD ON FRAMES UNLESS NOTED OTHERWISE 5. FILL NEW DOOR FRAMES IN FRAME WALLS WITH BATT INSULATION 6. FILL NEW DOOR FRAMES IN MASONRY WALLS WITH GROUT 7. UNDERCUT DOORS IN OFFICES WITHOUT RETURN AIR GRILLES. COORDINATE WITH ARCHITECT	

FINISH HARDWARE LEGEND		
LOCKSET / TRIM & FUNCTION L1 ENTRANCE L2 OFFICE L3 STOREROOM L4 PRIVACY L5 PASSAGE L6 OFFICE ALUMINUM DOOR	EXIT DEVICES E1 PANIC DEVICE ENTRANCE TRIM E2 PANIC DEVICE PASSAGE TRIM KICK PLATES PROVIDE ON PUSH SIDE 4" LESS THAN DOOR WIDTH TYPICAL UNLESS TWO PLATES ARE KEYED PROVIDE 2ND PLATE ON PULL SIDE OF DOOR PROVIDE ON BOTH LEAFS FOR PAIRS OF DOORS K1 10" HIGH STAINLESS STEEL, BOTH SIDES K2 30" HIGH STAINLESS STEEL, BOTH SIDES	PERIMETER SEALS PS1 SMOKE/SOUND SEALS PS2 INTUMESCENT RATED SEALS DOOR STOPS S1 WALL STOP S2 FLOOR STOP S3 DOOR MOUNTED STOP (KICK DOWN) DRIP EDGE D1 HEAD MOUNTED DRIP EDGE HARDWARE NOTES: AS KEYED ON SCHEDULE TO RIGHT NOTE1 = FOR PAIRS OF DOORS PROVIDE HARDWARE AS NOTED FOR BOTH LEAVES (EXCEPT FLUSH BOLTS, TYP.) NOTE2 = WITH SIDE LITE TO FILL REMAINING OPENING. APPROX 24" WIDE. CONTRACTOR TO FIELD VERIFY DIMENSIONS BEFORE SUBMITTING SHOP DRAWINGS.
CYLINDER CY INTERCHANGEABLE CORES PUSH / PULL P1 PUSH PLATE P2 PULL HANDLE HINGES H2 HEAVY DUTY H3 NON-REMOVABLE PINS - EXTERIOR CLOSERS C1 TYPE 2 CLOSER - HEAVY DUTY	FLUSH BOLTS FB1 HEAD AND SILL MANUAL BOLTS ON INACTIVE DOOR, ASTRAGAL ON ACTIVE DOOR FB2 HEAD AND SILL MANUAL BOLTS ON INACTIVE DOOR BY ALUMINUM DOOR SUPPLIER WEATHER STRIPPING / ASTRAGAL W1 HEAD JAMB & SWEEP	

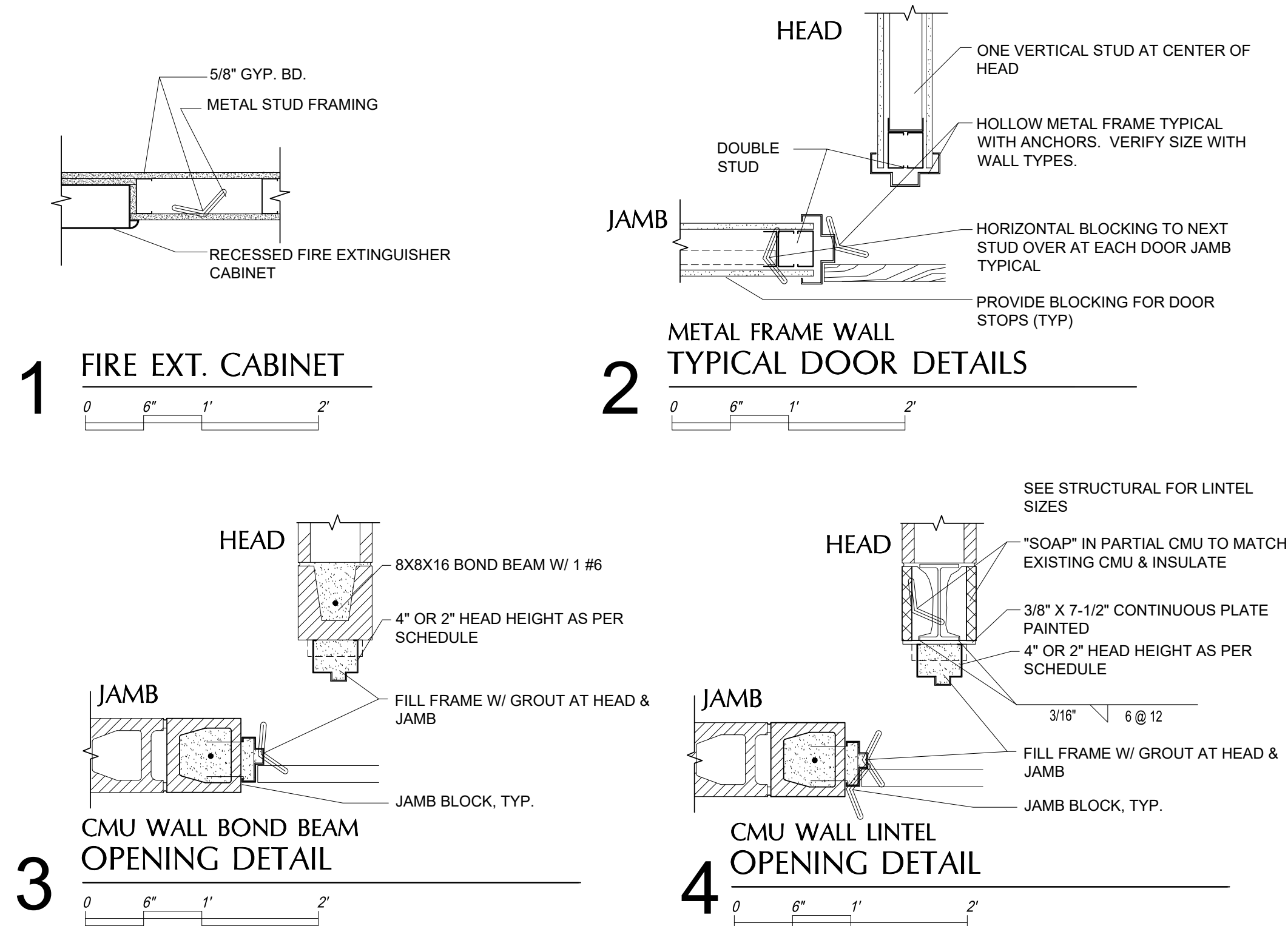
DOOR SCHEDULE										FINISH HARDWARE SCHEDULE															
DOOR MARK (BASED ON RM. NO.)	OPENING SIZE	DOOR TYPE (SEE NOTE 1)	CONSTRUCTION (SEE NOTE 3)	FACE & FINISH (SEE NOTE 4)	GLASS (SEE NOTE 5)	UL RATING (SEE NOTE 6)	FRAME (SEE NOTE 7)	MISC. ITEMS (SEE NOTE 8)	NOTES	LOCKSET/ TRIM/FUNCTION	CYLINDER	PUSH	PULL	HINGES	CLOSER	EXIT DEVICE	KICKPLATE	FLUSH BOLT	WEATHER STRIPPING/GASKETS	PERIMETER SEALS	STOP	DRIP EDGE	HARDWARE NOTES		
100A	3'-0" X 7'-0" X 1 3/4" (PAIR)	EXISTING STOREFRONT DOOR SYSTEM AND HARDWARE TO REMAIN UNCHANGED																							
101A	3'-0" X 7'-0" X 1 3/4" (PAIR)	BB	HM	MP	G1	20	HMW			L2	CY				H2	C1		K1	FB1		PS1	S1		NOTE1	
102A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS						L2	CY				H2							S1			
103A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS						L2	CY				H2							S1			
104A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS						L2	CY				H2							S1			
105A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS						L2	CY				H2							S1			
105B	3'-0" X 7'-0" X 1 3/4"	B	SC	WS						L2	CY				H2							S1			
106A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS						L5					H2	C1		K1				S1			
106B	3'-4" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW		L1	CY				H3	C1	K1		W1			D1			
107A	3'-4" X 7'-0" X 1 3/4"	A	HM	MP				HMW		L1	CY				H2	C1	K1					S1			
109A	3'-4" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
110A	3'-4" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
111A	3'-4" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW		L2	CY				H2	C1	K1					S3			
111B	3'-4" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW		L2	CY				H2	C1	K1					S3			
112A	3'-0" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
113A	3'-0" X 7'-0" X 1 3/4" (PAIR)	BB	HM	MP	G1	20	HMW			L2	CY				H2	C1		K1	FB1		PS1	S1		NOTE1	
114A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				E		L3	CY				H2							S1			
115A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				E		L5					H2							S1			
116A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS				E		L2	CY				H2							S1			
117A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS				E		L2	CY				H2							S1			
118A	3'-0" X 7'-0" X 1 3/4"	C	HM-IN	MP				HMW		L1	CY				H3	C1			W1			D1			
119A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS				E		L2	CY				H2							S1			
120A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS				E		L2	CY				H2							S1			
121A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS				E		L2	CY				H2							S1			
122A	3'-0" X 7'-0" X 1 3/4"	B	SC	WS				E		L2	CY				H2							S1			
123A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				E		L3	CY				H2							S1			
125A	3'-0" X 7'-0"	EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN UNCHANGED																							
127A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				E		L3	CY				H2							S1			
128A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				E		L3	CY				H2							S1			
129A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				E		L2	CY				H2							S1			
130A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				HMW				P1	P2		H2	C1		K1				S1			
131A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				HMW							H2	C1		K1				S1			
132A	3'-0" X 7'-0" X 1 3/4"	A	SC	WS				HMW		L3	CY				H2	C1		K1				S1			
133A	3'-0" X 7'-0" X 1 3/4" (PAIR)	BB	HM-IN	MP				HMW				P1	P2		H2	C1		K1				S1			
133B	3'-8" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW				P1	P2		H2	C1		K1				S1		NOTE1	
135A	3'-0" X 7'-0" X 1 3/4" (PAIR)	AA	HM	MP				E		L3	CY				H3	C1	E1	K1		W1		D1		NOTE1	
136A	3'-0" X 7'-0" X 1 3/4"	B	HM	MP				HMW		L2	CY				H2	C1		K1	FB1			S3			
137A	3'-0" X 6'-8"	EXISTING DOOR AND FRAME TO REMAIN. CHANGE HARDWARE AND PAINT FRAME.																							
139A	3'-0" X 6'-8"	EXISTING DOOR AND FRAME TO REMAIN. CHANGE HARDWARE AND PAINT FRAME.																							
140A	3'-0" X 7'-0" X 1 3/4"	C	HM-IN	MP				HMW	3'-0" X 7'-0" X 1 3/4"	L2	CY				H3	C1	E1		W1			D1		NOTE2	
141A	3'-0" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW		L2	CY				H2	C1		K1				S1			
142A	3'-0" X 7'-0" X 1 3/4"	A	HM	MP				HMW		L2	CY				H2							S1			
143A	3'-0" X 7'-0"	DOOR PART OF SECURITY CAGE SYSTEM, SEE CAGE SYSTEM DETAILS & SPECS																							
144A	3'-0" X 7'-0"	DOOR PART OF SECURITY CAGE SYSTEM, SEE CAGE SYSTEM DETAILS & SPECS																							
146A	3'-0" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW		L2	CY				H2	C1		K1				S2			
147A	3'-0" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
148A	3'-0" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
149A	3'-0" X 7'-0" X 1 3/4" (PAIR)	BB	HM-IN	MP				HMW		L2	CY				H2	C1		K1	FB1					NOTE1	
150A	3'-0" X 6'-8" X 1 3/4"	A	SC	WS				E		L2	CY				H2							S1			
151A	3'-0" X 6'-8" X 1 3/4"	B	SC	WS				E		L3	CY				H2							S1			
151B	3'-0" X 7'-0"	EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN UNCHANGED																							
152A	2'-6" X 7'-0" X 1 3/4" (PAIR)	AA	HM-IN	MP				E		L3	CY				H2				FB1			S1		NOTE1	
152B	3'-0" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
153A	3'-0" X 7'-0" X 1 3/4"	A	HM-IN	MP				HMW		L2	CY				H2	C1		K1				S3			
200A	3'-0" X 7'-0" X 1 3/4"	A	HM	MP				E		L3	CY				H2							S1			
OHD	16'-0" X 14'-0"	OH1	SEE SPECIFICATION SECTION 083613 FOR ADDITIONAL INFORMATION																						

GENERAL NOTES

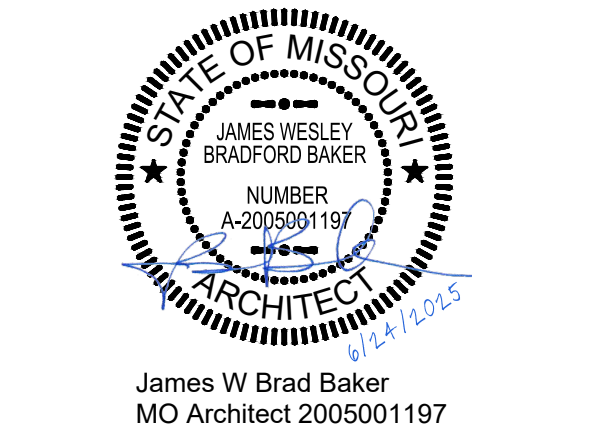
- GENERAL HARDWARE NOTES:
(NOT REFERENCED ON SCHEDULE ABOVE)
1. ALL HARDWARE TO BE ADA AND ANSI A117.1 COMPLIANT. CLOSURE SPEEDS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM. DOOR OPENING FORCE FOR PUSHING OR PULLING OPEN DOORS, OTHER THAN FIRE DOORS, SHALL BE AS FOLLOWS:
- INTERIOR HINGED DOORS: 5.0 POUNDS MAXIMUM.
2. VERIFY COMPATIBILITY OF HARDWARE SPECIFIED. NOTIFY ARCHITECT OF INCOMPATIBILITY ISSUES PRIOR TO ORDERING AND INSTALLATION.
3. ALL HARDWARE TO BE GRADE 1 (HEAVY DUTY COMMERCIAL).
4. ALL KEYED HARDWARE TO BE SINGLE SOURCED (BEST, 7 PINS SYSTEM). CONTRACTOR TO PROVIDE ALL HARDWARE, INCLUDING CORES AND BLANK KEYS. DELIVER CORES TO THE GUARD WHICH WILL KEYTM AND RETURN TO THE CONTRACTOR FOR INSTALLATION. PROVIDE TEMPORARY CORES FOR EXTERIOR DOORS DURING CONSTRUCTION. COORDINATE ORDERING AND DELIVERY REQUIREMENTS WITH OWNER'S REPRESENTATIVE.
- MISSOURI NATIONAL GUARD
ATTN: BILL EDWARDS
MOARNG CFMO-Project Manager
6819A North Boundary Road
Jefferson City, MO. 65101
EMAIL: billy.j.edwards66.nfg@army.mil
Office: 573-638-9534
Cell: 573-578-2612
5. FILL HOLLOW METAL FRAMES WITH BATT INSULATION IN FRAME WALLS.
6. FILL HOLLOW METAL FRAMES WITH GROUT IN MASONRY WALLS.
7. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
8. REFER TO EXTERIOR FINISH SCHEDULE AND INTERIOR FINISH PLAN FOR ADDITIONAL REQUIREMENTS.

GLAZING SCHEDULE

- ALSO APPLIES TO WINDOW SCHEDULE ON A-202
- TYPE G1: 1/4" SAFETY GLASS - CLEAR
- TYPE G2:
1" INSULATED SAFETY (FULLY TEMPERED) GLAZING: (REFER TO PROJECT MANUAL SECTION 08 80 00 GLAZING FOR ADDITIONAL REQUIREMENTS).
- EXTERIOR PANE: 1/4" TINTED (SOLARGRAY) (2) SURFACE (LOW-E), HEAT-TREATED (FT)
AIR CAVITY: 1/2"
INTERIOR PANE: 1/4" CLEAR, HEAT-TREATED (FT)
- PERFORMANCE REQUIREMENTS:
VISIBLE LIGHT TRANSMITTANCE (VLT): 35
VISIBLE LIGHT REFLECTANCE (EXTERIOR %): 7
VISIBLE LIGHT REFLECTANCE (INTERIOR %): 10
(NFR) U-VALUE (WINTER NIGHTTIME): 0.29
SOLAR HEAT GAIN COEFFICIENT (SHGC): 0.25
LIGHT TO SOLAR GAIN (LSG): 1.65



STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-601
DRAWN BY: **BD**
CHECKED BY: **HBC**

SHEET TITLE:
DOOR SCHEDULE
& DETAILS

SHEET NUMBER:

A-601



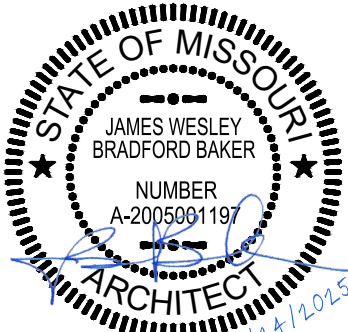
GENERAL NOTES

- (A)** THIS SHEET IS PROVIDED FOR GENERAL REFERENCE ONLY; THE FINAL SCOPE OF REQUIRED DEMOLITION OF FINISH ITEMS MUST BE COORDINATED WITH THE REQUIREMENTS OF ALL ARCHITECTURAL SHEETS, ESPECIALLY THE FLOOR PLAN AND FINISH PLANS.
- (B)** REFER TO SHEET A-701 FOR NEW CEILING INFORMAITON AND A-702 FOR NEW FLOOR FINISH AND BASE LOCATIONS. ALTHOUGH EVERY EFFORT HAS BEEN MADE TO KEY THE REQUIRED FINISH DEMOLITION AREAS, THE CONTRACTOR SHALL REMOVE ALL EXISTING FINISHES WHEREVER NEW FINISHES ARE SCHEDULED ELSEWHERE IN THESE DRAWINGS, WHETHER OR NOT SPECIFICALLY INDICATED ON THIS SHEET.

KEYED DEMO NOTES

- (1)** REMOVE EXISTING SUSPENDED CEILING SYSTEM IN THIS ROOM. MAINTAIN ALL LIGHT FIXTURES AND HVAC/ELEC DEVICES FOR REINSTALLATION IN REPLACEMENT CEILING IN SAME LOCATIONS.
- (2)** REMOVE EXISTING GYPSUM BOARD CEILING AND SUPPORTS, HVAC DEVICES, AND LIGHT FIXTURES IN THIS ROOM, COMPLETE
- (3)** REMOVE SLAB AS REQUIRED FOR NEW RECESSED SHOWER FLOORS AND PLUMBING
- (4)** REMOVE SLAB AS REQUIRED FOR ALL NEW UNDER-SLAB PLUMBING CONNECTIONS. THE EXACT CONNECTION POINT FOR NEW UNDERSLAB PLUMBING IS NOT KNOWN. AT THE CONTRACTOR'S OPTION, THE COMPLETE SLAB MAY BE REMOVED IN THE LATRINE AREAS AND REPLACED AS PART OF THIS PROJECT. ANY SLAB AREAS NOT REMOVED WILL REQUIRE THE REMOVAL OF EXISTING MOSAIC TILE AND PREPARATION OF SURFACES TO RECEIVE NEW EPOXY FINISHES.
- (5)** REMOVE EXISTING VCT TILE AND BASE IN THIS ROOM, COMPLETE. PREPARE FLOOR TO RECEIVE NEW FINISHES.
- (6)** REMOVE EXISTING CARPET, VCT TILE, AND BASE IN THIS ROOM, COMPLETE. PREPARE FLOOR TO RECEIVE NEW FINISHES. CONTRACTOR MUST VERIFY THAT ANY PRODUCTS OR PROCESSES USED TO AID IN THE REMOVAL OF EXISTING FLOOR FINISHES AND ADHESIVES WILL NOT ADVERSELY AFFECT THE BONDING PERFORMANCE OF ANY NEW ADHESIVES FOR NEW FINISHES IN THE SAME AREAS. THE ARCHITECT RECOMMENDS OBTAINING A CERTIFICATION STATEMENT FROM THE SUPPLIER OF ANY STRIPPING PRODUCTS THAT THEY ARE COMPATIBLE WITH THE PROPOSED ADHESIVES FOR THE NEW FLOOR FINISHES.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



James W Brad Baker
MO Architect 2005001197



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-700
DRAWN BY: BB
CHECKED BY: BP

SHEET TITLE:

INTERIOR FINISH
DEMO. PLAN

SHEET NUMBER:

A-700

A-701 1/8" = 1'-0" - SEE GENERAL NOTE "C" REGARDING HVAC DEVICES

**OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION**

**MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL**

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-A-702
 DRAWN BY: BB
 CHECKED BY: BP

SHEET TITLE:
INTERIOR FINISH
PLAN

SHEET NUMBER:

A-702

INTERIOR FINISH TYPES

FLOORS

F0	TYPE:	NO FLOORING WORK
F1	TYPE:	RESINOUS FLOORING (SEAMLESS)
	MFG:	"DUR-A-FLEX" - DUR-A-CHIP (BASIS FOR DESIGN)
	COLOR:	COBBLESTONE (GRAY WITH BLACK, GRAY, BEIGE AND WHITE FLAKES)
	FINISH:	MACRO / COURSE (NON-SLIP)
	APPL.:	ROLL ON (NOT TROWELED)
F2	TYPE:	LVT, FULLY ADHERED
	MFG:	MOHAWK GROUP (BASIS FOR DESIGN)
	SERIES:	LARGE & LOCAL COLLECTION
	SIZE:	9.25"x9"
	COLOR:	978 WOODY
	PATTERN:	LARGE & LOCAL WOOD

BASE

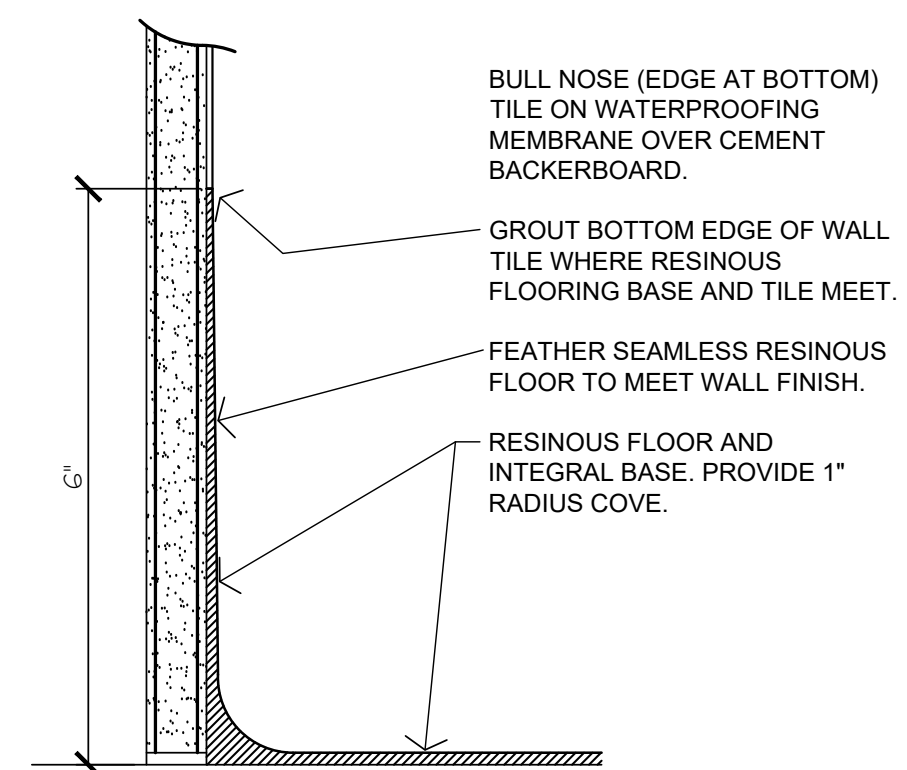
B1	TYPE:	RESINOUS FLOORING (SEAMLESS)
	MFG:	"DURA-FLEX" - DURA-CHIP (BASIS FOR DESIGN)
	COLOR:	COBBLESTONE (GRAY WITH BLACK, GRAY, BEIGE AND WHITE FLAKES)
	FINISH:	MACRO / COURSE (NON-SLIP)
	SIZE:	EXTEND UP WALL INTEGRAL WITH FLOORING 6", REFER TO DETAIL 7/1-101.
APPL.:	ROLL ON (NOT TROWELED)	

B2 TYPE: RESILIENT BASE
MFG: JOHNSONITE OR EQUAL (BASIS FOR DESIGN)
MATERIAL: RUBBER
COLOR: 40 BLACK
SIZE: 6" (TYPE TS)

WALLS

W0	TYPE:	NO WALL REFINISHING
W1	TYPE:	RESINOUS WALLCOVERING (SEAMLESS)
	APPL.:	ROLL ON (NOT TROWELED)
W2	TYPE:	EXISTING / NEW GYPSUM BOARD OR CMU
	FINISH:	RENT / PAINT (FIELD)
	MFG:	SHERWIN WILLIAMS OR EQUAL (BASIS FOR DESIGN)
	COLOR:	SW 7065 ARGOS
	SHEEN:	SEMI-GLOSS (MOLD & MILDEW RESISTANT)

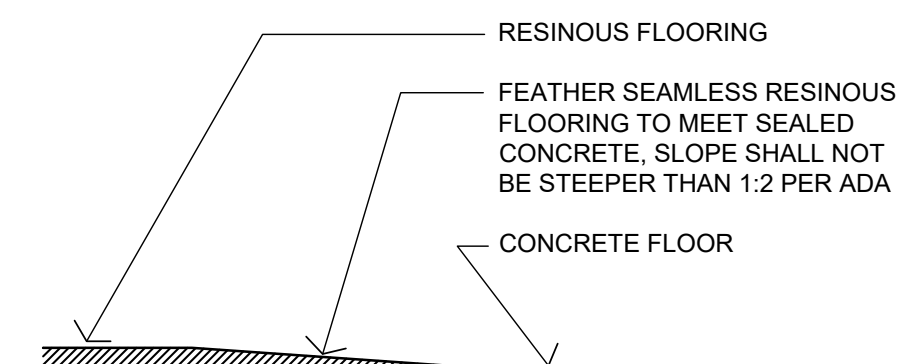
DO NOT PAINT ANY BRICK SURFACES



ALTERNATE NO. 2:
RESINOUS FLOORING AND BASE.

