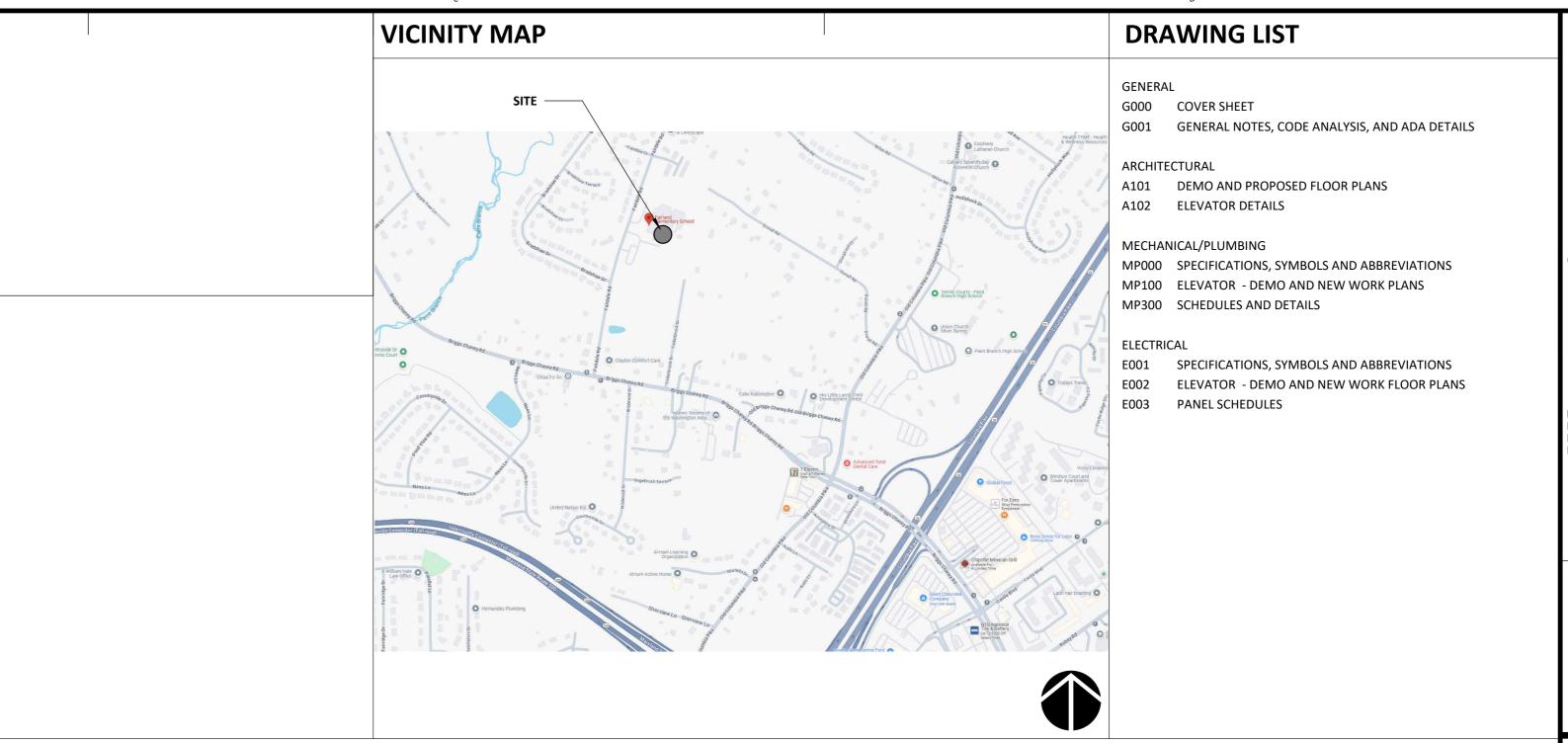
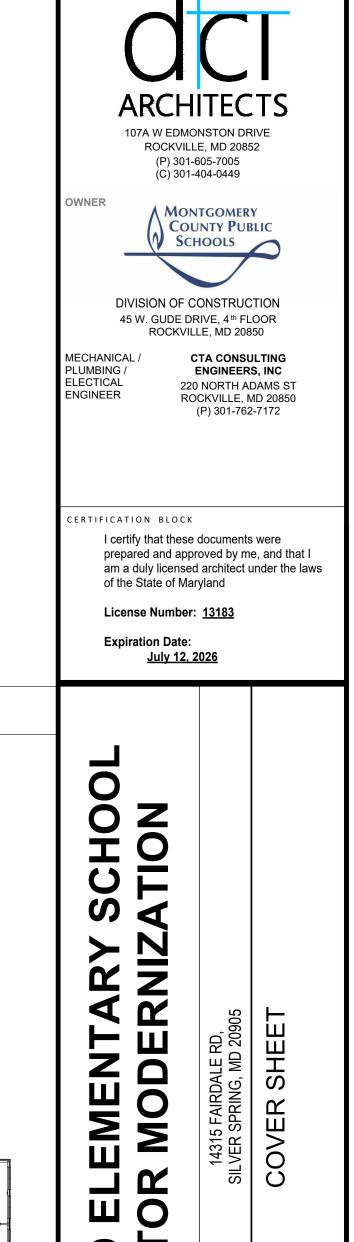
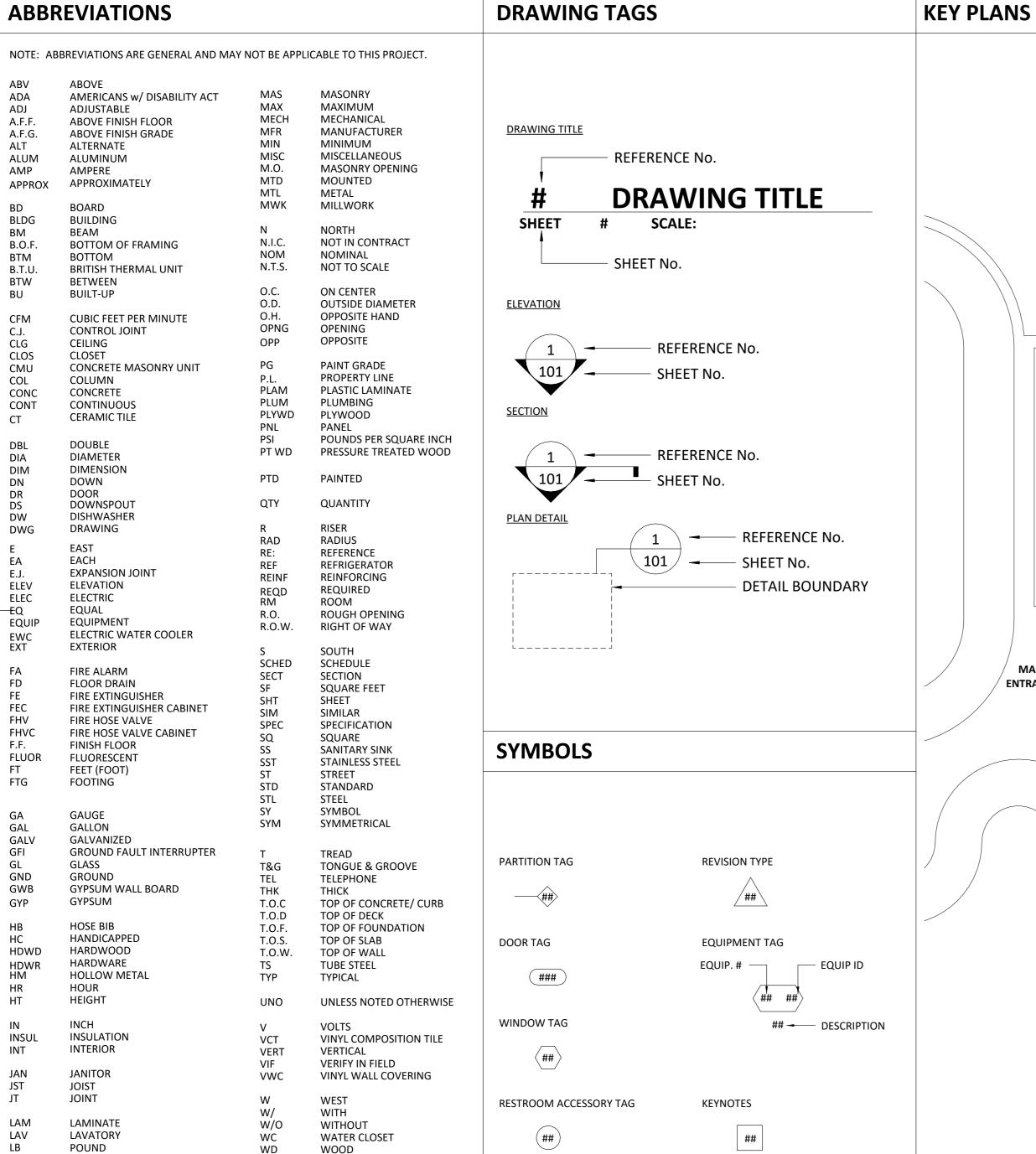
FAIRLAND ELEMENTARY SCHOOL

ELEVATOR MODERNIZATION 14315 FAIRDALE RD, SILVER SPRING, MD 20905

PERMIT/BID SET ISSUE 03.12.2025



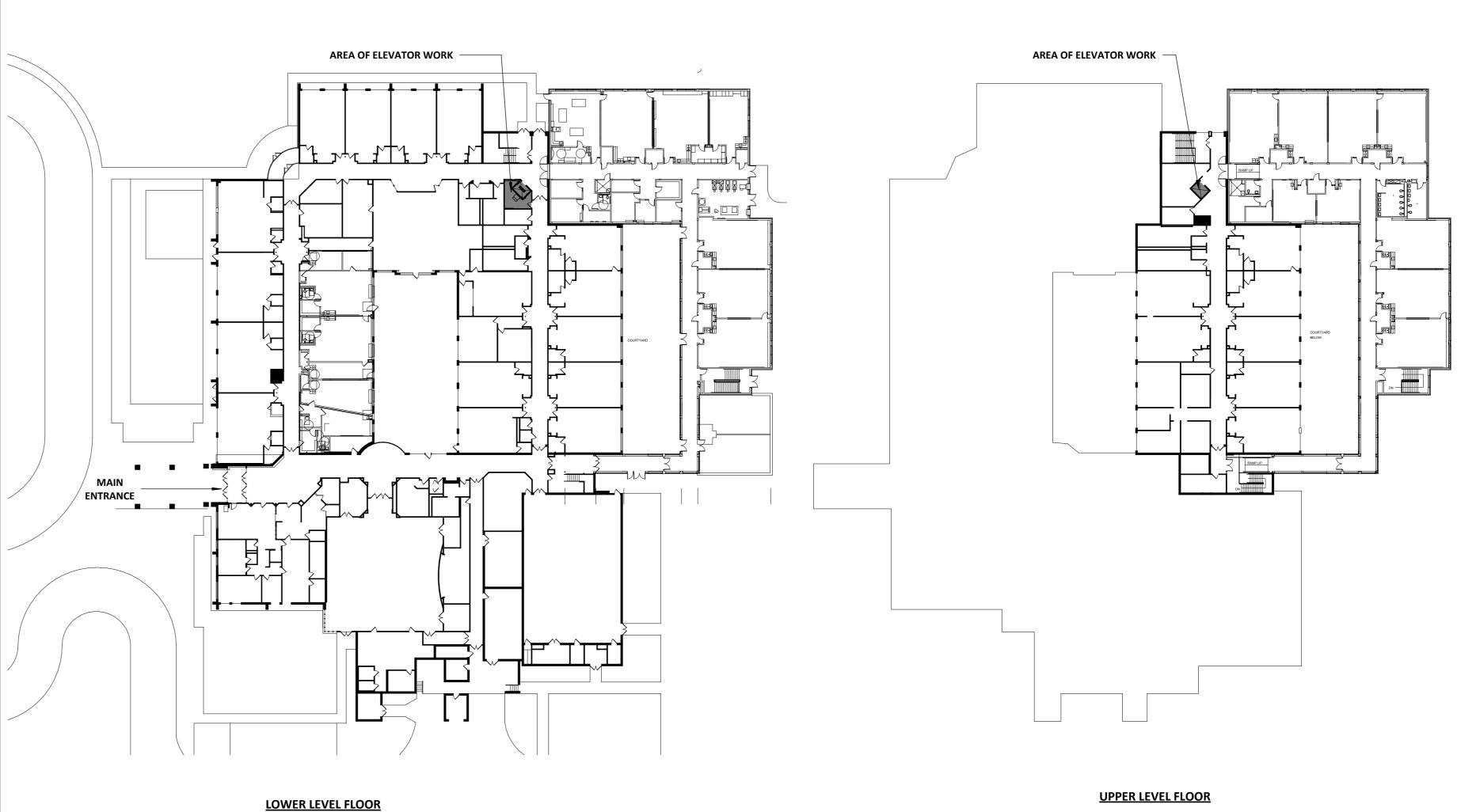




WATER FOUNTAIN

WET STACK

YARD



24-079 REVIEWED BY PERMIT/BID SET ISSUE 03.12.2025

POUND LINEAR FEET

LIGHTING

THE CONTRACT DOCUMENTS INCLUDE THE WORKING DRAWINGS, ADDENDA, MODIFICATIONS, GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT AND SPECIFICATIONS THE CONTRACT DOCUMENTS ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE

ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THE CONTRACT DOCUMENTS SHALL NOT BE USED BY OWNER OR TENANT FOR OTHER PROJECTS OR EXTENSIONS TO THE PROJECT, NOR ARE THEY TO BE MODIFIED IN ANY MANNER WHATSOEVER EXCEPT BY AGREEMENT IN WRITING WITH THE ARCHITECT.

PERMITS: GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, EXCEPT BUILDING PERMIT. QUALITY: CONTRACTOR SHALL PERFORM ALL WORK AND INSTALL ALL COMPONENTS IN A PROFESSIONAL

MANNER. ALL FINISH WORK TO BE TRUE, LEVEL & PLUMB. ALL JOINTS TO BE TIGHT & CLEAN. CODE COMPLIANCE: WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE & FEDERAL CODES INCLUDING

NFPA; USE TESTED AND CERTIFIED ASSEMBLIES, AS REQUIRED BY CODE. HANDICAP ACCESSIBILITY: CONTRACTOR SHALL COMPLY WITH ACCESSIBILITY GUIDELINES 36 CFR PART 1191 OF THE FEDERAL REGISTER, ITS PREVIOUS TO ANSI STANDARD A117.1, AND TITLE III OF THE AMERICAN WITH DISABILITY ACT (ADA), AND LOCAL ORDINANCES.

WARRANTY: ALL CONSTRUCTION, MATERIALS, PRODUCTS AND WORK TO BE WARRANTED FOR A PERIOD OF TWO YEARS FROM DATE OF FINAL ACCEPTANCE BY THE OWNER, UNLESS LONGER PERIODS ARE SPECIFIED FOR SPECIFIC MANUFACTURER'S / SYSTEMS, IN WHICH CASE THOSE LONGER PERIODS SHALL APPLY. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. NO MEASUREMENT SHALL BE SCALED FROM THE CONTRACT DRAWINGS. CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. CLARIFICATIONS REGARDING ANY CONFLICTS SHALL BE ACHIEVED PRIOR TO RELATED WORK BEING STARTED.

DIMENSIONS AND NOTES ON ENLARGED PLANS AND DETAILS ARE TO OVERRIDE SMALLER SCALE DRAWINGS. ALL DIMENSIONS ARE TO FACE OF DRYWALL UNLESS NOTED OTHERWISE.

REMOVE ALL DEBRIS, PACKING MATERIAL, DEMOLISHED MATERIAL AND EXTRANEOUS TRASH GENERATED BY CONSTRUCTION FROM BUILDING & SITE UNLESS NOTED, TO BE TURNED OVER TO OWNER. ALL DEMOLISHED 22. MATERIAL NOT TO BE TURNED OVER OWNER SHALL BECOME THE PROPERTY OF GENERAL CONTRACTOR. ALL MATERIAL, HARDWARE, FIXTURES AND FINISHED TO BE BUILDING STANDARD UNLESS NOTED OTHERWISE.

BUILDING STANDARD INFORMATION IS AVAILABLE THOROUGH THE OWNER'S REPRESENTATIVES AND TYPICALLY MATCHES EXISTING INTERIOR CONSTRUCTION. ALL GENERAL CONTRACTORS & SUBCONTRACTORS ARE TO VISIT THE SITE PRIOR TO COMPLETING BID TO

VERIFY EXISTING CONDITIONS. GENERAL CONTRACTOR & SUBCONTRACTORS TO PROVIDE WRITTEN DOCUMENTATION OF ANY DISCREPANCY BETWEEN SITE CONDITIONS & DOCUMENTS. SUBMISSION OF BID IS CONFIRMATION THAT EXISTING CONDITIONS HAVE BEEN FULLY TAKEN INTO CONSIDERATIONS & ARE REFLECTED IN THE COSTS PROVIDED.

