

POWER & LIGHTING LEGEND

ALL ABBREVIATIONS SHOWN MAY NOT APPEAR IN DRAWINGS.

	UTILITY STRIP FIXTURE, OVERHEAD OR WALL MOUNTED
	UTILITY STRIP FIXTURE WITH EMERGENCY BATTERY BACKUP
	LED, PENDANT, HIGH BAY FIXTURE
	LED, PENDANT, HIGH BAY FIXTURE WITH BATTERY BACKUP
	RECESSED FIXTURE, 2X2, 1X4, 2X4.
	RECESSED FIXTURE WITH BATTERY BACKUP.
	EMERGENCY BATTERY PACK FIXTURE, WALL / CEILING MOUNTED.
	LIGHT FIXTURE, SURFACE MTD. / RECESSED / WALL MOUNTED.
	LIGHT FIXTURE, SURFACE MTD. / RECESSED / WALL MOUNTED. W/ BATTERY BACKUP.
	EXIT SIGN, CEILING/WALL MOUNTED. PROVIDE ARROWS AS INDICATED ON DRAWINGS. W/ BATTERY BACKUP.
	S SINGLE POLE TOGGLE SWITCH, 120/277V, 20A. 3"-10" AFF
	3S / 4S THREE-WAY TOGGLE SWITCH/FOUR-WAY TOGGLE SWITCH, 120/277V, 20A. 3"-10" AFF
	M S MOTOR RATED SWITCH, AMPERAGE AS REQUIRED. VERIFY REQUIRED VOLTAGE AND # OF POLES W/ EQUIPMENT
	MS SINGLE POLE, THREE POSITION MOMENTARY CONTACT, 120/277 V, 20A. 3"-10" AFF
	DM S DIMMER SWITCH, 120/277V, FLUOR/INC AND AMPERAGE AS REQUIRED. 3"-10" AFF
	K S KEYED SWITCH, 120/277V, AMPERAGE AS REQUIRED. 3"-10" AFF
	OS / OS OCCUPANCY SENSOR, 3"-10" AFF WATTSTOPPER DW-100 OR EQUAL/ CEILING MTD.
	OS OCCUPANCY SENSOR, RELAY/POWER PACK, CONCEALED, ACCESSIBLE.
	PC PHOTOCCELL
	PANEL, LIGHTING OR POWER AS SPECIFIED IN PANEL SCHEDULE.
	F FUSED DISCONNECT SPECIFY AMP/POLE
	NF NON-FUSED DISCONNECT SPECIFY AMP/POLE
	VARIABLE FREQUENCY DRIVE/CONTROLLER.
	EXHAUST FAN FURNISHED AND INSTALLED BY HVAC. REFER TO MECHANICAL DWG'S FOR EXACT LOCATION AND ELECTRICAL REQUIREMENTS.
	Φ SINGLE RECEPTACLE 120/277V, AMPERAGE AS REQUIRED. 1"-6" AFF
	Φ / Φ DUPLEX/QUAD RECEPTACLE OUTLET, 120/277V, 20A. 1"-6" AFF
	Φ / Φ DUPLEX/QUAD RECEPTACLE OUTLET, 120/277V, 20A. 6" ABOVE COUNTER U.N.O.
	Φ / Φ DUPLEX/QUAD RECEPTACLE OUTLET, ISOLATED GROUND, 120/277V, 20A. 1"-6"
	Φ / Φ RECEPTACLE, FLOOR / CEILING FLUSH MOUNTED. 120/277V, 20A.
	Φ 2-POLE SINGLE RECEPTACLE 240V, AMPERAGE AS REQUIRED.
	Φ TVSS RECEPTACLE DUPLEX RECEPTACLE, 120V, 15A. EQUAL TO PANAMAX MODEL# MW-SURGE.
	Φ SPECIAL PURPOSE RECEPTACLE OUTLET, NEMA CONFIGURATION TO MATCH PLUG. (*GF=GROUND FAULT INTERRUPTER, *WP=WFI PROTECTED, WEATHER RATED, WEATHERPROOF ENCLOSURE)
	Φ / Φ / □ JUNCTION BOX
	ABOVE GROUND CONDUIT
	UNDERGROUND CONDUIT
	TBB / CBB COMMUNICATIONS, TELEPHONE / COMPUTER BACKBOARD.
	① HVAC CONTROLS, 3"-10" AFF U.N.O.
	Ⓣ TIME CLOCK.
	Ⓛ / ⓁⓁ LIGHTING CONTACTOR. ELECTRICALLY HELD WITH NO. OF POLES AS INDICATED.

ELECTRICAL ABBREVIATIONS

ALL ABBREVIATIONS SHOWN MAY NOT APPEAR IN DRAWINGS.

⊙	AT	MAX	MAXIMUM
&	AND	MCB	MAIN CIRCUIT BREAKER
A	AMPERE	MCC	MOTOR CONTROL CENTER
AB	ABOVE	MCM	1000 CIRCUULAR MILS
AC	ALTERNATING CURRENT	MECH	MECHANICAL
A/C	AIR CONDITIONING	MIN	MINIMUM
AFC	ABOVE FINISH CEILING	MISC	MISCELLANEOUS
AFF	ABOVE FINISH FLOOR	MLO	MAN LIVES ONLY
AFO	ABOVE FINISH GRADE	MFR	MANUFACTURER
AIC	AMPERE INTERRUPTING CAPACITY	MID	MOUNTED
ALUM	ALUMINUM	MIC	MOUNTING
APPROX	APPROXIMATE(LY)	MIS	MISCELLANEOUS
ARCH	ARCHITECT(URAL)	MNS	MANUAL TRANSFER SWITCH
ATS	AUTOMATIC TRANSFER SWITCH	N	NEUTRAL
AUX	AUXILIARY	NA	NOT APPLICABLE
AWG	AMERICAN WIRE GAGE	N.C.	NORMALLY CLOSED
BB	BACKBOARD	N.E.C.	NATIONAL ELECTRICAL CODE
BKR	BREAKER	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSO.
BLDG	BUILDING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
C	CONDUIT	N.I.C.	NOT IN CONTRACT
CLB	CABINET	NI	NIGHT LIGHT
CR	CIRCUIT	NO.	NORMALLY OPEN
CLG	CEILING	NO. OR #	NUMBER
CON	CONTROL	OD	OUTSIDE DIAMETER
CT	CURRENT TRANSFORMER	P	POLE
CV	CABLE TELEVISION	PH OR Ø	PHASE
CJ	COPPER	PMS	PAD MOUNTED SWITCH
CWP	COLD WATER PIPE	PMT	PAD MOUNTED TRANSFORMER
DB	DIRECT BURIAL	PNL	PANEL
DC	DIRECT CURRENT	PR	PRIMARY
DEG	DEGREE	PT	POTENTIAL TRANSFORMER
DET	DUAL ELEMENT TIME DELAY	PVC	POLYVINYL CHLORIDE
DIR	DIRECTED	PW	PART WINDING
DISC	DISCONNECT SWITCH	REF	REFERENCE
DN	DOWN	REQ	REQUIRED
DPSL	GARBAGE DISPOSAL	R	RATED LOAD AMPERES
DPST	DOUBLE POLE - SINGLE THROW	RM	ROOM
DPDT	DOUBLE POLE - DOUBLE THROW	RNC	RIGID NONMETALLIC CONDUIT
DTMTR	ERT TYPE TRANSFORMER	RNG	ELECTRICAL RANGE
DW	DISHWASHER	REF	REFRIGERATOR
EA	EACH	RT	RAN TIGHT
EAM	EXHAUST	SEC	SHORT CIRCUIT CURRENT RATING
EM	EMERGENCY	SCH	SCHEDULE
EMT	ELECTRICAL METALLIC TUBING	SD	SOFT DRAWN
EP	EXPLOSION PROOF	SE	SERVICE ENTRANCE
EQ	EQUIPMENT	SEC	SECONDARY
ER	EXISTING, REMOVE.	SI	SHIELD
EW	ELECTRIC WATER COOLER	SICR	INTERNATIONAL SYSTEM OF UNITS
EX	EXISTING, REPLACE WITH NEW	SLD	SINGLE LINE DIAGRAM
F	FUSE	SLR	SURFACE METALLIC RACEWAY
FA	FLUSH MTC	SN	SOLID NEUTRAL
FIN	FIRE ALARM	SPECS	SPECIFICATIONS
FIR	FISHED	SPST	SINGLE POLE - SINGLE THROW
FLA	FLOOR	STS	STATIC TRANSFER SWITCH
FMC	FULL LOAD AMPERES	SW	SWITCH
GA	GALVE	SW BO	SWITCH BOARD
GALV	GALVANIZED	SW CR	SWITCHBOARD
GF	GROUND FAULT INTERRUPTER	TB	TERMINAL BACKBOARD
GR	GALVANIZED RIGID METAL CONDUIT	TELE	TELEPHONE
GND	GROUND	TEMP	TEMPERATURE
HD	HEAVY DUTY	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSORS
HH	HANDHOLE	TYP	TYPICAL
HP	HORSEPOWER	UL	UNDERWRITER'S LABORATORY
HV	HIGH VOLTAGE	V	VOLTAGE
HVAC	HEATING/VENTILATION/AIR CONDITIONING	V	VOLTS ALTERNATING CURRENT
HZ	HERTZ (CYCLES PER SECOND)	VDC	VOLTS DIRECT CURRENT
ID	INSIDE DIAMETER	VENT	VENTILATION
IG	ISOLATED GROUND	W	WIRE
IMC	INTERMEDIATE METAL CONDUIT	W/	WITH
J-BOX	JUNCTION BOX	WP	WEATHERPROOF
K	KILO (1000)	WT	WATERTIGHT
KMIL	KILO CIRCUAR MILS	Z	ZONE
KV	KILO VOLTS	-	FEET
KVA	KILO VOLT - AMPERES	"	INCHES
KW	KILO WATTS		
LFC	LIQUIDTIGHT FLEXIBLE CONDUIT		
LGT	LIGHT(ING)		
LV	LOW VOLTAGE		

AUXILIARY LEGEND

ALL SYMBOLS SHOWN MAY NOT APPEAR IN DRAWINGS.

