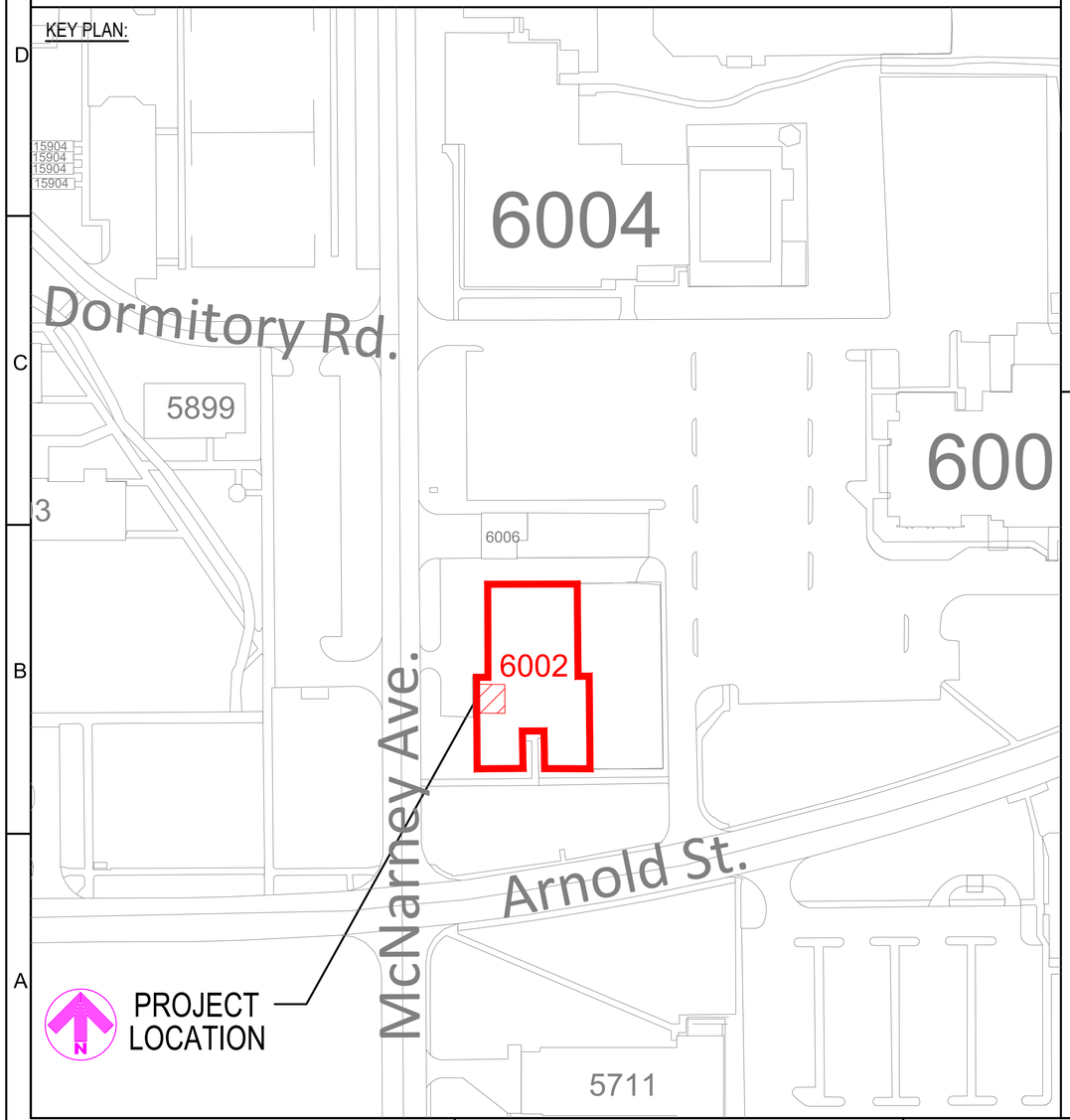
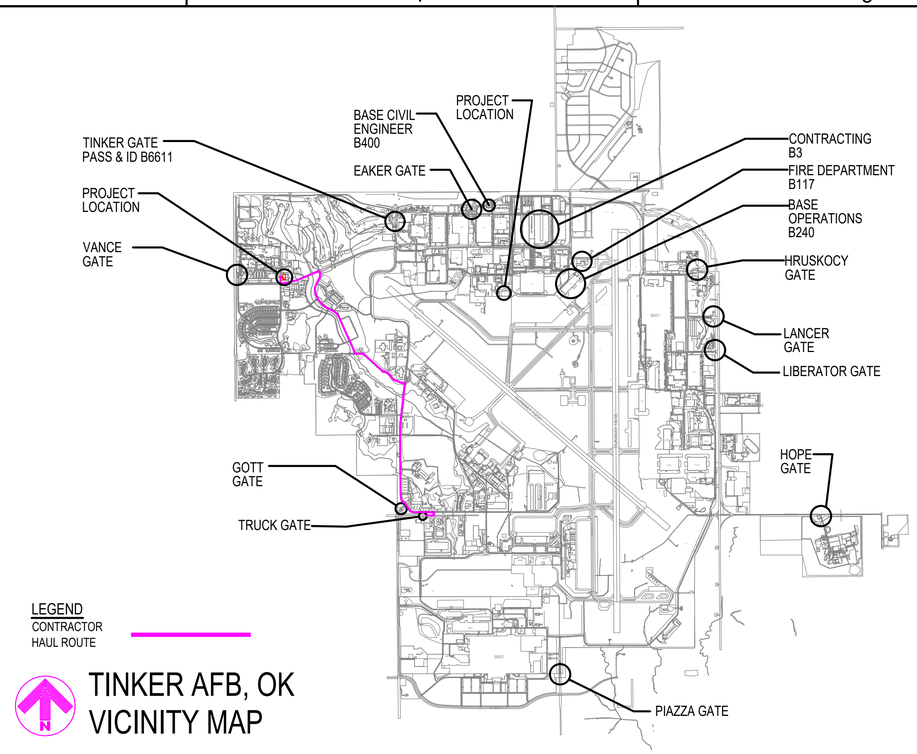
WWYK050751
REPAIR/REPLACE MAIN DISTRIBUTION & BRANCH PANEL BOARDS, B6002

KEY PLAN:





TINKER AFB, OK
VICINITY MAP

GENERAL NOTES:

1. BRAND NAMES: REFERENCE TO SPECIFIC BRAND NAMES OR COMPANIES IS FOR THE PURPOSE OF ESTABLISHING MINIMUM QUALITY STANDARDS, IDENTIFICATION AND GUIDANCE AND IS NOT INTENDED TO LIMIT SELECTION OF OTHER MANUFACTURERS THAT ARE EQUAL OR EXCEED THE SPECIFIED ITEMS IN TERMS OF PHYSICAL PROPERTIES, INCLUDING, COLOR RANGE, FINISH, DURABILITY, APPEARANCE, PERFORMANCE CHARACTERISTICS, AND OTHER FACTORS. OTHER PRODUCTS, MATERIALS, COLORS AND SYSTEMS, MAY BE SUBMITTED FOR EVALUATION AND APPROVAL/DISAPPROVAL BY THE CONTRACTING OFFICER.
2. THIS SET OF CONSTRUCTION DOCUMENTS SHALL BE CONSIDERED AS A WHOLE IN THAT THE GENERAL CONTRACTOR AND ALL THE SUB-CONTRACTORS ARE RESPONSIBLE FOR THE INFORMATION PRESENTED ON ALL SHEETS ON THE SET OF DRAWINGS AND ALL SECTIONS OF THE SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR ERECTING ALL CONSTRUCTION FENCING AND BARRICADES AS REQUIRED TO PROTECT CONSTRUCTION MATERIAL AND TO PREVENT ANY UNAUTHORIZED PERSONNEL FROM ENTERING THE CONSTRUCTION SITE.
4. ANY DAMAGE TO THE EXISTING GROUNDS OR FACILITIES CAUSED BY CONSTRUCTION TRAFFIC OR ANY CONSTRUCTION OPERATION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO MATCH OR EXCEED EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE GOVERNMENT.
5. ALL WORK NOTED & LOCATED IN THESE DOCS SHALL BE UNDERSTOOD BY THE CONTRACTOR TO REQUIRE ALL NEW LABOR & MATERIALS UNLESS SPECIFICALLY NOTED TO BE "EXISTING" OR "BY OTHERS".

