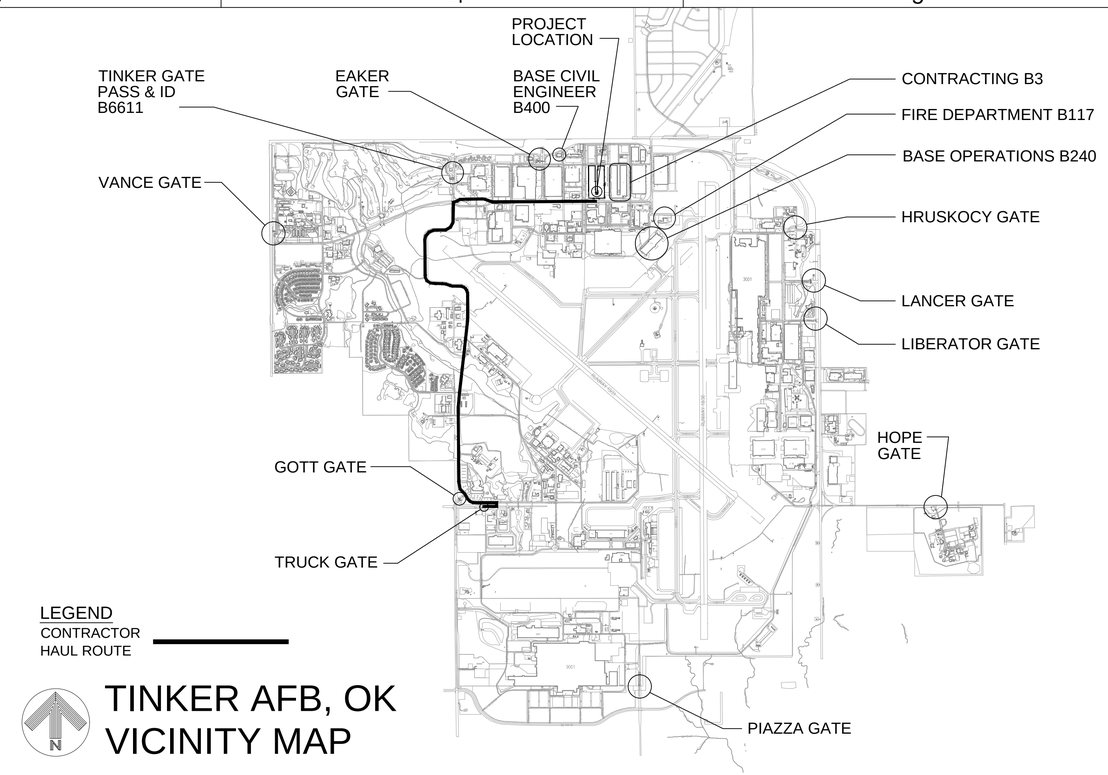
WWYK200051
REPLACE SWITCHGEAR, BLDG 1



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

SHT.	SHEET TITLE
GENERAL	
G-001	GENERAL NOTES, VICINITY MAP AND SHEET INDEX
G-101	LIFE SAFETY PLAN
STRUCTURAL	
S-001	STRUCTURAL NOTES
S-002	TYPICAL CONCRETE DETAILS
SD101	EXISTING FIRST FLOOR FRAMING PLAN - DEMOLITION
S-101	EXISTING FIRST FLOOR FRAMING PLAN - NEW WORK
ELECTRICAL	
E-001	LEGEND AND ABBREVIATIONS
ED401	ENLARGED PLANS - DEMOLITION
ED601	ONE-LINE - DEMOLITION
E-100	OVERALL PLAN
E-401	ENLARGED PLANS - NEW WORK
E-501	480V AND 280V SWITCHGEAR RISER
E-601	ONE-LINE - NEW WORK
E-701	SCHEDULES

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

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION

ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: JW
DRAWN BY: KH
CHECKED BY: JW
DESIGN FILE LOCATION:

SHEET TITLE
GENERAL NOTES, VICINITY MAP AND SHEET INDEX

SHEET NUMBER
G-001

KEYED NOTES:

1. EXISTING DIMENSIONS FOR FIRE RISER ROOM TO BE FIELD VERIFIED BY CONTRACTOR.

PROJECT AREA CODE SUMMARY

UFC 1-200-01 (12 JUNE 2023) WITH CHANGE 2
UFC 3-600-01 (6 MAY 2021) WITH CHANGE 6
2021 IBC AS AMENDED BY UFC 1-200-01
2021 IEBC AS AMENDED BY UFC 1-200-01
2024 NFPA 101 LIFE SAFETY CODE

PROJECT AREA BUILDING AREA

FLOOR	EXISTING AREA (GSF)
1ST FLOOR STORAGE (GROSS)	1,130
TOTAL	1,130

PROJECT AREA OCCUPANT LOAD

FLOOR	AREA TYPE	LOAD FACTOR	LOAD	REFERENCE
1ST FLOOR	MECH/ELEC	500 SF/ OCC.	3	UFC 3-600-01 TABLE 10-1
TOTAL			3	

PROJECT EGRESS TRAVEL DISTANCE

	ALLOWED	ACTUAL	NFPA 101 REF.
STORAGE USE			
COMMON PATH	100 FEET (WITH SPRINLKERS)	N/A	TABLE 42.2.5
TRAVEL DISTANCE	400 FEET (WITH SPRINLKERS)	120 FT	TABLE 42.2.6
DEAD-END CORRIDOR	100 FEET (WITH SPRINLKERS)	N/A	TABLE 42.2.5

LIFE SAFETY SYMBOLS:

EXIT DOOR TAG

A	CLEAR DOOR WIDTH [FEET - INCHES]
B	CAPACITY FACTOR [INCHES PER OCCUPANT]
C	EXIT CAPACITY [OCCUPANTS]

OTHERS

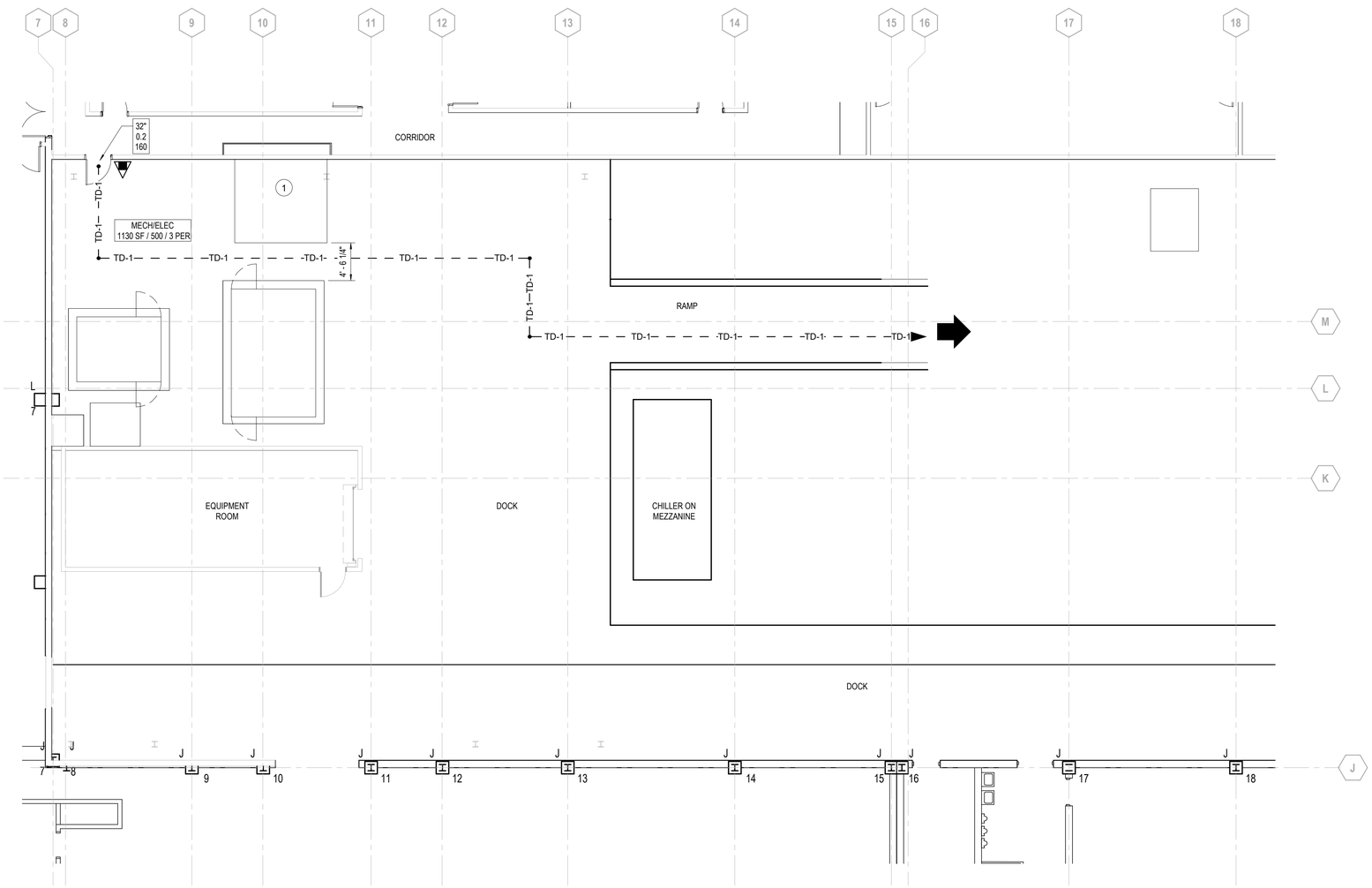
NEW FIRE EXTINGUISHER

LINE TYPES FOR MEANS OF EGRESS:

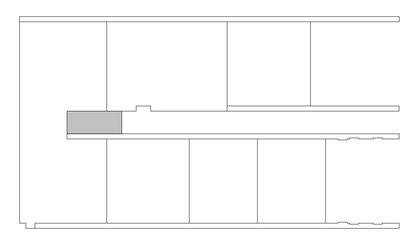
COMPONENT	SYMBOL
TRAVEL DISTANCE	TD
COMMON PATH	CP

EXIT DISCHARGE

EXIT DISCHARGE ARROW



1 G-101 LIFE SAFETY PLAN
1/8" = 1'-0"



KEY PLAN

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

LICENSED PROFESSIONAL ENGINEER
DOUGLAS EMANUS
33105
OKLAHOMA
04/10/2026

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

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DRAWN BY: JRM
CHECKED BY: JM
DESIGN FILE LOCATION:

SHEET TITLE
LIFE SAFETY PLAN

SHEET NUMBER
G-101

GENERAL STRUCTURAL NOTES (GSN)

GENERAL

G1. SCOPE
THE NOTES ON THIS SHEET AND THE STANDARD STRUCTURAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT WHETHER SPECIFICALLY CALLED OUT OR NOT, EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY ON STRUCTURAL SHEETS. IF THERE ARE QUESTIONS, THEY SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND ANSWERED IN WRITING PRIOR TO CONSTRUCTION.

G2. APPLICABLE SPECIFICATIONS AND CODES
A. INTERNATIONAL BUILDING CODE, IBC 2024 WITH APPLICABLE EDITIONS OF THE CODE REFERENCED STANDARDS.
B. ACI 318-19
C. TAFB FACILITY STANDARDS
D. UFC 1-200-01 (WITH CHANGE 4, DATED 17 DEC 2024)
E. UFC 3-301-01 (WITH CHANGE 6, DATED 30 JAN 2026)
F. AISC 360-22

G3. DESIGN CRITERIA
1. APPLIES TO ALL STRUCTURES (UNO)
A. DEAD LOAD:
1. ACTUAL TRIBUTARY STRUCTURE WEIGHT
B. LIVE LOAD:
1. ELECTRICAL YARD: 150 PSF
C. WIND:
1. RISK CATEGORY: III
2. ULTIMATE WIND SPEED: V_{ULT}: 116 MPH
3. ALLOWABLE STRESS WIND SPEED: V_{ASD}: 90 MPH
4. EXPOSURE: C
D. SEISMIC:
1. RISK CATEGORY: III
2. IMPORTANCE FACTOR: 1.25
3. SPECTRAL RESPONSE ACCELERATION, S_S: 0.298g
4. SPECTRAL RESPONSE ACCELERATION, S_1: 0.081g
5. SITE CLASS: D
6. SEISMIC DESIGN CATEGORY: B
7. SPECTRAL RESPONSE COEFFICIENT, S_{DS}: 0.31g
8. SPECTRAL RESPONSE COEFFICIENT, S_{D1}: 0.129g
9. BASIC SEISMIC FORCE RESISTING SYSTEM: ASCE 7 SECTION 13.3
10. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
11. DESIGN BASE SHEAR (MAX): $1.6*S_{DS}I_eW_P$
E. SNOW LOAD:
1. STRUCTURE INTERIOR TO EXISTING BUILDING; THEREFORE, SNOW LOADING HAS NOT BEEN CONSIDERED.
F. ICE LOADS:
1. STRUCTURE INTERIOR TO EXISTING BUILDING; THEREFORE, ICE LOADING HAS NOT BEEN CONSIDERED.