14. SUBMIT SHOP DRAWINGS AND SAMPLES FOR ALL TRADES AS SOON AS POSSIBLE TO THE ARCHITECT, ALLOWING TEN (10) WORKING DAYS FOR REVIEW. SHOP DRAWINGS SHALL BE REVIEWED & APPROVED BY CONTRACTOR PRIOR SUBMITTING THEM TO ARCHITECT. NO CONSTRUCTION SHALL PROCEED UNTIL THE APPROVAL OF THESE DRAWINGS. ALL TRADES SHALL BE REVIEWED BY THE ARCHITECT AT THE SAME TIME. CONTRACTOR SHALL PROVIDE MANUFACTURER'S SPECIFICATION, INSTALLATION, INSTRUCTION, SHOP DRAWINGS AND SAMPLES FOR REVIEW AND APPROVAL OF ALL MATERIALS AND METHODS TO BE USED PRIOR TO ORDERING OR PROCEEDING WITH THE WORK. CONTRACTOR SHALL FOLLOW PROCEDURES. IF THESE ARE CONTRARY TO THE CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ARCHITECT, IN WRITING, IMMEDIATELY TO RESOLVE DISCREPANCIES PRIOR TO PROCEEDING.

CONTRACTOR TO PROVIDE 2X FIRE RESISTANT BLOCKING AS NECESSARY BEHIND ALL WALL MOUNTED

CONTRACTOR TO PROVIDE BUILDING CONSTRUCTION REPRESENTATIVE WITH COPIES OF DELIVERY, AND CONSTRUCTION SCHEDULES. CONTRACTOR TO COORDINATE ALL SCHEDULES WITH BUILDINGS CONSTRUCTION

CUTTING & PATCHING: CONTRACTOR TO PATCH, REPAIR & REFINISH WORK DAMAGED AS A RESULT OF DEMOLITION OR REMOVAL OF CONSTRUCTION TO MATCH ADJACENT FINISH. PATCH THRU-WALL/ THRU-FLOOR PENETRATIONS TO MAINTAIN EXISTING BUILDING INTEGRITY.

IF NEEDED, CORING, DRILLING OR OTHER SUCH WORK IN ADJACENT TO OCCUPIED AREAS SHALL BE PERFORMED AT HOURS MINDFUL OF THE AFFECTED OCCUPANCY UNLESS OTHERWISE INDICATED. GENERAL CONTRACTOR SHALL DIRECTLY COORDINATE WITH BUILDING OWNER'S REPRESENTATIVE AND AFFECTED TENANT(S).

IF NEEDED, NO CORE DRILLING SHALL BE PERFORMED BEFORE 8:30 AM MONDAY - FRIDAY OR BEFORE 9:00 AM SATURDAY - SUNDAY. WITH REGARD TO CORE DRILLED SLAB OPENINGS, A DRAWING SHOWING THE LOCATION AND SIZE OF ALL OPENINGS SHALL BE SUBMITTED TO THE BUILDING OWNER'S REPRESENTATIVE FOR REVIEW BY THE BUILDING STRUCTURAL ENGINEER.

IF REQUIRED. UTILITY OUTAGES SHALL BE SCHEDULED OUTSIDE NORMAL WORKING HOURS FOR THE AFFECTED OCCUPANCY UNLESS OTHERWISE INDICATED.

IF REQUIRED, ALL ROOF WORK TO BE COMPLETED BY MCPS APPROVED ROOFING CONTRACTOR. PROVIDE A SMOOTH, NEAT, CONTINUOUS APPEARANCE WHERE DEMOLITION WORK MEETS ADJACENT EXISTING WORK. REMOVE EXISTING FINISHES AS REQUIRED TO PROVIDE NEAT, STRAIGHT SEAMS AND TRANSITIONS BETWEEN EXISTING AND MATCHING NEW FINISHES.

CONTRACTOR WILL COORDINATE AND OBTAIN ALL PERMITS AND APPROVALS TO HAVE AN OPEN TOP DUMPSTER AT CURBSIDE OF THE BUILDING.

24. CONTRACTOR TO PROTECT EXISTING FLOORING TO REMAIN WITH MINIMUM 1/2" PLYWOOD SHEETS.

CODE ANALYSIS

BUILDING DESCRIPTION:

PROJECT DESCRIPTION: ELEVATOR MODERNIZATION FOR ONE EXISTING HYDRAULIC ELEVATOR. EXIST CABS TO BE REFURBISHED; NEW MACHINE RM EQUIPM, DOORS, AND

CONTROLS. NEW AC VENTILATION

EXISTING PROPOSED IBC OCCUPANCY CLASSIFICATION E AND A3 E AND A3 (NO CHANGE) NFPA 101 - OCCUPANCY CLASSIFICATION **EDUCATION AND ASSEMBLY** EDUCATION AND ASSEMBLY (NO CHANGE) TYPE OF CONSTRUCTION II-B IBC II-B IBC NUMBER OF STORIES ABOVE GRADE (BLDG) APPROX. 25' - 0" APPROX. 25' - 0" (NO CHANGE) HEIGHT ABOVE GRADE (BLDG) HIGH RISE (Y/N) STANDPIPES (Y/N) N/A FULLY SPRINKLERED (Y/N) FIRE ALARM (Y/N) FLOOR AREA OF RENOVATION (GROSS) 233 SF 233 SF (NO CHANGE)

FINISH CLASS RATINGS:

CODES USED FOR DESIGN

ALL FLOOR, WALL AND CEILING FINISHES WILL MEET OR EXCEED SMOKE DEVELOPMENT AND FLAME SPREAD RATING

IBC 2018

APPROX. 96,406 SF **BUILDING AREA** NO CHANGE

OCCUPANT LOAD: (NO CHANGE)

REQUIREMENTS OF IBC CHAPTER 8. (USE: E)

MINIMUM FLOOR FINISH RATING REQUIRED: CLASS 'II'

MINIMUM WALL/CEILING FINISH RATING REQUIRED: CLASS 'C'

TYPICAL ADA DETAILS

CONSTRUCTION IF A DIMENSION(S) IS IN QUESTION

LIFE SAFETY PLANS (NO CHANGE TO EGRESS COMPONENTS)

APPLICABLE CODES

MONTGOMERY COUNTY, MD

2018 INTERNATIONAL BUILDING CODE (IBC)

2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

NFPA 70 (NATIONAL ELECTRICAL CODE)

2018 INTERNATIONAL MECHANICAL CODE (IMC)

2018 INTERNATIONAL FUEL GAS CODE (ICC)

2015 NFPA 1 FIRE CODE

2015 NFPA 101 LIFE SAFETY CODE

AS MODIFIED BY MONTGOMERY COUNTY AMENDMENTS

MONTGOMERY COUNTY CODE, CHAPTER 17 ELECTRICITY

WASHINGTON SUBURBAN SANITARY COMMISSION (WSSC)

MONTGOMERY COUNTY CODE CHAPTER 22 FIRE SAFETY CODE

ASME 17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS

COMAR 09.12.53 MARYLAND ACCESSIBILITY CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

JURISDICTION:

BUILDING CODE:

ELECTRICAL CODE:

ACCESSIBILITY CODE:

MECHANICAL CODE:

ENERGY CODE:

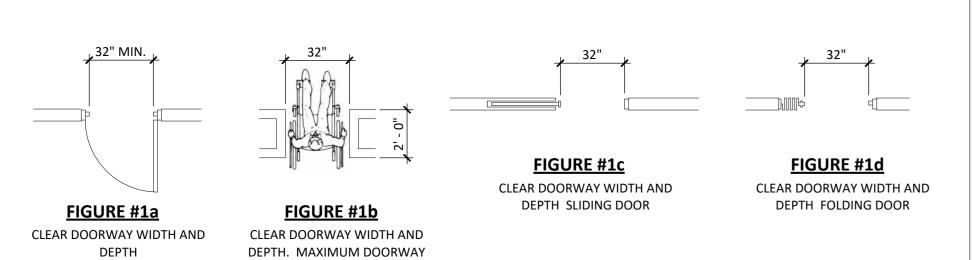
PLUMBING CODE:

FUEL GAS CODE:

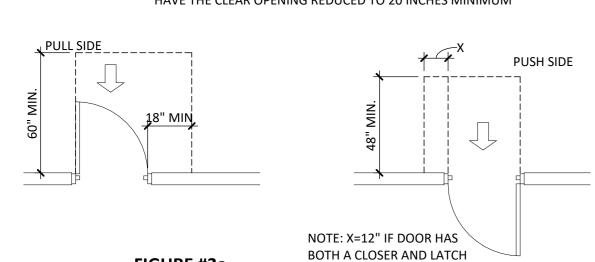
ELEVATOR CODE:

LOWER LEVEL FLOOR

FIRE & LIFE-SAFETY CODE:



1. CLEAR WIDTH EXCEPTION: DOORS NOT REQUIRING FULL USER PASSAGE, SUCH AS SHALLOW CLOSETS, MAY HAVE THE CLEAR OPENING REDUCED TO 20 INCHES MINIMUM



FRONT APPROACHES - SWINGING DOORS PULL SIDE

PUSH SIDE NOTE: X=36" MINIMUM IF Y=60" MINIMUM. X=42" MINIMUM IF Y=54" MINIMUM NOTE: Y=48" MINIMUM IF DOOR HAS BOTH FIGURE #2b A CLOSER AND LATCH

HINGE SIDE APPROACHES - SWINGING DOORS

FIGURE #2a

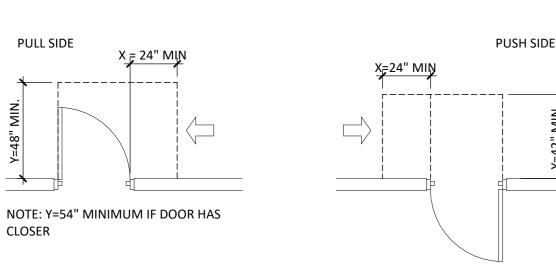
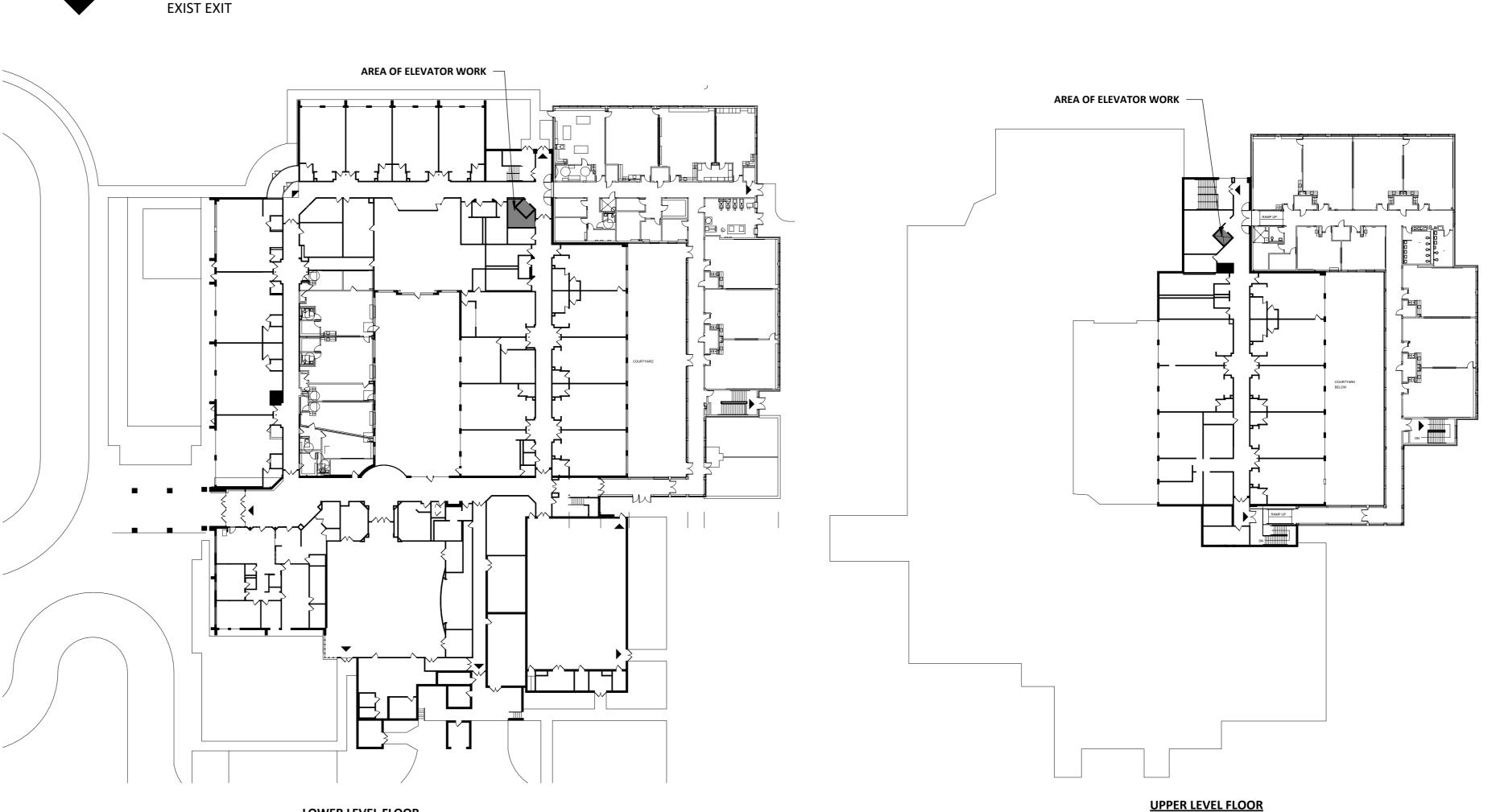


FIGURE #2c NOTE: Y=48" MINIMUM IF DOOR HAS LATCH SIDE APPROACHES - SWINGING CLOSER



TION 9 C NZ O W 0

ROCKVILLE, MD 20852

(P) 301-605-7005

(C) 301-404-0449

SCHOOLS

DIVISION OF CONSTRUCTION

45 W. GUDE DRIVE, 4th FLOOR

I certify that these documents were

prepared and approved by me, and that I

am a duly licensed architect under the laws

MECHANICAL /

PLUMBING /

ELECTICAL

ENGINEER

RTIFICATION BLOCK

of the State of Maryland

License Number: 13183

July 12, 2026

Expiration Date:

ROCKVILLE, MD 20850

CTA CONSULTING

ENGINEERS, INC

220 NORTH ADAMS ST

ROCKVILLE, MD 20850

(P) 301-762-7172

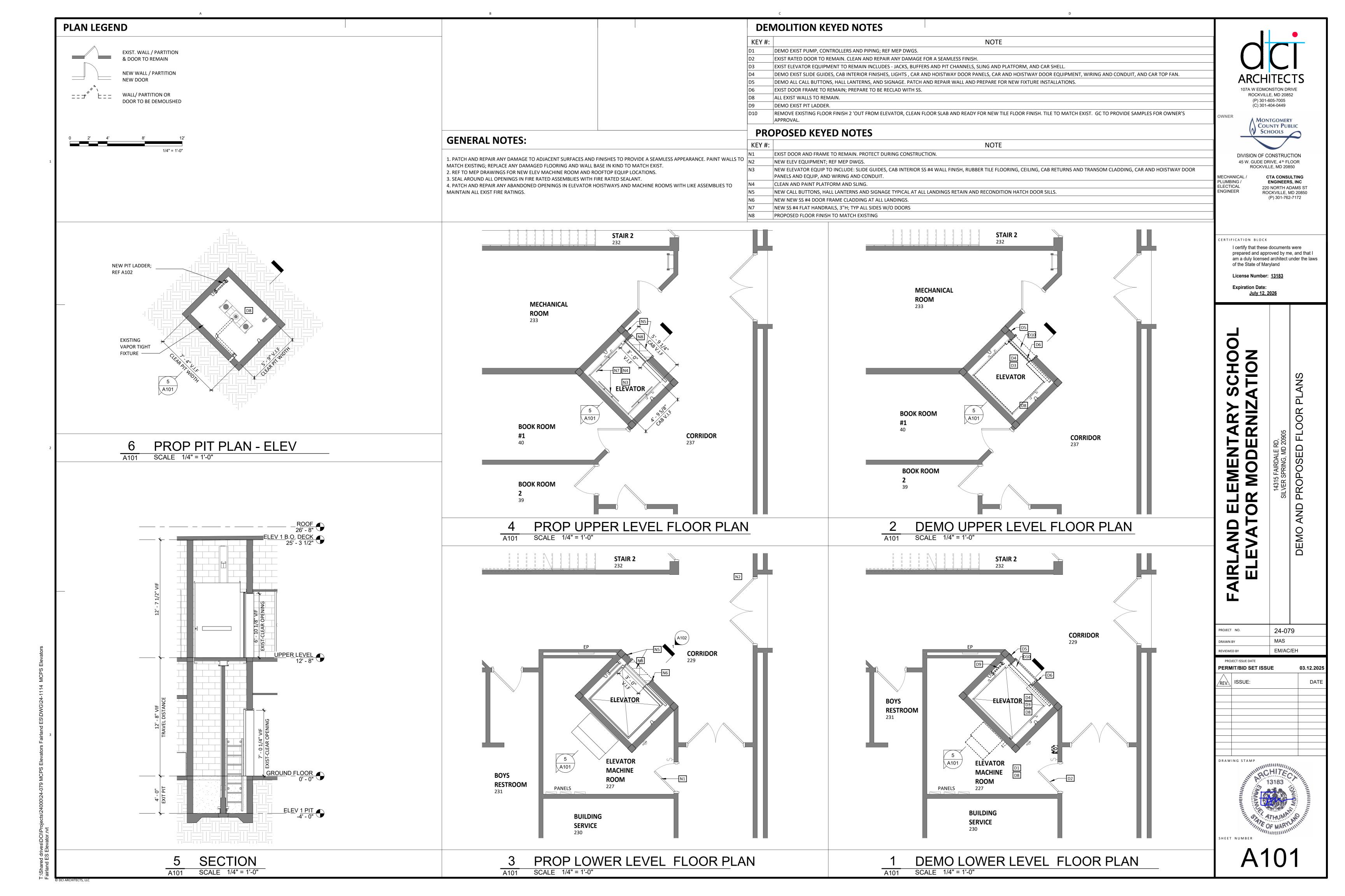
MONTGOMERY

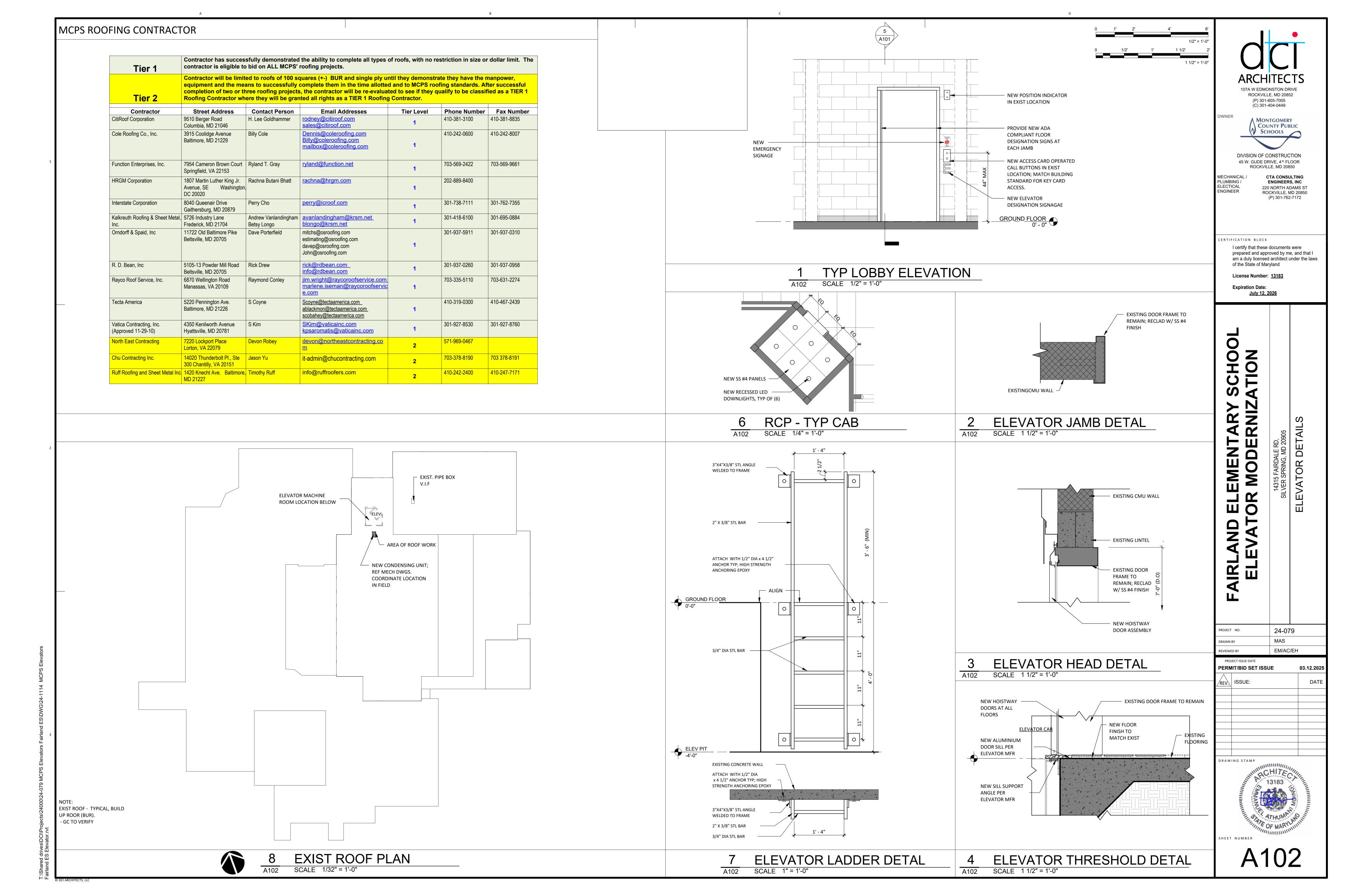
COUNTY PUBLIC

24-079 EM/AC/EH EVIEWED BY

PROJECT ISSUE DATE PERMIT/BID SET ISSUE 03.12.202







GENERAL NOTES

- THE WORK SHALL INCLUDE ALL DEMOLITION, FURNISHING AND INSTALLING ALL HEATING, AIR CONDITIONING, VENTILATION, PLUMBING, AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
- THE CONTRACTOR SHALL EXAMINE THE DRAWINGS, SPECIFICATIONS, AND JOB SITE AND FULLY INFORM HIMSELF OF ALL EXISTING CONDITIONS AND WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BEFORE SUBMITTING A BID. WAIVER OF RESPONSIBILITY OR REQUEST FOR ADDITIONAL PAYMENT BASED ON LACK OF KNOWLEDGE OF CONDITIONS AT THE SITE WILL NOT BE ACCEPTED OR CONSIDERED.
- PRIOR TO FABRICATION OF DUCTWORK, THIS CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS. IF DUCTS CANNOT BE INSTALLED AS SHOWN ON THE DRAWINGS, THIS CONTRACTOR SHALL NOTIFY THE OWNER'S ARCHITECT IMMEDIATELY. ANY EXTRA OR DEDUCT NECESSITATED BY THE ABOVE CONDITION SHALL BE SUBMITTED TO THE OWNER'S ARCHITECT IN WRITING PRIOR TO THE CONTINUATION OF THE
- ALL THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE EDITIONS OF THE INTERNATIONAL MECHANICAL CODE, AND ALL LOCAL CODES AND REGULATIONS. WHERE ANY PORTIONS OF THE SYSTEMS SHOWN ON THE DRAWINGS IS NOT IN ACCORDANCE WITH ALL APPLICABLE LAWS, ORDINANCES, REGULATIONS OR CODES, THIS CONTRACTOR SHALL MAKE ALL CHANGES REQUIRED BY THE ENFORCING AUTHORITIES IN A MANNER APPROVED BY THE ENGINEER AND AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL ORDER AND OBTAIN ALL NECESSARY TESTS, PERMITS AND CERTIFICATES OF APPROVAL AND PAY ANY REQUIRED FEES
- WORK SHALL BE PROTECTED AT ALL TIMES FROM DAMAGE BY PERSONS OR WEATHER AND ALL DAMAGED WORK RESTORED TO A NEW CONDITION BEFORE FINAL ACCEPTANCE.
- IF DURING CONSTRUCTION, ANY HAZARDOUS MATERIALS ARE ENCOUNTERED SUCH AS LEAD, ASBESTOS, ETC. THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER IMMEDIATELY. THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL AUTHORIZED TO DO SO, IN WRITING, BY THE OWNER.
- THIS CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH THE GENERAL CONTRACTOR FOR THE EXACT LOCATION OF CHASES, FURRING SPACES, DROPPED CEILINGS, STRUCTURE PENETRATIONS, PAINTING, ETC.
- EXAMINE ALL SERVICES, EQUIPMENT, SURFACES ETC., WHICH THIS WORK IS IN ANY WAY DEPENDENT UPON. SHOULD THE CONTRACTOR DISCOVER ANY CONDITIONS WHICH WILL PREVENT FOLLOWING GOOD PRACTICE OR RESULT IN LESS THAN A FIRST-CLASS INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S ARCHITECT IMMEDIATELY AND SHALL NOT PROCEED WITH HIS WORK UNTIL HE HAS RECEIVED INSTRUCTIONS FROM THE OWNER'S AGENT.
- 10. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE INSTALLATION TO BE FREE FROM DEFECTS FOR ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER. ANY DEFECTS OCCURRING DURING THE GUARANTEE PERIOD SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
- 1. ALL EQUIPMENT REQUIRING ELECTRIC POWER SHALL BE SUITED FOR USE WITH THE POWER TO BE SUPPLIED. ALL ELECTRICAL REQUIREMENTS SHALL BE COORDINATED WITH THE ELECTRICAL CONTRACTOR.
- 12. ALL EQUIPMENT SHALL BE TESTED FOR PROPER OPERATION AND CORRECTED AS NECESSARY. TEST, ADJUST AND BALANCE ALL AIR SYSTEMS TO PROVIDE AIR QUANTITIES SHOWN ON THE FLOOR PLANS AND PREPARE BALANCING REPORTS. TESTING, BALANCING AND BALANCING REPORTS SHALL BE IN ACCORDANCE WITH PROCEDURES OUTLINED BY THE AABC OR THE NEBB. TESTING & BALANCING SHALL BE PERFORMED BY A CERTIFIED BALANCING CONTRACTOR EITHER WITH AABC OR NEBB.
- 13. CONTRACTOR SHALL INSTRUCT THE OWNER IN THE OPERATION AND MAINTENANCE OF ALL COMPONENTS OF THE INSTALLATION.
- 4. PROTECTION OF EXISTING WORK: EXISTING WORK TO REMAIN AND EXISTING WORK TO BE RELOCATED SHALL BE PROTECTED FROM DAMAGE. WORK DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. COVER EQUIPMENT AS NECESSARY TO PROTECT IS FROM DUST AND DEBRIS. FLOORS TO REMAIN SHALL BE COVERED TO PROTECT THEM FROM DAMAGE. AT THE END OF EACH WORKING DAY AND DURING INCLEMENT WEATHER, CLOSE EXTERIOR OPENINGS WITH WEATHER PROOF COVERS.

- CLEAN UP: REMOVE DEBRIS AND RUBBISH FROM THE SITE AT THE END OF EACH WORKING DAY.
- B. IF DURING CONSTRUCTION, ANY HAZARDOUS MATERIALS ARE ENCOUNTERED SUCH AS LEAD, ASBESTOS ETC. THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER IMMEDIATELY. THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL AUTHORIZED TO DO SO, IN WRITING, BY THE OWNER.
- 15. PROVIDE PIPING IDENTIFICATION FOR PLUMBING PIPING AS MANUFACTURED BY BRADY B-500 PERMA CODE TAPE OR SETON SNAP AROUND. ALL PIPING LABELING (TEXT AND ARROWS) SHALL BE LEGIBLE FROM THE FLOOR LEVEL.

17. FIRE SUPPRESSION:

17.1. DRAIN EXISTING FIRE SUPPRESSION SYSTEM AND RE-ARRANGE THE EXISTING PIPING AND HEADS AS REQUIRED INSTALL NEW PUMP. ALL WORK SHALL BE IN ACCORDANCE WITH NFPA-13, AND THE FIRE MARSHALL'S REQUIREMENTS. ALL EQUIPMENT SHALL BE UL AND FM APPROVED.

18. QUALITY ASSURANCE

- 18.1. MANUFACTURER'S QUALIFICATIONS: FIRMS REGULARLY ENGAGED IN THE MANUFACTURE OF MECHANICAL EQUIPMENT, OF TYPES AND CAPACITIES REQUIRED, WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS THAN 5
- 18.2. INSTALLER'S QUALIFICATIONS: FIRMS WITH AT LEAST 5 YEARS OF SUCCESSFUL INSTALLATION EXPERIENCE WITH PROJECTS UTILIZING MECHANICAL SYSTEMS SIMILAR TO THOSE REQUIRED FOR THIS
- 18.3. ANY EQUIPMENT WHICH CONTAINS MECHANICAL/ELECTRICAL/ELECTRONIC COMPONENTS SHALL BE INSTALLED AND ADJUSTED BY FACTORY CERTIFIED PERSONNEL.
- 18.4. ANY ADJUSTMENTS TO EQUIPMENT SHALL BE PERFORMED BY FACTORY AUTHORIZED, FACTORY CERTIFIED TECHNICIANS.
- THE CONTRACTOR SHALL REPLACE AT NO COST TO THE OWNER, ANY WARRANTY WHICH IS VOIDED BY THE MANUFACTURER DUE TO THE USE OF UNQUALIFIED PERSONNEL.
- 18.5. AFTER INSTALLATION, EQUIPMENT SHALL BE TESTED AND ADJUSTED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS/INSTRUCTIONS

SUBSCRIPTS ADJACENT TO SYMBOLS

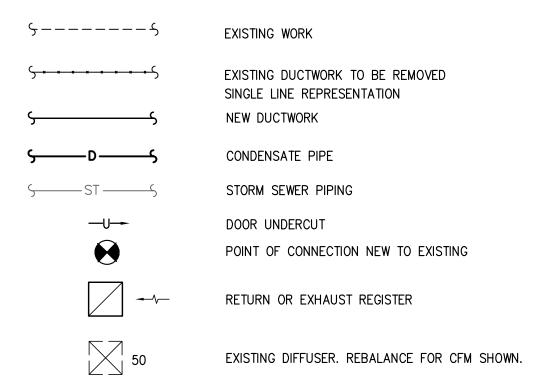
EXISTING DEVICE

EXISTING RELOCATED DEVICE

EXISTING DEVICE TO BE REMOVED AND RELOCATED

EXISTING DEVICE TO BE REMOVED

HVAC SYMBOLS LIST



ABBREVIATIONS

AFF CFM CLG CD DIA DN ER EXIST. F FLR IE MIN RR RA TYP UNO UTR VD	ABOVE FINISHED FLOOR CUBIC FEET PER MINUTE CEILING CEILING DIFFUSER DIAMETER DOWN EXHAUST REGISTER EXISTING FAN FLOOR INVERT ELEVATION MINIMUM RETURN REGISTER RETURN AIR TYPICAL UNLESS OTHERWISE NOTED UP THRU ROOF VOLUME DAMPER
٧U	VOLUME DAMIFER



MONTGOMERY COUNTY PUBLIC (V) SCHOOLS DIVISION OF CONSTRUCTION 45 W. GUDE DRIVE, 4 th FLOOR

ROCKVILLE, MD 20850 PLUMBING / ELECTICAL ENGINEER CONSULTING ENGINEERS

220 North Adams Street, Rockville, MD 20850 ERTIFICATION BLOCK

I certify that these documents were prepared and approved by me, and that I am a duly licensed engineer under the laws of the State of Maryland