	FIRE ALARM MANUAL PULL STATION, 3"-10" AFF
	FIRE ALARM STROBE / HORN-STROBE, 7"-6" AFF
	FIRE ALARM STROBE / HORN-STROBE. CEILING MOUNTED.
	FIRE ALARM SMOKE DETECTOR, CEILING MOUNTED.
	FIRE ALARM DUCT-MOUNTED SMOKE DETECTOR W/ SAMPLING TUBE.
	FIRE ALARM REMOTE TEST STATION, 3"-10" AFF
	FIRE ALARM HEAT DETECTOR, CEILING MOUNTED.
	FIRE ALARM AUXILIARY RELAY.
	MONITOR MODULE FOR AUXILIARY CONTROL
	FIRE ALARM FIRE SPRINKLER SYSTEM VALVE TAMPER SWITCH
	FIRE ALARM FIRE SPRINKLER SYSTEM FLOW SWITCH
	FIRE ALARM CONTROL PANEL.
	FIRE ALARM REMOTE PANEL.
	TELEPHONE/DATA OUTLET AND COVER PLATE. 18" AFF WITH 3/4" C. AAC/UNO
	WALL MOUNTED TELEPHONE, MOUNT 60" AFF/UNO
	COMBINATION DATA/TELEPHONE OUTLET AND COVER PLATE. 18" ACC WITH 3/4" C. TO ACC/UNO
	DATA OUTLET AND COVER PLATE, MOUNTED ON COLUMN OR POWER POLE.
	FLOOR BOX, ROUND "POKE THRU" TYPE WITH DUPLEX RECEPTACLE, TELEPHONE AND DATA OUTLET.
	FLOOR BOX COVER SHALL BE BRUSHED ALUMINUM WITH HINGED COVERS FOR DEVICES.

ELECTRICAL DESIGNATIONS

	FIXTURE NOTE	TYPE 'A' FIXTURE (SEE FIXTURE SCHEDULE), CIRCUIT NO. 2 (TYP)
	FIXTURE NOTE	TYPE 'A' FIXTURE (SEE FIXTURE SCHEDULE), CIRCUIT NO. 2 (TYP)
	RECEPT NOTE	WALL OUTLET WITH RECEPTACLE NOTED, CONNECT TO CIRCUIT NO. 2 (TYP)
	HOME RUN	HOMERUN (TYP) TO PANEL 'PPA', CONNECT TO CIRCUIT NO.'S '5, 6, & 7' EX: 3#12 (PH), 1#12 (N) & 1#12 GND
	MULTI-CONDUCTOR RUN	MULTI-CONDUCTOR RUN (TYP) EX: 3#12 (PH), 1#12 (N) & 1#12 GND
	WIRE DESIGNATION	TIC INDICATES NUMBER OF CONDUCTORS. EX: 3#12 (PH), 1#12 (N) & 1#12 GND

NOTES:

- "N" DESIGNATION REQUIRES FIXTURE TO BE CONFIGURED FOR CONTINUATION OPERATIONAL AT ALL TIMES.
- ALL CIRCUITS SHALL CONTAIN A GREEN EQUIPMENT GROUNDING CONDUCTOR.
- EQUIPMENT GROUND CONDUCTOR SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:
#12 AWG CIRCUIT - #12 GND
#10 AWG CIRCUIT - #10 GND
#8 AWG CIRCUIT - #10 GND
- UNLESS OTHERWISE INDICATED, CONDUIT SIZE SHALL BE 3/4" MIN. AND SHALL NOT EXCEED A FILL OF 40% MAXIMUM, SEE NEC.

OF CIRCUIT CONDUCTORS $\frac{1}{2}$ " & 1/2" GND - C SIZE OF CONDUIT
SIZE OF CIRCUIT CONDUCTORS "AWG" SIZE OF GROUNDING CONDUCTOR "AWG"

ELECTRICAL NOTES

- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING ALL REQUIRED PERMITS AND INSPECTION CERTIFICATES.
- ALL WORK SHALL COMPLY WITH IBC 2015, NEC 2014, STATE AND LOCAL CODES. VERIFY WITH AUTHORITY HAVING JURISDICTION AND COMPLY AS REQUIRED.
- OMISSIONS OR MISDESCRIPTION OF DETAILS OF WORK WHICH ARE EVIDENTLY NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS, OR WHICH ARE CUSTOMARILY PERFORMED, SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH OMISSIONS AND DETAILS OF WORK, BUT THEY SHALL BE PERFORMED AS IF FULLY AND CORRECTLY SET FORTH & DESCRIBED.
- EQUIPMENT, MATERIALS, AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THIS PERIOD SHALL BE CORRECTED AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
- MATERIALS AND ALL COMPONENTS THEREOF SHALL BE NEW AND SHALL BE UL APPROVED WHERE A STANDARD HAS BEEN ESTABLISHED. COMPONENTS SHALL BE EQUAL TO THOSE SCHEDULED ON DRAWINGS.
- ALL RACEWAY EXPOSED ON THE EXTERIOR SHALL BE RIGID GALVANIZED STEEL "RGS" OR "MCC". EMT SHALL NOT BE ACCEPTABLE. COORDINATE WITH ARCHITECT IF FINISH PAINTING SHALL BE REQUIRED.
- VERIFY FIELD DIMENSIONS. COORDINATE WORK WITH OTHER TRADES TO AVOID INTERFERENCES.
- ALL EXIT AND EMERGENCY LIGHTS SHALL BE UNSWITCHED AND SHALL BE SERVED FROM THE SAME CIRCUIT AS THE GENERAL LIGHTING IN THE SAME AREA U.N.O.
- ALL ELECTRICAL PANELS SHALL HAVE ENGRAVED LAMINATED (BLACK ON WHITE) LABELS IDENTIFYING THEM AS INDICATED ON DRAWINGS.
- ENSURE THAT ALL PENETRATIONS OF FIRE WALLS AND DECKS ARE PROPERLY SEALED PER IBC, ANY APPLICABLE UL ASSEMBLIES, AND THE SPECIFICATIONS.
- ALL COMPONENTS USED IN PLENUM SPACES SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL AND SHALL BE RATED FOR INSTALLATION IN PLENUM SPACES.
- COLOR OF WIRING DEVICES AND PLATES SHALL BE AS SELECTED BY THE ARCHITECT.
- COORDINATE LAYOUT CAREFULLY WITH SYSTEMS FURNITURE AND MILLWORK SHOP DRAWINGS PRIOR TO ROUGHING IN POWER AND COMMUNICATIONS OUTLETS TO ENSURE PROPER ORIENTATION OF OUTLETS WITH COMPONENTS OF THESE SYSTEMS.
- AVOID PENETRATING THE OUTER SKIN OF METAL BUILDING WALLS AND ROOF. MOUNT EQUIPMENT ON STRUCTURAL COLUMNS AND PURLINS WHERE POSSIBLE. PROVIDE MOUNTING STRUT BETWEEN STRUCTURAL MEMBERS WHERE NECESSARY. FOR ANY UNAVOIDABLE ROOF PENETRATION, ENSURE THAT METAL BUILDING MANUFACTURER'S ROOF WARRANTY REQUIREMENTS ARE SATISFIED.
- CONDUCTOR SIZES INDICATED ON THE DRAWINGS HAVE BEEN SELECTED TO PROVIDE FOR ACCEPTABLE VOLTAGE DROP. DO NOT REDUCE WIRE SIZES SHOWN WITHOUT CONSENT OF ENGINEER. BRANCH WIRING OVER 100 FT SHALL INCREASE TO NEXT SIZE CONDUCTOR.
- CONDUCTORS SHALL BE SINGLE CONDUCTOR COPPER, STRANDED FOR AWG #8 AND LARGER AND SOLID FOR AWG #10 AND SMALLER, WITH 600 VOLT THIN INSULATION.
- ALL CONDUCTORS SHALL BE INSTALLED IN METALLIC CONDUIT. PVC SCHEDULE 40, MAY BE INSTALLED BELOW GRADE WITH TRANSITIONS TO PVC SCH 80 IF CONCEALED WALL OR "RGS" IF EXPOSED ABOVE GRADE.
- THE USE OF MC CABLE IS PERMISSIBLE ONLY IN CONCEALED LOCATIONS AND FOR FLEXIBLE CONNECTIONS TO LIGHTING FIXTURES.
- THE LOCATION OF OUTLETS AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE AND THE OWNER SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ANY ADDITIONAL COST.
- TELECOM OUTLETS WHERE INSTALLED ADJACENT TO RECEPTACLE OUTLETS, SHALL HAVE UNIFORM SPACING BETWEEN RESPECTIVE DEVICES. E.C. SHALL UTILIZE MOUNTING PROVISIONS BETWEEN STUDS, IF REQUIRED, TO MAINTAIN THIS REQUIREMENT.
- ALL BREAKERS ASSOCIATED WITH HVAC EQUIPMENT SHALL BE HACR RATED.