PROJECT DRAWING INDEX

SEQ.	SHT.	SHEET TITLE
		GENERAL
1	G-101	GENERAL NOTES & VICINITY MAP
		DISCIPLINE
2	AD-101	ARCHITECTURAL DEMOLITION PLAN
3	A-101	ARCHITECTURAL PLAN
4	MD-101	MECHANICAL DEMOLITION PLAN
5	M-101	MECHANICAL PLAN
6	E-001	ELECTRICAL SYMBOLS AND ABBREVIATIONS
7	ED-101	ELECTRICAL DEMOLITION PLAN
8	E-101	ELECTRICAL PLAN
9	E-601	ELECTRICAL DEMO AND NEW WORK ONE LINE DIAGRAM

SIGNATURES

CORROSION ENGINEER: (CECE)	DATE:
CE OPERATIONS: (CECO)	DATE:
ZONE MANAGER:	DATE:
CONSTRUCTION MANAGEMENT: (CECE)	DATE:
FIRE DEPARTMENT: (CEFT)	DATE:
SAFETY:	DATE:
INDUSTRIAL HYGIENE:	DATE:
ENVIRONMENTAL:	DATE:
ASBESTOS EVALUATION:	DATE:
COMMUNICATIONS: (COMM)	DATE:
USING AGENCY:	DATE:
REVIEWED BY:	DATE:
REVIEWED BY:	DATE:
DESIGN MANAGER: (CECE)	DATE:
CHIEF DESIGN BRANCH: (CECE)	DATE:
CHIEF ENGINEER DIR: (CECE)	DATE:
BASE CIVIL ENGINEER: (CE)	DATE:

AFMC
AIR FORCE MATERIEL COMMAND
72 ABW CIVIL ENGINEER DIRECTORATE
TINKER AFB, OK

35% DESIGN

PROJECT INFORMATION
WWYK050751
REPAIR/REPLACE MAIN
DISTRIBUTION & BRANCH
PANEL BOARDS, B6002
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS
MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION
ISSUE DATE: 10JUN2025
DESIGN GROUP: TEPA-SRM
DESIGNED BY: C. BARBOZA
DRAWN BY: T. KISER
CHECKED BY: D. SHANNON
DESIGN FILE LOCATION:
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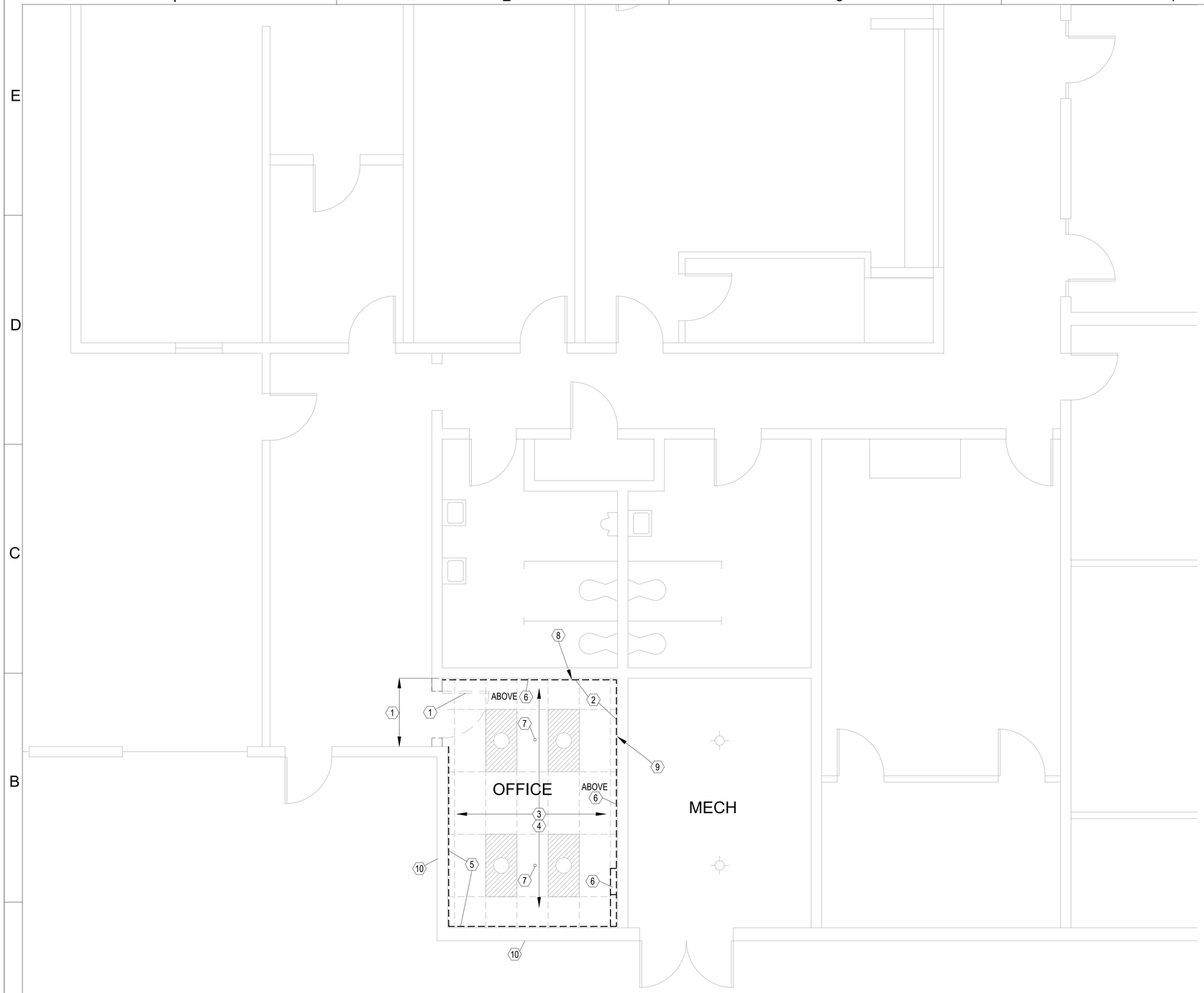
SHEET TITLE
GENERAL NOTES AND VICINITY MAP

SHEET NUMBER
G-101
SHEET 01 OF 09



1 AD-101 ARCHITECTURAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

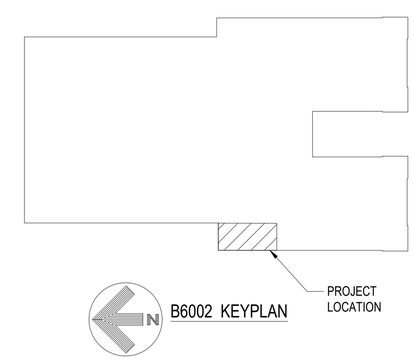
A. THIS DRAWING WAS PREPARED FROM EXISTING DRAWINGS AND LIMITED ACCESS FOR FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS FOR ACCURACY.

B. COORDINATE WITH USERS AND/OR BUILDING MANAGER FOR ANY HEATING OR COOLING OUTAGES PRIOR TO CONSTRUCTION.

C. COORDINATE FINAL LOCATION / MOUNTING HEIGHT OF WALL & DOOR MOUNTED EQUIPMENT PRIOR TO INSTALLATION.

DEMOLITION KEYED NOTES

1. DEMOLISH EXISTING WOOD DOOR, FRAME, AND WALL FOR INSTALLATION OF NEW DOOR.
2. DEMOLISH INNER LAYER OF GWB PANELS FROM CMU WALLS.
3. DEMOLISH FINISH FLOOR TO SUBSTRATE BELOW.
4. DEMOLISH ACT CEILING AND GRID INCLUDING LIGHT FIXTURES AND SUPPLY GRILL IN IT'S ENTIRETY - REFER ELECTRICAL AND MECHANICAL.
5. DEMOLISH GWB PANEL FROM INTERIOR METAL LINER.
6. DEMOLISH GWB PANELS, ENCLOSURE FRAMING, AND SHELVING AT EXISTING CONDUIT AND SAFETY SWITCH.
7. REMOVE EXISTING SPRINKLER HEAD FOR INSTALLATION OF NEW HEADS - REFER FIRE PROTECTION SOW.
8. EXISTING CMU WALL EXTENDS ABOVE EXISTING CEILING HEIGHT AND IS NOT FULL HEIGHT. (APPROXIMATELY 9'-0" +/- AFF)
9. EXISTING CMU WALL EXTENDS TO STRUCTURE (APPROXIMATELY 12'-6" +/- AFF)
10. EXISTING METAL PANEL ON METAL BUILDING STRUCTURE WITH INTERIOR METAL LINER - EXTENDS TO STRUCTURE (APPROXIMATELY 12'-6" +/- AFF)