License Number: 12404 **Expiration Date:** April 12, 2025

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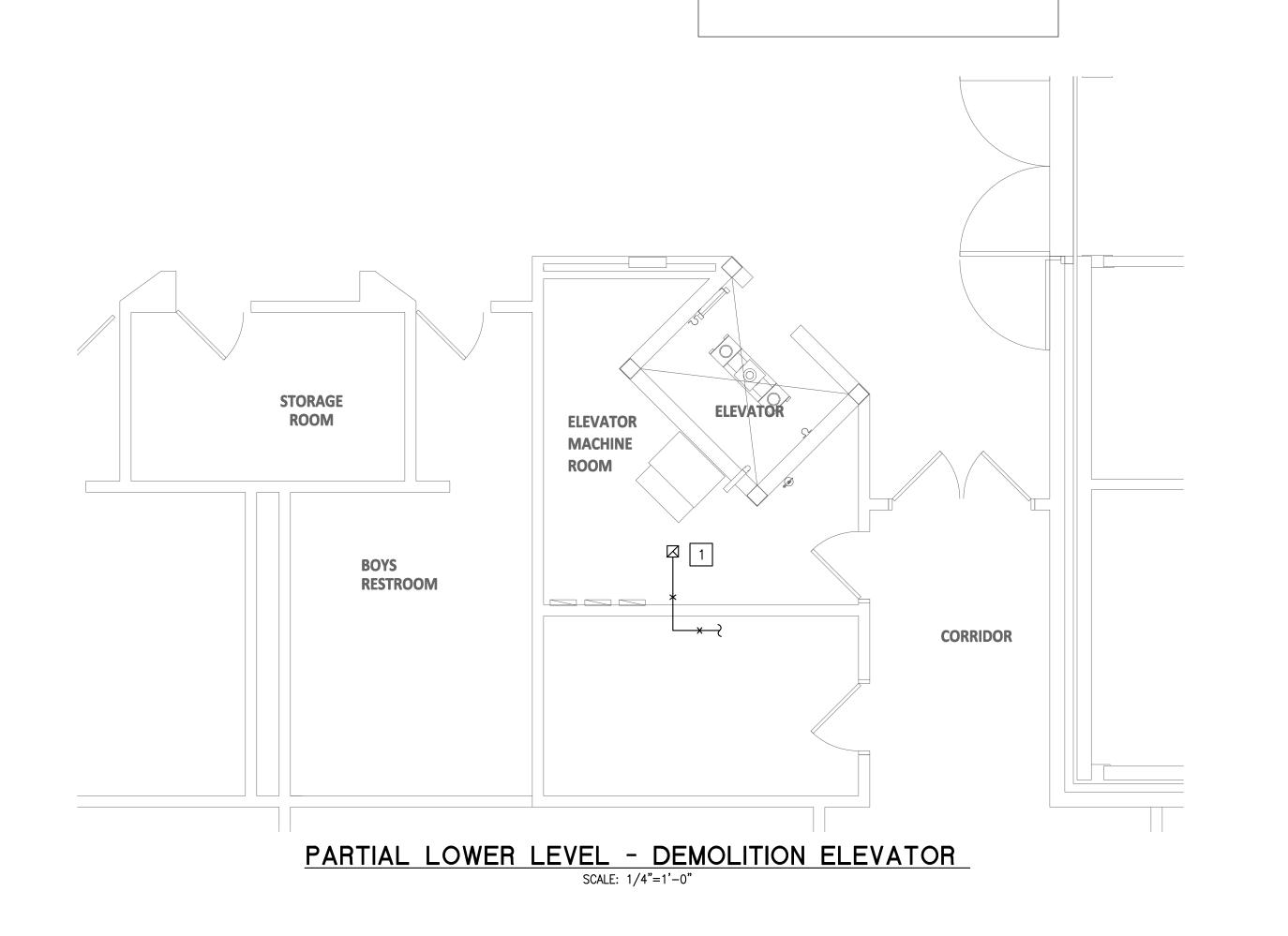
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PROJECT NO. 24081.10 A.G & L.B DRAWN BY C.A REVIEWED BY

PROJECT ISSUE DATE PERMIT/BID SET 02.04.2025 REV. ISSUE: DRAWING STAMP



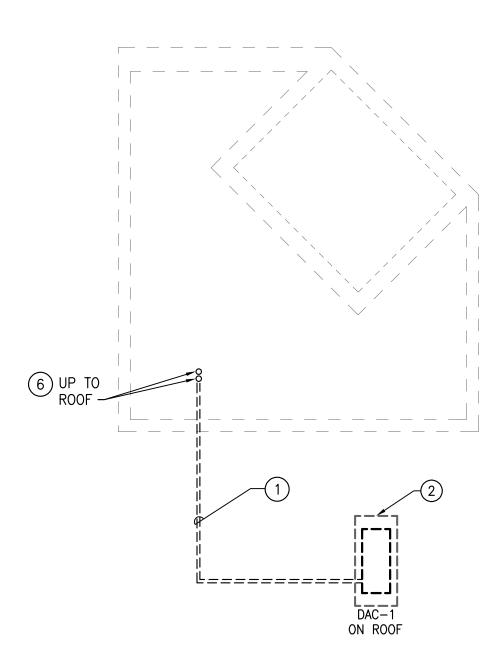


GENERAL NOTES: DEMOLITION

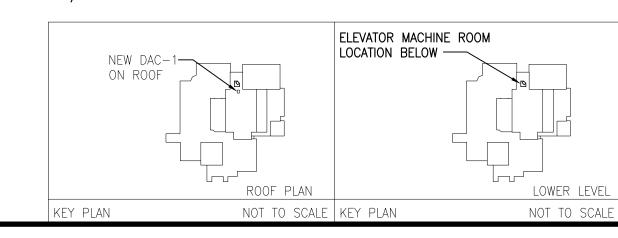
- A. ALL WORK SHOWN ON THIS PLAN IS EXISTING AND TO REMAIN UNLESS OTHERWISE INDICATED.
- B. 2. LOCATION OF EXISTING DUCTWORK, AIR DEVICES, PIPING AND AIR HVAC EQUIPMENT WERE TAKEN FROM EXISTING DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF LOCATION, ELEVATIONS, AND SIZES DURING CONSTRUCTION.

REFERENCE NOTES: DEMOLITION

1. REMOVE EXHAUST GRILLE AND ALL ASSOCIATED



SCALE: 1/4"=1'-0"



CONSULTING **ENGINEERS** 220 North Adams Street, Rockville, MD 20850 (301) 762-7172 www.ctaengineers.com

Pro. No.: 24081.10 ERTIFICATION BLOCK I certify that these documents were prepared and approved by me, and that I am a duly licensed engineer under the laws of the State of Maryland License Number: 12404 **Expiration Date:** April 12, 2025 TION 9 ELEMENTARY (ELF OR ELE

107A W EDMONSTON DRIVE ROCKVILLE, MD 20852 (P) 301-605-7005 (C) 301-404-0449

> MONTGOMERY COUNTY PUBLIC (V SCHOOLS

DIVISION OF CONSTRUCTION 45 W. GUDE DRIVE, 4 th FLOOR ROCKVILLE, MD 20850

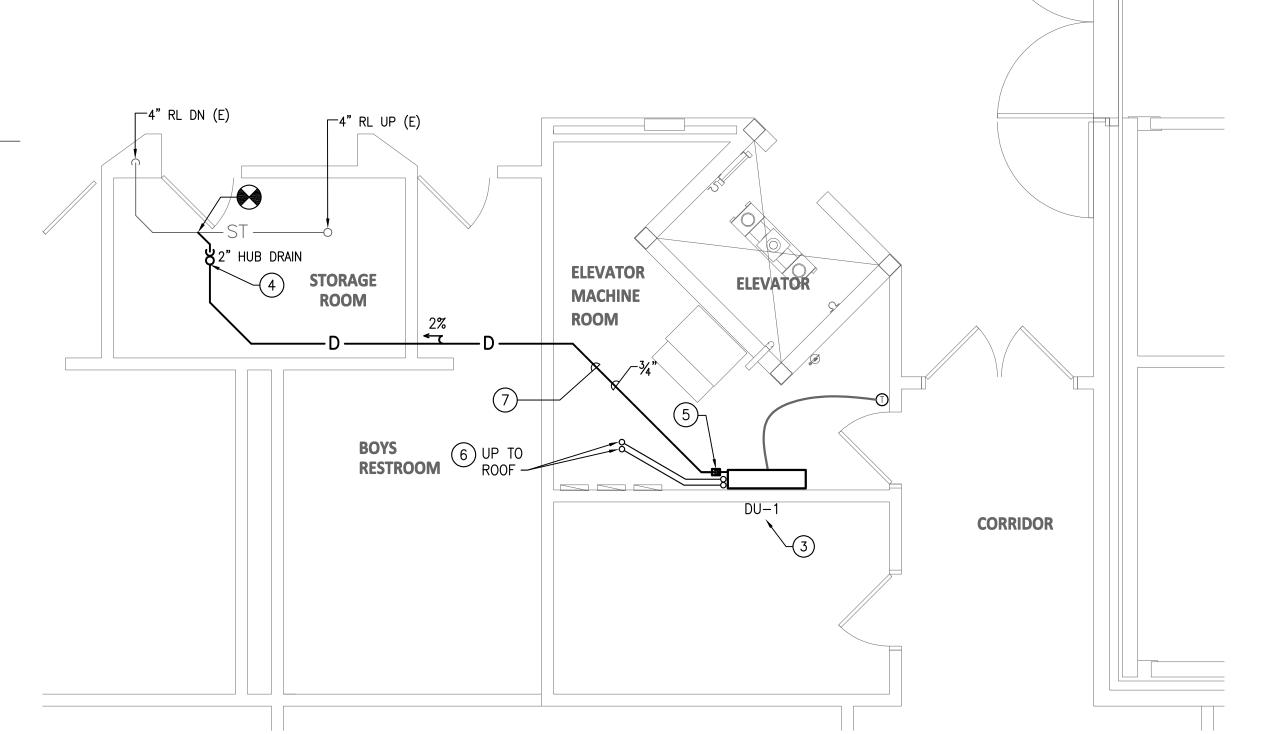
ELECTICAL

PROJECT NO. 24081.10 A.G & L.B DRAWN BY C.A. REVIEWED BY

PROJECT ISSUE DATE PERMIT/BID SET 02.04.2025 REV. ISSUE:

DRAWING STAMP





GENERAL NEW WORK NOTES:

- A. ALL WORK SHOWN ON NEW WORK PLAN(S) IS NEW UNLESS OTHERWISE INDICATED AS EXISTING.
- B. LOCATION OF EXISTING STORM PIPING SHALL BE FIELD VERIFIED PRIOR TO COMMENCING ANY NEW WORK.

REFERENCE NOTES: NEW WORK

- 1. INSTALL REFRIGERANT PIPES ON ROOF AS REQUIRED TO CONNECT TO OUTDOOR UNIT. FIELD COORDINATE EXACT
- 2. OUTDOOR UNIT ON ROOF, MOUNTED PER DETAIL. FIELD COORDINATE EXACT LOCATION.
- 3. MOUNT INDOOR UNIT 7' AFF.
- 4. DISCHARGE 3 CONDENSATE PIPE OVER 2 HUB DRAIN.
- 5. CONDENSATE PUMP BY LITTLE GIANT MODEL VCMA-15ULST. 60 WATTS MOTOR AT 115VOLTS/1PH/60HZ.
- 6. REFRIGERANT PIPES UP THROUGH EXISTING ROOF. FIELD COORDINATE EXACT ROUTING AND POINT OF ROOF PENETRATION ON 2ND FLOOR.
- 7. PIPE(S) ABOVE CEILING

PARTIAL LOWER LEVEL - NEW WORK ELEVATOR

SCALE: 1/4"=1'-0"

DUCTWORK BACK TO SOURCE.

PARTIAL ROOF PLAN - NEW WORK

<u>NOTES</u>

- 1) LOW AMBIENT CONTROLLER KIT TO 0°F
- 2) WALL MOUNTED THERMOSTAT
- 3) WALL MOUNTED SUPPORT BRACKETS.
- 4) REFRIGERANT: R410A
- 5) PROVIDE WITH CONDENSATE DRAIN REMOVAL PUMPS.
- 6) SINGLE POINT ELECTRICAL CONNECTION
- 7) INDOOR UNITS RECEIVE ELECTRICAL POWER FROM OUTDOOR UNITS
- THROUGH FIELD—SUPPLIED INTERCONNECTED WIRING.

PIPIN	IG INSULATION	SCHEDULE
PIPE	THICKNESS	TYPE
REFRIGERANT PIPING	3/4"	FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION WITH A MAXIMUM WATER VAPOR PERMEABILITY OF 0.05 PERM—IN WITH A "K" FACTOR OF 0.245 OR LESS AT 75 F MEAN TEMPERATURE. K—FLEX NBR/PVC INSULATION LOCATED OUTDOORS SHALL BE CLADDED WITH WEATHER RESISTANCE COVERING. K—FLEX TITAN.

	PIPING M	MATERIAL SCHEDULE	
APPLICATION	LOCATION	MATERIAL	REMARKS
STORM WATER PIPING	VARIOUS	TO MATCH EXISTING	
CONDENSATE	VARIOUS	COPPER TYPE L	

NOTES:

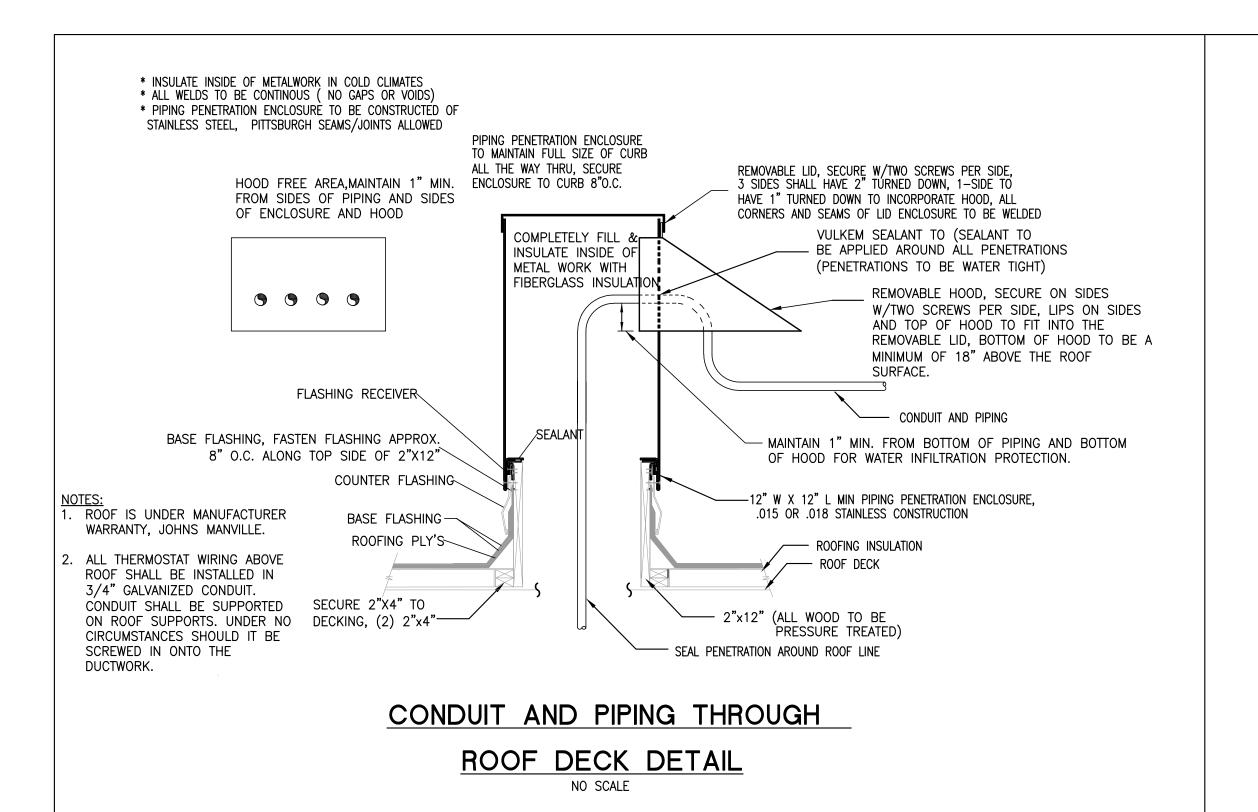
1. THIS SCHEDULE SUPPLEMENTS THE SPECIFICATIONS.

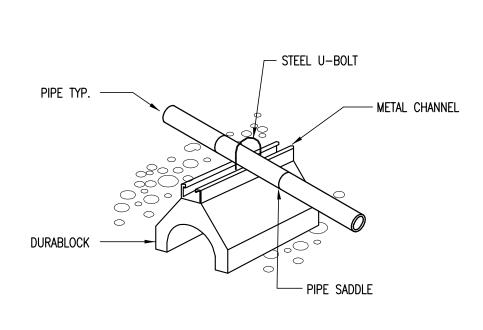
NOTES:

INSULATION SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50.

