FIRE ALARM

FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR/GRAPHIC MAP
FA-RPS	FIRE ALARM REMOTE POWER SUPPLY
C	CONTROL MODULE
M	MONITOR MODULE
	MANUAL PULLDOWN STATION
S	WALL MOUNTED ADA STROBE
	ADA HORN OR SPEAKER WITH STROBE
	MINI HORN / STROBE
MH	ELECTROMAGNETIC DOOR HOLD OPEN
FS	SPRINKLER FLOW SWITCH
TS	SPRINKLER TAMPER SWITCH
T	THERMAL DETECTOR
S	PHOTOELECTRIC SMOKE DETECTOR
S/CO	COMBINATION CARBON MONOXIDE / SMOKE DETECTOR
	DUCT SMOKE DETECTOR, SUPPLY OR RETURN
TS	REMOTE INDICATING LIGHT (TEST SWITCH)
D	120V. MOTORIZED SMOKE DAMPER
RA	RESCUE ASSISTANCE PHONE
F	FIRE FIGHTERS PHONE JACK

DISTRIBUTION AND RACEWAY

MDC	MAIN DISTRIBUTION CENTER (MDC)
	SURFACE MTD PANELBOARD
	RECESSED PANELBOARD
T	TRANSFORMER
	BRANCH CIRCUIT HOMERUN
	CONDUIT CONCEALED IN FLOOR OR UNDERGROUND
	CONDUIT EXPOSED OR CONCEALED IN WALL OR CEILING
	RACEWAY UP
	RACEWAY DOWN
	CAPPED CONDUIT
	CURRENT TRANSFORMER
	CIRCUIT BREAKER SWITCH
	FUSED SWITCH
	GROUNDING ELECTRODE CONDUCTOR
M	METER
GFP	GROUND FAULT PROTECTION

SYSTEMS

	TTB, MDF OR IDF SYSTEM BACKBOARD
	TELECOMMUNICATION OUTLET
	FLOOR MOUNTED TELECOMMUNICATION OUTLET
	TELEVISION OUTLET
	CABLE TRAY (LENGTH AS INDICATED ON DRAWINGS)

WIRING DEVICES

	DUPLEX RECEPTACLE
	FOUR PLEX RECEPTACLE
	SINGLE RECEPTACLE
	COMBO RECEPTACLE/SWITCH
	SWITCHED DUPLEX RECEPTACLE
	EMERGENCY POWERED DUPLEX RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE
	FLOOR MOUNTED SPECIAL PURPOSE RECEPTACLE
	FLOOR MOUNTED RECEPTACLE DUPLEX/QUAD
CLG CLG	CEILING MOUNTED RECEPTACLE DUPLEX/QUAD
SR	SURFACE RACEWAY
	CLOCK RECEPTACLE
J	JUNCTION BOX
J	WALL MOUNTED J-BOX
J	FLOOR MOUNTED JUNCTION BOX
	MOLDED CASE CIRCUIT BREAKER IN ENCLOSURE
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MAGNETIC CONTROLLER (STARTER)
	COMBINATION STARTER/DISCONNECT SWITCH
HP	MOTOR
R	RELAY
TC	TIME CLOCK
PC	PHOTOCELL
$TO	THERMAL OVERLOAD SWITCH
$	SINGLE POLE SWITCH, LINE VOLTAGE
$3	3-WAY SWITCH, LINE VOLTAGE
$4	4-WAY SWITCH, LINE VOLTAGE
$K	KEY OPERATED SWITCH
$D	DIMMER SWITCH, LINE VOLTAGE
$DOOR	RECESSED DOOR SWITCH
X	LIGHTING CONTROL DEVICE, REFER TO DETAILS FOR CONTROL INTENT

3

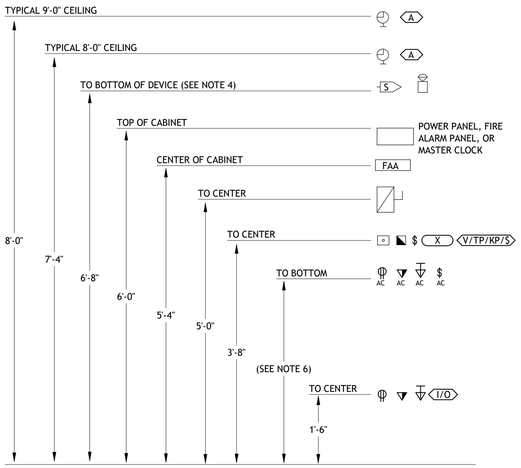
EMERGENCY RESPONDER COMMUNICATION SYSTEM (ERCS)

PURSUANT TO THE 2018 INTERNATIONAL FIRE CODE (IFC), SECTION 510, TWO-WAY EMERGENCY RESPONDER COMMUNICATION COVERAGE IS REQUIRED. THE CONTRACTOR SHALL INCLUDE SIGNAL STRENGTH TESTING (AS DEFINED IN IFC 510.4.1) IN THEIR SCOPE OF WORK; TESTING PARAMETERS SHALL BE IN ACCORDANCE WITH THE IFC AND THE LOCAL FIRE CODE OFFICIALS REQUIREMENTS. IN ADDITION, CONTRACTOR SHALL PROVIDE AND INSTALL ONE (1) 2-INCH CONDUIT TO ROOF WITH WEATHERHEAD FITTING FROM THE MOST APPLICABLE TELECOMMUNICATION ROOM. BASE DESIGN SHALL INCLUDE DEDICATED WALL SPACE FOR ERCS EQUIPMENT AND A DEDICATED DUPLEX RECEPTACLE WITHIN THE CORRESPONDING TELECOMMUNICATION ROOM.

FOR ADDITIONAL ALTERNATIVE (ADD ALTERNATE) PRICING, CONTRACTOR SHALL INCLUDE THE PROVISION AND INSTALLATION OF AN EMERGENCY RESPONDER COMMUNICATION SYSTEM (ERCS) AND ALL ASSOCIATED INFRASTRUCTURE. WHEN SIGNAL STRENGTH TESTING (AS DEFINED IN IFC 510.4.1) CONCLUDES THAT THE EXISTING SIGNAL DOES NOT EXCEED THE MINIMUM SIGNAL STRENGTH REQUIREMENTS, AN ERCS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH IFC 510. ALL SUPPORTING CONDUIT, PATHWAY, AND/OR INFRASTRUCTURE REQUIRED SHALL BE INCLUDED. ALL LINE-VOLTAGE BRANCH CIRCUIT POWER CONNECTIONS TO ERCS POWER SUPPLIES SHALL BE INCLUDED.

ABBREVIATIONS AND SYMBOLS

A	AMPERE(S)
AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERES INTERRUPTING CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
BFF	BELOW FINISHED FLOOR
BOF	BOTTOM OF FIXTURE
C	CONDUIT
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCT	CORRELATED COLOR TEMPERATURE
CLG	CEILING
CT	CURRENT TRANSFORMER
DED	DEDICATED CIRCUIT
DISC	DISCONNECT
DW	DISHWASHER
DWG(S)	DRAWING(S)
(E)	EXISTING TO REMAIN
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
(ER)	EXISTING TO BE RELOCATED
EM	EMERGENCY
EPO	EMERGENCY POWER OFF
EWC	ELECTRIC WATER COOLER
F	FUSE
FLA	FULL LOAD AMPS
FS	SPRINKLER FLOW SWITCH
G	GROUND
GC	GENERAL CONTRACTOR
GD	GARBAGE DISPOSAL
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
HP	HORSEPOWER
IDF	INTERMEDIATE DISTRIBUTION FACILITY
IG	ISOLATED GROUND
ISC	SHORT CIRCUIT CURRENT
KVA	KILOVOLT AMPERE(S)
KW	KILOWATT(S)
LSI	LONG TIME, SHORT TIME, INSTANTANEOUS
LTG	LIGHTING
MCA	MINIMUM CIRCUIT AMPERE(S)
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION CENTER
MDF	MAIN DISTRIBUTION FACILITY
MLO	MAIN LUGS ONLY
MTS	MANUAL TRANSFER SWITCH
MW	MICROWAVE
NC	NORMALLY CLOSED
NL	NIGHT LIGHT - SEE GENERAL NOTES
NO	NORMALLY OPEN
OAE	OR APPROVED EQUAL
OFH	OVERALL FIXTURE HEIGHT
OH	OVERHEAD
P	POLE
PART	PARTIAL CIRCUIT
PH	PHASE
PNL	PANEL
RCPT	RECEPTACLE
REF	REFRIGERATOR
RFD	RECESSED FIXTURE DEPTH
(R)	EXISTING TO BE REMOVED
(RL)	RELOCATED LOCATION
SPD	SURGE PROTECTION DEVICE
SME	STRUCTURED MEDIA ENCLOSURE
TS	SPRINKLER TAMPER SWITCH
UC	UNDER COUNTER/CABINET
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
W	WATT(S) OR WIRE
WFD	WALL FIXTURE DEPTH
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER
X	POOL EQUIPMENT SCHEDULE NOTATION
X	KITCHEN EQUIPMENT SCHEDULE NOTATION
X X	MECHANICAL EQUIPMENT SCHEDULE NOTATION
X	DETAIL NOTE
X	DELTA REVISION NOTE
X	ELECTRICAL WIRE SIZE
T1	LIGHTING CONTROLS SEQUENCE OF OPERATION



NOTES:

1. WHERE MULTIPLE LINE VOLTAGE DEVICES ARE SHOWN ADJACENT TO EACH OTHER, THEY ARE ALL TO SHARE THE SAME JUNCTION BOX, UP TO FOUR GANGS.
2. WHERE MORE THAN FOUR DEVICES ARE SHOWN ADJACENT TO EACH OTHER, DEVICES ARE TO STACK VERTICALLY ABOVE ONE ANOTHER IN TWO ROWS IN AS SMALL OF GANG BOXES AS POSSIBLE. I.E. SIX DEVICES WILL USE TWO THREE GANG BOXES, FIVE DEVICES WILL USE ONE THREE GANG AND ONE TWO GANG BOX. WHEN DIMMERS ARE GANGED TOGETHER, REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR DE-RATING.
3. BACK-TO-BACK JUNCTION BOXES IN COMMON WALLS ARE NOT PERMITTED. JUNCTION BOXES SHALL BE SEPARATED BY AT LEAST ONE STUD WHEREVER POSSIBLE.
4. AUDIBLE/VISUAL FIRE ALARM DEVICES SHOWN ARE TO BE MOUNTED AT 90" OR 6" BELOW CEILING, WHICHEVER IS LOWER. ADA STROBES TO BE MOUNTED AT 80" AFF OR 6" BELOW CEILING, WHICHEVER IS LOWER.
5. MAXIMUM ELEVATION FOR ALL LOAD CENTER CIRCUIT BREAKERS SHALL NOT EXCEED 48" AFF, WITHIN DWELLING UNITS.
6. THE E.C. SHALL REFER TO ARCHITECTURAL ELEVATIONS TO COORDINATE ALL COUNTER HEIGHTS. ALL "AC" DEVICES SHALL HAVE 60% FROM OR BACK BOX MOUNTED 4" ABOVE THE BACK-SIDE SPLASH.
7. THE TOP MOST CIRCUIT BREAKER OF ALL 'ADA' ACCESSIBLE, TYPE A, OR TYPE B ADAPTABLE RESIDENTIAL UNIT LOAD CENTERS AND THE TOP OF MEDIA ENCLOSURES WITHIN 'ADA' ACCESSIBLE, TYPE A, OR TYPE B ADAPTABLE UNITS SHALL NOT BE MORE THAN 4'-0" AFF.

3

1 DEVICE MOUNTING HEIGHT

E0.00 | NTS

COVERSHEET NOTES

1. THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIAL NECESSARY FOR A COMPLETE AND FUNCTIONING ELECTRICAL SYSTEM.
2. MATERIALS AND INSTALLATION SHALL COMPLY WITH CODES, LAWS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION.
3. MATERIALS AND EQUIPMENT SHALL BE LISTED AND/OR LABELED BY U.L., ETL, CSA OR ANOTHER RECOGNIZED TESTING LAB.
4. ALL WORK REQUIRED FOR THE INSTALLATION AS SHOWN ON DRAWINGS INCLUDING LABOR, EQUIPMENT AND MATERIALS SHALL BE IN STRICT COMPLIANCE WITH THE BUILDING STANDARDS, EXCEPT AS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, GOVERNMENTAL FEES, TAXES AND LICENSES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE ELECTRICAL WORK.
6. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO GOVERNMENTAL AGENCIES AND UTILITY COMPANIES SHOP DRAWINGS, WHICH ARE REQUIRED BY THESE AGENCIES, FOR THEIR APPROVAL.
7. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER/OWNER OF ANY MATERIALS OR APPARATUS BELIEVED TO BE INADEQUATE, UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES OR REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
8. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS, VISIT THE SITE, AND THOROUGHLY BECOME FAMILIAR WITH THE BUILDING STANDARDS AND LOCAL CONDITIONS RELATING TO THE WORK. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
9. ALL MATERIALS, AND EQUIPMENT SHALL BE ERECTED, INSTALLED, CONNECTED, CLEANED, ADJUSTED, TESTED, CONDITIONED, AND PLACED IN SERVICE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.
10. ALL CUTTING, DRILLING AND PATCHING OF MASONRY, STEEL OR IRON WORK BELONGING TO THE BUILDING MUST BE DONE BY THIS CONTRACTOR IN ORDER THAT THEIR WORK MAY BE PROPERLY INSTALLED, BUT UNDER NO CONDITIONS MAY STRUCTURAL WORK BE CUT, EXCEPT AT THE DIRECTION OF THE ARCHITECT-DESIGNER OR THEIR REPRESENTATIVE.
11. E.C. IS TO REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ALL FIRE RATED PENETRATION INSTALLATION REQUIREMENTS. E.C. IS TO NOTIFY ENGINEER AND ARCHITECT PRIOR TO INSTALLING ANY FIXTURES WITHIN A FIRE RATED CEILING OR WALL. FIRE RATING MUST BE MAINTAINED FOR THIS TYPE OF INSTALLATION WITH DRYWALL TENTING.
12. SHOP DRAWINGS SHALL INCLUDE MANUFACTURER'S NAMES, CATALOG NUMBERS, CUTS, DIAGRAMS AND OTHER SUCH DESCRIPTIVE DATA AS MAY BE REQUIRED TO IDENTIFY AND REVIEW THE EQUIPMENT. SUBMITTALS SHALL BE IN LOGICAL GROUPS, FOR EXAMPLE, ALL LIGHTING FIXTURES, PARTIAL SUBMITTALS WILL NOT BE REVIEWED.
13. SUBMIT (3) DIGITAL COPIES OF THE FOLLOWING SHOP DRAWINGS FOR REVIEW:
    A. SWITCH BOARD, PANELBOARDS, AND METERING EQUIPMENT
    B. DISCONNECTS
    C. FIRE ALARM SYSTEMS
    D. TRANSFORMERS
    E. PROVIDE "AS-BUILT" DRAWINGS AND SUBMIT TO ARCHITECT/DESIGNER.
14. ALL MATERIAL, EQUIPMENT, WIRING DEVICES, ETC. SHALL BE NEW, UNLESS SPECIFICALLY INDICATED AS EXISTING TO BE REUSED.
15. CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS. ELECTRICAL CONTRACTOR IS TO SUBMIT A COMPLETE CONSTRUCTION DRAWING SET TO THE ELECTRICAL UTILITY COMPANY WITHIN 10 DAYS OF AWARD OF CONTRACT. COORDINATE TIMELINE OF THE REVIEW, APPROVAL, ALL ASSOCIATED DOWN TIME, CONSTRUCTION SCHEDULING, DELIVERY, AND INSTALLATION OF THE UTILITY TRANSFORMER. NOTIFY OWNER OF SCHEDULING CONFLICTS.
16. ALL NEW CIRCUIT BREAKERS FOR NEW OR EXISTING PANELBOARDS SHALL MATCH EXISTING BUILDING PANELBOARD MANUFACTURER AND BREAKER TYPE. THE CONTRACTOR SHALL PROVIDE NEW TYPE WRITTEN PANEL DIRECTORIES FOR ALL NEW PANELS AND EXISTING PANELS WHICH HAVE CHANGED. PANELBOARD SHALL BE MARKED WHERE THE SOURCE OF POWER SUPPLY ORIGINATES, AND IF SERIES COMBINATION SYSTEMS ARE UTILIZED AND THEIR LISTED AMPERE RATING.
17. DO NOT SHARE NEUTRAL CONDUCTORS FOR MULTIWIRE BRANCH CIRCUITS. WHERE SHARED NEUTRAL CONDUCTORS ARE REQUIRED (SUCH AS POWERED FURNITURE SYSTEMS), HANDLE TIES SHALL BE PROVIDED ON THE CIRCUIT BREAKERS, WITH SHARED NEUTRALS, SUCH THAT IT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS. ALL HANDLE TIES ARE REQUIRED TO BE INDICATED ON THE PANELBOARD SHOP DRAWINGS.
18. SHOULD ACTUAL FIELD CONDITIONS REQUIRE INDICATED CIRCUIT DESIGNATIONS TO VARY, INDICATE THE CIRCUIT NUMBER USED ON THE "AS-BUILT" DRAWINGS.
19. ALL SERVICE EQUIPMENT (OTHER THAN IN DWELLING UNITS) SHALL BE LEGIBLY MARKED IN THE FIELD BY THE ELECTRICAL CONTRACTOR WITH THE MAXIMUM AVAILABLE FAULT CURRENT AS INDICATED WITHIN THESE DOCUMENTS. THE FIELD MARKING(S) SHALL COMPLY WITH ELECTRICAL SPECIFICATIONS FOR READABILITY AND DURABILITY.
20. PROVIDE COMPLETE METAL RACEWAY SYSTEMS AND ENCLOSURES FOR ALL WIRING THROUGHOUT THE EXTENT OF THE REQUIRED DISTRIBUTION SYSTEM.
    A. UTILIZE RIGID POLYVINYL CHLORIDE CONDUIT (PVC) IN THE FOLLOWING LOCATIONS:
        - UNDERGROUND
    B. UTILIZE ELECTRICAL METALLIC TUBING (EMT), MINIMUM SIZE OF 3/4", IN THE FOLLOWING LOCATIONS:
        - SERVICE & FEEDERS
        - POWER CIRCUIT HOMERUN
        - BRANCH CIRCUITS IN CONCEALED OR EXPOSED LOCATIONS
        - TELEPHONE/DATA/CATV ROUGH-IN
    C. UTILIZE METAL-CLAD CABLE (MC) IN THE FOLLOWING LOCATIONS:
        - BRANCH CIRCUIT IN CONCEALED LOCATIONS
        - FINAL CONNECTION TO RECESSED LIGHTING FIXTURES
        - FINAL CONNECTION TO STEP-DOWN TRANSFORMERS
24. ALL NEW CIRCUITS SHALL HAVE A GROUND WIRE INSTALLED.
25. ALL WIRING NOT INSTALLED IN CONDUIT AND INSTALLED IN THE CEILING SPACE SHALL BE PLENUM RATED.
26. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL SPECIAL OUTLET BOXES THAT MAY BE REQUIRED TO ENCLOSE RECEPTACLES.
27. EACH SWITCH, LIGHT, RECEPTACLE AND OTHER MISCELLANEOUS DEVICE SHALL BE PROVIDED WITH A GALVANIZED OR PRESSED STEEL OUTLET BOX OF THE KNOCKOUT TYPE, OF NOT LESS THAN NO. 14 U.S. GAUGE STEEL. CONDUITS SHALL BE FASTENED WITH LOCKNUTS AND BUSHINGS AND ALL UNUSED KNOCKOUTS MUST BE LEFT SEALED. THERE MUST BE SUFFICIENT ROOM FOR WIRES AND BUSHINGS AND DEEP BOXES SHALL BE INSTALLED WHERE REQUIRED. BOXES SHALL BE SECURELY AND ADEQUATELY SUPPORTED.
28. IN EXPOSED AND SUSPENDED CEILING APPLICATIONS, ROUTE CONDUIT AS CLOSE TO STRUCTURAL SLAB OR DECK AS POSSIBLE, AND SUPPORT CONDUIT AND JUNCTION BOXES DIRECTLY FROM THE STRUCTURAL SLAB, DECK, OR FRAMING PROVIDED FOR THAT PURPOSE. LIGHTING BRANCH CIRCUIT CONDUITS SHALL NOT BE CLIPPED TO THE CEILING SYSTEM HAS BEEN SPECIFICALLY DESIGNED FOR THAT PURPOSE.
29. ALL EXPOSED CONDUIT SHALL BE CONCEALED TO THE GREATEST EXTENT POSSIBLE, AND SHALL BE INSTALLED PARALLEL AND CLOSE TO STRUCTURAL MEMBERS. GENERAL CONTRACTOR SHALL PAINT CONDUIT TO MATCH ADJACENT FINISHES.
30. WHERE FLOOR FITTINGS REQUIRE PENETRATION OF THE FLOOR SLAB, THEY SHALL BE STANDARD DEVICE LISTED BY UL FOR THE PURPOSE AND HAVE A UL FIRE RATING EQUAL TO THE FLOOR RATING. FLOOR SERVICE BOXES SHALL BE MODULAR, ADJUSTABLE FLUSH TYPE, DUAL SERVICE UNITS SUITABLE FOR WIRING METHOD USED. COMPARTMENT BARRIERS SHALL SEPARATE POWER FROM LOW VOLTAGE CABLING. PROVIDE RECTANGULAR SERVICE PLATE WITH SATIN FINISH.
31. ALL RECEPTACLES SHALL BE SPECIFICATION GRADE NEMA 5-20R, UNLESS OTHERWISE NOTED.
32. ALL LIGHT SWITCHES SHALL BE SPECIFICATION GRADE, QUIET OPERATION RATED 120/277 VOLT, 20 AMPS, UNLESS OTHERWISE NOTED.
33. ALL FACE PLATE AND DEVICE COLORS SHALL BE APPROVED BY ARCHITECT OR OWNER/LEASEE.
34. PROVIDE LUMINAIRES SHOWN AS SHADED WITH EMERGENCY BATTERY BACKUP POWER. EMERGENCY LUMINAIRES SHALL SENSE UNSWITCHED POWER TO THE SPACE AND OPERATE AUTOMATICALLY UPON LOSS OF NORMAL POWER. ALL SHADED LUMINAIRES WITH LED SOURCES SHALL BE PROVIDED WITH 90 MINUTES OF BATTERY BACKUP POWER. ALL EMERGENCY LUMINAIRES SHALL HAVE INTEGRAL OR REMOTE TEST SWITCHES AS INDICATED IN THE FIXTURE SCHEDULE AND VISIBLE INDICATING LIGHTS. CONNECT THE EMERGENCY BATTERY BALLAST/DRIVER TO THE UN-SWITCHED LEG OF THE LIGHTING CIRCUIT INDICATED.
35. CIRCUIT ALL EMERGENCY LIGHTING UNITS (FROG EYES) AND EXIT SIGNS TO NEAREST LOCAL AREA LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHLEGS, UNLESS OTHERWISE NOTED.
36. UNLESS OTHERWISE NOTED, LUMINAIRES DESIGNATED AS NIGHT LIGHT (NL) SHALL BE CONNECTED AHEAD OF LOCAL SWITCHING AND REMAIN ON 24 HOURS A DAY.
37. ALL DIMMED LIGHTING CIRCUITS ARE TO RECEIVE DEDICATED NEUTRALS. DO NOT SHARE NEUTRALS ON DIMMED LIGHTING CIRCUITS.
38. PROVIDE OWNER WITH A COMPLETE LISTING OF ALL LAMPS UTILIZED ON THE PROJECT INCLUDING MANUFACTURER AND CATALOG INFORMATION. PROVIDE A SUGGESTED SOURCE, INCLUDING CONTACT NAME AND PHONE NUMBER, FOR REORDERING.
39. THE CONTRACTOR SHALL VERIFY THE CEILING TYPE BEFORE ORDERING LIGHTING.
40. ROUGH-IN FOR MECHANICAL EQUIPMENT SHALL ONLY OCCUR AFTER MECHANICAL EQUIPMENT SUBMITTALS ARE THOROUGHLY REVIEWED FOR CHAINGES. NOTIFY ENGINEER OF ANY DISCREPANCIES.
41. FINAL LAYOUT AND QUANTITY OF ALL FIRE ALARM DEVICES SUBJECT TO APPROVAL OF LOCAL AUTHORITY HAVING JURISDICTION.
42. PROVIDE NEMA 3R AND CORROSION RESISTANT ELECTRICAL EQUIPMENT AND WIRING METHODS WITHIN POOL EQUIPMENT, POOL AND WHIRLPOOL AREAS. REFER TO DRAWINGS AND SPECIFICATION.
43. EC SHALL COORDINATE ELECTRIC WATER COOLER RECEPTACLE PLACEMENT SUCH THAT THE RECEPTACLE IS ACCESSIBLE WITHIN THE WATER COOLER SHROUD, YET CONCEALED BY THE SHROUD PER NEC 422.33(A). PROVIDE 5mA GFCI CIRCUIT BREAKER IN ELECTRICAL PANEL PER NEC SECTION 422.
44. THE POWER AND CONTROL REQUIREMENTS FOR ALL EQUIPMENT CONNECTIONS SHALL BE CONFIRMED WITH APPROVED SHOP DRAWINGS PRIOR TO ELECTRICAL ROUGH-IN. FINAL POWER REQUIREMENTS, DIMENSIONED ROUGH-IN LOCATIONS, LOW VOLTAGE SYSTEM CONNECTIONS, ETC. SHALL BE CONFIRMED AND MODIFIED AS REQUIRED.
45. ALL DEVICES IN OR ABOVE COUNTERS SHALL HAVE LOCATIONS AND MOUNTING HEIGHTS CONFIRMED WITH ARCHITECTURAL ELEVATIONS & OWNER PRIOR TO ROUGH-IN. ANY ADJUSTMENTS TO MOUNTING HEIGHTS REQUIRED BY LACK OF COORDINATION WILL BE AT THE CONTRACTOR'S EXPENSE.
46. ALL EXISTING ELECTRICAL SERVICES NOT SPECIFICALLY INDICATED TO BE REMOVED OR ALTERED SHALL REMAIN AS THEY PRESENTLY EXIST.
47. IDENTIFY EACH RECEPTACLE WITH PANELBOARD IDENTIFICATION AND CIRCUIT NUMBER. USE HOT, STAMPED, OR ENGRAVED MACHINE PRINTING WITH BLACK-FILLED LETTERING ON FACE OF PLATE, AND DURABLE WIRE MARKERS OR TAGS INSIDE OUTLET BOXES.
48. UNLESS OTHERWISE NOTED, ALL GFCI RECEPTACLES SHALL HAVE TEST/RESET SWITCHES INTEGRAL TO RECEPTACLE DEVICE.

3

49. IN ACCORDANCE WITH 2018 IBC, ROUTT COUNTY AMENDMENTS, AND ASCE 7-16, SECTION 13.1.3. AND 13.1.4, ELECTRICAL AND FIRE ALARM COMPONENTS POSITIVELY ATTACHED TO THE STRUCTURE, AT AN IMPORTANCE FACTOR OF 1.0 AND WITHIN SEISMIC DESIGN CATEGORY C SHALL BE EXEMPT FROM CHAPTER 13 SEISMIC DESIGN REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND FOR EXACT SEISMIC DESIGN AND LOAD INFORMATION.

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
3/20/2024
PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.810.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL COVER SHEET

SHEET NO.

E0.00

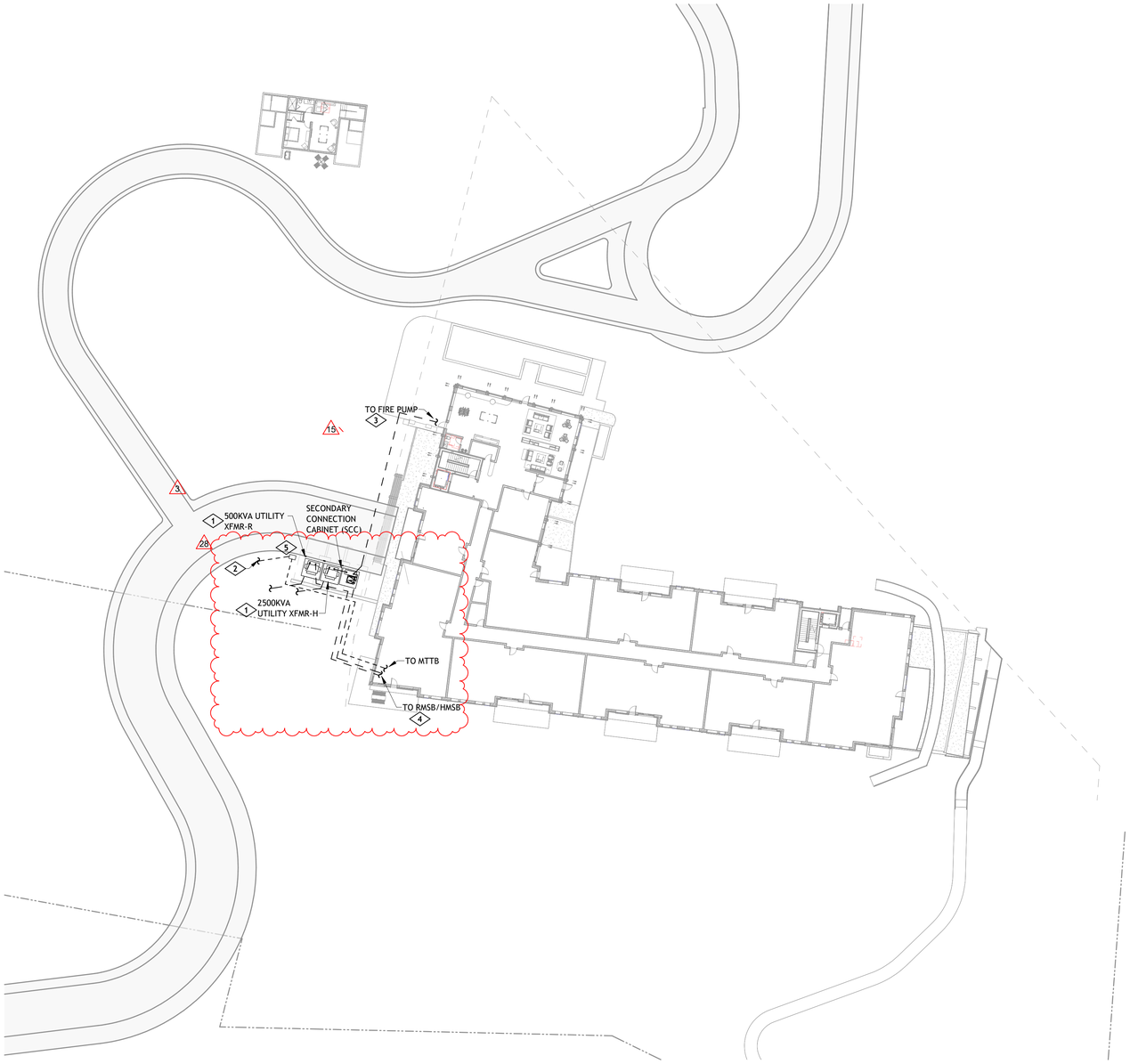
5/20/2024 4:41:39 PM

SITE GENERAL NOTES

A.	ALL EXTERIOR LIGHTING CIRCUITS SHALL UTILIZE A MINIMUM WIRE SIZE OF #8AWG COPPER, UON.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	NEW YAMPA VALLEY ELECTRIC ASSOCIATION (YVEA) PAD MOUNTED UTILITY TRANSFORMER. CONTRACTOR SHALL COORDINATE EXACT TRANSFORMER LOCATION AND ORIENTATION WITH UTILITY AS REQUIRED TO PROVIDE MINIMUM CLEARANCES, INCLUDING 10'-0" MINIMUM CLEARANCE FROM BUILDING, 10'-0" CLEAR IN FRONT OF TRANSFORMER CABINET ACCESS DOORS, AND AS REQUIRED TO COORDINATE POSITION OF PRIMARY AND SECONDARY CONDUIT ENTRY AREAS WITHIN PAD/VAULT AND TRANSFORMER ENCLOSURE. TRANSFORMER VAULT ANTICIPATED TO BE PROVIDED BY UTILITY (YVEA). CONTRACTOR SHALL COORDINATE EXACT CONCRETE PAD/VAULT INSTALLATION REQUIREMENTS WITH UTILITY PRIOR TO COMMENCING WORK. NEW PRIMARY FEEDER ANTICIPATED TO BE PROVIDED BY UTILITY (YVEA). CONTRACTOR SHALL PROVIDE NEW SECONDARY WIRING AND CONDUIT AS SHOWN. THE CONTRACTOR SHALL PERFORM ALL TRENCHING AND BACKFILLING ON THE SECONDARY SIDE OF THE TRANSFORMER. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR MORE INFORMATION. ALL NEW FEEDER CONDUCTOR AND CONDUIT INSTALLATIONS SHALL COMPLY WITH ALL APPLICABLE NEC REQUIREMENTS, INCLUDING BUT NOT LIMITED TO 110.14(B), 230.46, 300.5(E), 300.13 AND 300.15. COORDINATE ALL WORK WITH OWNER AND UTILITY (YVEA) PRIOR TO START OF CONSTRUCTION.
2	APPROXIMATE ROUTING OF CONDUIT BETWEEN TELECOMMUNICATIONS UTILITY CONNECTIONS PEDESTAL AND THE BUILDING MDF LOCATION FOR LOW VOLTAGE TELECOMMUNICATIONS UTILITY SERVICE CABLING RACEWAY. REFER TO LOW VOLTAGE RISER DIAGRAM #1/E6.01 FOR MORE INFORMATION.
3	CONTRACTOR SHALL COORDINATE EXACT ROUTING TO FIRE PUMP CONTROLLER IN GARAGE LEVEL MECHANICAL ROOM (MEP 108) WITH FINAL GRADING AND WATER ENTRY UTILITIES AS REQUIRED. REFER TO ONE-LINE DIAGRAM FOR MORE INFORMATION.
4	APPROXIMATE ROUTING OF ELECTRICAL SECONDARY FEEDERS BETWEEN UTILITY ELECTRICAL SERVICE TRANSFORMERS AND BUILDING MAIN ELECTRICAL SERVICE EQUIPMENT. REFER TO ELECTRICAL ONE-LINE FOR MORE INFORMATION. SECONDARY FEEDER SHALL REMAIN UNDERGROUND / OUTSIDE OF BUILDING FOR ENTIRE RUN.
5	PROVIDE IN-GRADE PULL-BOX FOR NEW TELECOMMUNICATIONS SERVICES. PROVIDE HUBBELL QUAZITE PG SERIES COMMUNICATIONS IN-GROUND PULL-BOX, 24'W X 36'L X 18"DEEP. ASSEMBLY AND ALL COMPONENTS UL LISTED. OPEN-BOTTOM BOX STYLE, ANSI/SCTE-77 TIER 22 RATING, PREPPED FOR HEX-HEAD SELF-CLEANING AUGER BOLTS, CATALOG NO. PG2436BA18 (OR APPROVED EQUAL SUBSTITUTIONS). COVER LABELLED "COMMUNICATIONS". COORDINATE EXACT LOCATION IN FIELD WITH NEW UTILITY TRANSFORMERS, UNDERGROUND ELECTRICAL UTILITIES, AND LOW-VOLTAGE SERVICE PROVIDER INTERCONNECTION POINT(S) PRIOR TO ROUGH-IN.