FIRE ALARM SYSTEM NOTES:

- THE FIRE ALARM SYSTEM SHALL BE A FIRE SPRINKLER SUPERVISORY TYPE SYSTEM. PROVIDE PRIMARY POWER CIRCUITS AND ALARM NOTIFICATION AND INITIATING CIRCUITS IN ACCORDANCE WITH SPECIFICATIONS.
- THE FIRE ALARM SYSTEM SHALL BE MONITORED BY AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. PER FC 907.7.5.1, AN AUTOMATIC TELEPHONE DIALING DEVICE USED TO TRANSMIT AN EMERGENCY ALARM SHALL NOT BE CONNECTED TO ANY FIRE DEPARTMENT TELEPHONE NUMBER UNLESS APPROVED BY THE FIRE CHIEF.
- INSTALLATION SHALL COMPLY WITH IBC 2012, NEC 2014, NFPA 72, FACTORY MUTUAL ENGINEERING AND RESEARCH (FM), UL AND LOCAL FIRE MARSHALL REQUIREMENTS.
- ALL SYSTEM COMPONENTS, ENCLOSURES, FRAMES, SURGE ARRESTORS, ETC. SHALL BE GROUNDING.
- DUCT DETECTORS SHALL BE PROVIDED BY E.C. AS PART OF THE F/A EQUIPMENT PACKAGE. INSTALLATION OF DUCT DETECTOR, SAMPLING TUBES AND CORRESPONDING FAN SHUTDOWN CONTROL WIRING SHALL BE BY MECHANICAL.
- IN GENERAL, THE FIRE ALARM WIRING SYSTEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS FOR THE SYSTEM SPECIFIED AND AS FOLLOWS:

POWER: 120VAC, #12 AWG NOTIFICATION APPLIANCE CIRCUITS (NAC), 240VDC, #14 AWG, NFPA 72 STYLE Z (CLASS B) SIGNALING LINE CIRCUIT (SLC), 24VDC, STYLE 5 (CLASS B)

ALL CLASS 'A' CIRCUITS SHALL BE INSTALLED SUCH THAT THE OUTGOING AND RETURN CONDUCTORS, EXITING FROM AND RETURNING TO THE CONTROL UNIT RESPECTIVELY, ARE ROUTED SEPARATELY AND NOT ROUTED THROUGH THE SAME CABLE OR RACEWAY. A LOOP CIRCUIT SYSTEM SHALL BE UTILIZED.
- ALL WIRING SHALL BE IN A COMPLETE CONDUIT SYSTEM, SIZED IN ACCORDANCE WITH NFPA 70 (NEC). JB COVERPLATES SHALL BE RED IN COLOR. PERMANENT MARKER IDENTIFICATION NOTES SHALL BE WRITTEN INSIDE JB FOR ZONE OR ADDRESS OF DEVICE. INSTALLATION SHALL COMPLY WITH SPECIFICATIONS.
- ALL EQUIPMENT AND DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, APPLICABLE STANDARDS AND ACCESSIBLE FOR VISUAL INSPECTION AND MAINTENANCE. WIRING DIAGRAMS SHALL BE OBTAINED FROM THE SYSTEM MANUFACTURER AND INSTALLED ACCORDINGLY TO MEET THE SPECIFIED TYPES.
- E.C. SHALL COORDINATE WITH GENERAL CONTRACTOR, FIRE ALARM CONTRACTOR AND FIRE MARSHALL ALL REQUIRED INSPECTIONS.
- A "CERTIFICATE OF COMPLETION" IN ACCORDANCE WITH NFPA 72 SHALL BE FURNISHED PRIOR TO FINAL ACCEPTANCE.



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Revisions:

No.	Date	Description
A	9/20/19	ABC CODE REVIEW/PRE-PERMIT
0	12/5/19	ISSUE FOR BID

Orange Beach Public Works
Roscoe Road
Orange Beach, Alabama

ELECTRICAL NOTES AND LEGEND

Project No.: -----
Drawn By: Wade Stewart, PE
Checked: CWS
Date: December 4, 2019
Sheet Number:

E1.0



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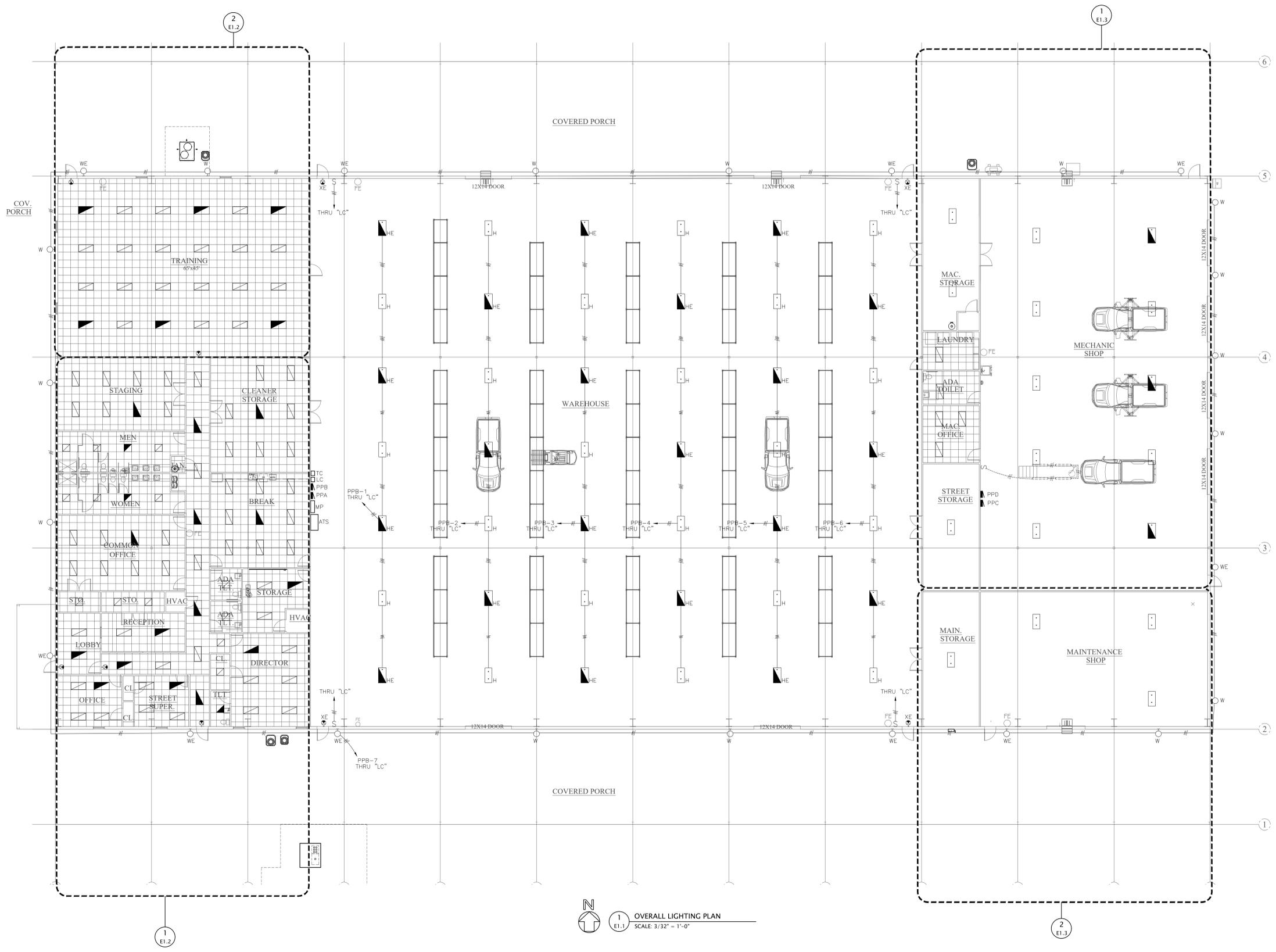
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 Roscoe Road
 Orange Beach, Alabama

OVERALL LIGHTING PLAN

Project No.: _____
 Drawn By: Wade Stewart, PE
 Checked: GWS
 Date: December 4, 2019
 Sheet Number:

E1.1

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1 E1.1 OVERALL LIGHTING PLAN
 SCALE: 3/32" = 1'-0"