G4. SAFETY
SAFETY AND STRUCTURE STABILITY DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS ONLY AS A COMPLETED STRUCTURE.

G5. OPENINGS
OPENINGS FOR PIPES, DUCTS, CONDUITS, ETC. ARE NOT ALL SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE AND PROVIDE OPENINGS AS REQUIRED TO ACCOMMODATE ALL WORK SHOWN OR SPECIFIED IN THE CONTRACT DOCUMENTS AND OTHERWISE REQUIRED FOR THE FURNISHING OF A FUNCTIONALLY COMPLETE PROJECT. REINFORCE AROUND OPENINGS PER STANDARD STRUCTURAL DETAILS UNLESS OTHERWISE SHOWN.

G6. STANDARD DETAILS
THE STANDARD DETAILS DEPICT TYPICAL DETAILING TO BE USED ON THIS PROJECT. IF CONDITIONS ARE NOT EXPLICITLY SHOWN ON THE DRAWINGS THEY SHALL BE MADE SIMILAR TO THE STANDARD DETAILS. OBTAIN APPROVAL OF ENGINEER IN WRITING FOR SIMILAR CONDITIONS PRIOR TO CONSTRUCTION.

G7. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION AS REQUIRED TO COORDINATE NEW CONSTRUCTION. SUBMIT REQUIRED CHANGES FOR APPROVAL.

G8. CONTRACTOR TO SUBMIT FOR REVIEW ALL EQUIPMENT SIZES, OPERATING WEIGHTS, VIBRATION FORCES, SUPPORT LOCATIONS, ALONG WITH ANY FLOOR OPENINGS, NOTCHES, AND RECESSES REQUIRED BY SUCH EQUIPMENT. CONCRETE SUPPORT PADS AND/OR FRAMING REQUIRED TO SUPPORT SAID EQUIPMENT SHALL NOT BE FABRICATED AND PLACED UNTIL THE CONCRETE SUPPORT PADS AND/OR FRAMING IS APPROVED TO SUPPORT THE EQUIPMENT.

CONSTRUCTION AT EXISTING STRUCTURES

E1. SEE DEMOLITION SHEETS.

E2. WHERE DRILL AND EPOXY REINFORCING OR ANCHORS ARE INSTALLED CONTRACTOR SHALL NOT DAMAGE EXISTING REINFORCING. IF REQUIRED, CONTRACTOR SHALL HAVE EXISTING CONCRETE INVESTIGATED USING GROUND PENETRATING RADAR TO LOCATE EXISTING REINFORCING.

E3. EXISTING CONCRETE SURFACES TO BE JOINED WITH NEW CONCRETE SHALL BE ROUGHENED TO 1/4" AMPLITUDE, THROUGHLY CLEANED BY SAND BLASTING, AND APPLY BONDING AGENT JUST PRIOR TO PLACEMENT OF NEW CONCRETE.

E4. WHERE EXISTING REINFORCING IS TO BE PRESERVED, CONTRACTOR SHALL STRAIGHTEN AND SAND BLAST REINFORCING JUST PRIOR TO PLACEMENT OF NEW CONCRETE.

E5. PRIOR TO DRILL AND EPOXY BOLTS OR REBAR, LOCATE ALL EXISTING REINFORCEMENT. CARE SHALL BE TAKEN NOT TO DISTURB THE EXISTING REINFORCEMENT.

CONCRETE

C1. DESIGN STRENGTHS:
F'c = 4,000 PSI
Fy = 60,000 PSI

C2. CONCRETE COVER
UNLESS OTHERWISE NOTED, PROVIDE CONCRETE COVER FOR REINFORCING AS FOLLOWS:
CONCRETE DEPOSITED AGAINST EARTH: 3"
ALL OTHER: 2"
SEE DRAWINGS FOR EXCEPTIONS

C3. SEE SPECIFICATIONS FOR REINFORCING PLACEMENT REQUIREMENTS.

C4. REFER TO OTHER DISCIPLINE DRAWINGS PRIOR TO CONSTRUCTION FOR EMBEDDED ITEMS AND PENETRATIONS NOT SHOWN ON STRUCTURAL DRAWINGS. AS REQUIRED TO ACCOMMODATE ALL WORK SHOWN OR SPECIFIED IN THE CONTRACT DOCUMENTS AND OTHERWISE REQUIRED FOR THE FURNISHING OF A FUNCTIONALLY COMPLETE PROJECT. REINFORCE AROUND OPENINGS PER STANDARD STRUCTURAL DETAILS UNLESS OTHERWISE SHOWN.

C5. PROVIDE 3/4" CHAMFERS AT ALL EXPOSED EDGES. NOT ALL CHAMFERS MAY BE SHOWN ON DRAWINGS.

C6. FIELD ADJUST REINFORCING AT OPENINGS AND EMBEDDED ITEMS AS INDICATED.

C7. ANCHOR BOLTS NOT SPECIFIED BY ENGINEER SHALL BE DESIGNED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA, RETAINED BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE PROJECT AND CODE REQUIREMENTS. SUBMIT AS A SHOP DRAWING FOR REVIEW AND APPROVAL BY THE ENGINEER. COORDINATE LOCATION, SIZE AND EMBEDMENT PRIOR TO CASTING CONCRETE.

C8. ABSOLUTELY NO WELDING OF REINFORCING BARS OR TORCHING TO BEND REINFORCING BARS SHALL BE ALLOWED WITHOUT SPECIFIC APPROVAL FROM THE STRUCTURAL ENGINEER.

C9. ALL CAST IN PLACE AND POST-INSTALLED ANCHORS INDICATED IN THE STRUCTURAL DOCUMENTS SHALL COMPLY WITH CHAPTER 17 OF ACI 318 AND CHAPTER 19 OF THE IBC. ALL EXPANSION AND ADHESIVE ANCHORS SHALL HAVE THE ICC REPORT SHOWING EQUIVALENT LOAD CAPACITY. SUBMIT AND INSTALL PER THE ICC EVALUATION REPORT.

DEFERRED SUBMITTALS

1. DEFINITION:
DELEGATED DESIGN SUBMITTALS ARE ITEMS FOR WHICH THE FINAL DESIGN OF A SPECIFIC ELEMENT OF THE PERMANENT CONSTRUCTION WORK EXPRESSLY DELEGATED TO A PROPERLY LICENSED AND REGISTERED DESIGN PROFESSIONAL LICENSED IN THE STATE OF OKLAHOMA RETAINED OR EMPLOYED BY THE CONTRACTOR, SUBCONTRACTOR, SUPPLIER OF ANY TIER. "DELEGATED DESIGN" APPLIES ONLY TO PERMANENT WORK THAT WILL BE PART OF THE COMPLETED PROJECT AS A FUCTIONING WHOLE.

2. DELEGATED DESIGN LIST:
THE FOLLOWING IS A LIST OF DELEGATED SUBMITTALS THAT ARE EXPECTED TO CONTAIN SEALED STRUCTURAL CALCULATIONS OF SAFETY-RELATED SYSTEM INFORMATION FOR REVIEW. THESE SUBMITTALS APPLY TO DELEGATED DESIGNED SYSTEMS PRIOR TO INSTALLATION OF THE INDICATED STRUCTURAL ELEMENT, EQUIPMENT, DISTRIBUTION SYSTEM, COMPONENT, OR ITS ANCHORAGE. THE CONTRACTOR SHALL SUBMIT THE REQUIRED ENGINEER CERTIFICATION, SUPPORTING DATA, AND SEALED DRAWINGS FOR REVIEW AND ACCEPTANCE BY THE CONTRACTING OFFICER.

DEFERRED SUBMITTALS	
SPEC SECTIONS/ COMPONENTS	
SWITCHGEAR	ANY EQUIPMENT OR COMPONENT IN WHICH A TECHNICAL SPECIFICATION REQUIRES SUBMITTAL OF EQUIPMENT OR ANCHORAGE SYSTEM CALCULATIONS
05 05 20	POST-INSTALLED CONCRETE ANCHORS

STATEMENT OF SPECIAL INSPECTIONS (IBC 1705):
UNLESS NOTED OTHERWISE

SI1. SHOP FABRICATED ITEMS BY APPROVED FABRICATOR ARE EXEMPT FROM SPECIAL INSPECTION. UPON COMPLETION, APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE STATING WORK WAS PERFORMED IN ACCORDANCE WITH APPROVED CONSTRUCTION DOCUMENTS.

SI2. CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY PRIOR TO CONSTRUCTION, INCLUDING:
A. ACKNOWLEDGEMENT OF SPECIAL INSPECTION REQUIREMENTS.
B. ACKNOWLEDGE THAT CONTROL WILL BE EXERCISED TO CONFORM WITH APPROVED CONSTRUCTION DOCUMENTS.
C. PROCEDURES FOR EXERCISING CONTROL, INCLUDING METHOD AND FREQUENCY OF REPORTING, AND DISTRIBUTION OF REPORTS.
D. IDENTIFICATION AND QUALIFICATION OF PERSON(S) EXERCISING SUCH CONTROL.

SI3. STRUCTURAL OBSERVATIONS ARE REQUIRED IN ACCORDANCE WITH IBC SECTION 1704.6.1 STRUCTURAL OBSERVATIONS SHALL BE PERFORMED BY THE ENGINEER OF RECORD (EOR) OR A LICENSED PROFESSIONAL ENGINEER (PE) DESIGNATED BY THE EOR. FOR GENERAL COMPLIANCE WITH DESIGN DOCUMENTS AND INTENT, OBSERVATION SCHEDULE SHALL BE SUBMITTED PRIOR TO OBSERVATION COMMENCEMENT. REGISTERED DESIGN PROFESSIONAL SHALL PREPARE A REPORT INDICATING SITE VISITS MADE AND IDENTIFYING ANY STRUCTURAL DEFICIENCIES THAT HAVE NOT BEEN CORRECTED. OBSERVATIONS ARE REQUIRED DURING INSTALLATION OF SMALL EQUIPMENT PADS.

SI4. THE FOLLOWING CONSTRUCTION IS SUBJECT TO SPECIAL INSPECTION:

SCHEDULE OF SPECIAL INSPECTION SERVICES

INSPECTION ITEM REQUIRED	FREQUENCY		CODE REFERENCE	REMARKS
	CONTINUOUS	PERIODIC		
GENERAL STRUCTURAL OBSERVATIONS				
CONDUCT DAILY VISUAL OBSERVATION OF THE STRUCTURAL SYSTEMS FOR GENERAL CONFORMANCE TO THE CONSTRUCTION DOCUMENTS. PREPARE WEEKLY REPORT OF OBSERVATIONS DESCRIBING WORK PROGRESS AND NON-CONFORMING ITEMS.	-	X		
CONCRETE AND REINFORCING STEEL			IBC TABLE 1705.3	
INSPECTION OF REINFORCING STEEL SIZE AND PLACEMENT.	-	X	ACI 318: CH 20, 25.2, 25.3, 26.6.1-26.6.3	
INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	-	X	ACI 318: 17.8.2.4, ACI 318: 17.8.2	
INSPECTION OF ANCHORS CAST IN CONCRETE	-	X	ACI 318: 17.8.2	
INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN ITEM A ABOVE	X -	- X	ACI 318: 17.8.2.4 ACI 318: 17.8.2	
VERIFYING USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 19, 26.4.3-26.4.4	
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172 ASTM C31 ACI 318: 5.6, 5.8	
INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.5	
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.5.3-26.5.5	
VERIFYING CONCRETE STRENGTH.	-	X	ACI 318: 26.12	
ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: CH. 26.8	
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.11.1.2(b)	

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

LICENSED PROFESSIONAL ENGINEER
COLIN J MULDERICK
34849
OKLAHOMA
04/10/2026

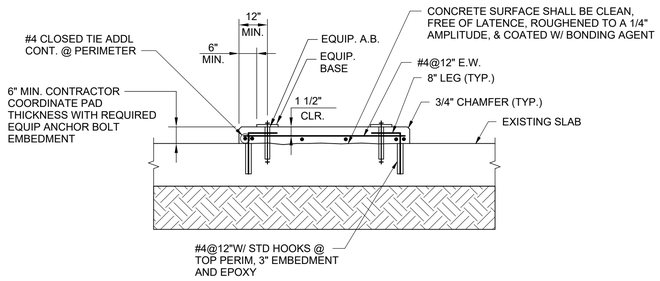
PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS
MARK DATE DESCRIPTION

MANAGEMENT INFORMATION
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: CM
DRAWN BY: RN
CHECKED BY: JC
DESIGN FILE LOCATION:

SHEET TITLE
GENERAL STRUCTURAL NOTES AND STATEMENT OF SPECIAL INSPECTIONS

SHEET NUMBER
S-001



1 TYPICAL EQUIPMENT SUPPORT PAD

12" = 1'-0"

PAD NOTES:

1. PAD DETAILS APPLY FOR SUPPORT OF ALL EQUIPMENT UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
2. BEFORE EQUIPMENT SUPPORT PADS ARE CAST, THE PAD SIZES AND REINFORCING SHALL BE APPROVED BY THE ENGINEER AS BEING CAPABLE OF SUPPORTING EQUIPMENT TO BE PLACED THEREON. EQUIPMENT BASE DIMENSIONS SHALL BE THE LARGER OF AS DETERMINED BY THE EQUIPMENT MANUFACTURER OR AS INDICATED ON THE DRAWINGS. SUBMIT ALL EQUIPMENT DIMENSIONS AND LOADS TO ENGINEER. THE SIZE, NUMBER, TYPE, LOCATION AND THREAD PROJECTION OF THE ANCHOR BOLTS (A.B.) SHALL BE AS DETERMINED BY THE EQUIPMENT MANUFACTURER AND SHALL BE AS APPROVED BY THE ENGINEER. A.B. SHALL BE HELD IN POSITION WITH A TEMPLATE WHILE EQUIPMENT PAD IS CAST.
3. REFERENCE ELECTRICAL DRAWINGS FOR DIMENSIONS & LOCATIONS OF PADS. FINAL PAD DIMENSIONS ARE TO BE ADJUSTED AS NEEDED TO FIT FINAL EQUIPMENT SELECTED.