2 COVE BASE DETAIL

A-702 6" = 1'-0"



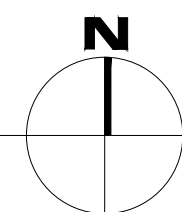
ALTERNATE NO. 2:
RESINOUS FLOORING AND BASE.

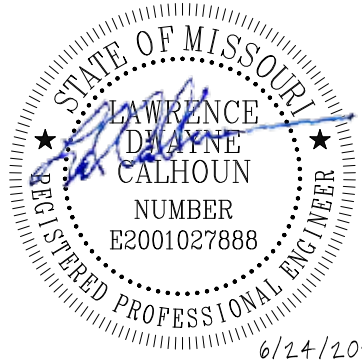
3 FLOOR TRANSITION

A-702 6" = 1'-0"

INTERIOR FINISH PLAN

1
A-702





OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-001
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:

PLUMBING
GEN NOTES
& LEGEND

SHEET NUMBER:

P-001

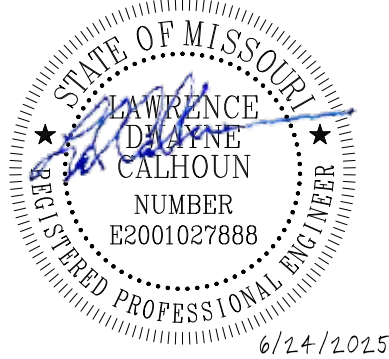
PLUMBING GENERAL NOTES

A. ALL PLUMBING AND NATURAL GAS WORK SHALL COMPLY WITH THE LATEST EDITION OF THE "INTERNATIONAL PLUMBING CODE" AND THE "INTERNATIONAL MECHANICAL CODE", NFPA ADOPTED BY THE AUTHORITY(S) HAVING JURISDICTION, ALL STATE AND LOCAL CODES, AND PROJECT SPECIFICATIONS.				IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.			
B. VISIT THE SITE AND VERIFY CONDITIONS PRIOR TO BIDDING.				H. COORDINATE WORK WITH THE WORK OF ALL TRADES ON THE PROJECT.			
C. VERIFY UTILITY LOCATIONS AND INVERTS, PRIOR TO ROUTING SERVICES. COORDINATE ALL BUILDING WASTE, SANITARY SEWER, STORM DRAINS, FIRE AND DOMESTIC WATER LINES AND NATURAL GAS LINES WITH CIVIL PLANS. REFER TO THE CIVIL PLANS FOR CONTINUATION OF ALL UTILITY LINES.				J. REFER TO SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS OF PLUMBING FIXTURES AND EQUIPMENT, AND PROPER APPLICATIONS OF SAME.			
D. PAY ALL UTILITY FEES AND CHARGES AS PART OF BASE BID IN THE CONTRACT.				K. ALL PIPING PENETRATIONS OF THE FLOOR, RATED CEILING AND WALL MUST BE MADE WITH A METAL PIPE OR UL LISTED APPROVED DEVICES. FIRE STOP ALL PIPE PENETRATIONS THRU RATED WALLS. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS, RATINGS AND FIRE STOPPING DETAILS.			
E. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. DO NOT SCALE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR ADDITIONAL INFORMATION.				L. PROVIDE STOP VALVES ON EVERY FIXTURE ON BOTH HOT AND COLD WATER SUPPLY LINES. ESCUTCHEONS, FITTINGS, ETC. SHALL BE CHROME PLATED WHERE EXPOSED.			
F. THE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION.				M. ALL EXPOSED MATERIALS WITHIN RETURN AIR PLENUMS SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50, AS DETERMINED IN ACCORDANCE WITH ASTM E84 AND U.L. LISTINGS. IF ANY MATERIALS DO NOT MEET THESE STANDARDS, THE ITEMS SHALL BE ENCLOSED IN A GYPSUM-BOARD ENCLOSURE, BE PLENUM RATED MATERIALS (I.E. CAST IRON), OR BE WRAPPED WITH AN APPROVED FIRE RATING MATERIAL, SUCH AS 3M Fyre WRAP. PLASTIC PIPING (PVC, ABS, CPVC) IS NOT APPROVED TO BE INSTALLED WITHIN RETURN AIR PLENUMS UNLESS WRAPPED AS NOTED ABOVE. COORDINATE ALL RETURN AIR PLENUM LOCATIONS PRIOR TO BID.			
G. EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM,				N. DO NOT ROUTE ANY PIPING OVER ELECTRIC ROOMS, COMPUTER ROOMS, OR ELECTRIC PANELS.			
				O. PROVIDE A LINTEL AT ALL NEW OPENINGS (EXCEEDING 12" WIDE) IN NEW OR EXISTING WALLS.			
				P. ALL WASTE PIPING BELOW GRADE SHALL BE SOLID WALL SCH 40 PVC PIPE, PVC DWV SOCKET FITTINGS AND SOLVENT-CEMENTED JOINTS.			
				Q. ALL WASTE AND VENT PIPING ABOVE GRADE SHALL BE HUBLESS CAST IRON SOIL PIPE AND FITTINGS, HEAVY DUTY HUBLESS PIPING COUPLINGS AND			
				COUPLED JOINTS.			
				R. ALL VENT PIPING SHALL BE 2" UNLESS OTHERWISE NOTED.			
				S. SLOPE 2-1/2" AND SMALLER BUILDING WASTE LINES AT MINIMUM OF 1/4" FALL PER FT. AND 3" AND LARGER SANITARY SEWER LINES AT MINIMUM 1/8" FALL PER FT. VERIFY INVERTS WITH SITE UTILITY PLANS AND COORDINATE INSTALLATION TO ASSURE PROPER FLOW.			
				T. PROVIDE CLEAN OUTS IN ALL WASTE, SANITARY, STORM DRAINAGE AND OVERFLOW LINES WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 100 FEET, AT EACH CHANGE OF DIRECTION GREATER THAN 45 DEGREES, AND ON ALL VERTICAL RISERS AT HEIGHT OF 30" A.F.F. AT THE BASE OF EACH STACK.			
				U. FLOOR DRAINS IN MECHANICAL ROOMS ARE SHOWN FOR GENERAL LOCATION ONLY. FLOOR DRAINS SHALL BE ACCESSIBLE AND SHALL BE COORDINATED WITH MECHANICAL EQUIPMENT LAYOUT. ALL FLOOR DRAINS SHALL HAVE A 4" DEEP SEAL TRAP MINIMUM.			
				V. AN APPROVED TRAP GUARD PRODUCT, CONFORMING TO ASSE STANDARD 1072, SHALL BE INSTALLED AT ALL FLOOR AND HUB DRAINS. INSTALL TRAP GUARD DEVICES PER MANUFACTURER'S INSTRUCTIONS.			
				W. ALL NEW AND EXISTING STORM DRAIN, CONDENSATE DRAIN, WASTE, SEWER AND VENT PIPING SHALL BE RODDED AND CLEANED AT END OF CONSTRUCTION. ALL TRAPS SHALL BE CLEANED AND PRIMED AT END OF CONSTRUCTION.			
				X. PROVIDE PRESSURE REDUCING VALVES IN WATER PIPING. THE MAXIMUM PRESSURE SHALL BE 70 PSI AT ALL OUTLETS. THE MINIMUM PRESSURE ACCEPTABLE AT WATER OUTLETS IS 20 PSI AT FLUSH VALVES, AND 8 PSI AT ALL OTHER OUTLETS.			
				Y. MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES, OPERABLE WINDOWS AND FLUES AND PLUMBING VENTS.			
				Z. EACH FIXTURE GROUP OR BATTERY OF FIXTURES SHALL BE PROVIDED WITH A SHUTOFF VALVE IN THE DOMESTIC HOT AND COLD WATER SUPPLY LINES ABOVE CEILING. VALVES SHALL BE ACCESSIBLE FROM BELOW. ACCESS PANELS SHALL BE COORDINATED WITH ARCHITECT PRIOR TO			
				CONSTRUCTION.			
				AA. PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES WHERE QUICK CLOSING VALVES ARE INSTALLED; i.e., FLUSH VALVES, ICE MAKERS, DISHWASHERS, ETC. PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES AS REQUIRED.			
				AB. PROVIDE BACK FLOW PREVENTION OR AN ANTI-SIPHON DEVICE AT ALL FIXTURES THAT COULD CONTAMINATE THE POTABLE WATER SYSTEM.			
				AC. INSTALL LISTED NATURAL GAS VALVE IMMEDIATELY AHEAD OF EACH NATURAL GAS PRESSURE REGULATOR, AND AT EACH PIECE OF GAS FIRED EQUIPMENT.			
				AD. INSULATE ALL ABOVE GRADE SUPPLY PIPING AND ALL ABOVE GRADE STORM DRAIN PIPING.			
				AE. INSULATE ALL ABOVE GRADE CONDENSATE DRAIN PIPING WITH 1/2" ARMAFLEX INSULATION.			
				AF. PROVIDE INSULATION AT ALL EXPOSED HOT WATER AND DRAIN PIPING FOR HANDICAPPED FIXTURES PER ANSI A117.1 AND ADA REQUIREMENTS.			
				AG. ALL DOMESTIC WATER AND SPRINKLER PIPING ROUTED IN AREAS SUBJECT TO FREEZING TEMPERATURES SHALL BE ROUTED ON THE INTERIOR OF THE INSULATION AND WITHIN THE HEATED ENVELOPE OF THE BUILDING. REFER TO THE ARCHITECTURAL DRAWINGS FOR INSULATION PLACEMENT AND DETAILS. UNLESS OTHERWISE INDICATED DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS. WHEN ROUTED IN EXTERIOR WALLS, CAREFULLY POSITION WATER PIPING ON THE HEATED SIDE (INTERIOR SIDE) OF THE WALL INSULATION.			
				AH. ALL PIPE DROPS FROM CEILING PLENUM TO FLOOR SHALL BE MADE IN FURROUTS AT COLUMNS, IN WEB OF BEAMS AT COLUMNS OR IN WALLS. PIPING SHALL BE CONCEALED UNLESS APPROVED BY ARCHITECT.			

PLUMBING SYMBOLS LEGEND

NOTE: ALL SYMBOLS MAY NOT APPEAR ON EVERY PLAN

	BELOW GRADE WASTE PIPING
	ABOVE GRADE WASTE PIPING
	SS SANITARY SEWER PIPING
	BW BUILDING WASTE AND DRAIN PIPING
	XBW EXISTING BUILDING WASTE AND DRAIN PIPING
	AW ACID WASTE PIPING
	CD CONDENSATE DRAIN PIPING
	GW GREASE WASTE PIPING
	OW OIL LADENT WASTE PIPING
	PW PUMPED WASTE PIPING
	SD STORM DRAIN PIPING
	RD ROOF DRAIN PIPING
	OD OVERFLOW ROOF DRAIN PIPING
	VENT PIPING
	AV ACID VENT PIPING
	FPM FIRE SPRINKLER MAIN PIPING
	COLD WATER SUPPLY PIPING
	HOT WATER SUPPLY PIPING
	HOT WATER RETURN PIPING
	DI DEIONIZED COLD WATER SUPPLY PIPING
	G NATURAL GAS PIPING
	LPG PROPANE GAS PIPING
	CA COMPRESSED AIR PIPING
	A MEDICAL COMPRESSED AIR PIPING
	O OXYGEN PIPING
	V VACUUM PIPING
	N NITROGEN GAS PIPING
	NO NITROUS OXIDE GAS PIPING
	PIPING DOWN (TEE DOWN TO ELBOW, ELBOW DOWN TO TEE, ELBOW, TEE)
	PIPING UP (TEE, ELBOW)
	TEE (DOWN, SIDE, UP)
	WATER HAMMER ARRESTOR (WHA)
	DIELECTRIC UNION
	VALVE
	CHECK VALVE
	CIRCUIT SETTER CALIBRATED BALANCE VALVE
	AUTOMATIC FLOW CONTROL VALVE
	GAS PLUG VALVE
	GAS PRESSURE REGULATOR
	HOSE BIBB
	BACKFLOW PREVENTER
	REDUCED PRESSURE BACKFLOW PREVENTER
	GAS METER
	WATER METER
	NEW PLUMBING EQUIPMENT
	EXISTING PLUMBING EQUIPMENT
	DEMOLISHED PLUMBING EQUIPMENT
	NEW PLUMBING FIXTURE PROVIDED BY THE CONTRACTOR
	EXISTING PLUMBING FIXTURE
	DEMOLISHED PLUMBING FIXTURE
	CLEANOUT AT THE END OF PIPE
	FINISH FLOOR CLEANOUT
	CLEANOUT TO (FINISH) GRADE (COTG)
	TWO-WAY CLEANOUT TO (FINISH) GRADE (COTG)
	VENT THROUGH THE ROOF
	CONNECT TO THE EXISTING
	POINT OF DEMOLITION



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

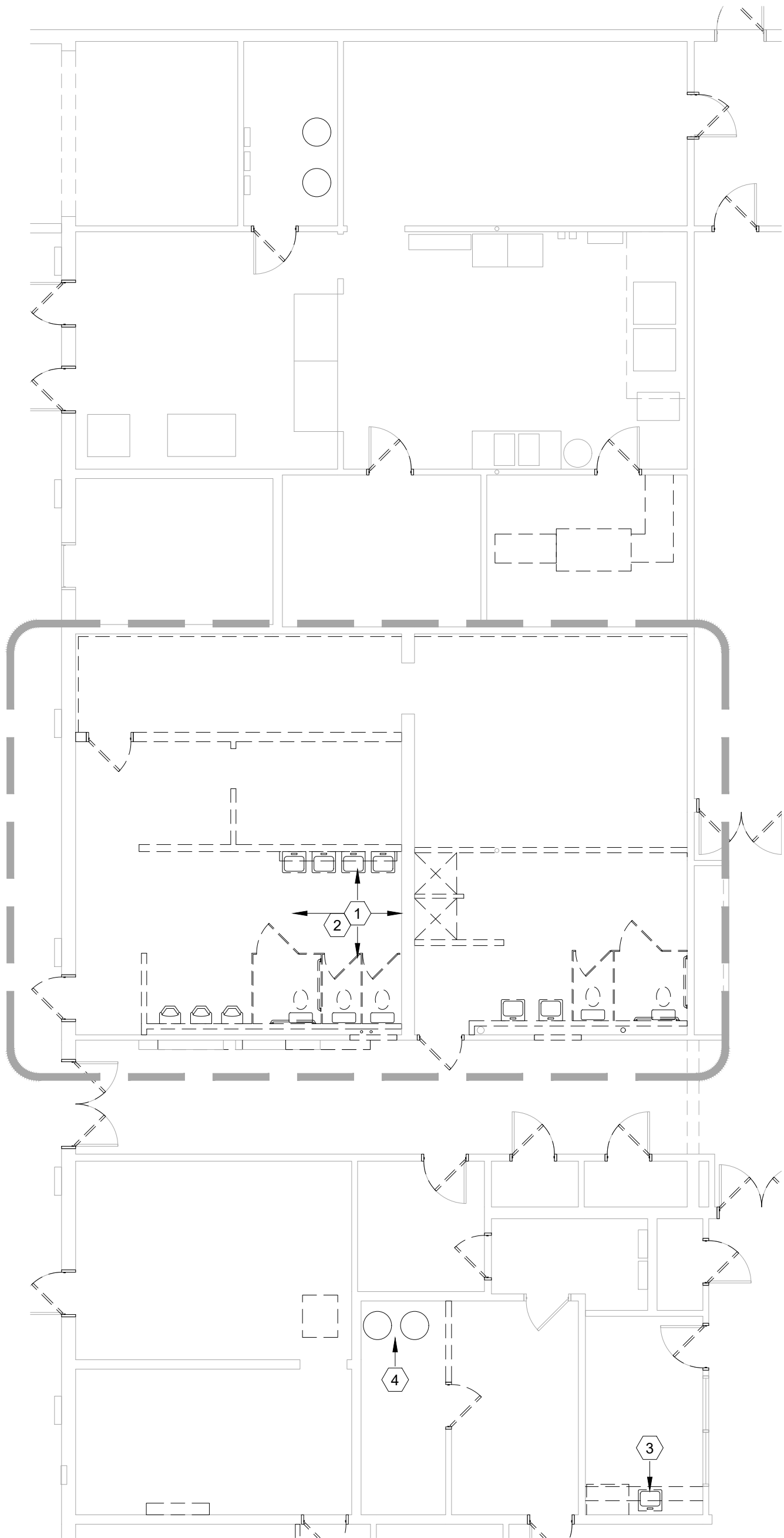
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-100
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
PLUMBING
DEMOLITION PLAN

SHEET NUMBER:

P-100



1
P-100
1/8" = 1'-0"

PLUMBING DEMOLITION PLAN

N

DEMO KEY NOTES

1. DEMO ALL PLUMBING (FIXTURES, SUPPLY, WASTE AND VENT PIPING) WITHIN THIS AREA AS REQUIRED TO ACCOMMODATE NEW PLUMBING FIXTURE LAYOUT. PREPARE REMAINING SUPPLY, WASTE AND VENT PIPING TO ACCOMMODATE NEW PLUMBING - REFER TO P-102, P-103, P-104.
2. SAWCUT EXISTING SLAB AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW SANITARY SEWER PIPING. SCOPE EXISTING SANITARY SEWER PIPING AS REQUIRED TO VERIFY ROUTING AND INVERT PRIOR TO CUTTING SLAB.
3. REMOVE EXISTING SINK. PREPARE EXISTING ASSOCIATED UTILITIES (SUPPLY, WASTE AND VENT PIPING) FOR INSTALLATION OF NEW PLUMBING FIXTURE.
4. REMOVE EXISTING 40 GAL WATER HEATERS. CUT AND CAP EXISTING UNDERSLAB WATER PIPING IN THIS AREA.



- GENERAL NOTES
- 1

P.C. TO FIELD VERIFY EXISTING METER SIZE AND COLD WATER SUPPLY SIZE. COORDINATE WITH RMJ FOR NEW METER SIZE AND ROUTE A NEW 2-1/2" WATER LINE TO THE BUILDING. PROVIDE NEW 2-1/2" RPZ AS SHOWN AND ROUTE NEW COLD WATER SERVICE OVERHEAD.
- 2

P.C. TO LOCATE EXISTING UNDERSLAB WATER PIPING (HOT AND COLD). NEW PIPING TO BE ROUTED TO NEW WATER HEATERS, AND MENS AND WOMENS BATHROOMS ABOVE CEILING. ALL EXISTING UNDERSLAB PIPING TO BE CUT, CAPPED AND REMOVED OR ABANDONED. NEW 2-1/2" COLD WATER LINE TO BE CONNECTED TO EXISTING KITCHEN COLD WATER SUPPLY. IT WILL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY ALL EXISTING FIXTURES NOT COVERED IN THE NEW REMODEL ARE IN WORKING CONDITION AND HAVE A SERVICEABLE WATER CONNECTION.
NO UNUSED UNDERSLAB PIPING IS TO BE LEFT CONNECTED TO THE NEW COMPLETED SYSTEM.

- #KEYED NOTES
- 1

P.C. TO VERIFY HOT AND COLD WATER AT THE NEW PLUMBING FIXTURE (SK). ROUTE NEW HOT AND COLD WATER AS NEEDED ABOVE CEILING AND DOWN WALL TO NEW FIXTURE LOCATION.
- 2

P.C. TO VERIFY LOCATION OF EXISTING COLD WATER SUPPLY TO KITCHEN AREA. ROUTE NEW 2" CW TO EXISTING CW IN THIS VICINITY. VERIFY EXISTING WATER LINE SIZE, LOCATION AND CONDITION PRIOR TO ROUTING OR CONNECTION OF NEW PIPING. PROVIDE A SHUT OFF VALVE AND ACCESS DOOR AT CONNECTION.
- 3

P.C. TO PLACE A LAYER OF BATT INSULATION (6" MIN) BETWEEN NEW ABOVE CEILING WATER LINES AND THE ROOF.
- 4

SEE SHEET P-302 DETAIL 5 FOR CONNECTIONS AT NEW WATER HEATERS.
- 5

PROVIDE BELL & GOSSETT #CB-1/2S LF CIRCUIT SETTER BALANCING VALVE, SET AT 1.0 GPM.
- 6

4" PVC COMBUSTION AIR AND 4" PVC VENT UP TO CONCENTRIC VENT THROUGH ROOF.
- 7

EXTEND NEW 2-1/2" WATER LINE APPROX 110' SOUTH TO NEW WATER METER. COORDINATE WITH UTILITY COMPANY
- 8

THERE IS AN EXISTING 2" GAS LINE IN THIS LOCATION. P.C. TO REMOVE EXISTING GAS PIPING TO OLD WATER HEATERS AND ADD NEW 2" GAS PIPING TO NEW WATER HEATERS REDUCING AS NEEDED TO MAKE CONNECTIONS TO EACH UNIT.