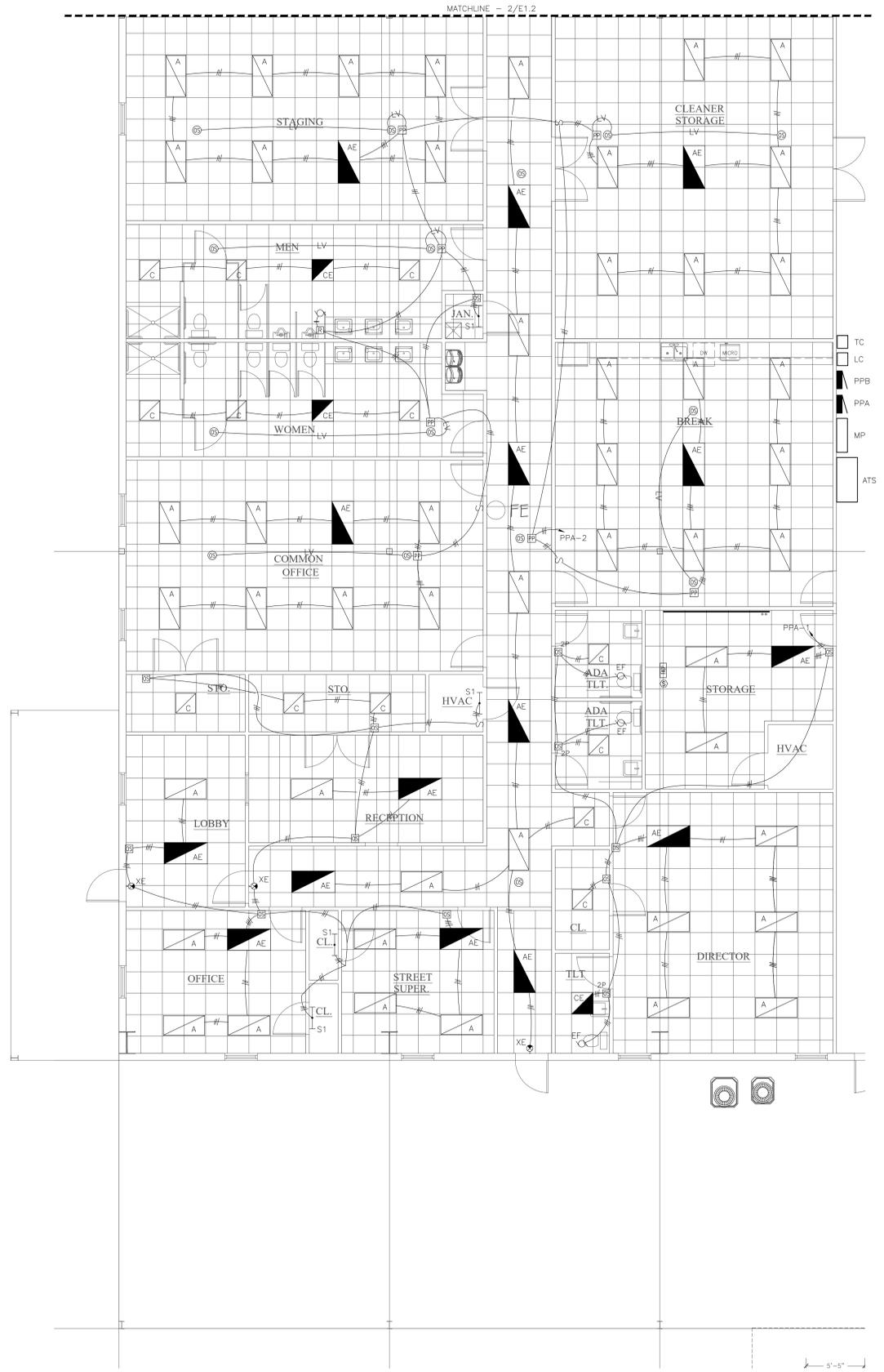


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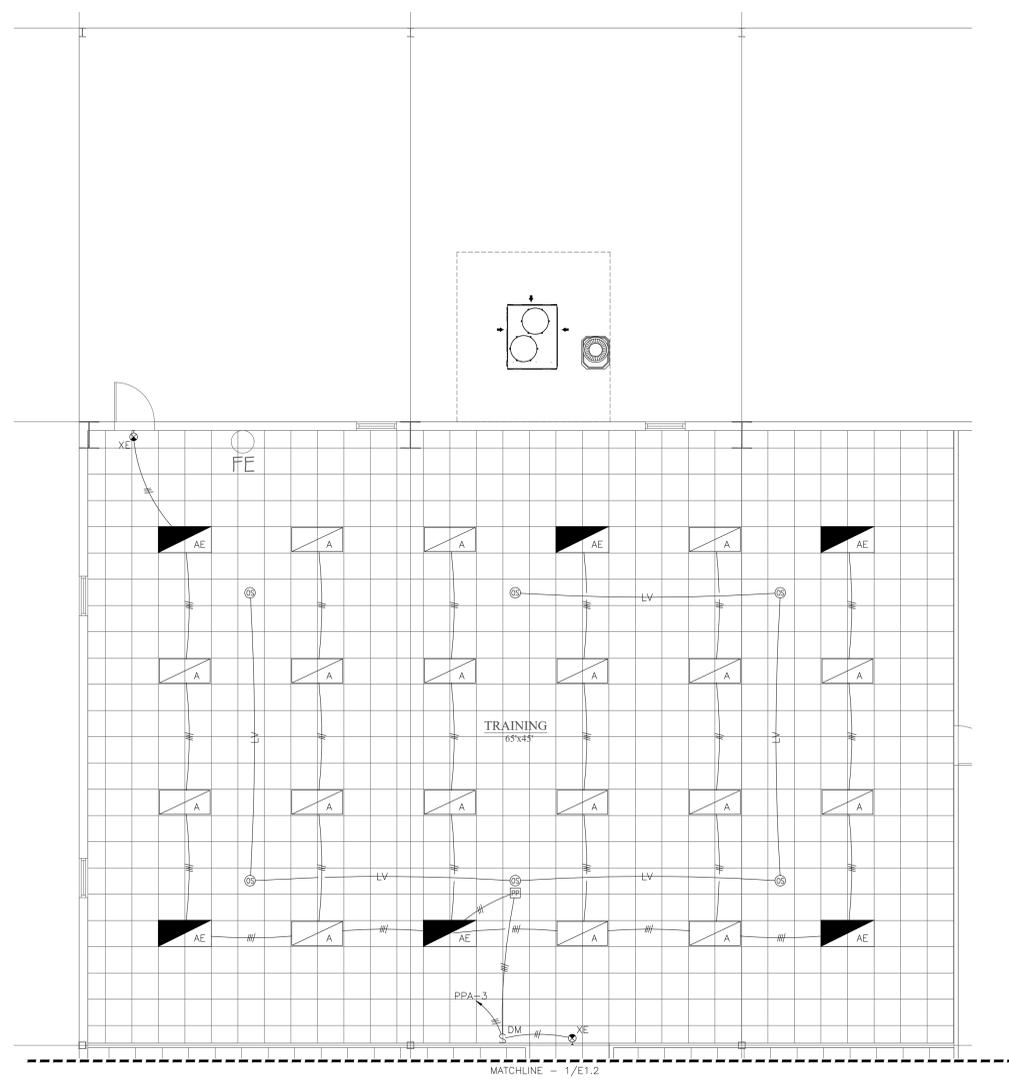


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1
 ENLARGED LIGHTING PLAN
 SCALE: 1/4" = 1'-0"



2
 ENLARGED LIGHTING PLAN
 SCALE: 3/16" = 1'-0"

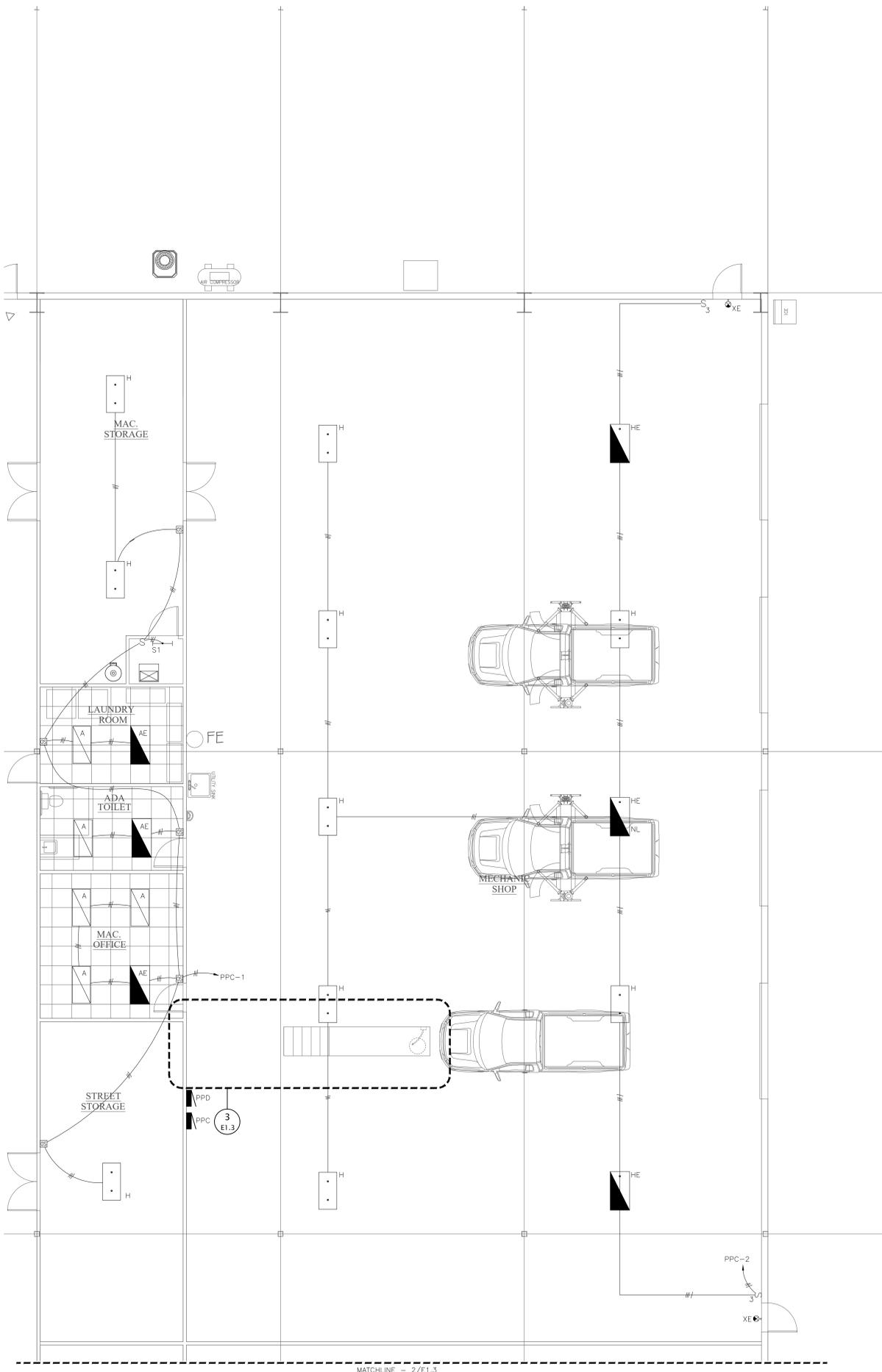
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ENLARGED LIGHTING PLAN