B6002 KEYPLAN

AIR FORCE MATERIEL COMMAND
72 ABW CIVIL ENGINEER DIRECTORATE
TINKER AFB, OK

35% DESIGN

PROJECT INFORMATION
WWYK050751
REPAIR/REPLACE MAIN DISTRIBUTION & BRANCH PANEL BOARDS, B6002
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION
ISSUE DATE: 10JUN2025
DESIGN GROUP: TEPA-SRM
DESIGNED BY: M NOEL
DRAWN BY: T KISER
CHECKED BY: D SHANNON
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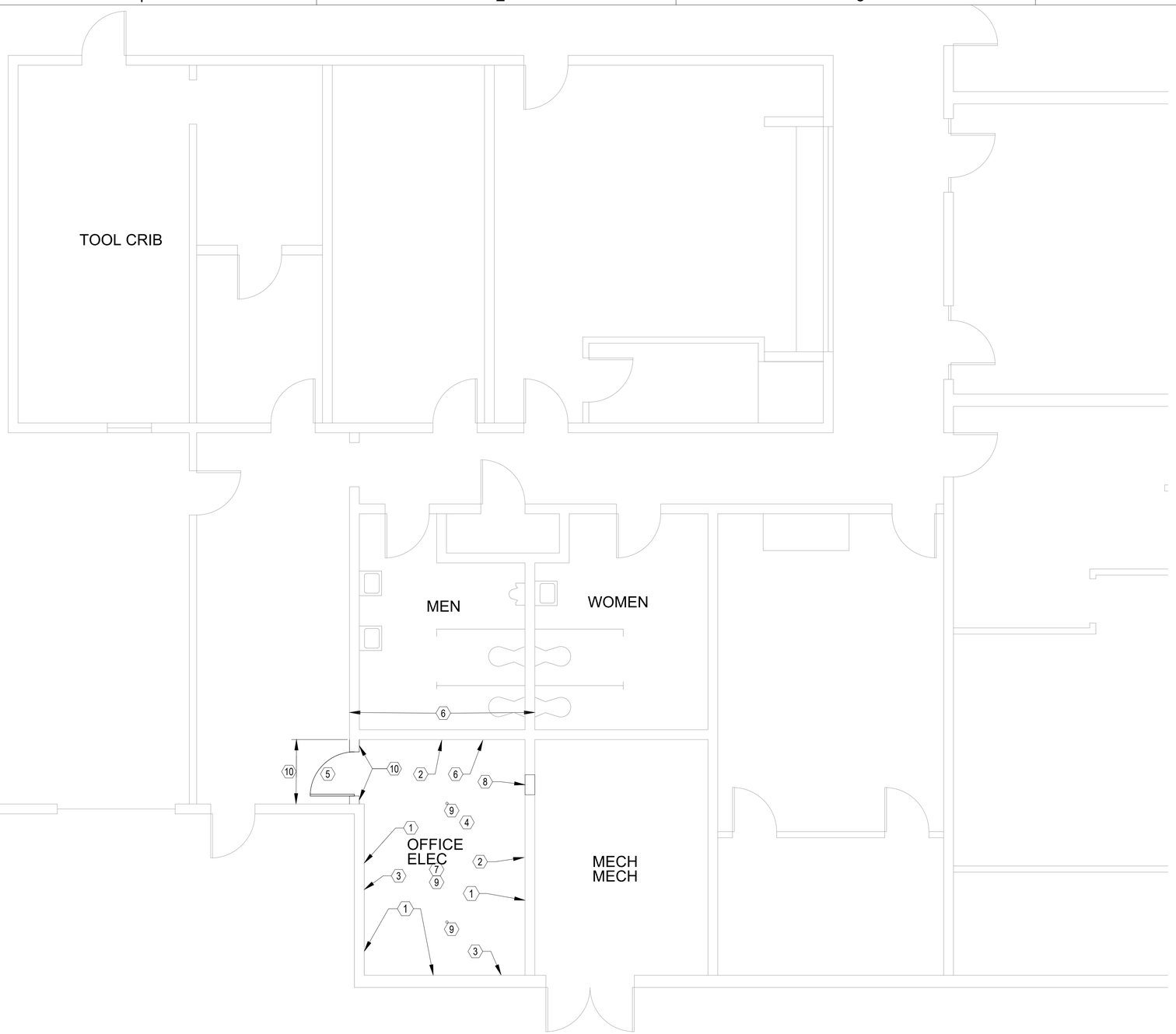
SHEET TITLE
ARCHITECTURAL DEMOLITION PLAN

SHEET NUMBER
AD-101

SHEET 02 OF 09



1
A-101
ARCHITECTURAL PLAN
SCALE: 1/4" = 1'-0"

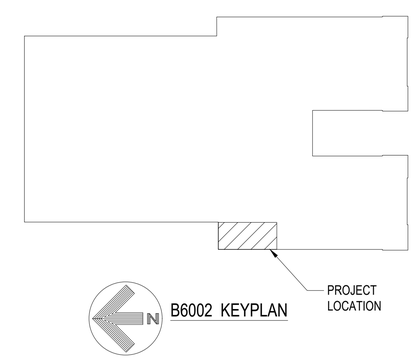
A. THIS DRAWING WAS PREPARED FROM EXISTING DRAWINGS AND LIMITED ACCESS FOR FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS FOR ACCURACY.

B. COORDINATE WITH USERS AND/OR BUILDING MANAGER FOR ANY HEATING OR COOLING OUTAGES PRIOR TO CONSTRUCTION.

C. COORDINATE FINAL LOCATION / MOUNTING HEIGHT OF WALL & DOOR MOUNTED EQUIPMENT PRIOR TO INSTALLATION.

KEYED NOTES

1. PRIME NEW GWB WALLS. PAINT ELECTRICAL ROOM GWB WALLS WITH EPOXY PAINT.
2. PATCH AND REPAIR CMU WALLS TO RECEIVE PAINT. PAINT WITH EPOXY PAINT.
3. PATCH AND REPAIR METAL LINER TO RECEIVE PAINT. PAINT WITH EPOXY PAINT.
4. PREP CONCRETE FLOOR AND CLEAN TO BARE CONCRETE. APPLY DENSIFIER TO CONCRETE FLOOR AS PER MANUFACTURER'S RECOMMENDATIONS.
5. NEW 3070 METAL DOOR AND FRAME. PAINT TO MATCH EXISTING ADJACENT DOOR FRAMES WITHIN BUILDING.
6. PROVIDE METAL FRAMING TO STRUCTURE ABOVE: 5/8" TYPE X GWB (ON ONE SIDE) ON 6" METAL FRAMING, 25 GA @ 16" O.C. WITH MINERAL WOOL BATT INSULATION.
7. PROVIDE NEW LIGHTING - REFER ELECTRICAL.
8. PROVIDE WALL MOUNTED SUPPLY GRILL - REFER MECHANICAL.
9. PROVIDE UP TURNED SPRINKLER HEADS - REFER FIRE PROTECTION SOW.
10. PROVIDE METAL FRAMING AT NEW DOOR LOCATION. 5/8" TYPE X GWB BOTH SIDES, ON 6" METAL FRAMING. 25GA AT 16" O.C. WITH MINERAL WOOL BATT INSULATION. EXTEND FRAMING AND GWB TO STRUCTURE ABOVE. PROVIDE DOUBLE STUDS AT EACH SIDE DOOR FRAME.



B6002 KEYPLAN

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72 ABW CIVIL ENGINEER DIRECTORATE
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35% DESIGN

PROJECT INFORMATION
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TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

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MANAGEMENT INFORMATION
ISSUE DATE:10JUN2025
DESIGN GROUP:TEPA-SRM
DESIGNED BY:M NOEL
DRAWN BY:T KISER
CHECKED BY:D SHANNON
DESIGN FILE LOCATION:
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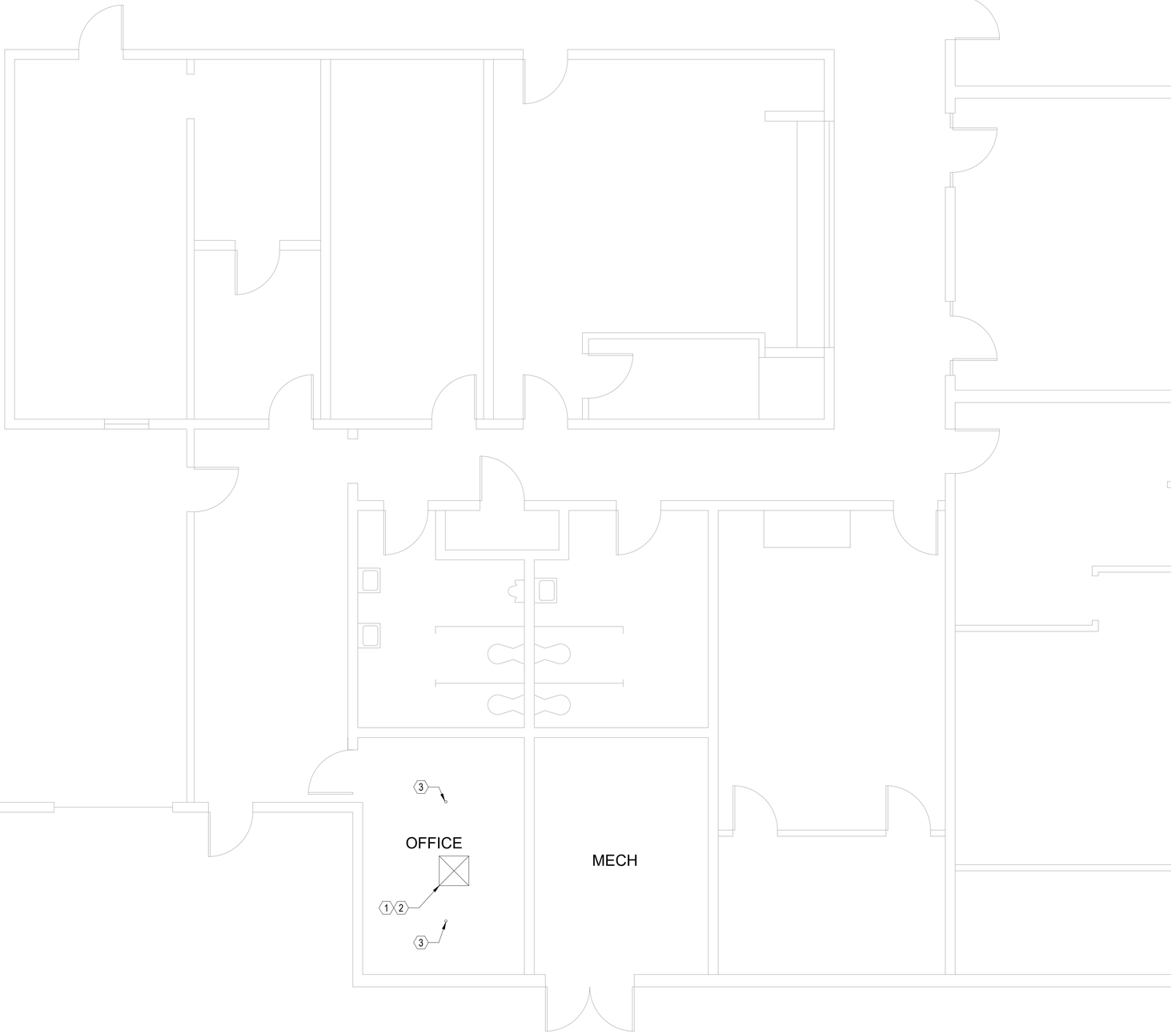
SHEET TITLE
ARCHITECTUAL PLAN