NORTH

1 | ELECTRICAL SITE PLAN
E0.10 | 1" = 30'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AEDESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024
15	RFI #122	07.01.2024
28	RFI #215	08.13.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NO.

E0.10

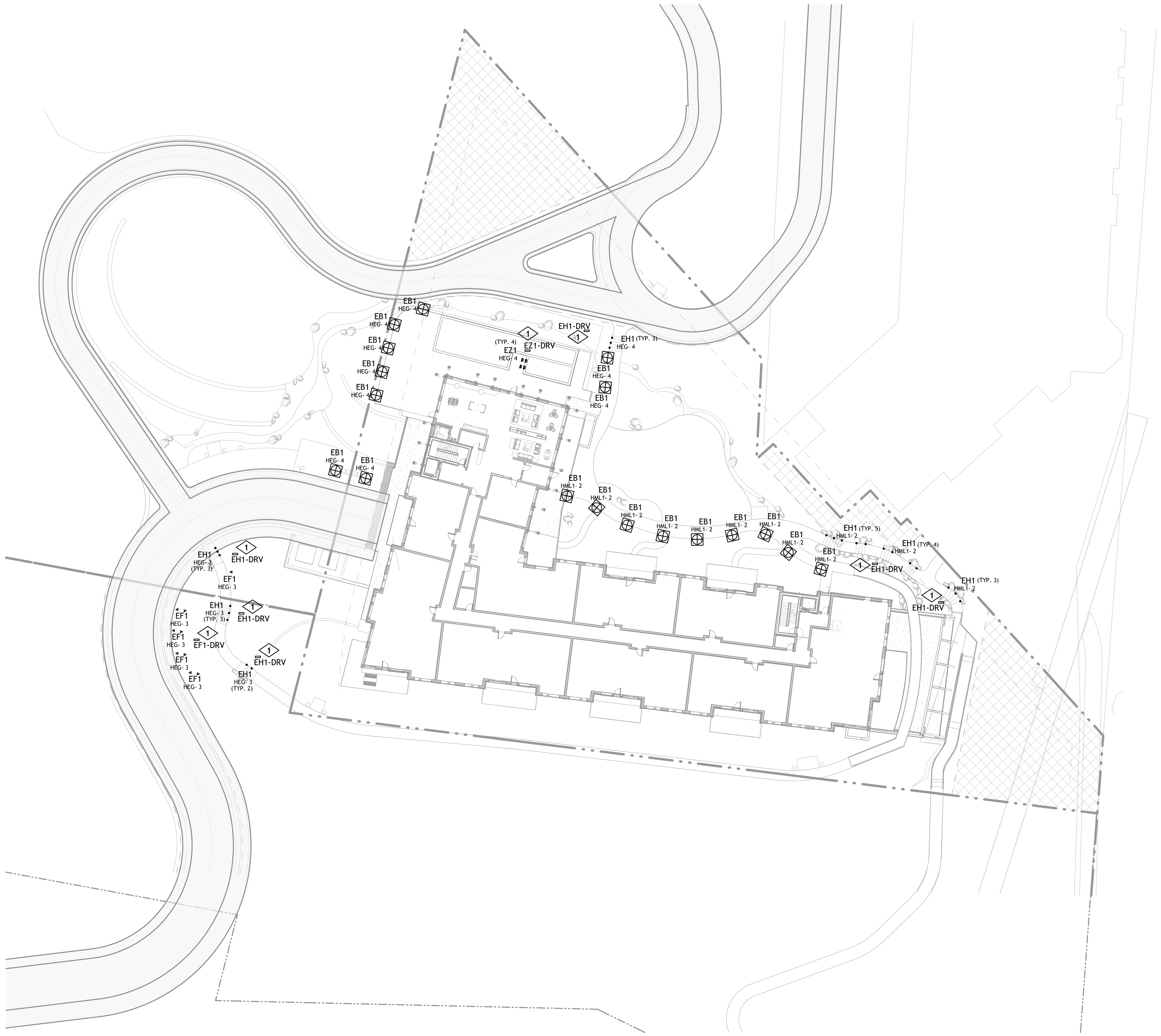
8/13/2024 3:44:25 PM

LIGHTING GENERAL NOTES

A.	LIGHTING IS SHOWN FOR CIRCUITING PURPOSES ONLY. REFERENCE ILC "EL" SERIES SHEETS FOR MORE INFORMATION ON LIGHT FIXTURES, LIGHTING CONTROLS, ETC.
B.	CIRCUIT ALL EXIT SIGNS TO NEAREST UN-SWITCHED 277-VOLT EMERGENCY LIGHTING CIRCUIT (ON PANEL HEG OR HE3 AS APPLICABLE). EXIT SIGN POWER CONNECTIONS SHALL BE CONNECTED AHEAD OF ALL SWITCH LEGS AND CONTROLS.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	96W REMOTE DRIVER SHALL BE LOCATED WITHIN LANDSCAPING IN THIS AREA. REFER TO "EL" SERIES DRAWINGS FOR MORE INFORMATION ON ACCEPTABLE MOUNTING LOCATIONS, QUANTITIES, FIXTURE ZONE CONTROL, REQUIRED NEMA RATINGS, ETC.



1 | ELECTRICAL LIGHTING CIRCUITING SITE PLAN

E0.11 | 1" = 30'-0"

COLORADO REGISTERED
JON BROOKS
35717
3/20/2024
PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN

3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024

PROJECT NUMBER 20019

ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL LIGHTING CIRCUITING SITE PLAN

SHEET NO.

E0.11

3/20/2024 4:41:35 PM

KEYNOTE LEGEND

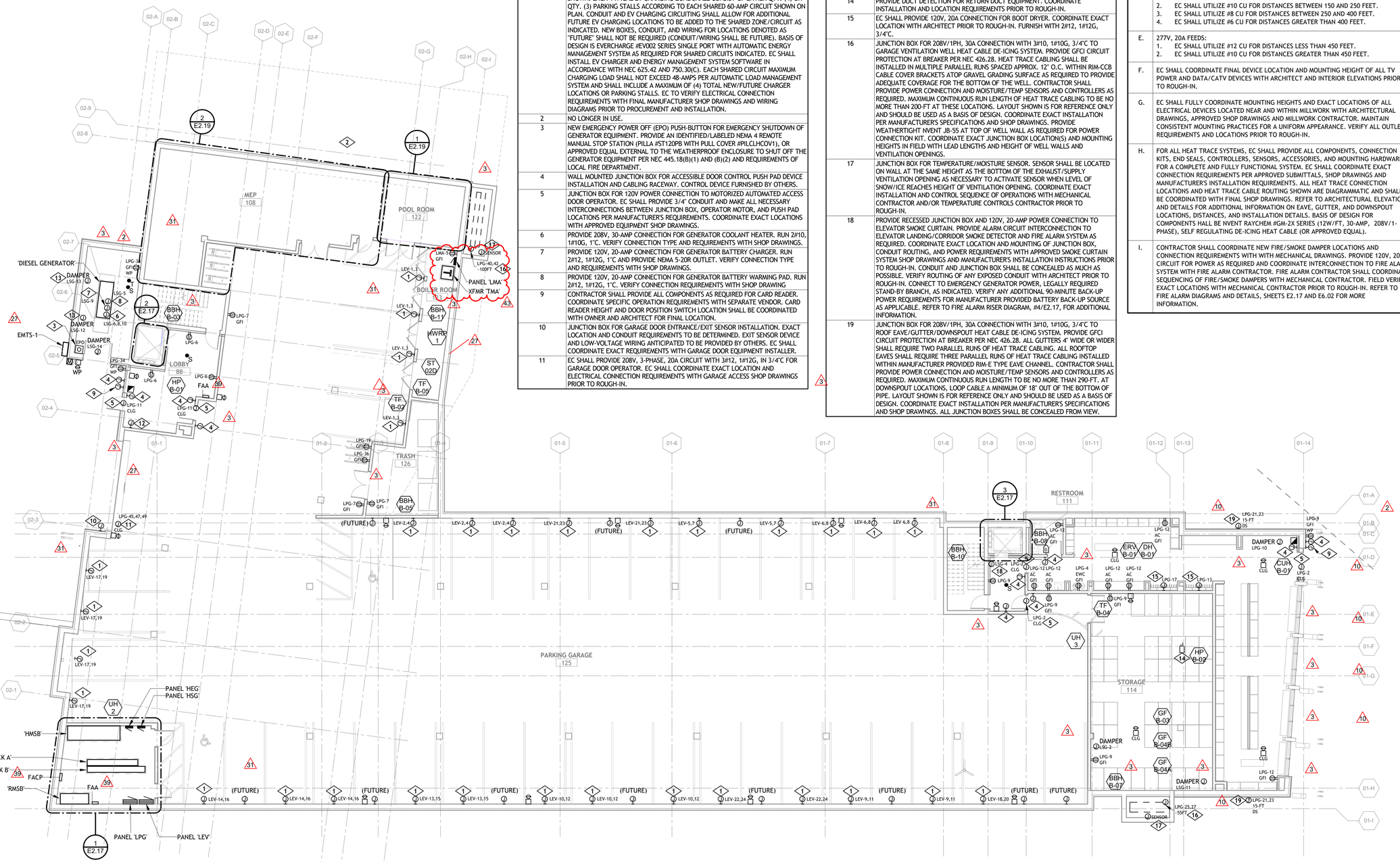
KEY VALUE	KEYNOTE TEXT
1	WALL MOUNTED SINGLE PORT ELECTRIC VEHICLE CHARGING STATION, LEVEL 2, 208V/1PH/48A WITH SINGLE SHARED 60A/2P CIRCUIT. FIELD VERIFY FINAL LOCATION WITH ARCHITECT AND OWNER. EACH JUNCTION BOX AND CIRCUIT INDICATES THE INSTALLED EV CHARGER LOCATION AND TERMINATION OF CIRCUIT WIRING. CONDUIT FOR EACH CIRCUIT SHALL BE STUBBED UP AT PERIMETER WALLS BETWEEN PARKING STALLS (LOCATED AT COLUMNS) TO AVOID VERTICAL CONDUIT ROUTING WITHIN PARKING STALLS. PROVIDE (1) SHARED 60-AMP BRANCH CIRCUIT WITH 2#4, 1#10G IN A SINGLE 1-1/2"C TO EACH ZONE OF CHARGING STATIONS AS SHOWN. EACH TYPICAL EV CHARGING ZONE SHALL CONSIST OF EITHER QTY. (4) OR QTY. (3) PARKING STALLS ACCORDING TO EACH SHARED 60-AMP CIRCUIT SHOWN ON PLAN. CONDUIT AND EV CHARGING CIRCUITING SHALL ALLOW FOR ADDITIONAL FUTURE EV CHARGING LOCATIONS TO BE ADDED TO THE SHARED ZONE/CIRCUIT AS INDICATED. NEW BOXES, CONDUIT, AND WIRING FOR LOCATIONS DENOTED AS "FUTURE" SHALL NOT BE REQUIRED (CONDUIT/WIRING SHALL BE FUTURE). BASIS OF DESIGN IS EVERCHARGE #EV002 SERIES SINGLE PORT WITH AUTOMATIC ENERGY MANAGEMENT SYSTEM AS REQUIRED FOR SHARED CIRCUITS INDICATED. EC SHALL INSTALL EV CHARGER AND ENERGY MANAGEMENT SYSTEM SOFTWARE IN ACCORDANCE WITH NEC 625.42 AND 750.30(C), EACH SHARED CIRCUIT MAXIMUM CHARGING LOAD SHALL NOT EXCEED 48-AMPS PER AUTOMATIC LOAD MANAGEMENT SYSTEM AND SHALL INCLUDE A MAXIMUM OF (4) TOTAL NEW/FUTURE CHARGER LOCATIONS OR PARKING STALLS. EC TO VERIFY ELECTRICAL CONNECTION REQUIREMENTS WITH FINAL MANUFACTURER SHOP DRAWINGS AND WIRING DIAGRAMS PRIOR TO PROCUREMENT AND INSTALLATION.
2	NO LONGER IN USE.
3	NEW EMERGENCY POWER OFF (EPO) PUSH-BUTTON FOR EMERGENCY SHUTDOWN OF GENERATOR EQUIPMENT. PROVIDE AN IDENTIFIED/LABELED NEMA 4 REMOTE MANUAL STOP STATION (PILLA #ST120PB WITH PULL COVER #PILCLHCOV1), OR APPROVED EQUAL EXTERNAL TO THE WEATHERPROOF ENCLOSURE TO SHUT OFF THE GENERATOR EQUIPMENT PER NEC 445.18(B)(1) AND (B)(2) AND REQUIREMENTS OF LOCAL FIRE DEPARTMENT.
4	WALL MOUNTED JUNCTION BOX FOR ACCESSIBLE DOOR CONTROL PUSH PAD DEVICE INSTALLATION AND CABLING RACEWAY. CONTROL DEVICE FURNISHED BY OTHERS.
5	JUNCTION BOX FOR 120V POWER CONNECTION TO MOTORIZED AUTOMATED ACCESS DOOR OPERATOR. EC SHALL PROVIDE 3/4" CONDUIT AND MAKE ALL NECESSARY INTERCONNECTIONS BETWEEN JUNCTION BOX, OPERATOR MOTOR, AND PUSH PAD LOCATIONS PER MANUFACTURER'S REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH APPROVED EQUIPMENT SHOP DRAWINGS.
6	PROVIDE 208V, 30-AMP CONNECTION FOR GENERATOR COOLANT HEATER. RUN 2#10, 1#10G, 1"C. VERIFY CONNECTION TYPE AND REQUIREMENTS WITH SHOP DRAWINGS.
7	PROVIDE 120V, 20-AMP CONNECTION FOR GENERATOR BATTERY CHARGER. RUN 2#12, 1#12G, 1"C AND PROVIDE NEMA 5-20R OUTLET. VERIFY CONNECTION TYPE AND REQUIREMENTS WITH SHOP DRAWINGS.
8	PROVIDE 120V, 20-AMP CONNECTION FOR GENERATOR BATTERY WARMING PAD. RUN 2#12, 1#12G, 1"C. VERIFY CONNECTION REQUIREMENTS WITH SHOP DRAWING
9	CONTRACTOR SHALL PROVIDE ALL COMPONENTS AS REQUIRED FOR CARD READER. COORDINATE SPECIFIC OPERATION REQUIREMENTS WITH SEPARATE VENDOR. CARD READER HEIGHT AND DOOR POSITION SWITCH LOCATION SHALL BE COORDINATED WITH OWNER AND ARCHITECT FOR FINAL LOCATION.
10	JUNCTION BOX FOR GARAGE DOOR ENTRANCE/EXIT SENSOR INSTALLATION. EXACT LOCATION AND CONDUIT REQUIREMENTS TO BE DETERMINED. EXIT SENSOR DEVICE AND LOW-VOLTAGE WIRING ANTICIPATED TO BE PROVIDED BY OTHERS. EC SHALL COORDINATE EXACT REQUIREMENTS WITH GARAGE DOOR EQUIPMENT INSTALLER.
11	EC SHALL PROVIDE 208V, 3-PHASE, 20A CIRCUIT WITH 3#12, 1#12G, IN 3/4"C FOR GARAGE DOOR OPERATOR. EC SHALL COORDINATE EXACT LOCATION AND ELECTRICAL CONNECTION REQUIREMENTS WITH GARAGE ACCESS SHOP DRAWINGS PRIOR TO ROUGH-IN.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
12	PROVIDE LOCKABLE 30A/1P SAFETY SWITCH FOR 20A DEDICATED CIRCUIT FOR ELEVATOR VISUAL COMMUNICATION SYSTEM. EXACT LOCATIONS SHALL BE COORDINATED IN-FIELD PRIOR TO ROUGH-IN. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO COMMENCING WORK.
13	PROVIDE 120V, 20-AMP CONNECTION TO MOTORIZED LOUVER IN GENERATOR ENCLOSURE. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. CONNECT TO STAND-BY POWER CIRCUIT AS INDICATED.
14	PROVIDE DUCT DETECTION FOR RETURN DUCT EQUIPMENT. COORDINATE INSTALLATION AND LOCATION REQUIREMENTS PRIOR TO ROUGH-IN.
15	EC SHALL PROVIDE 120V, 20A CONNECTION FOR BOOT DRYER. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. FURNISH WITH 2#12, 1#12G, 3/4"C.
16	JUNCTION BOX FOR 208V/1PH, 30A CONNECTION WITH 3#10, 1#10G, 3/4"C TO GARAGE VENTILATION WELL HEAT CABLE DE-ICING SYSTEM. PROVIDE GFCI CIRCUIT PROTECTION AT BREAKER PER NEC 426.28. HEAT TRACE CABLING SHALL BE INSTALLED IN MULTIPLE PARALLEL RUNS SPACED APPROX. 12" O.C. WITHIN RIM-CCB CABLE COVER BRACKETS ATOP GRAVEL GRADING SURFACE AS REQUIRED TO PROVIDE ADEQUATE COVERAGE FOR THE BOTTOM OF THE WELL. CONTRACTOR SHALL PROVIDE POWER CONNECTION AND MOISTURE/TEMP SENSORS AND CONTROLLERS AS REQUIRED. MAXIMUM CONTINUOUS RUN LENGTH OF HEAT TRACE CABLING TO BE NO MORE THAN 200-FT AT THESE LOCATIONS. LAYOUT SHOWN IS FOR REFERENCE ONLY AND SHOULD BE USED AS A BASIS OF DESIGN. COORDINATE EXACT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS. PROVIDE WEATHERTIGHT NVENT JB-55 AT TOP OF WELL WALL AS REQUIRED FOR POWER CONNECTION KIT. COORDINATE EXACT JUNCTION BOX LOCATION(S) AND MOUNTING HEIGHTS IN FIELD WITH LEAD LENGTHS AND HEIGHT OF WELL WALLS AND VENTILATION OPENINGS.
17	JUNCTION BOX FOR TEMPERATURE/MOISTURE SENSOR. SENSOR SHALL BE LOCATED ON WALL AT THE SAME HEIGHT AS THE BOTTOM OF THE EXHAUST/SUPPLY VENTILATION OPENING AS NECESSARY TO ACTIVATE SENSOR WHEN LEVEL OF SNOW/ICE REACHES HEIGHT OF VENTILATION OPENING. COORDINATE EXACT INSTALLATION AND CONTROL SEQUENCE OF OPERATIONS WITH MECHANICAL CONTRACTOR AND/OR TEMPERATURE CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
18	PROVIDE RECESSED JUNCTION BOX AND 120V, 20-AMP POWER CONNECTION TO ELEVATOR SMOKE CURTAIN. PROVIDE ALARM CIRCUIT INTERCONNECTION TO ELEVATOR LANDING/CORRIDOR SMOKE DETECTOR AND FIRE ALARM SYSTEM AS REQUIRED. COORDINATE EXACT LOCATION AND MOUNTING OF JUNCTION BOX, CONDUIT ROUTING, AND POWER REQUIREMENTS WITH APPROVED SMOKE CURTAIN SYSTEM SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN. CONDUIT AND JUNCTION BOX SHALL BE CONCEALED AS MUCH AS POSSIBLE. VERIFY ROUTING OF ANY EXPOSED CONDUIT WITH ARCHITECT PRIOR TO ROUGH-IN. CONNECT TO EMERGENCY GENERATOR POWER, LEGALLY REQUIRED STAND-BY BRANCH, AS INDICATED. VERIFY ANY ADDITIONAL 90-MINUTE BACK-UP POWER REQUIREMENTS FOR MANUFACTURER PROVIDED BATTERY BACK-UP SOURCE AS APPLICABLE. REFER TO FIRE ALARM RISER DIAGRAM, #4/E2.17, FOR ADDITIONAL INFORMATION.
19	JUNCTION BOX FOR 208V/1PH, 30A CONNECTION WITH 3#10, 1#10G, 3/4"C TO ROOF EAVE/GUTTER/DOWNSPOUT HEAT CABLE DE-ICING SYSTEM. PROVIDE GFCI CIRCUIT PROTECTION AT BREAKER PER NEC 426.28. ALL GUTTERS 4" WIDE OR WIDER SHALL REQUIRE TWO PARALLEL RUNS OF HEAT TRACE CABLING. ALL ROOFTOP EAVES SHALL REQUIRE THREE PARALLEL RUNS OF HEAT TRACE CABLING INSTALLED WITHIN MANUFACTURER PROVIDED RIM-E TYPE EAVE CHANNEL. CONTRACTOR SHALL PROVIDE POWER CONNECTION AND MOISTURE/TEMP SENSORS AND CONTROLLERS AS REQUIRED. MAXIMUM CONTINUOUS RUN LENGTH TO BE NO MORE THAN 290-FT. AT DOWNSPOUT LOCATIONS, LOOP CABLE A MINIMUM OF 18" OUT OF THE BOTTOM OF PIPE. LAYOUT SHOWN IS FOR REFERENCE ONLY AND SHOULD BE USED AS A BASIS OF DESIGN. COORDINATE EXACT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS. ALL JUNCTION BOXES SHALL BE CONCEALED FROM VIEW.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.



1 | ELECTRICAL POWER PLAN - LEVEL 00

E1.00 | 3/32" = 1'-0"

COLORADO REGISTERED
CLAIR BROOKS
35717
1/8/2025
PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble

Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSES	02.08.2024
2	DMP SET REVISIONS	02.09.2024
3	IFC	03.15.2024
10	RFI #02	05.22.2024
27	ASI 003	08.02.2024
31	RFI #034	09.16.2024
39	RFI #030	10.30.2024
43	ASI 007	01.08.2025

PROJECT NUMBER 20019

ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

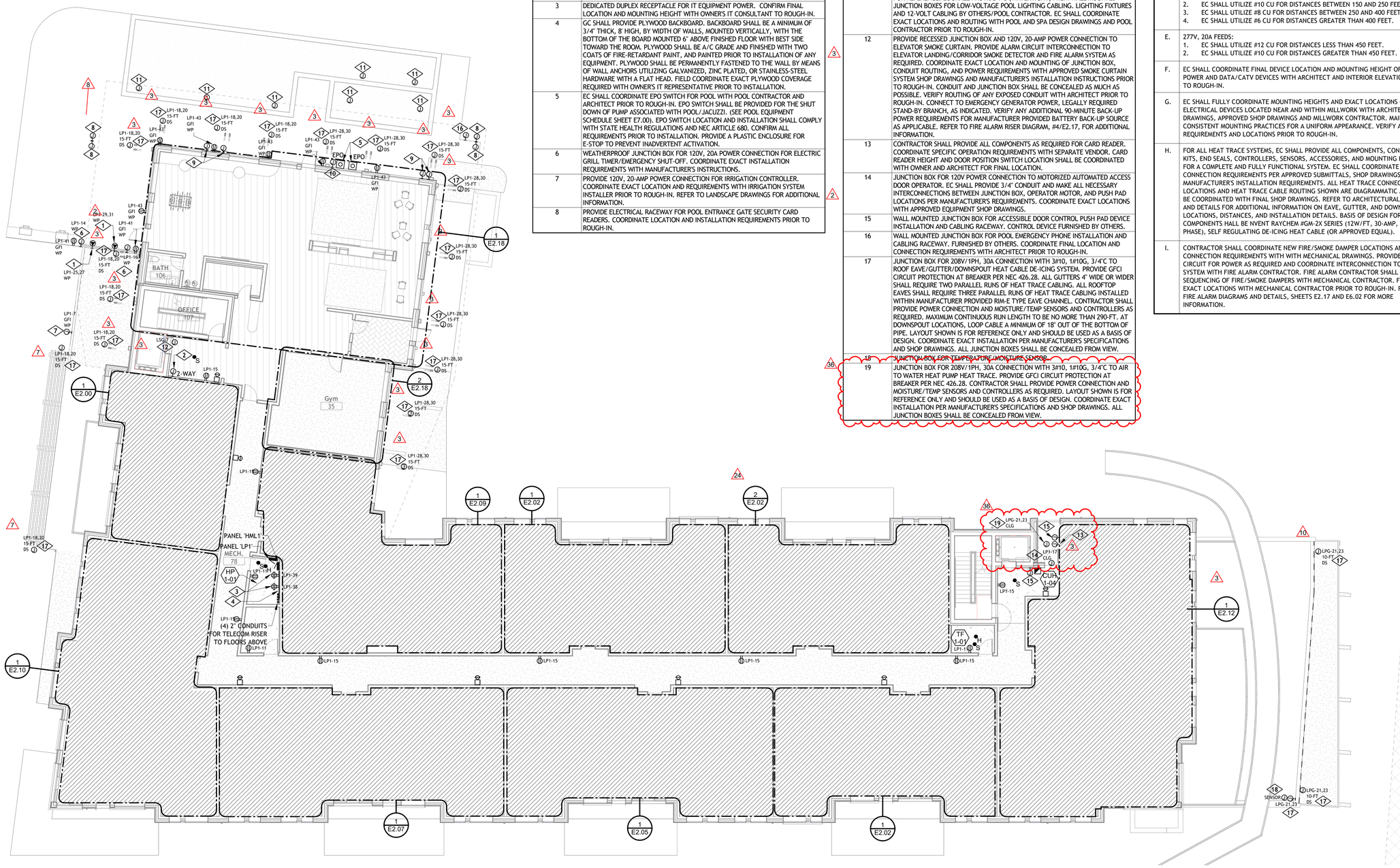
SHEET TITLE

ELECTRICAL POWER PLAN - LEVEL 00

SHEET NO.

E1.00

1/9/2025 9:55:20 AM



KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE NEMA 208V/1-PHASE 30-AMP ELECTRICAL CONNECTION (2#10, 1#10G, 3/4"C) AND NEMA 6-30R RECEPTACLE FOR 5,280-WATT ELECTRIC GRILL POWER CONNECTION. COORDINATE EXACT RECEPTACLE LOCATION WITHIN ACCESS PANEL BELOW GRILL WITH ARCHITECT PRIOR TO ROUGH-IN.
2	PROVIDE LOCKABLE 30A/1P SAFETY SWITCH FOR 20A DEDICATED CIRCUIT FOR ELEVATOR VISUAL COMMUNICATION SYSTEM. EXACT LOCATIONS SHALL BE COORDINATED IN-FIELD PRIOR TO ROUGH-IN. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO COMMENCING WORK.
3	DEDICATED DUPLEX RECEPTACLE FOR IT EQUIPMENT POWER. CONFIRM FINAL LOCATION AND MOUNTING HEIGHT WITH OWNER'S IT CONSULTANT TO ROUGH-IN.
4	GC SHALL PROVIDE PLYWOOD BACKBOARD. BACKBOARD SHALL BE A MINIMUM OF 3/4" THICK, 8' HIGH, BY WIDTH OF WALLS, MOUNTED VERTICALLY, WITH THE BOTTOM OF THE BOARD MOUNTED 6" ABOVE FINISHED FLOOR WITH BEST SIDE TOWARD THE ROOM. PLYWOOD SHALL BE A/C GRADE AND FINISHED WITH TWO COATS OF FIRE-RETARDANT PAINT, AND PAINTED PRIOR TO INSTALLATION OF ANY EQUIPMENT. PLYWOOD SHALL BE PERMANENTLY FASTENED TO THE WALL BY MEANS OF WALL ANCHORS UTILIZING GALVANIZED, ZINC PLATED, OR STAINLESS-STEEL HARDWARE WITH A FLAT HEAD. FIELD COORDINATE EXACT PLYWOOD COVERAGE REQUIRED WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION.
5	EC SHALL COORDINATE EPO SWITCH FOR POOL WITH POOL CONTRACTOR AND ARCHITECT PRIOR TO ROUGH-IN. EPO SWITCH SHALL BE PROVIDED FOR THE SHUT DOWN OF PUMP ASSOCIATED WITH POOL/JACUZZI. (SEE POOL EQUIPMENT SCHEDULE SHEET E7.00). EPO SWITCH LOCATION AND INSTALLATION SHALL COMPLY WITH STATE HEALTH REGULATIONS AND NEC ARTICLE 680. CONFIRM ALL REQUIREMENTS PRIOR TO INSTALLATION. PROVIDE A PLASTIC ENCLOSURE FOR E-STOP TO PREVENT INADVERTENT ACTIVATION.
6	WEATHERPROOF JUNCTION BOX FOR 120V, 20A POWER CONNECTION FOR ELECTRIC GRILL TIMER/EMERGENCY SHUT-OFF. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH MANUFACTURER'S INSTRUCTIONS.
7	PROVIDE 120V, 20-AMP POWER CONNECTION FOR IRRIGATION CONTROLLER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH IRRIGATION SYSTEM INSTALLER PRIOR TO ROUGH-IN. REFER TO LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.
8	PROVIDE ELECTRICAL RACEWAY FOR POOL ENTRANCE GATE SECURITY CARD READERS. COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PRIOR TO ROUGH-IN.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
9	WALL MOUNTED JUNCTION BOXES FOR WET-NICHE LIGHTING. COORDINATE EXACT LOCATIONS AND QUANTITIES WITH POOL AND SPA DESIGN DRAWINGS AND POOL CONTRACTOR. VERIFY JUNCTION BOX LOCATIONS AND MOUNTING WITH ARCHITECT PRIOR TO ROUGH-IN AS REQUIRED TO CONCEAL JUNCTION BOXES WHERE POSSIBLE.
10	POOL SPA JET TIMER. EC SHALL COORDINATE WITH POOL AND SPA DRAWINGS AND CONTRACTOR FOR CONDUIT AND JUNCTION BOX REQUIREMENTS. TIMER PROVIDED BY OTHERS.
11	TYPICAL LOCATION ON WET NICHE LIGHTING JUNCTION BOX WITHIN POOL SHOWN FOR REFERENCE. EC SHALL PROVIDE 1"C (WATERTIGHT) FROM WALL MOUNTED JUNCTION BOXES FOR LOW-VOLTAGE POOL LIGHTING CABLING. LIGHTING FIXTURES AND 12-VOLT CABLING BY OTHERS/POOL CONTRACTOR. EC SHALL COORDINATE EXACT LOCATIONS AND ROUTING WITH POOL AND SPA DESIGN DRAWINGS AND POOL CONTRACTOR PRIOR TO ROUGH-IN.
12	PROVIDE RECESSED JUNCTION BOX AND 120V, 20-AMP POWER CONNECTION TO ELEVATOR SMOKE CURTAIN. PROVIDE ALARM CIRCUIT INTERCONNECTION TO ELEVATOR LANDING/CORRIDOR SMOKE DETECTOR AND FIRE ALARM SYSTEM AS REQUIRED. COORDINATE EXACT LOCATION AND MOUNTING OF JUNCTION BOX, CONDUIT ROUTING, AND POWER REQUIREMENTS WITH APPROVED SMOKE CURTAIN SYSTEM SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN. CONDUIT AND JUNCTION BOX SHALL BE CONCEALED AS MUCH AS POSSIBLE. VERIFY ROUTING OF ANY EXPOSED CONDUIT WITH ARCHITECT PRIOR TO ROUGH-IN. CONNECT TO EMERGENCY GENERATOR POWER, LEGALLY REQUIRED STAND-BY BRANCH, AS INDICATED. VERIFY ANY ADDITIONAL 90-MINUTE BACK-UP POWER REQUIREMENTS FOR MANUFACTURER PROVIDED BATTERY BACK-UP SOURCE AS APPLICABLE. REFER TO FIRE ALARM RISER DIAGRAM, #4/E2.17, FOR ADDITIONAL INFORMATION.
13	CONTRACTOR SHALL PROVIDE ALL COMPONENTS AS REQUIRED FOR CARD READER. COORDINATE SPECIFIC OPERATION REQUIREMENTS WITH SEPARATE VENDOR. CARD READER HEIGHT AND DOOR POSITION SWITCH LOCATION SHALL BE COORDINATED WITH OWNER AND ARCHITECT FOR FINAL LOCATION.
14	JUNCTION BOX FOR 120V POWER CONNECTION TO MOTORIZED AUTOMATED ACCESS DOOR OPERATOR. EC SHALL PROVIDE 3/4" CONDUIT AND MAKE ALL NECESSARY INTERCONNECTIONS BETWEEN JUNCTION BOX, OPERATOR MOTOR, AND PUSH PAD LOCATIONS PER MANUFACTURER'S REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH APPROVED EQUIPMENT SHOP DRAWINGS.
15	WALL MOUNTED JUNCTION BOX FOR ACCESSIBLE DOOR CONTROL PUSH PAD DEVICE INSTALLATION AND CABLING RACEWAY. CONTROL DEVICE FURNISHED BY OTHERS.
16	WALL MOUNTED JUNCTION BOX FOR POOL EMERGENCY PHONE INSTALLATION AND CABLING RACEWAY. FURNISHED BY OTHERS. COORDINATE FINAL LOCATION AND CONNECTION REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
17	JUNCTION BOX FOR 208V/1PH, 30A CONNECTION WITH 3#10, 1#10G, 3/4"C TO ROOF EAVE/GUTTER/DOWNSPOUT HEAT CABLE DE-ICING SYSTEM. PROVIDE GFCI CIRCUIT PROTECTION AT BREAKER PER NEC 426.28. ALL GUTTERS 4" WIDE OR WIDER SHALL REQUIRE TWO PARALLEL RUNS OF HEAT TRACE CABLING. ALL ROOFTOP EAVES SHALL REQUIRE THREE PARALLEL RUNS OF HEAT TRACE CABLING INSTALLED WITHIN MANUFACTURER PROVIDED RIM-E TYPE EAVE CHANNEL. CONTRACTOR SHALL PROVIDE POWER CONNECTION AND MOISTURE/TEMP SENSORS AND CONTROLLERS AS REQUIRED. MAXIMUM CONTINUOUS RUN LENGTH TO BE NO MORE THAN 290-FT. AT DOWNSPOUT LOCATIONS, LOOP CABLE A MINIMUM OF 18" OUT OF THE BOTTOM OF PIPE. LAYOUT SHOWN IS FOR REFERENCE ONLY AND SHOULD BE USED AS A BASIS OF DESIGN. COORDINATE EXACT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS. ALL JUNCTION BOXES SHALL BE CONCEALED FROM VIEW.
~~18~~	~~JUNCTION BOX FOR TEMPERATURE/MOISTURE SENSOR~~
19	JUNCTION BOX FOR 208V/1PH, 30A CONNECTION WITH 3#10, 1#10G, 3/4"C TO AIR TO WATER HEAT PUMP HEAT TRACE. PROVIDE GFCI CIRCUIT PROTECTION AT BREAKER PER NEC 426.28. CONTRACTOR SHALL PROVIDE POWER CONNECTION AND MOISTURE/TEMP SENSORS AND CONTROLLERS AS REQUIRED. LAYOUT SHOWN IS FOR REFERENCE ONLY AND SHOULD BE USED AS A BASIS OF DESIGN. COORDINATE EXACT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS. ALL JUNCTION BOXES SHALL BE CONCEALED FROM VIEW.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.