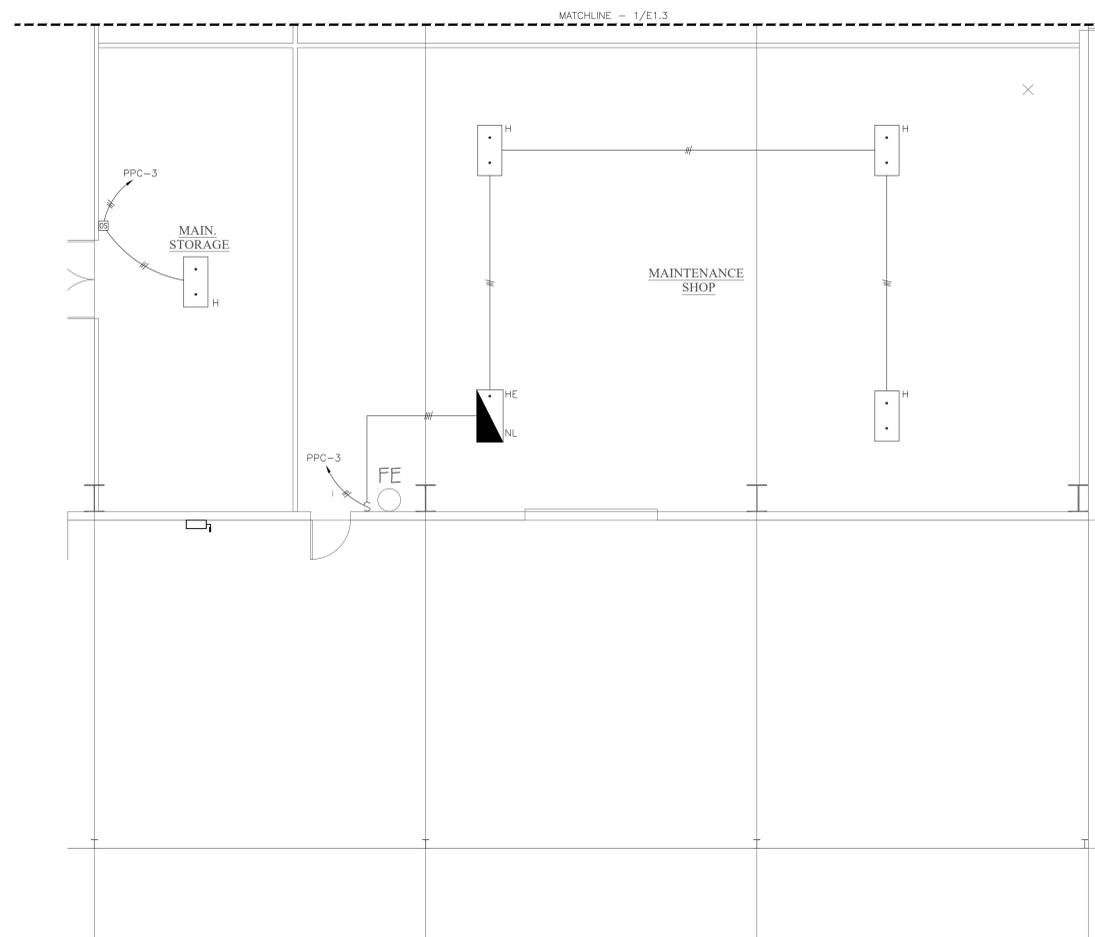
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E1.2

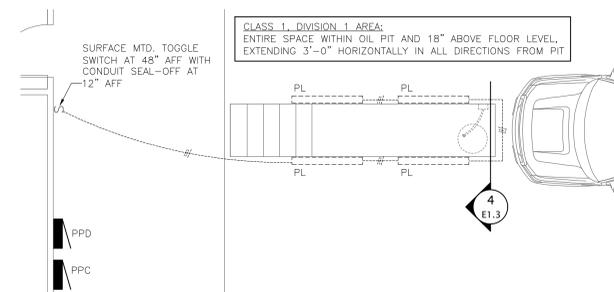
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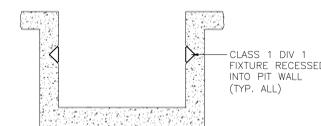
1 ENLARGED LIGHTING PLAN
SCALE: 3/16" = 1'-0"



2 ENLARGED LIGHTING PLAN
SCALE: 3/16" = 1'-0"



3 ENLARGE PIT LIGHTING PLAN
SCALE: 1/4" = 1'-0"



4 ENLARGED PIT SECTION
SCALE: NONE



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ENLARGED LIGHTING PLAN

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E1.3

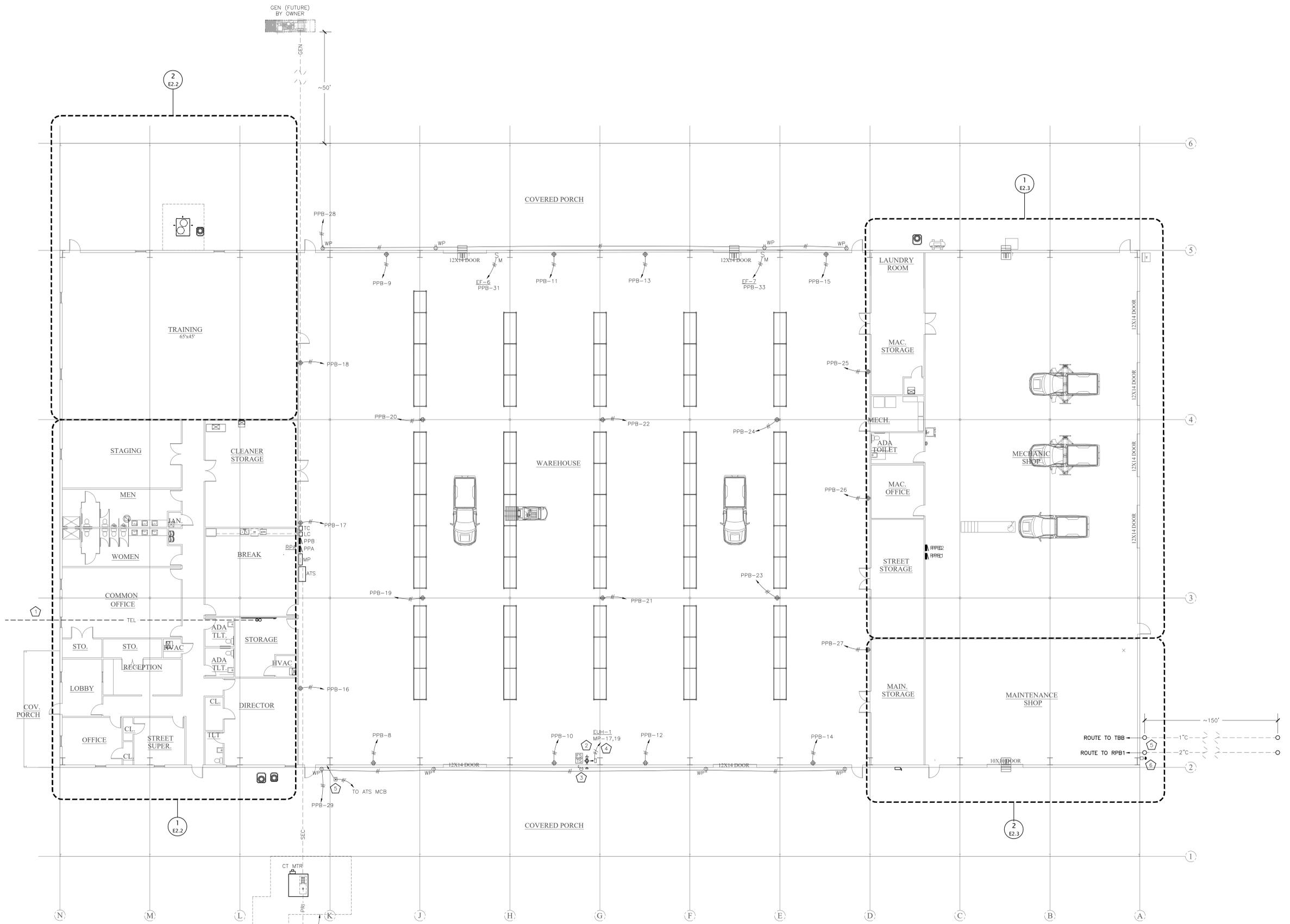


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1 OVERALL POWER & AUXILIARY PLAN
 SCALE: 3/32" = 1'-0"