SHEET NUMBER
A-101

SHEET 03 OF 09



1
MD-101
MECHANICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

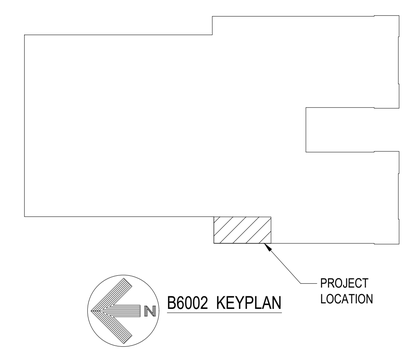
A. THIS DRAWING WAS PREPARED FROM EXISTING DRAWINGS AND LIMITED ACCESS FOR FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS FOR ACCURACY.

B. COORDINATE WITH USERS AND/OR BUILDING MANAGER FOR ANY HEATING OR COOLING OUTAGES PRIOR TO CONSTRUCTION.

C. COORDINATE FINAL LOCATION / MOUNTING HEIGHT OF WALL & DOOR MOUNTED EQUIPMENT PRIOR TO INSTALLATION.

DEMOLITION KEYED NOTES

1. CONTRACTOR SHALL PERFORM A PRE-TAB OF THE EXISTING SYSTEM AND REPORT EXISTING CONDITIONS TO GOVERNMENT.
2. DEMOLISH EXISTING SUPPLY DIFFUSER AND DISCONNECT FROM EXISTING DUCTWORK.
3. EXISTING SPRINKLER HEADS. REMOVE HEADS - REF FIRE PROTECTION SOW.



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PROJECT INFORMATION:
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REPAIR/REPLACE MAIN DISTRIBUTION & BRANCH PANEL BOARDS, B6002
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

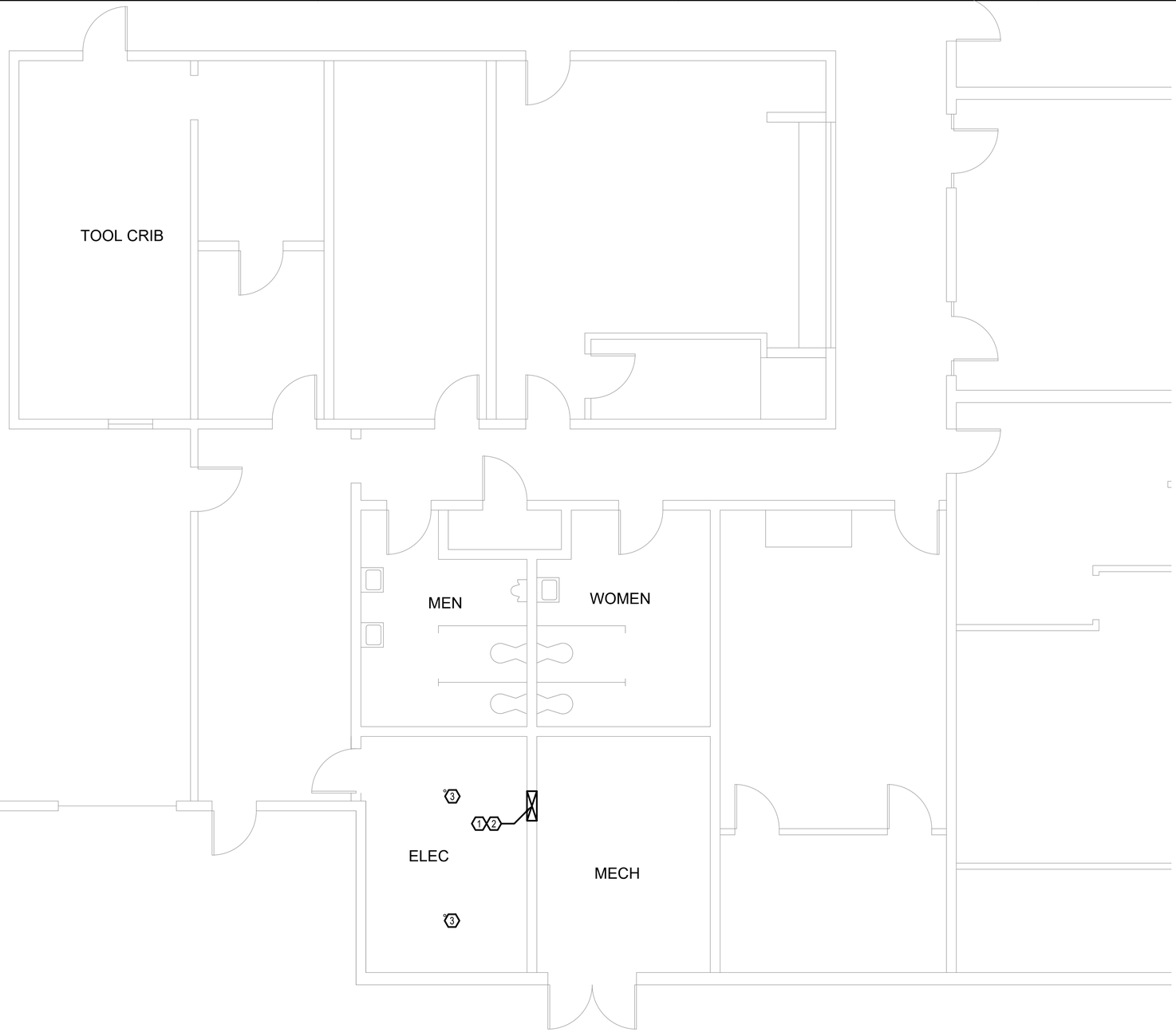
MANAGEMENT INFORMATION

ISSUE DATE: 10JUN2025
DESIGN GROUP:TEPA-SRM
DESIGNED BY:Q GAUNA
DRAWN BY:T KISER
CHECKED BY:D SHANNON
DESIGN FILE LOCATION:
Engr\Design\2000s\2005\200507511\0_Support\0_3_Drawings\Model

SHEET TITLE
MECHANICAL DEMOLITION PLAN

SHEET NUMBER
MD-101

SHEET 04 OF 09



1 / M-101 MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

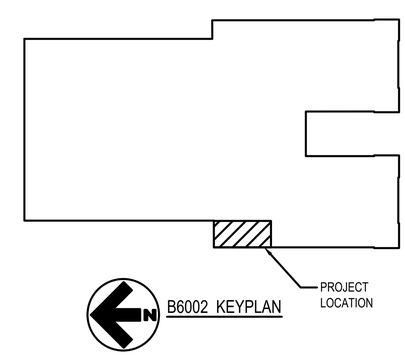
A. THIS DRAWING WAS PREPARED FROM EXISTING DRAWINGS AND LIMITED ACCESS FOR FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS FOR ACCURACY.

B. COORDINATE WITH USERS AND/OR BUILDING MANAGER FOR ANY HEATING OR COOLING OUTAGES PRIOR TO CONSTRUCTION.

C. COORDINATE FINAL LOCATION / MOUNTING HEIGHT OF WALL & DOOR MOUNTED EQUIPMENT PRIOR TO INSTALLATION.

KEYED NOTES

1. PROVIDE & INSTALL NEW WALL MOUNTED SUPPLY AIR DIFFUSER AND CONNECT TO EXISTING DUCTWORK.
2. CONTRACTOR SHALL PERFORM A FINAL TAB OF THE SYSTEM AND REPORT CONDITIONS TO THE GOVERNMENT.
3. PROVIDE NEW UPRIGHT HEADS AT EXISTING SPRINKLER SYSTEM. REF FIRE PROTECTION SOW.