PLUMBING LEGEND

---	COLD WATER PIPING
---	HOT WATER PIPING
---	HOT WATER RECIRCULATION PIPING
---	GAS
---	WASTE PIPING
---	CONDENSATE LINE
---	EXISTING BUILDING WASTE
---	GREASE LADEN WASTE PIPING
---	OIL-WATER-SOLIDS WASTE PIPING
---	VENT PIPING
C.O.T.G.	CLEANOUT TO GRADE
F.C.O.	FLOOR CLEANOUT
W.C.O.	WALL CLEANOUT



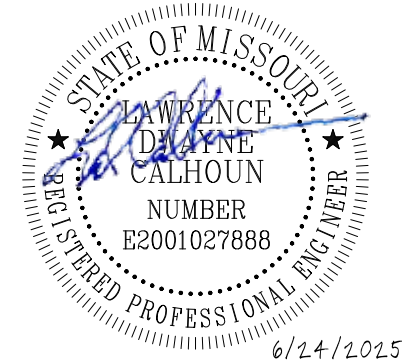
1P-102

SUPPLY PIPING PLAN

1/8" = 1'-0"

N

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-100
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
SUPPLY PIPING
PLAN

SHEET NUMBER:

P-102

GENERAL NOTES

1 EXISTING GAS METER TO BE CHANGED FROM LOW PRESSURE (7" W.C.) TO HIGH PRESSURE (2 LBS). THE EXISTING PIPING IS TO REMAIN. THERE ARE TO BE (5) NEW GAS REGULATORS PLACED IN THE EXISTING GAS PIPING SYSTEM TO BRING THE PRESSURE DOWN TO 7" W.C. P.C. TO VERIFY CONNECTED LOAD AND COORDINATE WITH AMEREN MISSOURI - TRENT SNODGRASS (TSNODGRASS@AMEREN.COM) TO VERIFY GAS METER USAGE AND SIZING.

KEYED NOTES

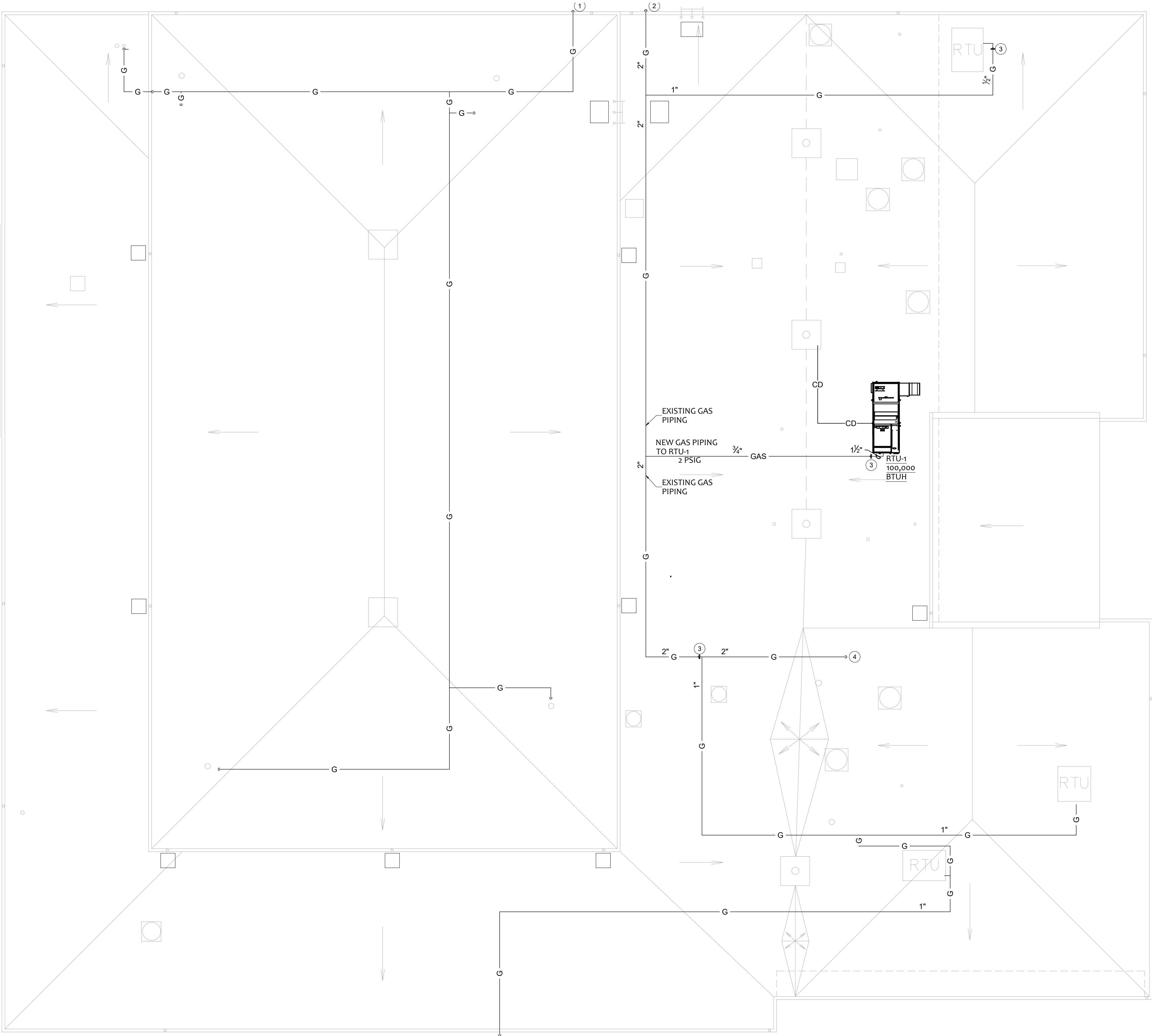
1 EXISTING LOW PRESSURE GAS LINE ON HIGH ROOF TO REMAIN UNCHANGED. A REGULATOR TO BE ADDED NEAR METER TO MAINTAIN 7" W.C. SEE SHEET P-302 DETAIL 5.

2 2" GAS PIPING UP ONTO LOW ROOF AREA. GAS PIPING TO REMAIN. GAS PRESSURE TO BE CHANGED FROM 7" W.C. TO 2LBS HIGH PRESSURE. INDEPENDENT GAS REGULATORS TO BE PROVIDED AT INDICATED LOCATIONS TO CHANGE GAS PRESSURE FROM 2 LBS. TO 7" W.C. SEE DETAIL 5 SHEET P-302 FOR GAS METER AND REGULATOR LOCATIONS ON THE NORTH SIDE OF THE BUILDING. COORDINATE WITH GAS PROVIDER FOR NEEDED CHANGES.

3 P.C. TO INSTALL A NEW GAS REGULATOR (2 LBS. TO 7" W.C.) AT THIS LOCATION. VERIFY CONNECTED LOAD.

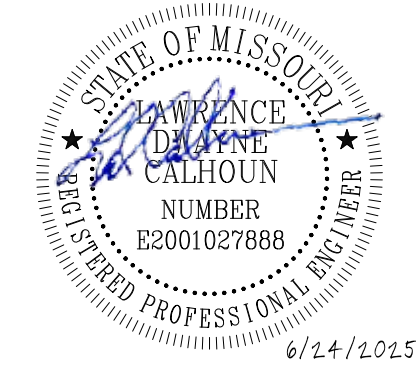
4 SEE SHEET P-102 FOR GAS PIPING CONTINUATION TO NEW WATER HEATERS.

PLUMBING LEGEND	
---	COLD WATER PIPING
-.-.-	HOT WATER PIPING
-.-.-	HOT WATER RECIRCULATION PIPING
— GAS —	GAS PIPING
— BW —	WASTE PIPING
— CD —	CONDENSATE LINE
—XBW—	EXISTING BUILDING WASTE
— GW —	GREASE LADEN WASTE PIPING
—OWS—	OIL-WATER-SOLIDS WASTE PIPING
— V —	VENT PIPING
C.O.T.G.	CLEANOUT TO GRADE
F.C.O.	FLOOR CLEANOUT
W.C.O.	WALL CLEANOUT



1 ROOF GAS PIPING PLAN
P-103 1/8" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

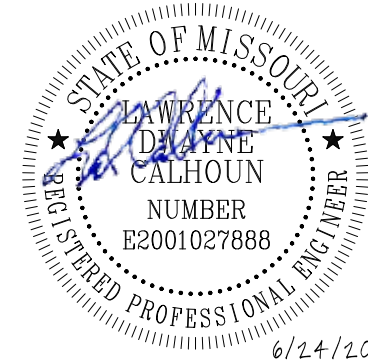
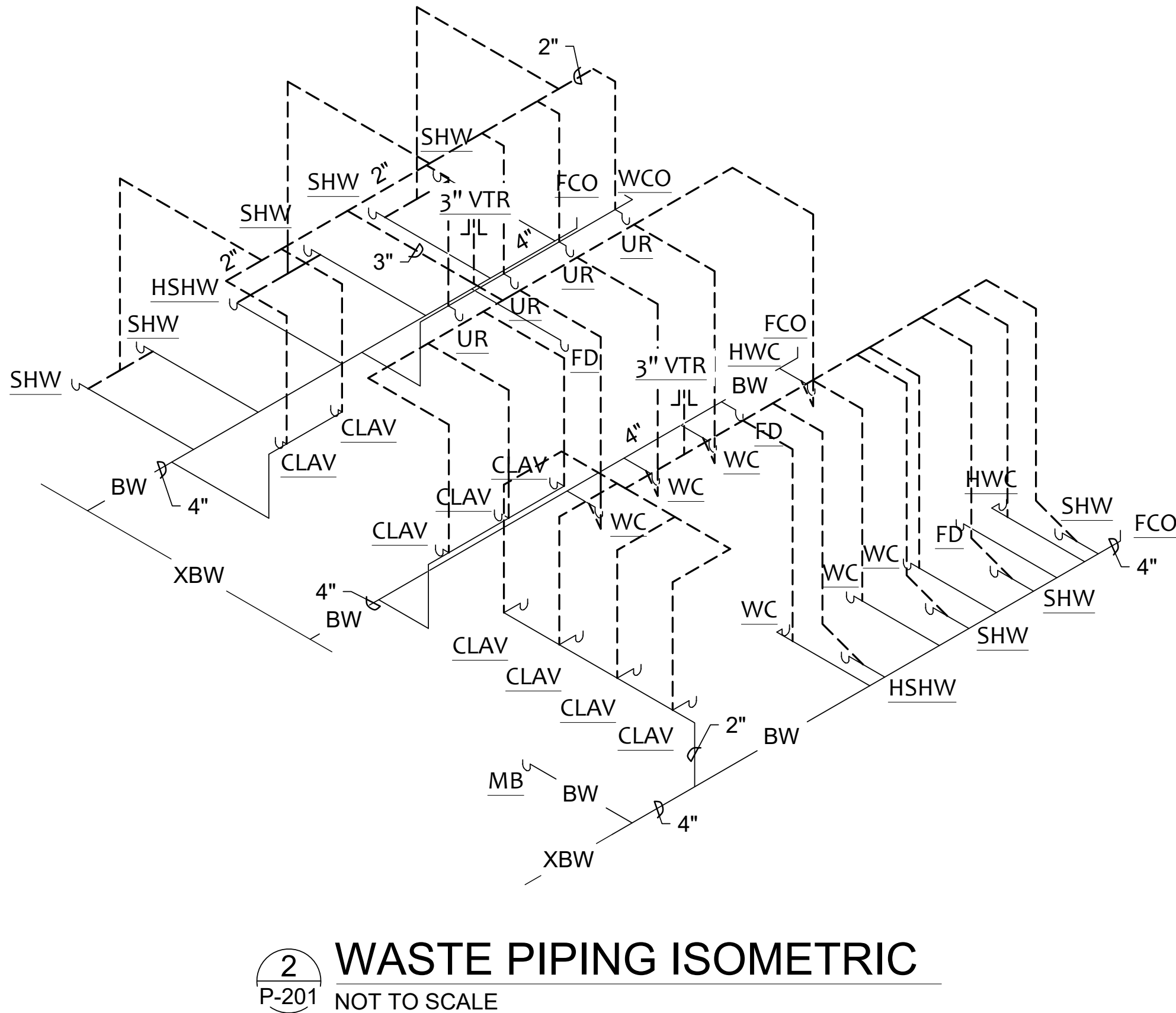
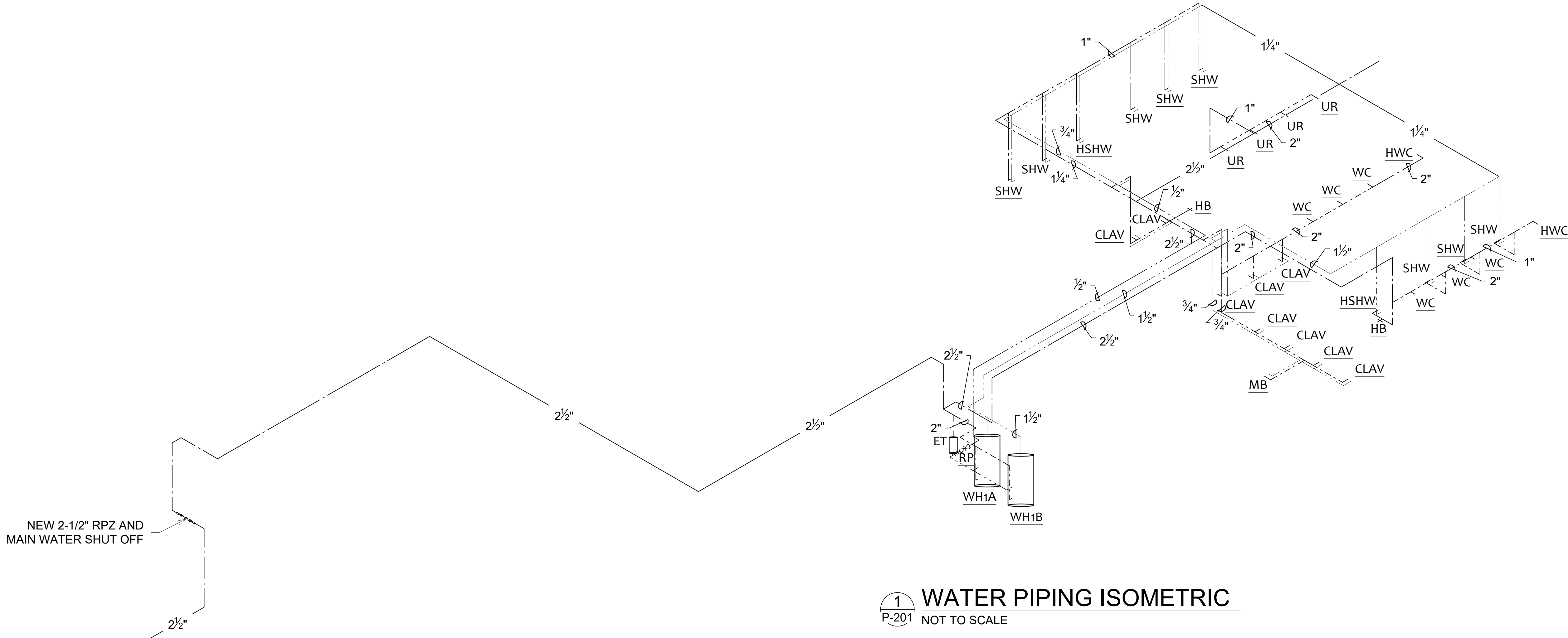
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-100
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
**ROOF GAS
PIPING PLAN**

SHEET NUMBER:

P-103



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

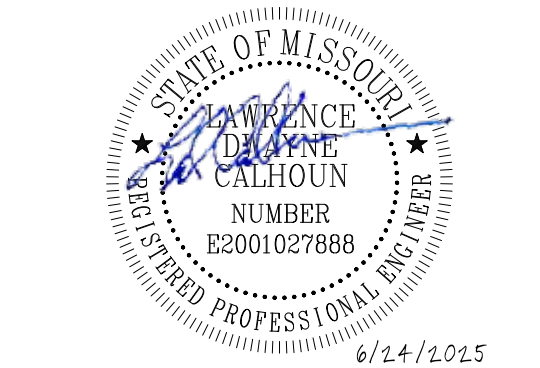
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-100
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
PLUMBING
ISOMETRICS

SHEET NUMBER:

P-201



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-301
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
PLUMBING
DETAILS &
SCHEDULES

SHEET NUMBER:

P-301

PLUMBING FIXTURE SCHEDULE (BASIS OF DESIGN)										
MARK	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES	FAUCET	WASTE	VENT	CONN. SIZE		REMARKS
								HOT	COLD	
CLAV	20"X17" COUNTERTOP LAVATORY	ZURN	Z5114	GRID	ZURN Z7440-XL-FC	2"	2"	1/2"	1/2"	3
FCO	FINISH FLOOR CLEANOUT	ZURN	ZN1400-BP	-	-	-	-	-	-	6
FD	CAST-IRON BODY FLOOR DRAIN	ZURN	ZN-Z415B	TRAP	-	2"	2"	-	-	-
HB	HOSE BIBB	ZURN	Z1341	BOX	-	-	-	-	1/2"	7
HD	HUB DRAIN	-	-	-	-	3"	-	-	-	-
HWC	ADA FLUSH VALVE WATER CLOSET	ZURN	Z5665-BWL1	SEAT	ZURN Z6000AV	4"	2"	-	1"	1
HSHW	ACCESSIBLE SHOWER	-	-	BARS, DRAIN, SH-SEAT	Z7300-SSC-HW11-MT-VB-WF	2"	2"	1/2"	1/2"	4.5
SHW	SHOWER	-	-	DRAIN	ZURN Z7301-SS-MT-S5	2"	2"	1/2"	1/2"	4.5
URN	WALL MOUNTED 0.5 GPF	ZURN	Z5755-U	CARRIER	Z6003AV-EWS	2"	2"	-	3/4"	2
WC	FLUSH VALVE WATER CLOSET	ZURN	Z56550BWL1	SEAT	ZURN Z600AV	4"	2"	-	1"	-
WCO	WALL CLEANOUT	ZURN	Z1446	-	-	PIPE SIZE	-	-	-	2
MB	STONE MOP BASIN	STERN-WILLIAMS	MB-2424	GUARD, HANGER, HOSE, PANEL	STERN-WILLIAMS T-10-VB	3"	2"	3/4"	3/4"	8
SK	DOUBLE BOWL SS SINK	ZURN	LR3322	STRAINER, GARBAGE	ELKAY LK7922SSS	2"	2"	1/2"	1/2"	9

ACCESSORIES:

BARS - ADA COMPLIANT GRAB BARS
BOX - ZURN Z341 - BOX FAUCET BOX
CARRIER - FLOOR MOUNTED CARRIER
GARBAGE - GARBAGE DISPOSAL EQUAL TO IN-SINK-ERATOR BADGER 5
DRAIN - SHOWER DRAIN - ZURN Z5415B5
GRID - GRID STRAINER/TAILOPIECE - ZURN Z8743-PC
SEAT - ZURN Z5956SS-EL (HEAVY DUTY) OPEN FRONT WHITE SEAT
SH-SEAT - REMOVABLE FOLD-UP SEAT
TRAP - TRAP GUARD DEVICE CONFORMING TO ASSE STANDARD 1072
GUARD - STERN-WILLIAMS ALUMINUM BUMPER GUARDS #A20
HANGER - STERN-WILLIAMS STAINLESS STEEL MOP HANGER #T-40
HOSE - STERN-WILLIAMS HOSE & WALL HOOK #T-35
PANEL - STERN-WILLIAMS STAINLESS STEEL SPLASH CATCHER PANELS #BP
STRAINER - ELKAY LK99 STAINLESS STEEL STRAINER BASKET

REMARKS:

- HANDLE ON THE WIDE SIDE OF THE STALL.
- REFER TO THE ARCHITECTURAL PLANS FOR THE MOUNTING HEIGHT.
- INSULATE THE SUPPLY AND DRAIN PIPING WITH A WHITE INSULATION DEVICE EQUAL TO McGUIRE MODEL NO. PW-2150-WC AND PROVIDE A THERMOSTATIC MIXING VALVE ON THE SUPPLIES EQUAL TO WATTS MODEL NO. LFUSG-B
- VALVE ORIENTATION PER THE PLAN.
- REFER TO THE ARCHITECTURAL PLANS FOR THE SHOWER SURFACE ENCLOSURE INFORMATION.
- REFER TO THE PLAN FOR THE SIZE.
- MOUNTED AT 24" ABOVE FINISH FLOOR
- FAUCET SHALL HAVE VACUUM BREAKER
- NO QUICK CLIPS ALLOWED

PUMP SCHEDULE (BASIS OF DESIGN)												
MARK	MANUFACTURER	MODEL	WATER FLOW RATE	TOTAL HEAD	PUMP	MOTOR		ELECTRICAL			ACCESSORIES	REMARKS
			GPM			FT. OF H2O	RPM	BHP	MHP	V/PH		
RP	BELL & GOSSETT	NBF-25	1	12	-	-	125W	120/1	1	15	TSM, TH, TM	1

ACCESSORIES:

TSM - THREE SPEED MOTOR
TH - ADJUSTABLE THERMOSTAT
TM - ADJUSTABLE TIMER

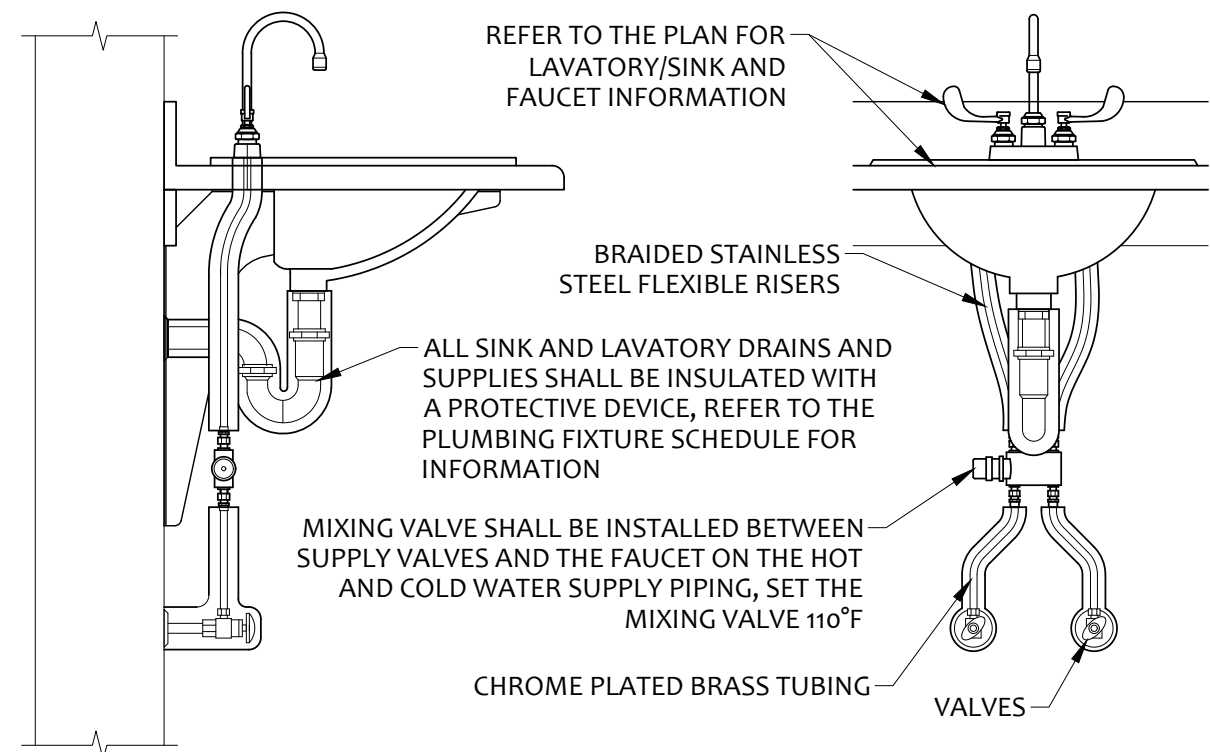
REMARKS:

- CONNECTIONS AS REQUIRED BY PIPING TYPE.