2. INSTALL INSULATION IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

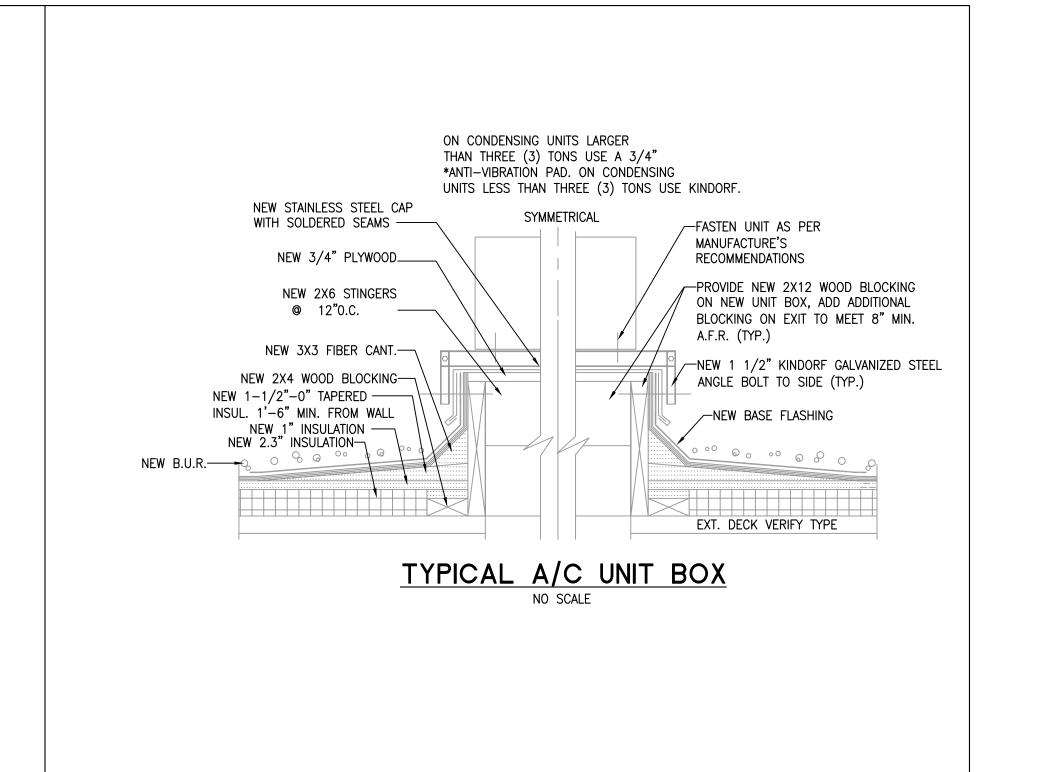
3. FOR PIPING OUTDOORS INSULATION SHALL BE PROTECTED WITH A WEATHER PROTECTION JACKET AS SPECIFIED.





ROOF PIPING SUPPORT DETAIL

NO SCALE



T-\Shared drives\DC\\Projects\24000\24-079 MCPS Flevators Fairland FS\DWG\24-1114 MCPS Flevators

Fairland ES Elevator.rvt

MP300

107A W EDMONSTON DRIVE ROCKVILLE, MD 20852 (P) 301-605-7005 (C) 301-404-0449

> MONTGOMERY COUNTY PUBLIC SCHOOLS

DIVISION OF CONSTRUCTION 45 W. GUDE DRIVE, 4 th FLOOR ROCKVILLE, MD 20850

CONSULTING ENGINEERS

220 North Adams Street, Rockville, MD 20850 (301) 762-7172 www.ctaengineers.com *Pro. No.:* 24081.10

prepared and approved by me, and that I am a duly licensed engineer under the laws

I certify that these documents were

MECHANICAL / PLUMBING / ELECTICAL ENGINEER

ERTIFICATION BLOCK

of the State of Maryland

Expiration Date:

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PROJECT NO.

DRAWN BY

REVIEWED BY

PROJECT ISSUE DATE

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License Number: 12404

April 12, 2025

ARCHITECTS, LLC

- ANY DISCREPANCIES ON THE PLANS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION, IN WRITING, BEFORE SUBMITTING THE BID.
- ELECTRICAL PLANS ARE DIAGRAMMATIC. ALL WIRING AND RACEWAYS SHALL BE INSTALLED CONCEALED ABOVE CEILINGS AND INSIDE WALLS.
- 4. THE FOLLOWING TERMINOLOGY AND MEANINGS WILL BE USED IN THESE SPECIFICATIONS:
- A. PANELBOARDS "EQUIPPED SPACE" OR "SPACE": INCLUDE ALL NECESSARY BUS, DEVICE SUPPORTS AND CONNECTIONS FOR INSERTION OF A FUTURE
- B. "PROVIDE": FURNISH AND INSTALL
- C. "THIS CONTRACTOR": THE ELECTRICAL CONTRACTOR.
- THIS CONTRACTOR SHALL EXAMINE THE DRAWINGS, SPECIFICATIONS AND VISIT THE JOB SITE AND FULLY INFORM HIMSELF OF ALL EXISTING CONDITIONS AND WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BEFORE SUBMITTING HIS BID. WAIVER OF RESPONSIBILITY OR REQUEST FOR ADDITIONAL PAYMENT BASED ON LACK OF KNOWLEDGE OF CONDITIONS AT THE SITE WILL NOT BE ACCEPTED OR CONSIDERED. ANY DIFFICULTIES IN COMPLYING WITH THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER, IN WRITING, BEFORE SUBMITTING THE BID.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL CONFORM TO THE APPLICABLE EDITIONS OF THE NATIONAL ELECTRICAL CODE, NFPA 70, LOCAL JURISDICTION REQUIREMENTS AND LOCAL STATE CODE REQUIREMENTS.
- THIS CONTRACTOR SHALL ORDER AND OBTAIN ALL NECESSARY ELECTRICAL TESTS, PERMITS AND CERTIFICATES OF APPROVAL AND PAY ANY REQUIRED FEES FOR SAME.
- THIS CONTRACTOR SHALL VERIFY AVAILABLE VOLTAGE PRIOR TO ORDERING ANY EQUIPMENT OR FIXTURES. ANY EQUIPMENT OR FIXTURES SHALL BE COMPATIBLE WITH AVAILABLE VOLTAGE.
- SHOP DRAWINGS FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, DEVICES AND MATERIALS SHALL BE SUBMITTED TO THE PROJECT MANAGER FOR APPROVAL BEFORE DELIVERY TO THE JOB SITE. EQUIPMENT, FIXTURES, AND MATERIAL DELIVERED TO THE JOB SITE OR INSTALLED PRIOR TO APPROVAL OF THE SHOP DRAWINGS AND FOR WHICH THE SHOP DRAWINGS ARE SUBSEQUENTLY REJECTED, SHALL BE REPLACED WITH AN APPROVED ITEM AT NO ADDITIONAL COST TO THE OWNER. PROVIDE 6 COPIES FOR THE FOLLOWING ITEMS:
- A. LIGHTING FIXTURES AND SWITCHES INCLUDING BALLASTS, LAMPS, REFLECTORS ETC.
- B. RECEPTACLES PANELBOARDS
- D. FIRE ALARM DEVICES AND SHOP DRAWINGS
- 10. UNLESS OTHERWISE NOTED, ALL EQUIPMENT, CIRCUITRY, DEVICES, MATERIALS ETC. SHALL BE NEW AND SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 11. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BEAR THE UNDERWRITER'S LABORATORIES LABEL.
- 12. ALL EQUIPMENT SUCH AS PANELBOARDS, TRANSFORMERS, STARTERS AND DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY EATON/CUTLER-HAMMER, GENERAL ELECTRIC, SQUARE-D, OR SIEMENS.
- 13. WORK SHALL BE PROTECTED AT ALL TIMES FROM DAMAGE BY PERSONS OR WEATHER AND ALL DAMAGED WORK RESTORED TO A NEW CONDITION BEFORE FINAL ACCEPTANCE.
- 14. ALL PENETRATIONS OF FLOOR AND WALLS SHALL BE SEALED WITH UL LISTED PUTTY TYPE SEALING COMPOUND IN ACCORDANCE WITH BOCA, NEC AND NFPA.
- 15. ALL WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS. MONDAY THROUGH FRIDAY CONFIRM WITH OWNER. IF WORK CANNOT BE PERFORMED DURING NORMAL WORKING HOURS THE OWNER SHALL BE NOTIFIED PRIOR TO THE SIGNING OF THE CONTRACT.
- 16. THIS CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH THE GENERAL CONTRACTOR OR THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING THE WORK AND FOR DISCONNECTION AND RECONNECTION OF ANY UTILITIES THAT MAY HAVE TO BE DISCONNECTED FOR THE COMPLETION OF THE PROJECT. ADVANCE NOTICE SHALL BE GIVEN TO THE OWNER BEFORE COMMENCEMENT OF WORK, WHETHER OR NOT AN OUTAGE IS REQUIRED.
- 17. THIS CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH THE GENERAL CONTRACTOR FOR THE EXACT LOCATION OF CHASES, FURRING SPACES, DROPPED CEILINGS, STRUCTURE PENETRATIONS, PAINTING, ETC.
- A. CONSULT ARCHITECTURAL PLANS AND DETAILS FOR CONSTRUCTION TYPE. HEADROOM, ROOM FINISHES, TYPE OF CEILING, FLOORS ETC.
- 18. ALL HVAC/PLUMBING EQUIPMENT INDICATED ON THE DRAWINGS SHALL BE CONNECTED UNDER THIS CONTRACT. ELECTRICAL EQUIPMENT REQUIREMENTS INDICATED ON DRAWINGS MAY DIFFER FROM ACTUAL EQUIPMENT FURNISHED. THIS CONTRACTOR SHALL COORDINATE ALL SUCH EQUIPMENT POWER REQUIREMENTS AND LOCATIONS WITH THE HVAC/PLUMBING CONTRACTORS PRIOR TO ROUGHING IN ANY DISCONNECT SWITCHES, WIRING, FEEDERS, BREAKERS, ETC. NECESSARY FOR EQUIPMENT INSTALLATION.
- 19. THIS CONTRACTOR SHALL COORDINATE ALL MOUNTING HEIGHTS FOR SWITCHES, RECEPTACLES, CEILING MOUNTED LIGHTING FIXTURES AND TELEPHONE OUTLETS BY THE USE OF THE ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS. SHOULD ANY CONFLICTS BECOME APPARENT, THIS CONTRACTOR SHALL REQUEST CLARIFICATION PRIOR TO INSTALLATION. IF THE WORK IS NOT COORDINATED ANY REMEDIAL WORK SHALL BE REDONE AT NO ADDITIONAL COST TO THE OWNER.
- 20. FINAL TESTING: AT THE TIME OF FINAL INSPECTION AND TEST, ALL CONNECTIONS AT PANELBOARDS, DEVICES AND EQUIPMENT, AND ALL SPLICES MUST BE COMPLETED. EACH BRANCH CIRCUIT AND ITS RESPECTIVE CONNECTED EQUIPMENT MUST TEST FREE OF SHORT CIRCUITS. UPON COMPLETION OF THE WORK, CLEAN AND POLISH ALL EXPOSED SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 21. THIS CONTRACTOR SHALL GUARANTEE THE ENTIRE INSTALLATION TO BE FREE FROM DEFECTS FOR TWO YEARS FROM THE DATE OF ACCEPTANCE BY THE OWNER. ANY DEFECTS OCCURRING DURING THE GUARANTEE PERIOD SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
- 22. THIS CONTRACTOR SHALL MAINTAIN ACCURATE RECORD DRAWINGS OF ALL WORK AS ACTUALLY INSTALLED. ON COMPLETION OF THE PROJECT THE FOLLOWING MATERIAL SHALL BE DELIVERED TO THE OWNER:
- A. TWO (2) COMPLETE SETS OF REPRODUCIBLE DRAWINGS SHALL BE DELIVERED TO THE OWNER AND ONE (1) SET OF DRAWING TO THE A/E

B. ALL NEW INSTALLED EQUIPMENT MANUFACTURER'S DATA AND WARRANTY

- GENERAL: DIVISION I OF THE ARCHITECTURAL SPECIFICATIONS SHALL GOVERN THE SEQUENCE OF CONSTRUCTION.
- PROCEDURES: THE PROCEDURES PROPOSED FOR THE ACCOMPLISHMENT OF SALVAGE AND DEMOLITION WORK SHALL BE SUBMITTED FOR APPROVAL. THE PROCEDURES SHALL PROVIDE FOR SAFE CONDUCT OF THE WORK. CAREFUL REMOVAL AND DISPOSITION OF MATERIALS SPECIFIED TO BE SALVAGED. PROTECTION OF PROPERTY WHICH IS TO REMAIN UNDISTURBED, COORDINATION WITH OTHER WORK IN PROGRESS, AND TIMELY DISCONNECTION OF UTILITY SERVICES, FIRE ALARM SYSTEMS, ELEVATORS, ETC. THE PROCEDURES SHALL INCLUDE A DETAILED DESCRIPTION OF THE METHODS AND EQUIPMENT TO BE USED FOR EACH OPERATION AND THE SEQUENCE OF OPERATION.
- PROTECTION OF EXISTING WORK: EXISTING WORK TO REMAIN AND EXISTING WORK TO BE RELOCATED SHALL BE PROTECTED FROM DAMAGE. WORK DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER, COVER EQUIPMENT AS NECESSARY TO PROTECT IS FROM DUST AND DEBRIS. FLOORS TO REMAIN SHALL BE COVERED TO PROTECT THEM FROM DAMAGE. AT THE END OF EACH WORKING DAY AND DURING INCLEMENT WEATHER, CLOSE EXTERIOR OPENINGS WITH WEATHER-PROOF COVERS.
- 4. TITLE TO EQUIPMENT TO BE RELOCATED IS VESTED IN THE OWNER UPON RECEIPT OF NOTICE TO PROCEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION, LOSS OR DAMAGE TO SUCH PROPERTY AFTER NOTICE TO PROCEED. EQUIPMENT REMOVED SHALL BE TURNED OVER TO THE OWNER AT A DESIGNATED POINT WITHIN THE PREMISES.
- AFTER REMOVAL OF ALL DEVICES THIS CONTRACTOR SHALL TURN ALL DEVICES OVER TO OWNER'S REPRESENTATIVE FOR HIM TO INSPECT. AFTER INSPECTED BY THE OWNER'S REPRESENTATIVE THIS CONTRACTOR SHALL REMOVE ALL UNNECESSARY DEVICES OR MATERIALS FROM THE SITE.
- DISPOSITIONS OF MATERIALS: DISPOSE OF EQUIPMENT AND MATERIALS TO BE DEMOLISHED IN A SAFE MANNER AND IN ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS.
- THIS CONTRACTOR SHALL CLEAN THE PROJECT SITE AND REMOVE DEBRIS AND RUBBISH AT THE END OF EACH WORKING DAY.
- 8. IF DURING CONSTRUCTION, ANY HAZARDOUS MATERIALS ARE ENCOUNTERED SUCH AS LEAD, ASBESTOS ETC. THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER IMMEDIATELY. THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL AUTHORIZED TO DO SO, IN WRITING, BY THE OWNER.
- . PROVIDE BLANK COVER PLATES ON ALL EXISTING OUTLETS NOT REUSED. COVER PLATES TO MATCH PROJECT SPECIFICATIONS.
- 10. PRIOR TO STARTING THE WORK, THIS CONTRACTOR SHALL PERFORM A CIRCUIT TRACING TO TEST THE EXISTING WORK TO REMAIN (OUTLETS, LIGHTING, LIGHT SWITCHES WIRING ETC.) FOR PROPER VOLTAGE, OPERATION AND BRANCH CIRCUIT ORIGINATION. A WRITTEN REPORT SHALL BE PREPARED INDICATING ANY DEFICIENCIES AND RECOMMENDED REPAIRS. SUBMIT FOUR (4) COPIES OF THIS REPORT TO THE ARCHITECT/OWNER FOR REVIEW. NO ADDITIONAL CHARGES WILL BE CONSIDERED AFTER COMPLETION OF THE WORK, TO REPAIR/CONNECT EXISTING OUTLETS UNLESS THESE WERE DESCRIBED IN THE REPORT ABOVE. ANY EXISTING DEVICES DISCONNECTED DURING CONSTRUCTION SHALL BE RE-CONNECTED AT NO ADDITIONAL COST TO THE OWNER.
- 1. THE CONTINUITY OF ALL EXISTING CIRCUITS WHICH ARE TO REMAIN OPERATIONAL SHALL BE MAINTAINED THROUGHOUT THE FACILITY. THIS CONTRACTOR SHALL IDENTIFY ALL CIRCUITS THAT SUPPLY POWER TO AREAS TO REMAIN, LABEL THESE CIRCUITS AND MAKE SURE THEIR POWER IS NOT INTERRUPTED DURING DEMOLITION AND CONSTRUCTION. ALL EXISTING CIRCUITS TO REMAIN SHALL BE RECONNECTED TO NEW OR EXISTING PANELS.
- 12. CONTRACTOR SHALL REMOVE ALL POWER, COMMUNICATIONS WIRING AND CONDUIT FROM LUMINAIRES, RECEPTACLES, TELEPHONE, DATA, CCTV AND CABLE TV OUTLETS TO BE REMOVED UNDER THE DEMOLITION PHASE. ALL WIRING AND CONDUIT SHALL BE REMOVED BACK TO SOURCE.
- 13. EXISTING FIRE ALARM AND FIRE PROTECTION SYSTEMS SHALL BE MAINTAINED IN SERVICE DURING DEMOLITION AND NEW CONSTRUCTION.
- 14. THIS CONTRACTOR SHALL RESTORE ALL AREAS. SYSTEMS AND ASSOCIATED DEVICES, COMPONENTS, ETC., DISTURBED BY HIS WORK TO THE SATISFACTION OF THE OWNER, ARCHITECTS, AND ENGINEER.