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34849
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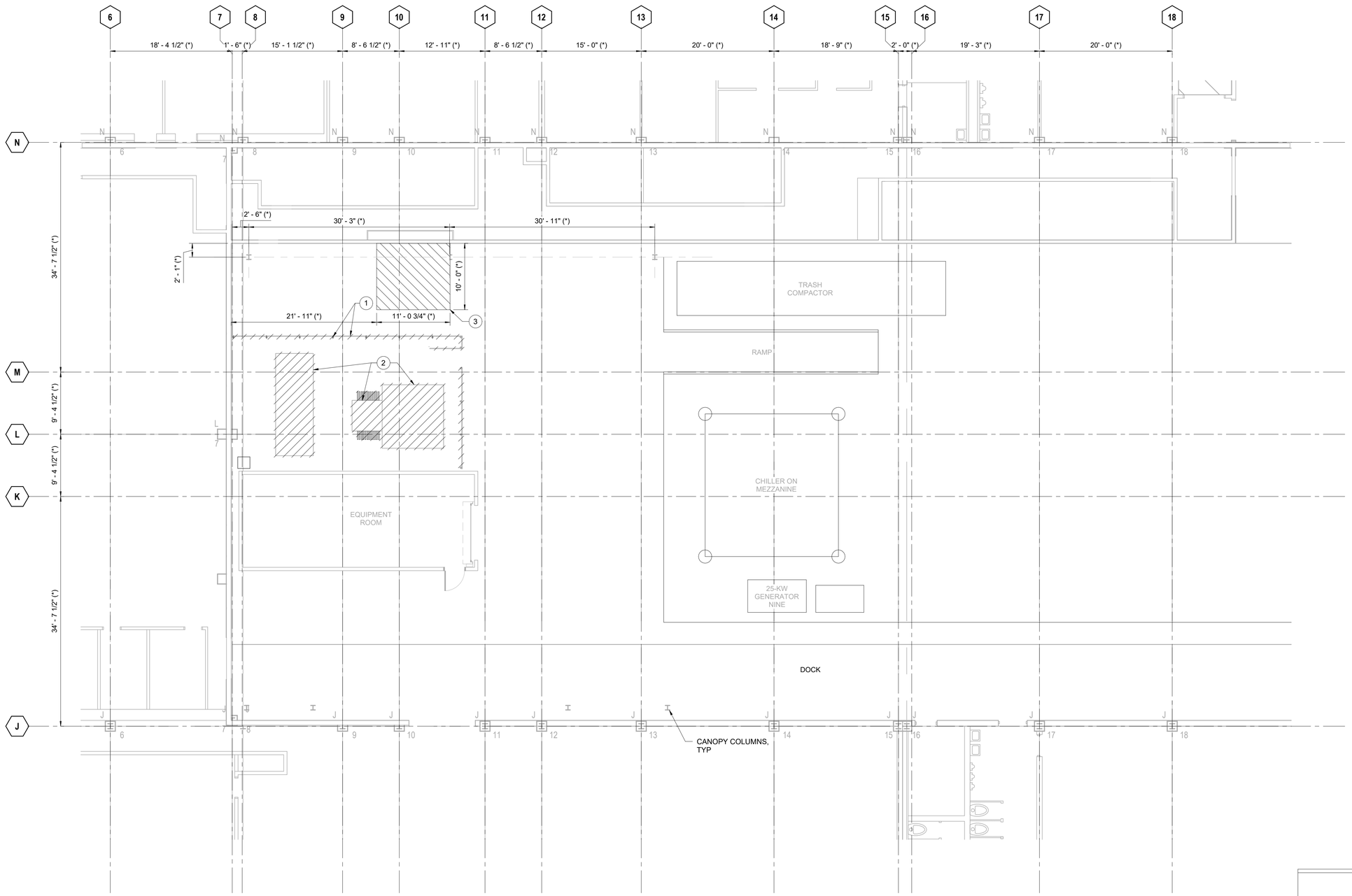
TYPICAL CONCRETE DETAILS

SHEET NUMBER
S-002



1 SD101 EXISTING FIRST FLOOR FRAMING PLAN - DEMOLITION

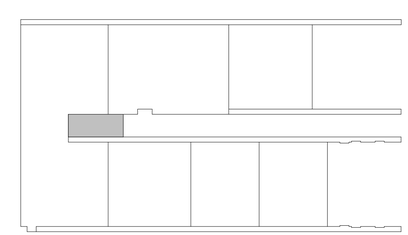
1/8" = 1'-0"

GENERAL NOTES:

1. (*) INDICATES EXISTING DIMENSION TO BE FIELD VERIFIED BY CONTRACTOR.
2. EXISTING BUILDING INFORMATION IS AS INDICATED ON THE AS-BUILT DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL REVIEW AS-BUILT DRAWINGS REPLACE TRANSFORMERS, BLDG 1 PROJECT NUMBER OC-216-1 DATED 17 JULY 1972, AND REPLACE POWER DISTRIBUTION SYSTEM, LIGHTS AND AIR-CONDITIONING, BUILDING 1 PROJECT NUMBER OC-9-9, DATED 19 MAY 1986 FOR EXISTING STRUCTURAL INFORMATION. VERIFY ALL DIMENSIONS SHOWN WITH EXISTING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE CONTRACTING OFFICER.

KEYNOTES:

1. EXISTING POSTS, INCLUDING BASE PLATES AND SCREENS, SHALL BE REMOVED.
2. COORDINATE REMOVAL OF EXISTING EQUIPMENT AND CONCRETE PADS WITH ELECTRICAL SCOPE. EXISTING EQUIPMENT AND SCREEN POST ANCHORS SHALL BE GROUND OUT, BACKGOUGED, AND COVERED WITH GROUT.
3. EXISTING FIRE RISER ROOM. SEE WWYK160073 FOR OVERALL DIMENSIONS AND AS-BUILT LOCATION.



KEY PLAN

AIR FORCE MATERIEL COMMAND
72 ABW CIVIL ENGINEER DIRECTORATE
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LICENSED PROFESSIONAL ENGINEER
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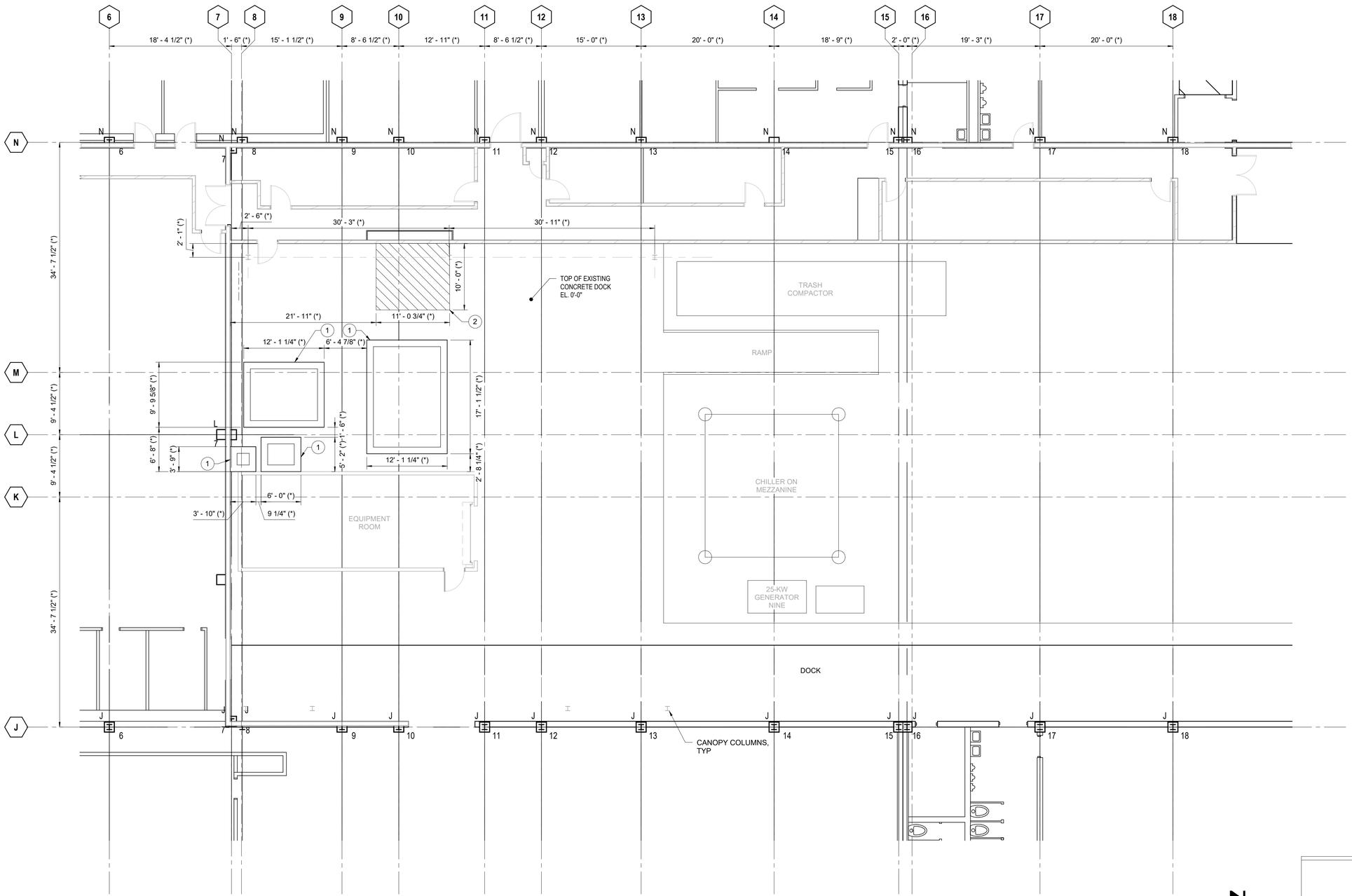
EXISTING FIRST FLOOR FRAMING PLAN - DEMOLITION

SHEET NUMBER
SD101



1 S-101 EXISTING FIRST FLOOR FRAMING PLAN - NEW WORK

1/8" = 1'-0"

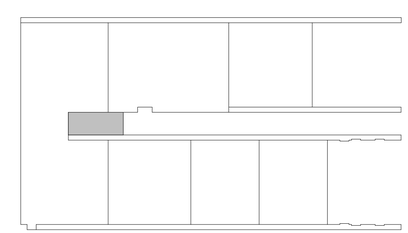
GENERAL NOTES:

1. (*) INDICATES EXISTING DIMENSION TO BE FIELD VERIFIED BY CONTRACTOR.
2. EXISTING BUILDING INFORMATION IS AS INDICATED ON THE AS-BUILT DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL REVIEW AS-BUILT DRAWINGS REPLACE TRANSFORMERS, BLDG 1 PROJECT NUMBER OC-216-1 DATED 17 JULY 1972, AND REPLACE POWER DISTRIBUTION SYSTEM, LIGHTS AND AIR-CONDITIONING, BUILDING 1 PROJECT NUMBER OC-9-9, DATED 19 MAY 1986 FOR EXISTING STRUCTURAL INFORMATION. VERIFY ALL DIMENSIONS SHOWN WITH EXISTING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE CONTRACTING OFFICER.

KEYNOTES: (x)

(1) NEW EQUIPMENT PAD, SEE 1/S-002. COORDINATE LOCATION WITH ELECTRICAL DRAWINGS.