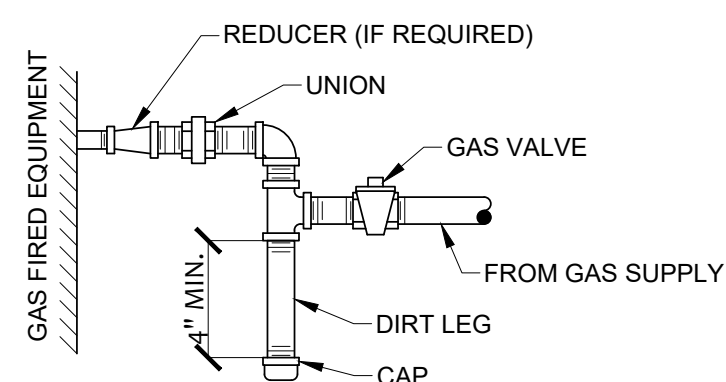
GAS WATER HEATER SCHEDULE (BASIS OF DESIGN)									
MARK	MANUFACTURER	MODEL	GAS INPUT	RECOVERY @100°F. RISE	STORAGE CAPACITY	ELECTRICAL			REMARKS
			MBH	GPH	GALLONS	V/PH	MCA	MOCP	
WH1A	STATE	SUF119 300NE (A)	300	349	119	120/1	6	20	1,2,3,4,5
WH1A	STATE	SUF119 300NE (A)	300	349	119	120/1	6	20	1,2,4,5

REMARKS:

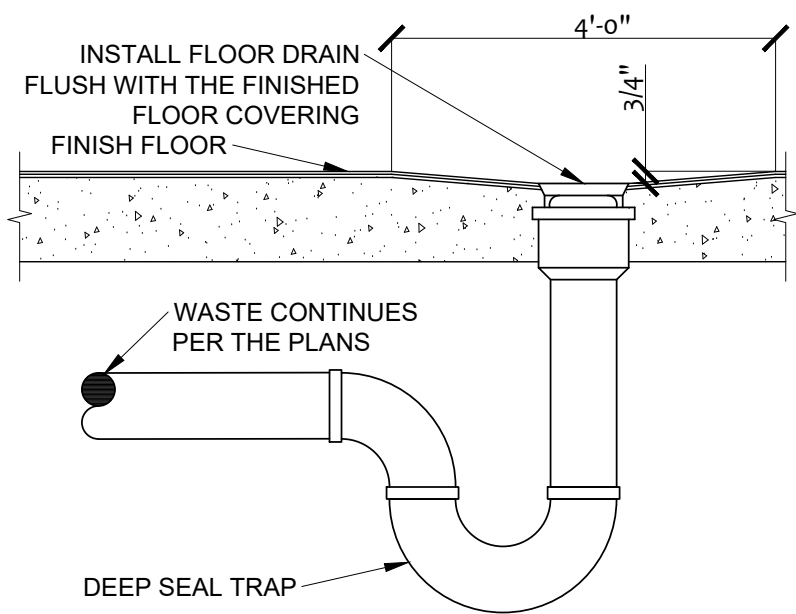
- 140° F. TANK STORAGE TEMPERATURE.
- ASME CERTIFICATION.
- THERMAL EXPANSION TANK - AMTROL ST-30VC-DD
- CONCENTRIC VENT KIT.
- CONDENSATE NEUTRALIZATION KIT.



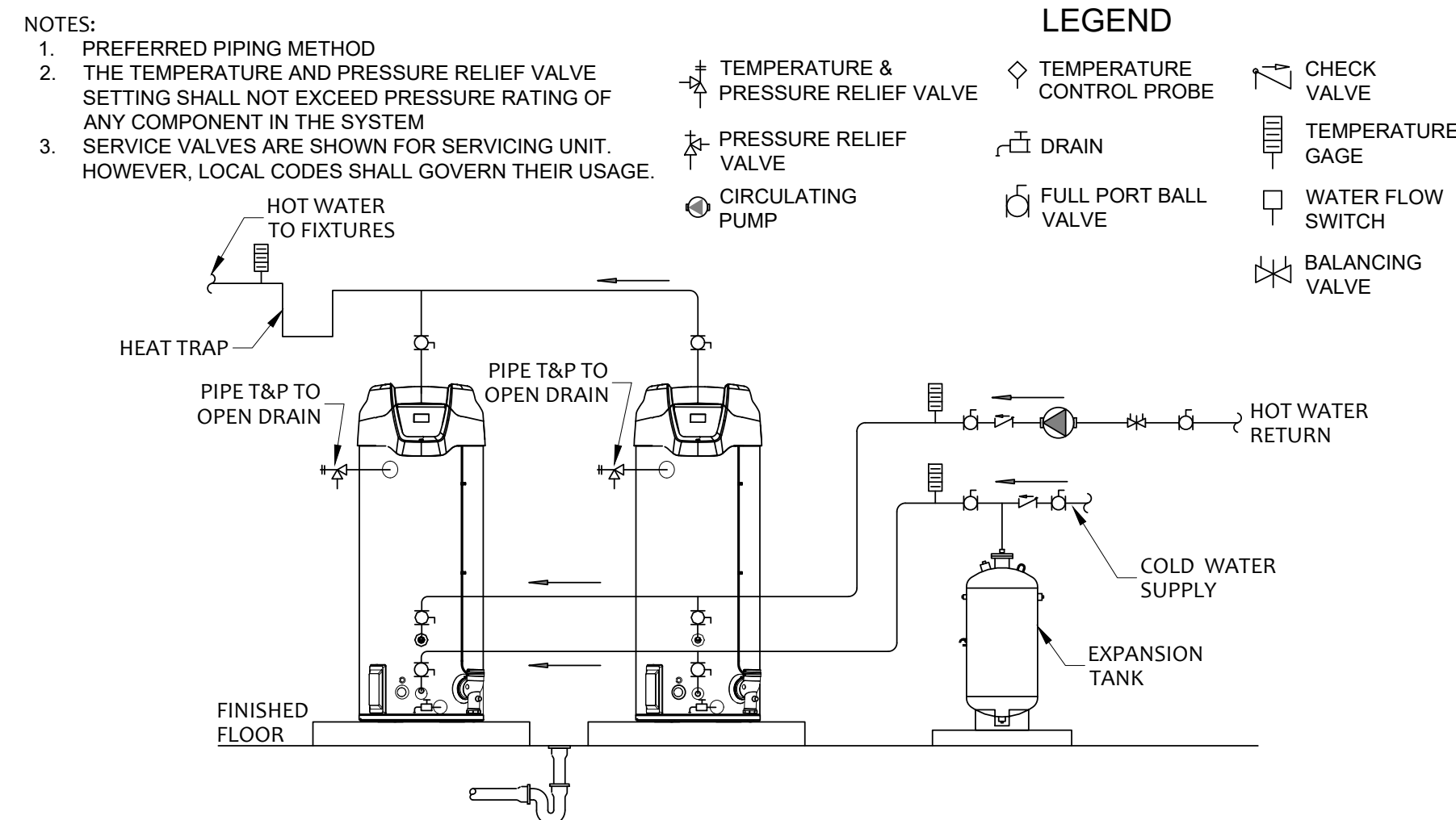
1 LAVATORY INSTALLATION DETAIL
NOT TO SCALE



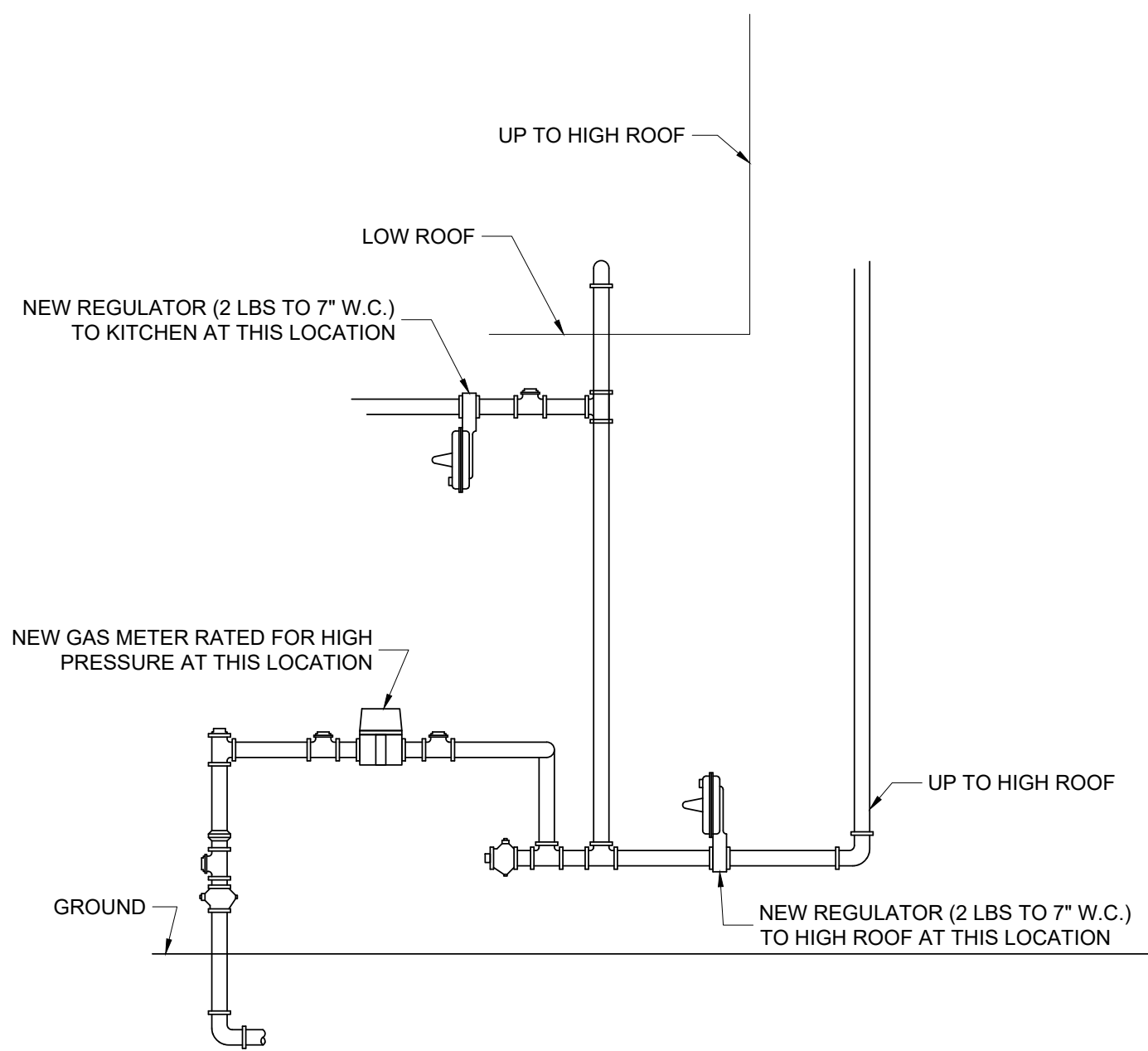
2 GAS CONNECTION DETAIL
NOT TO SCALE



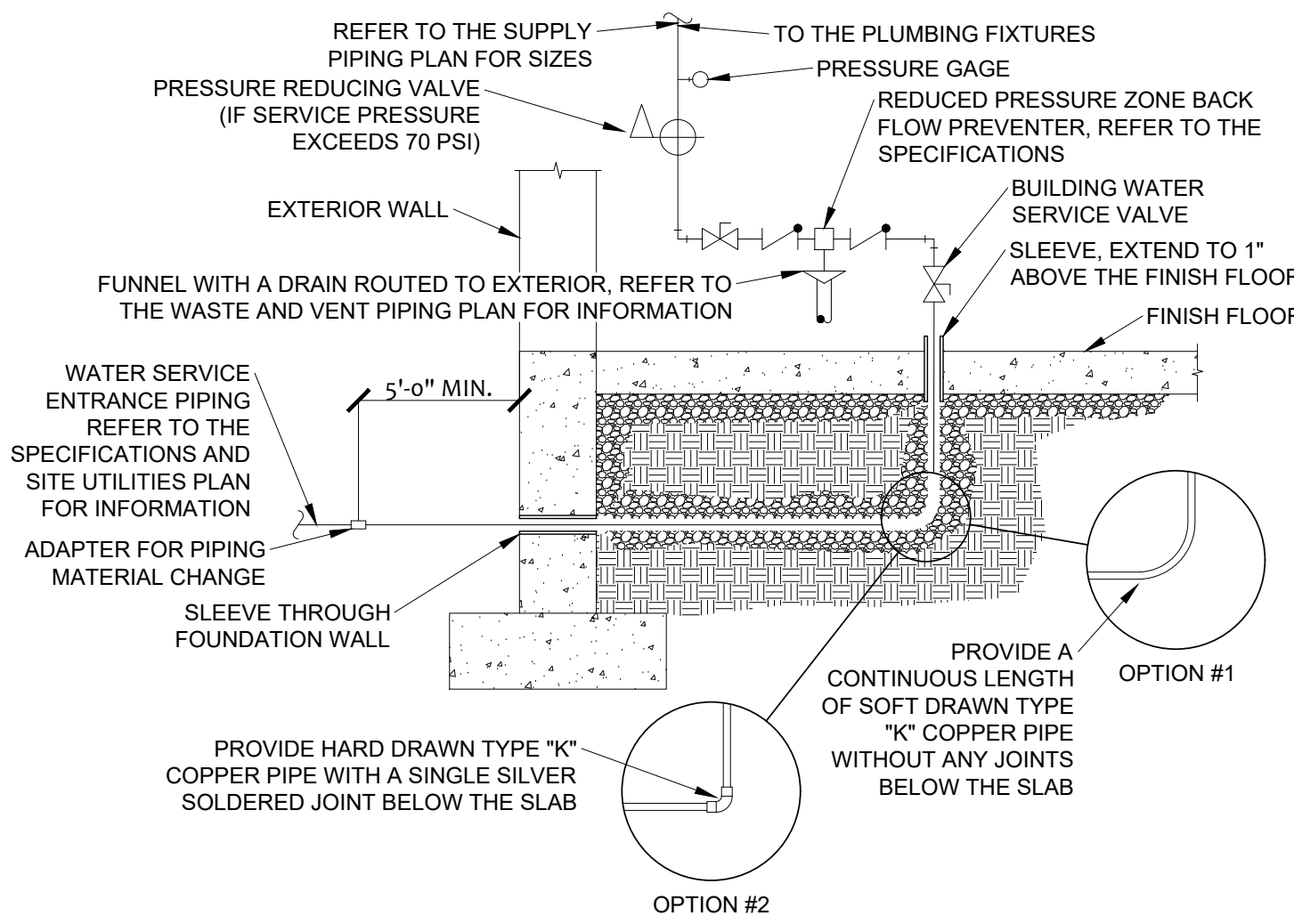
3 FLOOR DRAIN DETAIL
NOT TO SCALE



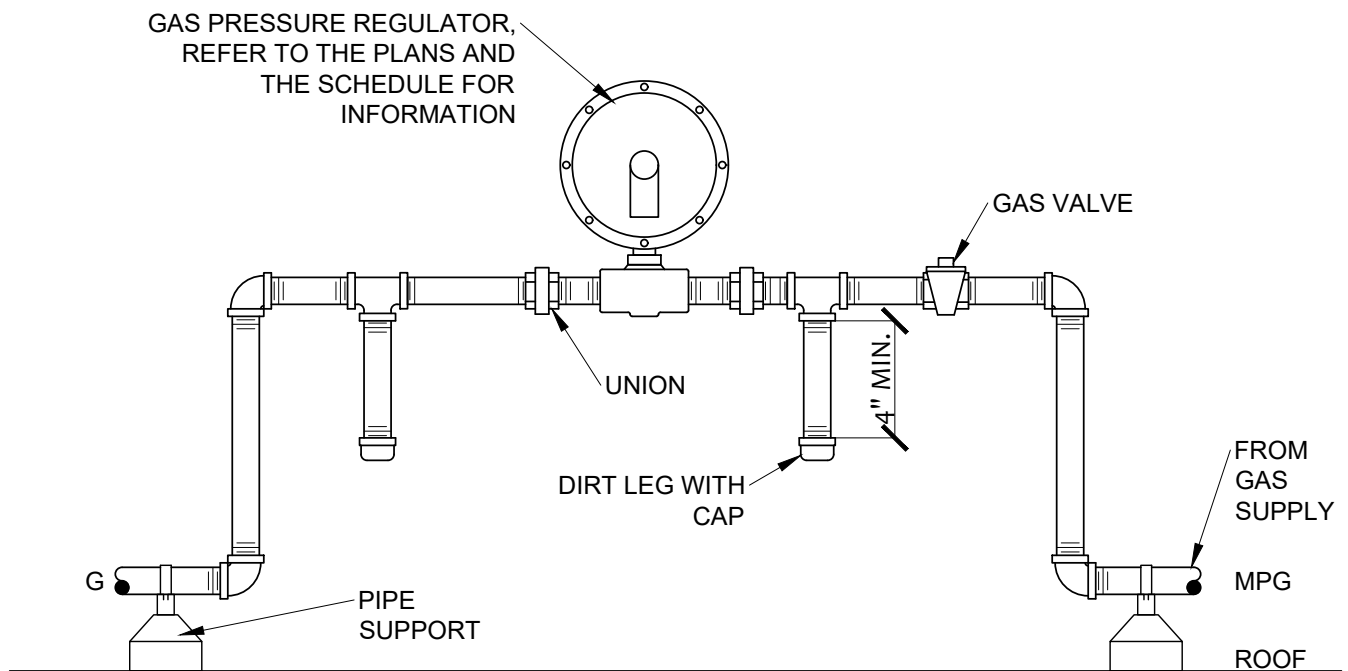
4 DUAL WATER HEATER PIPING DETAIL
NOT TO SCALE



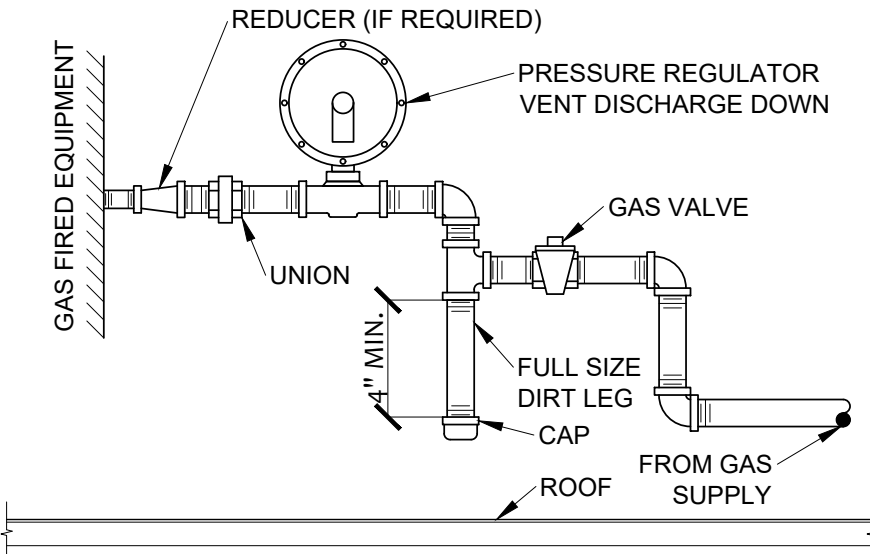
5 GAS METER RISER DETAIL
NOT TO SCALE



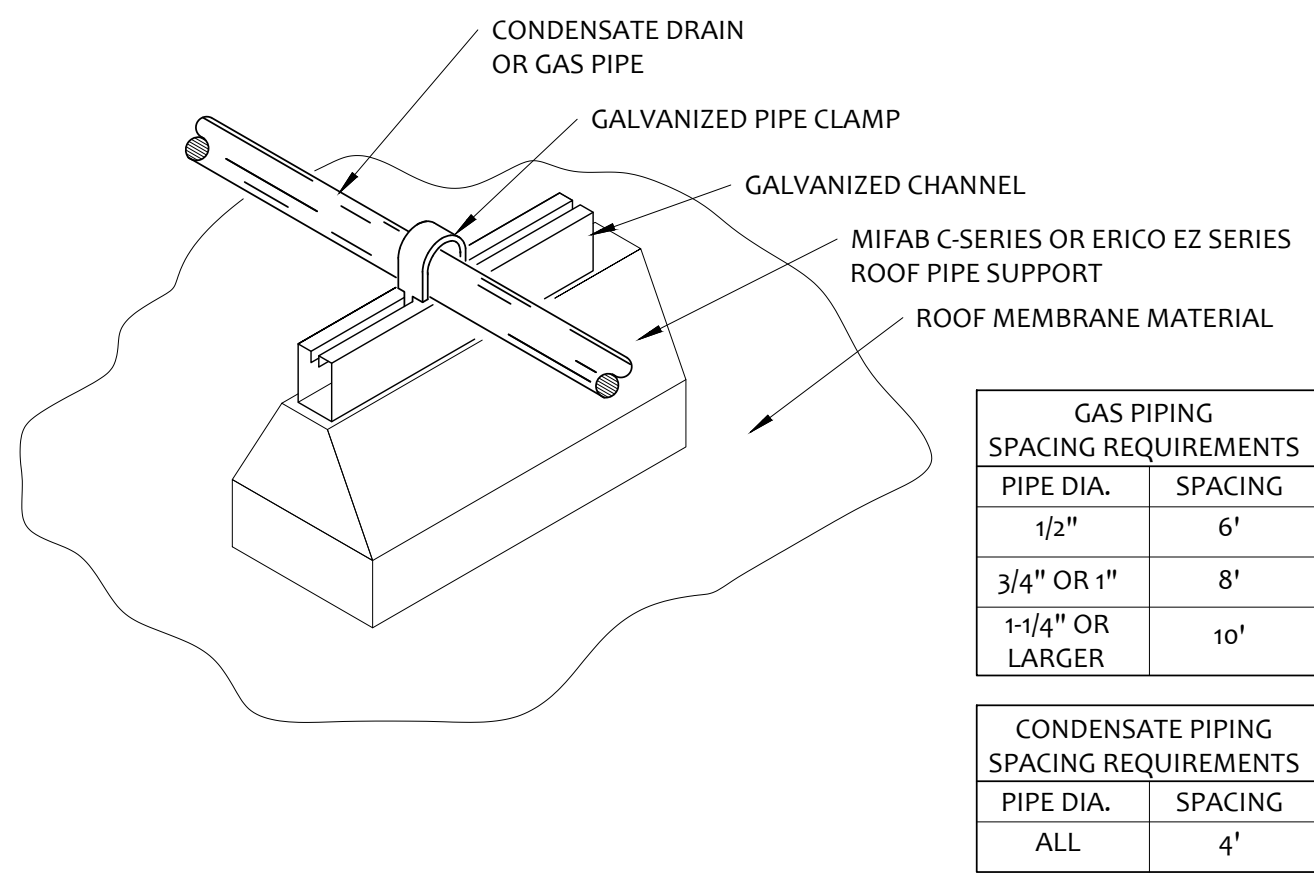
6 WATER SERVICE ENTRANCE
NOT TO SCALE



7 GAS PRESSURE REGULATOR DETAIL
NOT TO SCALE

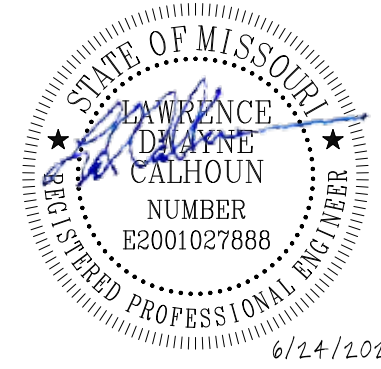


8 GAS CONNECTION DETAIL
NOT TO SCALE



9 PIPE SUPPORT DETAIL
NOT TO SCALE

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

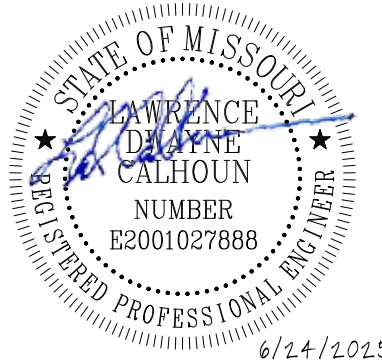
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-P-301
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
PLUMBING
DETAILS