- PROVIDE LABELING FOR ALL FEEDER RACEWAYS, ELECTRICAL PANELS, AND ALL MAJOR PIECES OF EQUIPMENT AS FOLLOWS:
- A. ALL RECEPTACLE PLATE COVERS SHALL BE LABELED WITH PANEL DESIGNATION AND CIRCUIT NUMBER.
- B. ALL FEEDER RACEWAYS SHALL BE LABELED AS TO ITEM SERVED WITH MINIMUM 1/4" HIGH LETTERS.
- C. ALL JUNCTION BOXES FOR BRANCH CIRCUITRY SHALL BE LABELED WITH PANEL DESIGNATION AND CIRCUIT NUMBERS WITH MINIMUM 1/4" HIGH LETTERS.
- D. ALL STARTERS AND DISCONNECTS SHALL BE LABELED WITH 1/4" ENGRAVED WHITE LETTERS BLACK LAMACOID BACKGROUND NAME PLATES. NAME PLATE SHALL BE LABELED "F - NO." OR "AHU - NO." ETC.

PANELBOARDS

- CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSES ONLY. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY SPACING THE CIRCUITS IN THE PANEL AND BALANCE THE LOAD ON THE PHASES UNDER NORMAL OPERATING CONDITIONS.
- . BEFORE ORDERING PANELBOARDS, COORDINATE ALL MOTOR CIRCUIT BREAKER TRIPS WITH MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE CONDUCTOR SIZE WITH ACTUAL MOTORS AND OTHER MECHANICAL AND ARCHITECTURAL EQUIPMENT FURNISHED BEFORE INSTALLING CIRCUITRY.
- ALL PANELBOARDS SHALL HAVE COMMON KEYED LOCKS. PROVIDE A MINIMUM OF TWO KEYS PER PANEL. PANELBOARDS SHALL BE COMPLETE WITH COVER AND TRIM AND SHALL CONTAIN A GROUND BUS.
- . SURFACE MOUNTED PANELBOARD CABINETS SHALL BE INSTALLED ON AN APPROVED STEEL FRAMEWORK TO DISTRIBUTE THE WEIGHT EVENLY TO THE WALL OR FLOOR AND TO PROVIDE A 1-INCH AIR SPACE BETWEEN WALL AND CABINET.
- OF PANEL 6" INTO CEILING SPACE FOR EVERY 3 SPARE CIRCUIT BREAKERS OR SPACES. PROVIDE BOLT ON TYPE BRANCH CIRCUIT BREAKERS. THE BRANCH CIRCUIT

BREAKERS SHALL BE CONSTRUCTED WITH OVER CENTER TRIP FREE, AND

ON RECESSED PANELBOARDS, PROVIDE ONE 3/4" EMPTY CONDUIT FROM TOP

AFTER COMPLETION OF WORK, PROVIDE A TYPED CIRCUIT DIRECTORY FOR EACH EXISTING PANELBOARD TO REMAIN, AFFECTED BY THIS WORK AND FOR EACH NEW PANELBOARD.

POSITIVE HANDLE TRIP WITH COMMON TRIP ON ALL MULTIPLE POLE BREAKERS

SWITCHES, RECEPTACLES & OUTLETS

- PRIOR TO INSTALLATION OF ANY TELEPHONE, DATA AND RECEPTACLE OUTLETS, THIS CONTRACTOR SHALL VERIFY ITS FINAL LOCATION WITH THE ARCHITECTURAL
- 2. WHERE TWO OR MORE DEVICES OF THE SAME VOLTAGE ARE SHOWN TOGETHER ON THE PLANS, A GANGED PLATE SHALL BE USED. DEVICES OF DIFFERENT VOLTAGES SHALL BE SEPARATED HORIZONTALLY BY 6" AND SHALL BE HORIZONTALLY OR VERTICALLY ALIGNED.
- ALL RECEPTACLES, TELEPHONE, AND DATA OUTLETS SHOWN ON A WALL BACK TO BACK SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY.
- 4. WALL PLATES SHALL BE STAINLESS STEEL. FINISH AS SELECTED BY THE ARCHITECT.
- COORDINATE LIGHT SWITCHES SHOWN ON DRAWINGS WITH DOOR SWINGS. LOCATE LIGHT SWITCH ON LOCK SIDE OF DOOR.

LIGHTING FIXTURES

- 1. THIS CONTRACTOR SHALL VERIFY THAT ALL DOOR SWINGS, FURNITURE AND EQUIPMENT ARE CORRECT BEFORE INSTALLING LIGHT SWITCHES AND OUTLETS.
- 2. THIS CONTRACTOR SHALL VERIFY AVAILABLE VOLTAGE PRIOR TO ORDERING ANY FIXTURES. ALL FIXTURES SHALL BE COMPATIBLE WITH AVAILABLE VOLTAGE.
- COORDINATE RECESSED LIGHTING FIXTURES WITH SPRINKLERS, MECHANICAL EQUIPMENT AND ARCHITECTURAL CEILING PLAN. GRID LAYOUT ON PLANS IS APPROXIMATE, ADJUST AND COORDINATE LIGHTING FIXTURES IN FIELD PER ARCHITECTS REFLECTED CEILING PLAN.
- 4. THIS CONTRACTOR SHALL VERIFY THE TYPE OF CEILING TO INSURE THAT ALL LIGHTING FIXTURES ARE SUITABLE WITH CEILING FINISH.
- PROVIDE FINISHED FRAMES FOR ALL RECESSED LIGHTING FIXTURES, TYPE TO BE COMPATIBLE WITH CEILING. COORDINATE ALL FIXTURE TYPES WITH CEILING SYSTEM BEFORE ORDERING FIXTURES. PROVIDE ALL MOUNTING ATTACHMENTS FOR A COMPLETE INSTALLATION. LIGHTING FIXTURES SHALL BE SUPPORTED FROM BUILDING STRUCTURE. LIGHTING FIXTURES SUPPORTED FROM CEILING SYSTEM OR MECHANICAL EQUIPMENT WILL NOT BE ACCEPTED.
- ALL NEW LIGHTING FIXTURES SHALL BE INSTALLED COMPLETE WITH LED. SEE PLANS FOR SPECIFIC REQUIREMENTS.
- . COLORS AND FINISHES OF LIGHTING FIXTURES SHALL BE AS SELECTED BY THE ARCHITECT.

STARTERS AND DISCONNECT SWITCHES

- 1. THIS CONTRACTOR SHALL NOTE U.L. LABELS ON PACKAGED TYPE MECHANICAL EQUIPMENT. IF U.L. LABEL ON MECHANICAL EQUIPMENT TO BE INSTALLED CALLS FOR THE OVERCURRENT PROTECTIVE DEVICE TO BE FUSED, THIS CONTRACTOR SHALL PROVIDE A FUSED DISCONNECT SWITCH WITH PROPER SIZE FUSES AT THE SWITCH LOCATION INDICATED ON DRAWINGS.
- LOCATE DISCONNECT SWITCH FOR MECHANICAL EQUIPMENT TO PERMIT SERVICING OF EQUIPMENT. PROVIDE FUSES IF REQUIRED BY MANUFACTURER OF EQUIPMENT FOR UL APPROVAL. CONNECT CONDUCTORS AS REQUIRED BY MANUFACTURER.
- 3. DISCONNECT SWITCHES INDICATED SHALL BE HEAVY— DUTY TYPE, HORSEPOWER RATED. QUICK-MAKE. QUICK-BREAK TYPE SWITCHES WITH SPRING REINFORCED WIRE GRIPS AND SELF-ALIGNING SWITCH CONTACTS AND SHALL BE ENCLOSED IN NEMA-1 UNLESS OTHERWISE NOTED. ENCLOSURE SHALL BE HEAVY METAL WITH HINGED INTERLOCKING COVER WHICH PREVENTS BEING OPEN IN "ON" POSITION.
- 4. PROVIDE CARTRIDGE TYPE FUSES IN SWITCHES.

BRANCH CIRCUITRY

- ALUMINUM WIRING WILL NOT BE PERMITTED.
- 2. ALL WIRING SHALL BE 2#12+#12G IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.
- 3. ALL CIRCUITRY ROUTING SHOWN IS DIAGRAMMATIC. THIS CONTRACTOR SHALL DETERMINE IN FIELD THE MOST SUITABLE ROUTES.
- 4. MINIMUM SIZE EMT OR CONDUIT SHALL BE 3/4".
- 5. NO NONMETALLIC CONDUIT SHALL BE USED FOR BRANCH CIRCUIT WORK ABOVE GRADE.
- 6. CIRCUITRY SHALL BE INSTALLED CONCEALED IN FINISHED AREAS, EXPOSED IN UNFINISHED AREA.
- CIRCUITRY SHALL BE INSTALLED TIGHT TO THE UNDERSIDE OF THE FLOOR SLAB ABOVE IN A NEAT WORKMANLIKE MANNER. ALL INSTALLATION SHALL BE PARALLEL OR PERPENDICULAR TO BUILDING WALLS.
- 8. ALL EMPTY RACEWAYS SHALL CONTAIN A DRAG WIRE. EMPTY RACEWAYS 2" OR LARGER IN SIZE SHALL HAVE A MAXIMUM OF 3-90 DEGREE BENDS.
- 9. MAKE FINAL CONNECTION TO ALL MOTORS AND VIBRATING EQUIPMENT WITH FLEXIBLE CONDUIT.
- 10. ALL CONDUIT/CABLE PENETRATIONS OF EXTERIOR WALLS, FIRE RATED WALLS AND FIRE RATED FLOORS, SHALL BE CAULKED AND SEALED WATERTIGHT. SEALS FOR FIRE RATED PENETRATIONS SHALL BE SEALED WITH UL LISTED PUTTY TYPE SEALING COMPOUND.
- 11. CONTRACTOR SHALL X-RAY THE CONCRETE FLOOR SLAB PRIOR TO CORE DRILLING OR CHISELING TO INSTALL NEW SLEEVES OR CONDUITS.
- 12. WIRING SHALL BE ARMORED CABLE OR METAL CLAD WIRING. ALL HOME RUNS SHALL BE INSTALLED IN GALVANIZED EMT. 13. FEEDER CONDUITS SHALL BE GALVANIZED EMT OR HEAVY WALL GALVANIZED RIGID STEEL.

WIRE AND CABLE

- THE CORRECT NUMBER OF WIRES MAY NOT BE INDICATED FOR ALL CIRCUITS. ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THIS CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM WHETHER INDICATED ON DRAWINGS OR NOT.
- 2. ALL CONDUCTORS, RACEWAYS AND CABLES SHALL BE CONCEALED IN WALL OR INSTALLED ALONG BEAMS UNLESS INDICATED OTHERWISE.

3. CONDUCTORS SHALL BE INSTALLED CONTINUOS BETWEEN DEVICES, WITH SPLICE LOCATED ONLY IN JUNCTION BOXES OR IN CABINETS. CONDUCTORS SHALL BE OF SUFFICIENT LENGTH TO REACH THE FARTHEST TERMINAL IN PANELS. A MINIMUM OF 6" LOOPS SHALL REMAIN WHERE CONNECTIONS OR TAPS ARE TO BE MADE IN BRANCH CIRCUIT WIRING.

- FEEDERS SHALL BE COPPER (ALL CONDUCTOR SIZES INDICATED ON THE DRAWINGS ARE FOR COPPER CONDUCTORS). INSULATION SHALL BE RATED FOR 75 DEG. C. ALUMINUM FEEDERS WILL BE ALLOWED IF APPROVED BY LOCAL JURISDICTION; SIZES SHOWN ON THE DRAWINGS SHALL MODIFIED FOR ALUMINUM CONDUCTORS.
- . ALL WIRING SHALL BE COLOR CODED THROUGHOUT.
- 6. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER, MINIMUM NO. 12-EXCEPT CONTROL CONDUCTORS AND LIGHTING TAPS AS PERMITTED BY N.E.C. CONDUCTORS FOR SWITCHING LIGHTS SHALL NOT BE CONSIDERED CONTROL CONDUCTORS. ALL SIZES #8 OR LARGER SHALL HAVE THW INSULATION OR EQUIVALENT. THW OR EQUIVALENT SHALL BE REQUIRED FOR HEATERS OR OTHER UL LISTED DEVICES RATED AT 75 DEG. F. SUPPLY FEED.
- ALL RECEPTACLES, LIGHTING FIXTURES, MOTORS, ETC., SHALL BE GROUNDED. ALL RECEPTACLE CIRCUITS SHALL CONTAIN A #12 INSULATED GROUND
- 8. BALANCE THE PANEL LOADS. INSTALL MULTIPLE HOMERUNS TO ALTERNATELY NUMBERED PANELBOARD CIRCUITS (i.e. 1, 3, 5).
- 9. ALL 120 VOLT CIRCUIT HOMERUNS WHICH ARE OVER 100 LINEAR FEET SHALL BE A MINIMUM OF #10 CONDUCTORS UNLESS OTHERWISE INDICATED ON THE

ELECTRICAL SYMBOLS

1' X 4' LED LIGHTING FIXTURE NEW LED LIGHT FIXTURE MANUFACTURER

> FOR ELEVATOR PIT PROVIDE PART #WMB OR PROVIDE SIMILAR LIGHT FIXTURE. 20A, 277/120V SINGLE POLE TOGGLE SWITCH, MOUNTED +48"

BY WILLIAMS CATALOG #96-4-L40-840-HIAFR-WET/1-UNIV.

20AMP. 125V 3W DUPLEX RECEPTACLE WITH BUILT-IN GROUND FAULT CIRCUIT INTERRUPTER MOUNTED+18"AFF UON

20A, 125V, 3W WEATHER-RESISTANT DUPLEX RECEPTACLE WITH BUILT-IN GROUND-FAULT CIRCUIT INTERRUPTER AND WEATHERPROOF COVER (WET LOCATION) MOUNTED +18" ABOVE FINISH FLOOR.

JUNCTION BOX

30/2/20

FUSIBLE DISCONNECT SWITCH, "30/2/20" AMPERE/POLES/FUSE SIZE

WIRING AND CONDUIT CONCEALED IN CEILING OR WALL WIRING AND CONDUIT CONCEALED IN FLOOR

HAVE A SEPARATE INSULATED GROUND WIRE

BRANCH CIRCUIT HOMERUN. NUMBER OF ARROWS INDICATE NUMBER OR CIRCUITS. NUMBER OF HASH MARKS INDICATE NUMBER OR WIRES IN CONDUIT WHEN MORE THAT TWO. GROUND WIRE NOT SHOWN, BUT REQUIRED. ALL CIRCUITS SHALL

O CONDUIT TURNING UP

CONDUIT TURNING DOWN

DATA/TELEPHONE OUTLET, MOUNTED +18" AFF UON CONTRACTOR SHALL PROVIDE 11 EMPTY CONDUIT EXTENDING ABOVE FINISHED CEILING SPACE SHALL BE TERMINATED WITH 90 DEGREE BEND APPROXIMATE 12" ABOVE THE HUNG CEILING, TERMINATED WITH PULL WIRE AND INSULATED BUSHING.