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Engr\Design\2000s\2005\200507510_Support\0_3_Drawings\Model

SHEET TITLE: MECHANICAL PLAN

SHEET NUMBER: M-101

SHEET 05 OF 09

ELECTRICAL SYMBOLS LEGENDS AND ABBREVIATIONS

GENERAL NOTES:

(APPLICABLE TO ALL ELECTRICAL SHEETS)

1. EQUIPMENT INTERRUPTING CAPACITIES SPECIFIED IN THE CONTRACT DOCUMENTS ARE BASED UPON EQUIPMENT CHARACTERISTICS AND IMPEDANCES SHOWN ON THE DRAWINGS. IF ACTUAL INSTALLED EQUIPMENT DEVIATES FROM THESE CHARACTERISTICS OR HAS LOWER IMPEDANCES. THE CONTRACTOR SHALL INCREASE THE INTERRUPTING CAPACITIES OF ALL ITEMS ON THE LOAD SIDE OF THE DEVIANT EQUIPMENT IN DIRECT PROPORTION TO THE CHANGED CHARACTERISTICS. INTERRUPTING CAPACITIES SHALL NOT BE REDUCED TO VALUES LESS THAN THOSE REQUIRED BY THE CONTRACT DOCUMENTS.
2. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
3. CONTROL WIRING P&ID'S FOR MECHANICAL EQUIPMENT ARE NOT SHOWN ON THESE SHEETS.
4. RISER AND ONE-LINE DIAGRAMS ARE MEANT TO SHOW ELECTRICAL RELATIONSHIPS FOR EQUIPMENT, AND THEREFORE MAY NOT INCLUDE ALL REQUIRED EQUIPMENT DEVICES, AND ACCESSORIES.

POWER SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	RECEPTACLE, DUPLEX, 20A, 250V, GROUNDING 2W+G, NEMA 5-20R
C	RECEPTACLE, DUPLEX, SERVING COMPUTER LOAD. 20A, 250V, GROUNDING 2W+G RECEPTACLE, NEMA 5-20R
F	RECEPTACLE, DUPLEX, FLOOR MOUNTED, FLUSH, 20A, 250V, GROUNDING 2W+G NEMA 5-20R.
	RECEPTACLE, DUPLEX, CEILING MOUNTED, 20A, 250V, GROUNDING 2W+G, NEMA 5-20R
	240 VOLT 20 AMP RECEPTACLE
	RECEPTACLE, DUPLEX, SPECIAL PURPOSE
	RECEPTACLE, QUADRAPLEX
	RECEPTACLE, SPECIAL PURPOSE
	SURFACE RECEPTACLE STRIP
C	RECEPTACLE, CLOCK
J	JUNCTION BOX, ABOVE CEILING
C J	JUNCTION BOX, WALL MOUNTED, SERVING COMPUTER LOAD.
W	WIREMOLD
$	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), SINGLE-POLE, MOUNT 48" AFF
$2	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), DOUBLE-POLE, MOUNT 48" AFF
$3	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), THREE-WAY, SPDT. MOUNT 48" AFF
$4	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), FOUR-WAY, SPDT. MOUNT 48" AFF
$DM	SWITCH, DIMMER, 120V., 1500 WATT. MOUNT 48" AFF
$OS	SWITCH, OCCUPANCY SENSOR
S	SWITCH, PULL SWITCH, CEILING MOUNTED
	BRANCH CIRCUIT HOME RUN WITH NEUTRAL, PHASE AND EQUIPMENT GROUND RESPECTIVELY
EL-5	BRANCH CIRCUIT HOME RUN IDENTIFIER
T	TRANSFORMER, DRY TYPE
	SWITCH, DISCONNECT
	COMBINATION STARTER/DISCONNECT WITH HOA SWITCH-COORDINATE WITH MECH. CONTRACTOR.

POWER SYMBOLS LEGEND (CONTINUED)

SYMBOL	DESCRIPTION
	PANELBOARD, SURFACE MOUNTED
	PANELBOARD, RECESSED
	RACEWAY, ABOVE FLOOR
	RACEWAY, RISER UP
	RACEWAY, RISER DOWN
M 1/20HP	MOTOR W/HORSEPOWER
T	THERMOSTAT BY MECHANICAL CONTRACTOR
	CEILING FAN
	TELEPHONE RECEPTACLE, WALL MOUNTED
	DATA RECEPTACLE, WALL MOUNTED
	TELEPHONE/DATA RECEPTACLE, WALL MOUNTED
	BELL
S	SPEAKER, CEILING MOUNTED
M	MICROPHONE, CEILING MOUNTED
	SPEAKER CONTROL
	SOUND CABINET
	AUDIO/VISUAL PROJECTOR
TV	CABLE TV OUTLET
M	EXHAUST FAN
VFD	VARIABLE FREQUENCY DRIVER
	SYSTEM FURNITURE POINT IN WALL
	FLOOR BOX WITH RECEPTACLE AND DATA OUTLET

LIGHTING SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	FLUORESCENT/LED, SURFACE OR PENDANT, RECESSED CEILING MOUNTED
	FLUORESCENT/LED, WALL MOUNTED
	NIGHT LIGHT, FLUORESCENT/LED FIXTURE WITH INTERGAL EMERGENCY BALLAST
	CFL/HID/LED FIXTURE, SURFACE OR PENDANT
	CFL/HID/LED FIXTURE, RECESSED CEILING MOUNTED
	CFL/HID/LED FIXTURE, WALL MOUNTED
	EXIT SIGN, LIGHTED, SURFACE OR PENDANT, CEILING MOUNTED W/LIGHTED FACE AND DIRECTIONAL ARROW.
	EXIT SIGN, LIGHTED, WALL MOUNTED.
	EMERGENCY LIGHT, 2 LAMPS, BATTERY POWERED
	BRANCH CIRCUIT HOME RUN

ONE-LINE & CONTROL SCHEMATIC LEGEND

SYMBOL	DESCRIPTION
	SCHEMATIC, CIRCUIT CONNECTIONS
	SCHEMATIC CIRCUIT
	ELECTRICAL BUSS
	SEPARABLE (PLUG-IN) CONNECTOR OR CONNECTION FOR DRAWOUT ASSEMBLIES
	CABLE OR WIRE
	SWITCH, DISCONNECT, FUSED, LOAD BREAK. FUSE AMPERE RATING [A] AND FUSE TYPE SHOWN NEXT TO SYMBOL
	TRANSFORMER, POWER, KVA RATING, WINDING VOLTAGES AND CONNECTIONS ARE SHOWN NEXT TO SYMBOL
	TRANSFORMER, CURRENT, TURNS RATIO, SHOWN NEXT TO SYMBOL
	GROUNDING CONNECTION. WHEN USED WITH TRANSFORMER WINDING SYMBOL IT INDICATES A NEUTRAL GROUNDING CONNECTION (ON SECONDARY SIDE ONLY)
D	DELTA CONNECTED
Y	WYE CONNECTED
	GROUNDED WYE WINDING CONNECTION
	RELAY OR CONTACTOR CONTACTS
	CIRCUIT BREAKER, MOLDED CASE, TRIP CURRENT [A] AND QUANTITY OF POLES [P] SHOWN NEXT TO SYMBOL
1200A 3P	SWITCH, DISCONNECT, NON-FUSED, LOAD BREAK. CONTINUOUS CURRENT RATING [A] AND QUANTITY OF POLES [P] SHOWN NEXT TO SYMBOL
	FUSE, AMPERE RATING [A] AND FUSE TYPE SHOWN NEXT TO SYMBOL
	MOTOR THERMAL OVERLOAD PROTECTOR
	INTEGRAL PHOTOELECTRIC CELL AND RELAY (PHOTOCONTROL)
M	WATTHOUR METER
C	CONTACTOR OR RELAY COIL. LETTER(S) INSIDE OF SYMBOL MATCH CONTACTS CONTROLLED
	SURGE ARRESTER, VALVE TYPE ARRESTER KV RATING SHOWN NEXT TO SYMBOL
	EQUIPMENT ENCLOSURE
SPD	SURGE PROTECTION DEVICE
GFP	GROUND FAULT PROTECTION

GROUNDING LEGEND

SYMBOL	DESCRIPTION
B	CONDUCTOR, BARE, UON
	GROUNDING CONNECTION, COUNTERPOISE TO GROUND ROD.