SHEET NUMBER:

P-302



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-M-101
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:

HVAC GEN NOTES
& LEGEND

SHEET NUMBER:

M-001

MECHANICAL SYMBOLS LEGEND	
NOTE: ALL SYMBOLS MAY NOT APPEAR ON EVERY PLAN.	
	SUPPLY AIR CEILING GRILLE
	RETURN AIR CEILING GRILLE
	EXHAUST AIR CEILING GRILLE
	NEW EQUIPMENT
	EXISTING EQUIPMENT
	DEMOLISHED EQUIPMENT
	EXHAUST DUCT
	SUPPLY DUCT
	NEW DUCTWORK
	EXISTING DUCTWORK
	DEMOLISHED DUCTWORK
	MEDIUM PRESSURE DUCT
	DUCT-WIDTHxDEPTH
	FLAT OVAL DUCT-WIDTHxDEPTH
	SUPPLY DUCT DOWN
	SUPPLY DUCT UP
	RETURN/EXHAUST DUCT DOWN
	RETURN/EXHAUST DUCT UP
	ROUND DUCT DOWN
	ROUND DUCT UP
	ROUND DUCT DOWN TO A BELLMOUTH FITTING WITH A DAMPER
	SLOPING IN DIRECTION OF AIR FLOW
	FLEXIBLE DUCT (MAX. 5'-0" LONG)
	SIDEWALL SUPPLY/RETURN GRILLES
	LOUVER
	MANUAL OPPOSED BLADE DAMPER
	MOTORIZED OPPOSED BLADE DAMPER
	FLEX CONNECTION IN DUCT
	MANUAL BUTTERFLY DAMPER W/ LOCKING QUADRANT
	RADIUS ELBOW R/D = 1.5
	ELBOW W/ TURNING VANES
	SQUARE TO SQUARE TRANSITION
	SQUARE TO ROUND TRANSITION
	ROUND DUCT
	RECTANGULAR DUCT
	SPLITTER DAMPER
	AIR EXTRACTOR
	DAMPER (IF SHOWN) CONICAL/BELLMOUTH TEE
	DAMPER (IF SHOWN) HIGH EFFICIENCY TAKE-OFF
	45° DEG.° LATERAL
	DAMPER (IF SHOWN) 45 DEG.° ENTRY TAP
	CONICAL 45° DEG. LATERAL
	FIRE DAMPER
	SMOKE DAMPER
	FIRE SMOKE DAMPER
	DUCT ACCESS DOOR, VERTICAL OR HORIZONTAL
	ON THE BOTTOM OF THE DUCT
	WALL ACCESS PANEL
	HOT WATER SUPPLY PIPING
	HOT WATER RETURN PIPING
	CONDENSATE DRAIN
	REFRIGERANT LINE SET
	CEILING ACCESS PANEL
	HUMIDISTAT
	THERMOSTAT
	THERMOSTAT WITH LOCKING COVER
	ADJUSTABLE ROOM SENSOR
	NON-ADJUSTABLE ROOM SENSOR
	CO2 SENSOR

HVAC EQUIPMENT CONTROL
SEQUENCE

RTU-1 (DEDICATED OUTSIDE AIR UNIT W/ ENERGY WHEEL AND NATURAL GAS HEAT):

THE AHU REMOTE TOUCHSCREEN CONTROLLER SHALL MONITOR AND DISPLAY UNIT STATUS AND ALARMS. THE OCCUPIED MODE SHALL BE INITIATED ACCORDING TO THE OWNER DEFINED SCHEDULE. SEQUENCE OF OPERATION SHALL BE ACCOMPLISHED BY MANUFACTURER'S FACTORY INSTALLED CONTROLS.

OCCUPIED:
SUPPLY FAN AND EXHAUST FAN SHALL OPERATE CONTINUOUSLY. THE OUTSIDE AIR DAMPER AND RETURN AIR DAMPER SHALL OPEN. THE DX COOLING AND GAS HEAT SHALL MODULATE TO MAINTAIN THE OCCUPIED SPACE TEMPERATURE SETPOINT (75°F, ADJ.).

UNOCCUPIED:
SUPPLY AND EXHAUST FANS SHALL CYCLE AND DX COOLING AND GAS HEAT SHALL MODULATE TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE SETPOINT (68°F HEATING, 80°F COOLING). A SPACE OVERRIDE TIMER (2 HOURS) LOCATED AT THE SPACE TEMPERATURE SENSOR SHALL START/STOP THE SYSTEM ACCORDING TO THE NORMAL OCCUPIED MODE.

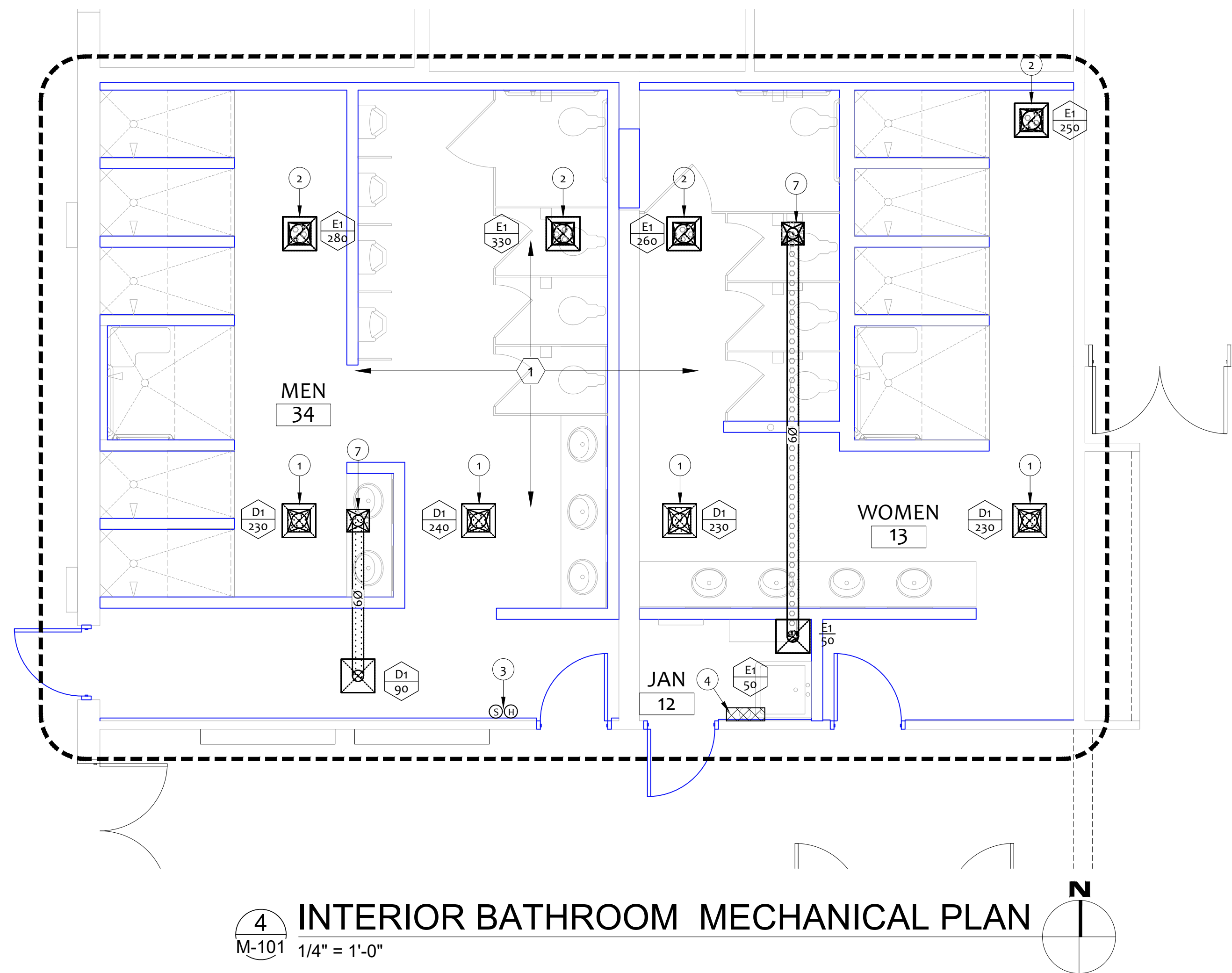
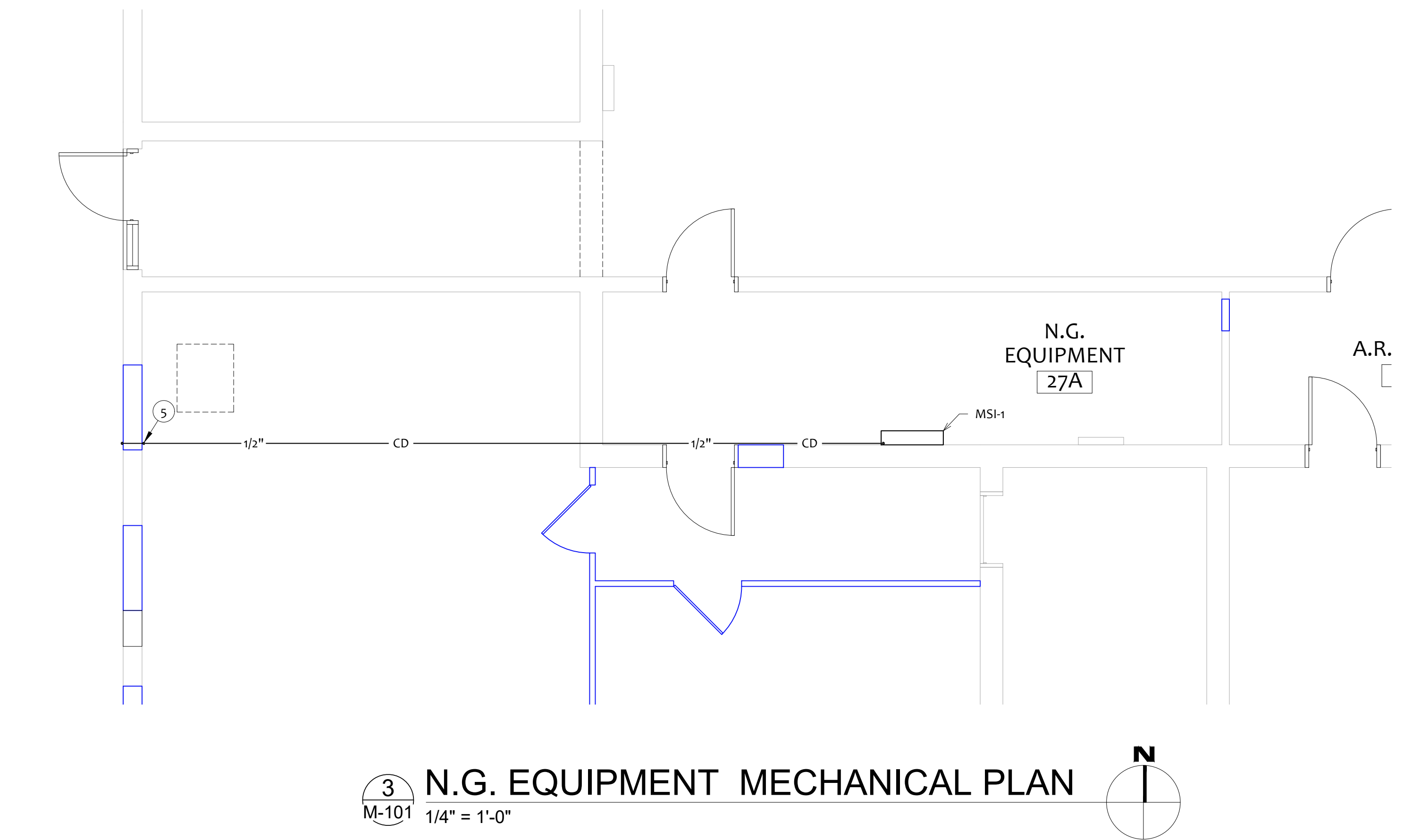
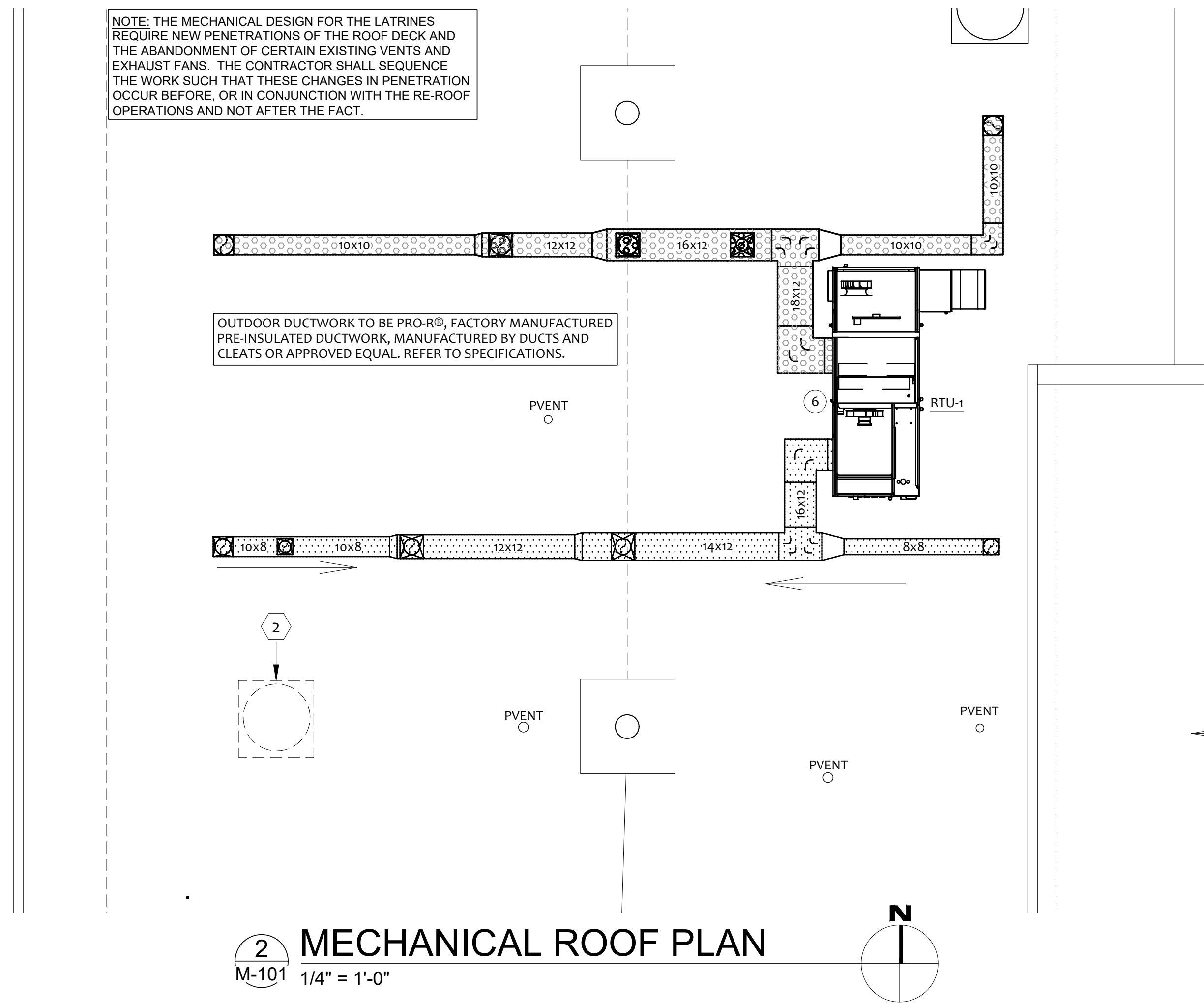
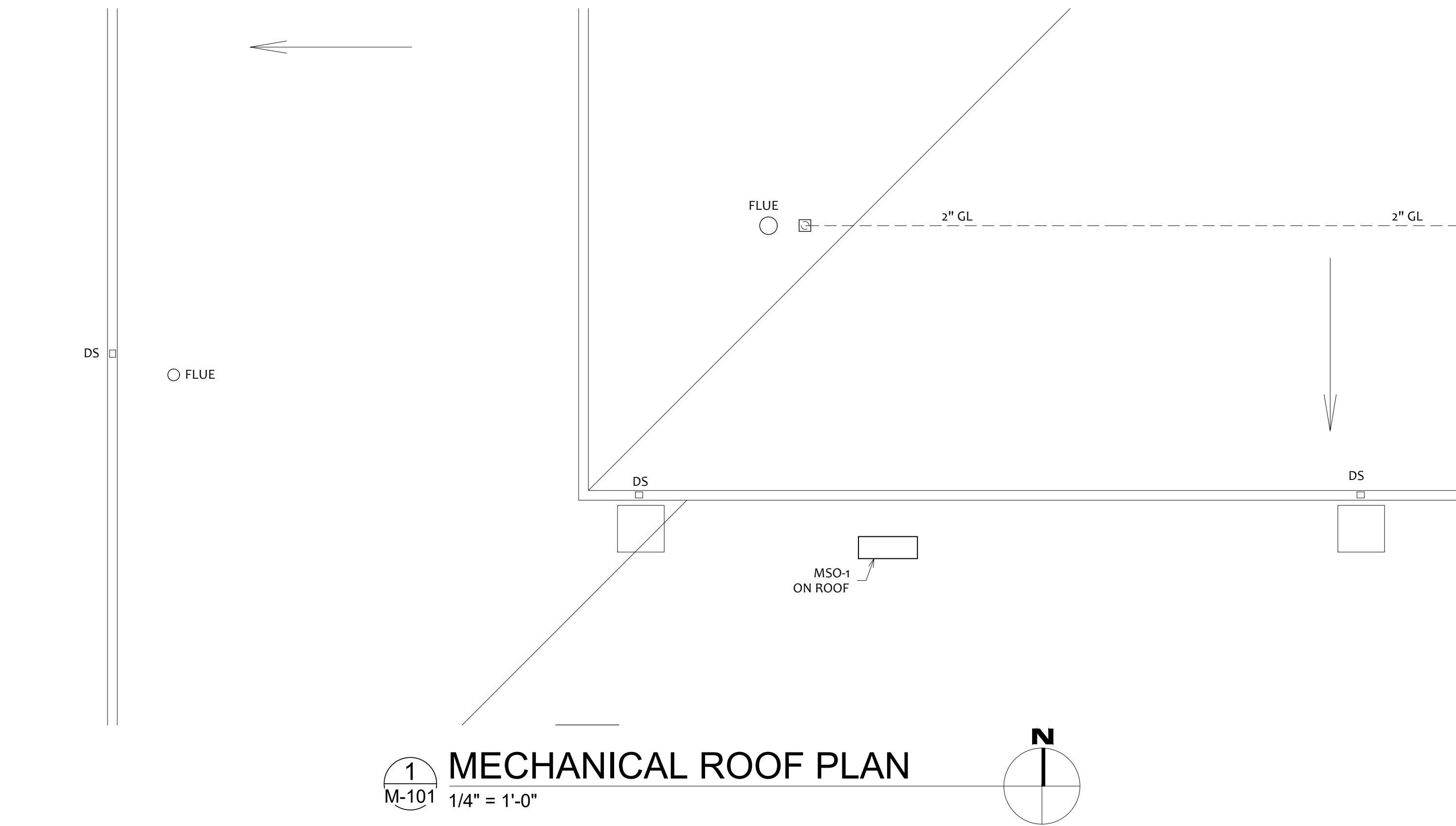
DEHUMIDIFICATION:
FACTORY INSTALLED MODULATING HOT GAS REHEAT SHALL PROVIDE DEHUMIDIFICATION VIA MANUFACTURER'S CONTROL SEQUENCE TO MAINTAIN SPACE RELATIVE HUMIDITY BELOW 60% (ADJ.). DEHUMIDIFICATION SEQUENCE SHALL BE ALLOWED WHEN OUTSIDE AIR TEMPERATURE IS ABOVE 40° F.

ENERGY WHEEL OPERATION:
THE ENERGY RECOVERY VENTILATOR (ERV) IS INTERLOCKED WITH SUPPLY FAN AND EXHAUST FAN OPERATION IN OCCUPIED HEATING OR COOLING MODES. FROST CONTROL - ELECTRIC HEATER SHALL MODULATE AS REQUIRED TO MAINTAIN UNIT ENTERING AIR TEMPERATURE AT 18°F. REFER TO MANUFACTURER'S LITERATURE FOR COMPLETE ERV SEQUENCE.