(2) EXISTING FIRE RISER ROOM. SEE WWYK160073 FOR OVERALL DIMENSIONS AND AS-BUILT LOCATION.



KEY PLAN

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

LICENSED PROFESSIONAL ENGINEER
COLIN J MULDERICK
34849
OKLAHOMA
04/10/2026

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: CM
DRAWN BY: RN
CHECKED BY: JC
DESIGN FILE LOCATION:

SHEET TITLE
EXISTING FIRST FLOOR FRAMING PLAN - NEW WORK

SHEET NUMBER
S-101

ELECTRICAL SYMBOLS LEGENDS AND ABBREVIATIONS

GENERAL NOTES:

(APPLICABLE TO ALL ELECTRICAL SHEETS)

1. ALL WORKS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH TINKER AFB ELECTRICAL STANDARDS (JANUARY 2026)
2. 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.
3. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR SYSTEMS PENETRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.
4. CONTROL WIRING P&ID'S FOR MECHANICAL EQUIPMENT ARE NOT SHOWN ON THESE SHEETS.
5. 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, 120V, GROUNDING 2W+G, NEMA 5-20R
C	RECEPTACLE, DUPLEX, SERVING COMPUTER LOAD. 20A, 120V, GROUNDING 2W+G RECEPTACLE, NEMA 5-20R
F	RECEPTACLE, DUPLEX, FLOOR MOUNTED, FLUSH, 20A, 120V, GROUNDING 2W+G NEMA 5-20R.
	RECEPTACLE, DUPLEX, CEILING MOUNTED, 20A, 120V, GROUNDING 2W+G, NEMA 5-20R
IG	ISOLATED GROUND RECEPTACLE, DUPLEX, ORANGE TYPE. 20A, 120V, GROUNDING 2W+2G RECEPTACLE, NEMA 5-20R
	240 VOLT 20 AMP RECEPTACLE
	RECEPTACLE, DUPLEX, SPECIAL PURPOSE
	RECEPTACLE, QUADRAPLEX
	RECEPTACLE/EQUIPMENT CONNECTION, SPECIAL PURPOSE
C	RECEPTACLE, CLOCK
J	JUNCTION BOX, ABOVE CEILING
C J	JUNCTION BOX, WALL MOUNTED, SERVING COMPUTER LOAD.
	HORIZONTAL WIREMOLD
	VERTICAL WIREMOLD
$	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), SINGLE-POLE, MOUNT 54" AFF
$2	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), DOUBLE-POLE, MOUNT 54" AFF
$3	SWITCH, TOGGLE, WALL MOUNTED, 20A., 120/277V RATED (AC ONLY), THREE-WAY, SPDT. MOUNT 54" AFF
$4P	SWITCH, LOW VOLTAGE, WALL MOUNTED, 4-SCREEN PRESET. MOUNT 54" AFF
$DM	SWITCH, DIMMER, LOW VOLTAGE 0-10V. MOUNT 54" AFF
$M	SWITCH, MOTOR
$OS	SWITCH, OCCUPANCY SENSOR, 120V, 1500 WATT. MOUNT 54" AFF
OS	OCCUPANCY SENSOR, CEILING MOUNTED. MANUAL ON/INTEGRAL MANUAL DIMMING
P	PHOTOSENSOR, CEILING MOUNTED
	BRANCH CIRCUIT HOME RUN WITH NEUTRAL, PHASE AND EQUIPMENT GROUND RESPECTIVELY
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	MOTOR
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
VFD	VARIABLE FREQUENCY DRIVER
	CCTV SECURITY CAMERA

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
	CFL/HID/LED FIXTURE, AREA LIGHT POLE
	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
	LIGHTING SWITCHLEG

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
EPM	ELECTRIC POWER 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

SITE UTILITIES LEGEND

SYMBOL	DESCRIPTION
—E—E—	DUCT BANK, OVERHEAD PRIMARY
—ES—ES—	DUCT BANK, OVERHEAD SECONDARY
–E– – –E–	DUCT BANK, UNDERGROUND PRIMARY
–ES– –ES–	DUCT BANK, UNDERGROUND SECONDARY
E	MANHOLE, ELECTRIC
E	HANDHOLE, ELECTRIC
∅	POWER POLE, ELECTRIC

GROUNDING LEGEND

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

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

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
OV	OVERRIDE SWITCH
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
WAP	WIRELESS ACCESS POINT
WH	WEATHERHEAD
W/	WITH
∅	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

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

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
30576
OKLAHOMA
04-10-26

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION
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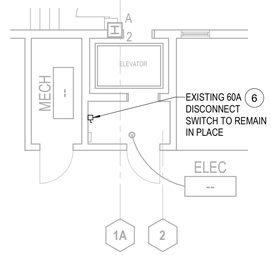
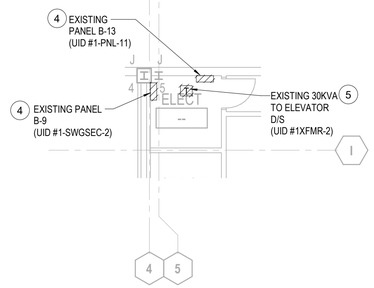
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE
ELECTRICAL LEGEND AND ABBREVIATIONS

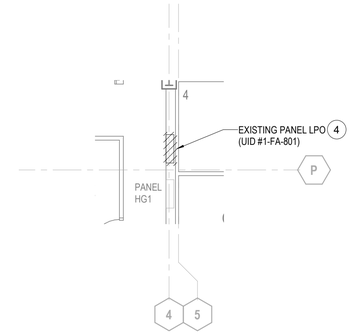
SHEET NUMBER
E-001



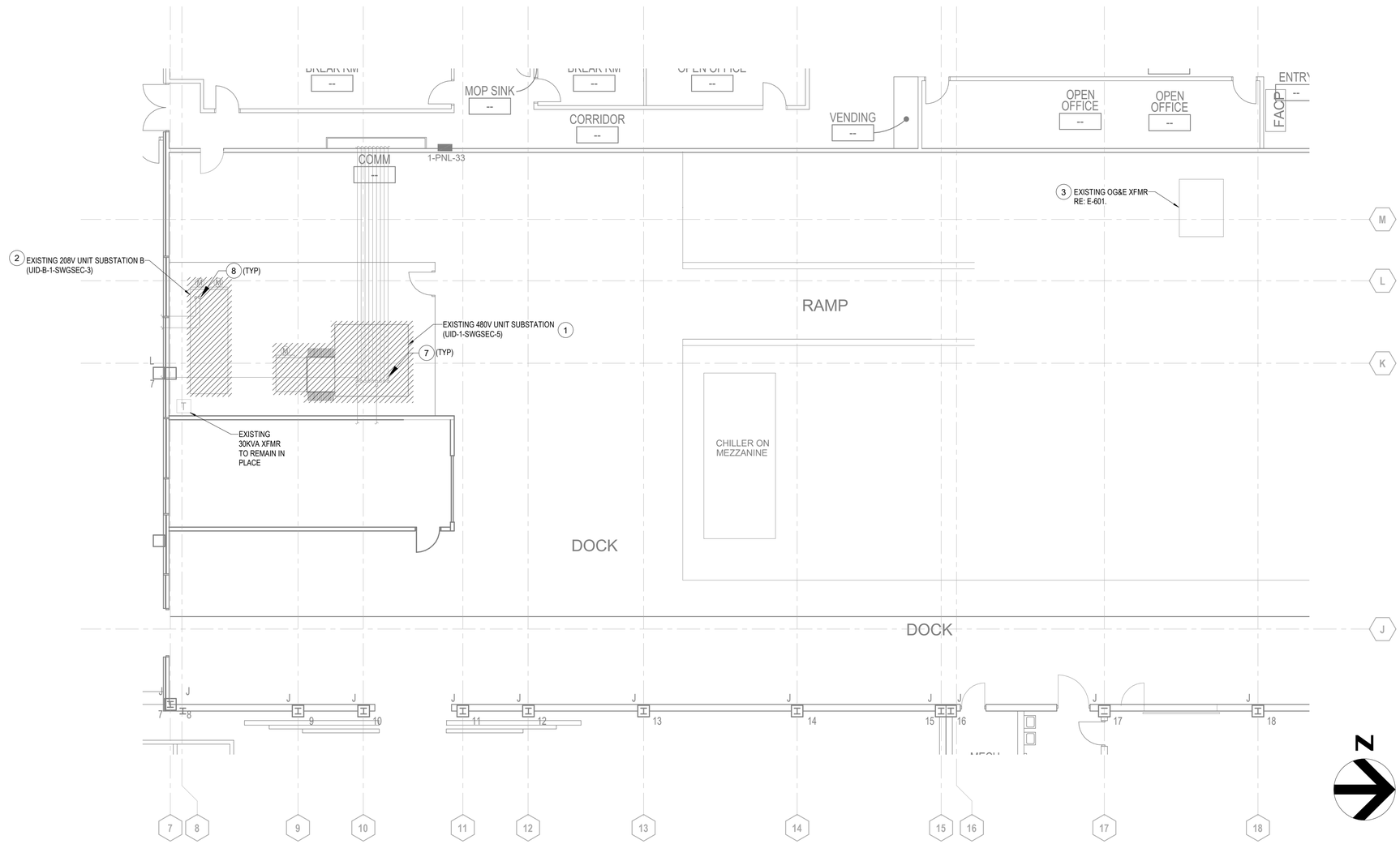
1 E-100 ELECTRICAL DEMO PLAN - ENLARGED ELEVATOR ROOM
1/8" = 1'-0"



2 E-100 ELECTRICAL DEMO PLAN - ENLARGED ELECTRICAL CLOSET
1/8" = 1'-0"



3 E-100 ELECTRICAL DEMO PLAN - ELECTRICAL CLOSETS
1/8" = 1'-0"



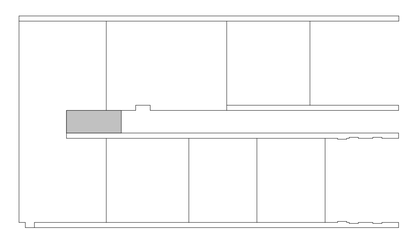
4 E-100 ELECTRICAL DEMO PLAN - ENLARGED DOCK
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO ED-601 FOR DEMOLITION ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
2. ALL DEMO WORK MUST BE PLANNED IN PHASES TO MINIMIZE IMPACT TO PRODUCTION. COORDINATE ALL WORK WITH OG&E AND THE FACILITY USER GROUP. REFER TO E-100 FOR PHASING PLAN.
3. THIS DRAWING WAS PREPARED FROM EXISTING AS-BUILTS AND LIMITED ACCESS FOR FIELD OBSERVATIONS AND VERIFICATIONS. FIELD VERIFY EXISTING CONDITIONS AND UPDATE AS-BUILT DRAWINGS FOR RECORD. SUBMIT RFIs TO GOVERNMENT AND DOR IF THERE ARE ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING SITE CONDITIONS FOR RESOLUTIONS.
4. UNLESS NOTED OTHERWISE, ALL EXISTING EQUIPMENT TO REMAIN AND MAINTAIN NORMAL OPERATION. REFER TO SPECIFICATION 26 20 00 FOR ADDITIONAL INFORMATION ON EXISTING TO REMAIN EQUIPMENT

KEYED NOTES:

1. DISCONNECT POWER CONNECTION AND REMOVE EXISTING 480V UNIT SUBSTATION WITH 480V SWITCHGEAR ENCLOSURE, INCLUDING EXISTING ASSOCIATED ELECTRICAL DEVICES, POWER METERS, AND GROUNDING/BONDING TO EXISTING BUILDING. REMOVE EXISTING MV FEEDER BACK TO SOURCE.
2. DISCONNECT POWER CONNECTION AND REMOVE EXISTING 208V UNIT SUBSTATION WITH 208V SWITCHGEAR ENCLOSURE, INCLUDING EXISTING ASSOCIATED ELECTRICAL DEVICES, POWER METERS, AND GROUNDING/BONDING TO EXISTING BUILDING. REMOVE EXISTING MV FEEDER BACK TO SOURCE.
3. EXISTING 1500KVA OG&E TRANSFORMER TO REMAIN IN PLACE FOR CONNECTION IN NEW WORK.
4. EXISTING PANELBOARD MUST BE REPLACED IN PLACE. DISCONNECT POWER CONNECTION AS INDICATED ON DEMOLITION ONE-LINE DIAGRAM. RETAIN ALL EXISTING BRANCH CIRCUITS BEING FED FROM PANEL FOR RECONNECTION IN NEW WORK.
5. DISCONNECT POWER CONNECTION TO EXISTING TRANSFORMER AND REMOVE ALL PRIMARY AND SECONDARY CONDUCTORS/CONDUITS TO POWER SOURCE.
6. DISCONNECT POWER CONNECTION FROM EXISTING 30KVA XFMR (UID #1XFMR-2). SEE KEYED NOTE #5.
7. DISCONNECT EXISTING FEEDER. RETAIN FOR RECONNECTION IN NEW WORK.
8. REMOVE CONDUCTORS AND RETAIN CONDUIT CONNECTION. SEE DEMOLITION ONE-LINE, SHEET ED601 FOR ADDITIONAL INFORMATION.