SD SMOKE DETECTOR HD HEAT DETECTOR

CALL BUTTON

ABBREVIATIONS

AMPERES OR AMP ALTERNATING CURRENT AMERICANS WITH DISABILITIES ACT AMPERE INTERRUPTING CURRENT AFF ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AMERICAN WIRE GAUGE **BUILDING CONDUIT** CAT CATALOG CIRCUIT COPPER C/B CIRCUIT BREAKER CURRENT TRANSFORMER CW COOL WHITE DEPTH DWG DRAWING EMPTY CONDUIT WITH PULL WIRE FIXT FIXTURE FLA FULL LOAD AMP FLU0 FLUORESCENT FLR FLOOR FEET G/GRND GROUND OR GROUNGIND GROUND FAULT INTERRUPTER HEIGHT **HORSEPOWER** FB0 FURNISHED BY OTHERS INSTALLED BY THIS CONTRACTOR **INCANDESCENT KCMIL** THOUSAND CIRCULAR MILS K۷ KILOVOLT

KILOVOLTAMPS KVA KILOWATTS MINIMUM CIRCUIT AMPACITY MCB MAIN CIRCUIT BREAKER

MOP MAXIMUM OVERCURRENT PROTECTION MIN MINIMUM MISC MISCELLANEOUS MLO MAIN LUGS ONLY

MOUNTING NATIONAL ELECTRICAL CODE NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NIC NOT IN CONTRACT

UNLESS OTHERWISE NOTED

VOLTAGE OR VOLT

WEATHERPROOF

NUMBER PVC POLYVINYL CHLORIDE ROOM TYP **TYPICAL** U/G UNDERGROUND

VOLT AMP WATTS WITH

UON

SUBSCRIPTS ADJACENT TO SYMBOLS

EXISTING DEVICE (EXR) EXISTING RELOCATED DEVICE (XR) EXISTING DEVICE TO BE REMOVED AND RELOCATED EXISTING DEVICE TO BE REMOVED NEW DEVICE (XN) REPLACE WITH NEW

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MONTGOMERY COUNTY PUBLIC SCHOOLS **DIVISION OF CONSTRUCTION** 45 W. GUDE DRIVE, 4 th FLOOR

ROCKVILLE, MD 20850 /IECHANICAL PLUMBING / ELECTICAL NGINEER CONSULTING **ENGINEERS** 220 North Adams Street, Rockville, MD 20850

ERTIFICATION BLOCK I certify that these documents were prepared and approved by me, and that I am a duly licensed engineer under the laws

License Number: 12404 **Expiration Date:**

of the State of Maryland

April 12, 2025

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ROJECT NO. 24081.10 E.J.C. RAWN BY R.C. REVIEWED BY

PROJECT ISSUE DATE PERMIT/BID SET 02.04.2025 REV. | ISSUE:

DRAWING STAMP

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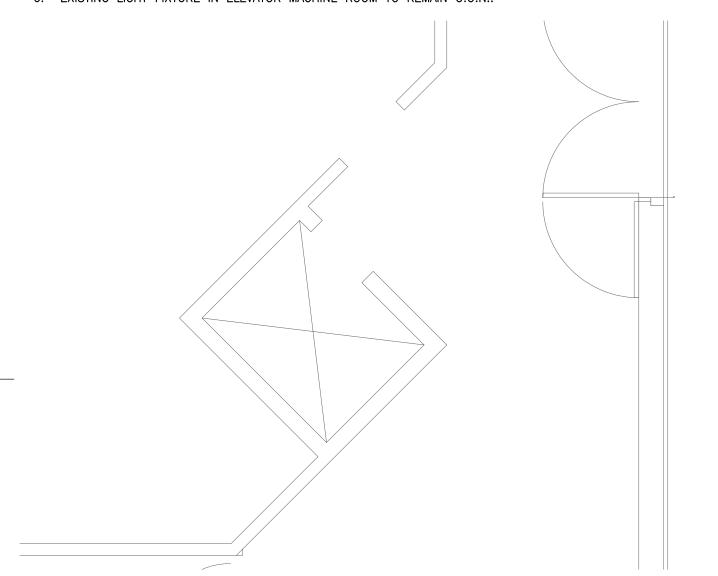


GENERAL NOTES: DEMOLITION

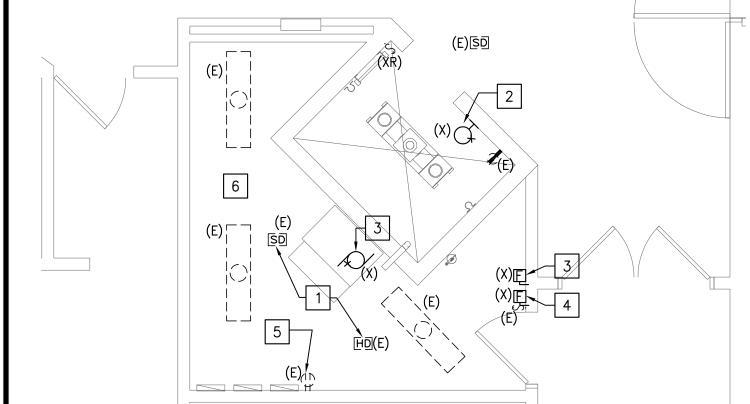
A. ALL WORK ON THIS PLAN IS EXISTING TO REMAIN UNLESS OTHERWISE INDICATED TO BE REMOVED.

REFERENCE NOTES: DEMOLITION

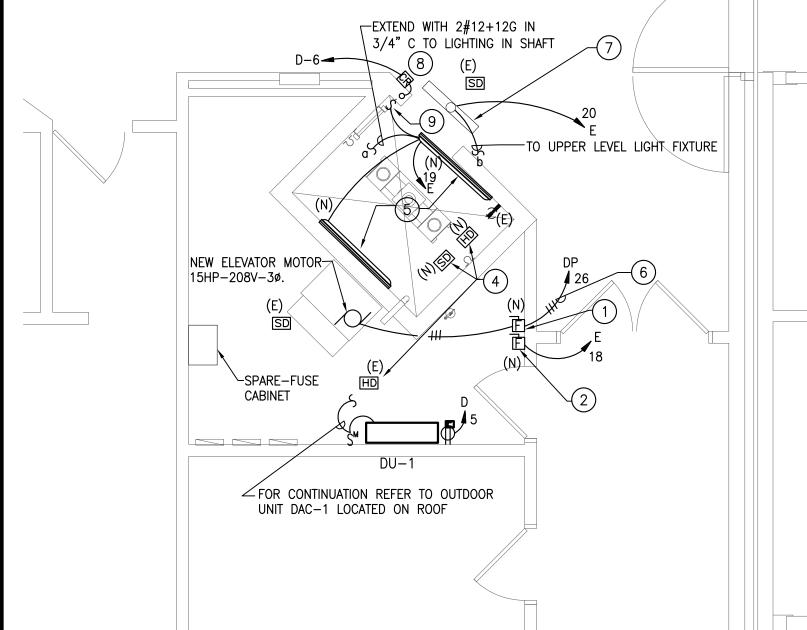
- 1. EXISTING FIRE ALARM DEVICES SERVING ELEVATOR MACHINE ROOM TO REMAIN U.O.N.
- 2. EXISTING ELEVATOR PIT LIGHT FIXTURE TO BE REMOVE AND REPLACE WITH NEW. REMOVE ASSOCIATED CONDUIT/WIRE BACK TO PANEL REFER TO NEW WORK.
- 3. EXISTING ELEVATOR MOTOR 15H.P 208V 3Ø, MOTOR TO BE REMOVE AND REPLACE IN KIND REMOVE ALL ASSOCIATED DISCONNECT SWITCH, CONDUIT AND WIRING, ETC. BACK TO SOURCE, TO BE REPLACE WITH NEW SEE NEW WORK.
- 4. EXISTING ELEVATOR DISCONNECT SWITCH SERVING CAR FAN & LIGHT TO BE REMOVE AND REPLACE WITH NEW REMOVE WITH ASSOCIATED CONDUIT, AND WIRING BACK TO SOURCE REFER TO NEW WORK.
- 5. CONTRACTOR SHALL REMOVE RECEPTACLE AND REPLACE WITH A GFCI RECEPTACLE
- 6. EXISTING LIGHT FIXTURE IN ELEVATOR MACHINE ROOM TO REMAIN U.O.N..



DEMO UPPER LEVEL FLOOR PLAN - ELEVATOR SCALE: 1/4"=1'-0"

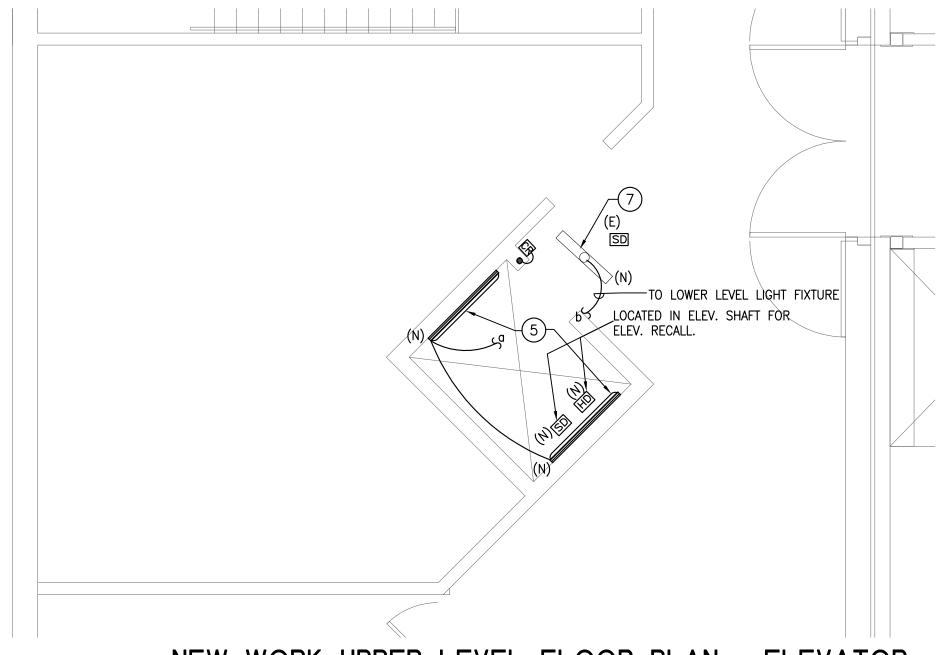


DEMO LOWER LEVEL FLOOR PLAN - ELEVATOR

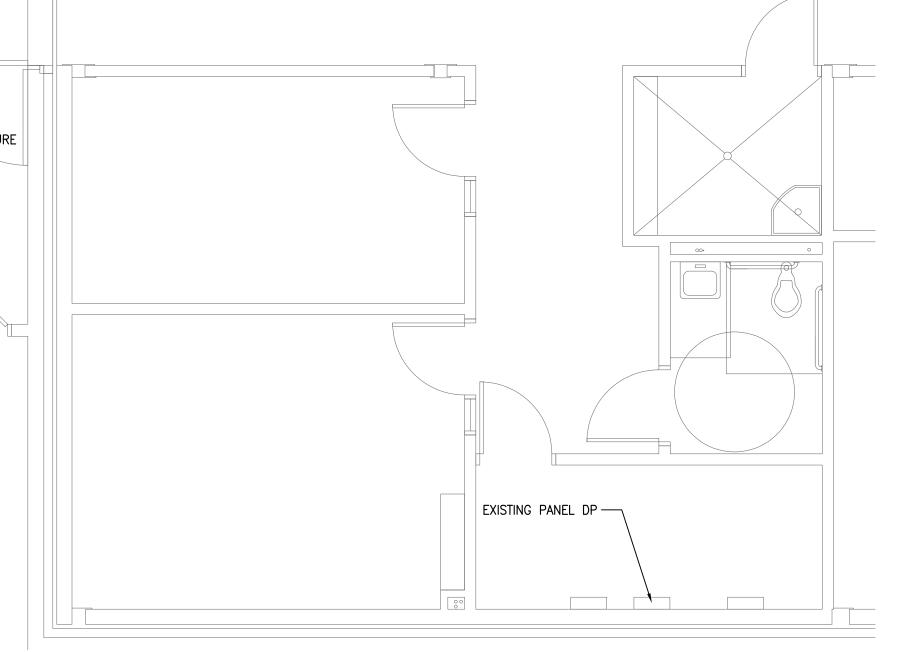


ELEVATOR NOTE:

MONTGOMERY COUNTY PUBLIC SCHOOLS, DOES NOT REQUIRE THE ELEVATORS TO BE CONNECTED TO THE GENERATOR EMERGENCY OR STANDBY CIRCUITS WHEN THE ELEVATOR UNIT IS EQUIPPED WITH BATTERY POWERING LOWERING DEVICES. THE EXISTING ELEVATOR AS WELL AS THE NEW ELEVATOR ARE EQUIPPED WITH BATTERY POWERING LOWERING DEVICES, THEREFORE IT DOES NOT REQUIRE TO BE CONNECTED TO THE GENERATOR.



NEW WORK UPPER LEVEL FLOOR PLAN - ELEVATOR SCALE: 1/4"=1'-0"

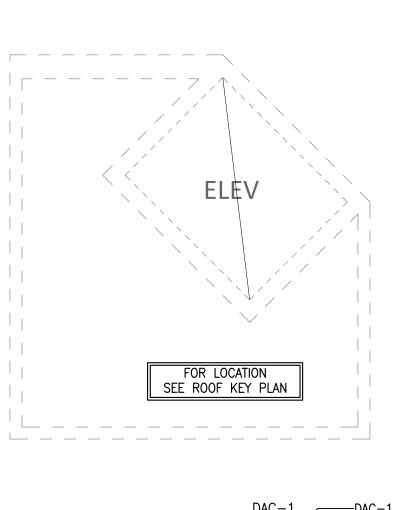


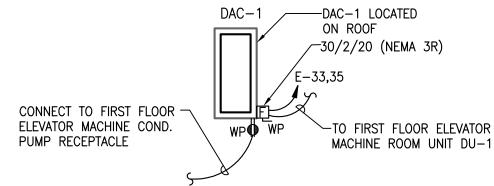
GENERAL NOTES: NEW WORK

- A. ALL WORK ON THIS PLAN IS NEW UNLESS OTHERWISE INDICATED AS EXISTING.
- B. ELEVATOR: EMERGENCY BATTERY OPERATION LOWERING, A MECHANICAL AUXILIARY CONTACT SHALL BE INSTALLED ON THE DISCONNECT SWITCH FOR ELEV. CAP. THE AUXILIARY SHALL BE CONFIGURED AS SPST AT 1AMP 115V (MIN). THE AUXILIARY CONTACT SHALL BE OPEN WHEN THE DISCONNECT SWITCH IS IN THE OPEN POSITION. OF A SHUNT TRIP CIRCUIT BREAKER IS PROVIDED AN AUXILIARY CONTACT SHALL BE INSTALLED ON THE CIRCUIT BREAKER.
- . ELEVATOR REQUIREMENTS MAY VARY FROM ONE MANUFACTURER TO ANOTHER. CONTRACTOR SHALL VERIFY ELECTRICAL REQUIREMENT OF ELEVATOR TO BE INSTALLED PRIOR TO ROUGH-IN TO ENSURE PROPER OPERATION AND OVERCURRENT PROTECTION.
- D. PROVIDE NEW SHUNT-TRIP TYPE MAIN LINE DISCONNECT SWITCHES AND FUSES CAR LIGHTING DISCONNECT SWITCHES. PROVIDE REQUIRED GROUNDING CONDUCTOR IN EACH DISCONNECT SWITCH. PROVIDE POWER SUPPLY AND BRANCH CIRCUIT FOR MACHINE ROOM PUMPING UNIT OIL COOLER OR OIL HEATER.

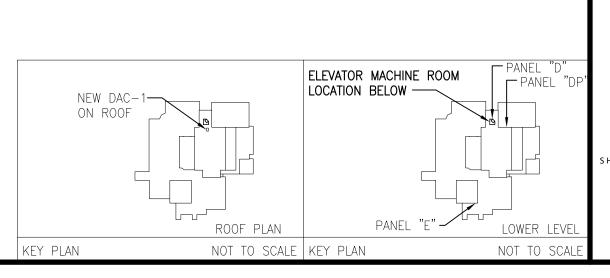
REFERENCE NOTES: NEW WORK

- 1. PROVIDE 3P-200 AMP FUSED DISCONNECT SWITCH WITH 90 AMP DUAL ELEMENT TIME DELAY. FUSES SWITCH SHALL BE PROVIDED WITH PROVISION TO SEAL IN THE "OFF" POSITION, PROVIDE AUX DRY CONTACT.
- 2. PROVIDE 1P+S/N 30 AMP FUSED DISCONNECT SWITCH WITH 20 AMP FUSE FOR ELEVATOR CAR FAN & LIGHT.
- NOT USED.
- 4. PROVIDE MODIFICATIONS AND PROGRAMING OF THE BUILDING FIRE ALARM AND SMOKE DETECTOR SYSTEM AND ASSOCIATED DEVICES FOR ELEVATOR RECALL AND SHUNT TRIP OPERATION. AT THE PRESENT ALL EXISTING ELEVATOR RECALL SYSTEM SMOKE, HEAT DETECTOR IN THE ELEVATOR MACHINE ROOM, ELEVATOR PIT/SHAFT AND LOBBY ARE EXISTING TO REMAIN UON. THIS CONTRACTOR SHALL MODIFY IF SO REQUIRED BY NEW ELEVATOR REQUIREMENTS.
- 5. PROVIDE NEW LED LIGHT FIXTURE FULLY ENCLOSED & GASKETED AT ELEVATOR PIT LIGHT FIXTURE MANUFACTURER BY WILLIAMS CATALOG #96-4-L40-840-HIAFR-WET/1-UNIV FOR ELEVATOR PIT PROVIDE PART #WMB OR PROVIDE SIMILAR LIGHT FIXTURE.
- 6. RECONNECT BACK TO EXISTING PANEL DP 1200 AMP 120/208V 3Ø 4W EXIST. POSITION #26 THIS CONTRACTOR SHALL REMOVE THE EXISTING 3P-70 AMP CIRCUIT BREAKER SERVING THE EXISTING ELEVATOR THAT WAS REMOVED, AND PROVIDE A NEW 3P-125 AMP CIRCUIT BREAKER W/BUILT-IN SHUNT-TRIP MECHANISM TO SERVE NEW ELEVATOR REFER TO PANEL SCHEDULE REFER TO ELEVATOR NOTE ON THIS SHEET.
- 7. PROVIDE NEW RECESSED LED LIGHT FIXTURE MODEL MX4RG-2'00-L12-8-30-F-DRV-UNV MANUFACTURED BY WILLIAMS LIGHTING OR SIMILAR.
- 8. CARD READER CONNECTION.
- 9. RELOCATED SWITCH PROVIDE NEW AND RECONNECT BACK TO SOURCE.