*THE SYSTEM SHALL SHUT DOWN:
UPON DETECTION OF SMOKE BY SMOKE DETECTORS LOCATED IN THE RETURN AIR STREAM OR FIRE ALARM SYSTEM
HIGH WATER LEVEL IN UNIT CONDENSATE DRAIN PAN AS SENSED BY HIGH CONDENSATE LEVEL SWITCH

MECHANICAL GENERAL NOTES

A. COMPLY WITH LOCAL, STATE AND NATIONAL CODES.	G. PROVIDE REQUIRED MODIFICATIONS TO THE NEW AND EXISTING SYSTEMS TO FACILITATE THE INSTALLATION OF THE NEW SYSTEMS AND FOR THE PROPER OPERATION OF ALL SYSTEMS.	AD. COORDINATE LOCATION OF DUCTS AND DIFFUSERS WITH STRUCTURAL FRAMING MEMBERS. OFFSET DUCTS, AS REQUIRED, TO CLEAR STRUCTURAL MEMBERS.	AN. MAINTAIN A MINIMUM CLEARANCE OF 10'-0" BETWEEN OUTSIDE AIR INTAKES AND ALL EXHAUST FANS, PLUMBING VENTS, FLUES AND OTHER SOURCES OF ODOR.
B. COORDINATE WORK WITH THE WORK OF ALL TRADES ON THE PROJECT.	H. ALL DUCT DIMENSIONS REPRESENT INTERIOR FREE DIMENSIONS, ADJUST DUCT CONSTRUCTION FOR THE INSULATION SPECIFIED.	AE. PROVIDE A SLEEVE, FOR ALL PIPE AND DUCTS, THROUGH FIRE RATED PARTITIONS AND SLABS AND SEAL WITH FIRE RATED SEALANT.	AI. EXISTING HVAC SYSTEMS AND LAYOUT INDICATED ON DRAWINGS IS BASED ON ORIGINAL CONSTRUCTION DOCUMENTS AND SITE EVALUATION WHERE POSSIBLE. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS, INCLUDING: <ul style="list-style-type: none">EQUIPMENT SIZE AND LOCATIONDUCTWORK SIZE AND ROUTINGPIPING SIZE AND ROUTINGMECHANICAL CONTROLS
C. FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING.	I. LOW PRESSURE FLEXIBLE DUCT SHALL HAVE A MAXIMUM LENGTH OF 5'-0", BE PROPERLY SUPPORTED WITH NO KINKS OR HARD BENDS. ELBOWS SHALL HAVE AN R/D NOT LESS THAN 1.0.	AF. PATCH ALL WALLS, FLOORS, AND CEILINGS TO MATCH THE SURROUNDING SURFACE FOR ALL OPENINGS CREATED BY DEMOLITION WORK. REPLACE AND/OR PATCH TO MATCH THE EXISTING SURFACE ANY PIPE AND/OR DUCT INSULATION THAT SHALL REMAIN AND IS DAMAGED OR REMOVED DURING CONSTRUCTION.	AJ. REMOVE ALL PORTIONS OF DUCTWORK AND PIPING SYSTEMS INDICATED FOR DEMOLITION. TERMINATE EXISTING SYSTEMS ABOVE CEILING AND BELOW FLOOR SLABS SUCH THAT IT DOES NOT CONFLICT WITH NEW WORK.
D. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. DO NOT SCALE THE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR ADDITIONAL INFORMATION.	J. LOW PRESSURE DUCT FITTINGS: BRANCH SUPPLY DUCT TO CEILING SUPPLY DIFFUSERS TO BE HIGH EFFICIENCY TAP WITH A DAMPER. ALL 90 DEGREE ROUND ELBOWS SHALL HAVE A R/D = 1.5. ALL 90 DEGREE RECTANGULAR ELBOWS SHALL HAVE TURNING VANES UNLESS OTHERWISE NOTED.	AG. ACCESS PANELS IN HARD CEILINGS SHALL BE A MINIMUM OF 24" X 24" FOR BALANCING DAMPERS, HUMIDIFIERS, VALVES, TRAPS, CLEAN OUTS, CONTROLS, FIRE DAMPERS, ETC.	AK. REMOVE AND RELOCATE SMALL CONDUIT, CABLE, PIPE, DUCTWORK, HANGERS, ETC. AS NECESSARY TO ACHIEVE A COMPLETE INSTALLED MECHANICAL SYSTEM AS SHOWN ON DRAWINGS.
E. THE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION. NO SUBSTITUTIONS OTHER THAN THE MANUFACTURERS LISTED OR PRE-APPROVED BY ADDENDUM.	K. CLOSELY COORDINATE THE LOCATION OF INSTALLED EQUIPMENT TO ACHIEVE THE GREATEST ACCESSIBILITY FOR MAINTENANCE PURPOSES.	AH. REFER TO THE ARCHITECTURAL PLANS FOR THE LOCATION OF FIRE AND SMOKE PARTITIONS.	AL. CLOSELY COORDINATE NEW WORK WITH EXISTING SYSTEMS. PROVIDE NECESSARY MODIFICATIONS TO FACILITATE INSTALLATION/INTERFACE OF NEW SYSTEMS WITH EXISTING.
F. EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.	X. ALL DUCTS PASSING THROUGH A FIRE RATED MEMBRANE SHALL BE INSTALLED WITH FIRE DAMPER, OR PROTECTED AS REQUIRED BY THE GOVERNING CODE.	AI. REFER TO THE ARCHITECTURAL PLANS FOR WALL AND ROOF PENETRATIONS AND EQUIPMENT MOUNTING DETAILS.	AM. OUTDOOR DUCTWORK SHALL BE PRO-R, FACTORY MANUFACTURED PRE-INSULATED DUCTWORK AS MANUFACTURED BY DUCTS & CLEATS, OR APPROVED EQUAL.
	Y. REFER TO ARCHITECTURAL PLANS FOR CEILING GRILLE LOCATIONS AND CEILING TYPE.	AJ. USE EXISTING PIPING SYSTEM VALVES WHERE POSSIBLE TO ISOLATE SYSTEMS AND TO CAP EXISTING PIPING. REPLACE EXISTING VALVES WHERE NECESSARY WHEN EXISTING VALVES DO NOT OPERATE PROPERLY.	
	Z. SEAL ALL DUCT JOINTS WITH LIQUID SEALER. DUCT TAPE IS NOT ACCEPTABLE.	AK. COORDINATE AND SCHEDULE ALL CONNECTIONS TO EXISTING SYSTEMS AND SYSTEM SHUT-DOWNS WITH OWNER.	
	AA. PROVIDE DUCT ACCESS DOORS AT EACH FIRE DAMPER, CONTROL DAMPER AND UPSTREAM AND DOWNSTREAM OF EACH DUCT MOUNTED COIL. THE SIZE OF THE DOORS SHALL BE ADEQUATE FOR INSPECTION AND MAINTENANCE OF DUCT MOUNTED EQUIPMENT.	AL. MAINTAIN EXISTING BUILDING SYSTEMS WITH PHASED DEMOLITION AND INSTALLATION OF NEW WORK, PROVIDING TEMPORARY SERVICES AS REQUIRED.	
	AB. PROVIDE A LINTEL AT ALL NEW OPENINGS (EXCEEDING 12" WIDE) IN NEW OR EXISTING WALLS.	AM. EXISTING EQUIPMENT BEING REMOVED AND DESIGNATED TO REMAIN THE PROPERTY OF THE OWNER SHALL BE DELIVERED UPON REMOVAL TO THE LOCATION DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL OTHER SYSTEM COMPONENTS REMOVED FROM THE SITE.	
	AC. INSULATE AND SECURE THE TOP OF ALL SUPPLY AIR DIFFUSERS WITH 1" THICK FIBERGLASS DUCT WRAP.		

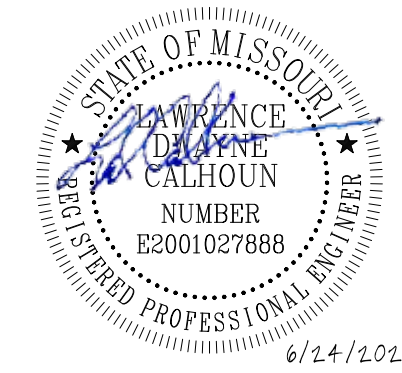


#	DEMO KEY NOTES
1	DEMO HVAC SYSTEM COMPLETE IN DESIGNATED AREA (UNLESS NOTED OTHERWISE) - INCLUDING DUCTWORK, AIR DEVICES, EXHAUST FANS/CIRCUITS & ASSOCIATED ROOF CURBS.
2	REMOVE EXISTING ROOF CURB MOUNTED EXHAUST FAN & CURB. COORDINATE WITH ROOFING CONTRACTOR.

#	KEYED NOTES
1	8"Ø SUPPLY AIR DUCT WITH BALANCING DAMPER UP TO 8"X8" THROUGH ROOF. TRANSITION TO FULL SIZE RTU DUCT CONNECTION IN RISER.
2	10"Ø EXHAUST AIR DUCT WITH BALANCING DAMPER UP TO 10"X10" THROUGH ROOF. TRANSITION TO FULL SIZE RTU DUCT CONNECTION IN RISER.
3	VERIFY ROOM TEMPERATURE SENSOR AND HUMIDITY SENSOR LOCATIONS WITH OWNER. MOUNT AT 5' A.F.F.
4	RTU-1 REMOTE TOUCHSCREEN CONTROLLER. VERIFY LOCATION WITH OWNER.

#	KEYED NOTES
5	ROUTE CONDENSATE FROM MS-1 ABOVE CEILING AND TO EXTERIOR WALL AS SHOWN. ROUTE DOWN INTERIOR WALL AND TO OUTSIDE. TERMINATE AT 12" ABOVE FINISHED GRADE. SEAL WALL PENETRATION
6	SUPPORT CONDENSATE DRAIN PIPING ON ROOF PER DETAIL. ALL CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC, PAINTED WITH UV RESISTANT COATING. ROUTE AND SLOPE TO ROOF DRAIN. SEE SHEET P-103
7	6"Ø SUPPLY/EXHAUST AIR DUCT WITH BALANCING DAMPER UP TO 6"X6" THROUGH ROOF. TRANSITION TO FULL SIZE RTU DUCT CONNECTION IN RISER.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

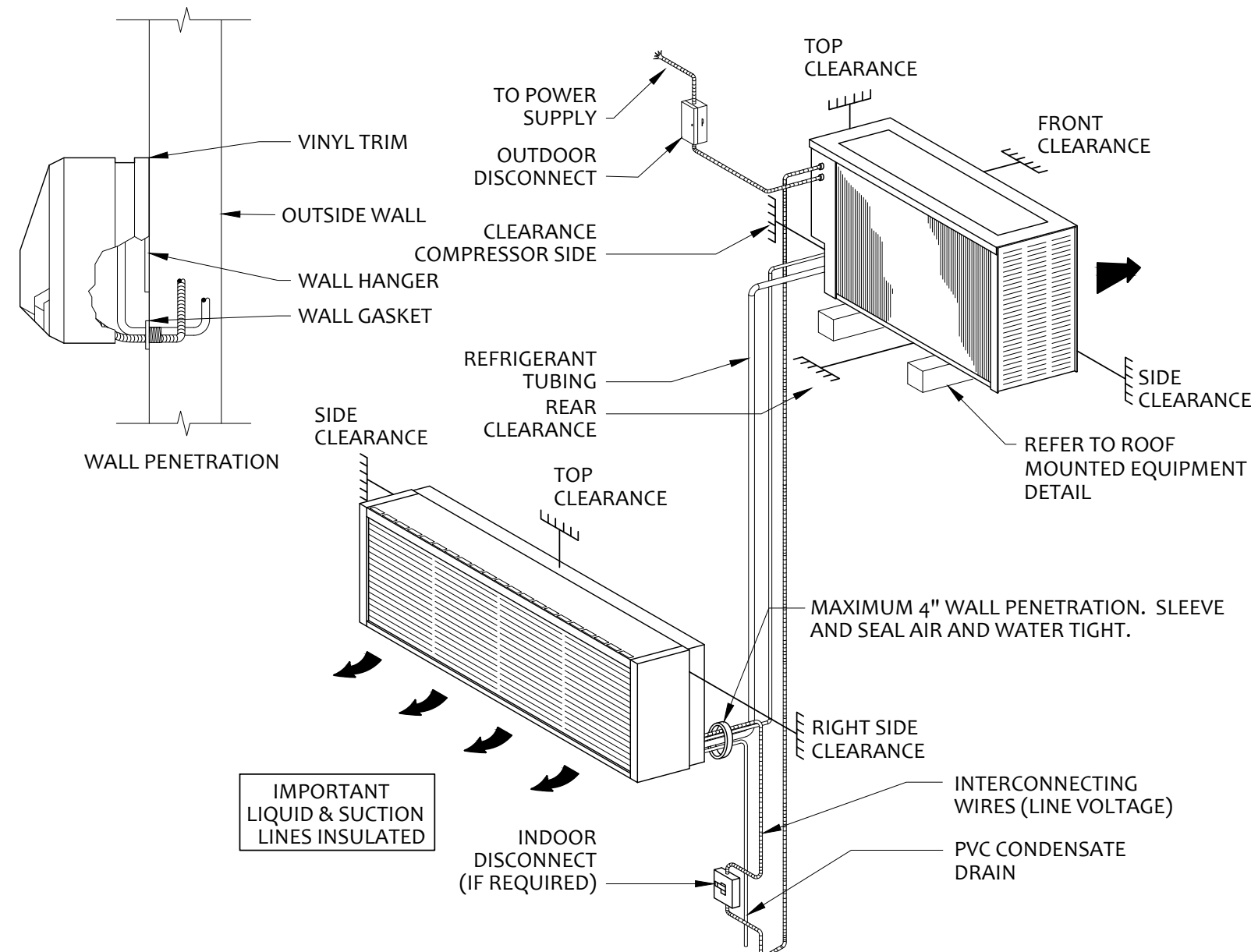
PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

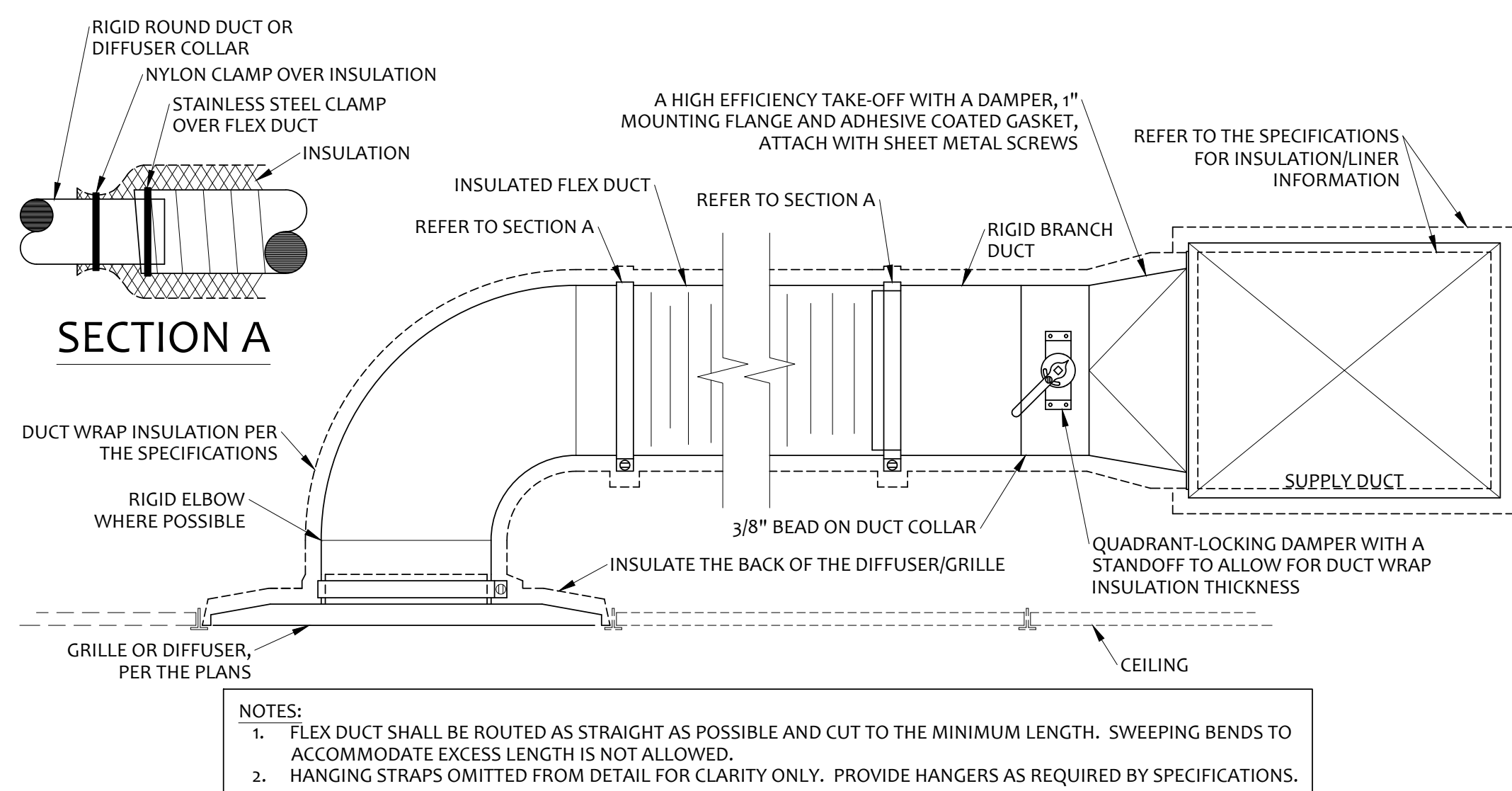
CAD DWG FILE: T2238-01 6297 8136297001-M-101
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:
HVAC
PLAN

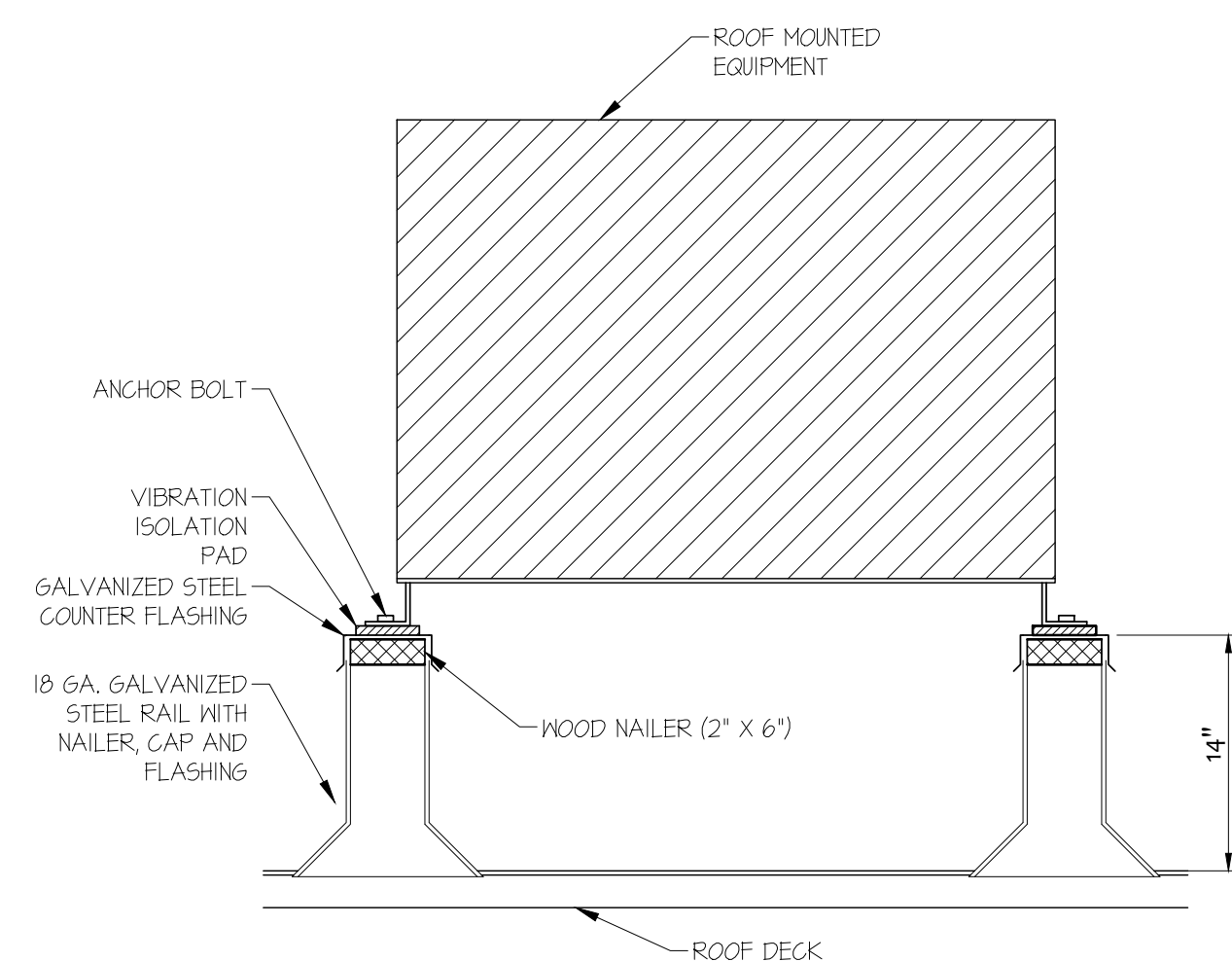
SHEET NUMBER:
M-101



1 DUCTLESS SPLIT SYSTEM DETAIL
NOT TO SCALE



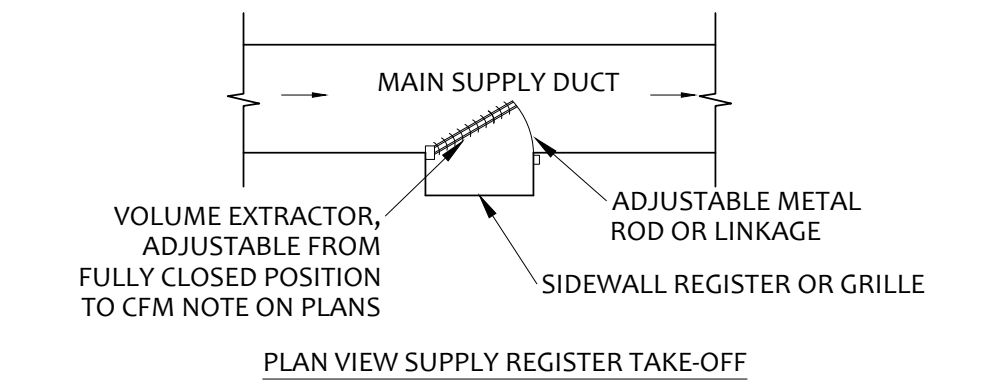
2 BRANCH DUCT DETAIL
NOT TO SCALE



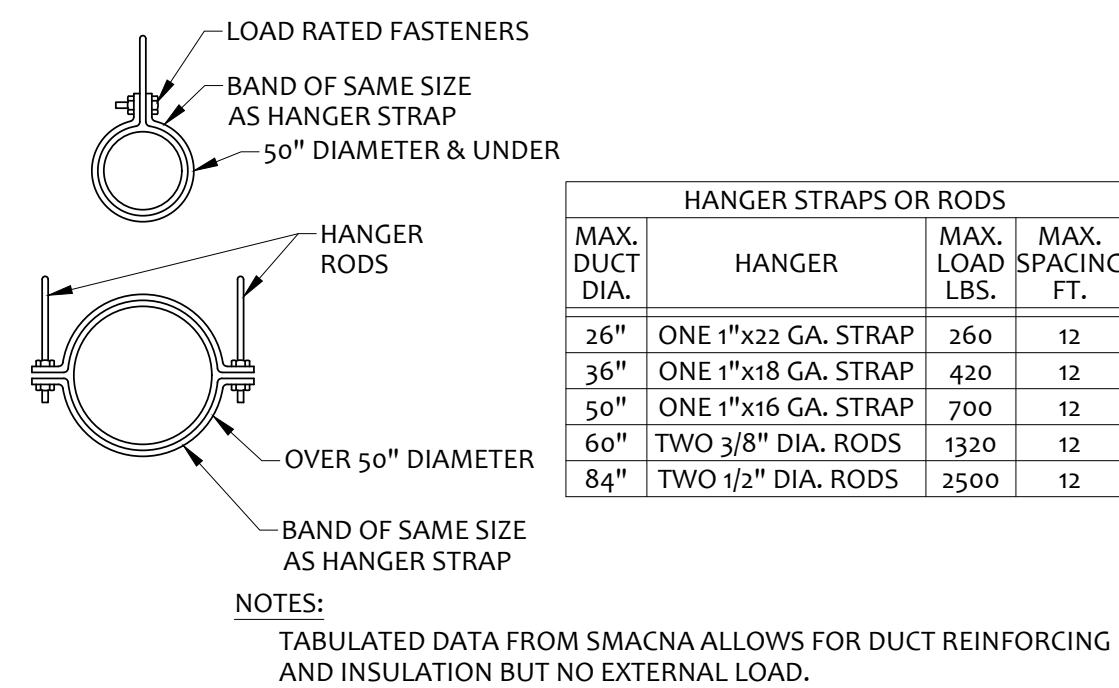
3 PIPE SUPPORT DETAIL
NOT TO SCALE

GAS PIPING SPACING REQUIREMENTS	
PIPE DIA.	SPACING
1/2"	6'
3/4" OR 1"	8'
1-1/4" OR LARGER	10'