KEY PLAN

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72 ABW CIVIL ENGINEER DIRECTORATE
TINKER AFB, OK

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
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04/10/26

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TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

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MANAGEMENT INFORMATION
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE
ELECTRICAL ENLARGED PLANS - DEMOLITION

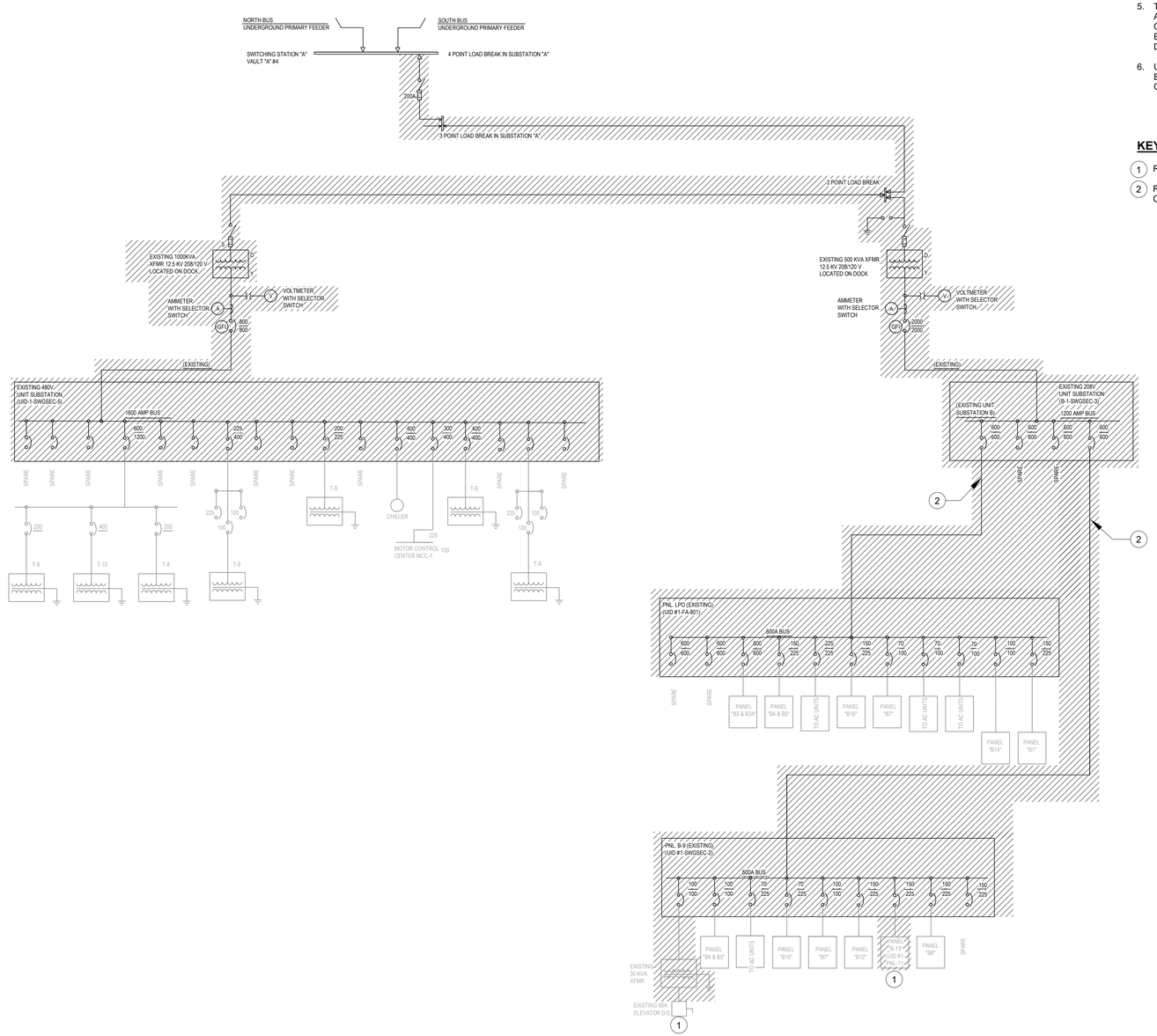
SHEET NUMBER
ED401

GENERAL NOTES:

1. UNLESS NOTED OTHERWISE, RETAIN EXISTING DOWNSTREAM CONDUCTORS AND CONDUIT FEEDING EXISTING-TO-REMAIN EQUIPMENT AS SHOWN IN PLACE.
2. DISCONNECT AND REMOVE EXISTING MEDIUM VOLTAGE FEEDER INCLUDING CABLES AND CONDUITS BACK TO VAULT "A" AS SHOWN. CAP AND ABANDON UNDERGROUND CONDUITS PER TAFB ELECTRICAL STANDARDS.
3. TRACE AND VERIFY THE EXISTING BRANCH CIRCUITS FEEDING FROM DEMOLISHED PANELBOARDS AND EXISTING UNIT-SUBSTATIONS AS SHOWN. CONFIRM AND PROVIDE CIRCUIT INDEX DIRECTORIES PER SPECIFICATIONS.
4. ALL DEMO WORK MUST BE PLANNED IN PHASES TO MINIMIZE IMPACT TO PRODUCTION. COORDINATE ALL WORK WITH OG&E AND THE FACILITY USER. REFER TO E-100 FOR PHASING PLAN.
5. THIS DRAWING WAS PREPARED FROM EXISTING AS-BUILTS AND LIMITED ACCESS FOR FIELD OBSERVATIONS AND VERIFICATIONS. FIELD VERIFY EXISTING CONDITIONS AND UPDATE AS-BUILT DRAWINGS FOR RECORD.
6. UNLESS NOTED OTHERWISE, ALL EXISTING EQUIPMENT AS SHOWN TO REMAIN. EXISTING CIRCUIT BREAKERS AS INDICATED ARE 3-POLE.

KEYED NOTES:

1. REMOVE EXISTING CONDUCTORS AND CONDUITS.
2. REMOVE EXISTING CONDUCTORS. RETAIN CONDUITS FOR RECONNECTION IN NEW WORK.



1 ED601 ELECTRICAL ONE-LINE - DEMOLITION

NOT TO SCALE

AIR FORCE MATERIEL COMMAND
72 ABW CIVIL ENGINEER DIRECTORATE

TINKER AFB, OK

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
30576
OKLAHOMA
04-10-26

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REPLACE SWITCHGEAR, BLDG 1

TINKER AIR FORCE BASE, OKLAHOMA

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CHECKED BY: G. JAGLOWSKI
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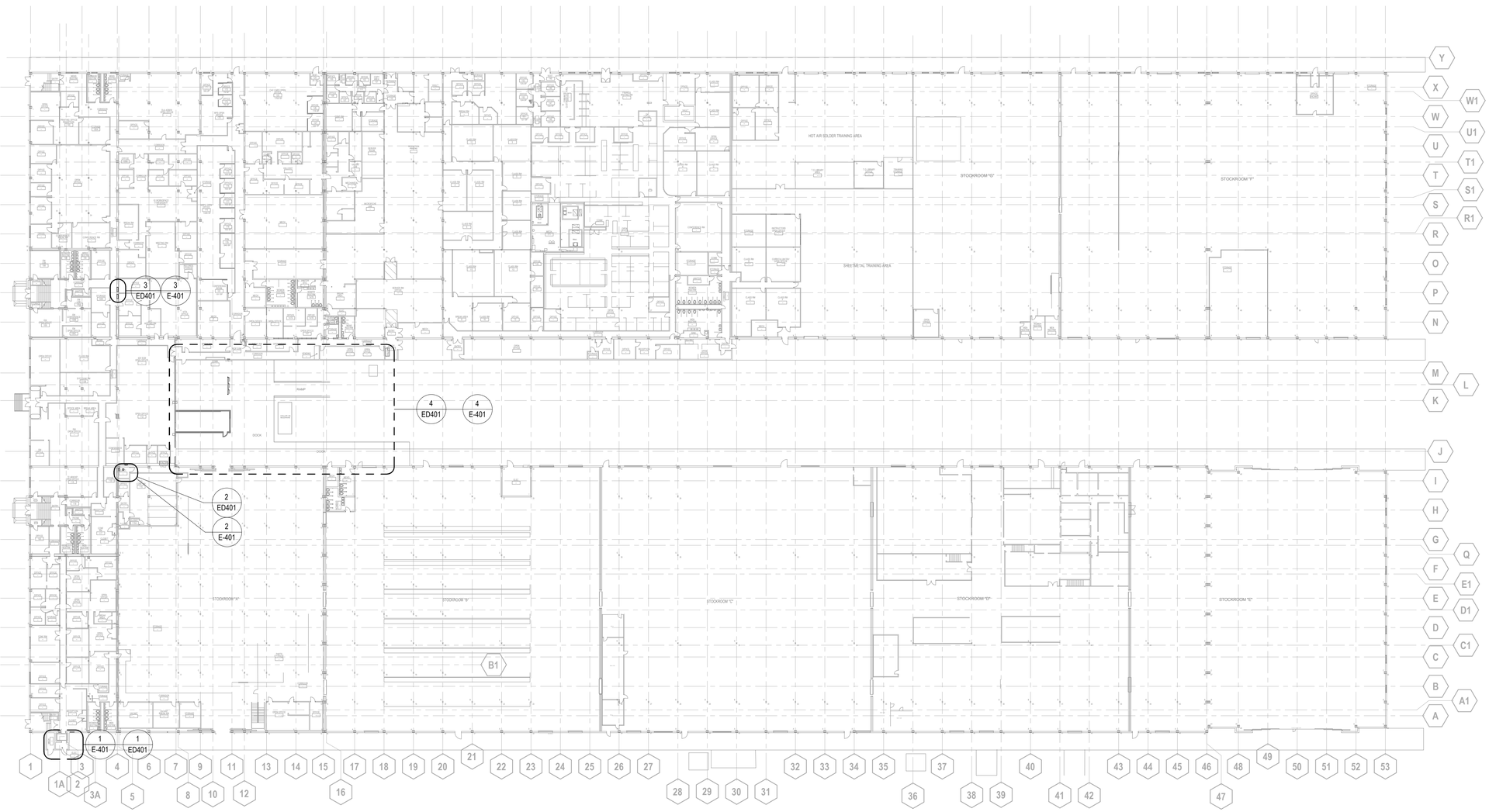
SHEET TITLE

ELECTRICAL ONE-LINE - DEMOLITION

SHEET NUMBER

ED601



1 E-100 ELECTRICAL OVERALL PLAN

1" = 40'-0"

PHASING NOTES:

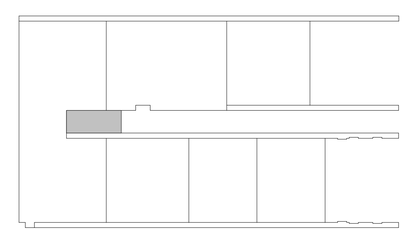
THE FOLLOWING PHASING PLAN IS A GENERAL SEQUENCING PLAN THAT IS NOT DEEMED TO BE FINAL. THE CONTRACTOR AND THEIR SUBS MUST PREPARE THEIR OWN OPERATIONS PLAN AND PHASING PLAN VALIDATING AND CONFIRMING SEQUENCING AND TIMELINES THAT WILL ALLOW THE WORK TO BE COMPLETED IN A LIMITED AMOUNT OF TIME DURING PLANNING OUTAGES. CONTRACTOR WILL BE RESPONSIBLE TO PLAN AND COORDINATE WITH THE CONTRACTING OFFICER, BASE CE, OG&E, AND ANY OTHER PARTY AS NECESSARY TO ENSURE ALL WORK IS ACCOMPLISHED IN A TIMELY FASHION AT A TIME THAT WORKS FOR ALL PARTIES. PHASE NUMBER:

1. DISCONNECTING AND REMOVING EXISTING 480V UNIT SUBSTATION, INCLUDING MV FEEDERS BACK TO POWER SOURCE. DISCONNECTING ALL EXISTING FEEDERS DISTRIBUTING POWER INTO THE BUILDING AND BEING FED FROM THE EXISTING UNIT SUBSTATION. RETAIN CONDUCTORS/CONDUITS FOR RECONNECTION IN NEW WORK. PROVIDE TEMPORARY POWER DURING EQUIPMENT REPLACEMENT. PROVIDING, INSTALLING AND CONNECTING NEW 480V SWITCHGEAR (UID-1-SWGSEC-5) TO THE SECONDARY SIDE OF NEWLY INSTALLED 1500KVA OG&E TRANSFORMER. ALL POWER CONNECTIONS TO THE SECONDARY SIDE OF THE TRANSFORMER WILL BE COORDINATED WITH OG&E. CONTRACTOR MUST ROUTE SECONDARY FEEDERS ABOVE GROUND AND OVERHEAD TO CANOPY AND ALONG THE SIDE OF THE BUILDING EXTERIOR WALL. RECONNECTING ALL EXISTING DISTRIBUTION FEEDERS TO NEW 480V SWITCHGEAR (UID-1-SWGSEC-5). TEST AND ENSURE ALL EXISTING LOADS RETURN TO ORIGINAL OPERATION.