FIRE DETECTION SYMBOLS LEGEND

SYMBOL	DESCRIPTION
FCP	FIRE ALARM CONTROL PANEL
F	FIRE ALARM MANUAL PULL STATION
FSA	REMOTE ANNUNCIATOR PANEL
	FIRE ALARM SIGNALING DEVICE, VISUAL ONLY
	FIRE ALARM SIGNALING DEVICE, AUDIO/VISUAL, HORN AND LIGHT (1 ASSEMBLY)
	FIRE ALARM SIGNALING DEVICE, BELL
FTR	FIRE ALARM TRANSMITTER
135°	FIRE HEAT DETECTOR, W/ TEMPERATURE OR RATE OF RISE.
	SMOKE DETECTOR
	SPRINKLER SYSTEM VALVE TAMPER SWITCH
	SPRINKLER SYSTEM FLOW SWITCH
	FIREMANS TELEPHONE
ESR	ELEVATOR RECALL

SYMBOL MODIFIERS

SYMBOL	DESCRIPTION
AC	DEVICE MOUNTED ABOVE COUNTER TOP
AV	AUDIBLE AND VISUAL
C	RECEPTACLE SERVING COMPUTER LOAD.
E	EXISTING
F	FIXED TEMPERATURE
GFI	GROUND FAULT CIRCUIT INTERRUPTER
N	NEW
NL	NIGHT LIGHT
R	ITEM OR DEVICE RECESSED INTO MOUNTING SURFACE
RF	RADIO FREQUENCY
WP	WEATHERPROOF
WP	WATER PROOF

ABBREVIATIONS

A	AMPERES OR TRIP AMPERES
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	SYMMETRICAL AMPS INTERRUPTING CAPACITY
AWG	AMERICAN WIRE GAUGE
A/R	AS REQUIRED
ARR.	ARRESTOR
BLDG	BUILDING
BRKT	BRACKET
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CL	CURRENT LIMITING
CO	CONDUIT ONLY
CTL	CONTROL
DC	DIRECT CURRENT
D.T.C.	DATA TERMINAL CABINET
EMCS	ENERGY MONITORING AND CONTROL SYSTEM
FACP	FIRE ALARM CONTROL PANEL
FT	FOOT, FEET
GFCI	GROUND FAULT CIRCUIT INTERRUPTER, 5MA PERSONNEL PROTECTION UNLESS OTHERWISE NOTED.
GRD	GROUND
HZ	HERTZ
IAW	IN ACCORDANCE WITH
IG	ISOLATED GROUND
IN	INCH, INCHES
IR	INFRARED
KV	KILOVOLTS
KVA	KILOVOLT AMPERES
KVAR	KILOVOLT AMPS REACTIVE
KWH	KILOWATT HOURS
L-L	LINE TO LINE
L-N	LINE TO NEUTRAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MTD	MOUNTED
MTG	MOUNTING
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT	NEUTRAL
N.O.	NORMALLY OPEN
NLT	NOT LESS THAN
NMT	NOT MORE THAN
OH	OVERHEAD
PAS	PUBLIC ADDRESS SYSTEM
PE	PHOTOELECTRIC
PH	PHASE
PLCS	PLACES
PNL	PANELBOARD
PVC	POLYVINYL CHLORIDE ELECTRICAL RACEWAY USED ONLY U.G., CARLON OR EQUIVALENT
RC	RIGID STEEL CONDUIT
REF	REFERENCE
REQ'D	REQUIRED
RGC	RIGID GALVANIZED STEEL CONDUIT
RM	ROOM
RMC	RIGID METALIC CONDUIT
SHT	SHEET
SOB	STANDOFF BRACKET
SPACE	SPACE(S) ONLY (NO BREAKER DEVICE)
SPARE	SPARE BREAKER OR DEVICE
SPDT	SINGLE-POLE, DOUBLE-THROW
SPECS	CONTRACT SPECIFICATIONS
SPST	SINGLE-POLE, SINGLE-THROW
S/N	SOLID NEUTRAL
TB	TELEPHONE BACKBOARD
TYP	TYPICAL
UG	UNDERGROUND
UL	LISTED BY UNDERWRITER'S LABORATORIES
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT AMPERES
W	WATT
WH	WEATHERHEAD
W/	WITH
Ø	PHASE
2W+G	CIRCUIT TYPE
3W+G	CIRCUIT TYPE
4W+G	CIRCUIT TYPE

SYMBOL NOTES

1. THESE SYMBOLS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS.
2. ALL SYMBOLS ARE NOT NECESSARILY USED IN THE DRAWINGS FOR THIS PROJECT. LISTING OF SYMBOLS DOES NOT IMPLY THAT ALL SYMBOLS ARE USED IN THE CONTRACT DRAWINGS.
3. COLORS FOR ALL OUTLETS AND SWITCHES SHALL BE AS SHOWN ON ARCHITECTURAL PLANS.
4. ALL MOUNTING HEIGHTS SHOWN IN SYMBOL LEGEND SHALL BE AS PER TAS/ADA REQUIREMENTS UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS.
5. BRANCH CIRCUIT NUMBERS MAY BE SHOWN NEXT TO SYMBOLS IN MULTIWIRE CIRCUITS.
6. EQUIPMENT IDENTIFIERS, MATCHING EQUIPMENT SCHEDULES, ARE DISPLAYED ATTACHED TO SYMBOLS BY LEADER ARROWS, UON.
7. SYMBOL ORIENTATION DOES NOT IMPLY DEVICE OR EQUIPMENT ORIENTATION, UNLESS NOTED AS SUCH. SEE REFLECTED CEILING PLANS FOR LIGHT FIXTURE POSITIONS AND ORIENTATIONS.
8. SYMBOL SIZE DOES NOT IMPLY EQUIPMENT SIZE, UON.
9. LOWER CASE LETTER IN POSITION "X" INDICATES FIXTURES CONTROLLED BY SAME LETTER.
10. PLAN SYMBOLS USE THE FOLLOWING LINE TYPE CONVENTION AND ARE REPRESENTED AS FOLLOWS:
    - LINETYPE, DENOTES EXISTING TO REMAIN
    - LINETYPE, DENOTES EXISTING TO BE DEMOLISHED
    - LINETYPE, DENOTES NEW U.G. OR CONCEALED CONSTRUCTION
    - LINETYPE, DENOTES NEW CONSTRUCTION
    - LINETYPE, DENOTES LIGHTING SWITCHLEG

AIR FORCE MATERIEL COMMAND
72 ABW CIVIL ENGINEER DIRECTORATE
TINKER AFB, OK

35% DESIGN

PROJECT INFORMATION:
WWYK050751
REPAIR/REPLACE MAIN DISTRIBUTION & BRANCH PANEL BOARDS, B6002
TINKER AIR FORCE BASE, OKLAHOMA

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DRAWN BY: T KISER
CHECKED BY: D SHANNON
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ELECTRICAL SYMBOLS AND ABBREVIATIONS

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E-001
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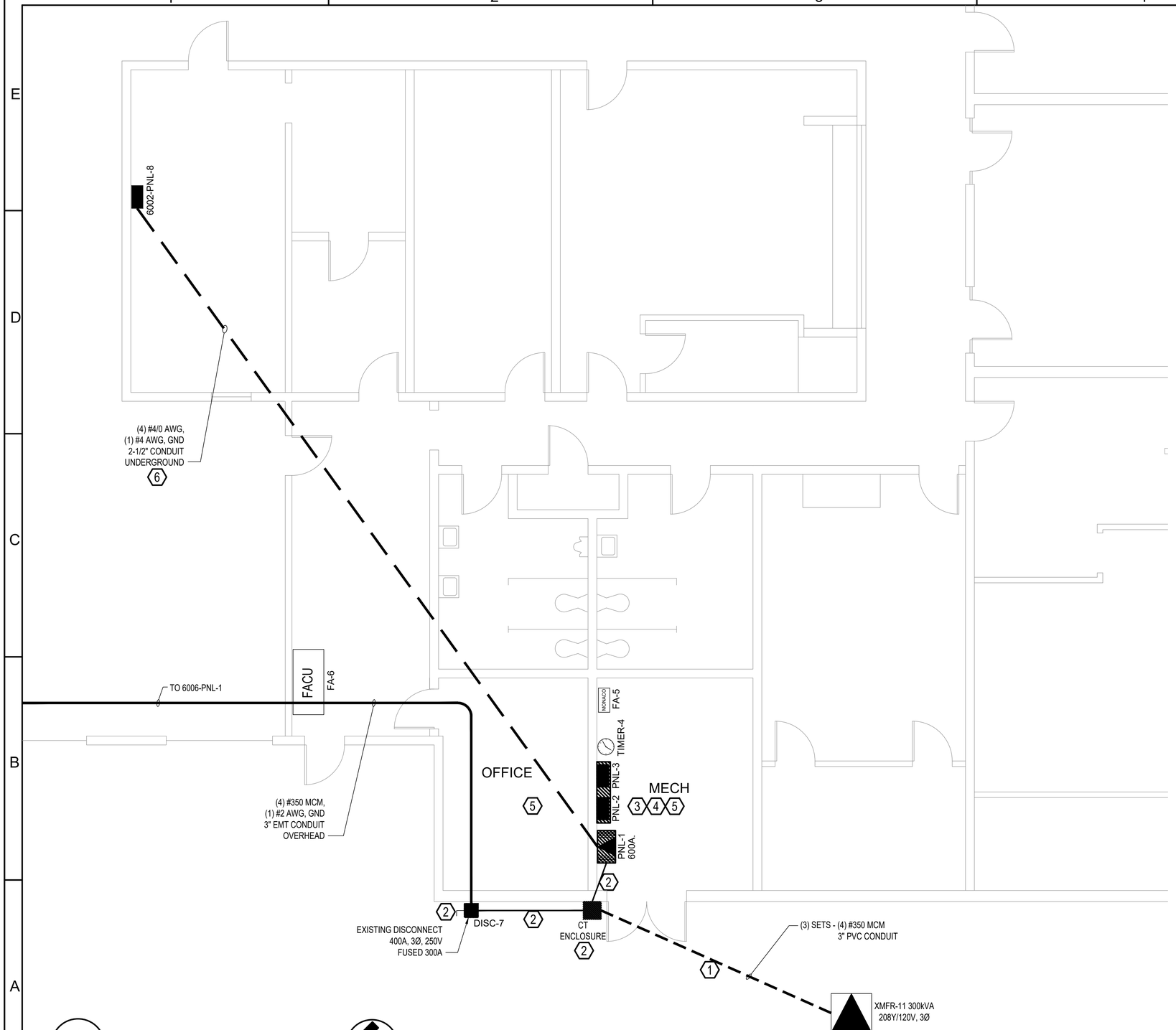


1 ED-101 ELECTRICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

DEMOLITION GENERAL NOTES

A. ALL INFORMATION AND GENERAL ARRANGEMENTS SHOWN ON DRAWINGS ARE DIAGRAMMATIC AND SHOW DESIGN INTENT INFORMATION ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO DEMOLITION AND CONSTRUCTION.