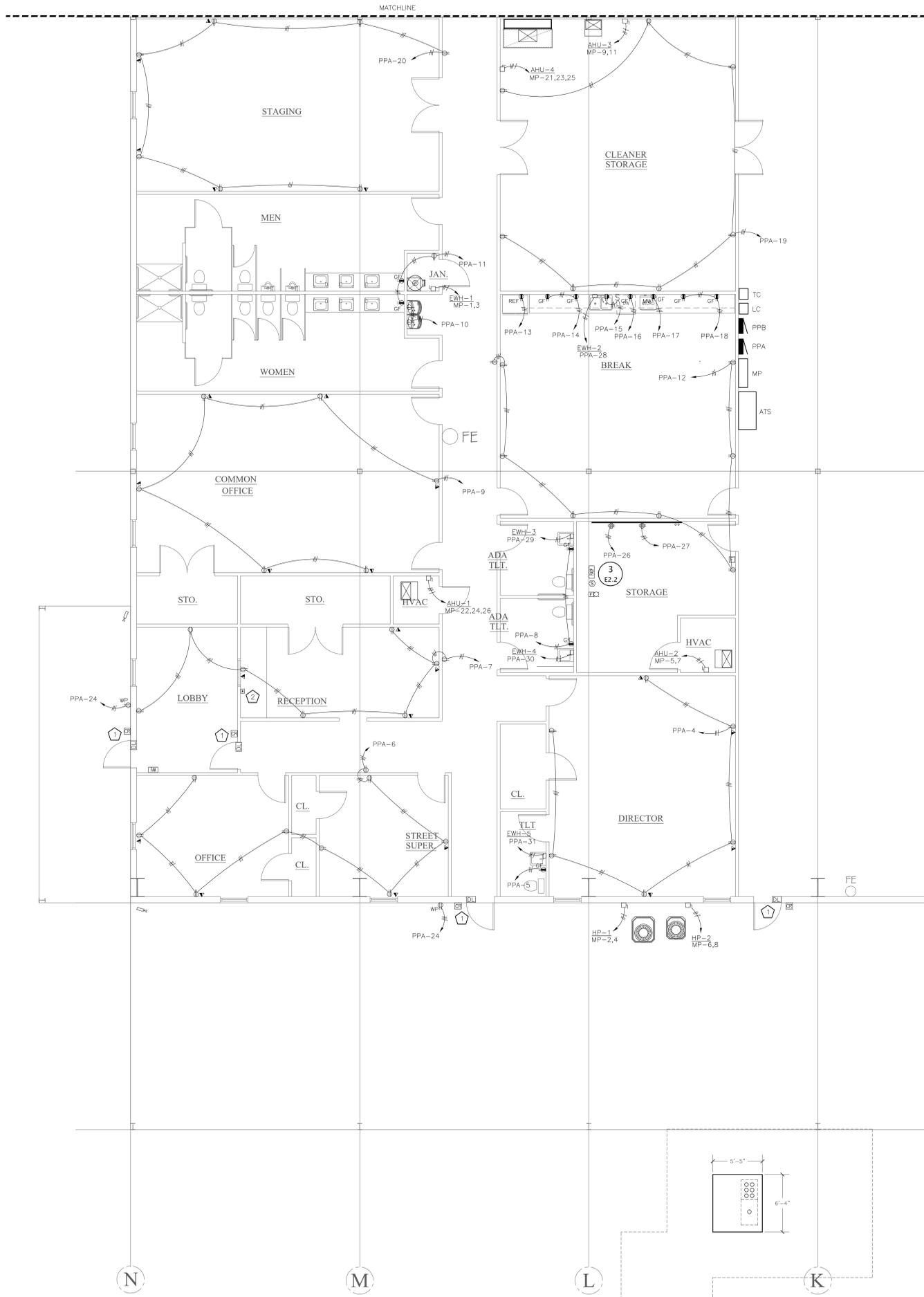
KEY NOTES (THIS SHEET ONLY)

- 1 TWO 2" CONDUITS ROUTED TO RIGHT OF WAY FOR TELCO SERVICE ENTRANCE. COORDINATE WITH TELCO PRIOR TO INSTALLATION FOR EXACTION STUB-UP LOCATION.
- 2 FIRE ALARM TAMPER AND FLOW SWITCHES FOR SUPERVISORY MONITORING OF SPRINKLER SYSTEM
- 3 SPRINKLER WATER GONG/BELL FURNISHED BY FIRE PROTECTION CONTRACTOR AND INSTALLED BY ELEC CONTRACTOR. E.C. SHALL MAKE ELECTRICAL CONNECTIONS FOR WATER GONG OPERATION WITH WATER FLOW
- 4 ELECTRIC UNIT HEATER, DAYTON 3WU90 OR EQUAL
- 5 BUILDING MEANS OF DISCONNECT: WEATHERPROOF EMERGENCY STOP WITH PAD LOCKABLE COVER. ROUTE 3-#14 AWG STRANDED CONDUCTORS (RED,YELLOW,GREEN) CONNECTOR TO SHUNT-TRIP MODULE AT ATS MAIN CIRCUIT BREAKER. KEY FOR PAD LOCK TO BE PLACED IN KNOX BOX. ATS START CONTROL WIRING SHALL INTERCONNECT WITH GENERATOR TO INHIBIT AUTOMATIC GENERATOR STARTUP IN EVENT THE ESTOP IS ACTUATED
- 6 POWER AND DATA CONDUITS ROUTED 36" BELOW GRADE TO FUTURE FUEL DISPENSING AREA. INSTALLATION SHALL COMPLY WITH NEC SECTION 514. FURNISH AND INSTALL SEAL-OFF CONDUIT FITTINGS AT 24" AFG AT BUILDING END PRIOR TO ROUTING TO FINAL LOCATIONS.
- 7 WP ESTOP WITH CONTROL CONDUCTORS ROUTED TO PANEL RPB1 AND CONNECTED TO FUEL PUMP CIRCUIT BREAKER SHUNT TRIP OPERATOR.

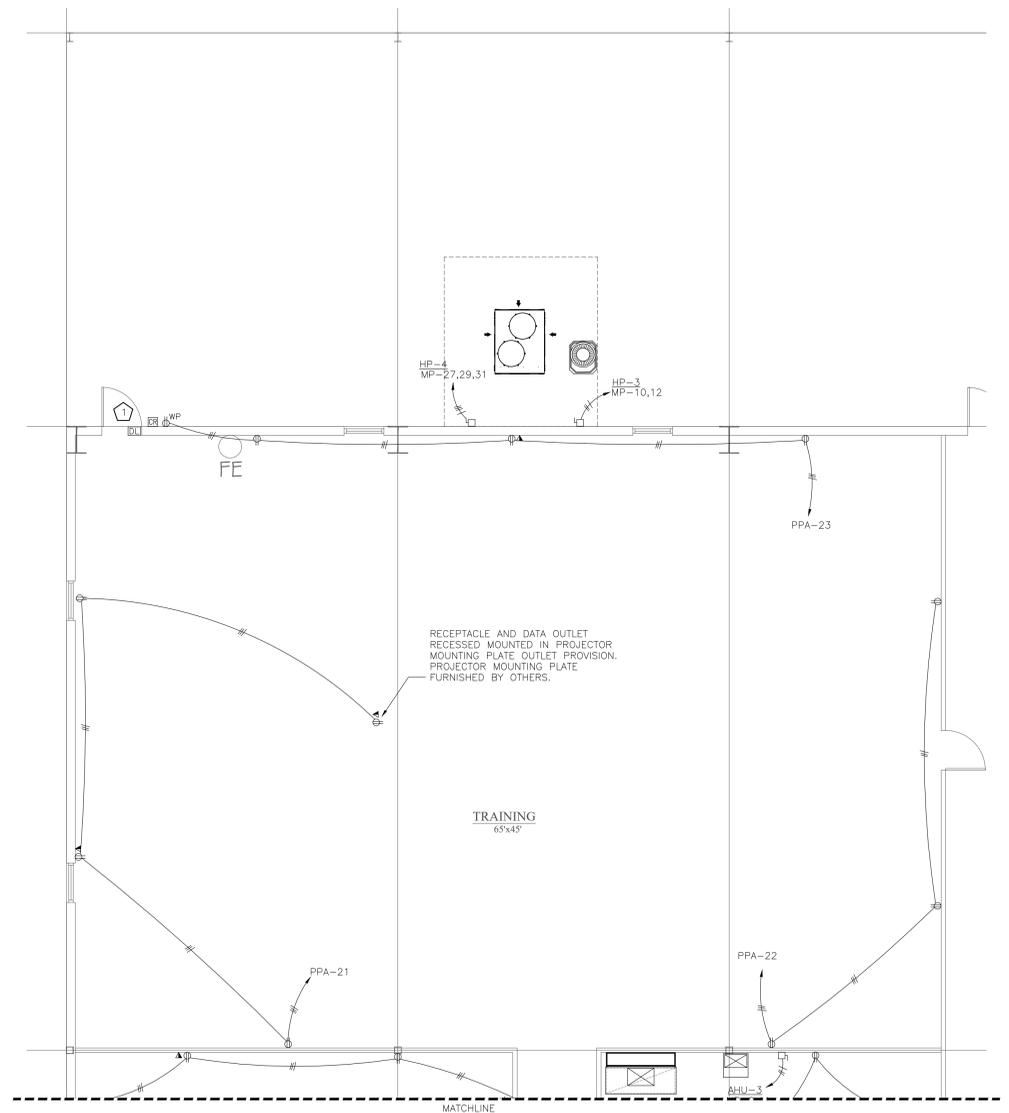
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OVERALL POWER & AUX PLAN

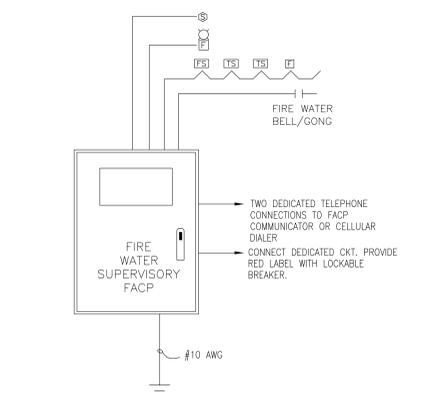
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E2.1



1
E2.2
ENLARGED POWER & AUXILIARY PLAN
SCALE: 3/16" = 1'-0"



2
E2.2
ENLARGED POWER & AUXILIARY PLAN
SCALE: 3/16" = 1'-0"



3
E2.2
SUPERVISORY FIRE ALARM RISER
VERIFY DEVICE COUNT WITH FLOOR PLAN

- KEY NOTES (THIS SHEET ONLY)**
- ① ROUGH-IN PROVISIONS FOR ACCESS CONTROLLED DOOR. OWNER'S SECURITY VENDOR SHALL COMPLETE THE INSTALLATION.
 - ② PUSH BUTTON SWITCH FOR DOOR LOCK OVERRIDE.