2. DISCONNECTING AND REMOVING EXISTING 208V UNIT SUBSTATION, INCLUDING MV FEEDERS BACK TO PANEL SOURCE. DISCONNECTING ALL EXISTING FEEDERS DISTRIBUTING POWER INTO THE BUILDING AND BEING FED FROM THE EXISTING UNIT SUBSTATION. RETAIN CONDUCTORS/CONDUITS FOR RECONNECTION IN NEW WORK. PROVIDE TEMPORARY POWER DURING EQUIPMENT REPLACEMENT. PROVIDING AND INSTALLING 500KVA (480V-208V/120Y) STEP-DOWN TRANSFORMER AND NEW 208V SWITCHGEAR (UID-B-1-SWGSEC-3). CONNECTING TRANSFORMER TO NEW 480V SWITCHGEAR (UID-1-SWGSEC-5) AND TO NEW 208V SWITCHGEAR (UID-B-1-SWGSEC-3). RECONNECTING EXISTING DISTRIBUTION FEEDERS TO NEW 208V SWITCHGEAR. TEST AND ENSURE ALL LOADS RETURN TO ORIGINAL OPERATION.

3. DISCONNECTING TWO (2) EXISTING 600A PANELBOARDS , PANEL B-9 (UID #1-SWGSEC-2) AND PANEL LPO (UID #1-FA-801), INCLUDING OUTDATED SUB-FED PANELBOARD, PANEL B-13 (UID #1-PNL-11). REMOVE CONDUCTORS BACK TO PANEL SOURCE. RETAIN CONDUITS FOR RECONNECTION IN NEW WORK. PROVIDING AND INSTALLING TWO (2) 600A PANELBOARDS, PANEL B-9 (UID #1-SWGSEC-2) AND PANEL LPO (UID #1-FA-801), INCLUDING PANEL B-13 (UID #1-PNL-11) AT THEIR ORIGINAL LOCATIONS. RECONNECTING ALL EXISTING BRANCH CIRCUITS TO NEW REPLACEMENT PANELBOARDS. PROVIDING NEW CONDUCTORS FOR REPLACEMENT PANELBOARDS AND ROUTED VIA EXISTING CONDUITS. TEST AND ENSURE ALL NEW AND EXISTING EQUIPMENT OPERATE PROPERLY.

4. DISCONNECTING AND REMOVING THE EXISTING 30KVA STEP-UP TRANSFORMER (UID #1XFMR-2). THE STEP-UP TRANSFORMER IS CURRENTLY FEEDING EXISTING 60A/480V DISCONNECT SWITCH FOR ELEVATOR. REMOVE CONDUCTORS AND CONDUITS BACK TO PANEL, PANEL B-9 (UID #1-SWGSEC-2). RE-FEED EXISTING 60A DISCONNECT SWITCH (480V) FROM ELEVATOR MACHINE ROOM AND CONNECT TO NEW 480V SWITCHGEAR (UID-1-SWGSEC-5). TEST AND ENSURE THE ELEVATOR MACHINE RETURNS TO ORIGINAL OPERATION.



KEY PLAN

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

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
30576
OKLAHOMA
04/10/26

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

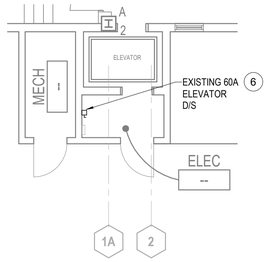
REVISIONS

MARK	DATE	DESCRIPTION

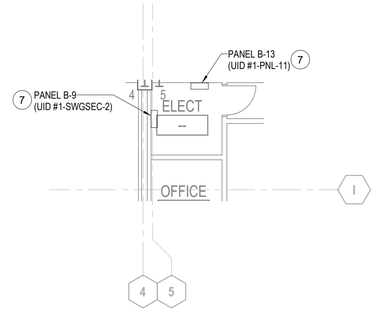
MANAGEMENT INFORMATION
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE
ELECTRICAL OVERALL PLAN

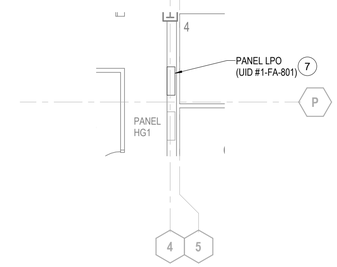
SHEET NUMBER
E-100



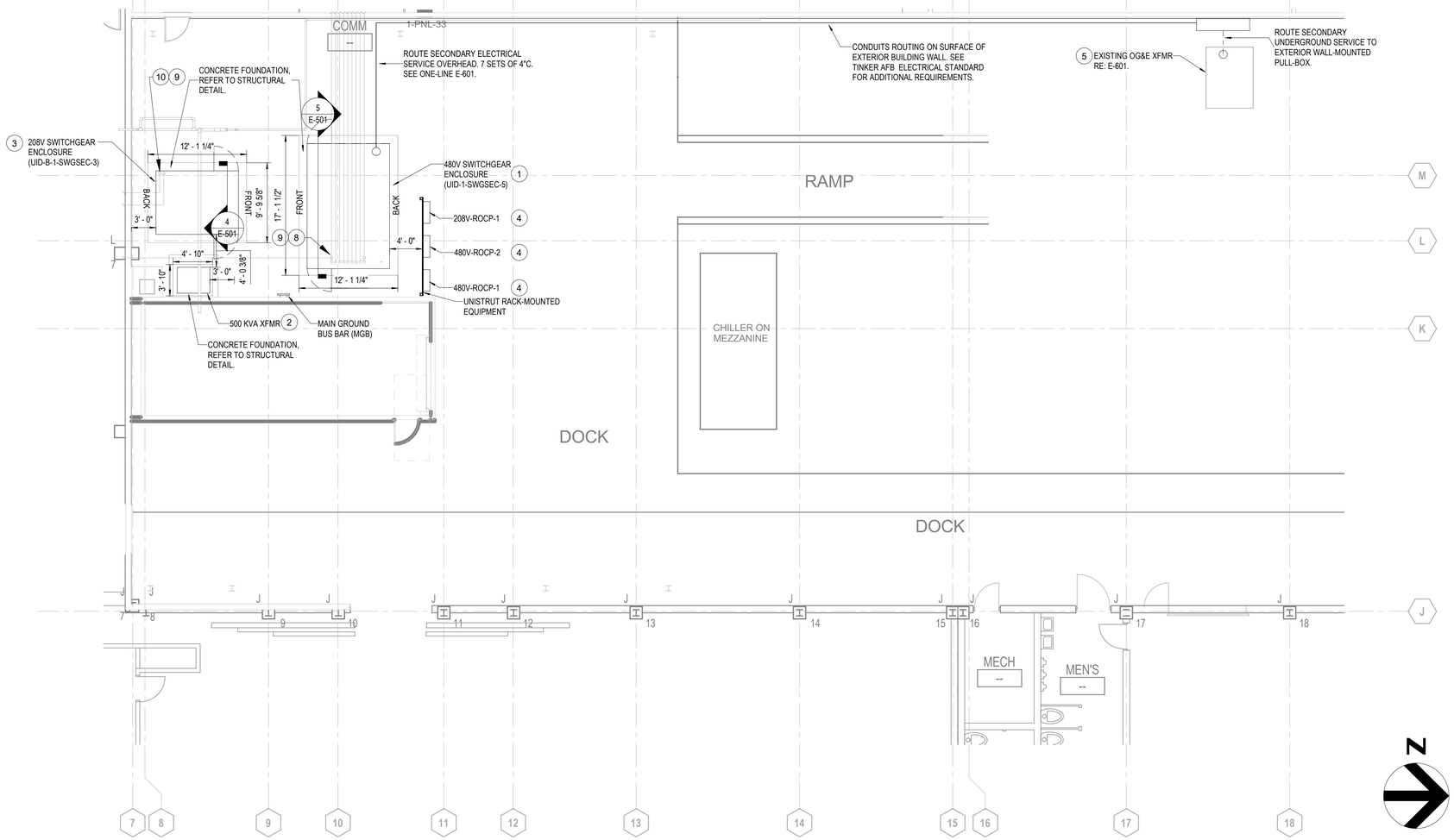
1 E-100 ELECTRICAL PLAN - ENLARGED ELEVATOR ROOM
1/8" = 1'-0"



2 E-100 ELECTRICAL PLAN - ENLARGED ELECTRICAL CLOSET
1/8" = 1'-0"



3 E-100 ELECTRICAL PLAN - ENLARGED ELECTRICAL CLOSETS
1/8" = 1'-0"



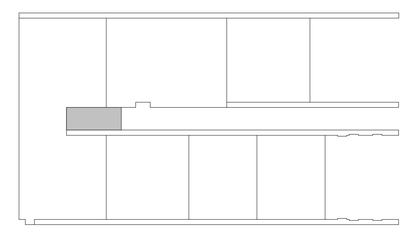
4 E-100 ELECTRICAL PLAN - ENLARGED DOCK
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO E-601 FOR NEW WORK ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
2. ALL NEW WORK MUST BE DONE IN PHASES COORDINATED WITH THE FACILITY USER GROUP. REFER TO E-100 FOR PHASING PLAN DETAILS.
3. COORDINATE PLACEMENT OF ELECTRICAL EQUIPMENT WITH OTHER DISCIPLINES PRIOR TO ROUGH-IN.

KEYED NOTES:

1. PROVIDE NEW 480V SWITCHGEAR ENCLOSURE. RECONNECT EXISTING FEEDER-TO-REMAIN AND LINE UP WITH THE SWITCHGEAR DISTRIBUTION SECTION AS REQUIRED FOR RECONNECTION.
2. PROVIDE 480V-208Y/120V TRANSFORMER AND MAKE CONNECTION TO 480V SWITCHGEAR AFTER EQUIPMENT RUNNING.
3. PROVIDE 208V SWITCHGEAR ENCLOSURE AND MAKE CONNECTION TO 500KVA TRANSFORMER AFTER EQUIPMENT IS RUNNING. RECONNECT EXISTING FEEDER-TO-REMAIN AND LINE UP WITH THE SWITCHGEAR DISTRIBUTION SECTION AS REQUIRED FOR RECONNECTION.
4. PROVIDE REMOTE OPERATIONAL BREAKER ENCLOSURE FOR 480V AND 208V BREAKERS HOUSED IN SWITCHGEAR ENCLOSURES. COORDINATE WITH MANUFACTURER FOR EXACT SIZE AND DIMENSION AND ADDITIONAL REQUIREMENTS SUCH AS CLEARANCES AND INSTALLATIONS. REFER TO SHEET E-501 FOR REMOTE OPERATIONAL BREAKER ENCLOSURE ELEVATIONS.
5. EXISTING 1500KVA OG&E 480V TRANSFORMER TO FEED NEW 480V SWITCHGEAR ENCLOSURE TO REMAIN.
6. CONNECT EXISTING ELEVATOR DISC. SWITCH TO 480V SWITCHGEAR AS SHOWN ON ONE-LINE DIAGRAM.
7. PROVIDE PANEL WITH SAME RATING AS EXISTING PANEL, INCLUDING EXISTING BRANCH CIRCUIT BREAKERS, AND INSTALL IN PLACE. RECONNECT ALL EXISTING BRANCH CIRCUITS RETAINED DURING DEMOLITION TO NEW PANEL EXTEND CONDUCTORS/CONDUITS AS REQUIRED FOR FINAL RECONNECTION. CONTRACTOR MUST VERIFY EXSITING EQUIPMENT RATING SUCH AS VOLTAGE, AMPERAGE, AND EXISTING BRANCH CIRCUIT BREAKER SIZES PRIOR TO PROCUREMENT AND INSTALLATION. SUBMIT RFI FOR DISCREPANCIES.
8. RECONNECT ALL EXISTING FEEDER RETAINED DURING DEMOLITION TO NEW SWITCHGEAR AS SHOWN ON ONE-LINE DIAGRAM. EXTEND CONDUCTORS/CONDUITS AS REQUIRED FOR FINAL CONNECTION.
9. PRIOR TO PROCUREMENT AND INSTALLATION, CONTRACTOR MUST TRACE AND RECORD THE EXISTING FEEDERS AND ASSOCIATED CIRCUIT BREAKER SIZE SERVING EACH DEDICATED FEEDER, SO THAT THE DISTRIBUTION SECTION OF THE SWITCHGEAR LINE UP IN ORDER OF THE EXISTING FEEDERS LOCATION. CONTRACTOR MUST SUBMIT THE SHOP DRAWINGS INDICATING EACH EXISTING FEEDER ROUTE LINED UP WITH THE SWITCHGEAR DISTRIBUTION SECTION RESPECTIVELY, FOR REVIEW AND APPROVAL.
10. ROUTE CONDUCTORS VIA EXISTING CONDUIT. EXTEND CONDUITS AS REQUIRED FOR RECONNECTION. SEE ONE-LINE, E0601 FOR ADDITIONAL INFORMATION.