1 | ELECTRICAL POWER PLAN - LEVEL 01
E1.01 | 3/32" = 1'-0"

NORTH

10/9/2024 2:56:08 PM

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
2	GMP SET REVISIONS	02.09.2024
3	RFC	03.15.2024
7	RFI #45	04.12.2024
8	RFI #43	04.12.2024
10	RFI #62	05.22.2024
24	ASD 001	07.26.2024
36	RFI #228.1	10.09.2024

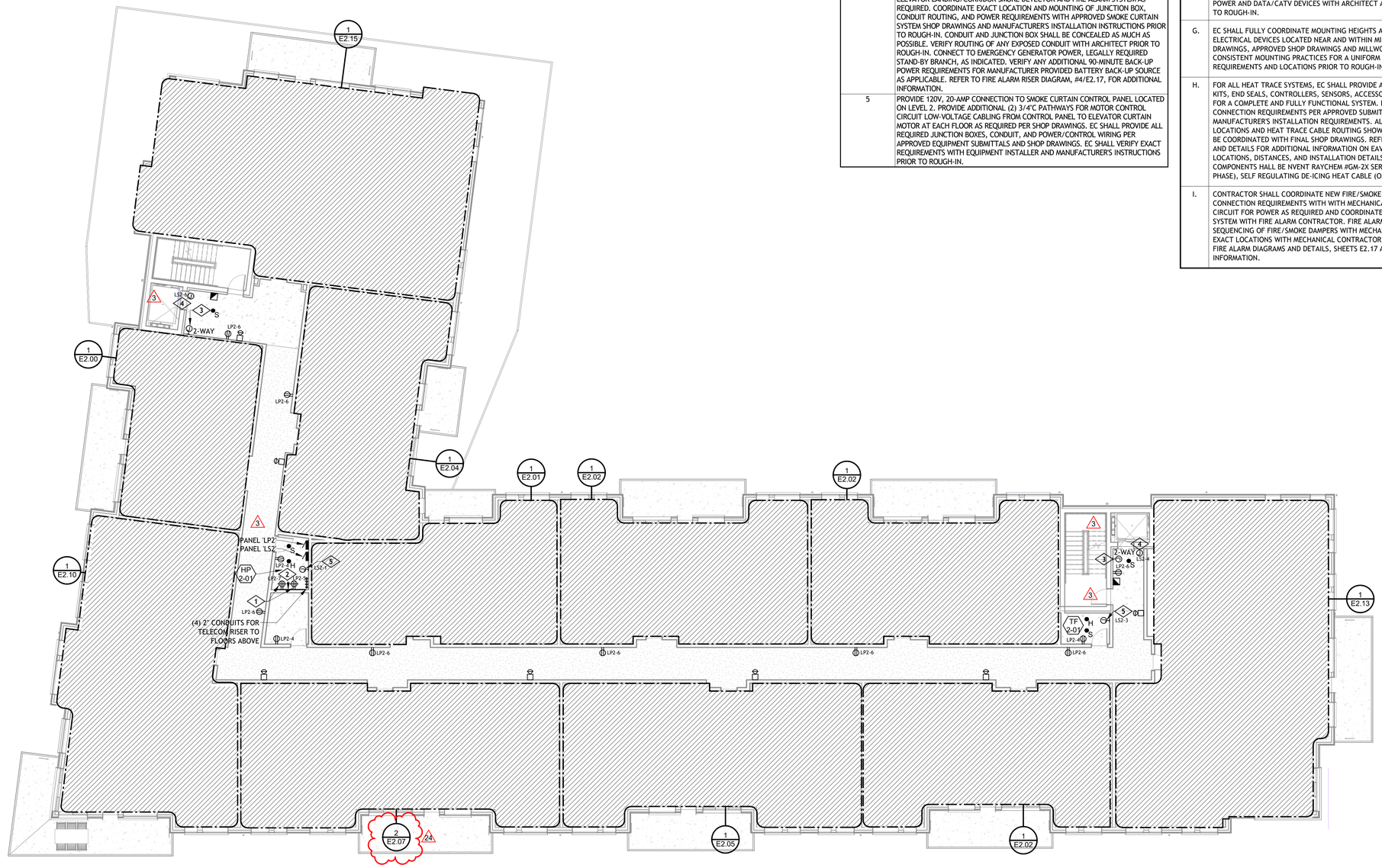
PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER PLAN - LEVEL 01

SHEET NO.
E1.01



1 | ELECTRICAL POWER PLAN - LEVEL 02
E1.02 | 3/32" = 1'-0"

NORTH

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	DEDICATED DUPLEX RECEPTACLE FOR IT EQUIPMENT POWER. CONFIRM FINAL LOCATION AND MOUNTING HEIGHT WITH OWNER'S IT CONSULTANT TO ROUGH-IN.
2	GC SHALL PROVIDE PLYWOOD BACKBOARD. BACKBOARD SHALL BE A MINIMUM OF 3/4" THICK, 8' HIGH, BY WIDTH OF WALLS, MOUNTED VERTICALLY, WITH THE BOTTOM OF THE BOARD MOUNTED 6" ABOVE FINISHED FLOOR WITH BEST SIDE TOWARD THE ROOM. PLYWOOD SHALL BE A/C GRADE AND FINISHED WITH TWO COATS OF FIRE-RETARDANT PAINT, AND PAINTED PRIOR TO INSTALLATION OF ANY EQUIPMENT. PLYWOOD SHALL BE PERMANENTLY FASTENED TO THE WALL BY MEANS OF WALL ANCHORS UTILIZING GALVANIZED, ZINC PLATED, OR STAINLESS-STEEL HARDWARE WITH A FLAT HEAD. FIELD COORDINATE EXACT PLYWOOD COVERAGE REQUIRED WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION.
3	WALL MOUNTED JUNCTION BOX WITH 3/4"C TO ACCESSIBLE CEILING FOR ELEVATOR 2-WAY COMMUNICATION SYSTEM. 2-WAY SYSTEM DESIGN SHALL BE SUBMITTED BY OTHERS, AS PART OF A DEFERRED SUBMITTAL. EC SHALL COORDINATE EXACT LOCATION WITH APPROVED SHOP DRAWINGS AND FIRE MARSHALL/AHJ.
4	PROVIDE RECESSED JUNCTION BOX AND 120V, 20-AMP POWER CONNECTION TO ELEVATOR SMOKE CURTAIN. PROVIDE ALARM CIRCUIT INTERCONNECTION TO ELEVATOR LANDING/CORRIDOR SMOKE DETECTOR AND FIRE ALARM SYSTEM AS REQUIRED. COORDINATE EXACT LOCATION AND MOUNTING OF JUNCTION BOX, CONDUIT ROUTING, AND POWER REQUIREMENTS WITH APPROVED SMOKE CURTAIN SYSTEM SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN. CONDUIT AND JUNCTION BOX SHALL BE CONCEALED AS MUCH AS POSSIBLE. VERIFY ROUTING OF ANY EXPOSED CONDUIT WITH ARCHITECT PRIOR TO ROUGH-IN. CONNECT TO EMERGENCY GENERATOR POWER, LEGALLY REQUIRED STAND-BY BRANCH, AS INDICATED. VERIFY ANY ADDITIONAL 90-MINUTE BACK-UP POWER REQUIREMENTS FOR MANUFACTURER PROVIDED BATTERY BACK-UP SOURCE AS APPLICABLE. REFER TO FIRE ALARM RISER DIAGRAM, #4/E2.17, FOR ADDITIONAL INFORMATION.
5	PROVIDE 120V, 20-AMP CONNECTION TO SMOKE CURTAIN CONTROL PANEL LOCATED ON LEVEL 2. PROVIDE ADDITIONAL (2) 3/4"C PATHWAYS FOR MOTOR CONTROL CIRCUIT LOW-VOLTAGE CABLING FROM CONTROL PANEL TO ELEVATOR CURTAIN MOTOR AT EACH FLOOR AS REQUIRED PER SHOP DRAWINGS. EC SHALL PROVIDE ALL REQUIRED JUNCTION BOXES, CONDUIT, AND POWER/CONTROL WIRING PER APPROVED EQUIPMENT SUBMITTALS AND SHOP DRAWINGS. EC SHALL VERIFY EXACT REQUIREMENTS WITH EQUIPMENT INSTALLER AND MANUFACTURER'S INSTRUCTIONS PRIOR TO ROUGH-IN.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
2	ITC	03.15.2024
2A	ASI 001	07.26.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER PLAN - LEVEL 02

SHEET NO.
E1.02

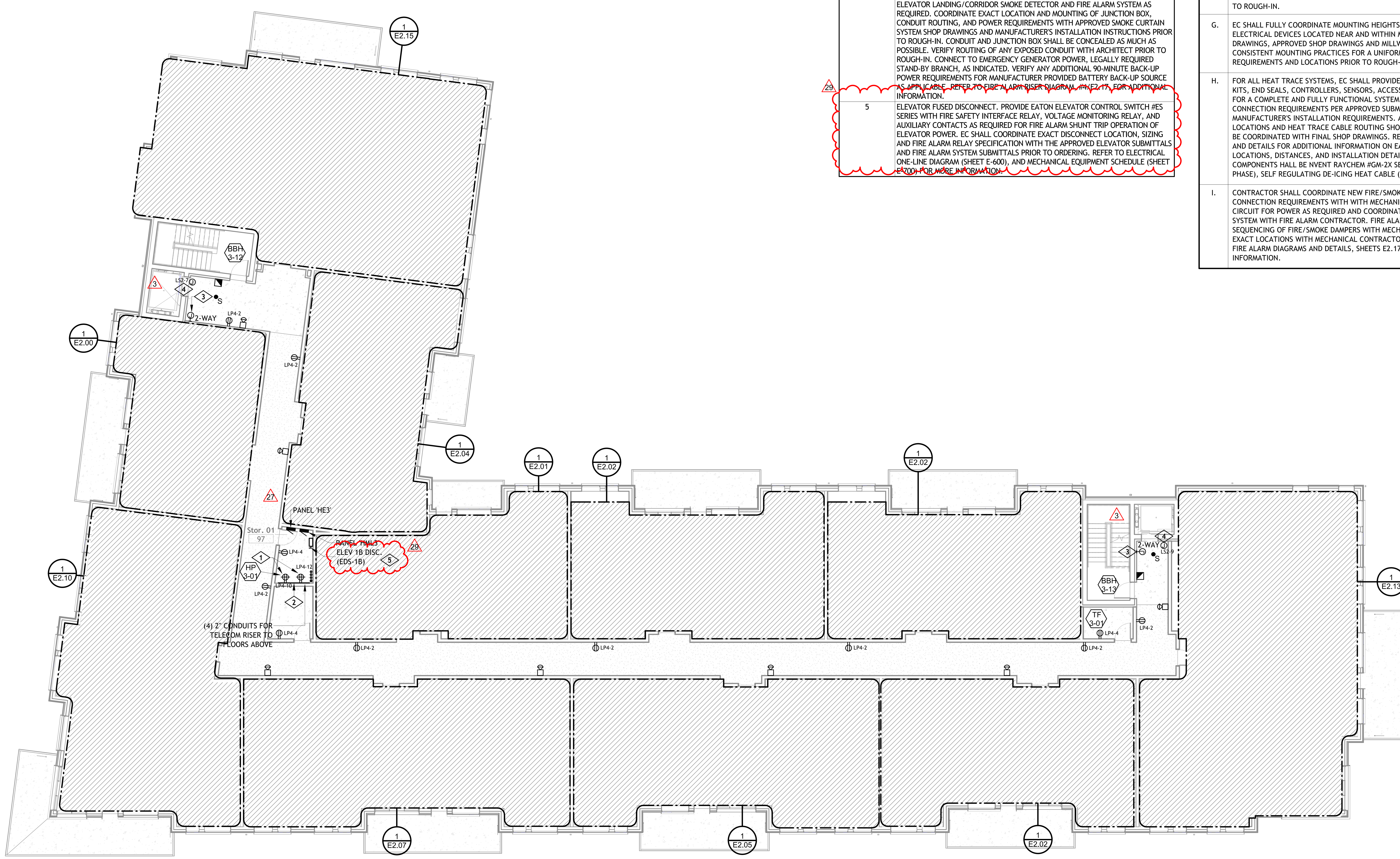
7/30/2024 5:38:09 PM

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	DEDICATED DUPLEX RECEPTACLE FOR IT EQUIPMENT POWER. CONFIRM FINAL LOCATION AND MOUNTING HEIGHT WITH OWNER'S IT CONSULTANT TO ROUGH-IN.
2	GC SHALL PROVIDE PLYWOOD BACKBOARD. BACKBOARD SHALL BE A MINIMUM OF 3/4" THICK, 8' HIGH, BY WIDTH OF WALLS, MOUNTED VERTICALLY, WITH THE BOTTOM OF THE BOARD MOUNTED 6" ABOVE FINISHED FLOOR WITH BEST SIDE TOWARD THE ROOM. PLYWOOD SHALL BE A/C GRADE AND FINISHED WITH TWO COATS OF FIRE-RETARDANT PAINT, AND PAINTED PRIOR TO INSTALLATION OF ANY EQUIPMENT. PLYWOOD SHALL BE PERMANENTLY FASTENED TO THE WALL BY MEANS OF WALL ANCHORS UTILIZING GALVANIZED, ZINC PLATED, OR STAINLESS-STEEL HARDWARE WITH A FLAT HEAD. FIELD COORDINATE EXACT PLYWOOD COVERAGE REQUIRED WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION.
3	PROVIDE LOCKABLE 30A/1P SAFETY SWITCH FOR 20A DEDICATED CIRCUIT FOR ELEVATOR VISUAL COMMUNICATION SYSTEM. EXACT LOCATIONS SHALL BE COORDINATED IN-FIELD PRIOR TO ROUGH-IN. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO COMMENCING WORK.
4	PROVIDE RECESSED JUNCTION BOX AND 120V, 20-AMP POWER CONNECTION TO ELEVATOR SMOKE CURTAIN. PROVIDE ALARM CIRCUIT INTERCONNECTION TO ELEVATOR LANDING/CORRIDOR SMOKE DETECTOR AND FIRE ALARM SYSTEM AS REQUIRED. COORDINATE EXACT LOCATION AND MOUNTING OF JUNCTION BOX, CONDUIT ROUTING, AND POWER REQUIREMENTS WITH APPROVED SMOKE CURTAIN SYSTEM SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN. CONDUIT AND JUNCTION BOX SHALL BE CONCEALED AS MUCH AS POSSIBLE. VERIFY ROUTING OF ANY EXPOSED CONDUIT WITH ARCHITECT PRIOR TO ROUGH-IN. CONNECT TO EMERGENCY GENERATOR POWER, LEGALLY REQUIRED STAND-BY BRANCH, AS INDICATED. VERIFY ANY ADDITIONAL 90-MINUTE BACK-UP POWER REQUIREMENTS FOR MANUFACTURER PROVIDED BATTERY BACK-UP SOURCE AS APPLICABLE. REFER TO FIRE ALARM RISER DIAGRAM, #4/E2.17, FOR ADDITIONAL INFORMATION.
5	ELEVATOR FUSED DISCONNECT. PROVIDE EATON ELEVATOR CONTROL SWITCH #ES SERIES WITH FIRE SAFETY INTERFACE RELAY, VOLTAGE MONITORING RELAY, AND AUXILIARY CONTACTS AS REQUIRED FOR FIRE ALARM SHUNT TRIP OPERATION OF ELEVATOR POWER. EC SHALL COORDINATE EXACT DISCONNECT LOCATION, SIZING AND FIRE ALARM RELAY SPECIFICATION WITH THE APPROVED ELEVATOR SUBMITTALS AND FIRE ALARM SYSTEM SUBMITTALS PRIOR TO ORDERING. REFER TO ELECTRICAL ONE-LINE DIAGRAM (SHEET E-600), AND MECHANICAL EQUIPMENT SCHEDULE (SHEET E-700) FOR MORE INFORMATION.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.



1 | ELECTRICAL POWER PLAN - LEVEL 03
E1.03 | 3/32" = 1'-0"
NORTH

359 DESIGN

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

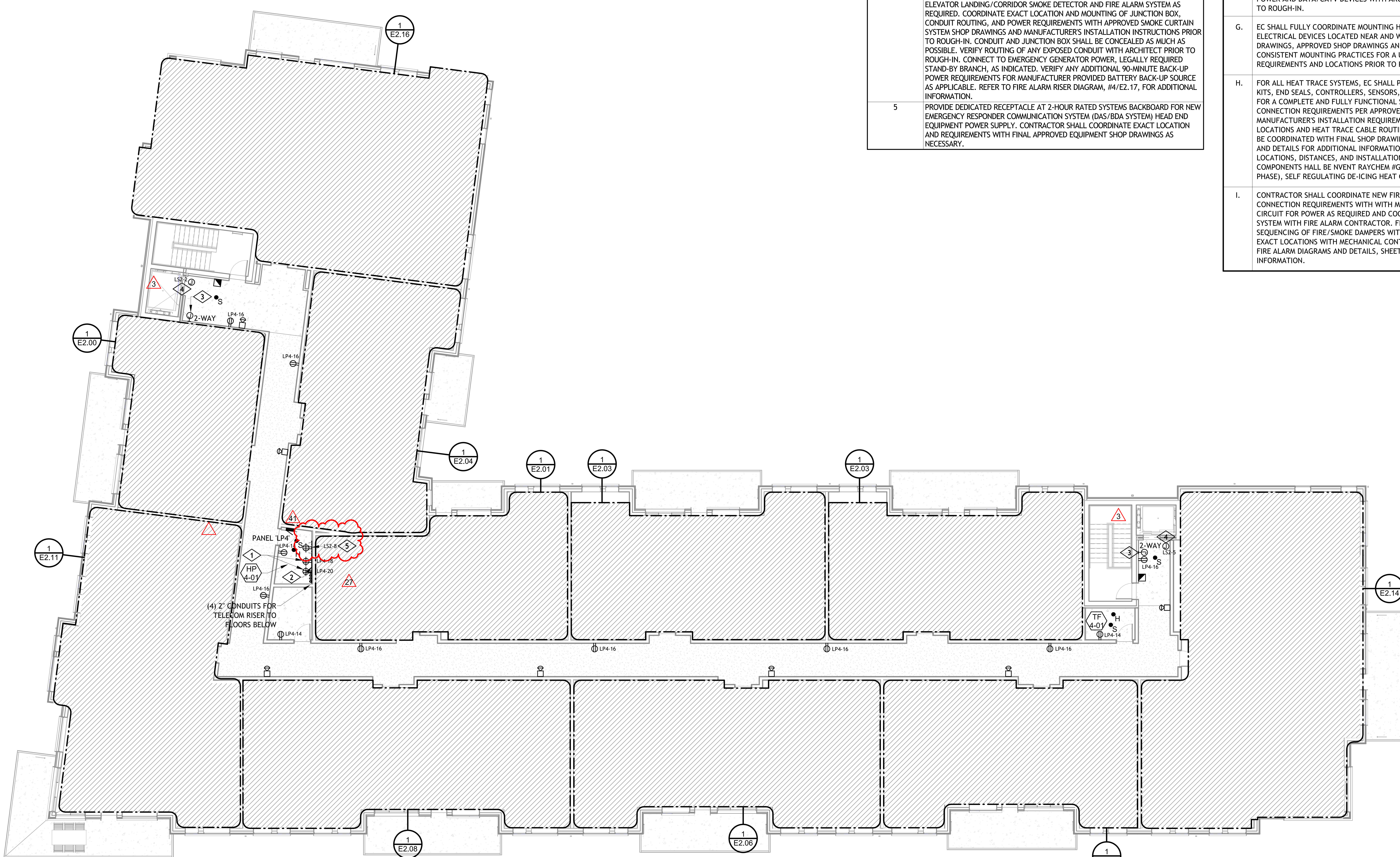
The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER PLAN - LEVEL 03

SHEET NO.
E1.03

8/14/2024 3:05:49 PM



1 | ELECTRICAL POWER PLAN - LEVEL 04
E1.04 | 3/32" = 1'-0"

NORTH

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	DEDICATED DUPLEX RECEPTACLE FOR IT EQUIPMENT POWER. CONFIRM FINAL LOCATION AND MOUNTING HEIGHT WITH OWNER'S IT CONSULTANT TO ROUGH-IN.
2	GC SHALL PROVIDE PLYWOOD BACKBOARD. BACKBOARD SHALL BE A MINIMUM OF 3/4" THICK, 8' HIGH, BY WIDTH OF WALLS, MOUNTED VERTICALLY, WITH THE BOTTOM OF THE BOARD MOUNTED 6" ABOVE FINISHED FLOOR WITH BEST SIDE TOWARD THE ROOM. PLYWOOD SHALL BE A/C GRADE AND FINISHED WITH TWO COATS OF FIRE-RETARDANT PAINT, AND PAINTED PRIOR TO INSTALLATION OF ANY EQUIPMENT. PLYWOOD SHALL BE PERMANENTLY FASTENED TO THE WALL BY MEANS OF WALL ANCHORS UTILIZING GALVANIZED, ZINC PLATED, OR STAINLESS-STEEL HARDWARE WITH A FLAT HEAD. FIELD COORDINATE EXACT PLYWOOD COVERAGE REQUIRED WITH OWNER'S IT REPRESENTATIVE PRIOR TO INSTALLATION.
3	PROVIDE LOCKABLE 30A/1P SAFETY SWITCH FOR 20A DEDICATED CIRCUIT FOR ELEVATOR VISUAL COMMUNICATION SYSTEM. EXACT LOCATIONS SHALL BE COORDINATED IN-FIELD PRIOR TO ROUGH-IN. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO COMMENCING WORK.
4	PROVIDE RECESSED JUNCTION BOX AND 120V, 20-AMP POWER CONNECTION TO ELEVATOR SMOKE CURTAIN. PROVIDE ALARM CIRCUIT INTERCONNECTION TO ELEVATOR LANDING/CORRIDOR SMOKE DETECTOR AND FIRE ALARM SYSTEM AS REQUIRED. COORDINATE EXACT LOCATION AND MOUNTING OF JUNCTION BOX, CONDUIT ROUTING, AND POWER REQUIREMENTS WITH APPROVED SMOKE CURTAIN SYSTEM SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN. CONDUIT AND JUNCTION BOX SHALL BE CONCEALED AS MUCH AS POSSIBLE. VERIFY ROUTING OF ANY EXPOSED CONDUIT WITH ARCHITECT PRIOR TO ROUGH-IN. CONNECT TO EMERGENCY GENERATOR POWER, LEGALLY REQUIRED STAND-BY BRANCH, AS INDICATED. VERIFY ANY ADDITIONAL 90-MINUTE BACK-UP POWER REQUIREMENTS FOR MANUFACTURER PROVIDED BATTERY BACK-UP SOURCE AS APPLICABLE. REFER TO FIRE ALARM RISER DIAGRAM, #4/E2.17, FOR ADDITIONAL INFORMATION.
5	PROVIDE DEDICATED RECEPTACLE AT 2-HOUR RATED SYSTEMS BACKBOARD FOR NEW EMERGENCY RESPONDER COMMUNICATION SYSTEM (DAS/BDA SYSTEM) HEAD END EQUIPMENT POWER SUPPLY. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FINAL APPROVED EQUIPMENT SHOP DRAWINGS AS NECESSARY.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.

COLORADO REGISTERED JON BROOKS 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
27	ASI 003	08.02.2024
41	RFI #294.1	12.20.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER PLAN - LEVEL 04

SHEET NO.

E1.04

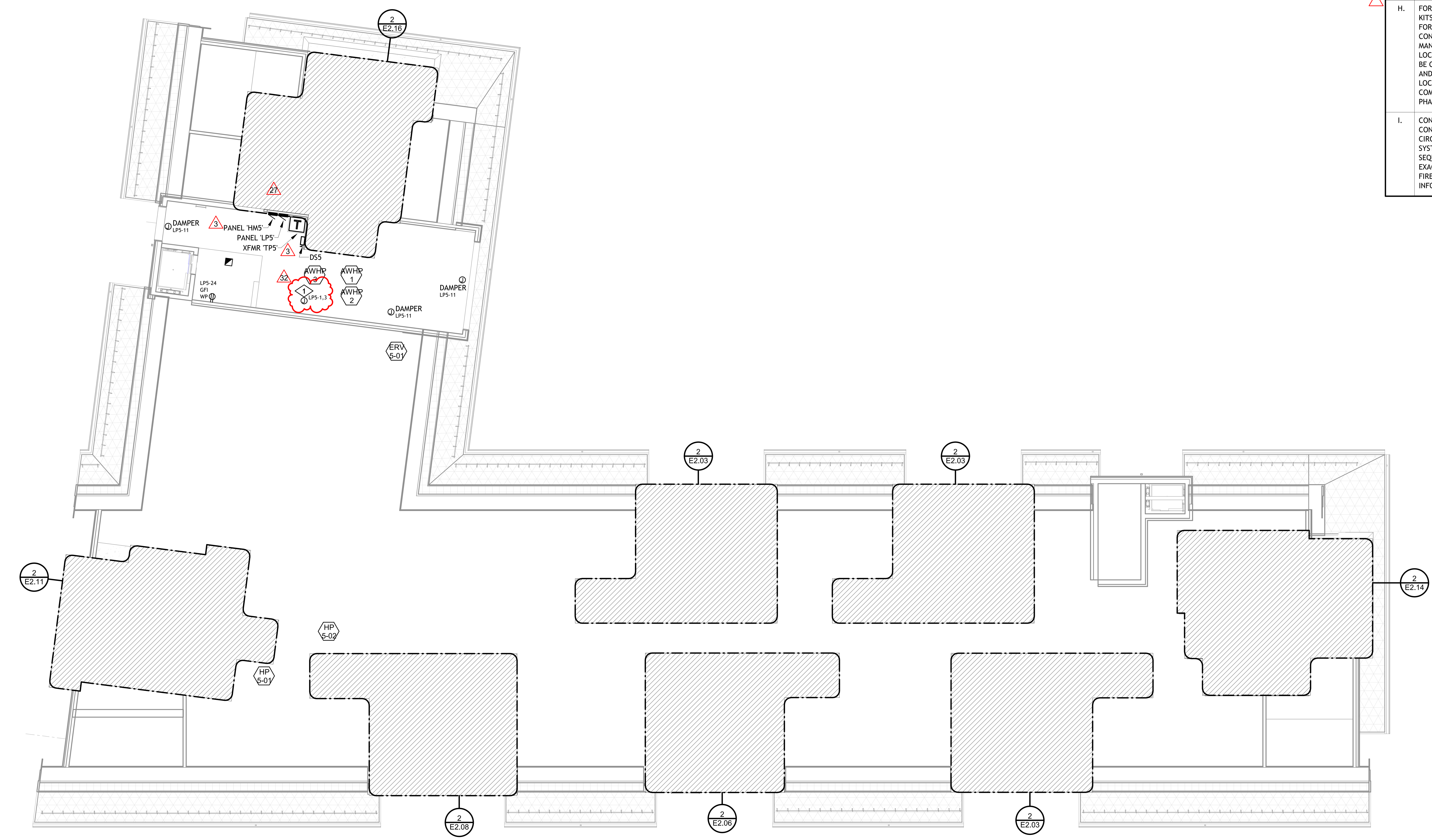
12/18/2024 3:28:37 PM

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	JUNCTION BOX FOR 208V/1PH, 30A CONNECTION WITH 3#10, 1#10G, 3/4"C TO AIR TO WATER HEAT PUMP HEAT TRACE. PROVIDE GFCI CIRCUIT PROTECTION AT BREAKER PER NEC 426.28. CONTRACTOR SHALL PROVIDE POWER CONNECTION AND MOISTURE/TEMP SENSORS AND CONTROLLERS AS REQUIRED. LAYOUT SHOWN IS FOR REFERENCE ONLY AND SHOULD BE USED AS A BASIS OF DESIGN. COORDINATE EXACT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS. ALL JUNCTION BOXES SHALL BE CONCEALED FROM VIEW.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.



1 | ELECTRICAL POWER PLAN - DORMER LEVEL
E1.05 | 3/32" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER JON BROOKS 35717 2/18/2025

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
27	ASI 003	08.02.2024
32	RFI #245	09.16.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

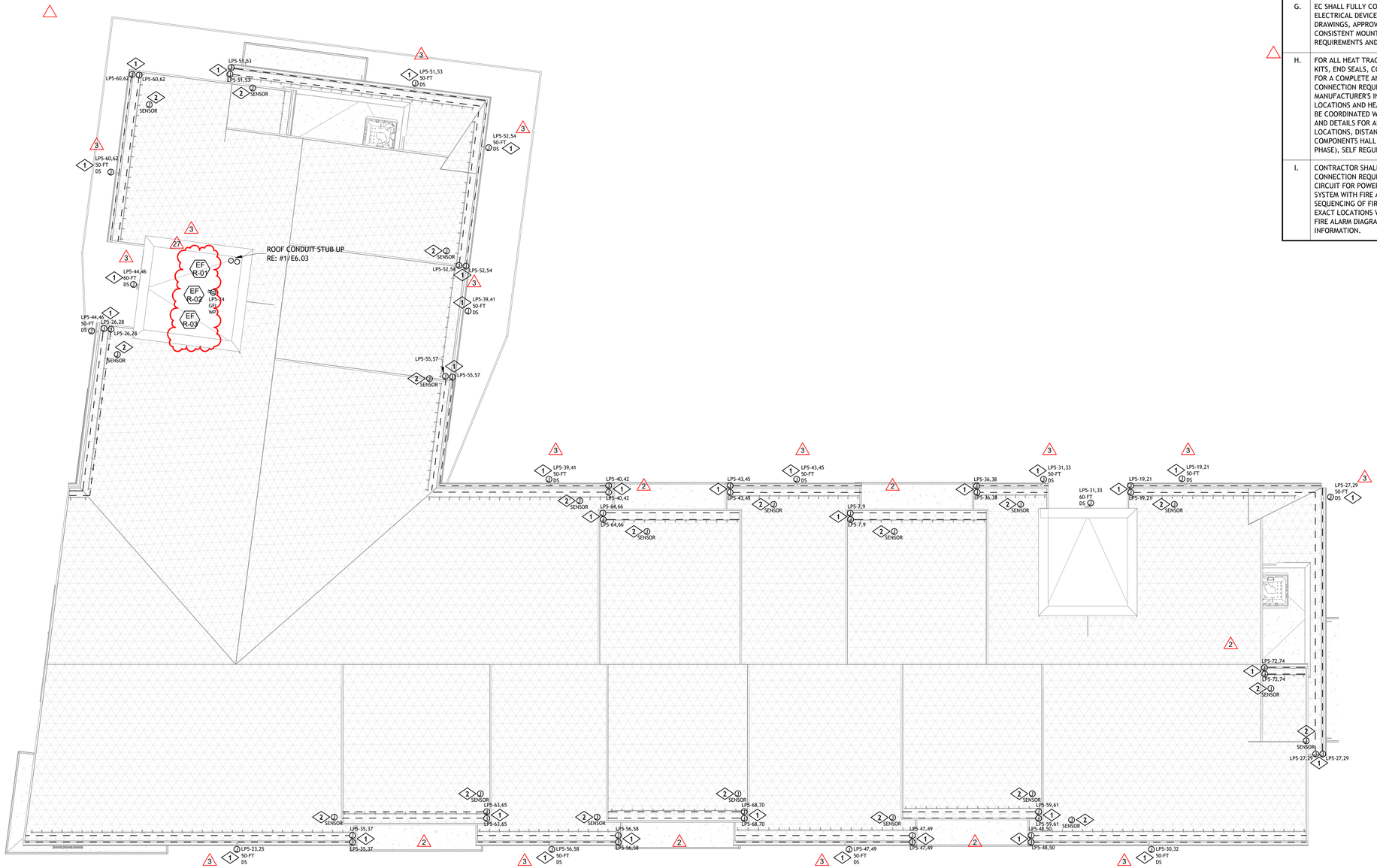
SHEET TITLE

ELECTRICAL POWER PLAN - DORMER LEVEL

SHEET NO.

E1.05

9/12/2024 8:41:33 PM



1 | ELECTRICAL POWER PLAN - ROOF LEVEL

E1.06 | 3/32" = 1'-0"

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	JUNCTION BOX FOR 208V/1PH, 30A CONNECTION WITH 3#10, 1#10G, 3/4"C TO ROOF EAVE/GUTTER/DOWNSPOUT HEAT CABLE DE-ICING SYSTEM. PROVIDE GFCI CIRCUIT PROTECTION AT BREAKER PER NEC 426.28. ALL GUTTERS 4" WIDE OR WIDER SHALL REQUIRE TWO PARALLEL RUNS OF HEAT TRACE CABLING. ALL ROOFTOP EAVES SHALL REQUIRE THREE PARALLEL RUNS OF HEAT TRACE CABLING INSTALLED WITHIN MANUFACTURER PROVIDED RIM-E TYPE EAVE CHANNEL. CONTRACTOR SHALL PROVIDE POWER CONNECTION AND MOISTURE/TEMP SENSORS AND CONTROLLERS AS REQUIRED. MAXIMUM CONTINUOUS RUN LENGTH TO BE NO MORE THAN 290-FT. AT DOWNSPOUT LOCATIONS, LOOP CABLE A MINIMUM OF 18" OUT OF THE BOTTOM OF PIPE. LAYOUT SHOWN IS FOR REFERENCE ONLY AND SHOULD BE USED AS A BASIS OF DESIGN. COORDINATE EXACT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS AND SHOP DRAWINGS. ALL JUNCTION BOXES SHALL BE CONCEALED FROM VIEW.
2	JUNCTION BOX FOR TEMPERATURE/MOISTURE SENSOR.

POWER GENERAL NOTES

A.	ALL DEVICES IN COMMON SPACES, SHALL BE TAMPER RESISTANT PER NEC 406.12.
B.	ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.8 SHALL BE ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AND OUTDOOR RATED AS REQUIRED.
C.	EC SHALL ENSURE ALL OUTLETS IN AREAS SPECIFIED IN NEC 210.63 SHALL BE WEATHERPROOF AND ARC-FAULT CIRCUIT INTERRUPTER PROTECTED AS REQUIRED.
D.	120V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 150 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES BETWEEN 150 AND 250 FEET. 3. EC SHALL UTILIZE #8 CU FOR DISTANCES BETWEEN 250 AND 400 FEET. 4. EC SHALL UTILIZE #6 CU FOR DISTANCES GREATER THAN 400 FEET.
E.	277V, 20A FEEDS: 1. EC SHALL UTILIZE #12 CU FOR DISTANCES LESS THAN 450 FEET. 2. EC SHALL UTILIZE #10 CU FOR DISTANCES GREATER THAN 450 FEET.
F.	EC SHALL COORDINATE FINAL DEVICE LOCATION AND MOUNTING HEIGHT OF ALL TV POWER AND DATA/CATV DEVICES WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
G.	EC SHALL FULLY COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL ELECTRICAL DEVICES LOCATED NEAR AND WITHIN MILLWORK WITH ARCHITECTURAL DRAWINGS, APPROVED SHOP DRAWINGS AND MILLWORK CONTRACTOR. MAINTAIN CONSISTENT MOUNTING PRACTICES FOR A UNIFORM APPEARANCE. VERIFY ALL OUTLET REQUIREMENTS AND LOCATIONS PRIOR TO ROUGH-IN.
H.	FOR ALL HEAT TRACE SYSTEMS, EC SHALL PROVIDE ALL COMPONENTS, CONNECTION KITS, END SEALS, CONTROLLERS, SENSORS, ACCESSORIES, AND MOUNTING HARDWARE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. EC SHALL COORDINATE EXACT CONNECTION REQUIREMENTS PER APPROVED SUBMITTALS, SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL HEAT TRACE CONNECTION LOCATIONS AND HEAT TRACE CABLE ROUTING SHOWN ARE DIAGRAMMATIC AND SHALL BE COORDINATED WITH FINAL SHOP DRAWINGS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION ON EAVE, GUTTER, AND DOWNSPOUT LOCATIONS, DISTANCES, AND INSTALLATION DETAILS. BASIS OF DESIGN FOR COMPONENTS HALL BE NVENT RAYCHEM #GM-2X SERIES (12W/FT, 30-AMP, 208V/1-PHASE), SELF REGULATING DE-ICING HEAT CABLE (OR APPROVED EQUAL).
I.	CONTRACTOR SHALL COORDINATE NEW FIRE/SMOKE DAMPER LOCATIONS AND CONNECTION REQUIREMENTS WITH WITH MECHANICAL DRAWINGS. PROVIDE 120V, 20A CIRCUIT FOR POWER AS REQUIRED AND COORDINATE INTERCONNECTION TO FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL COORDINATE SEQUENCING OF FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. FIELD VERIFY EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO FIRE ALARM DIAGRAMS AND DETAILS, SHEETS E2.17 AND E6.02 FOR MORE INFORMATION.