B. CONTRACT DOCUMENTS WERE PREPARED FROM FIELD SURVEYS, THEY ARE NOT INTENDED TO DEPICT UNFORESEEN CONDITIONS THAT MAY ADVERSELY AFFECT THE ELECTRICAL SYSTEM DEMOLITION OR INSTALLATION. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO STARTING ANY WORK.

C. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND QUANTITIES OF EXISTING ELECTRICAL FIXTURES, EQUIPMENT, DEVICES, AND COMPONENTS AFFECTED BY THE PROJECT WORKS INCLUDED BUT NOT LIMITED TO ELECTRICAL PANELBOARDS, DISCONNECTS, RECEPTACLES, LIGHT FIXTURES, SWITCHES, CABLES, CONDUITS, AND RACEWAYS, ETC THAT ARE AFFECTED BY THIS RENOVATION WORKS.

D. CONTRACTOR SHALL PROVIDE AN ADEQUATE CONSTRUCTION BARRIER TO PROTECT ALL ADJACENT AREAS FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION.

E. ANY ELECTRICAL FIXTURE, DEVICE, EQUIPMENT AND COMPONENTS ENCOUNTERED DURING THE DEMOLITION IN AREAS AFFECTED BY THE RENOVATION WORK (INCLUDING THOSE NOT SHOWN ON THE DRAWINGS) SHALL BE PROTECTED FROM DAMAGE DURING THE DEMOLITION AND CONSTRUCTION PHASES OF WORK.

F. ALL DEMOLISHED EQUIPMENT SHALL REMAIN PROPERTY OF THE US GOVERNMENT. CONTRACTOR SHALL CONSULT WITH CONTRACTING OFFICER FOR DIRECTION ON PROPER DISPOSAL OR STORAGE OF ALL DEMOLISHED EQUIPMENT.

G. COORDINATE ALL SHUTDOWNS AND REQUIRED WORK IN EACH SPACE WITH THE USER/GOVERNMENT A MINIMUM OF FOUR WEEKS PRIOR TO STARTING ANY WORK.

H. COORDINATE WITH OTHER TRADES FOR ADDITIONAL DEMOLITION WORK REQUIRED WITHIN RENOVATED AREA.

DEMOLITION KEYED NOTES

1. FEEDERS WILL BE DISCONNECTED, REMOVED AND REINSTALLED AT NEW LOCATION. NEW TRENCH WILL BE REQUIRED. COORDINATE WITH POWER UTILITY COMPANY (OG&E) FOR DE-ENERGIZE / DISCONNECTION OF THE CONDUCTORS.

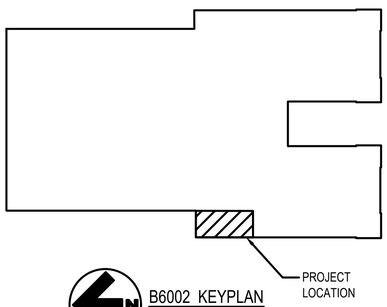
2. THE DISCONNECT SWITCH DISC-7, CT ENCLOSURE AND ALL INTERIOR AND EXTERIOR CONDUITS WILL BE REMOVED TO THE NEAREST JUNCTION BOX OR COUPLING INSIDE THE BUILDING. CONDUCTORS MUST BE PROTECTED FROM PHYSICAL DAMAGE DURING CONSTRUCTION PROJECT.

3. BRANCH CIRCUITS MUST BE LABELED AND REMOVED FOR FURTHER RECONNECTION TO THE NEW PANELBOARDS.

4. EXISTING TIMERS AND/OR STARTERS REMAIN IN PLACE.

5. REMOVE EXISTING LIGHT FIXTURES IN THE OFFICE AND MECHANICAL ROOM.

6. CONDUIT AND CABLE FOR PANEL 6002-PNL-8, CONDUIT TO REMAIN ABANDONED IN PLACE, CABLE TO BE CUT BACK FLUSH WITH FLOOR AND REMAIN ABANDONED IN PLACE.



B6002 KEYPLAN

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TINKER AFB, OK

35% DESIGN

PROJECT INFORMATION
WWYK050751
REPAIR/REPLACE MAIN DISTRIBUTION & BRANCH PANEL BOARDS, B6002
TINKER AIR FORCE BASE, OKLAHOMA

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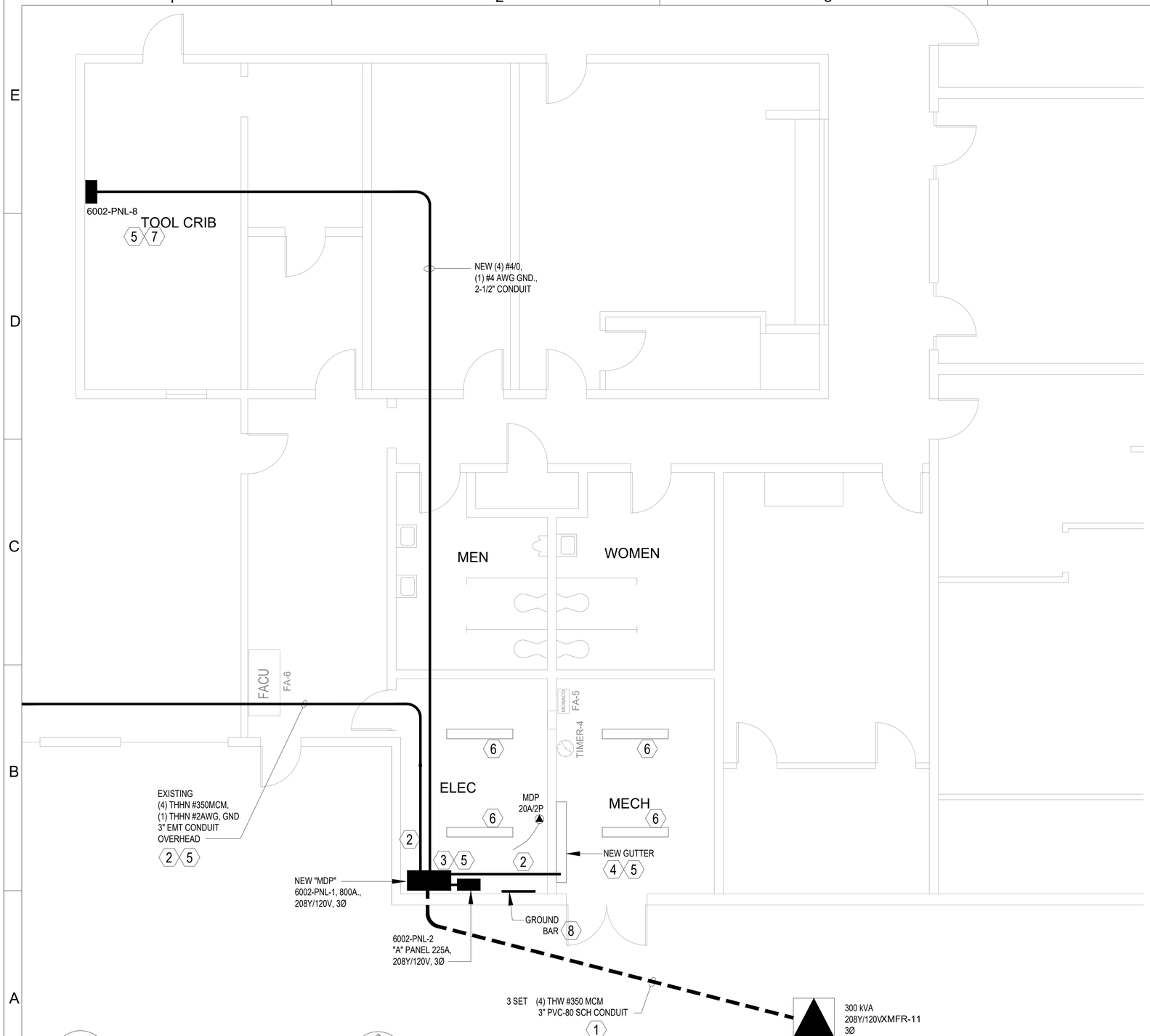


1
E-101
ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

A. CONTRACTOR MUST VERIFY THE ELECTRICAL FIELD REQUIREMENTS AND INSTALL THE NEW EQUIPMENT IN A NEAT AND WORKMANSHIP MANNER PER CODE, UFC SPECIFICATIONS AND TAFB ELECTRICAL STANDARDS.

B. COORDINATE WITH USERS AND/OR BUILDING MANAGER FOR ANY POWER OUTAGES, UTILITY DISCONNECT OR UNDERGROUND EXCAVATION PRIOR TO CONSTRUCTION.