NEW WORK - ROOF PLAN SCALE: 1/4"=1'-0"





MONTGOMERY COUNTY PUBLIC (V SCHOOLS **DIVISION OF CONSTRUCTION**

45 W. GUDE DRIVE, 4 th FLOOR

ROCKVILLE, MD 20850 MECHANICAL / PLUMBING / ELECTICAL

> CONSULTING **ENGINEERS**

220 North Adams Street, Rockville, MD 20850 (301) 762-7172 www.ctaengineers.com *Pro. No.:* 24081.10 TIFICATION BLOCK

I certify that these documents were prepared and approved by me, and that I am a duly licensed engineer under the laws of the State of Maryland

License Number: 12404

Expiration Date: April 12, 2025

0 ERNIZ AR

OR

ELE

24081.10 E.J.C.

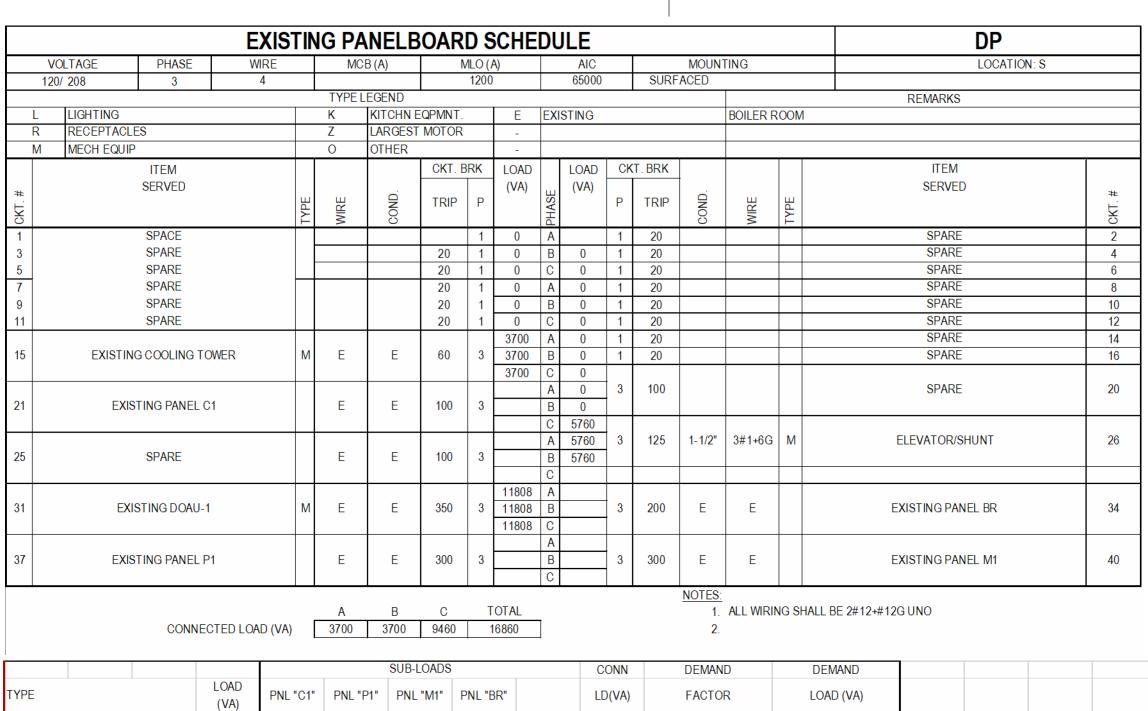
PROJECT ISSUE DATE PERMIT/BID SET 02.04.2025 REV. ISSUE:

R.C.

REVIEWED BY

DRAWING STAMP

NEW WORK LOWER LEVEL FLOOR PLAN - ELEVATOR



				SUB-LOADS)		CONN	DEMAND	DEMAND				
YPE	LOAD (VA)	PNL "C1"	PNL "P1"	PNL "M1"	PNL "BR"		LD(VA)	FACTOR	LOAD (VA)				
IGHTING	0		16,500		1,500	-	18,000	125%	22,500				
RECEPTACLES	0	18,500	42,250		540	-	61,290	*	35,645	(1ST 10KVA @	100%, REMA	INING @ 50%)	
MECH EQUIP	63,804			51,100	31,500	-	82,600	100%	82,600				
KITCHN EQPMNT.	0					-	0	100%	0		0	# OF KITCH	EQUIPMENT
ARGEST MOTOR	0					-	0	125%	0				
OTHER	0	2,500			2,500	-	5,000	100%	5,000				
XISTING	0					-	0	125%	0				
				C	CONNECTED	TOTAL (VA)	166,890		145,745	DEMAND LO	AD		
				CON	NNECTED AN	//PACITY (A)	463.24		404.55	DEMAND AM	IPACITY (A)		

	VOLTAGE PHASE WIRE MCB (A) MLO (A) AIC MOUNTING															D		
VC	VOLTAGE PHASE WIRE 120/ 208 3 4				MC	B (A)	A) MLO (A)			AIC MOUNT					ΓING			
120						00					10000		RECESSED					
		EGEND											REMARKS					
L	LIGHTING				K	KITCHN E			Е	EXI	STING						FED FROM MDP	
R					Z	LARGEST	MOTOR		-									
М	MECH EQUIP)			0	OTHER			-	Ц,								
							CKT. B	RK	LOAD		LOAD	CK	T. BRK				ITEM	
		SERVED				<u> </u>			(VA)	ш	(VA)			<u>.</u>		1		#
				TYPE	WIRE	COND	TRIP	Р		PHASE		P	TRIP	OND	WIRE	TYPE		TX.
	51/10T			<u> </u>					500	_	005			0	-	<u>-</u>	EVICTIVE LIEUTING SUSTAINED DA	
				<u> </u>	E	E	20	1	500	A	265	1	15	E	E	L	EXISTING LIGHTING ELEVATOR RM	2
+				L	E	E	15	1	500	В	1080	1	15	E	E	R	EXISTING RECEPTACLES ROOM 17	4
 	NEW CC		JMP	М		3/4"	20	1	50	C	25	1	20	E	E	0	NEWELEVATOR CAR READER	(
+	EVICTING		DIAGLES				20	1	4000	A	1200	1	20	E	E	R	EXISTING RECEPTACLES	- 1
	EXISTING CO		PTACLES	R	E	E	20	1	1080	В	900	1	20	E	E	L	EXISTING LIGHTING ROOM 14	1
	EVICTING		OL OPET	-	E E	E E	20	1	1080	C	900	1	20	E	E	R	EXISTING RECEPTACLES ROOM 14 SPARE	1
;	EXISTINGLI		CLOSET	- -	С				1000	+		1	20			+	SPARE	1
							20	1		B		1	20			+ +	SPARE	1
				+			20	1		A	1080	1	20	E	Е	R	EXISTING COMPUTER ROOM 14	2
							20	1		В	1000	1	20	E	E		SPARE	2
	FXISTII		2 17	R	E	E	20	1	180	С	880	1	20	E	E	R	EXISTING WATER COOLER	2
5	Datern		C 17	- 1			20	1	100	A	880	1	20	E	E	R	EXISTING WATER COOLER	2
7	FXISTIN		M 14	М	Е	E	20	1	1080	В		1	20			+ ` +	SPARE	2
)	2,1101111			+**			20	1		С		1	20			1 1	SPARE	3
							20	1		A	1000	1	20	Е	Е	М	EXISTING CU HEAT	3
3							20	1		В		1	20				SPARE	3
5	EXI			М	Е	E	15	3	1300	С							SPACE	3
		" "							1300	Α							SPACE	3
)		" "							1300	В							SPACE	4
1		SPACE						1		С							SPACE	4
														NOTES:	•			•
					Α	В	С	T	OTAL					1.	ALL WIR	ING SHA	ALL BE 2#12+#12G UNO	
		CONNEC	CTED LOAD (V	A)	7305	5940	3335	1	6580									
		LOAD		UBLOA	ADS (VA)		CONN		EMAND		EMAND							
PE		(VA)	PNL		PNL	PNL	LD(VA)		ACTOR		AD (VA)	T						
HTING		3,245			-	-	3,245	1	125%	_	4,056							
	RECEPTACLES MECH EQUIP ITEM SERVED EXISTING LIGHTING 17 EXISTING BOYS BATH ROOM LIGH NEW CONDENSATE PUMP SPARE EXISTING CORRIDOR RECEPTACE SPARE EXISTING LIGHTING WINE CLOSE SPARE SPARE SPARE SPARE SPARE EXISTING COMPUTER 17 SPARE EXISTING UVENT ROOM 14 SPARE SPARE SPARE SPARE EXISTING PRU #1 " " " SPACE CONNECTED LOAD (VA) NG 3,245 TACLES 7,280 EQUIP 6,030 I EQPMNT. 0 ST MOTOR 0				-	-	7,280		*	_	7,280	(1ST	10KVA @ 1	00%, REM	AINING @	50%)		
		_			-	-	6,030		100%		6,030	↓ ,						
					-	-	0		100%		0		0	# OF KIT	CH EQUI	PMENT		
ATT OF	MOTOR	0			-	-	0	1	125%		0							
THER						_	25		100%	+	25	ł						

17,391 DEMAND LOAD 48.27 DEMAND AMPACITY (A)

CONNECTED TOTAL (VA) 16,580 CONNECTED AMPACITY (A) 46.02

		PHASE WIRE 3 4 S ITEM SERVED			EB (A) LEGEND KITCHN E LARGEST OTHER	EQPMNT.	ИLО (л 400	,		AIC 10000		SURF	MOUN	TING			
L R M	LIGHTING RECEPTACLE MECH EQUIP	S		K Z	KITCHN E					10000		SHID	100				
M # 1	RECEPTACLE MECH EQUIP	ITEM		K Z	KITCHN E			F	•		- 1	3011	ACE				
M # 1	RECEPTACLE MECH EQUIP	ITEM		Z	LARGEST			F								REMARKS	
M # 1	MECH EQUIP	ITEM				MOTOR		_	EXI	ISTING				LOCATIO	N: GE	NERATOR ROOM	
# 20	1			0	OTHER			-									
1								-									
1		SERVED				CKT. B	BRK	LOAD		LOAD	CK	T. BRK				ITEM	
1	EXISTI							(VA)		(VA)							#
1	EXISTI		TYPE	WIRE	COND	TRIP	Р		PHASE		Р	TRIP	COND.	WIRE	TYPE		
'	EXISTI		Lλ	\mathbb{X}	00				ЬH				00	\geq	LΥ		CKT
3		NG TELEPHONE	R	Е	Е	20	1	1080	Α	1080	1	20	Е	Е	0	EXISTING PA STACK	2
	EXISTING	LIGHTING OFFICE	L	Е	Е	20	1	1080	В	1080	1	20	Е	Е	L	EXISTING LIGHTING ENTRY	4
5		OFFICE TELEPHONE ROOM	L	E	Е	20	1	1080	С	900	1	20	Е	Е	R	EXISTING MED OUTLET, CORRI+EMERG LIGHTS	6
7		SHT REAR CORRIDOR	L	Е	Е	20	1	1080	Α	900	1	20	Е	Е	L	EXISTING LIGHT REAR CORRIDOR	8
9	EXISTI	NG FIRE ALARM	O	Е	Е	20	1	1080	В	1080	1	20	Е	Е	L	EXISTING LIGHT ENTRY	10
11		SHT REAR CORRIDOR	L	Е	Е	20	1	900	С	1080	1	20	Е	Е	L	EXISTING LIGHT FRONT ENTRY	12
13	EXISTING LIGHT	MULTI-PURPOSE ROOM	L	Е	E	20	1	1080	Α	1200	1	20	Е	Е	L	EXISTING LIGHT CORRIDOR 3	14
15	EXISTING LIGHT	BOYS/GIRLS BATHROOM	L	Е	Е	20	1	1080	В	360	1	20	Е	Е	L	EXISTING LIGHT CORRIDOR 3	16
17		LIGHT CORRIDOR 2	L	Е	Е	20	1	500	С	250	1	20	3/4"		L	ELEVATOR CAR LIGHT/FAN	18
19		PIT/SHAFT LIGHT	L	3/4"		20	1	120	Α	250	1	20	3/4"		L	NEW ELEV. LOBBY LIGHT	20
21	EXISTING	WALK UP FREEZER	K	Е	E	20	2	1000	В		1	20				SPARE	22
23		" "							С	230	1	20	3/4"		L	EXISTING EMERGENCY LIGHTS GYM	24
25		SPARE				200	3		Α	1440	2	20	3/4"		L	EXISTING FIRE PANEL LIGHTS/GYM/MECH ROOM	26
27		" "							В							" "	28
29		" "							С		1	20	Е	E	$oxed{igspace}$	EXISTING BATHROOM	30
31		" "							Α		1	20	Е	Е	oxed	EXISTING BATHROOM	32
33	NEW INDOOR/	OUTDOOR DU-1/DAC-1	R		3/4"	20	2	1250	В		1	20	Е	E	$oxed{oxed}$	EXISTING BATHROOM	34
35		11 11						1250	C		1	20	Е	Е		EXISTING BATHROOM	36
													NOTES:				
				Α	В	С	T	OTAL						ALL MADE	LIO OI	IALL BE 2#12+#12G UNO	

1,000

0 2,160

26,128 DEMAND LOAD

72.52 DEMAND AMPACITY (A)

4,480 (1ST 10KVA @ 100%, REMAINING @ 50%)

1 # OF KITCH EQUIPMENT

CONN DEMAND DEMAND

PNL PNL LD(VA) FACTOR LOAD (VA)

0 100% 1,000 100% 0 125% 2,160 100%

- 0 125%

CONNECTED TOTAL (VA) 22,430

CONNECTED AMPACITY (A) 62.26

LOAD

(VA)

1,000

LIGHTING RECEPTACLES

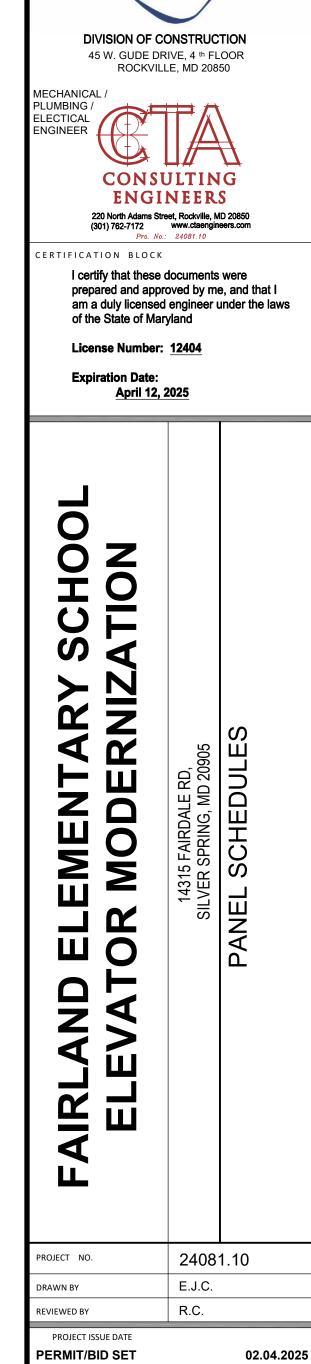
MECH EQUIP KITCHN EQPMNT.

EXISTING

LARGEST MOTOR

SUBLOADS (VA)

PNL



REV. ISSUE:

DRAWING STAMP

107A W EDMONSTON DRIVE

ROCKVILLE, MD 20852

(P) 301-605-7005 (C) 301-404-0449

MONTGOMERY

COUNTY PUBLIC

SCHOOLS