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble

Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSES	02.08.2024
2	DMP SET REVISIONS	02.09.2024
3	IFC	03.15.2024
2/7	ASI 003	08.02.2024

PROJECT NUMBER **20019**

ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER PLAN - ROOF

SHEET NO.

E1.06

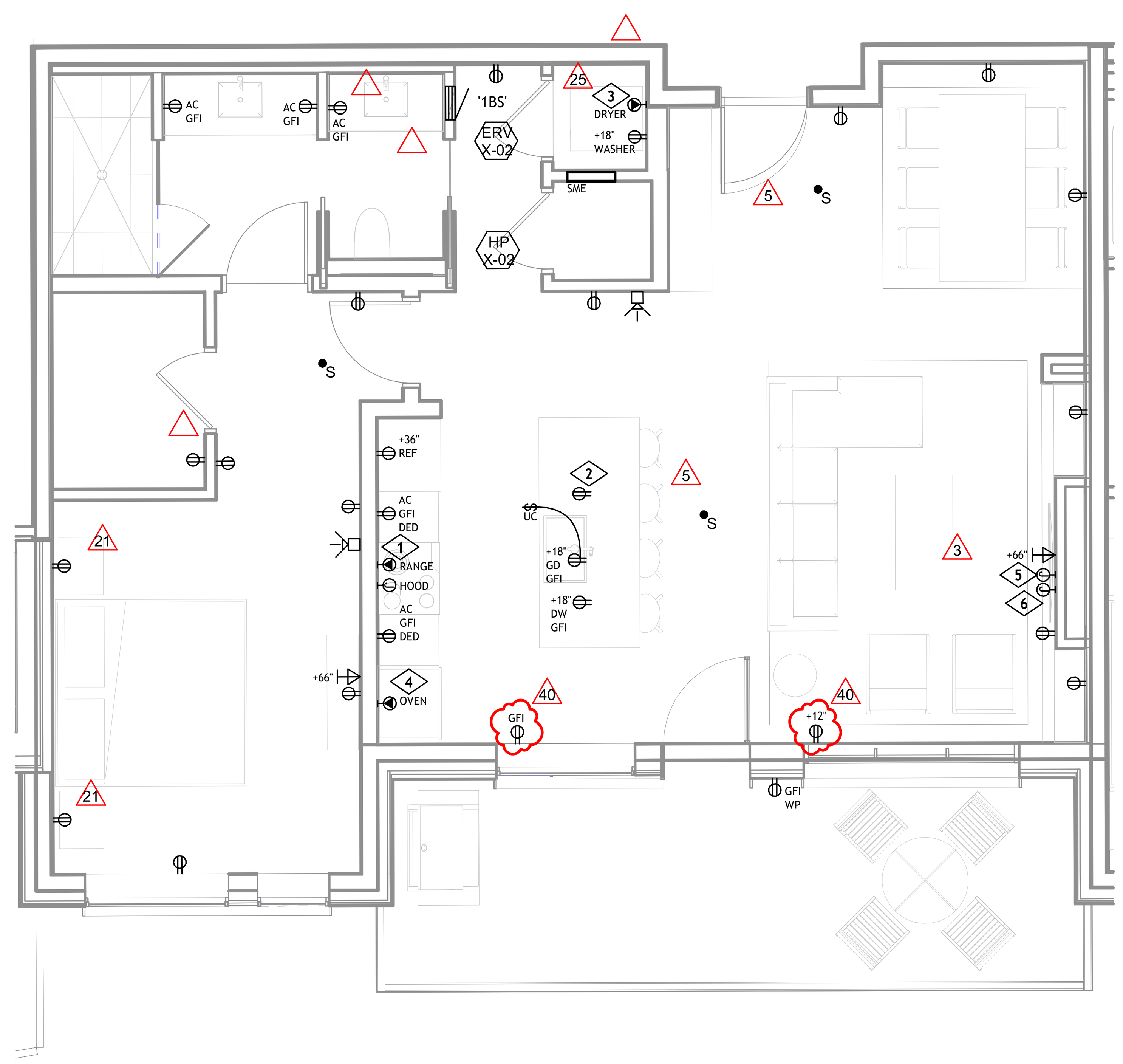
8/5/2024 10:47:49 PM

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
2	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
3	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.

UNIT FIRE ALARM NOTES:

1. PER LOCAL FIRE DEPARTMENT/AHJ REQUIREMNETS, UNIT SMOKE DETECTORS SHALL BE CONNECTED TO THE BUILDING FIRE ALARM SYSTEM. UNIT SMOKE DETECTORS SHALL ACTIVATE LOCAL/UNIT ALARMS VIA INTEGRAL SOUNDER BASE. DETECTORS SHALL RECEIVE POWER FROM FIRE ALARM SIGNAL CABLING/CONNECTIONS. SMOKE DETECTORS SHALL BE CAPABLE OF INITIATING NOTIFICATION BASED UPON BUILDING FIRE ALARM SYSTEM ACTIVATION AS REQUIRED BY AHJ. HARDWIRED 120V STANDALONE SINGLE-STATION OR MULTI-STATION SMOKE DETECTORS ARE NOT ANTICIPATED.
2. COMBINATION HORN/STROBES, MINI-HORNS AND STROBES (NOT SHOWN ON THESE PLANS) SHALL BE INCLUDED IN DEFERRED FIRE ALARM SYSTEM SUBMITTAL, AND TO BE CONNECTED TO BUILDING FIRE ALARM SYSTEM. WHERE BUILDING-WIDE NOTIFICATION IS PROVIDED BY IN UNIT SMOKE DETECTORS WITH INTEGRAL SOUNDER BASE, ADDITIONAL MINI-HORN DEVICES ARE NOT ANTICIPATED TO BE REQUIRED.
3. SMOKE ALARM DETECTORS SHALL BE PHOTOELECTRIC TYPE AND BE LOCATED A MINIMUM 3 FEET AWAY FROM ANY CEILING FAN BLADE EDGE, BATHROOM DOOR, AND/OR HVAC DIFFUSER, AND SHALL BE LOCATED A MINIMUM OF 6 FEET FROM THE KITCHEN RANGE.
4. SMOKE ALARM DETECTORS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE ALARM DEVICE WILL ACTIVATE ALL ALARMS THE DEVICES WITHIN THE INDIVIDUAL UNIT. PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER THE BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
5. REFERENCE ARCHITECTURAL PLANS FOR UNITS DESIGNATED TO BE HANDICAP ACCESSIBLE FOR ADA. PROVIDE VISIBLE NOTIFICATION APPLIANCES IN DESIGNATED UNITS TO MEET REQUIREMENT OF IFC TABLE 907.5.2.3.2 VISIBLE ALARMS. STROBES IN ALL BATHROOMS AND BEDROOMS (NOT SHOWN ON THESE PLANS) SHALL BE INCLUDED IN DEFERRED FIRE ALARM SYSTEM SUBMITTAL, AND SHALL BE CONNECTED TO BUILDING FIRE ALARM SYSTEM.
6. PER LOCAL FIRE DEPARTMENT/AHJ, DWELLING UNIT CARBON MONOXIDE DETECTION SHALL NOT BE REQUIRED PER INTERNATIONAL FIRE CODE, SECTION 915. DWELLING UNITS AND SPACES OUTSIDE OF DWELLING UNITS SHALL NOT CONTAIN FUEL BURNING APPLIANCES, FIREPLACES, OR FURNACES.



1 ELECTRICAL POWER UNIT PLAN - 1 BEDROOM STANDARD

E2.00 1/4" = 1'-0"

DWELLING UNIT GENERAL NOTES - TYPICAL

UNIT POWER AND LIGHTING NOTES:

1. FIELD COORDINATE DEVICE LOCATIONS AND INTERCONNECTION CONDUIT REQUIREMENTS IN LOAD BEARING WALLS WITH ALL OTHER TRADES. PREFABRICATED OPENINGS IN WALL FRAMING ARE TO BE USED FOR HORIZONTAL CONNECTIONS BETWEEN DEVICES.
2. BACK-TO-BACK OUTLETS IN COMMON WALL CAVITIES ARE NOT PERMITTED. OUTLET BOXES SHALL BE SEPARATED BY AT LEAST ONE STUD WHENEVER POSSIBLE. IN CASES OF OUTLET BOXES OF ADACENT ROOMS IN SAME STUD CAVITY AT THE SAME HEIGHT, PROVIDE A LAYER OF EXPANDABLE SPRAY FOAM INSULATION AROUND EACH BOX IN THAT CAVITY. THERE MUST BE A MINIMUM OF A 1" HORIZONTAL SEPARATION SPACE BETWEEN BOXES OF ADJACENT ROOMS. IF THIS CONDITION OCCURS IN A FIRE RATED WALL, PROVIDE FIRE RATED PUTTY PADS TO COVER THE OUTLETS TO MAINTAIN FIRE RATED ASSEMBLY INTEGRITY.
3. ALL BRANCH CIRCUITRY SUPPLYING OUTLETS IN AREAS SPECIFIED IN NEC 210.12(b) SHALL BE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED. DESIGN INTENT IS TO PROVIDED PROTECTION AT THE CIRCUIT BREAKERS IN THE UNIT LOAD CENTER.
4. IN ALL DWELLING UNIT AREAS SPECIFIED IN NEC 210.52, ALL 125-VOLT, 15 AND 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES PER NEC 406.12.
5. REFERENCE ARCHITECTURAL PLANS FOR UNITS DESIGNATED TO BE ACCESSIBLE ANSI TYPE A. FOR RANGE HOOD CONTROLS, PROVIDE CONTROL SWITCHES FOR FAN AND LIGHT IN HOOD, LOCATE IN ACCESSIBLE LOCATION ABOVE COUNTER IN COMPLIANCE WITH ANSI A11.3-2003. DO NOT REWIRE THE INTERNAL WIRING OF THE HOOD. HOOD SHALL BE PROVIDED WITH REMOTE CONTROL CAPABILITY. COORDINATE WITH G.C. AND ARCHITECT.
6. ELECTRICAL CONTRACTOR TO ADJUST RECEPTACLE LOCATIONS AND SPACING FOR ALTERNATE LAYOUTS AND SLIGHT DIFFERENCES IN TYPICAL UNIT TYPES DEPENDING ON UNIT LOCATION, ORIENTATION IN BUILDING AND FIELD FRAMING DIFFERENCES TO MEET THE SPACING REQUIREMENTS OF NEC 210.52.
7. PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) PROTECTION PER NEC 210.8. DESIGN INTENT IS TO PROVIDE GFCI PROTECTION AT THE CIRCUIT BREAKER IN THE UNIT LOAD CENTER.
8. OUTDOOR RECEPTACLES AT PATIO DECK SHALL BE DUPLEX, TAMPER-RESISTANT, WEATHER-RESISTANT, AND GFCI PROTECTED. RECEPTACLE COVERS SHALL BE CLEAR PLASTIC, WEATHERPROOF IN-USE TYPE.
9. COORDINATE RECEPTACLES ABOVE COUNTERS IN BATHROOMS WITH MIRRORS AND ARCHITECTURAL ELEVATIONS. INSTALL ABOVE COUNTER RECEPTACLES HORIZONTALLY, ABOVE BACKSPLASH.
10. COORDINATE RECEPTACLES ABOVE COUNTERS IN KITCHEN WITH SINKS, APPLIANCES AND ARCHITECTURAL ELEVATIONS. INSTALL ABOVE COUNTER RECEPTACLES HORIZONTALLY, ABOVE BACKSPLASH.
11. COORDINATE EXACT LOCATIONS OF MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN OF THE ASSOCIATED ELECTRICAL CONNECTION. PROVIDE DEDICATED ELECTRICAL CONNECTIONS TO ALL MECHANICAL AND PLUMBING EQUIPMENT UNLESS OTHERWISE INDICATED. REFER TO MECHANICAL EQUIPMENT SCHEDULE(S) ON SHEET E6.02 FOR ELECTRICAL CONNECTION INFORMATION.
12. ALL CEILING JUNCTION BOXES FOR LIGHTS IN THE BEDROOMS AND LIVING ROOMS TO BE CEILING FAN RATED AND SHALL BE FIRE RATED AS REQUIRED TO MAINTAIN CEILING FIRE RATED ASSEMBLY REQUIREMENTS.
13. ALL SWITCHED DUPLEX RECEPTACLES SHALL BE SPLIT SUCH THAT THE BOTTOM OF RECEPTACLE IS SWITCHED, AND THE TOP RECEPTACLE SHALL REMAIN HOT.
14. KITCHEN ISLAND/PENINSULA RECEPTACLES: RECEPTACLES LOCATED IN KITCHEN ISLANDS OR PENINSULAS SHALL BE FLUSH MOUNT POP-UP TYPE MOUNTED IN COUNTER TOPS AND UL LISTED FOR COUNTER TOPS AS REQUIRED TO COMPLY WITH 2023 NEC. COORDINATE RECEPTACLE BOX DEPTH AND LOCATIONS WITH CASEWORK INSTALLER TO ENSURE BOXES DO NOT INTERFERE WITH DRAWERS OR APPLIANCES INSTALLED IN CASEWORK. CONDUIT RUN TO ISLAND SHALL BE INSTALLED IN FLOOR SLAB PRIOR TO CONCRETE POUR.
15. RANGE: PROVIDE 50A, 208V RECEPTACLE (3#6 CU, 1#10 GND). COORDINATE EXACT NEMA CONFIGURATION WITH APPLIANCE PROVIDED.
16. DISHWASHERS: LOCATE THE DISHWASHER RECEPTACLE WHERE ACCESSIBLE PER NEC 422.16(B)(2)(6) IN ADJACENT CABINET SPACE UNDER SINK.
17. DRYERS: PROVIDE 30A, 208V RECEPTACLE (3#10, 1#10 GND). COORDINATE EXACT NEMA CONFIGURATION WITH APPLIANCE PROVIDED.
18. STACKED WASHER/DRYER UNITS: REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR RECOMMENDED RECEPTACLE LOCATIONS AND MOUNTING HEIGHTS.
19. USB RECEPTACLES IN KITCHEN: PROVIDE DUPLEX, TAMPER RESISTANT RECEPTACLE WITH TWO USB CHARGING PORTS.
20. ALL UNIT LOAD CENTERS COVERS SHALL BE STEEL, FACTORY PRE-FINISHED WITH WHITE BAKED ENAMEL, READY FOR PAINTING IN THE FIELD. GENERAL CONTRACTOR TO FIELD PAINT LOAD CENTER COVERS TO MATCH WALLS, WITHOUT PAINTING COVERS SHUT. EC SHALL REFER TO DEVICE MOUNTING HEIGHT DIAGRAM, 1/E-000, FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR THE MOUNTING HEIGHT OF UNIT LOAD CENTERS AND STRUCTURED MEDIA ENCLOSURES IN 'ADA' ACCESSIBLE OR TYPE A ADAPTABLE UNITS. VERIFY FINAL LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO INSTALLATION.
21. REFER TO ARCHITECTURAL SHEETS FOR DIMENSIONS ASSOCIATED WITH LIGHT FIXTURES PRIOR TO ROUGH-IN. REFER TO LIGHTING DESIGN DRAWINGS FOR LIGHTING FIXTURE LOCAIONS AND INSTALLATION REQUIREMENTS.
22. PROVIDE LOW VOLTAGE COMMUNICATIONS BOX ("COMM. BOX"), 14"X42", FOR TELE/DATA/CATV CABLING WITHIN UNIT. PANEL SHALL BE MOUNTED AT 18" AFF TO BOTTOM. PROVIDE TWO DUPLEX RECEPTACLES INSIDE BOX. COORDINATE EXACT LOCATION AND MOUNTING WITH LOW VOLTAGE CONTRACTOR PRIOR TO ROUGH-IN.
23. FLOOR BOXES: PROVIDE 1-GANG FLUSH FLOOR BOXES WHERE INDICATED ON PLANS. BOXES SHALL BE FLUSH, NON-METALLIC TYPE, WITH DUPLEX 15A TAMPER RESISTANT RECEPTACLE, FLUSH IN COVER WITH SLIDER/HINGE COVER FOR ACCESS. BASIS OF DESIGN IS LEGRAND WIREMOLD EVOLUTION SERIES 4" FIRE-RATED POKE-THROUGH FLOOR BOX AND SURFACE SOLID FLOOR BOX COVER. EC SHALL PROVIDE FLOOR BOX COVERS FOR WOOD FLOORING FINISH APPLICATIONS. EC SHALL CONFIRM EXACT COVER TYPE SPECIFICATION WITH NEW FLOOR FINISH/MATERIALS AND VERIFY WITH ARCHITECT/OWNER PRIOR TO ORDERING. BOX AND POWER CONDUITS IN AND OUT OF BOX SHALL ALL BE INSTALLED IN FLOOR SLAB PRIOR TO CONCRETE POUR. CONTRACTOR SHALL PROVIDE ALL FLOOR BOX COMPONENTS AND ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION. FIELD COORDINATE FINAL LOCATION WITH ARCHITECT AND STRUCTURAL PRIOR TO ROUGH-IN. DO NOT DIMENSION OFF ELECTRICAL PLANS. FOR INSTALLATIONS THAT ARE NOTE ACCESSIBLE FROM CEILINGS BELOW, CONTRACTOR SHALL PROVIDE CONDUIT FITTINGS AND RACEWAY DIRECTLY FROM POKE-THROUGH CONDUITS UP THROUGH NEAREST WALL TO THE CORRESPONDING DWELLING UNIT SPACE OR LOAD CENTER FOR THE UNIT SERVED BY THE FLOOR RECEPTACLE. JUNCTION BOXES SHALL NOT BE PROVIDED WITHIN INACCESBLE LOCATIONS FOR CONNECTIONS TO POKE-THROUGH FLOOR BOXES.
24. WHERE MULTIPLE DEVICES ARE LOCATED ADJACENT TO EACH OTHER, FOR EXAMPLE FAN SWITCHES AND LIGHT OR RECEPTACLE SWITCHES; PROVIDE MULTI-GANG BACK BOX WITH COMMON COVER PLATE.
25. EC SHALL PROVIDE NEMA 6-15R TYPE RECEPTACLE FOR CONDENSATE PUMP AND CONNECT TO SAME CIRCUIT AS ASSOCIATED FCU. FIELD COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
26. ALL RECEPTACLES IN KITCHEN ARE TO COMPLY WITH NEC 2023 SECTION 210.8(A)(6).
27. ALL UNITS WITH ACCESSIBLE COMMUNICATIONS FEATURES SHALL BE PROVIDED WITH HARD-WIRED ELECTRIC DOORBELL SYSTEM AS REQUIRED PER ADA STANDARDS FOR ACCESSIBLE DESIGN, SECTION 809.5. EC SHALL CONFIRM EXACT QUANTITY OF UNITS AND LOCATIONS WHERE ACCESSIBLE COMMUNICATIONS FEATURES ARE REQUIRED WITH ARCHITECT PRIOR TO COMMENCING WORK.
28. REFERENCE ARCHITECTURAL PLANS FOR UNITS DESIGNATED TO BE HANDICAP ACCESSIBLE OR ADAPTABLE (TYPE A, ETC.) PER ADA REQUIREMENTS. FOR RANGE HOOD CONTROLS, PROVIDE CONTROL SWITCHES FOR FAN AND LIGHT IN HOOD, LOCATE IN ACCESSIBLE LOCATION ABOVE COUNTER IN COMPLIANCE WITH ANSI A11.3-2003. DO NOT REWIRE THE INTERNAL WIRING OF THE HOOD. HOOD SHALL BE PROVIDED WITH REMOTE CONTROL CAPABILITY. COORDINATE WITH G.C. AND ARCHITECT.

COLORADO REGISTERED JON BROOKS 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN

3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble

Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
26	RFI #132	07.29.2024
35	RFI #132.1	10.09.2024
40	RFI #319	11.22.2024

PROJECT NUMBER 20019

ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 1 BEDROOM STANDARD

SHEET NO.

E2.00

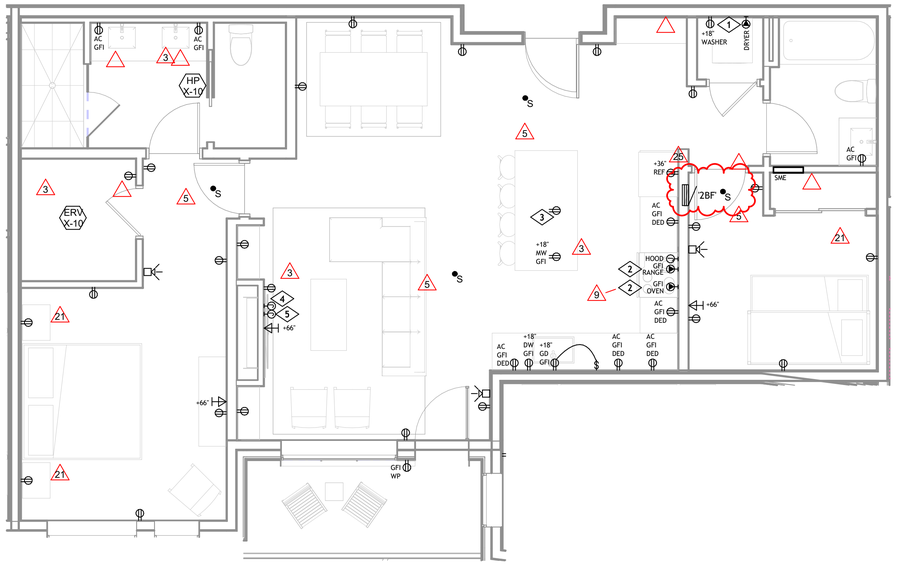
11/22/2024 2:30:10 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
2	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE/OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 2 BEDROOM FLEX

E2.01 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DAAP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
15	RFI #36	04.12.2024
9	RFI #59	04.30.2024
21	RFI #103	07.30.2024
25	RFI #186	07.29.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 2 BEDROOM FLEX

SHEET NO.

E2.01

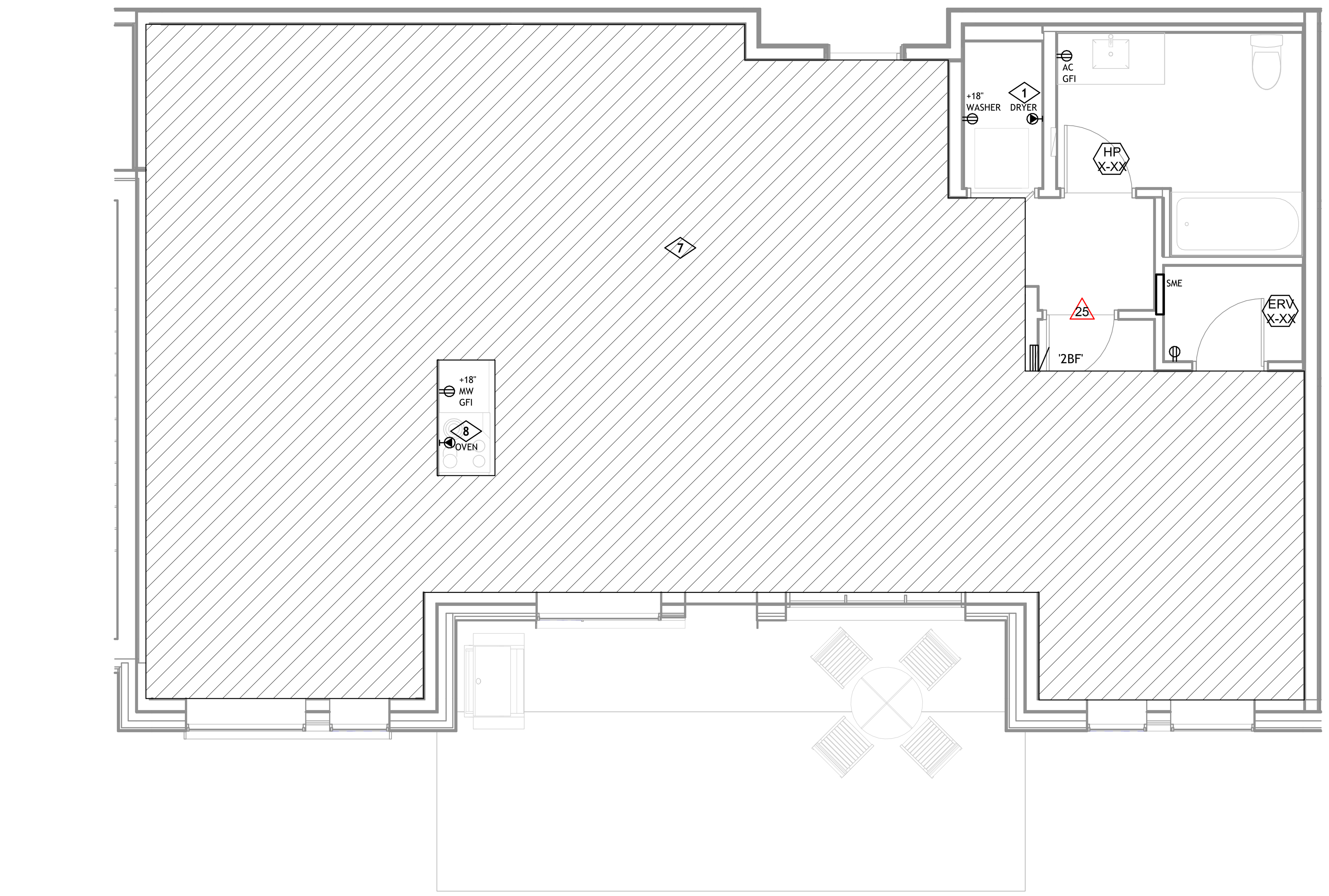
7/3/2024 6:47:31 PM

DWELLING UNIT GENERAL NOTES

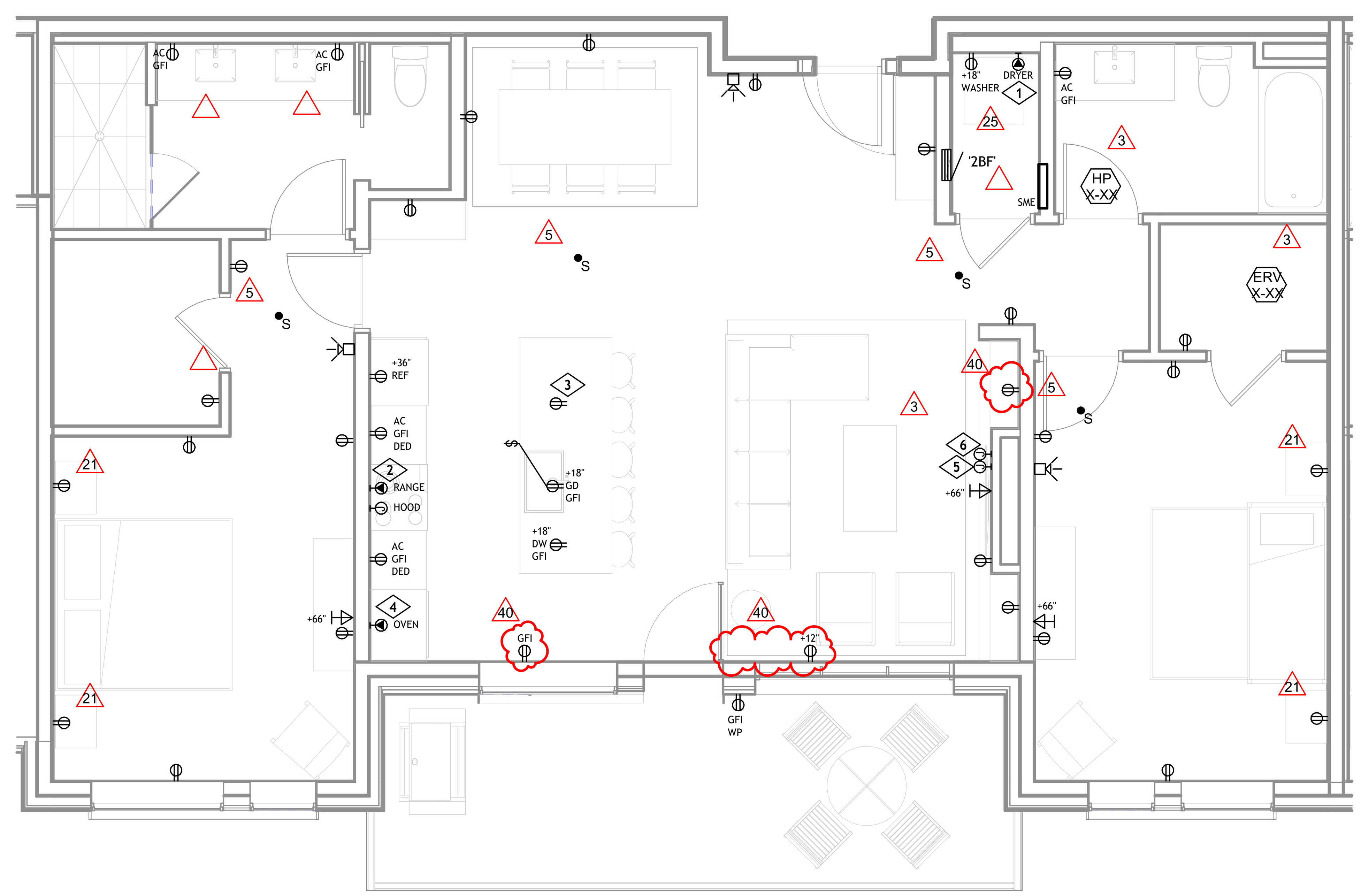
A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
2	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
7	REFER TO NON-TYPE-A TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
8	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 30-AMP CIRCUIT AND 3#10, 1#10G, 1"C TO OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.



2 | ELECTRICAL POWER UNIT PLAN - 2 BEDROOM STANDARD TYPE-A
E2.02 | 1/4" = 1'-0"



1 | ELECTRICAL POWER UNIT PLAN - 2 BEDROOM STANDARD
E2.02 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER JON BROOKS 35717 2/18/2025

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
24	ASI 001	07.26.2024
25	RFI #186	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 2 BEDROOM STANDARD

SHEET NO.

E2.02

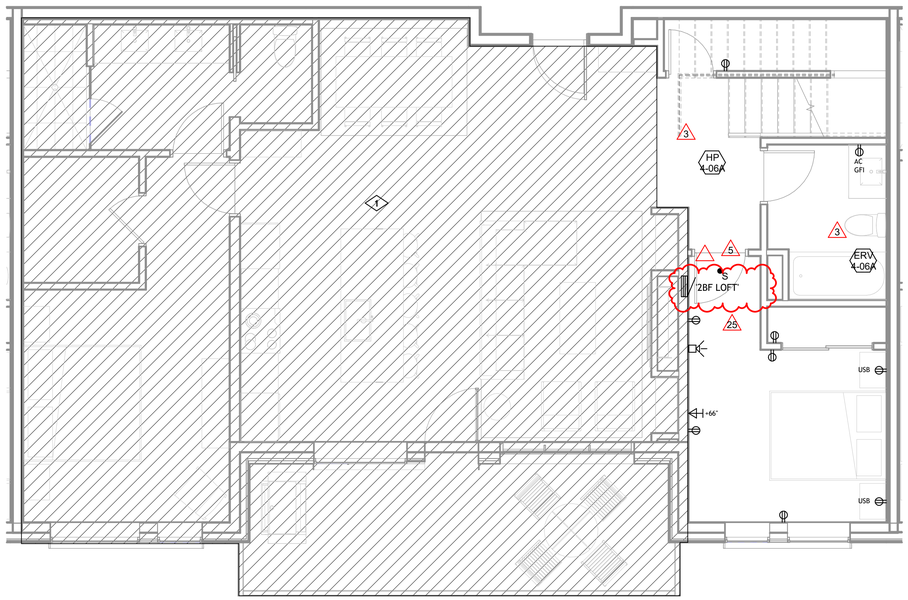
11/22/2024 2:30:12 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

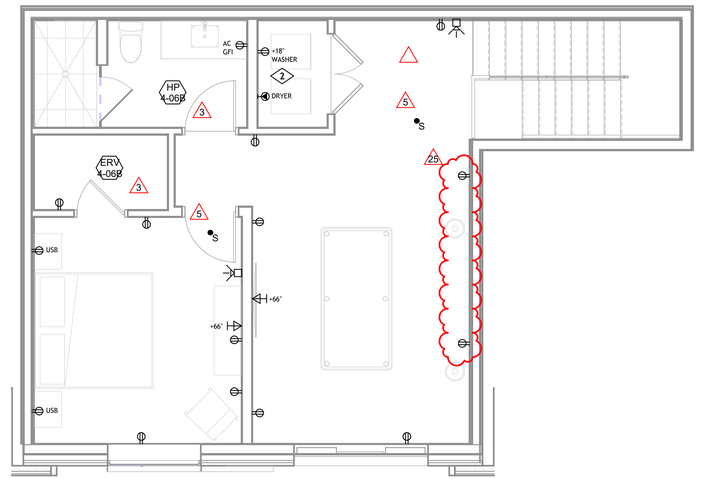
KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	REFER TO NON-LOFT TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.