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TINKER AFB, OK

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OKLAHOMA
04/10/26

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WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

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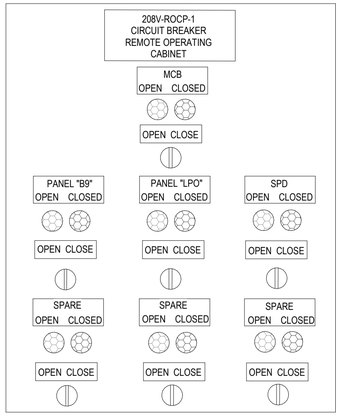
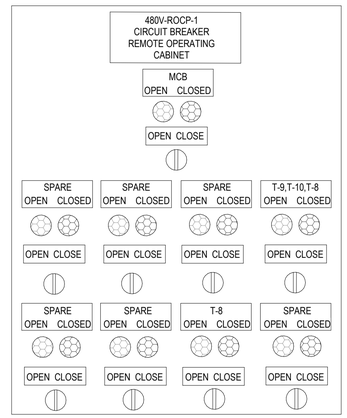
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE
ELECTRICAL
ENLARGED PLANS - NEW WORK

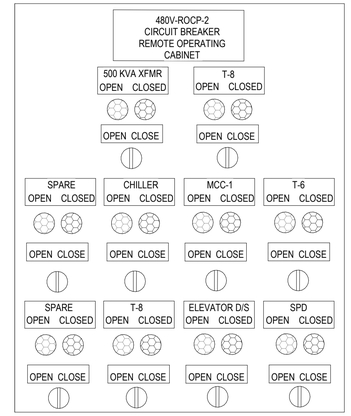
SHEET NUMBER
E-401



1 E-501 208V-ROCP-1 ELEVATION
NOT TO SCALE



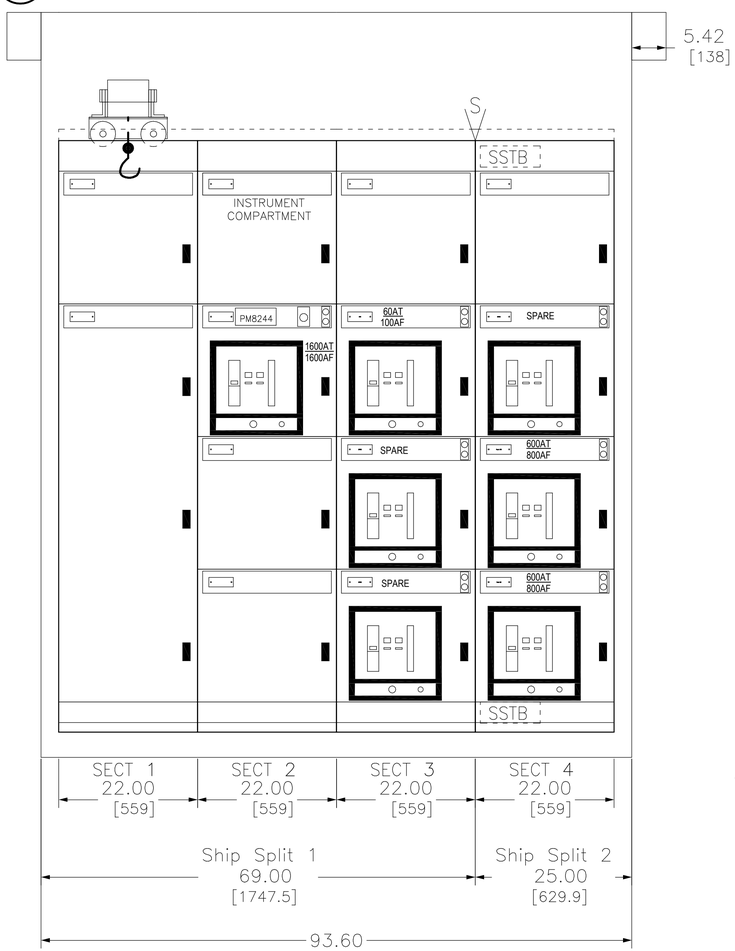
2 E-501 480V-ROCP-1 ELEVATION
NOT TO SCALE



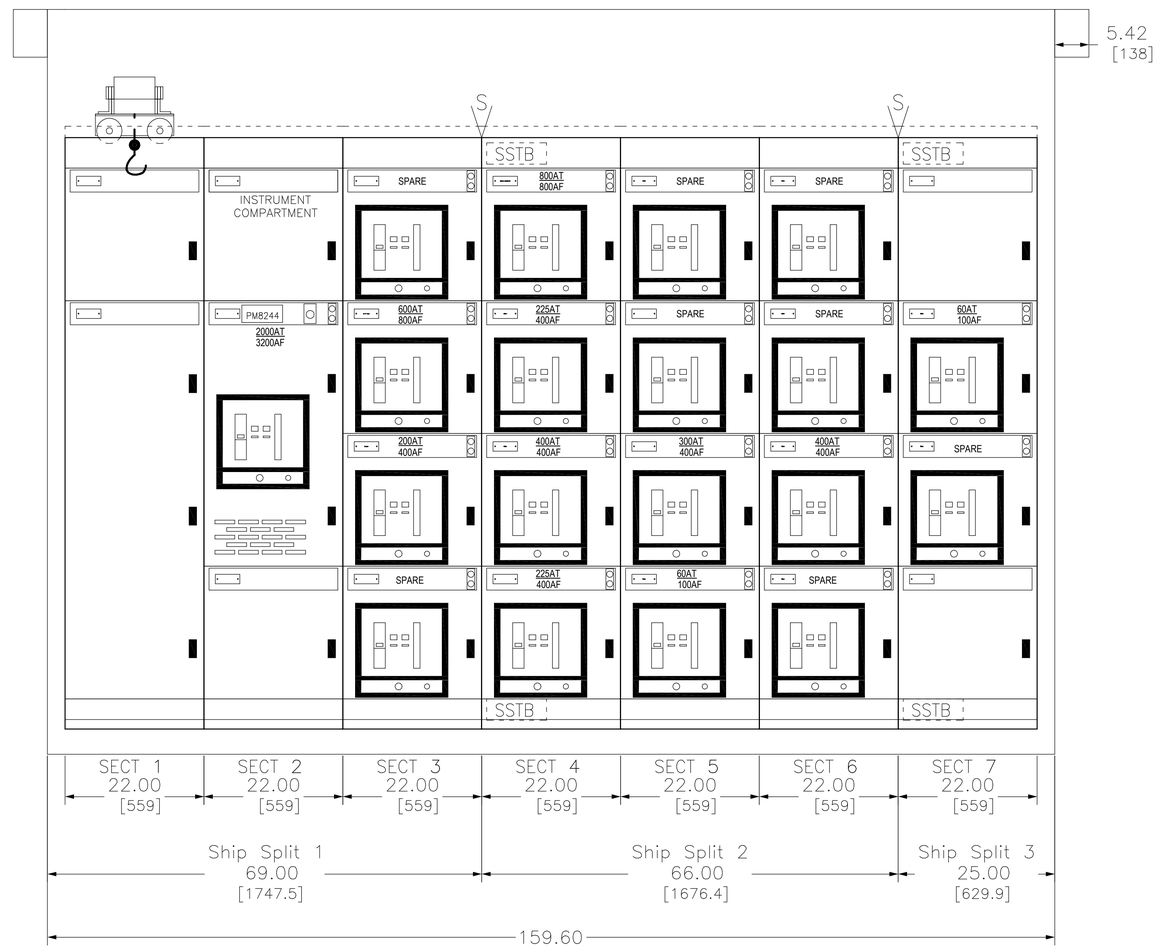
3 E-501 480V-ROCP-2 ELEVATION
NOT TO SCALE

GENERAL NOTES:

1. COORDINATE WITH MANUFACTURER ON EXISTING CIRCUIT BREAKER SIZES BASED ON EXISTING SITE CONDITIONS. PROVIDE SHOP DRAWINGS AND SUBMIT FOR REVIEW AND APPROVAL.



4 E-501 208V SWITCHGEAR ELEVATION
NOT TO SCALE



5 E-501 480V SWITCHGEAR ELEVATION
NOT TO SCALE

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

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
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OKLAHOMA
04-10-26

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE
ELECTRICAL 480V AND 208V SWITCHGEAR ELEVATIONS

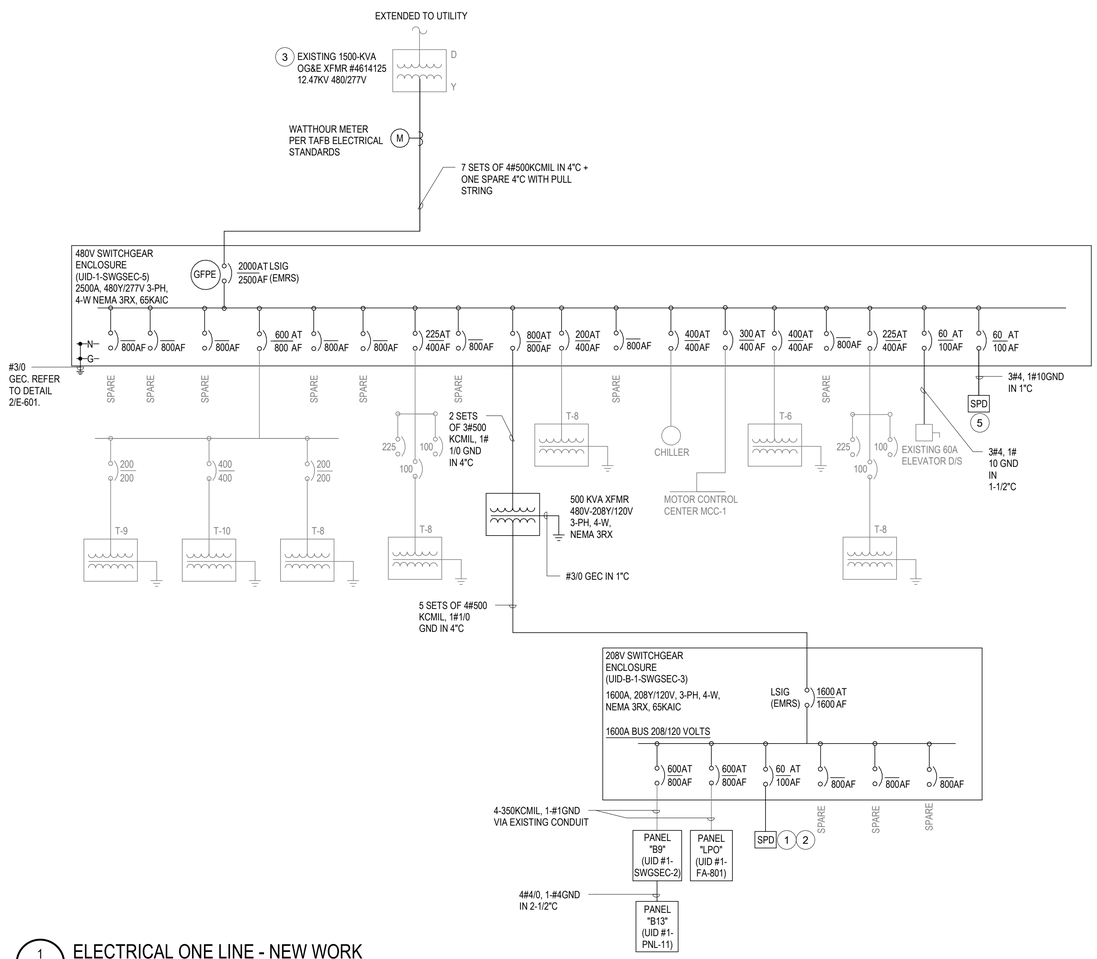
SHEET NUMBER
E-501

GENERAL NOTES:

1. THIS DRAWING WAS PREPARED FROM EXISTING AS-BUILTS AND LIMITED ACCESS FOR FIELD OBSERVATIONS AND VERIFICATIONS. FIELD VERIFY EXISTING CONDITIONS AND UPDATE AS-BUILT DRAWINGS FOR RECORD.
2. UNLESS NOTED OTHERWISE, ALL EXISTING EQUIPMENT TO REMAIN. EXISTING CIRCUIT BREAKERS AS INDICATED ARE 3-POLE.
3. WHERE PROVIDING NEW CIRCUIT BREAKERS IN EXISTING PANELS, ENSURE CIRCUIT BREAKER KAIC RATING MATCHES THE PANEL RATING.
4. PROVIDE FIELD LABEL AND AFFIX TO PANELBOARD ENCLOSURE THE AVAILABLE FAULT CURRENT / DATE OF THE CALCULATION IN ACCORDANCE WITH NEC 2026, ARTICLE 408. REFER TO SPECIFICATIONS AND TINKER AFB ELECTRICAL STANDARDS FOR FIELD LABELING REQUIREMENTS.
5. WHERE EXISTING FEEDER OR BRANCH CIRCUITS ARE RETAINED BUT AFFECTED BY THE WORKS, UNDERTAKE INSPECTION AND TESTING TO ENSURE COMPLIANCE WITH NFPA 70 (NEC).