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Revisions:

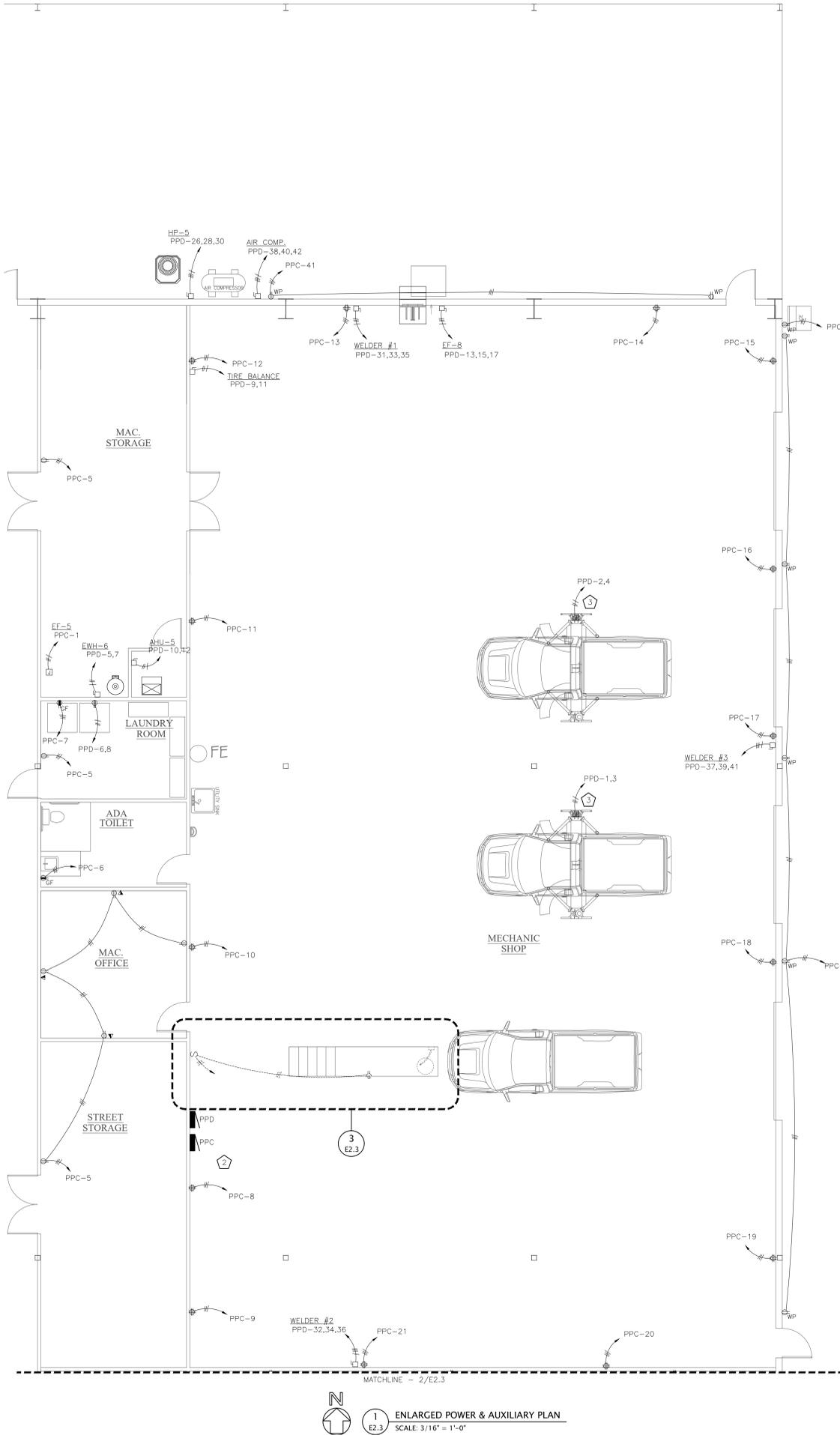
No.	Date	Description
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0	12/5/19	ISSUE FOR BID

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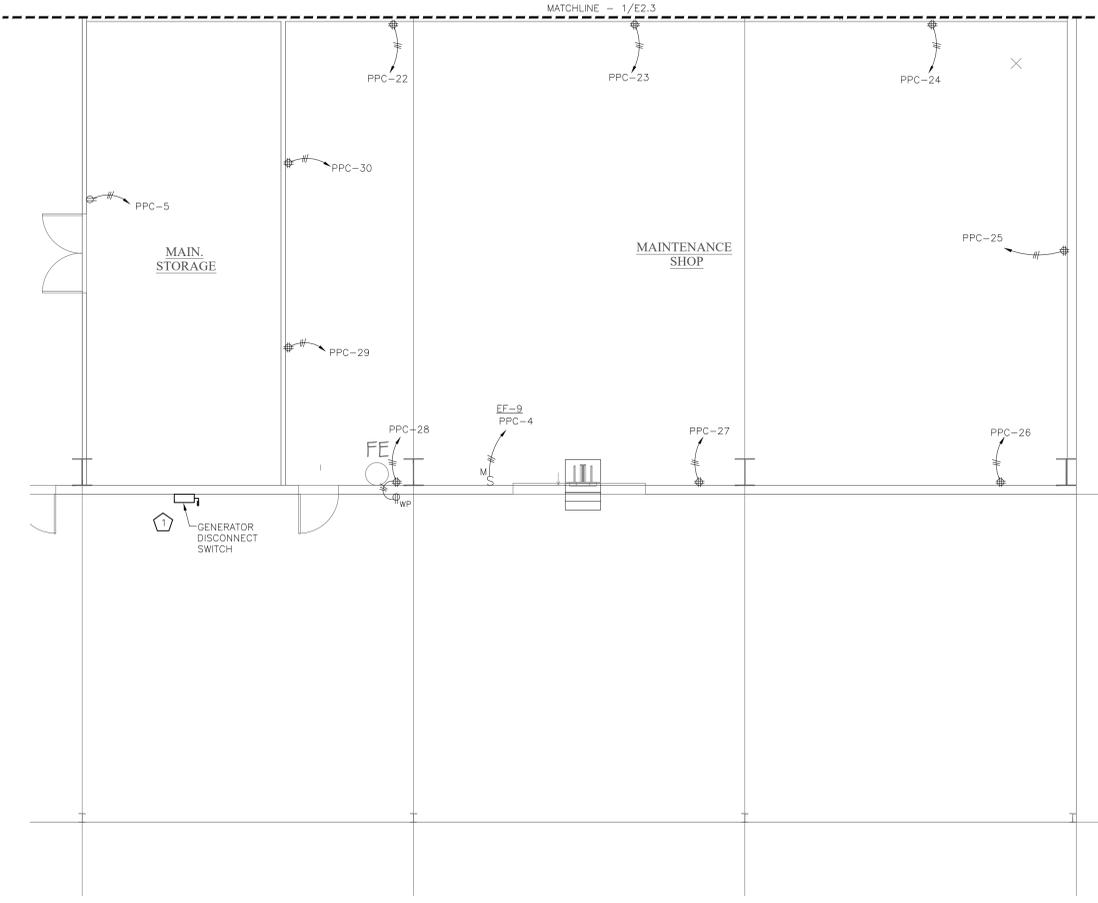
ENLARGED POWER & AUX PLAN

Project No.:
 Drawn By: Wade Stewart, PE
 Checked: CWS
 Date: December 4, 2019
 Sheet Number:

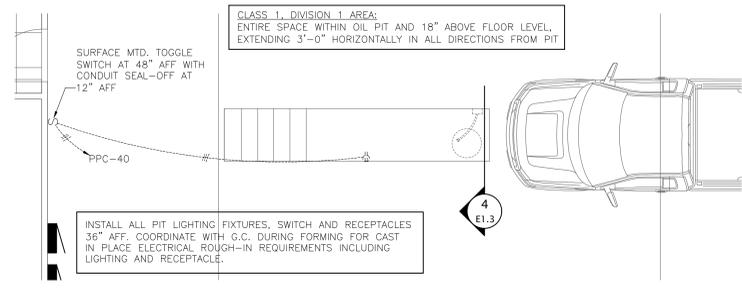
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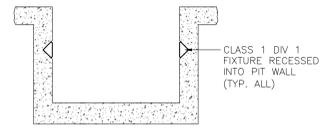
1
E2.3
ENLARGED POWER & AUXILIARY PLAN
SCALE: 3/16" = 1'-0"



2
E2.3
ENLARGED POWER & AUXILIARY PLAN
SCALE: 3/16" = 1'-0"



3
E2.3
ENLARGE PIT POWER PLAN
SCALE: 1/4" = 1'-0"



4
E2.3
ENLARGED PIT SECTION
SCALE: NONE

- KEY NOTES (THIS SHEET ONLY)**
- 1 GENERATOR DISCONNECT SWITCH FOR PORTABLE GEN CONNECTION AS NEEDED.
 - 2 MANUAL TRANSFER SWITCH WITH EMERGENCY FEED CONNECTION ROUTED TO GENERATOR DISC SWITCH.
 - 3 CEILING MOUNTED JB FOR VEHICLE LIFT ELECTRICAL CONNECTION.