1 | ELECTRICAL POWER UNIT PLAN - 2 BEDROOM STANDARD LOFT

E2.03 | 1/4" = 1'-0"



2 | ELECTRICAL POWER UNIT PLAN - 2 BEDROOM STANDARD DORMER

E2.03 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DAP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
15	RFI #39	04.12.2024
25	RFI #186	07.29.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER UNIT PLAN - 2 BEDROOM STANDARD LOFT

SHEET NO.
E2.03

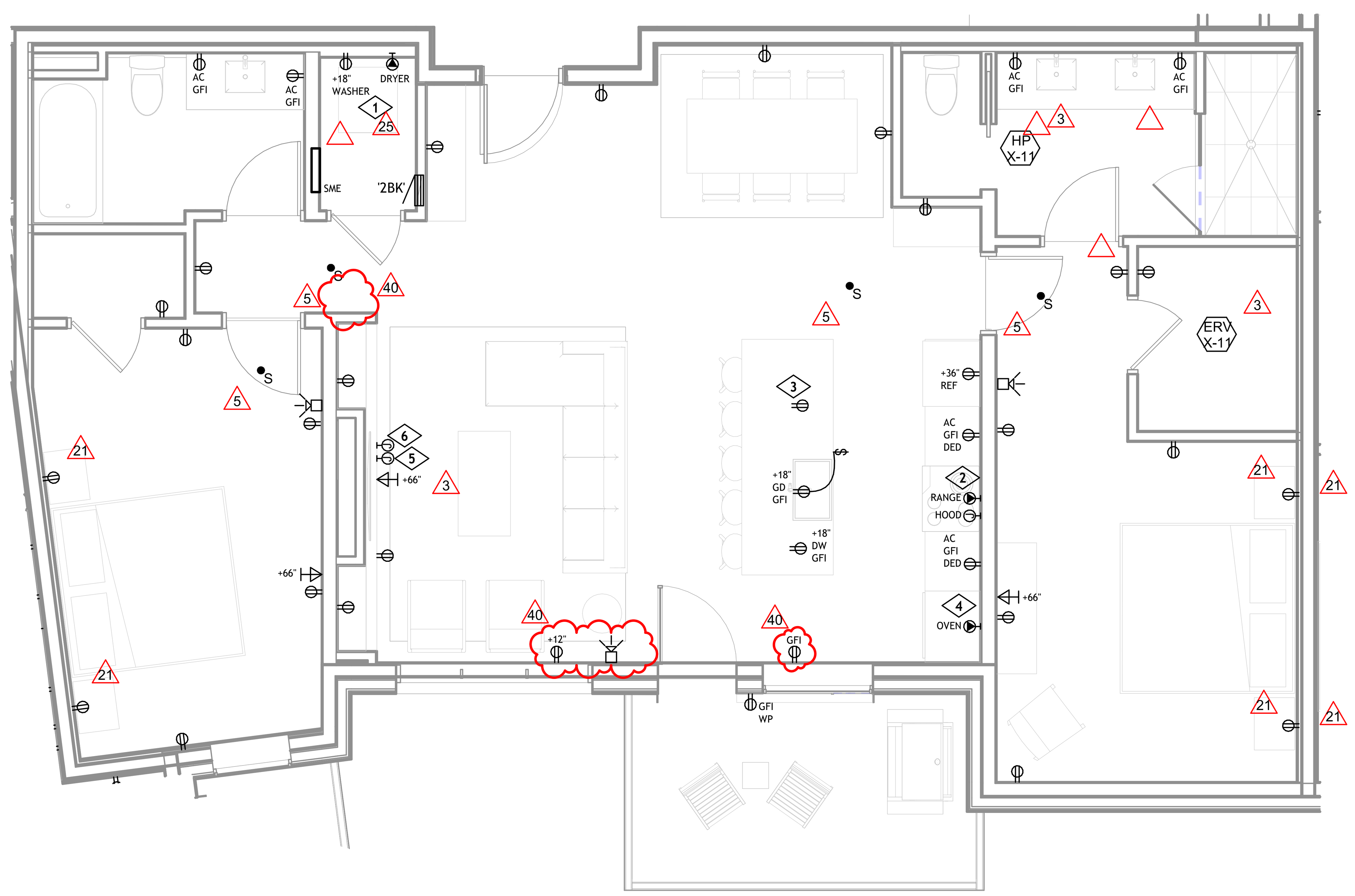
7/30/2024 5:47:30 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
2	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 2 BEDROOM KNUCKLE
E2.04 | 1/4" = 1'-0"

COLORADO REGISTERED JON BROOKS 35717 PROFESSIONAL ENGINEER 2/18/2025

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 2 BEDROOM KNUCKLE

SHEET NO.

E2.04

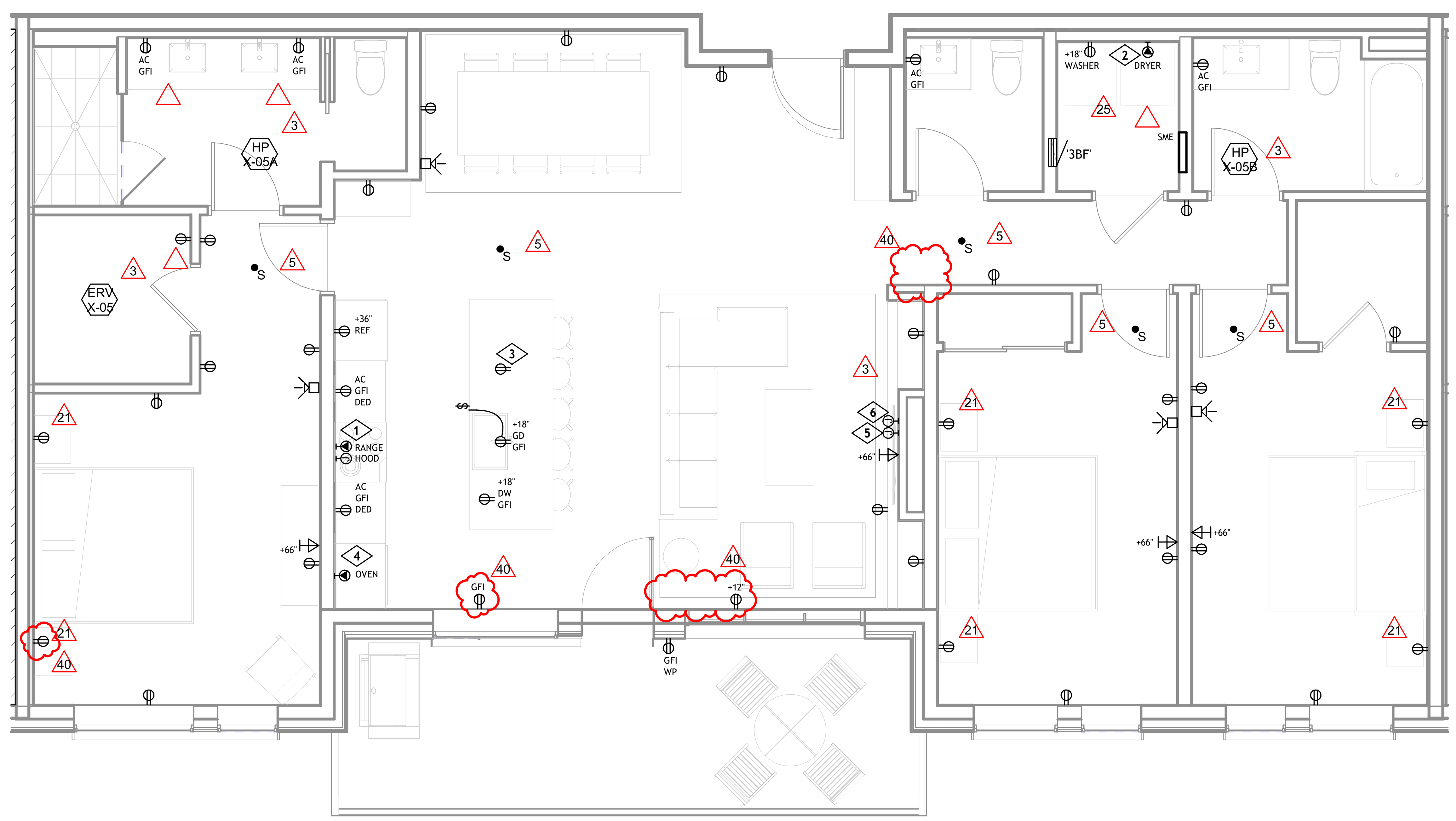
11/22/2024 2:30:13 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM FLEX
E2.05 | 1/4" = 1'-0"

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 3 BEDROOM FLEX

SHEET NO.

E2.05

11/22/2024 2:30:13 PM

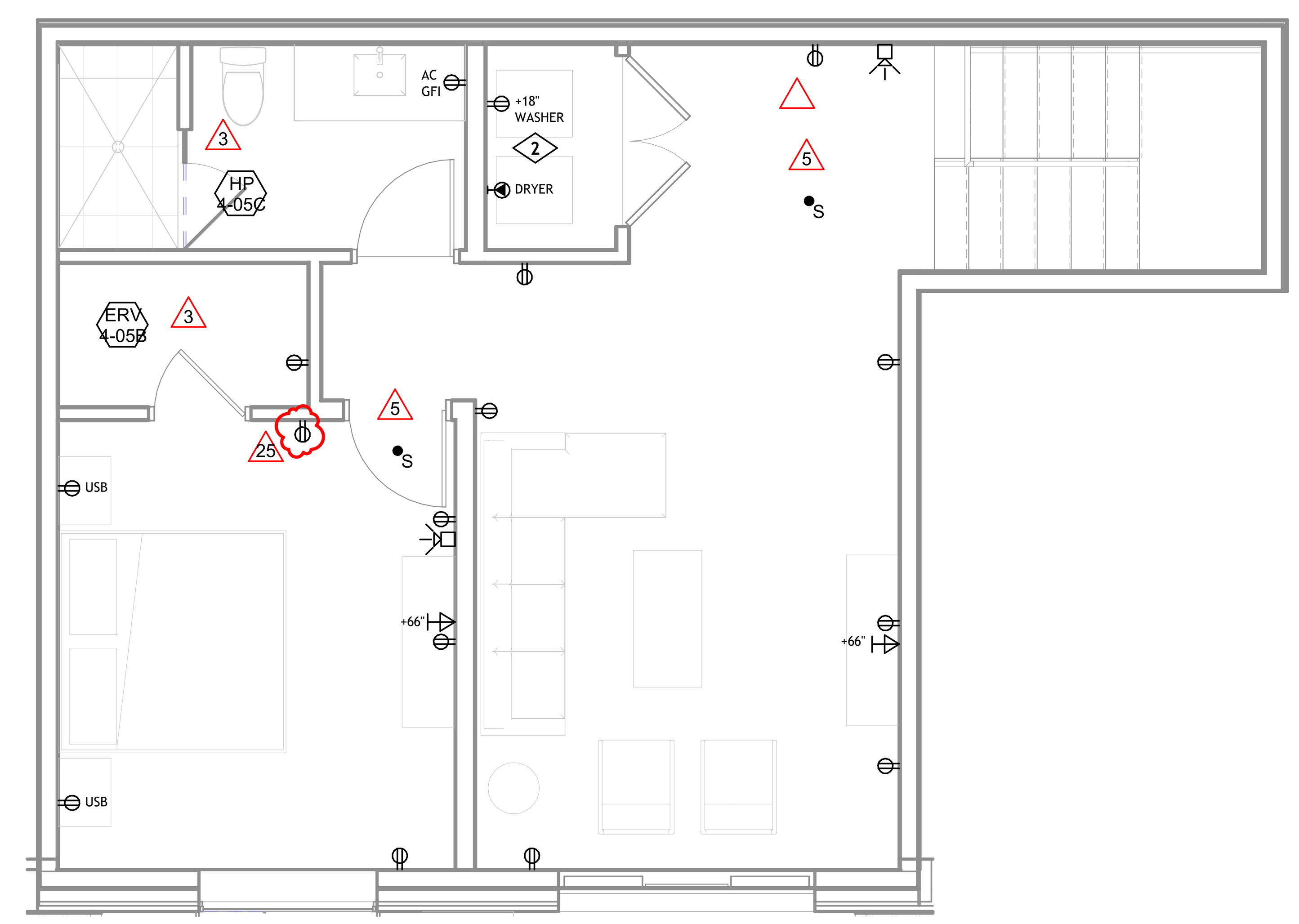
DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	REFER TO NON-LOFT TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.

1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM FLEX LOFT
E2.06 | 1/4" = 1'-0"



2 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM FLEX DORMER
E2.06 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER 35717 2/18/2025

TOWN STAMP

359 DESIGN

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
25	RFI #186	07.29.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER UNIT PLAN - 3 BEDROOM FLEX LOFT

SHEET NO.
E2.06

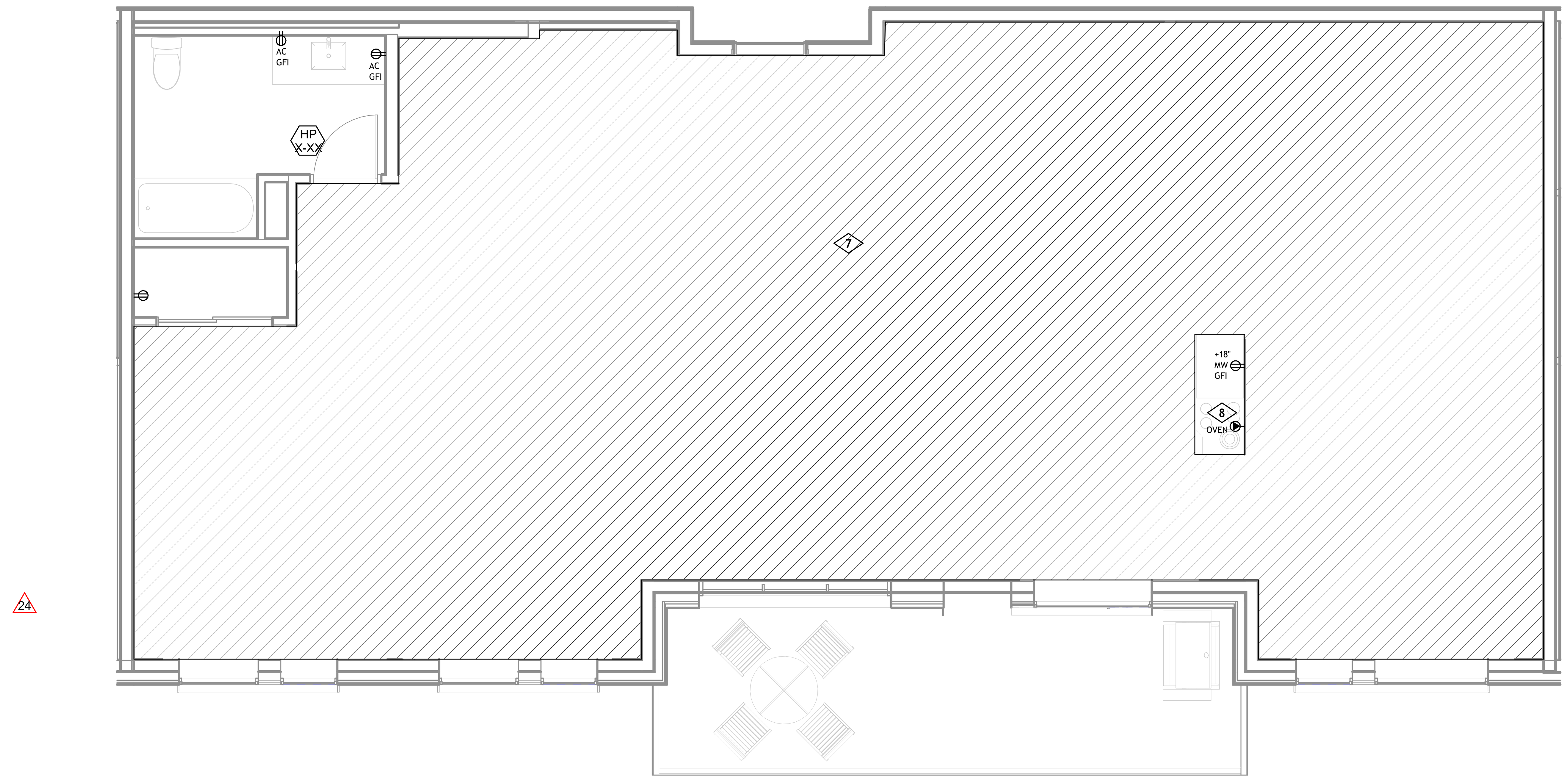
7/30/2024 5:47:40 PM

DWELLING UNIT GENERAL NOTES

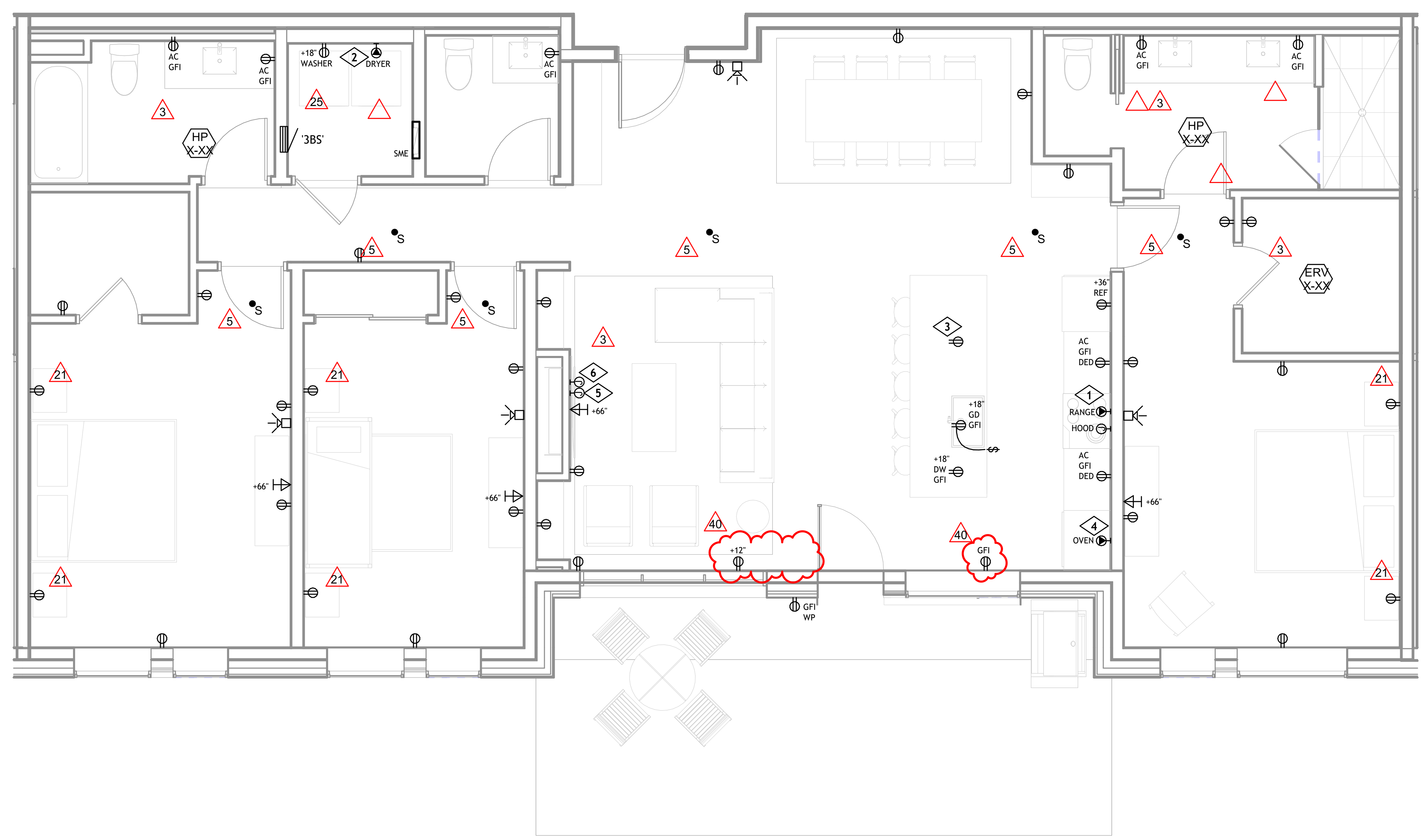
A. REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
7	REFER TO NON-TYPE-A TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
8	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 30-AMP CIRCUIT AND 3#10, 1#10G, 1"C TO OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.



2 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM STANDARD TYPE A
E2.07 | 1/4" = 1'-0"



1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM STANDARD
E2.07 | 1/4" = 1'-0"

COLORADO REGISTERED JON BROOKS 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
24	ASI 001	07.26.2024
25	RFI #186	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 3 BEDROOM STANDARD

SHEET NO.

E2.07

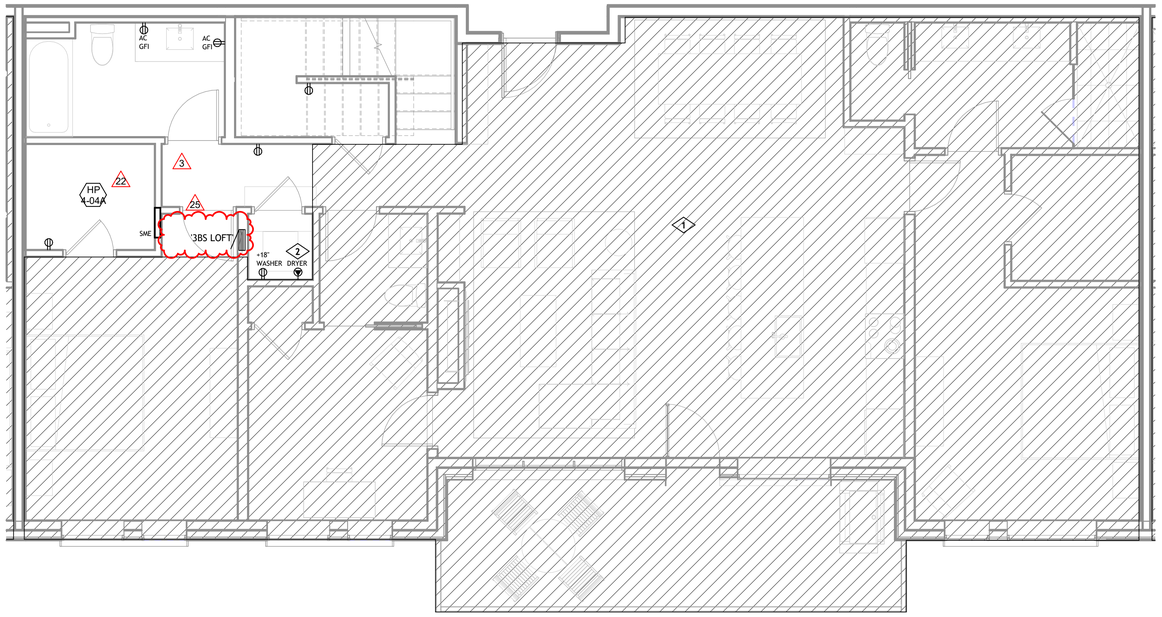
11/22/2024 2:30:15 PM

DWELLING UNIT GENERAL NOTES

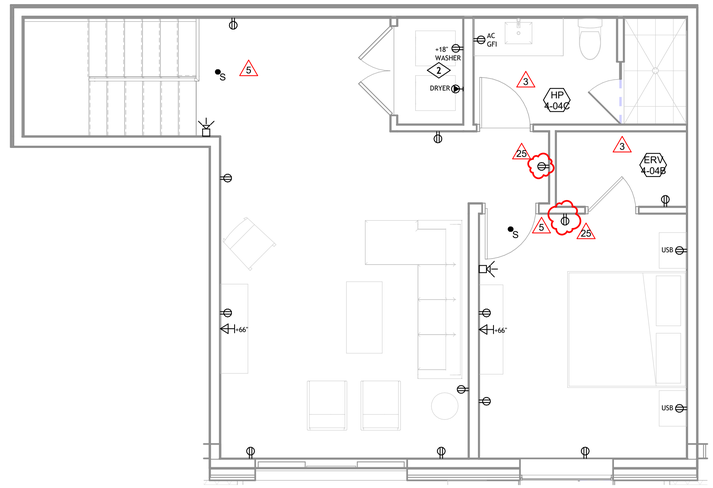
A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	REFER TO NON-LOFT TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.



1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM STANDARD LOFT
E2.08 | 1/4" = 1'-0"



2 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM STANDARD DORMER
E2.08 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
20	RFI #39	04.12.2024
22	RFI #170	07.26.2024
25	RFI #186	07.29.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER UNIT PLAN - 3 BEDROOM STANDARD LOFT

SHEET NO.
E2.08

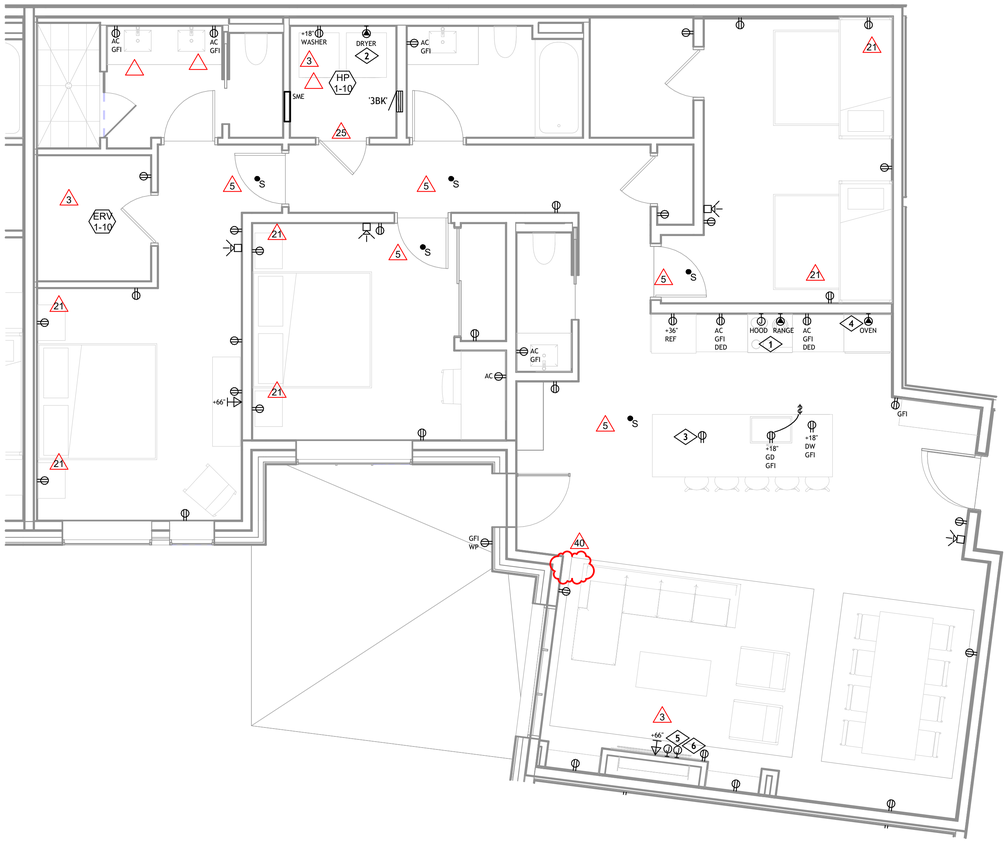
7/30/2024 5:47:44 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM KNUCKLE

E2.09 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DAP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.28.2024
3	IFC	03.15.2024
5	REFI #06	04.12.2024
9	REFI #09	04.30.2024
21	REFI #100	07.26.2024
25	REFI #106	07.29.2024
30	REFI #319	11.22.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 3 BEDROOM KNUCKLE

SHEET NO.

E2.09

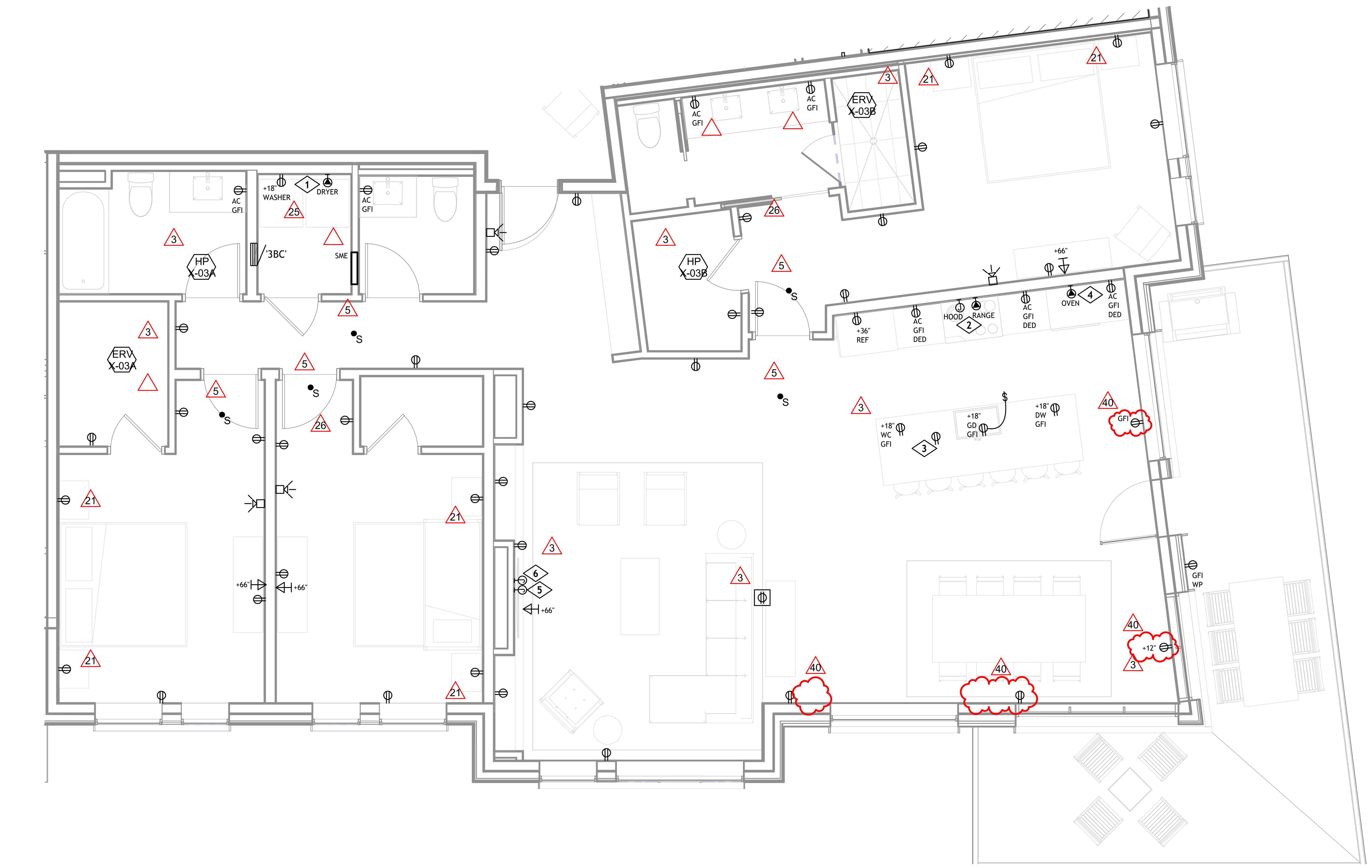
11/22/2024 2:30:15 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
2	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM CORNER
E2.10 | 1/4" = 1'-0"

COLORADO REGISTERED JON BROOKS 35717 PROFESSIONAL ENGINEER 2/18/2025

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
26	RFI #132	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 3 BEDROOM CORNER

SHEET NO.

E2.10

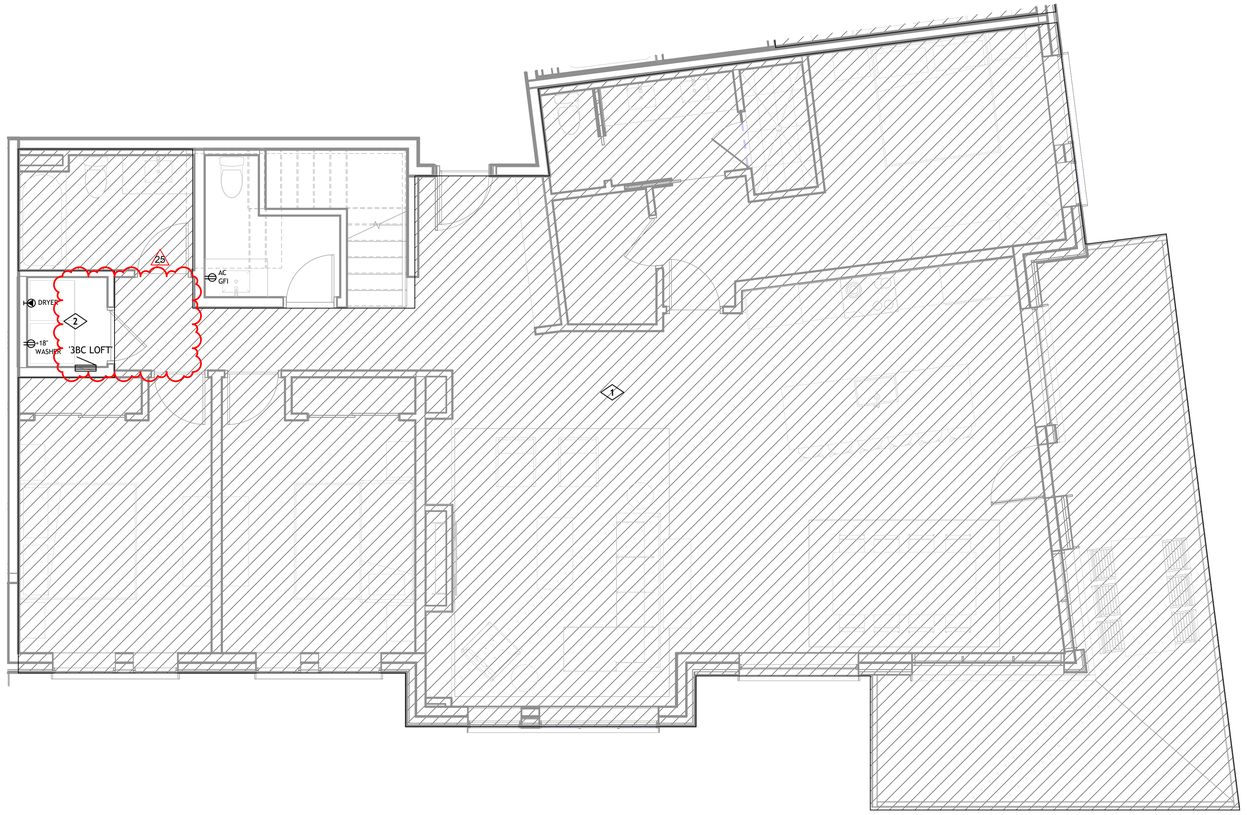
11/22/2024 2:30:16 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

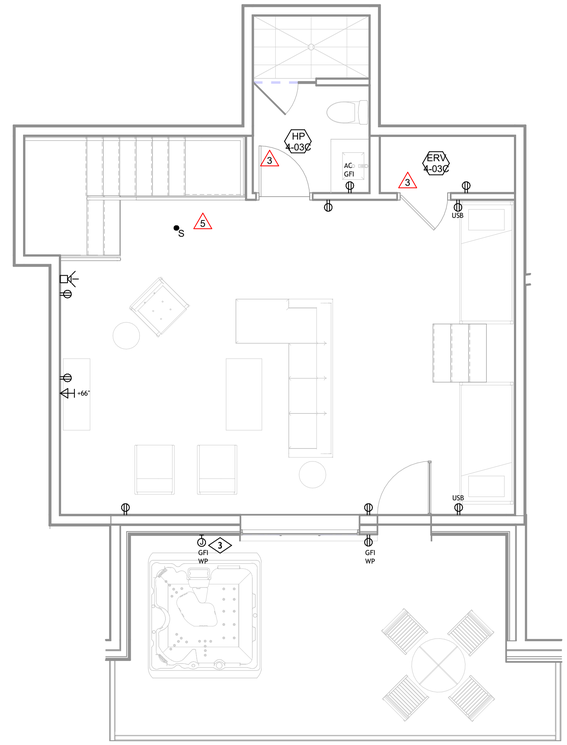
KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	REFER TO NON-LOFT TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	EC SHALL PROVIDE GFI CIRCUIT BREAKER WEATHERPROOF JUNCTION BOX FOR HOT TUB CONNECTION. RUN 2#4, 1#10G, 1"C. PROVIDE 60A/2P NEMA 3R LOCKABLE MAINTENANCE DISCONNECT SWITCH AND EMERGENCY SHUT-OFF AT LEAST 5-FT AWAY FROM EDGE OF HOT TUB FOR SHUTDOWN OF HOT TUB POWER AS REQUIRED PER NEC 680.