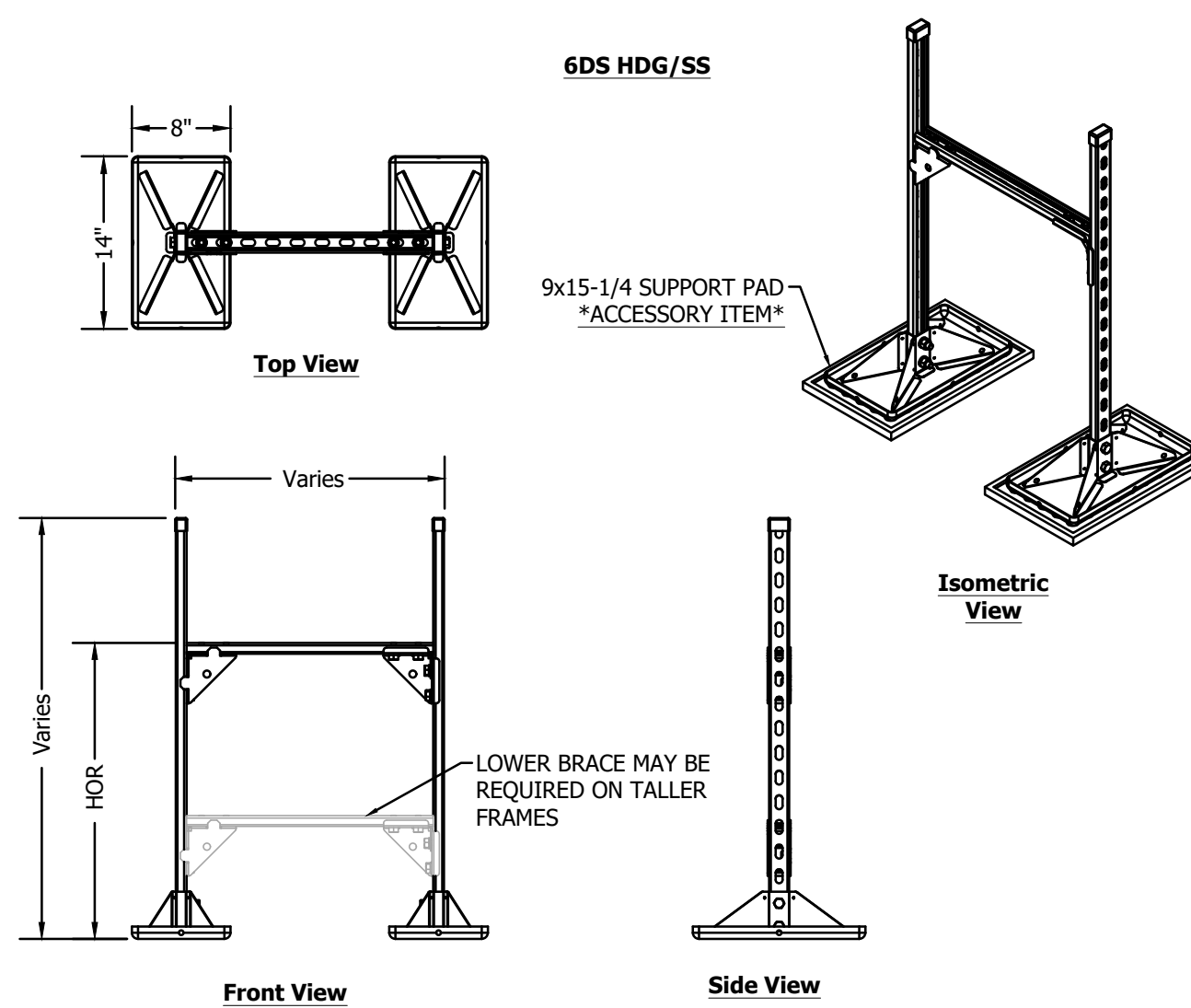
CONDENSATE PIPING SPACING REQUIREMENTS	
PIPE DIA.	SPACING
ALL	4'



4 SUPPLY DUCT TAKE-OFFS
NOT TO SCALE

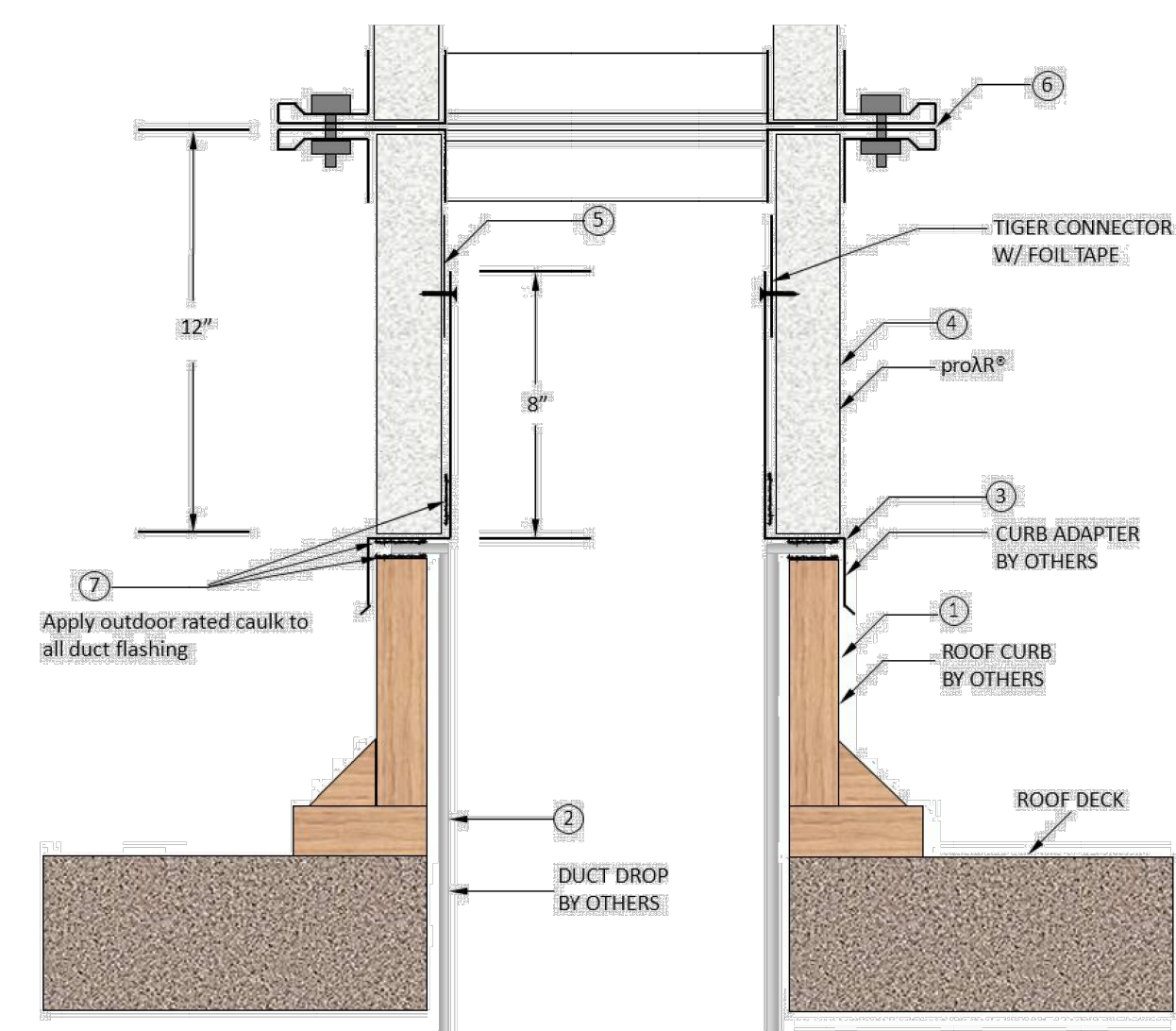


5 ROUND DUCT HANGER DETAIL
NOT TO SCALE



6 EXHAUST GRILLE DUCT CONNECTION
NOT TO SCALE

- 1 Roof curb by others – as specified by engineer
- 2 Duct drop by others – as specified by engineer
- 3 Curb adapter by others – as specified by engineer
- 4 Pro-R® starter piece – install over curb adapter flange
- 5 Install tiger equipment connector w/ teeth into phenolic w/ flat side overlapping metal sleeve. Cover tiger connector with foil tape. Screw through curb adapter flange into tiger connector.
- 6 Pro-R® field joint – install as specified by manufacturer
- 7 Apply outdoor rated caulk to all duct flashing

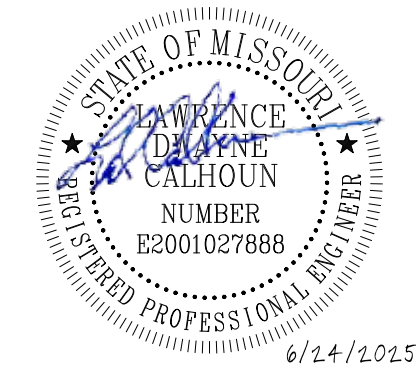


- ACCESSORIES**
- 9 x 15-1/4 Support Pad
 - Cross Bracing
- PRODUCT DESCRIPTION**
- Duct and Cable Trays are designed for single or multiple duct supports and cable trays. To obtain pricing for the 6DS model, call your local representative and have the following information available:
1. Specify number of supports needed or provide a roof top duct layout drawing and MIRO Ind. will provide a support layout drawing and take off.
 2. Dimensions of duct (Width x Height, or Diam)
 3. Duct material (gauge thickness)
 4. Clearance height above roof (HOR)
 5. Exterior insulation thickness (if any)
 6. Does duct need to be enclosed?
- KEY INFORMATION**
- The 6DS series support is engineered to ensure member/component capacities and deflection criteria are not exceeded.
 - Maximum loading from any MIRO base to the finished roof surface is not to exceed 3.0 psi (288 lbs/base) unless specifically allowed otherwise in the project specifications.
 - Deflection in the horizontal header bar is not to exceed the span length by 360 or 1/8".
 - Frame is designed for gravity loading only.
 - Recommended spacing is not to exceed 8 feet centers depending upon the load.
 - Width and height are built job specific based on information provided to MIRO Ind. with a minimum height of 12".
 - Frame is made with 12 Gauge Channel; size is determined during design.
 - Base Material: Hot dip galvanized or stainless steel
 - All metal parts are hot dip galvanized or stainless steel

9 ROOFTOP DUCT SUPPORT DETAIL
NOT TO SCALE

10 CURB CONNECTION DETAIL
NOT TO SCALE

ROOF MOUNTED EQUIPMENT SUPPORT
NOT TO SCALE



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025


CAD DWG FILE: T2238-01 6297 8136297001-M-101
DRAWN BY: RO
CHECKED BY: LDC

SHEET TITLE:

HVAC
SCHEDULES

SHEET NUMBER:

M-301

AIR DISTRIBUTION DEVICES SCHEDULE (BASIS OF DESIGN)												MARK
MARK	MANUFACTURER	MODEL	TYPE 1	MAX AIR FLOW	EXT. STATIC PRESSURE	THROW	NECK SIZE	PANEL SIZE	MAX NOISE CRITERIA	FINISH	ACCESSORIES	REMARKS
				CFM	IN. OF H2O	FEET*	INCHES	INCHES				
D1	KRUEGER	5SHR-04	SURFACE	300	0.07	20	8"Ø	18x18	22	WHITE	-	3
E1	KRUEGER	EGCS	SURFACE	900	0.02	-	10"Ø	18x18	20	WHITE	PF,SR	4

ACCESSORIES:

PF - 58PF ALUMINUM PLASTER FRAME
SR - SQUARE TO ROUND ADAPTER

REMARKS/NOTES:

- REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES AND MOUNTING REQUIRED.
- AT TERMINAL VELOCITY = 50FPM
- FULL LOUVER FACE
- REFER TO PLAN FOR DUCT CONNECTION SIZE

DUCTLESS SPLIT SYSTEMS (BASIS OF DESIGN)																									
MARK		SERVES	INDOOR MOUNTING TYPE				COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH) @17°F	FAN DATA		OSA CFM	ELECTRICAL DATA					SEER2	HSPF2	NUMBER OF INDOOR UNITS PER OUTDOOR UNITS	WEIGHT (LB.)		MANUFACTURER	MODEL		REMARKS
INDOOR	OUTDOOR		WALL	CEILING CASSETTE	CEILING SUSPENDED	CONCEALED			MAX CFM	VOLT		Φ	RLA	MCA	MOCP	INDOOR				OUTDOOR	INDOOR		OUTDOOR		
MSI-1	MSO-1	N.G. EQUIPMENT (27A)	X	-	-	-	12,625	17,061	459	-	230	1	7.8	10	15	23.2	10.2	1	18.3	74.1	LG	LSNogoHSV5	LSUogoHSV5	1,2,3,4,5	

REMARKS:

- SIMPLE CONTROLLER (PREMITCOOU)
- INSULATED REFRIGERANT LINE SET
- DISCONNECT SWITCH
- CONDENSATE PUMP
- OUTDOOR UNIT PROVIDES POWER TO INDOOR UNIT

DEDICATED OUTSIDE AIR WITH ENERGY RECOVERY ROOFTOP UNIT SCHEDULE																																										
MARK	MANUFACTURER	MODEL	AIR FLOW INFO.				COOLING INFO.							HEATING INFO.		SUPPLY FAN MOTOR INFO.				EXHAUST FAN MOTOR INFO.				EFFICIENCY (%)		ENERGY RECOVERY WHEEL								ELECTRICAL INFO.			WEIGHT	ACCESSORIES	REMARKS			
			AIR FLOW INFO.		STATIC PRESSURE		NET CAPACITY (MBH)(2)		AIR TEMP. (DEG. F.)					CAPACITY (MBH)												AIR TEMP. (DEG. F.)		COOLING MODE TEMPERATURES				HEATING MODE TEMPERATURES										
			CFM		(IN. W.C.)				ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB(3)	LEAVING WET BULB(3)	AMBIENT	SEER/EER	INPUT	OUTPUT	ENTERING	LEAVING	CFM	B.H.P.	H.P.	RPM	CFM	B.H.P.	H.P.	RPM	SUMM.	WINT.	OA EDB/EWB °F	EDB/EWB °F	LDB/LWB °F	RA LDB/LWB °F	OA EDB/EWB °F	EDB/EWB °F	LDB/LWB °F	SA LDB/LWB °F						
			SUPPLY	OUTSIDE AIR	EXTERNAL (1)	TOTAL (4)	SENSIBLE	TOTAL	83.4	68.7	55.5	53.9	95	15.7	100	81	40.0	110.7	1100	0.86	2	1733	1200	0.49	1	1616	52	52	95/75	74/62	84.1/68.3	83.4/68.7	5/5	72/59	39.8/38.8	40.0/37.4	V/PH	MCA	MOCP	LBS.		
RTU-1	AAON	RQ-004	1100	1100	0.5/0.5	2.6/1.5	31.1/42.5	48.1/71.3	83.4	68.7	55.5	53.9	95	15.7	100	81	40.0	110.7	1100	0.86	2	1733	1200	0.49	1	1616	52	52	95/75	74/62	84.1/68.3	83.4/68.7	5/5	72/59	39.8/38.8	40.0/37.4	230/3	46	50	1600	CO, DP, DS, DW, EF, F, HC, HGR, HPC, MG1, OD, SD, SF, TE, TSC TXV, UC, VSC, W	-

ACCESSORIES:

- CO - CONVENIENCE OUTLET
- DP - STAINLESS STEEL DRAIN PAN
- DS - DISCONNECT SWITCH
- DW - SOLID 2" DOUBLE WALL CONSTRUCTION
- EF - EXHAUST FAN - ECM WITH BACKWARD CURVED PLENUM FAN
- F - 2" PLEATED MERV 8 OUTDOOR AIR AND RETURN AIR FILTERS
- HC - HIGH CONDENSATE LEVEL SWITCH
- HGR - MODULATING HOT GAS REHEAT
- HPC - ECM CONDENSER RAN/HEAD PRESSURE CONTROL
- MG1 - STAINLESS STEEL FURNACE - MODULATING GAS HEAT (MINIMUM 8.3:1 TURNDOWN)
- OD - 2-POSITION OUTDOOR AIR DAMPER
- SD - RETURN AIR SMOKE DETECTOR
- SF - SUPPLY FAN - ECM WITH BACKWARD CURVED PLENUM FAN
- TSC - REMOTE TOUCH SCREEN CONTROLLER WITH ROOM TEMPERATURE SENSOR AND ROOM HUMIDITY SENSOR
- TE - TOTAL ENERGY WHEEL
- TXV - THERMAL EXPANSION VALVE
- UC - UNIT CONTROLS - SPACE TEMPERATURE AND HUMIDITY
- W - FACTORY STARTUP. 25 YEAR HEAT EXCHANGER WARRANTY. 5-YEAR COMPRESSOR WARRANTY.TWO YEAR PARTS WARRANTY, ONE YEAR LABOR WARRANTY AND REFRIGERANT LOSS WARRANTY.
- VSC - VARIABLE CAPACITY SCROLL COMPRESSOR

REMARKS:

- STATIC PRESSURE EXTERNAL TO UNIT - SUPPLY/EXHAUST.
- MECHANICAL COOLING CAPACITY/EQUIVALENT COOLING CAPACITY WITH ENERGY RECOVERY.
- UNIT LEAVING AIR TEMPERATURE.
- UNIT TOTAL STATIC PRESSURE - SUPPLY/EXHAUST.

STATE OF MISSOURI
JENNIFER L WINSLOW
LANE WINSLOW
NUMBER
E-2009001145
PROFESSIONAL ENGINEER
6/24/2015

JENNIFER L WINSLOW, ENGINEER
MO# E-2009001145
MO COAPE E-2020011618

THIS SEAL IS FOR ENGINEERING INFORMATION ONLY



ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

PROJECT #	T2238-01
SITE #	6297
ASSET #	8136297001







ISSUE DATE: 6-24-2025

HEET TITLE:

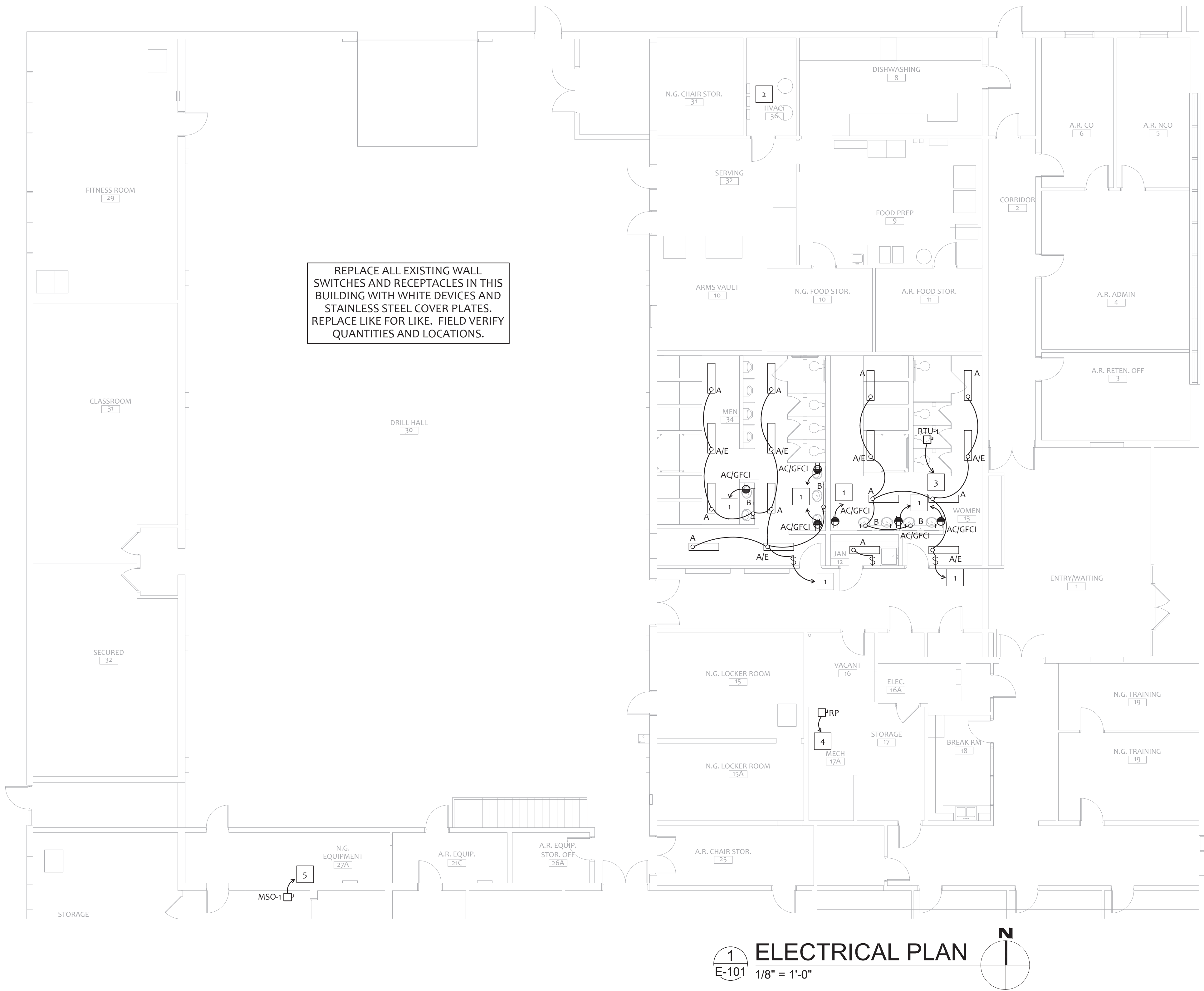
HEET NUMBER:

Page 32 of 35

REPLACE ALL EXISTING WALL SWITCHES AND RECEPTACLES IN THIS BUILDING WITH WHITE DEVICES AND STAINLESS STEEL COVER PLATES. REPLACE LIKE FOR LIKE. FIELD VERIFY QUANTITIES AND LOCATIONS.