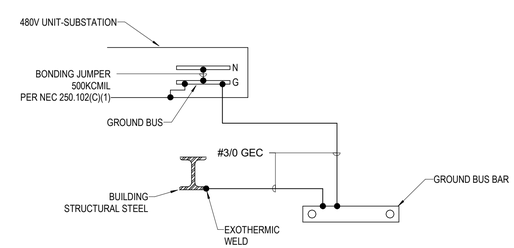
KEYED NOTES:

1. PROVIDE 3#4, 1#10G, IN 1"C FOR EXTERNALLY MOUNTED SPD.
2. MOUNT DEVICE AS CLOSE TO EQUIPMENT AS POSSIBLE OR PER EQUIPMENT MANUFACTURER RECOMMENDATION.
3. CONNECT TO SECONDARY SIDE OF THE TRANSFORMER AS INDICATED. COORDINATE WITH OG&E FOR ALL FINAL POWER CONNECTION REQUIREMENTS INCLUDING METER INSTALLATION PRIOR COMMENCING WORK.



1 / E-601 ELECTRICAL ONE LINE - NEW WORK

NOT TO SCALE



2 / E-601 GROUNDING RISER DETAIL

NOT TO SCALE

AIR FORCE MATERIEL COMMAND
72 ABW CIVIL ENGINEER DIRECTORATE

TINKER AFB, OK

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
30576
OKLAHOMA
04-10-26

PROJECT INFORMATION

WWYK200051
REPLACE SWITCHGEAR, BLDG 1

TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION

ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE

ELECTRICAL ONE-LINE - NEW WORK

SHEET NUMBER

E-601

GENERAL NOTES:

1. THIS DRAWING WAS PREPARED FROM SITE OBSERVATION AND LIMITED ACCESS FOR BRANCH CIRCUIT VERIFICATIONS.
   CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND UPDATE ALL EXISTING CONDITIONS, EQUIPMENT AND OVERCURRENT PROTECTIVE DEVICES RATING. SUBMIT ALL EXISTING CONDITIONS TO ENGINEER FOR RECORDS. SUBMIT RFIs IF THERE IS ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS FOR RESOLUTIONS PRIOR COMMENCING WORKS.
2. CONTRACTOR SHALL ENSURE REPLACED PANELBOARDS AND ASSOCIATED CIRCUIT BREAKERS SIZE AND KAIC RATING MATCHES THE EXISTING PANELBOARDS.
3. CONTRACTOR SHALL PROVIDE FIELD LABEL AND AFFIX TO PANELBOARD ENCLOSURE THE AVAILABLE FAULT CURRENT / DATE OF THE CALCULATION IN ACCORDANCE WITH NEC 2026, ARTICLE 408. REFER TO SPECIFICATIONS AND TINKER AFB ELECTRICAL STANDARDS FOR FIELD LABELING REQUIREMENTS.
4. WHERE EXISTING FEEDER OR BRANCH CIRCUITS ARE RETAINED BUT AFFECTED BY THE WORKS, UNDERTAKE INSPECTION AND TESTING TO ENSURE COMPLIANCE WITH NFPA 70 (NEC).

PANEL LPO (UID #1-FA-801)

LOCATION: ELECTRICAL CLOSET — VOLTAGE: 208/120 V — KAIC: 14 — BUSSING SHALL BE FULLY RATED
MOUNTING: SURFACE — PHASE: 3 P/4W — CODES: 0=EQPT, 1=RCPT, 2=LTG, 3=A/C, 4=HEAT
ENCLOSURE: NEMA 1 — STYLE: I-LINE — BUSSING: 600 A — 5=CONTINUOUS MOTORS, 6=LRGST MOTOR, 7=PANEL
BRKR MTG: BOLT-ON (REF: SQUARE-D) — MCB: 600 A — ACCESSORIES: GROUND BUS, 30 SPACE
BREAKERS: 75 DEGREE TERMINALS — MLO: A

CODE	BRKR	CIRCUIT USE	CKT	LOAD	A	B	C	LOAD	CKT	CIRCUIT USE	BRKR	CODE
	225/3	EXISTING LOAD	1		X				2	EXISTING LOAD	150/3	
			3			X			4			
			5				X		6			
	225/3	EXISTING LOAD	7		X				8	EXISTING LOAD	150/3	
			9			X			10			
			11				X		12			
	150/3	EXISTING LOAD	13		X				14	SPARE	150/3	
			15			X			16			
			17				X		18			
	70/3	EXISTING LOAD	19		X				20	EXISTING LOAD	70/3	
			21			X			22			
			23				X		24			
	70/3	EXISTING LOAD	25		X				26	EXISTING LOAD	100/3	
			27			X			28			
			29				X		30			
	150/3	SPARE	31		X				32	SPARE	150/3	
			33			X			34			
			35				X		36			

	EQPT VA	RCPT VA	LTG VA	AC/HEAT VA	MOTORS	LRG MTR	CONN VA	PANEL VA	PHASE AMP
PHASE A	0	0	0	0	0	0	0	0	0
PHASE B	0	0	0	0	0	0	0	0	0
PHASE C	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	

PANEL DEMAND KVA: **0.00** — ADDITIONAL PANEL DEMAND AMPACITY: **0** AMPS
RESERVE KVA: **0.00** — RESERVE AMPACITY: **0.0** AMPS
DESIGN KVA: **0.00** — DESIGN AMPACITY: **0** AMPS

NOTES:
1. PROVIDE NEW CIRCUIT BREAKERS WITH THE PANEL FOR EXISTING LOADS AND RETERMINATE EXISTING FEEDERS.
2. ALL NEW BREAKERS MUST MATCH EXISTING RATING, POLES, AND POSITION ASSOCIATED WITH EXISTING CIRCUIT BEING RECONNECTED TO.

PANEL B-9 (UID #1-SWGSEC-2)

LOCATION: ELECTRICAL CLOSET — VOLTAGE: 208/120 V — KAIC: 14 — BUSSING SHALL BE FULLY RATED
MOUNTING: SURFACE — PHASE: 3 P/4W — CODES: 0=EQPT, 1=RCPT, 2=LTG, 3=A/C, 4=HEAT
ENCLOSURE: NEMA 1 — STYLE: I-LINE — BUSSING: 600 A — 5=CONTINUOUS MOTORS, 6=LRGST MOTOR, 7=PANEL
BRKR MTG: BOLT-ON (REF: SQUARE-D) — MCB: 600 A — ACCESSORIES: GROUND BUS, 48 SPACE
BREAKERS: 75 DEGREE TERMINALS — MLO: A

CODE	BRKR	CIRCUIT USE	CKT	LOAD	A	B	C	LOAD	CKT	CIRCUIT USE	BRKR	CODE
	150/3	EXISTING LOAD	1		X				2	EXISTING LOAD	150/3	
			3			X			4			
			5				X		6			
	150/3	EXISTING LOAD	7		X				8	EXISTING LOAD	150/3	
			9			X			10			
			11				X		12			
	100/3	EXISTING LOAD	13		X				14	EXISTING LOAD	100/3	
			15			X			16			
			17				X		18			
	100/3	EXISTING LOAD	19		X				20	EXISTING LOAD	100/3	
			21			X			22			
			23				X		24			
	150/3	SPARE	25		X				26	SPARE	150/3	
			27			X			28			
			29				X		30			
	150/3	SPARE	31		X				32	SPARE	150/3	
			33			X			34			
			35				X		36			
	150/3	SPARE	37		X				38	SPARE	150/3	
			39			X			40			
			41				X		42			
	150/3	SPARE	43		X				44	PANEL "B-13" (UID #1-PNL-11)	150/3	7
			45			X			46			
			47				X		48			

	EQPT VA	RCPT VA	LTG VA	AC/HEAT VA	MOTORS	LRG MTR	CONN VA	PANEL VA	PHASE AMP
PHASE A	0	0	0	0	0	0	0	0	0
PHASE B	0	0	0	0	0	0	0	0	0
PHASE C	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	

PANEL DEMAND KVA: **0.00** — ADDITIONAL PANEL DEMAND AMPACITY: **0** AMPS
RESERVE KVA: **0.00** — RESERVE AMPACITY: **0.0** AMPS
DESIGN KVA: **0.00** — DESIGN AMPACITY: **0** AMPS

NOTES:
1. PROVIDE NEW CIRCUIT BREAKERS WITH THE PANEL FOR EXISTING LOADS AND RETERMINATE EXISTING FEEDERS.
2. ALL NEW BREAKERS MUST MATCH EXISTING RATING, POLES, AND POSITION ASSOCIATED WITH EXISTING CIRCUIT BEING RECONNECTED TO.

PANEL B-13 (UID #1-PNL-11)

LOCATION: ELECTRICAL CLOSET — VOLTAGE: 208/120 V — KAIC: 10 — BUSSING SHALL BE FULLY RATED
MOUNTING: SURFACE — PHASE: 3 P/4W — CODES: 0=EQPT, 1=RCPT, 2=LTG, 3=A/C, 4=HEAT
ENCLOSURE: NEMA 1 — STYLE: I-LINE — BUSSING: 225 A — 5=CONTINUOUS MOTORS, 6=LRGST MOTOR, 7=PANEL
BRKR MTG: BOLT-ON (REF: SQUARE D) — MCB: A — ACCESSORIES: GROUND BUS, 32 SPACE
BREAKERS: 75 DEGREE TERMINALS — MLO: 225 A

CODE	BRKR	CIRCUIT USE	CKT	LOAD	A	B	C	LOAD	CKT	CIRCUIT USE	BRKR	CODE
	20/1	EXISTING LOAD	1		X				2	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	3			X			4	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	5				X		6	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	7		X				8	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	9			X			10	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	11				X		12	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	13		X				14	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	15			X			16	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	17				X		18	EXISTING LOAD	20/1	
	20/1	EXISTING LOAD	19		X				20	EXISTING LOAD	20/1	
	20/1	SHIPPING BAY	21			X			22	SHIPPING BAY	20/1	
	20/1	SHIPPING BAY	23				X		24	SHIPPING BAY	20/1	
	20/1	SHIPPING BAY	25		X				26	SHIPPING BAY	20/1	
	20/1	EXISTING LOAD	27			X			28	EXISTING LOAD	20/1	
	20/1	SHIPPING BAY	29				X		30	SHIPPING BAY	20/1	
	20/1	SHIPPING BAY	31		X				32	SHIPPING BAY	20/1	

	EQPT VA	RCPT VA	LTG VA	AC/HEAT VA	MOTORS	LRG MTR	CONN VA	PANEL VA	PHASE AMP
PHASE A	0	0	0	0	0	0	0	0	0
PHASE B	0	0	0	0	0	0	0	0	0
PHASE C	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	

PANEL DEMAND KVA: **0.00** — ADDITIONAL PANEL DEMAND AMPACITY: **0** AMPS
RESERVE KVA: **0.00** — RESERVE AMPACITY: **0.0** AMPS
DESIGN KVA: **0.00** — DESIGN AMPACITY: **0** AMPS

NOTES:
1. PROVIDE NEW CIRCUIT BREAKERS WITH THE PANEL FOR EXISTING LOADS AND RETERMINATE EXISTING FEEDERS.
2. ALL NEW BREAKERS MUST MATCH EXISTING RATING, POLES, AND POSITION ASSOCIATED WITH EXISTING CIRCUIT BEING RECONNECTED TO.

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

LICENSED PROFESSIONAL ENGINEER
KRYSTAL T. LE
30576
OKLAHOMA
24-10-26

PROJECT INFORMATION
WWYK200051
REPLACE SWITCHGEAR, BLDG 1
TINKER AIR FORCE BASE, OKLAHOMA

REVISIONS

MARK	DATE	DESCRIPTION

MANAGEMENT INFORMATION
ISSUE DATE: 10 APRIL 2026
DESIGN GROUP: HDR BES
DESIGNED BY: K. LE
DRAWN BY: G. CORNELL
CHECKED BY: G. JAGLOWSKI
DESIGN FILE LOCATION:

SHEET TITLE
ELECTRICAL SCHEDULES

SHEET NUMBER
E-701