1 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM CORNER LOFT

E2.11 | 1/4" = 1'-0"



2 | ELECTRICAL POWER UNIT PLAN - 3 BEDROOM CORNER DORMER

E2.11 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	RFI #39	03.15.2024
6	RFI #59	04.12.2024
2S	RFI #156	07.29.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE
ELECTRICAL POWER UNIT PLAN - 3 BEDROOM CORNER LOFT

SHEET NO.
E2.11

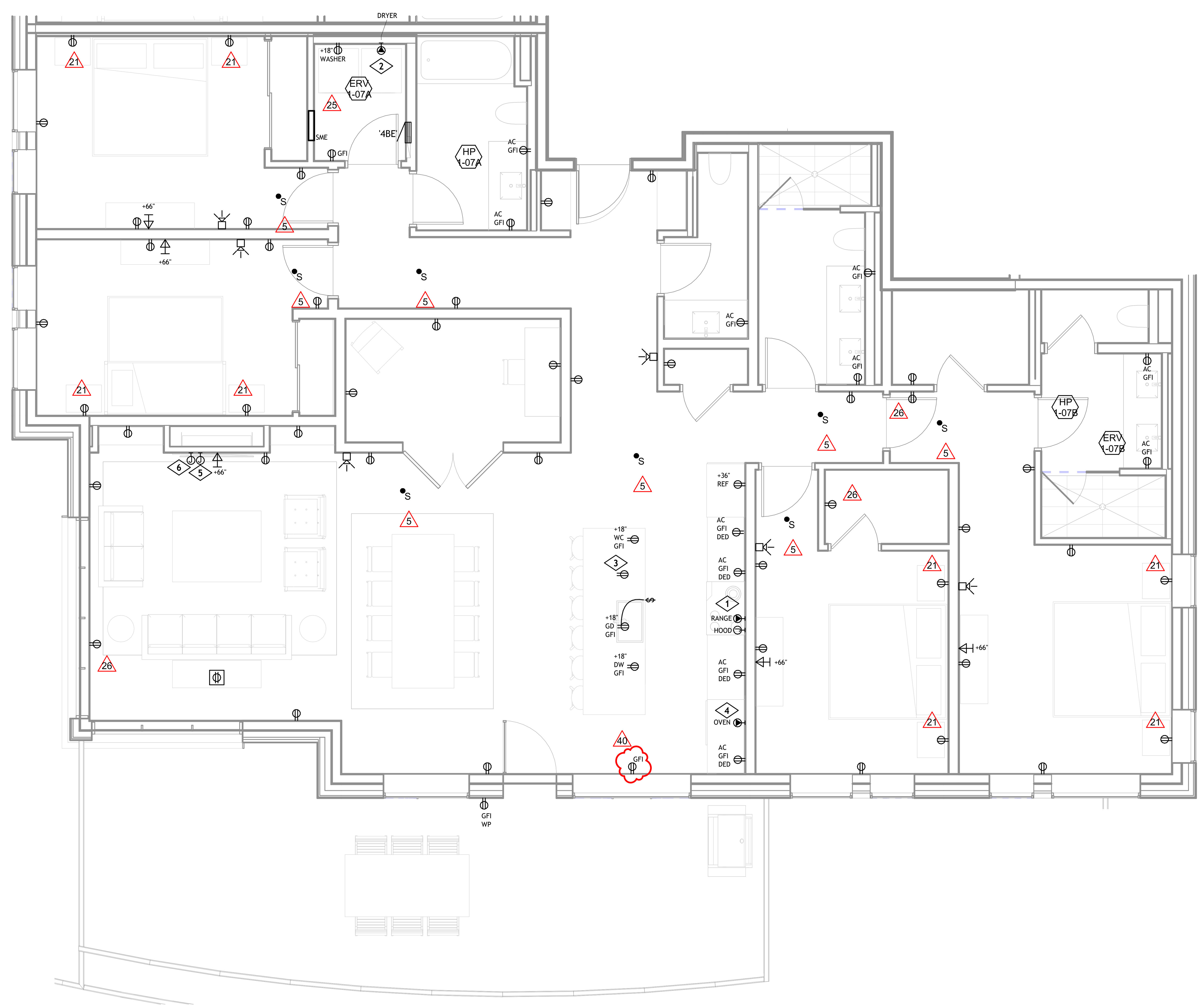
7/3/2024 5:47:49 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST LVL 1
E2.12 | 1/4" = 1'-0"

COLORADO REGISTERED JON BROOKS 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
26	RFI #132	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST LVL 1

SHEET NO.

E2.12

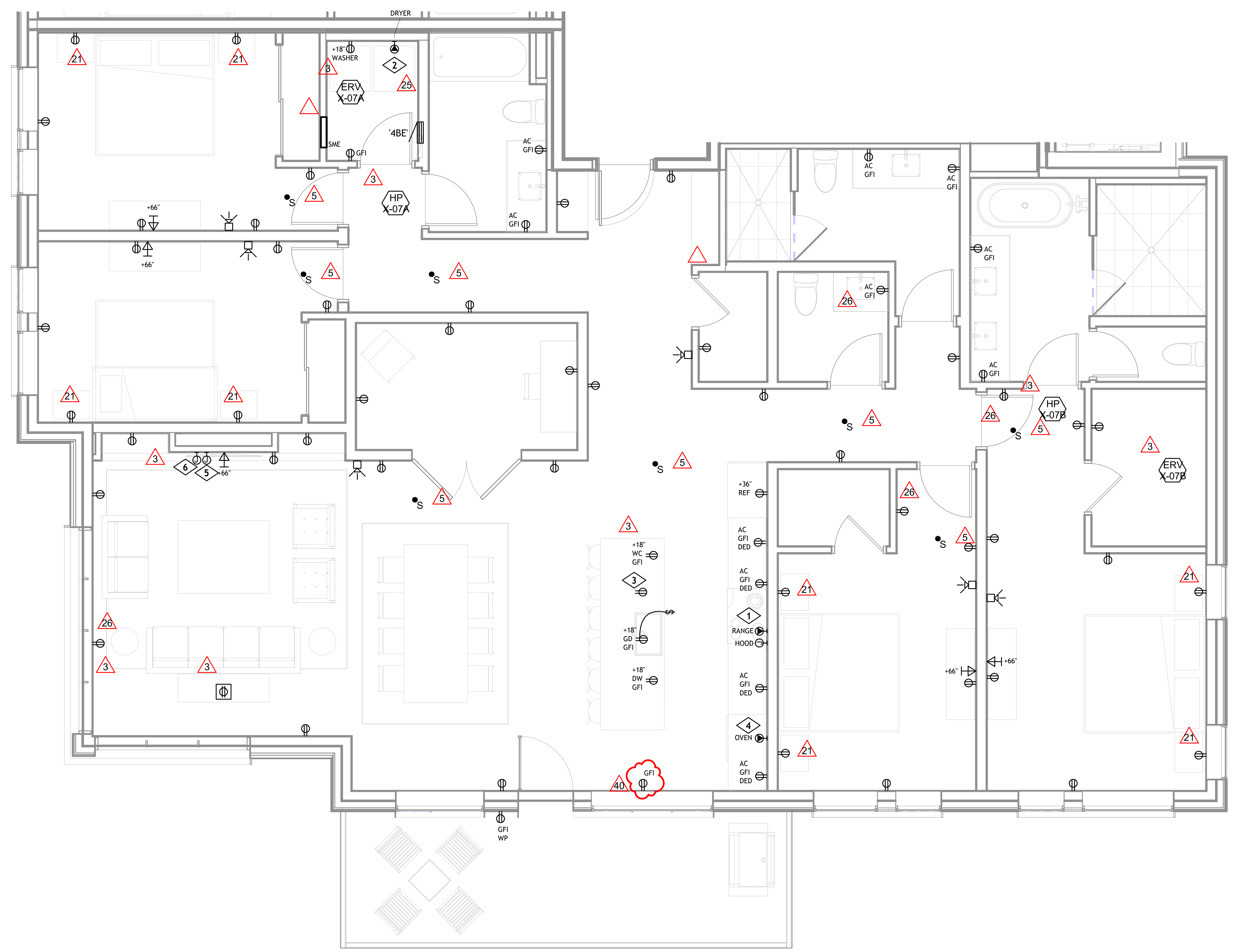
11/22/2024 2:30:17 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST LVL 2-4
E2.13 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER 35717 2/18/2025
TOWN STAMP

359 DESIGN

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
26	RFI #132	07.29.2024
40	RFI #319	11.22.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST LVL 2-4

SHEET NO.
E2.13

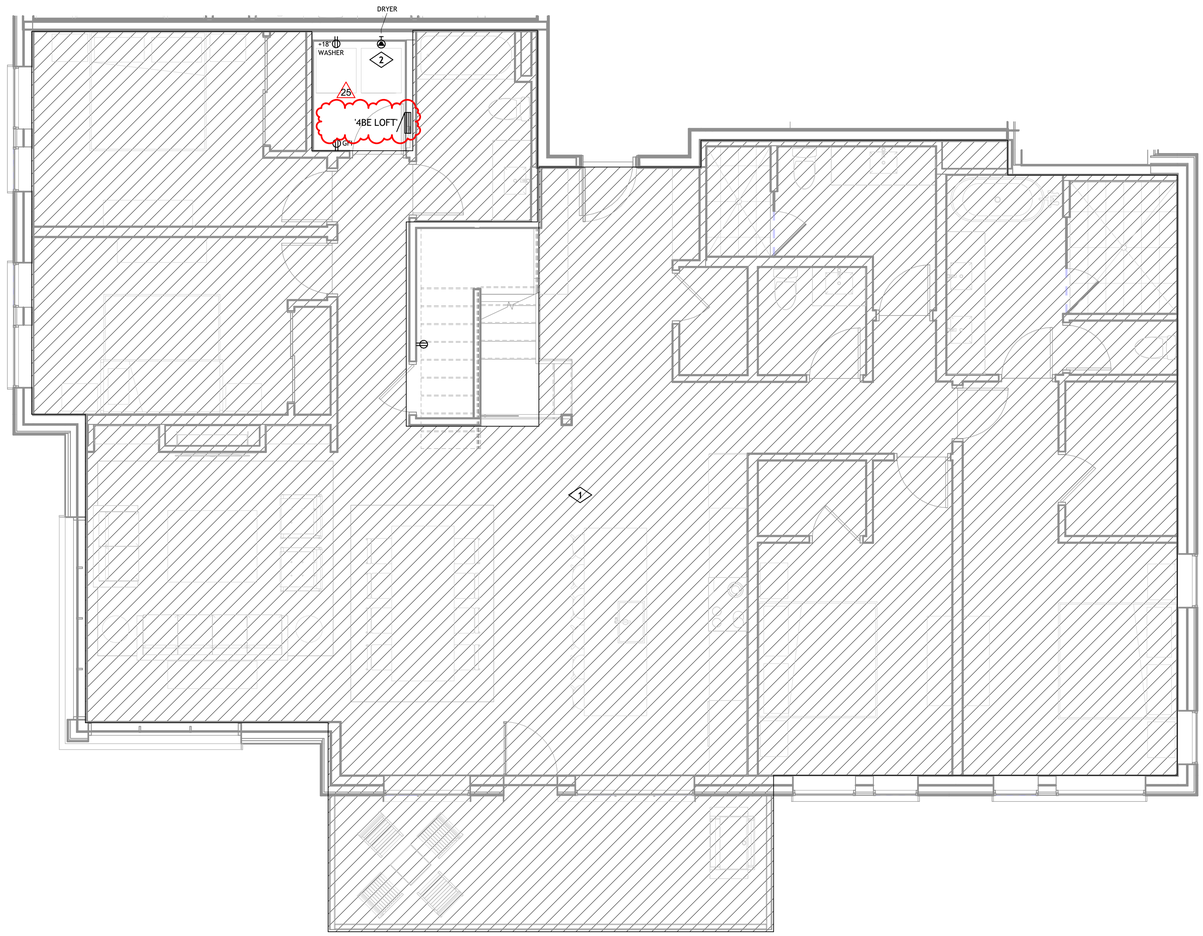
11/22/2024 2:30:18 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	REFER TO NON-LOFT TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	EC SHALL PROVIDE GFI CIRCUIT BREAKER WEATHERPROOF JUNCTION BOX FOR HOT TUB CONNECTION. RUN 2#4, 1#10G, 1"C. PROVIDE 60A/2P NEMA 3R LOCKABLE MAINTENANCE DISCONNECT SWITCH AND EMERGENCY SHUT-OFF AT LEAST 5-FT AWAY FROM EDGE OF HOT TUB FOR SHUTDOWN OF HOT TUB POWER AS REQUIRED PER NEC 680.



1 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST LOFT
E2.14 | 1/4" = 1'-0"

2 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST DORMER
E2.14 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.18.2024
3	IFC	03.15.2024
5	RFI #39	04.12.2024
25	RFI #166	07.29.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

3

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 4 BEDROOM EAST LOFT

SHEET NO.

E2.14

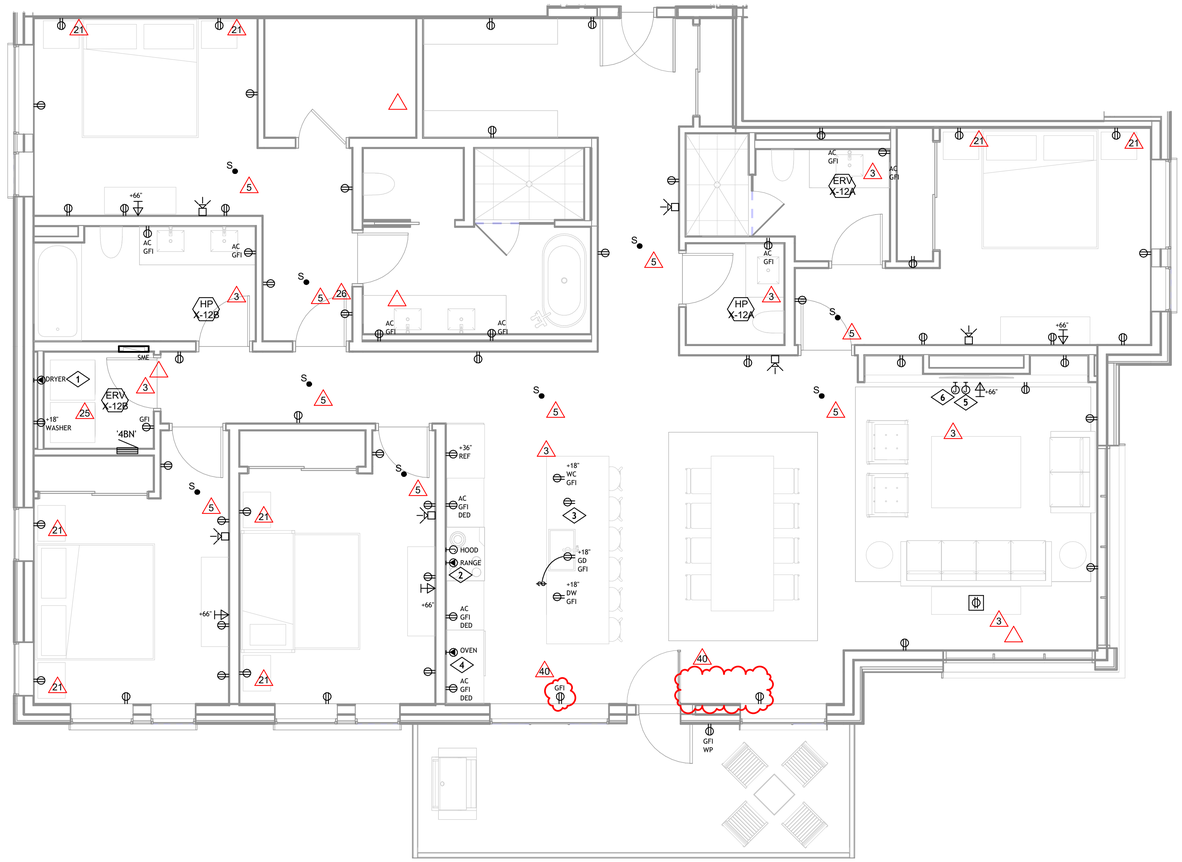
7/30/2024 6:47:53 PM

DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
2	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO RANGE. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
3	PROVIDE POP-UP STYLE IN-COUNTER TAMPER RESISTANT DUPLEX RECEPTACLE, UL LISTED FOR USE IN COUNTER TOPS. BASIS OF DESIGN: MOCKET #PCS103B. CONNECT TO GFCI PROTECTED CIRCUIT AS REQUIRED. RECEPTACLE SHALL BE LOCATED AT BACK CABINET OF PULL-OUT TRASH COMPARTMENT. CONDUIT OR METAL-CLAD CABLE SHALL BE ROUTED TIGHT TO BACK OF CABINET SECTION AS REQUIRED TO ACCOMMODATE TRASH COMPARTMENT AND PROTECT WIRING. COORDINATE EXACT RECEPTACLE LOCATION IN COUNTER-TOP WITH ARCHITECT AND INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.
4	PROVIDE HARDWIRED CONNECTION FOR 208V/1-PHASE, 4-WIRE, 40-AMP CIRCUIT AND 3#8, 1#10G, 1"C TO DOUBLE OVEN. COORDINATE EXACT POWER CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SHOP DRAWINGS.
5	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6	EC SHALL PROVIDE 120V, 20A CONNECTION FOR FIREPLACE FAN. COORDINATE EXACT LOCATION AND POWER REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.



1 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM NORTH

E2.15 | 1/4" = 1'-0"

COLORADO REGISTERED
DAN BROOKE
35717
2/18/2025
PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DRP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
2	IFC	03.15.2024
3	RFI #39	04.12.2024
9	RFI #59	04.30.2024
21	RFI #169	07.26.2024
25	RFI #186	07.29.2024
26	RFI #132	07.29.2024
40	RFI #519	11.22.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

3

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 4 BEDROOM NORTH

SHEET NO.

E2.15

11/22/2024 2:30:19 PM

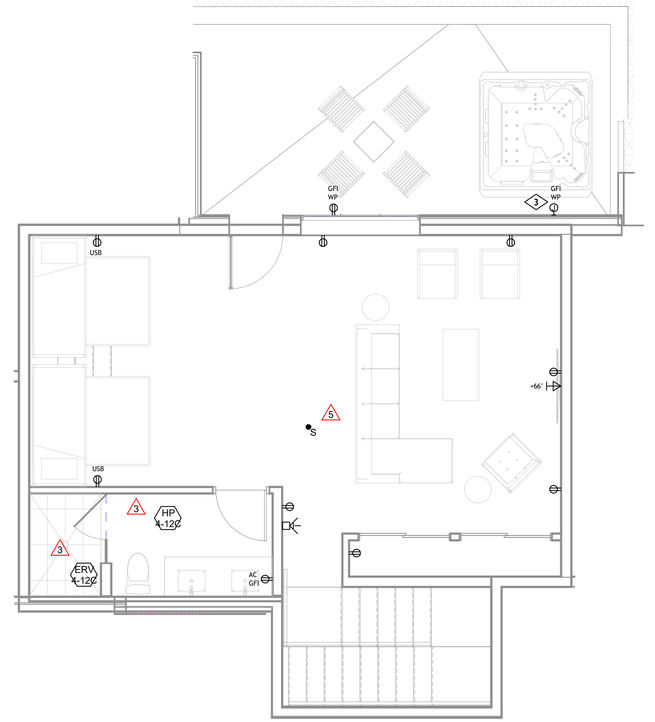
DWELLING UNIT GENERAL NOTES

A.	REFER TO DRAWING E2.00 FOR DWELLING UNIT GENERAL NOTES.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	REFER TO NON-LOFT TYPICAL UNIT PLAN FOR DEVICE LAYOUT IN HATCHED AREA.
2	EC SHALL PROVIDE NEMA 14-30R RECEPTACLE FED WITH 3#10, 1#10G, 3/4"C FOR 30A, 208V/1PH, 4-WIRE CORD AND PLUG DRYER POWER CONNECTION.
3	EC SHALL PROVIDE GFI CIRCUIT BREAKER WEATHERPROOF JUNCTION BOX FOR HOT TUB CONNECTION. RUN 2#4, 1#10G, 1"C. PROVIDE 60A/2P NEMA 3R LOCKABLE MAINTENANCE DISCONNECT SWITCH AND EMERGENCY SHUT-OFF AT LEAST 5-FT AWAY FROM EDGE OF HOT TUB FOR SHUTDOWN OF HOT TUB POWER AS REQUIRED PER NEC 680.

1 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM NORTH LOFT
E2.16 | 1/4" = 1'-0"



2 | ELECTRICAL POWER UNIT PLAN - 4 BEDROOM NORTH DORMER
E2.16 | 1/4" = 1'-0"

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024
20	RFI #39	04.12.2024
25	RFI #186	07.29.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

3

SHEET TITLE

ELECTRICAL POWER UNIT PLAN - 4 BEDROOM NORTH LOFT

SHEET NO.

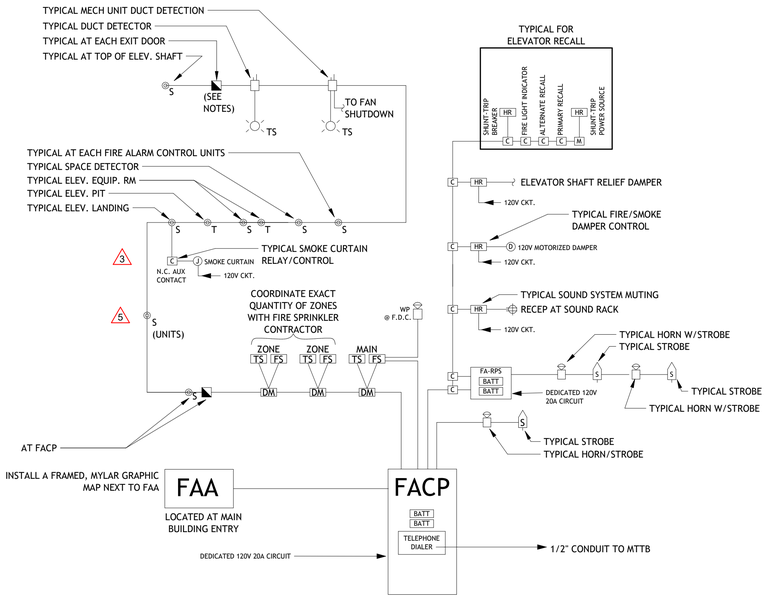
E2.16

7/30/2024 5:47:55 PM

FIRE ALARM SHOP DRAWING REQUIREMENTS

THE FIRE ALARM DEVICES SHOWN ARE FOR GENERAL LAYOUT AND GUIDELINES ONLY. THE AWARDED FIRE ALARM CONTRACTOR IS TO PROVIDE A COMPLETE SET OF SHOP DRAWINGS FOR SUBMITTAL AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION. THESE DOCUMENTS ARE TO INCLUDE THE FOLLOWING INFORMATION:

1. SHOP DRAWINGS MUST BE PREPARED AND SIGNED BY A MINIMUM OF A NICET FIRE ALARM LEVEL III CERTIFIED INDIVIDUAL.
2. COMPLETE RISER DIAGRAM SHOWING ALL DEVICES BY FLOOR/AREA AS CONNECTED TO THE CIRCUIT, DEVICE ADDRESSES, WIRE COLOR CODING SCHEDULE, WIRE COUNT, WIRE TYPE AND CONDUIT FILL WITH CALCULATIONS SHOWN.
3. PROVIDE A SEQUENCE OF OPERATION (INPUT/OUTPUT MATRIX) IN COMPLIANCE WITH THE NFPA 72 ANNEX MATERIAL. THE INFORMATION PROVIDED IN THE SEQUENCE OF OPERATION MUST BE SPECIFIC TO THE PROJECT. GENERIC SEQUENCE OF OPERATIONS WILL NOT BE ACCEPTED.
4. IDENTIFY THE TYPE OF SYSTEM, I.E. CENTRAL, REMOTE, PROPRIETARY, ETC.
5. IDENTIFY THE TYPE OF AUDIBLE NOTIFICATION: TEMPORAL, STEADY, CODED, VOICE, ETC.
6. IDENTIFY THE TYPE OF VISUAL NOTIFICATION: PUBLIC OR PRIVATE MODE.
7. PROVIDE A WIRING LEGEND SPECIFIC TO TYPES USED FOR THE PROJECT. IDENTIFY IF WIRING IS ENCLOSED IN CONDUIT, OPEN WIRING, PLENUM WIRING, POWER LIMITED OR NON-POWER LIMITED
8. PROVIDE AN EQUIPMENT LIST WITH MANUFACTURER, PART NUMBER, BACK BOX AND SYMBOL USED TO IDENTIFY THE COMPONENT. IF THERE IS INSUFFICIENT SPACE FOR WIRING LEGEND, EQUIPMENT LIST AND SYMBOL LEGEND ON THE TITLE SHEET, THAN INSERT AN ADDITIONAL SHEET.
9. COMPLETE RISER DIAGRAM SHOWING ALL DEVICES BY FLOOR/AREA AS CONNECTED TO THE CIRCUIT, DEVICE ADDRESSES, WIRE COLOR CODING SCHEDULE, WIRE COUNT, WIRE TYPE AND CONDUIT FILL WITH CALCULATIONS SHOWN.
10. DETAIL SHEET INCLUDING THE FOLLOWING: CIRCUIT WIRING DIAGRAM, DEVICE/APPLIANCE MOUNTING HEIGHT PROFILE, TYPICAL DEVICE AND ANCILLARY DEVICE WIRING, AND THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
11. PROVIDE VOLTAGE DROP CALCULATIONS FOR EACH CIRCUIT SHOWING WIRE SIZE, CIRCUIT LOAD AND VOLTAGE DROP.
12. PROVIDE AUDIO CIRCUIT POWER LOSS CALCULATIONS
13. VOLTAGE DROP CALCULATIONS MUST BE PERFORMED USING THE OUTPUT CIRCUIT VOLTAGE WHEN THE INPUT VOLTAGE TO THE CONTROL PANEL IS 85% OF ITS NAME PLATE VOLTAGE. (NFPA 72, 2002 ED., SECTION 4.4.4.1(1))
14. PROVIDE RESISTANCE VALUES WITH SUPPORTING DATA SHEETS OR PROVIDE NEC VALUES AND REFERENCE.
15. INDICATE METHOD USED AND SHOW ALL FORMULAS/EQUATIONS.
16. PROVIDE STAND-BY BATTERY CALCULATIONS FOR EACH CONTROL PANEL, SUB PANEL, MONITORING STATION TRANSMITTER, POWER SUPPLY OR ANY COMPONENT REQUIRING SECONDARY POWER.
17. SHOW LOCATION OF ALL FIRE ALARM INITIATING DEVICES AND NOTIFICATION APPLIANCES WITH TEMPERATURE, DECIBLE AND CANDELA RATINGS, WHEN APPLICABLE.
18. ALL DWELLING UNITS AND SLEEPING UNITS SHALL BE PROVIDED WITH ELECTRICAL JUNCTION BOXES, CONDUIT, AND ROUGH-IN INFRASTRUCTURE AS REQUIRED PER INTERNATIONAL FIRE CODE FOR CAPABILITY TO SUPORT FUTURE VISIBLE ALARM NOTIFICATION APPLIANCES PER ICC A117.1. PROVIDE SUFFICIENT SPARE CAPACITY FOR ALL UNITS TO BE CONVERTED TO ADA ACCESSIBLE UNITS OR ADAPTABLE UNITS. PROVIDE ALL NECESSARY EXPANSION CARDS AND REMOTE POWER SUPPLIES TO SUPPORT ADDITIONAL CAPACITY.



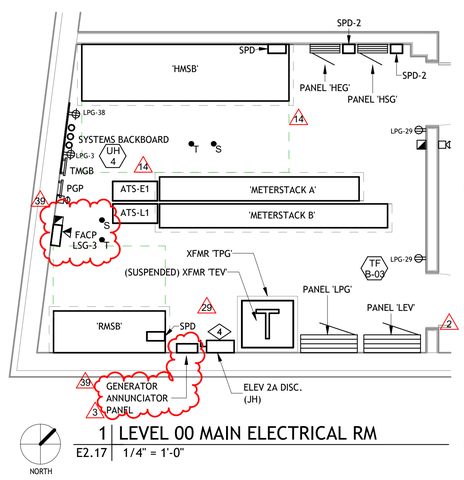
FIRE ALARM GENERAL NOTES:

1. THIS IS A FULLY ADDRESSABLE SYSTEM WITH EACH DEVICE HAVING A DISTINCT 'ADDRESS'.
2. PROVIDE NON-POWER LIMITING, PLENUM RATED WIRING. INSTALL IN EMT WHERE WIRING IS ROUTED THROUGH HAZARDOUS LOCATIONS, EXPOSED STRUCTURAL CEILINGS, INACCESSIBLE CEILINGS, AND BETWEEN AREAS SEPARATED BY MULTI-STORY ATRIUMS. ALL RACEWAY COMPONENTS SHALL BE PAINTED RED.
3. PROVIDE DUCT DETECTION FOR ALL AIR-HANDLING EQUIPMENT OPERATING WITH A RETURN CAPACITY EXCEEDING 2000CFM, SUPPLY CAPACITY EXCEEDING 15,000CFM WITH COMMON DUCT SERVING MULTIPLE FLOORS, AND ADDITION- ALLY AS REQUIRED BY LOCAL CODES.
4. SPRINKLER SYSTEM IS A DESIGN-BUILD CONTRACT. COORDINATE WITH SPRINKLER CONTRACTOR FOR QUANTITIES AND LOCATIONS OF ALL FLOW AND TAMPER SWITCHES, AND FOR LOCATION OF FIRE HORN/LIGHT AT EXTERIOR OF BUILDINGS. INSTALL WITH A MINIMUM OF 20% SPARE CAPACITY ON ALL INITIATING AND INDICATING APPLIANCE CIRCUITS.
5. PROVIDE 120V CIRCUIT AND LOW-VOLTAGE FIRE ALARM CONTROL CIRCUIT TO ALL SMOKE DAMPERS. COORDINATE LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO BID.
6. COORDINATE ALL SEQUENCING OF OPERATIONS WITH LOCAL FIRE DEPARTMENT.
7. ALL DEVICES INSTALLED IN DAMP, WET OR EXTERIOR LOCATIONS SHALL BE FURNISHED WITH WP HOUSINGS. ALL DEVICES INSTALLED IN GYMNASIUMS SHALL BE FURNISHED WITH WIRE GUARD.
8. PER LOCAL FIRE DEPARTMENT/AHJ, DWELLING UNIT SMOKE DETECTORS SHALL BE CONNECTED TO BUILDING FIRE ALARM SYSTEM. SMOKE DETECTORS SHALL BE PROVIDED WITH SOUNDER BASE FOR AUDIBLE NOTIFICATION. INDIVIDUAL SINGLE STATION SMOKE DETECTORS SHALL NOT BE PROVIDED FOR DWELLING UNITS.
9. PROVIDE SUFFICIENT SPARE CAPACITY FOR ALL UNITS TO BE CONVERTED TO ADA ACCESSIBLE UNITS OR ADAPTABLE UNITS. PROVIDE ALL NECESSARY EXPANSION CARDS AND REMOTE POWER SUPPLIES TO SUPPORT ADDITIONAL CAPACITY.
10. SYSTEM SHALL TRANSMIT REQUIRED FIRE ALARM SIGNALS TO CENTRAL MONITORING AGENCY (SELECTED BY OWNER) VIA DIALER PROVIDED IN FIRE ALARM CONTROL PANEL.
11. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID AN ADDITIONAL 10% SPARE STROBES AND HORN/STROBES, INCLUDING INSTALLATION, AS MAY BE REQUIRED BY AHJ.
12. SEQUENCE OF OPERATION FOR SMOKE DAMPERS:
    - 12.1. DAMPERS WILL OPERATE WHEN THE FOLLOWING CONDITIONS OCCURS.
      - 12.1.1. THE SUPPLY OR RETURN DUCT DETECTOR OF THE RESPECTIVE AIR HANDLING UNIT GOES INTO ALARM.
      - 12.1.2. FIRE/SMOKE DAMPERS SHALL BE CLOSED BY ACTUATION OF A SMOKE DETECTOR INSTALLED IN DUCT WORK WITHIN 5' OR SPOT-TYPE DETECTOR INSTALLED WITHIN 5', REFER TO PLANS TYPE AND LOCATION.
13. SEQUENCE OF OPERATION FOR ELEVATOR RECALL:
    - 13.1. WHEN THE SMOKE DETECTORS IN THE LOBBIES, ELEVATOR SHAFT OR EQUIPMENT ROOM GO INTO ALARM, THE RESPECTIVE ELEVATOR WILL RETURN TO THEIR PRIMARY LEVEL OR SECONDARY LEVEL AND LOCK-OUT; THE LEVEL WILL DEPEND UPON IF THE ELEVATOR LOBBY DETECTOR SENSES ANY SMOKE AT THE RESPECTIVE LOBBY.
    - 13.2. SUBSEQUENTLY, IF THE THERMAL DETECTOR IN THE ELEVATOR ROOM GOES INTO ALARM, THE POWER TO THE ELEVATOR CONTROLLER WILL BE DISCONNECTED VIA A SHUNT TRIP CIRCUIT BREAKER.
14. PER ROUTT COUNTY REGIONAL BUILDING DEPARTMENT 2018 IBC POLICY AMENDMENTS, SECTION 907.2.9.1 GROUP R-2, EXCEPTION 2, IS HEREBY DELETED. CONTRACTOR SHALL PROVIDE MANUAL FIRE ALARM PULL-STATIONS EVEN WHERE BUILDING IS EQUIPPED WITH AUTOMATIC SPRINKLER SYSTEMS AND AUTOMATIC NOTIFICATIONS DEVICES THAT AUTOMATICALLY ACTIVATE UPON SPRINKLER WATER FLOW.
15. CONTRACTOR SHALL PROVIDE NORMALLY CLOSED AUXILIARY CONTACT FOR SMOKE CURTAIN SYSTEM THAT IS ACTIVATED WHEN THE SMOKE DETECTOR GOES INTO ALARM. THIS CONTACT DOES NOT ACTIVATE ON THE GENERAL BUILDING ALARM. NO VOLTAGE EXISTS ACROSS THE CONTACT. PROVIDE 24 VDC ALARM CIRCUIT ROUTED IN CONDUIT FROM LANDING SMOKE DETECTOR AUXILIARY CONTACT TO THE SMOKE CURTAIN HOUSING JUNCTION BOX. COORDINATE EXACT REQUIREMENTS WITH SMOKE CURTAIN SYSTEM SHOP DRAWINGS PRIOR TO COMMENCING WORK.