C. COORDINATE FINAL LOCATION / MOUNTING HEIGHT OF WALL MOUNTED DEVICES AND CONTROL EQUIPMENT PRIOR INSTALLATION.

D. CONTRACTOR SHALL REPLACE EXISTING CONDUCTORS, CONDUITS, SUPPORTS, AND ANY OTHER ASSOCIATED COMPONENT WITH WEATHERPROOF MATERIALS.

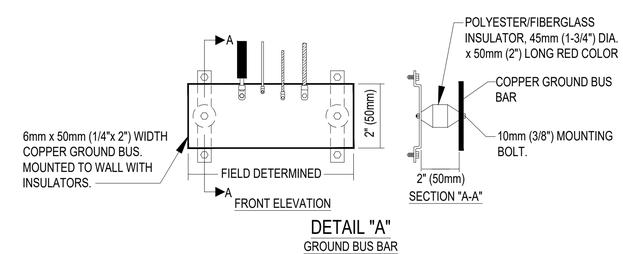
E. REFER TO MECHANICAL FOR ADDITIONAL INFORMATION. VERIFY ALL POWER CONNECTIONS AND INSTALLATIONS REQUIREMENTS WITH MANUFACTURER'S PRIOR TO ROUGH-IN.

F. NEW CIRCUIT BREAKERS SHALL MATCH EXISTING MANUFACTURER BRAND AND SHORT CIRCUIT RATINGS OF EXISTING PANELBOARDS.

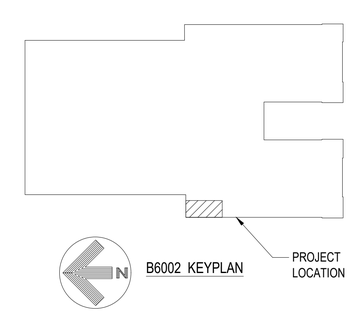
G. CONTRACTOR SHALL TRACE ALL EXISTING TO REMAIN CIRCUITS. ANY UN-USED CIRCUITS SHALL BE SWITCHED TO 'OFF' POSITION AND LABELED AS 'SPARE'. THE CIRCUIT DIRECTORIES MUST BE UPDATED FOR ALL PANELS INVOLVED IN THE PROJECT.

KEYED NOTES

1. NEW FEEDER CONDUCTORS WILL BE INSTALLED BETWEEN UTILITY TRANSFORMER AND NEW PANELBOARD. COORDINATE WITH POWER UTILITY COMPANY (OG&E) FOR RECONNECTION.
2. CONTRACTOR WILL EXTEND THE BRANCH CIRCUITS AND RECONNECT THE 3" CONDUIT THAT WAS REMOVED BACK TO NEAREST JUNCTION BOX OR COUPLING, SEE KEYED NOTE 2, SHEET ED-101, TO NEW "MDP" PANELBOARD.
3. PANELBOARD MOUNTED ON CONCRETE PAD THAT FEEDS THE CARWASH IN THE NEW ELECTRICAL ROOM.
4. THE NEW WIREWAY ELECTRICAL GUTTER WILL BE INSTALLED IN THE SAME LOCATION. EXISTING CIRCUITS AND EQUIPMENT (TIMERS, STARTERS, DISCONNECTS) WILL BE RECONNECTED.
5. CONTRACTOR MUST VERIFY FUNCTIONALITY OF THE EQUIPMENT WHEN PROJECT IS COMPLETED (ROTATION AND CONTINUITY).
6. NEW LIGHTING FIXTURES WILL BE INSTALLED IN THE SAME LOCATION AS FIXTURES WITH INTEGRAL BATTERY BACKUP WILL BE INSTALLED NEXT TO THE EXIT DOORS.
7. OVERHEAD SERVICE FOR PANELBOARD "B", CONTRACTOR TO PROVIDE AND INSTALL NEW EMT CONDUIT AND CONDUCTORS AS NEEDED.
8. CONTRACTOR WILL PROVIDE AND INSTALL NEW BUILDING ELECTRICAL SYSTEM GROUNDING BUS BAR PER CODE, SEE DETAIL "A" THIS SHEET.



DETAIL "A"
GROUND BUS BAR



B6002 KEYPLAN

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TINKER AFB, OK

35% DESIGN

PROJECT INFORMATION:
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PANEL BOARDS, B6002
TINKER AIR FORCE BASE, OKLAHOMA

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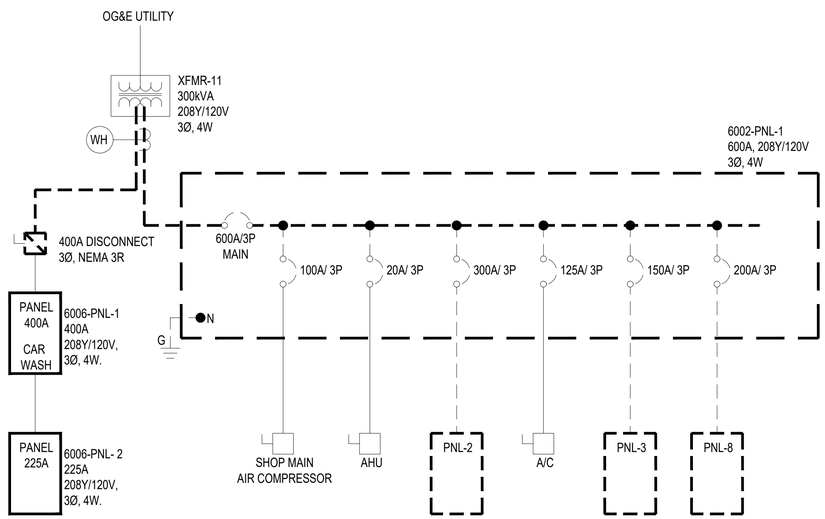
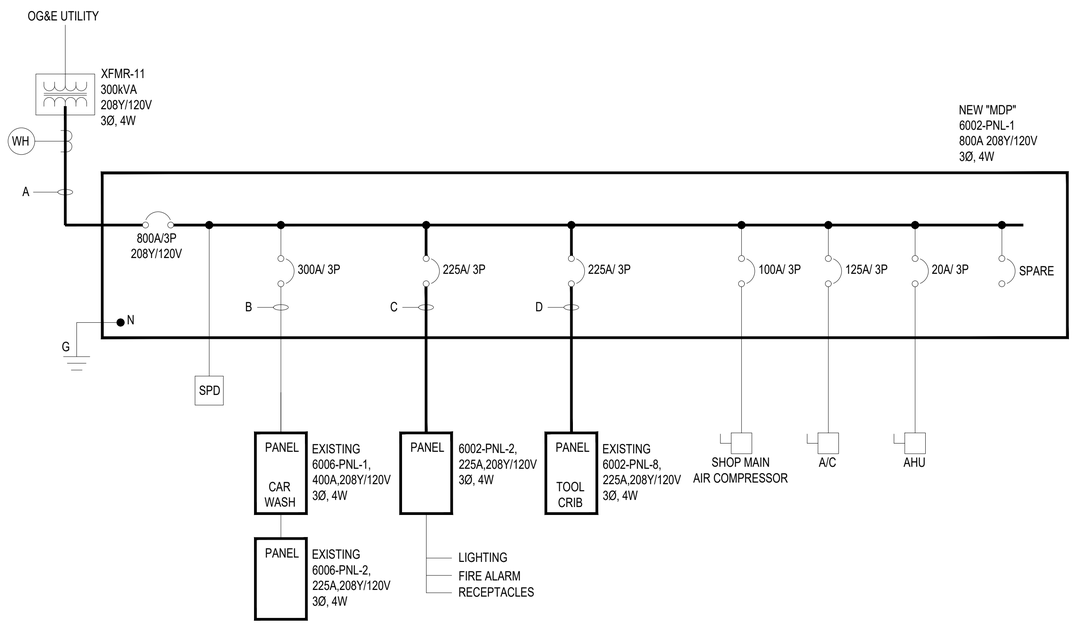


ONE-LINE DEMO OF EXISTING ELECTRICAL PANELS



ONE-LINE CONSTRUCTION NEW ELECTRICAL PANELS

GENERAL NOTES

1. THE DRAWING WAS PREPARED FROM EXISTING DRAWINGS AND LIMITED ACCESS FOR FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS FOR ACCURACY.
2. CONTRACTOR MUST VERIFY THE ELECTRICAL FIELD REQUIREMENTS AND WORKING SPACE REQUIRED PER CODE.
3. NEW ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANSHIP MANNER PER NFPA 70 UFC SPECIFICATIONS AND TINKER ELECTRICAL STANDARDS.

CIRCUIT FEEDER LEGEND

A = 3 SET (4) THWN # 350 MCM
(1) 3" PVC-80SCH CONDUIT

B = 1 SET (4) THHN # 350 MCM
(1) THHN # 2 AWG GND.
(1) 3" EMT CONDUIT

C = 1 SET (4) THHN # 4/0 AWG
(1) THHN # 4 AWG GND.
(1) 2-1/2" EMT CONDUIT

D = 1 SET (4) THHN # 4/0 AWG
(1) THHN # 4 AWG GND.
(1) 2-1/2" EMT CONDUIT

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ELECTRICAL DEMO AND NEW WORK ONE-LINE DIAGRAM

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E-601

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