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E2.3

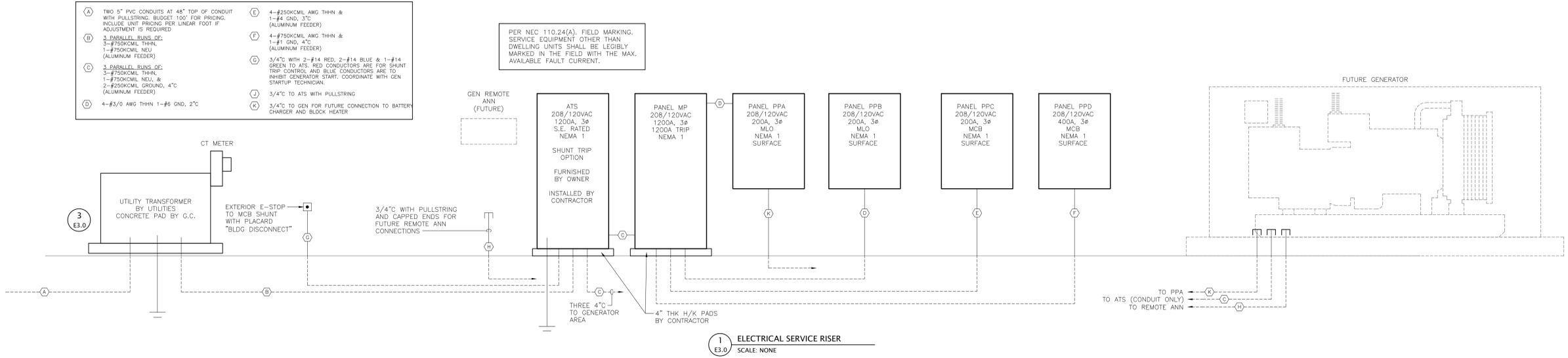


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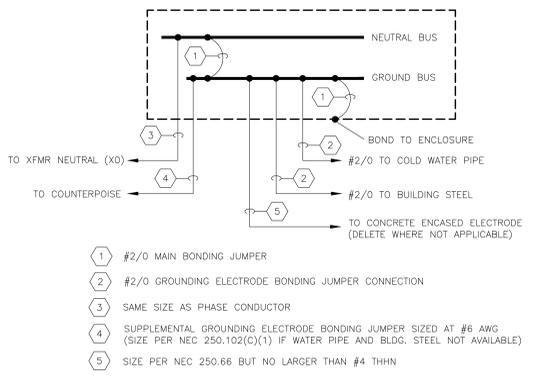
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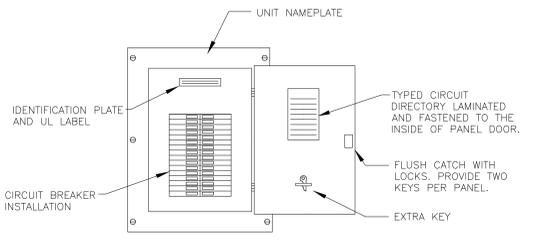


1 ELECTRICAL SERVICE RISER
 SCALE: NONE

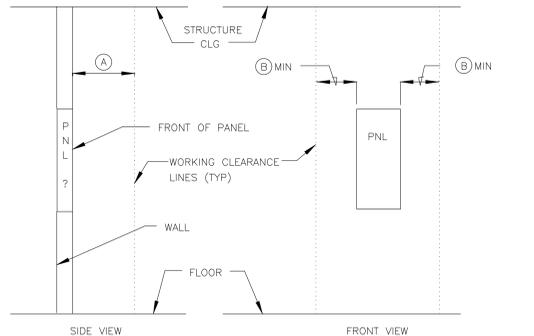
ID	DESCRIPTION	ELECTRICAL DATA		LAMP DATA		BASIS OF DESIGN (SUBSTITUTIONS ALLOWABLE WITH 10 DAY PRIOR APPROVAL, PHOTOMETRICS REQUIRED FOR ALT. FIXTURE)										MTG HGT		
		LOAD VA	VOLTAGE	QTY	WATTAGE	MANUFACTURER	MODEL OR SERIES	MOUNT TYPE										
						CEILING	FLOOR	GROUND	POLE	ROOF	SUSPENDED	WALL	FLUSH	RECESSED	PENDANT	RECESSED SURFACE	TRACK	
A	2x4, LED, RECESSED	31	120		LED	LITHONIA	2BLT4 40L SDSM LP940											
AE	2x4, LED, RECESSED, EMER.	31	120		LED	LITHONIA	2BLT4 40L SDSM LP940 EL14L											
C	2x2, LED, RECESSED	30	120		LED	LITHONIA	2BLT2 40LHE LP940											
C	2x2, LED, RECESSED, EMER.	30	120		LED	LITHONIA	2BLT2 40LHE LP940											
H	HIGHBAY, LED	170	120		LED	LITHONIA	IBGN 4FT 24000LM SEF WD ATL 40K 80CR1											14'-0"
HE	HIGHBAY, LED	170	120		LED	LITHONIA	IBGN 4FT 24000LM SEF WD ATL 40K 80CR1 PS30250											14'-0"
PL	OIL PIT	45	120		LED	KENALL	HSEC114 3-18 4000K 1800LM LED LAMPS 120V AF 2H T											
S1	STRIP	15	120		LED	LITHONIA	ZL1N L24 1500LM MVOLT											
W	WALLPACK	25	120		LED	LITHONIA	WST LED P2 40K VW MVOLT											10'-0"
WE	WALLPACK, EMER.	25	120		LED	LITHONIA	WST LED P2 40K VW MVOLT E20WH											10'-0"
XE	EXIT	6	120		LED	LITHONIA	LQM											
ZE	EXIT/EMER COMBO	6	120		LED	LITHONIA	LHQM											



2 MAIN SERVICE GROUNDING DETAIL
 SCALE: NONE



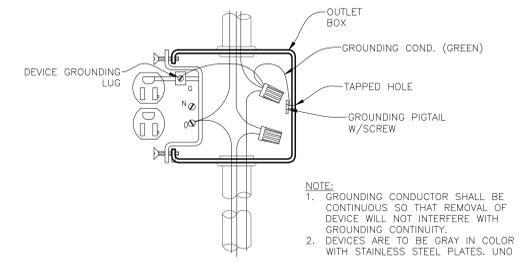
4 IDENTIFICATION - POWER PANELS
 SCALE: NONE



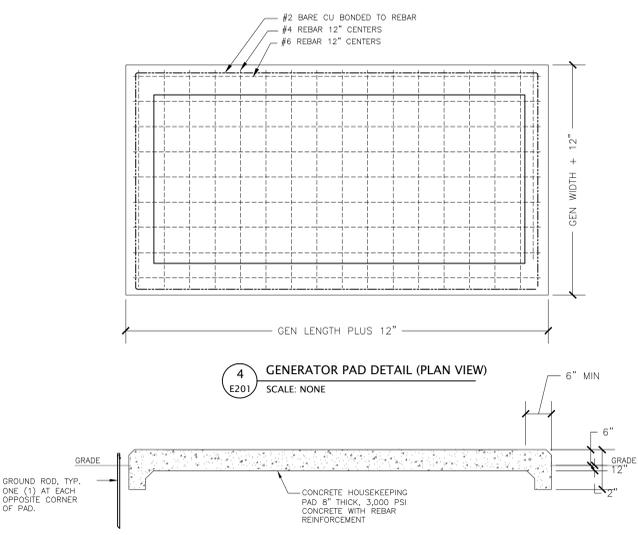
5 PANEL CLEARANCES
 SCALE: NONE

- NOTES:
- DIMENSIONS SHOWN ARE MINIMUM
 - WORKING CLEARANCES SHALL BE MAINTAINED FROM FLOOR TO STRUCTURAL CLG.
 - SEE NFPA 70, ARTICLE 110-16

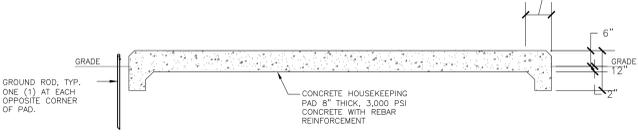
DIMENSION	BLOCK	ENGLISH
A	3'-6"	
B	1'-3"	
C	6'-7"	



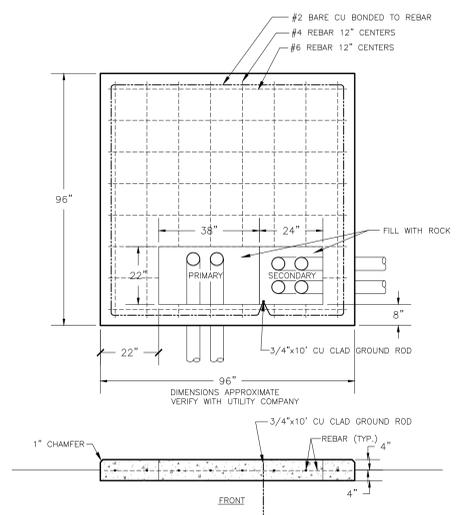
6 TYPICAL RECEPTACLE INSTALLATION
 SCALE: NONE



4 GENERATOR PAD DETAIL (PLAN VIEW)
 SCALE: NONE

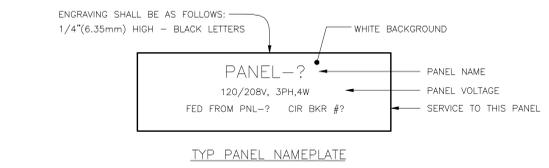


5 GENERATOR PAD DETAIL (SECTION VIEW)
 SCALE: NONE

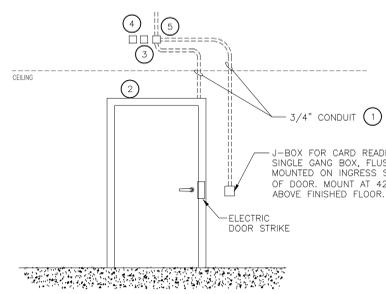


3 TRANSFORMER PAD DETAIL
 SCALE: NONE

- NOTES:
- FILL VOID AROUND ALL PRIMARY CABLES WITH NEC APPROVED DUCT SEAL.
 - CAP ALL EMPTY CONDUITS.
 - VERIFY PAD DIMENSIONS & REQUIREMENTS PRIOR TO BUILD.



TYP PANEL NAMEPLATE



9 SINGLE DOOR ACCESS CONTROL
 SCALE: NONE

- KEYNOTES (THIS DETAIL ONLY):
- CONCEAL CONDUIT IN WALL.
 - DOOR POSITION SWITCH PROVIDED, MOUNTED AND TERMINATED BY SECURITY SYSTEM VENDOR.
 - JUNCTION BOX. INTERCONNECTED TO ACCESS CONTROL CIRCUIT.
 - SINGLE DROP FROM NETWORK RACK FOR DOOR ACCESS CONTROL. INSTALL 1-#18 AWG, 4-CONDUCTOR CABLE.
 - J-BOX FOR SECURITY SYSTEM WIRING (6" x 6"), WALL MOUNTED ON EGRESS SIDE OF DOOR, ABOVE ACCESSIBLE CEILING WHERE APPLICABLE.

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ELECTRICAL RISER DIAGRAM

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E3.0