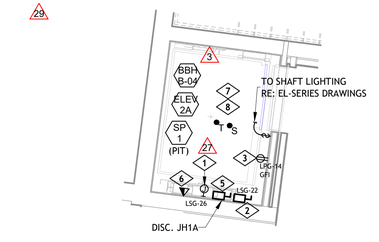
4 | FIRE ALARM RISER DIAGRAM
E2.17 | 1/8" = 1'-0"

KEYNOTE LEGEND

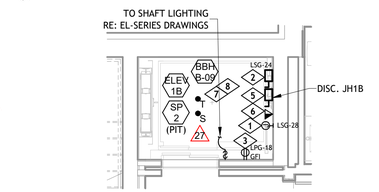
KEY VALUE	KEYNOTE TEXT
1	PROVIDE LOCKABLE 30A/1P SAFETY SWITCH FOR 20A DEDICATED CIRCUIT FOR ELEVATOR VISUAL COMMUNICATION SYSTEM. EXACT LOCATIONS SHALL BE COORDINATED IN-FIELD PRIOR TO ROUGH-IN. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO COMMENCING WORK.
2	PROVIDE LOCKABLE 30A/1P SAFETY SWITCH FOR 20A DEDICATED CIRCUIT FOR ELEVATOR CAB AND FAN LIGHTING. EC SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS WITH APPROVED ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN.
3	GFI PROTECTED DUPLEX RECEPTACLE WITHIN ELEVATOR PIT, VERIFY HEIGHT AND LOCATION PER ELEVATOR SHOP DRAWINGS PRIOR TO INSTALLATION.
4	ELEVATOR FUSED DISCONNECT. PROVIDE EATON ELEVATOR CONTROL SWITCH #ES SERIES WITH FIRE SAFETY INTERFACE RELAY, VOLTAGE MONITORING RELAY, AND AUXILIARY CONTACTS AS REQUIRED FOR FIRE ALARM SHUNT TRIP OPERATION OF ELEVATOR POWER. EC SHALL COORDINATE EXACT DISCONNECT LOCATION, SIZING AND FIRE ALARM RELAY SPECIFICATION WITH THE APPROVED ELEVATOR SUBMITTALS AND FIRE ALARM SYSTEM SUBMITTALS PRIOR TO ORDERING. REFER TO ELECTRICAL ONE-LINE DIAGRAM (SHEET E-600), AND MECHANICAL EQUIPMENT SCHEDULE (SHEET E-700) FOR MORE INFORMATION.
5	PROVIDE LOCKABLE NON-FUSED ELEVATOR DISCONNECT SWITCH WITH AUXILIARY DRY CONTACT LOCATED AT TOP OF HOISTWAY ADJACENT TO ELEVATOR MOTOR CONTROLLER (AS REQUIRED FOR WHEN ELEVATOR MOTOR CONTROLLER IS LOCATED IN HOISTWAY).
6	EC SHALL PROVIDE 3/4"C CONDUIT TO TELECOMMUNICATIONS SYSTEMS BACKBOARD IN TELECOM ROOM FOR ELEVATOR LOW-VOLTAGE TELEPHONE CABLING RACEWAY. CONTRACTOR SHALL PROVIDE (1) CAT6 CABLE FROM PATCH PANEL AT IT RACK LOCATION TO CONNECTION AT ELEVATOR CONTROL PANEL LOCATED AT ELEVATOR CONTROLLER LANDING/LEVEL. COORDINATE EXACT REQUIREMENTS WITH APPROVED ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN.
7	PROVIDE 3/4"C FROM ELEVATOR DISCONNECT AUX. DRY CONTACT TO ELEVATOR TEST AND INSPECTION PANEL (LDU LOCATED AT TOP FLOOR ELEVATOR CONTROLLER LANDING/LEVEL) AS REQUIRED FOR ELEVATOR EVACUATION CONTROL FUNCTIONS WHERE PROVIDED BY MANUFACTURER IN ACCORDANCE WITH NFPA 70. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN.
8	PROVIDE 3/4"C FROM AUXILIARY DRY CONTACTS AT GENERATOR CONTROL PANEL TO ELEVATOR TEST AND INSPECTION PANEL (LDU) FOR GENERATOR SIGNAL CONNECTION REQUIRED TO INTERFACE WITH ELEVATOR CONTROL SYSTEMS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN.



1 | LEVEL 00 MAIN ELECTRICAL RM
E2.17 | 1/4" = 1'-0"



2 | ELEVATOR 02 (ELEV A) SHAFT
E2.17 | 1/4" = 1'-0"



3 | ELEVATOR 01 (ELEV B) SHAFT
E2.17 | 1/4" = 1'-0"

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
2	PERMIT SET REVISIONS	02.09.2024
3	RFI #30	03.15.2024
5	RFI #39	04.12.2024
14	RFI #62	06.18.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024
39	RFI #330	10.30.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

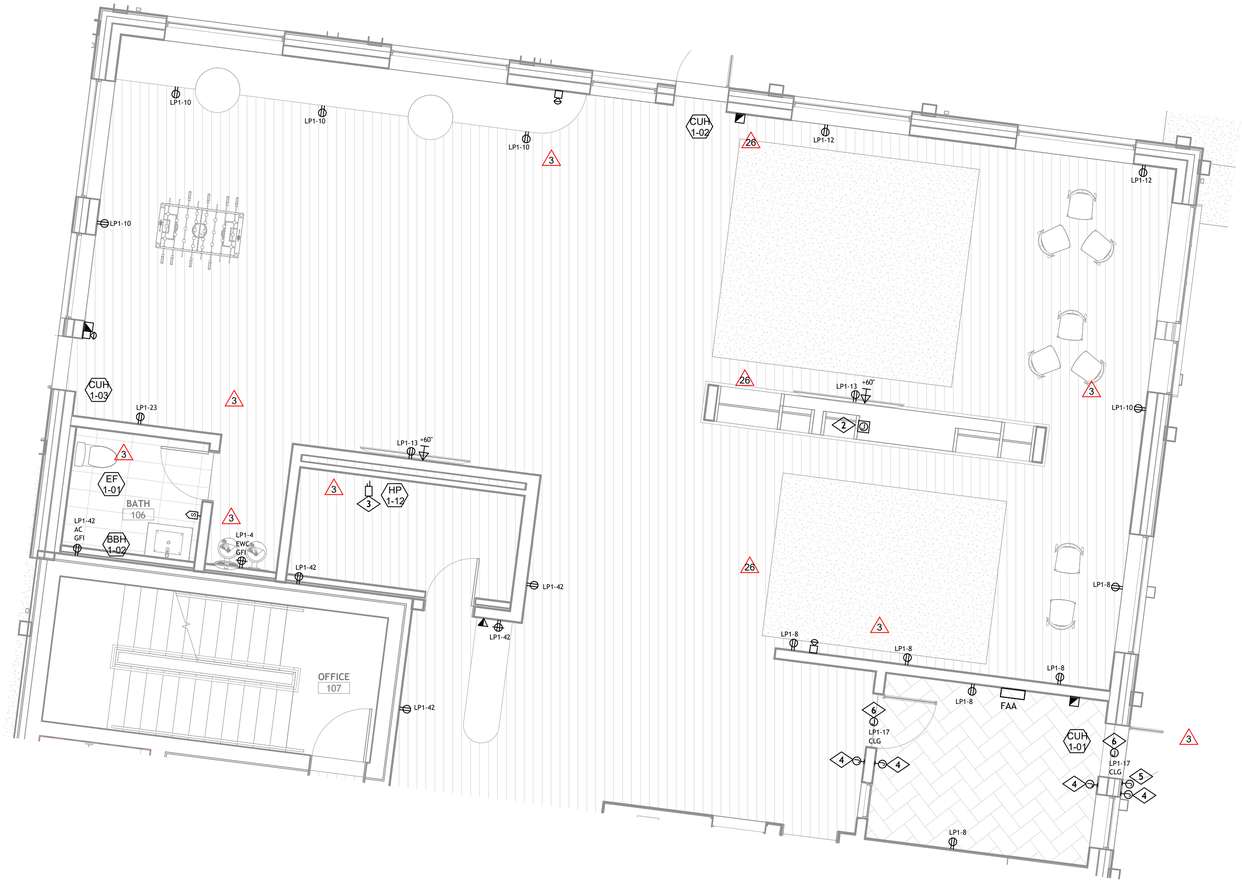
SHEET TITLE

ELECTRICAL ENLARGED PLANS

SHEET NO.

E2.17

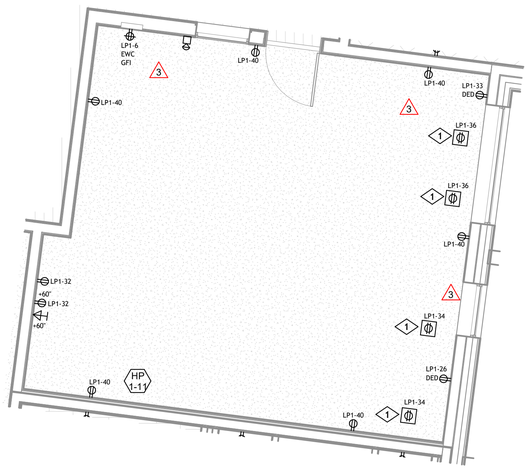
10/30/2024 7:21:29 PM



1 | LOUNGE AREA ELECTRICAL POWER PLAN

E2.18 | 1/4" = 1'-0"

NORTH



2 | GYM ROOM ELECTRICAL POWER PLAN

E2.18 | 1/4" = 1'-0"

NORTH

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE 2-GANG FLOOR BOX WITH (1) DUPLEX RECEPTACLE, (1) DATA PROVISION, AND MOUNTING PLATES. PROVIDE BASIS OF DESIGN LEGRAND WIREMOLD EVOLUTION SERIES 4" FIRE-RATED POKE-THROUGH FLOOR BOX (#4ATCP2RXX) WITH DUPLEX RECEPTACLE COVER, OR APPROVED EQUIVALENT. CONTRACTOR SHALL CONFIRM COVER FINISH TYPE AND COLOR SELECTION WITH FINISHED FLOOR MATERIAL AND ARCHITECT PRIOR TO PURCHASING. EC SHALL PROVIDE 3/4"C FOR POWER AND 3/4"C FOR FUTURE DATA ROUTED IN-SLAB TO NEAREST ACCESSIBLE WALL. BOX AND CONDUITS IN AND OUT OF BOX SHALL ALL BE INSTALLED IN FLOOR SLAB PRIOR TO CONCRETE POUR. CONTRACTOR SHALL PROVIDE ALL FLOOR BOX COMPONENTS AND ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT AUDIO-VISUAL AND DATA DEVICE SUB-PLATE SELECTION AND INSTALLATION REQUIREMENTS WITH OWNER IT & AV CABLING INSTALLERS PRIOR TO ORDERING. PROVIDE BLANK PLATES AS NECESSARY. LOW-VOLTAGE CONDUITS SHALL BE PROVIDED WITH PULL-STRING AND BUSHINGS AT END OF CONDUIT. FIELD COORDINATE FINAL LOCATION WITH ARCHITECT AND STRUCTURAL PRIOR TO ROUGH-IN. DO NOT DIMENSION OFF ELECTRICAL PLANS.
2	JUNCTION BOX FOR FIRE PLACE. COORDINATE WITH ARCHITECT FOR EXACT LOCATION AND CONNECTION REQUIREMENTS PRIOR TO INSTALLATION.
3	PROVIDE DUCT DETECTION FOR RETURN DUCT EQUIPMENT. COORDINATE INSTALLATION AND LOCATION REQUIREMENTS PRIOR TO ROUGH-IN.
4	WALL MOUNTED JUNCTION BOX FOR ACCESSIBLE DOOR CONTROL PUSH PAD DEVICE INSTALLATION AND CABLING RACEWAY. CONTROL DEVICE FURNISHED BY OTHERS.
5	CONTRACTOR SHALL PROVIDE ALL COMPONENTS AS REQUIRED FOR CARD READER. COORDINATE SPECIFIC OPERATION REQUIREMENTS WITH SEPARATE VENDOR. CARD READER HEIGHT AND DOOR POSITION SWITCH LOCATION SHALL BE COORDINATED WITH OWNER AND ARCHITECT FOR FINAL LOCATION.
6	JUNCTION BOX FOR 120V POWER CONNECTION TO MOTORIZED AUTOMATED ACCESS DOOR OPERATOR. EC SHALL PROVIDE 3/4" CONDUIT AND MAKE ALL NECESSARY INTERCONNECTIONS BETWEEN JUNCTION BOX, OPERATOR MOTOR, AND PUSH PAD LOCATIONS PER MANUFACTURER'S REQUIREMENTS. COORDINATE EXACT LOCATIONS WITH APPROVED EQUIPMENT SHOP DRAWINGS.

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble

Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.28.2024
3	IFC	03.15.2024
26	RFI #132	07.29.2024
35	RFI #132.1	10.29.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

3

SHEET TITLE

ELECTRICAL ENLARGED PLANS

SHEET NO.

E2.18

10/15/2024 7:52:41 AM

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE EMERGENCY POWER OFF (EPO) SWITCHES FOR SHUT DOWN OF BOILER EQUIPMENT. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH PLUMBING ENGINEERING DRAWINGS PRIOR TO ROUGH-IN.
2	EC SHALL PROVIDE 120V, 20A POWER CONNECTION TO POOL EQUIPMENT CONTROL PANEL 'PSC-1' FOR CONTROL PANEL POWER SUPPLY. CIRCUIT WITH 2#12, 1#12G, 3/4"C. COORDINATE ADDITIONAL LINE-VOLTAGE POWER REQUIRED TO BE CONNECTED THROUGH CONTROL PANEL WITH POOL CONTRACTOR PRIOR TO ROUGH-IN. REFER TO POOL SHOP DRAWINGS FOR EXACT CONTROL PANEL LOCATION AND POWER AND CONTROL WIRING REQUIREMENTS.
3	POOL AND SPA WET-NICHE LIGHTING POWER CIRCUIT SHALL BE CONNECTED THROUGH POOL/SPA CONTROL PANEL PSC-1 AS REQUIRED FOR CONTROL PER POOL SHOP DRAWINGS. REFER TO FIRST FLOOR ELECTRICAL POWER PLAN FOR WET-NICHE POOL LIGHT LOCATIONS. LIGHT NICHE SHALL BE FURNISHED AND INSTALLED BY POOL CONTRACTOR. NICHE SHALL BE GROUNDED/BONDED BY THE ELECTRICAL CONTRACTOR. WET NICHE LUMINAIRE, POWER SUPPLY TRANSFORMER, AND LOW-VOLTAGE WIRING SHALL BE FURNISHED AND INSTALLED BY THE POOL CONTRACTOR. WATERTIGHT CONDUIT, JUNCTION BOXES, LINE-VOLTAGE WIRING, AND GFCI PROTECTION SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH NEC ARTICLE 680.23(B).

POOL EQUIPMENT NOTES

A PROVIDE 120V CONTROL WIRING AS REQUIRED PER POOL EQUIPMENT SCHEDULE ON POOL DRAWINGS.

B REFER TO POOL DRAWINGS FOR EQUIPMENT LOCATIONS.

C FIELD VERIFY ALL EQUIPMENT LOADS, VOLTAGES, AND RECOMMENDED FUSE SIZING PRIOR TO ENERGIZING CIRCUIT.

D THE ELECTRICAL CONTRACTOR SHALL REVIEW ALL AQUATICS PLANS AND PROVIDE ALL WORK AS CALLED OUT TO BE COMPLETED BY THE ELECTRICAL CONTRACTOR. COORDINATE WITH POOL CONTRACTOR.

E ALL DISCONNECTS SHALL BE NEMA 3R RATED WITH NON-METALLIC ENCLOSURE AND STAINLESS STEEL HARDWARE FOR CORROSION RESISTANCE.

F MOTORS REQUIRING STARTERS SHALL UTILIZE COMBINATION STARTER/DISCONNECT. STARTERS SHALL BE NON-REVERSING WITH NEMA SIZE AS LISTED. ALL STARTERS SHALL UTILIZE CIRCUIT BREAKERS FOR OVERCURRENT PROTECTION. ELECTRICAL CONTRACTOR TO VERIFY ALL PUMPS AND MOTORS REQUIREING STARTERS TO BE PROVIDED BY EC PRIOR TO COMMENCING WORK AND ORDERING MOTOR STARTERS.

G PROVIDE FLEXIBLE CONDUIT CONNECTION AT ALL PUMP MOTORS, MINIMUM 18" IN LENGTH.

H WHERE MOTOR IS WITHIN SIGHT (PER THE DEFINITION OF THE NEC) OF THE MCC, THE INDICATED DISCONNECT SWITCH IS NOT REQUIRED.

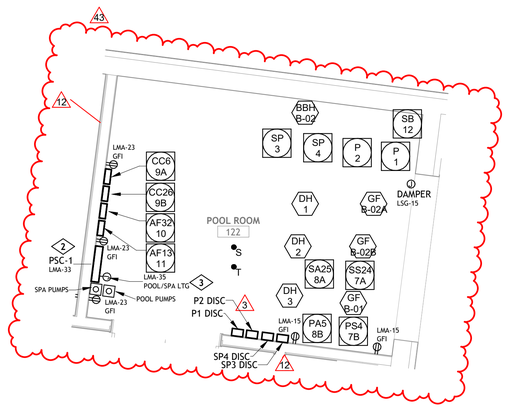
I ALL MOTORS GREATER THAN 7.5 HORSEPOWER ARE TO BE PROVIDED WITH THREE PHASE PROTECTION.

J ELECTRICAL CONTRACTOR SHALL REFERENCE POOL WIRING DIAGRAMS AND SEQUENCE OF OPERATIONS FOR INTERLOCKS PROVIDED ON THE AQUATIC DESIGNERS DRAWINGS.

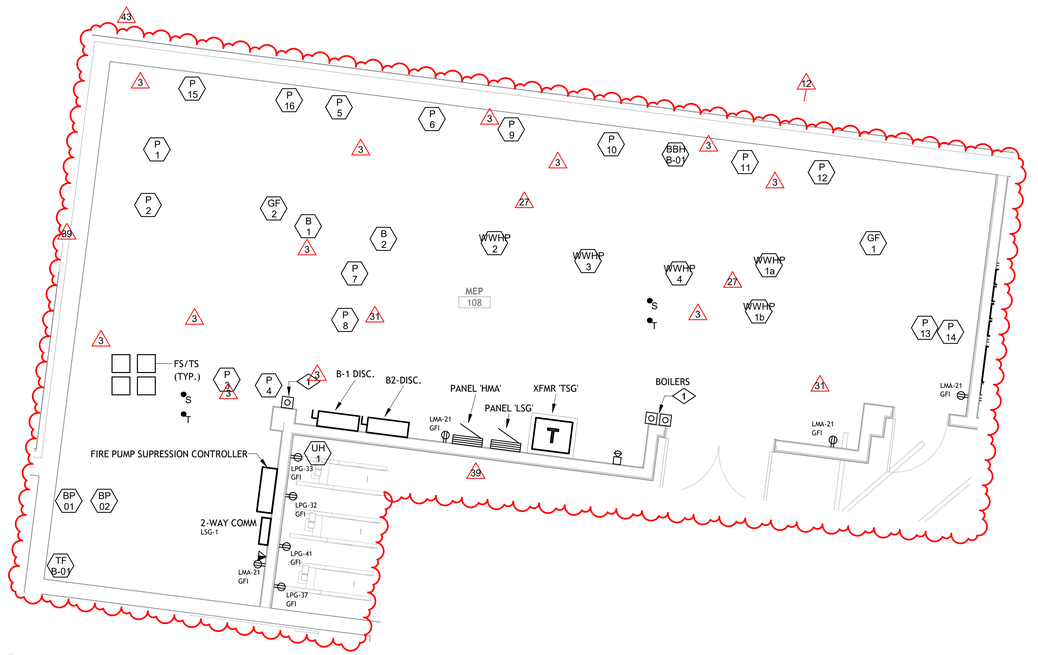
K ALL POOL, SPA AND/OR HOT-TUB ELECTRICAL RECEPTACLES, DEVICES, LIGHTING, UNDERWATER LUMINAIRES, PUMPS/MOTORS, AND EQUIPMENT SHALL BE PROVIDED WITH GFCI PROTECTION AND SPGFCI PROTECTION IN ACCORDANCE WITH NEC ARTICLE 680 REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SECTIONS: 680.5, 680.12, 680.21 (C), 680.22(A)(4), 680.22 (A)(4), 680.22(B)(4), AND 680.23(A)(3).WHERE NOT PROVIDED BY THE POOL CONTRACTOR, THE ELECTRICAL CONTRACTOR SHALL PROVIDE VARIABLE FREQUENCY DRIVE AS INDICATED IN THE POOL EQUIPMENT SCHEDULE PER THE FOLLOWING SPECIFICATIONS.
   a. MANUFACTURER SHALL BE: ABB, ALLEN BRADLEY, OR APPROVED EQUAL.
   b. VFD UNIT ENCLOSURE SHALL BE NEMA-12 RATED.
   c. UNIT SHALL BE PROVIDED WITH MANUAL SPEED ADJUSTMENT VIA KEYPAD OR DIAL MOUNTED ON THE ENCLOSURE'S EXTERIOR.
   d. UNIT SHALL BE PROVIDED WITH REQUIRED NUMBER OF OUTPUTS FOR CONNECTION TO EXTERNAL RELAY(S) AND EQUIPMENT.
   e. UNIT SHALL BE PROVIDED WITH MANUFACTURER'S PERFORMED FIELD TEST OF DRIVE.
   f. UNIT SHALL BE PROVIDED WITH OWNER OPERATIONAL AND MAINTENANCE TRAINING OF DEVICE.
   g. UNIT SHALL BE SUITABLE FOR OPERATING ENVIRONMENT FROM 0 DEGREES TO 40 DEGREES CELCIUS, AND HUMIDITY UP TO 90% NON-CONDENSING.
   h. PROVIDE VFD WITH CAPABILITY OF 30 SECOND RAMP UP TO FULL SPEED AND 5 SECOND RAMP DOWN FROM FULL SPEED TO ZERO FOR ALL APPLICATIONS USING FILTRATION SYSTEM WITH REGENERATIVE MEDIA FILTER. COORDINATE LOCATIONS WITH POOL CONTRACTOR.
   i. PROVIDE VFD WITH REQUIRED NUMBER OF OUTPUTS FOR CONNECTION TO ALL EXTERNAL RELAY(S) AND EQUIPMENT AS REQUIRED BY THE POOL CONTRACTOR'S DRAWINGS.

L PROVIDE CLEARLY LABELED EMERGENCY SHUTOFF BUTTONS FOR THE PURPOSE OF STOPPING THE MOTORS THAT PROVIDE POWER TO ALL NON-FILTRATION PUMPS PER POOL ENGINEER. EMERGENCY SHUTOFF BUTTON LOCATIONS SHALL BE COORDINATED WITH THE OWNER OR THE OWNER'S RISK MANAGEMENT CONSULTANT.

M PROVIDE CLEARLY LABELED EMERGENCY POWER OFF (EPO) SWITCH(ES) FOR EMERGENCY SHUTDOWN OF ALL POOL WATER HEATER/BOILER SYSTEMS AS REQUIRED BY CODE. EPO SWITCH LOCATIONS SHALL BE AT EACH EGRESS DOOR LEADING FROM THE ROOM HOUSING THE POOL WATER HEATER SYSTEM(S) AND SHALL BE COORDINATED WITH THE POOL ENGINEER AND OWNER'S RISK MANAGEMENT CONSULTANT.



1 | ELECTRICAL ENLARGED POOL ROOM
E2.19 | 1/4" = 1'-0"



2 | ELECTRICAL ENLARGED MEP ROOM
E2.19 | 1/4" = 1'-0"

COLORADO REGISTERED
CLAY BROOKS
35717
1/8/2025
PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	CMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
5	PCC	03.15.2024
12	RFI #65.1	06.04.2024
27	ASI 003	08.02.2024
31	RFI #234	09.16.2024
39	RFI #330	10.24.2024
43	ASI 007	01.08.2025

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

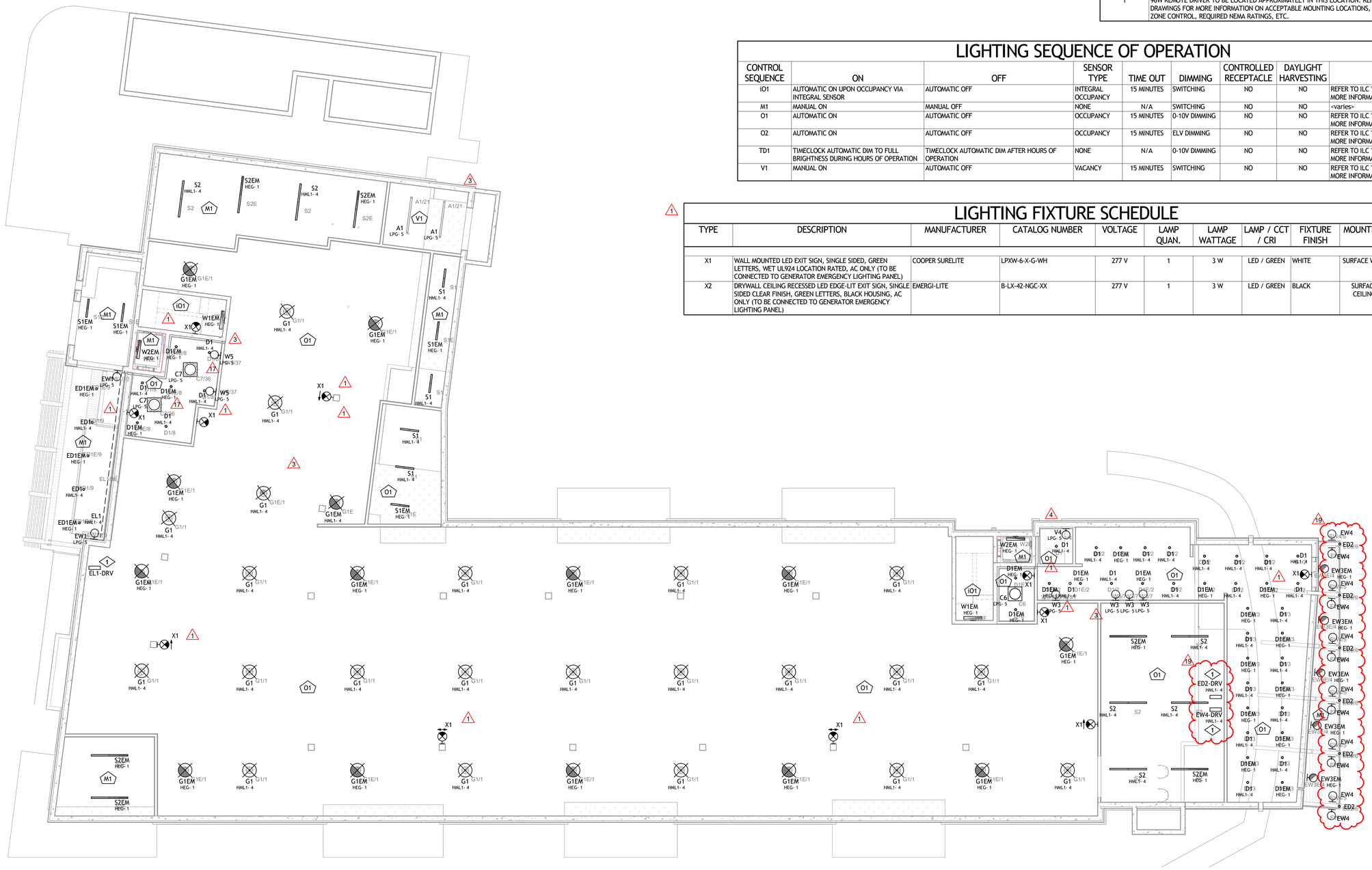
The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL ENLARGED PLANS

SHEET NO.
E2.19

1/8/2025 9:55:21 AM



1 | ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 00

E3.00 | 3/32" = 1'-0"

NORTH

7/8/2024 1:48:16 PM

LIGHTING GENERAL NOTES

A.	LIGHTING IS SHOWN FOR CIRCUITING PURPOSES ONLY. REFERENCE ILC "EL" SERIES SHEETS FOR MORE INFORMATION ON LIGHT FIXTURES, LIGHTING CONTROLS, ETC.
B.	CIRCUIT ALL EXIT SIGNS TO NEAREST UN-SWITCHED 277-VOLT EMERGENCY LIGHTING CIRCUIT (ON PANEL HEG OR HE3 AS APPLICABLE). EXIT SIGN POWER CONNECTIONS SHALL BE CONNECTED AHEAD OF ALL SWITCH LEGS AND CONTROLS.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	96W REMOTE DRIVER TO BE LOCATED APPROXIMATELY IN THIS LOCATION. REFER TO "EL" SERIES DRAWINGS FOR MORE INFORMATION ON ACCEPTABLE MOUNTING LOCATIONS, QUANTITIES, FIXTURE ZONE CONTROL, REQUIRED NEMA RATINGS, ETC.

LIGHTING SEQUENCE OF OPERATION

CONTROL SEQUENCE	ON	OFF	SENSOR TYPE	TIME OUT	DIMMING	CONTROLLED RECEPTACLE	DAYLIGHT HARVESTING	NOTES
iO1	AUTOMATIC ON UPON OCCUPANCY VIA INTEGRAL SENSOR	AUTOMATIC OFF	INTEGRAL OCCUPANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
M1	MANUAL ON	MANUAL OFF	NONE	N/A	SWITCHING	NO	NO	<varies>
O1	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O2	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	ELV DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
TD1	TIMECLOCK AUTOMATIC DIM TO FULL BRIGHTNESS DURING HOURS OF OPERATION	TIMECLOCK AUTOMATIC DIM AFTER HOURS OF OPERATION	NONE	N/A	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
V1	MANUAL ON	AUTOMATIC OFF	VACANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMP QUAN.	LAMP WATTAGE	LAMP / CCT / CRI	FIXTURE FINISH	MOUNTING	BOF/RFD/OFH
X1	WALL MOUNTED LED EXIT SIGN, SINGLE SIDED, GREEN LETTERS, WET UL924 LOCATION RATED, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	COOPER SURELITE	LPXW-6-X-G-WH	277 V	1	3 W	LED / GREEN	WHITE	SURFACE WALL	BOF 6" ABOVE DOOR FRAME
X2	DRYWALL CEILING RECESSED LED EDGE-LIT EXIT SIGN, SINGLE SIDED CLEAR FINISH, GREEN LETTERS, BLACK HOUSING, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	EMERGI-LITE	B-LX-42-NGC-XX	277 V	1	3 W	LED / GREEN	BLACK	SURFACE CEILING	BOF 6" ABOVE DOOR FRAME

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024
9	RFI #30	04.12.2024
17	RFI #135	07.02.2024
19	RFI #141	07.08.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

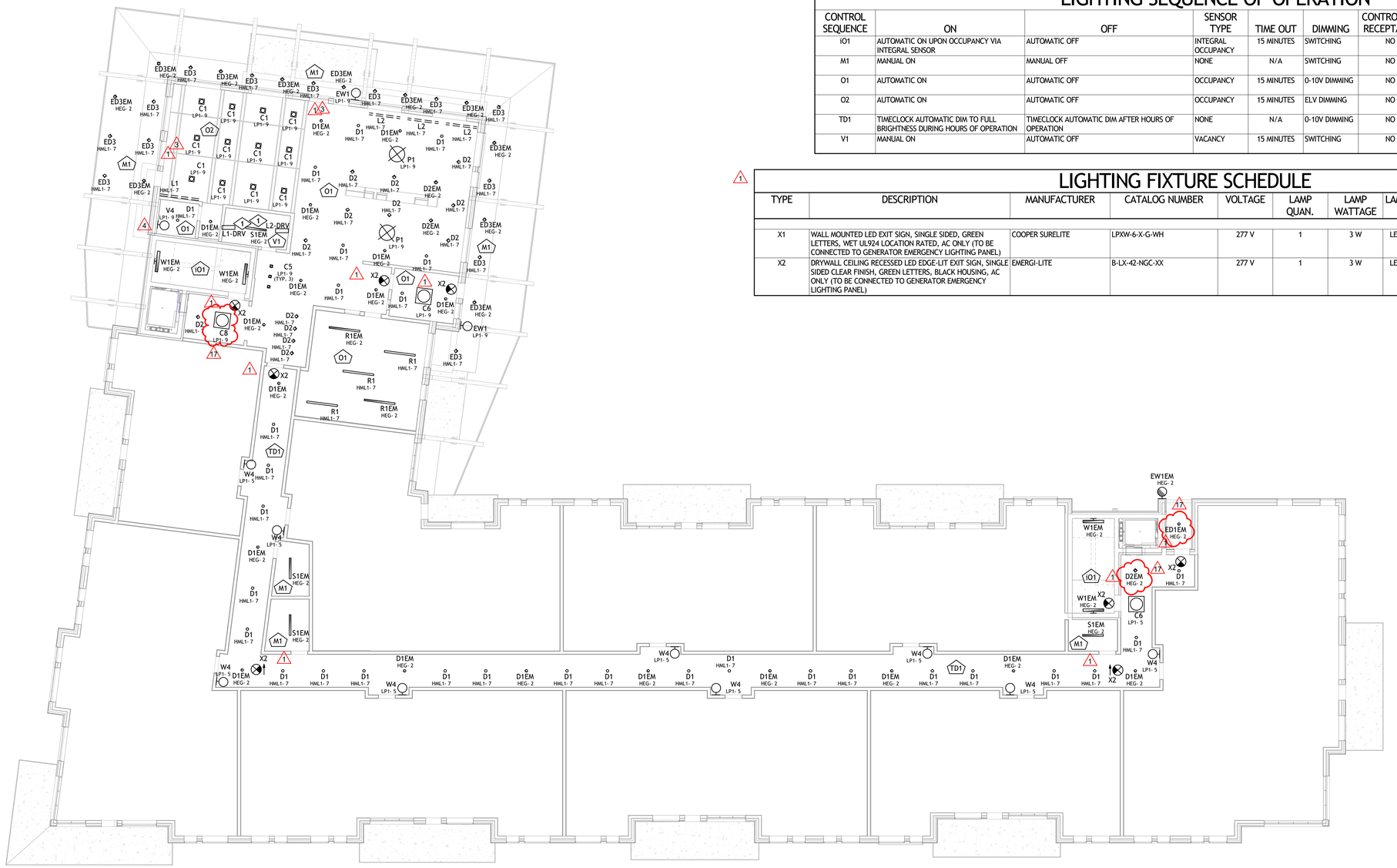
IFC SET

SHEET TITLE

ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 00

SHEET NO.

E3.00



1 | ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 01
E3.01 | 3/32" = 1'-0"

NORTH

7/2/2024 11:29:18 AM

LIGHTING GENERAL NOTES

A.	LIGHTING IS SHOWN FOR CIRCUITING PURPOSES ONLY. REFERENCE ILC "EL" SERIES SHEETS FOR MORE INFORMATION ON LIGHT FIXTURES, LIGHTING CONTROLS, ETC.
B.	CIRCUIT ALL EXIT SIGNS TO NEAREST UN-SWITCHED 277-VOLT EMERGENCY LIGHTING CIRCUIT (ON PANEL HEG OR HE3 AS APPLICABLE). EXIT SIGN POWER CONNECTIONS SHALL BE CONNECTED AHEAD OF ALL SWITCH LEGS AND CONTROLS.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	96W REMOTE DRIVER TO BE LOCATED APPROXIMATELY IN THIS LOCATION. REFER TO "EL" SERIES DRAWINGS FOR MORE INFORMATION ON ACCEPTABLE MOUNTING LOCATIONS, QUANTITIES, FIXTURE ZONE CONTROL, REQUIRED NEMA RATINGS, ETC.