LUMINAIRE SCHEDULE									
CALLOUT	SYMBOL	DESCRIPTION	MODEL	LAMP	BALLAST	MOUNTING	INPUT WATTS	VOLTS	NOTES
A		4' SURFACE MOUNT LED WRAPAROUND	LITHONIA: STL4 30L EZ1 LP835	(1) 26.7W LED, 3500K CCT	LED DRIVER	SURFACE	26.7	120V 1P 2W	EQUALS ALLOWED - COOPER, WILLIAMS, PEERLESS, LITHONIA, DAY-BRITE, CURRENT, LSI, COLUMBIA
A/E		4' SURFACE MOUNT LED WRAPAROUND W/EMERGENCY BATTERY	LITHONIA: STL4 30L EZ1 LP835 EL14L	(1) 26.7W LED, 3500K CCT	LED DRIVER	SURFACE	26.7	120V 1P 2W	EQUALS ALLOWED - COOPER, WILLIAMS, PEERLESS, LITHONIA, DAY-BRITE, CURRENT, LSI, COLUMBIA
B		4' INDIRECT WALL MOUNT LED W/ MOTION SENSOR	WILLIAMS: AIWSDL-4-L11/835-DIM-UNV	(1) 37.5W LED, 3500K CCT	LED DRIVER	WALL	37.5	120V 1P 2W	EQUALS ALLOWED - COOPER, WILLIAMS, PEERLESS, LITHONIA, DAY-BRITE, CURRENT, LSI, COLUMBIA
PL-1		PREVAIL AREA AND ROADWAY LUMINAIRE(2) 70 CRI, 4000K LEDS AND TYPE IV OPTICS, W/ 20' POLE	COOPER LIGHTING SOLUTIONS - LUMARK, PRV-C40-D-UNV-T4-BZ	(2) 131W	ELECTRONIC	POLE	131	120V 1P 2W	FIXTURE CHOSEN FOR BASE PHOTOMETRICS AND DESIGN, EQUALS ARE ALLOWED. CONFIRM FINISH WITH ARCHITECT AND OWNER
XL-1		EXISTING LIGHT FIXTURE		-	ELECTRONIC	CEILING		120V 1P 2W	MOUNTING HEIGHTS AND FIXTURE TYPES TO BE FIELD VERIFIED
XL-2		EXISTING LIGHT FIXTURE	--	-	ELECTRONIC	CEILING		120V 1P 2W	MOUNTING HEIGHTS AND FIXTURE TYPES TO BE FIELD VERIFIED

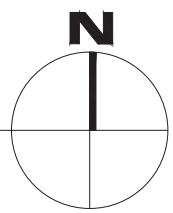
1. THE E.C. IS RESPONSIBLE TO COUNT AND CONFIRM THE QUANTITIES OF THE FIXTURES IN THE PLANS PRIOR TO ORDERING.



JENNIFER WINSLOW, PE, LLC
 MECHANICAL, ELECTRICAL & PLUMBING DESIGN
 608 S. ASSISI WAY
 REPUBLIC, MO 65738
 (417) 496-2123



1
E-102 **EXISTING ELECTRICAL SITE LIGHTING PLAN**
1" = 30'-0"



GENERAL NOTES

¹ LUMEN OUTPUT FROM EXISTING PARKING LIGHT FIXTURES IS ESTIMATED BASED ON AVAILABLE INFORMATION. EXISTING CONDITIONS MAY VARY.

STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-E-102
DRAWN BY: RO
CHECKED BY: BB
DESIGNED BY: JW

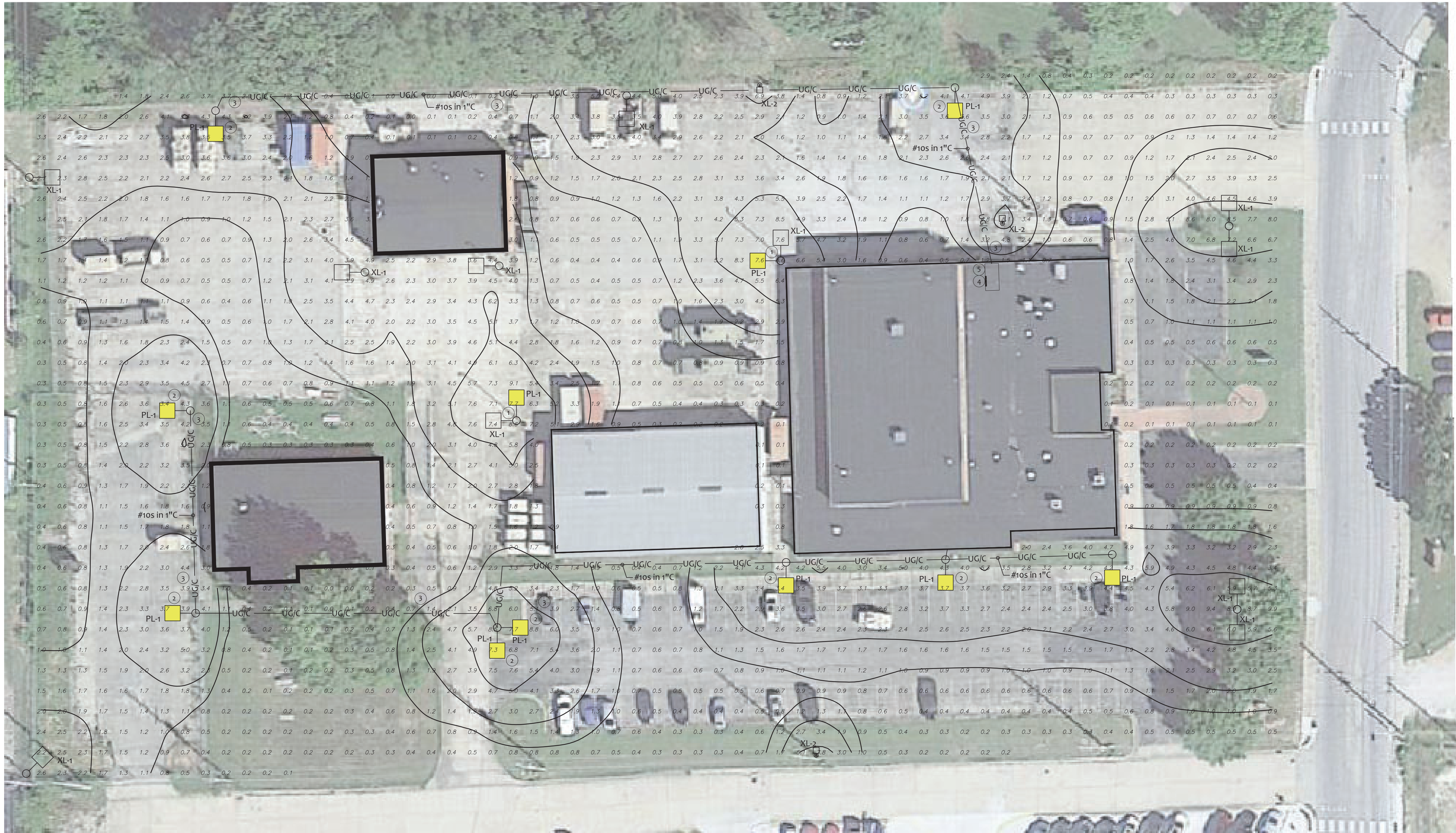
SHEET TITLE:

**ELECTRICAL
EXISTING SITE
LIGHTING**

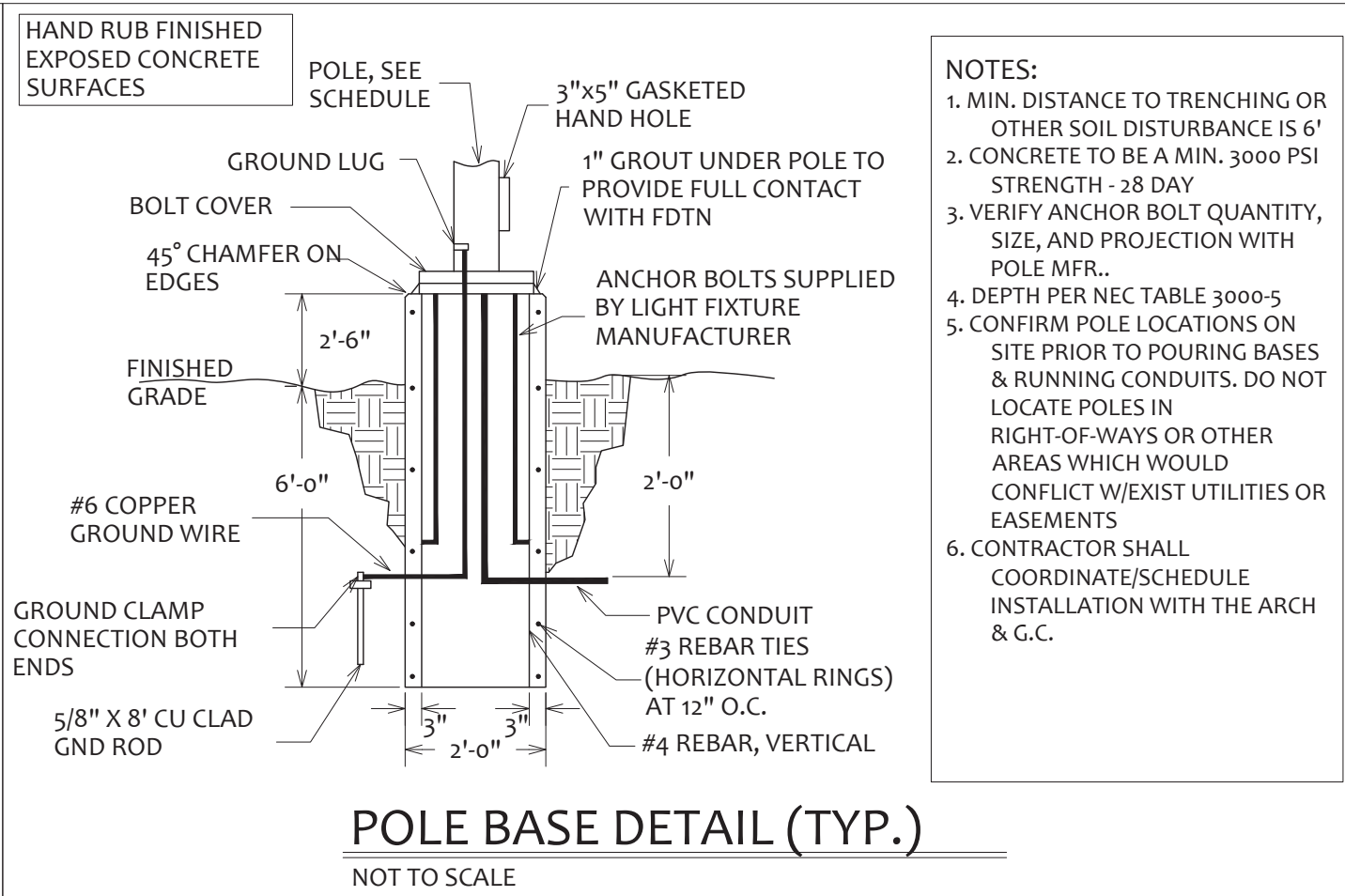
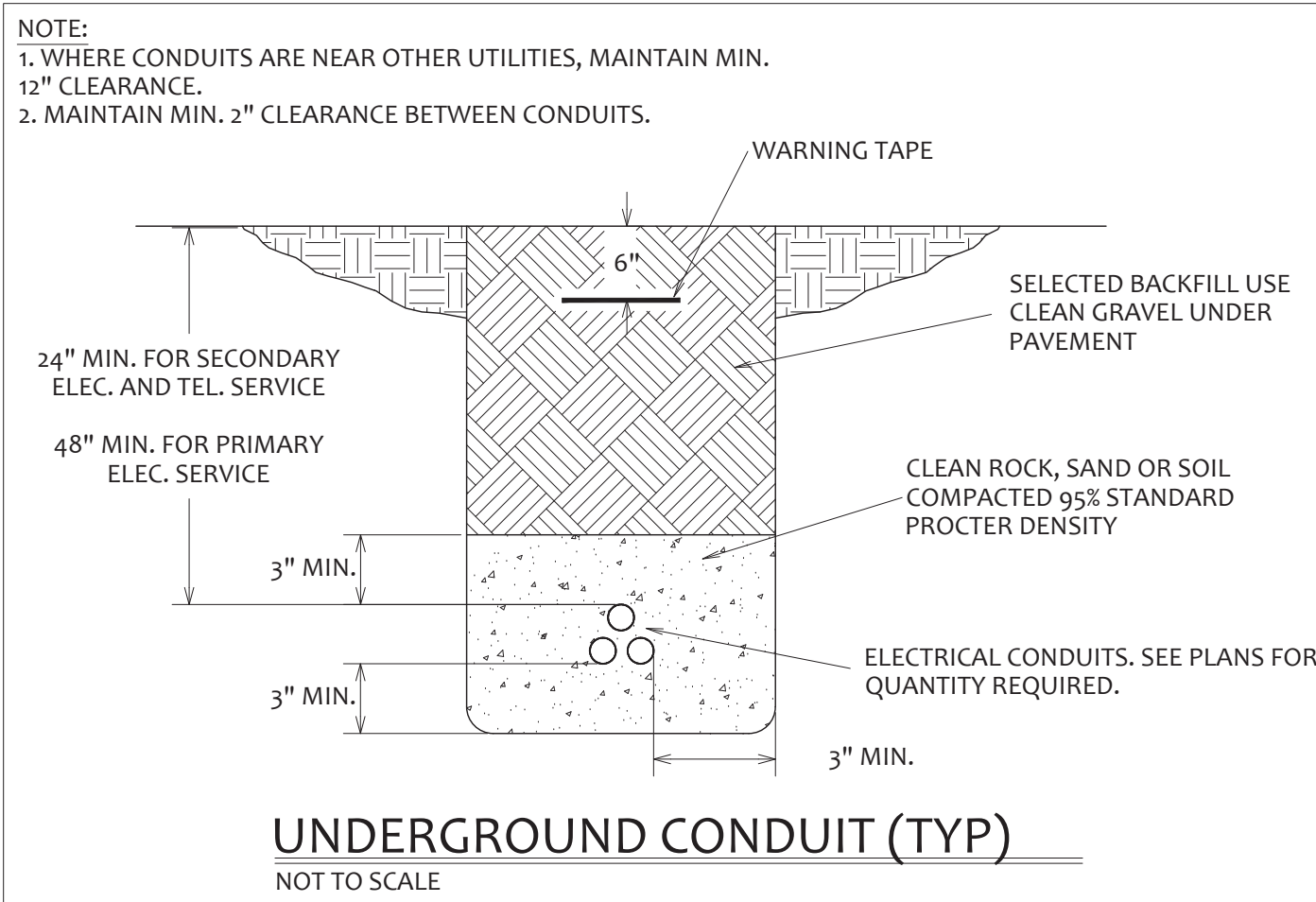
SHEET NUMBER:

E-102

JENNIFER WINSLOW, PE, LLC
MECHANICAL, ELECTRICAL & PLUMBING DESIGN
608 S. ASSISI WAY
REPUBLIC, MO 65738
(417) 496-2123

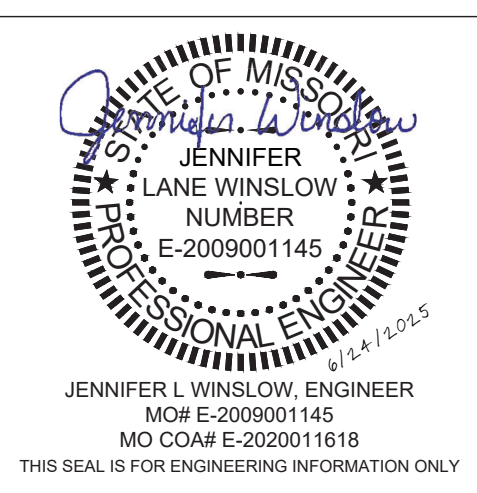


1
E-103
PROPOSED ELECTRICAL SITE LIGHTING PLAN
1" = 30'-0"



#	KEYED NOTES
1	EXISTING LIGHT POLE WITH (1) ONE EXISTING LIGHT FIXTURE (XL-1). ADD (1) ONE NEW LIGHT FIXTURE HEAD (PL-1). MATCH MOUNTING HEIGHT OF EXISTING LIGHT FIXTURE. CONNECT TO EXISTING LIGHTING CIRCUIT. FIELD VERIFY MOUNTING REQUIREMENTS.
2	NEW LIGHT FIXTURE AND POLE. FIXTURE MOUNTED AT 20'. E.C. TO ROUTE NEW POWER, CONDUIT, WIRES, ETC. FROM READINESS BUILDING MAIN ELECTRICAL ROOM. FIELD VERIFY BREAKER SPACE AND CAPACITY.
3	E.C. TO TRENCH UNDERGROUND 1" CONDUIT AS NEEDED FROM NEW POLE LIGHTS TO READINESS BUILDING THEN ROUTE INTERNALLY TO MAIN ELECTRICAL ROOM. AVOID BACKTOP/CONCRETE WHERE POSSIBLE. WHEN NOT POSSIBLE E.C. IS RESPONSIBLE FOR REPAIR OF BACKTOP/CONCRETE TO AS NEW CONDITION.
4	READINESS BUILDING MAIN ELECTRICAL ROOM
5	PROVIDE NEW PHOTOCELL AND TIMELOCK CONTROLS FOR ALL NEW AND EXISTING EXTERIOR PARKING LOT LIGHTS. PROVIDE LIGHTING CONTACTOR AS REQUIRED. TIMELOCK LOCATED NEAR EXISTING ELECTRICAL PANELS. FIELD VERIFY PHOTOCELL LOCATION ON NORTH SIDE OF BUILDING.

#	GENERAL NOTES
1	DESIGN INDICATED IS FOR BIDDING PURPOSES ONLY AND MAY REQUIRE ADJUSTMENTS BY THE ENGINEER BASED ON THE FINAL FIXTURE SELECTION AND FIELD CONDITIONS.
2	LUMEN OUTPUT FROM EXISTING PARKING LIGHT FIXTURES IS ESTIMATED BASED ON AVAILABLE INFORMATION. EXISTING CONDITIONS MAY VARY.
3	THE PHOTOMETRIC ANALYSIS ON THIS SHEET IS BASED ON A COMBINATION OF DATA FOR EXISTING FIXTURES AND PROPOSED FIXTURES THAT HAVE BEEN UTILIZED AS A DESIGN BASIS. ALTERNATE FIXTURES WITH EQUIVALENT OUTPUT ARE ACCEPTABLE SUBJECT TO THE CONDITIONS OF THE CONTRACT. THE GENERAL CONTRACTOR IS RESPONSIBLE, AS A CONDITION OF THE CONTRACT, TO PERFORM A PHOTOMETRIC ANALYSIS OF ANY PROPOSED CHANGES PRIOR TO INSTALLATION.



OFFICE OF
ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN
AND CONSTRUCTION

MISSOURI NATIONAL GUARD
DEPT. OF ADJUTANT GENERAL

ROOF, TUCKPOINT REPAIR
& INTERIOR RENOVATION
ROLLA READINESS CENTER

ROLLA READINESS CENTER
201 FAIRGROUNDS ROAD
ROLLA, MISSOURI 65401

PROJECT # T2238-01
SITE # 6297
ASSET # 8136297001

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 6-24-2025

CAD DWG FILE: T2238-01 6297 8136297001-FA-101
DRAWN BY: RO
CHECKED BY: BB
DESIGNED BY: JW

SHEET TITLE:
FIRE ALARM
PLAN

SHEET NUMBER:

FA-101

FIRE ALARM GENERAL NOTES	
A	THE FIRE ALARM SYSTEM SHALL BE PER THE REQUIREMENTS OF THE LATEST ADOPTED VERSION OF NFPA, ADA, IBC, AND ANY APPLICABLE LOCAL CODES AND ORDINANCES.
B	FIRE ALARM SYSTEM SHALL BE DESIGNED BY A FIRE ALARM SYSTEM CONTRACTOR. VERIFY DEVICES AND LOCATIONS SHOWN WITH FIRE ALARM CONTRACTOR AND ADJUST TO MEET ALL CODE REQUIREMENTS.
C	COORDINATE WORK WITH WORK OF ALL OTHER TRADES ON THE PROJECT.
D	PROVIDE ADDRESSABLE FIRE ALARM CONTROL PANEL AND DEVICES WITH AN EMERGENCY VOICE SYSTEM.
E	PLANS ARE DIAGRAMMATIC AND DO NOT SHOW THE EXACT WIRING CONNECTIONS REQUIRED, REFER TO THE MANUFACTURER'S REQUIREMENTS FOR WIRING AND CONNECTION REQUIREMENTS.
F	DO NOT INSTALL SMOKE DETECTORS WITHIN 36" OF A CEILING FAN OR SUPPLY AIR DIFFUSER/REGISTER.
G	COORDINATE POWER REQUIREMENTS FOR FIRE ALARM SYSTEM WITH ELECTRICAL CONTRACTOR.
H	PROVIDE REMOTE KEYED TEST STATIONS FOR DUCT SMOKE DETECTORS IN AN ACCESSIBLE LOCATION. COORDINATE LOCATIONS WITH MECHANICAL CONTRACTOR AND OWNER.
I	PROVIDE PROTECTION FROM DUST AND DEBRIS FOR SMOKE DETECTORS DURING CONSTRUCTION. REMOVE PROTECTIVE DEVICES PRIOR TO OCCUPANCY BY THE OWNER.
J	COORDINATE LOCATION OF FIRE ALARM DEVICES WITH EXISTING STRUCTURE, LIGHTS, AND HVAC AIR DEVICES. FIELD VERIFY.

#	KEYED NOTES
1	COORDINATE LOCATION OF FIRE ALARM CONTROL PANEL WITH EXISTING STRUCTURE AND OWNER. FIELD VERIFY.

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	SMOKE DETECTOR
	SPEAKER/STROBE
	STROBE
	MANUAL PULL STATION



1 FIRE ALARM PLAN
FA-101 1/8" = 1'-0"

JENNIFER WINSLOW, PE, LLC
MECHANICAL, ELECTRICAL & PLUMBING DESIGN
608 S. ASSISI WAY
REPUBLIC, MO 65738
(417) 496-2123