LIGHTING SEQUENCE OF OPERATION

CONTROL SEQUENCE	ON	OFF	SENSOR TYPE	TIME OUT	DIMMING	CONTROLLED RECEPTACLE	DAYLIGHT HARVESTING	NOTES
iO1	AUTOMATIC ON UPON OCCUPANCY VIA INTEGRAL SENSOR	AUTOMATIC OFF	INTEGRAL OCCUPANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
M1	MANUAL ON	MANUAL OFF	NONE	N/A	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O1	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O2	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	ELV DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
TD1	TIMECLOCK AUTOMATIC DIM TO FULL BRIGHTNESS DURING HOURS OF OPERATION	TIMECLOCK AUTOMATIC DIM AFTER HOURS OF OPERATION	NONE	N/A	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
V1	MANUAL ON	AUTOMATIC OFF	VACANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMP QUAN.	LAMP WATTAGE	LAMP / CCT / CRI	FIXTURE FINISH	MOUNTING	BOF/RFD/OFH
X1	WALL MOUNTED LED EXIT SIGN, SINGLE SIDED, GREEN LETTERS, WET UL924 LOCATION RATED, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	COOPER SURELITE	LPXW-6-X-G-WH	277 V	1	3 W	LED / GREEN	WHITE	SURFACE WALL	BOF 6" ABOVE DOOR FRAME
X2	DRYWALL CEILING RECESSED LED EDGE-LIT EXIT SIGN, SINGLE SIDED CLEAR FINISH, GREEN LETTERS, BLACK HOUSING, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	EMERGI-LITE	B-LX-42-NGC-XX	277 V	1	3 W	LED / GREEN	BLACK	SURFACE CEILING	BOF 6" ABOVE DOOR FRAME

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	RFI #32	03.15.2024
4	RFI #38	04.12.2024
17	RFI #135	07.22.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 01

SHEET NO.

E3.01

LIGHTING GENERAL NOTES

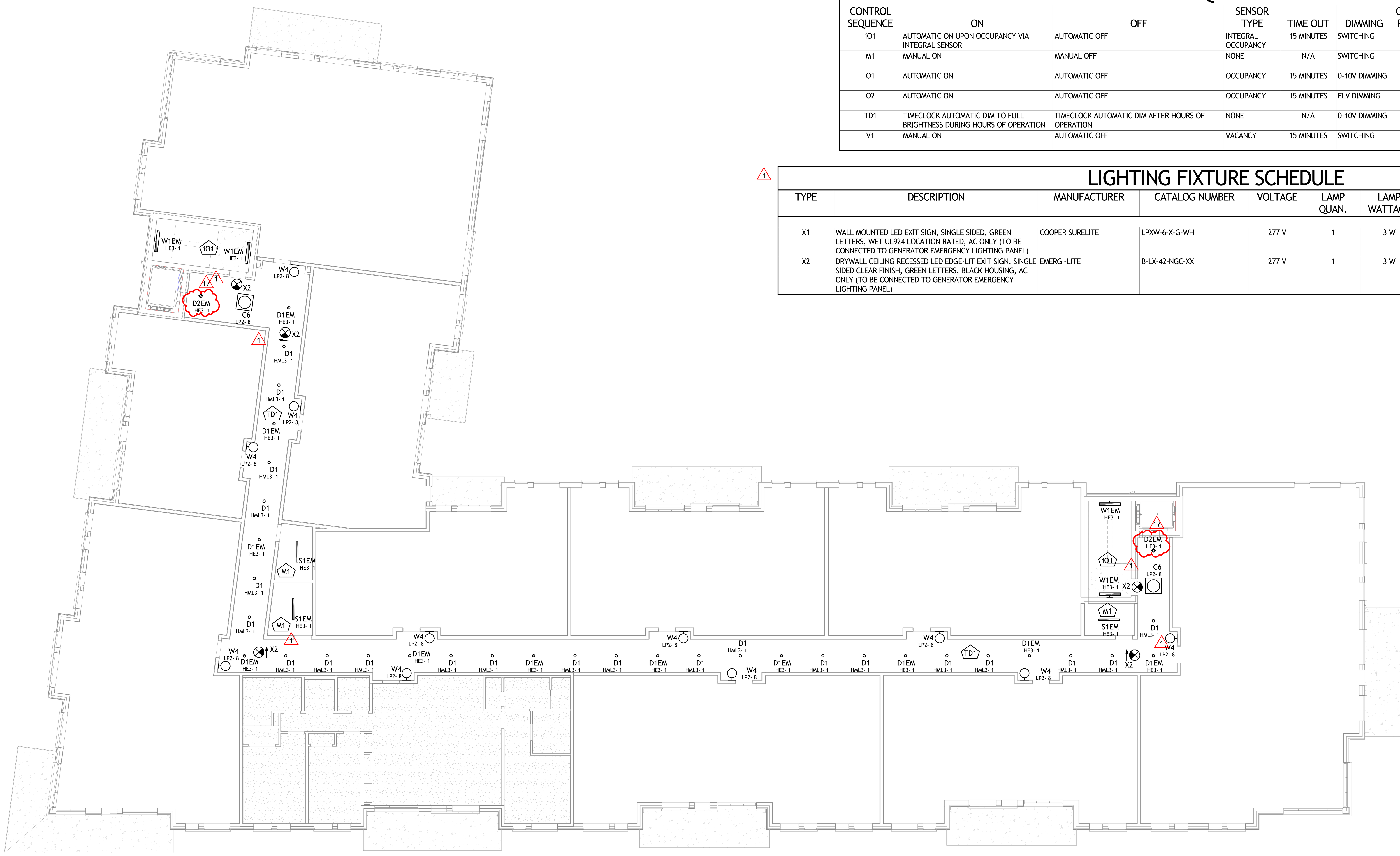
A.	LIGHTING IS SHOWN FOR CIRCUITING PURPOSES ONLY. REFERENCE ILC "EL" SERIES SHEETS FOR MORE INFORMATION ON LIGHT FIXTURES, LIGHTING CONTROLS, ETC.
B.	CIRCUIT ALL EXIT SIGNS TO NEAREST UN-SWITCHED 277-VOLT EMERGENCY LIGHTING CIRCUIT (ON PANEL HEG OR HE3 AS APPLICABLE). EXIT SIGN POWER CONNECTIONS SHALL BE CONNECTED AHEAD OF ALL SWITCH LEGS AND CONTROLS.

LIGHTING SEQUENCE OF OPERATION

CONTROL SEQUENCE	ON	OFF	SENSOR TYPE	TIME OUT	DIMMING	CONTROLLED RECEPTACLE	DAYLIGHT HARVESTING	NOTES
IO1	AUTOMATIC ON UPON OCCUPANCY VIA INTEGRAL SENSOR	AUTOMATIC OFF	INTEGRAL OCCUPANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
M1	MANUAL ON	MANUAL OFF	NONE	N/A	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O1	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O2	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	ELV DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
TD1	TIMECLOCK AUTOMATIC DIM TO FULL BRIGHTNESS DURING HOURS OF OPERATION	TIMECLOCK AUTOMATIC DIM AFTER HOURS OF OPERATION	NONE	N/A	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
V1	MANUAL ON	AUTOMATIC OFF	VACANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMP QUAN.	LAMP WATTAGE	LAMP / CCT / CRI	FIXTURE FINISH	MOUNTING	BOF/RFD/OFH
X1	WALL MOUNTED LED EXIT SIGN, SINGLE SIDED, GREEN LETTERS, WET UL924 LOCATION RATED, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	COOPER SURELITE	LPXW-6-X-G-WH	277 V	1	3 W	LED / GREEN	WHITE	SURFACE WALL	BOF 6" ABOVE DOOR FRAME
X2	DRYWALL CEILING RECESSED LED EDGE-LIT EXIT SIGN, SINGLE SIDED CLEAR FINISH, GREEN LETTERS, BLACK HOUSING, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	EMERGI-LITE	B-LX-42-NGC-XX	277 V	1	3 W	LED / GREEN	BLACK	SURFACE CEILING	BOF 6" ABOVE DOOR FRAME



1 ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 02
E3.02 3/32" = 1'-0"

NORTH

COLORADO REGISTERED JON BROOKS 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
17	RFI #135	07.02.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 02

SHEET NO.
E3.02

LIGHTING GENERAL NOTES

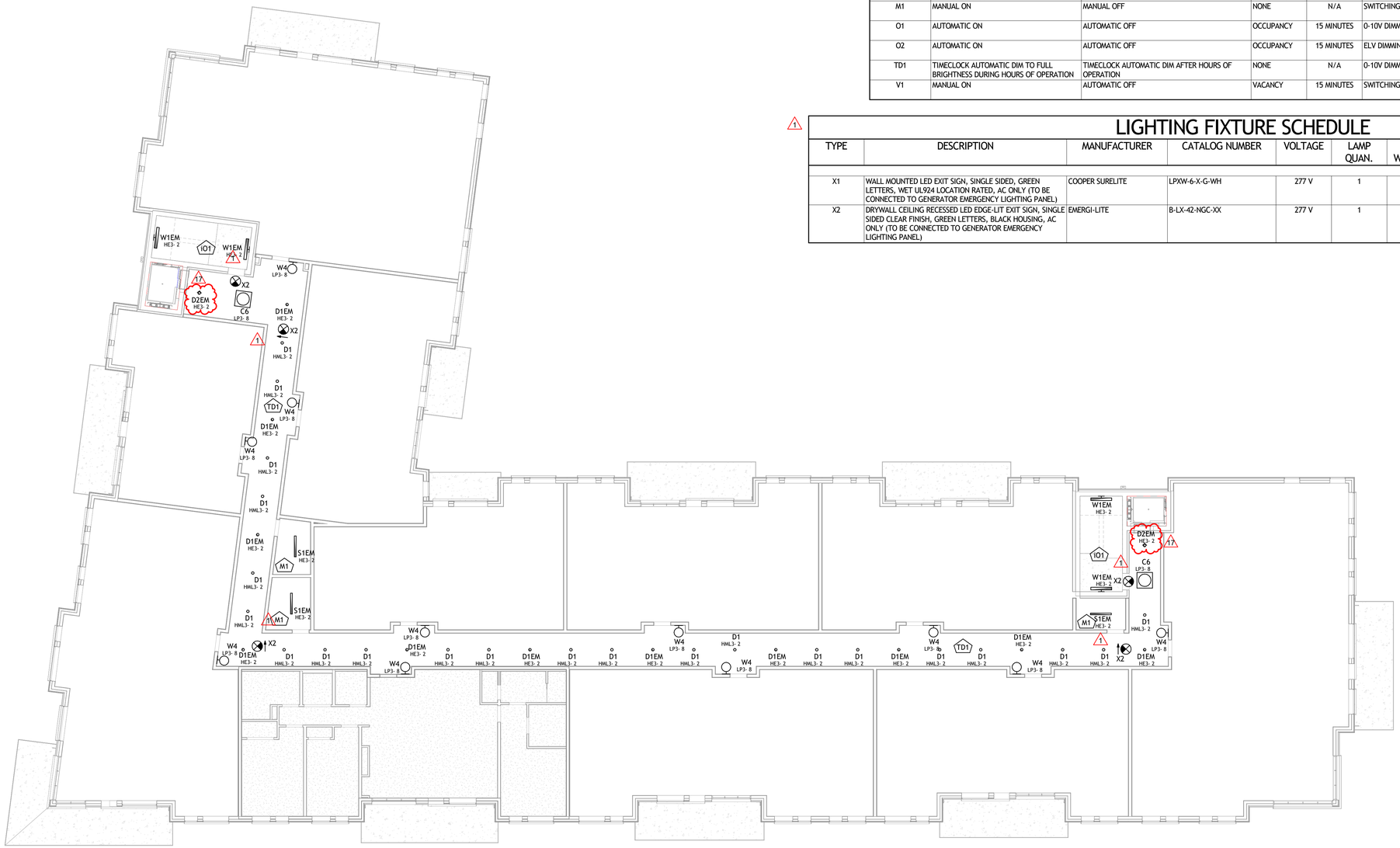
A.	LIGHTING IS SHOWN FOR CIRCUITING PURPOSES ONLY. REFERENCE ILC "EL" SERIES SHEETS FOR MORE INFORMATION ON LIGHT FIXTURES, LIGHTING CONTROLS, ETC.
B.	CIRCUIT ALL EXIT SIGNS TO NEAREST UN-SWITCHED 277-VOLT EMERGENCY LIGHTING CIRCUIT (ON PANEL HEG OR HE3 AS APPLICABLE). EXIT SIGN POWER CONNECTIONS SHALL BE CONNECTED AHEAD OF ALL SWITCH LEGS AND CONTROLS.

LIGHTING SEQUENCE OF OPERATION

CONTROL SEQUENCE	ON	OFF	SENSOR TYPE	TIME OUT	DIMMING	CONTROLLED RECEPTACLE	DAYLIGHT HARVESTING	NOTES
iO1	AUTOMATIC ON UPON OCCUPANCY VIA INTEGRAL SENSOR	AUTOMATIC OFF	INTEGRAL OCCUPANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
M1	MANUAL ON	MANUAL OFF	NONE	N/A	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O1	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O2	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	ELV DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
TD1	TIMECLOCK AUTOMATIC DIM TO FULL BRIGHTNESS DURING HOURS OF OPERATION	TIMECLOCK AUTOMATIC DIM AFTER HOURS OF OPERATION	NONE	N/A	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
V1	MANUAL ON	AUTOMATIC OFF	VACANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMP QUAN.	LAMP WATTAGE	LAMP / CCT / CRI	FIXTURE FINISH	MOUNTING	BOF/RFD/OFH
X1	WALL MOUNTED LED EXIT SIGN, SINGLE SIDED, GREEN LETTERS, WET UL924 LOCATION RATED, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	COOPER SURELITE	LPXW-6-X-G-WH	277 V	1	3 W	LED / GREEN	WHITE	SURFACE WALL	BOF 6" ABOVE DOOR FRAME
X2	DRYWALL CEILING RECESSED LED EDGE-LIT EXIT SIGN, SINGLE SIDED CLEAR FINISH, GREEN LETTERS, BLACK HOUSING, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	EMERGI-LITE	B-LX-42-NGC-XX	277 V	1	3 W	LED / GREEN	BLACK	SURFACE CEILING	BOF 6" ABOVE DOOR FRAME



1 | ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 03
E3.03 | 3/32" = 1'-0"

NORTH

COLORADO REGISTERED BRODOVE 35717 PROFESSIONAL ENGINEER
2/18/2025
TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
17	RFI #135	07.02.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

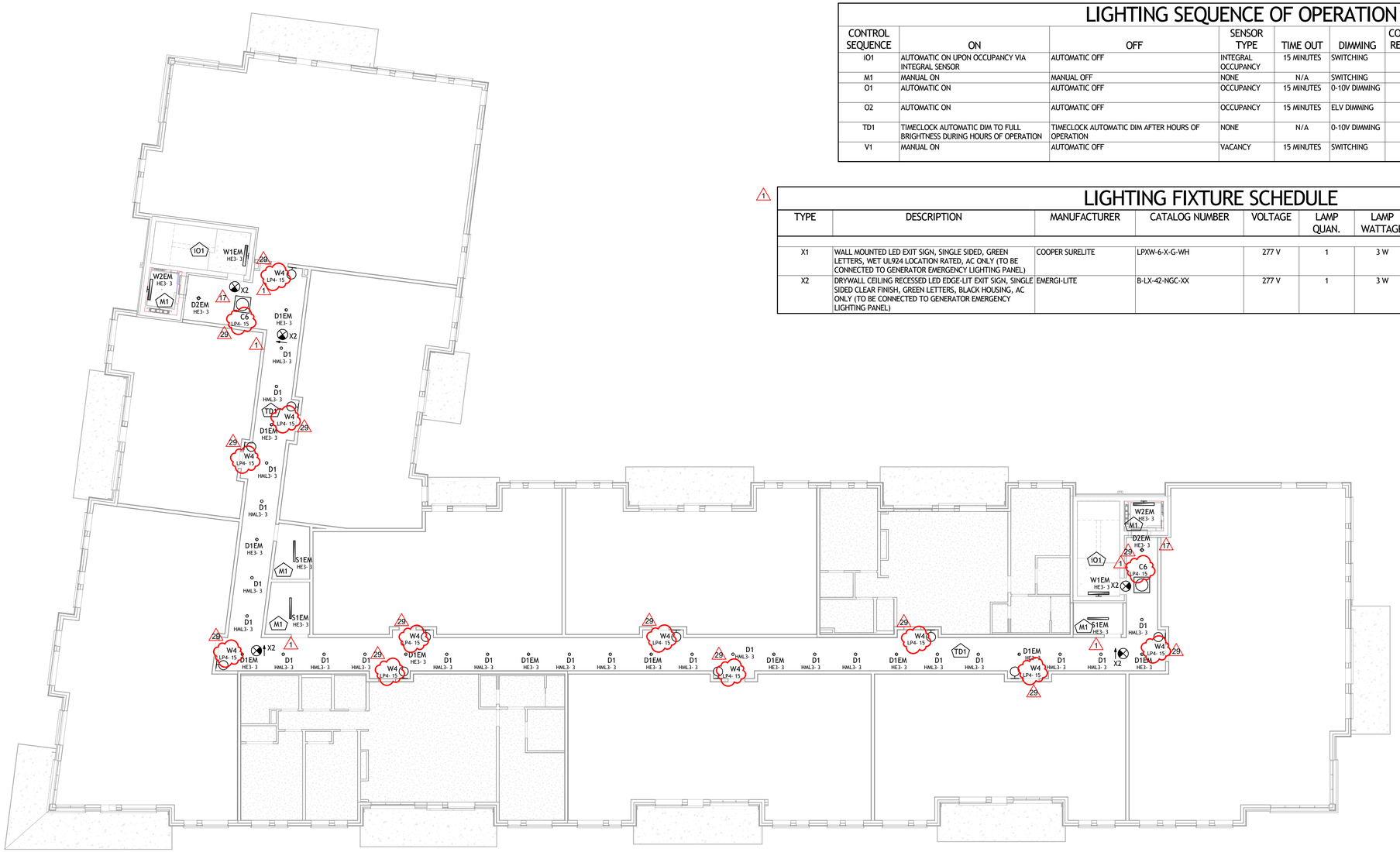
SHEET TITLE

ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 03

SHEET NO.

E3.03

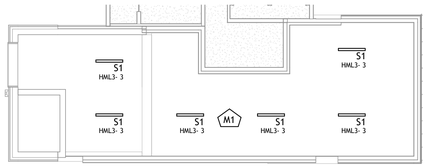
7/2/2024 11:29:22 AM



1 | ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 04

E3.04 | 3/32" = 1'-0"

NORTH



18

2 | ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL DORMER

E3.04 | 3/32" = 1'-0"

LIGHTING GENERAL NOTES

1

A.	LIGHTING IS SHOWN FOR CIRCUITING PURPOSES ONLY. REFERENCE ILC "EL" SERIES SHEETS FOR MORE INFORMATION ON LIGHT FIXTURES, LIGHTING CONTROLS, ETC.
B.	CIRCUIT ALL EXIT SIGNS TO NEAREST UN-SWITCHED 277-VOLT EMERGENCY LIGHTING CIRCUIT (ON PANEL HEG OR HE3 AS APPLICABLE). EXIT SIGN POWER CONNECTIONS SHALL BE CONNECTED AHEAD OF ALL SWITCH LEGS AND CONTROLS.

LIGHTING SEQUENCE OF OPERATION

CONTROL SEQUENCE	ON	OFF	SENSOR TYPE	TIME OUT	DIMMING	CONTROLLED RECEPTACLE	DAYLIGHT HARVESTING	NOTES
IO1	AUTOMATIC ON UPON OCCUPANCY VIA INTEGRAL SENSOR	AUTOMATIC OFF	INTEGRAL OCCUPANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
M1	MANUAL ON	MANUAL OFF	NONE	N/A	SWITCHING	NO	NO	<varies>
O1	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
O2	AUTOMATIC ON	AUTOMATIC OFF	OCCUPANCY	15 MINUTES	ELV DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
TD1	TIMECLOCK AUTOMATIC DIM TO FULL BRIGHTNESS DURING HOURS OF OPERATION	TIMECLOCK AUTOMATIC DIM AFTER HOURS OF OPERATION	NONE	N/A	0-10V DIMMING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION
V1	MANUAL ON	AUTOMATIC OFF	VACANCY	15 MINUTES	SWITCHING	NO	NO	REFER TO ILC 'EL' SERIES DRAWINGS FOR MORE INFORMATION

1

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMP QUAN.	LAMP WATTAGE	LAMP / CCT / CRI	FIXTURE FINISH	MOUNTING	BOF/RFD/OFH
X1	WALL MOUNTED LED EXIT SIGN, SINGLE SIDED, GREEN LETTERS, WET UL924 LOCATION RATED, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	COOPER SURELITE	LPXW-6-X-G-WH	277 V	1	3 W	LED / GREEN	WHITE	SURFACE WALL	BOF 6" ABOVE DOOR FRAME
X2	DRYWALL CEILING RECESSED LED EDGE-LIT EXIT SIGN, SINGLE SIDED CLEAR FINISH, GREEN LETTERS, BLACK HOUSING, AC ONLY (TO BE CONNECTED TO GENERATOR EMERGENCY LIGHTING PANEL)	EMERGI-LITE	B-LX-42-NGC-XX	277 V	1	3 W	LED / GREEN	BLACK	SURFACE CEILING	BOF 6" ABOVE DOOR FRAME

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.310.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

COLORADO REGISTERED BRODOVE 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

The Amble

Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
17	RFI #135	07.02.2024
18	RFI #136	07.02.2024
29	ASI-005	08.14.2024

PROJECT NUMBER 20019

ISSUE DATE 03/19/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL LIGHTING CIRCUITING PLAN - LEVEL 04 & 05

18

SHEET NO.

E3.04

8/14/2024 3:05:53 PM

ALUMINUM WIRING ALTERNATE:

PROVIDE DEDUCT ALTERNATE PRICING FOR ALUMINUM CONDUCTORS FOR DISTRIBUTION FEEDERS AND WIRING RATED 100-AMPS AND LARGER. PRICING SHALL INCLUDE ASSOCIATED CONDUIT SIZES REQUIRED TO ACCOMMODATE. THE USE OF ALUMINUM WIRING AS AN ALTERNATE TO COPPER SHALL BE APPROVED BY OWNER AND ELECTRICAL ENGINEER IN WRITING PRIOR TO COMMENCING WORK. IF ACCEPTED, ALUMINUM CONDUCTOR WIRING SHALL BE ACCEPTABLE FOR DISTRIBUTION WIRING RATED 100-AMPS AND LARGER ONLY. ALL ALUMINUM WIRING TERMINATIONS SHALL BE MADE WITH APPROPRIATE CONNECTORS, HARDWARE AND OTHER MATERIALS AND COMPONENTS LISTED AND RATED FOR ALUMINUM WIRING CONNECTIONS AS REQUIRED PER NEC. ALUMINUM WIRING AND TERMINATIONS SHALL BE INSTALLED ACCORDING TO LATEST NECA/AA-104 STANDARDS AND REQUIREMENTS. SEE ONE-LINE DIAGRAM AND ALUMINUM FEEDER SCHEDULE FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL COORDINATE INSTALLED WIRING TYPE/MATERIALS WITH LIGHTNING PROTECTION SYSTEM WIRING AND GROUNDING SYSTEM WIRING AS APPLICABLE.

SELECTIVE COORDINATION NOTE:

PROVIDE SELECTIVE COORDINATION ANALYSIS PER NEC 620, 700, AND 701. PROVIDE SUBMITTAL TO THE ENGINEER FOR REVIEW AND APPROVAL, PRIOR TO COMPLETION OF THIS PROJECT, PROVIDE A WRITTEN STATEMENT TO THE ENGINEER AND OWNER CONFIRMING THAT PROTECTIVE DEVICE SETTINGS HAVE BEEN ADJUSTED PER THE STUDY AND SELECTIVE COORDINATION HAS BEEN ACHIEVED.

UTILITY METERING NOTES

CT METERING EQUIPMENT SHALL BE INSTALLED ACCORDING TO YAMPA VALLEY ELECTRIC ASSOCIATION (YVEA) UTILITY ELECTRIC SERVICE REQUIREMENTS AND EC SHALL PROVIDE UL-LISTED BAR-MOUNTED CT CABINET WITH ALL NECESSARY PROVISIONS, CONNECTORS, CLEARANCES, MOUNTING HARDWARE, AND ACCESS AS REQUIRED BY UTILITY. EC SHALL FURNISH AND INSTALL THE REQUIRED METER HOUSING AS COORDINATED WITH YVEA. UTILITY SHALL FURNISH, INSTALL, AND CONNECT THE METER IN THAT HOUSING. METER AT SECONDARY CONNECTION CABINET SHALL BE PROVIDED AND INSTALLED BY YVEA. ALL COSTS FOR WORK DESCRIBED ABOVE TO BE PERFORMED BY UTILITY SHALL BE PAID BY THE OWNER. EC SHALL COORDINATE EXACT METERING REQUIREMENTS AND INSTALLATION, INCLUDING METER LOCATION, WITH UTILITY COMPANY (YVEA) PRIOR TO COMMENCING WORK.

ELECTRICAL REQUIREMENTS FOR ELEVATORS

1. E.C. SHALL COORDINATE WITH ELEVATOR SHOP DRAWINGS ALL ELECTRICAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO, ELEVATOR HORSEPOWER, MAXIMUM OVERCURRENT DEVICE, MINIMUM WIRE SIZE, OPERATING VOLTAGE AND PROMPTLY ADVISE ELECTRICAL ENGINEER SO THAT MODIFICATIONS CAN BE MADE PRIOR TO ROUGH IN.
2. E.C. SHALL PROVIDE PIT LIGHTS AND SWITCH, CONVENIENCE OUTLETS PER CAR WITH GFCI PROTECTION TO MEET NEC REQUIREMENTS.
3. E.C. SHALL PROVIDE DEDICATED 120 VOLT 20 AMP SERVICE ALONG WITH TELEPHONE CIRCUIT WHEN REQUIRED TO TERMINALS OF EACH REQUIRED CONTROLLER FOR THE FOLLOWING:
   A. KEYED SWITCH FOR CAR LIGHTS
   B. ALARM CIRCUIT WITH GFCI PROTECTION
   C. GROUP CONTRO WHEN/IF REQUIRED.
   D. BACK UP POWER IF STANDBY POWER IS SUPPLIED TO ELEVATOR.
4. IF BATTERY OPERATED LOWERING IS PROVIDED, E.C. SHALL PROVIDE ELEVATOR ROOM DISCONNECT WITH AUXILIARY CONTACTS CONFIGURED AS SPST AT 1 AMP 120 VOLT. THE CONTACTS SHALL BE OPEN WHEN DISCONNECTING MEANS IS IN THE OPEN POSITION.
5. E.C. SHALL PROVIDE SMOKE AND/OR THERMAL DETECTION IN ELEVATOR PIT AND TOP OF ELEVATOR SHAFT, MACHINE ROOM AND IN FRONT OF ELEVATOR DOORS AS REQUIRED BY ELEVATOR MACHINE CODE, BUILDING CODES, THE NEC AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.

GENERAL NOTES

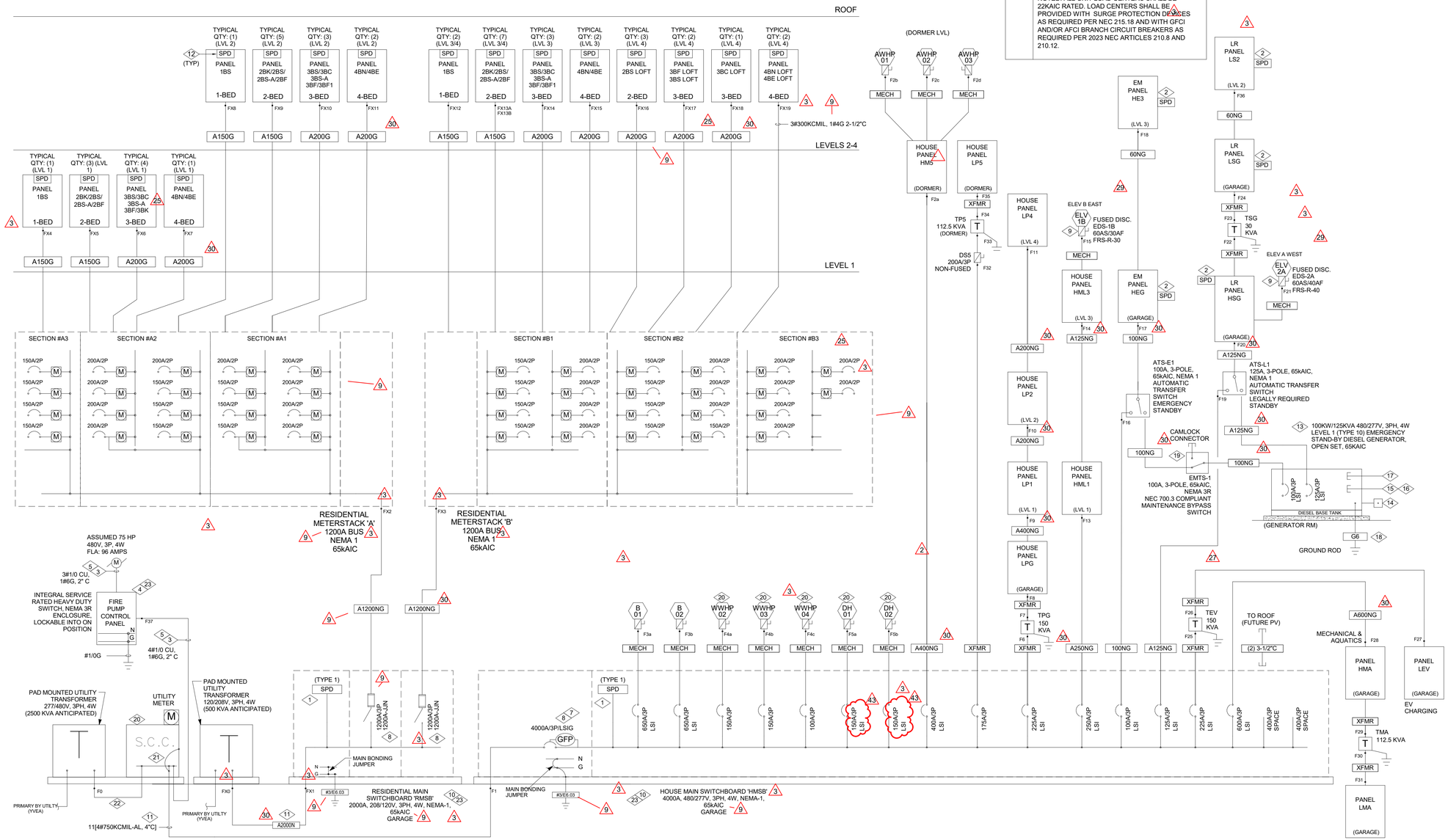
A. ALL UNIT LOAD CENTERS SHALL BE 208/120V, 1PH, 3W, 125A BUS, 125A/2P MAIN CIRCUIT BREAKER, 42-CIRCUIT PANELBOARDS UNLESS OTHERWISE NOTED. ALL UNIT LOAD CENTERS SHALL BE 22KAIC RATED. LOAD CENTERS SHALL BE PROVIDED WITH SURGE PROTECTION DEVICES AS REQUIRED PER NEC 215.18 AND WITH GFCI AND/OR AFCI BRANCH CIRCUIT BREAKERS AS REQUIRED PER 2023 NEC ARTICLES 210.8 AND 210.12.

KEYNOTE LEGEND

KEY VALUE	
20.	SECONDARY CONNECTION CABINET (S.C.C.), CT METERING PROVISIONS, AND UNDERGROUND VAULT, AND CONCRETE PAD FOR UTILITY TRANSFORMER AND S.C.C. PROVIDED AND INSTALLED BY THE CONTRACTOR PER UTILITY REQUIREMENTS. S.C.C. TO BE RATED A MINIMUM OF 4000A, 277/480V, 3PH, 4W, 65KAIC, NEMA 3R.
21.	BOND SCC METAL ENCLOSURE TO THE GROUND SYSTEM CONDUCTOR (NEUTRAL) PER NEC 250.80. BONDING JUMPER TO BE 500KCMIL-AL PER TABLE 250.102(C)(1).
22.	CONDUIT AND WIRING BETWEEN TRANSFORMER SECONDARY AND SECONDARY CONNECTION CABINET (SCC) ANTICIPATED TO BE PROVIDED BY YVEA. CONTRACTOR SHALL COORDINATE EXACT INSTALLATION AND METERING REQUIREMENTS WITH YVEA.
23.	EC SHALL PROVIDE IDENTIFICATION AS REQUIRED BY 2023 NEC ARTICLE 230.2(E) FOR BUILDING WITH MULTIPLE SERVICES.

KEYNOTE LEGEND

KEY VALUE	
1.	PROVIDE TYPE 1, UL 1449 (4TH EDITION) LISTED EXTERNAL SURGE PROTECTION DEVICE (SPD) WITH 150KA PER MODE PROTECTION. PROVIDE CIRCUIT BREAKER AND WIRING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND REQUIREMENTS, INCLUDING MANUFACTURER'S LEAD LENGTHS. CURRENT TECHNOLOGY MODEL #SL3-150-480-3Y-MNB-M6E-F (OR APPROVED EQUAL).
2.	PROVIDE SURGE PROTECTION DEVICE (SPD) FOR EMERGENCY PANEL PER NEC 700.8. SPD SHALL BE EXTERNAL TO PANELBOARD AND PROVIDE 65kA/MODE PROTECTION. PROVIDE BREAKER SIZE AND WIRING PER MANUFACTURER'S RECOMMENDATIONS
3.	SERVICE CONDUCTORS TO RUN "OUTSIDE OF BUILDING" - UNDER SLAB OR CONCRETE ENCASED PER NFPA CHAPTER 20 6-3.1.1 AND NEC 695.6(A) AND (B).
4.	LISTED FIRE PUMP CONTROLLER WITH INTEGRAL SERVICE RATED MAIN DISCONNECT SWITCH, SIZED FOR PUMP LOCKED ROTOR PROTECTION PER NFPA 20, CHAPTER 10. CONTROLLER SHALL BE RATED FOR 100-HP, 208V, 3-PHASE, 60HZ, 100KAIC, NEMA 3R.
5.	RIGID METAL CONDUIT SEE NOTE 3 FOR ROUTING REQUIREMENTS.
6.	NO LONGER USED
7.	PROVIDE LSIG ELECTRONIC ADJUSTABLE TRIP CIRCUIT BREAKER WITH GROUND FAULT PROTECTION PER NEC. PROVIDE RECOMMENDED SHORT TIME (ST) LONG TIME (LT), INSTANTANEOUS (INSTA), AND GROUND FAULT (GF) CIRCUIT BREAKER SETTINGS.
8.	PROVIDE ARC ENERGY REDUCTION MAINTENANCE SETTING OR OTHER METHOD PER NEC 240.67 AND 240.87. EC TO PROVIDE COMPLIANT DOCUMENTATION FOR THE ARC ENERGY REDUCTION PER NEC 240.67 AND 240.87.
9.	PROVIDE ELEVATOR CONTROL SWITCH (EATON 'ES' SERIES, OR APPROVED EQUAL) WITH FIRE SAFETY INTERFACE RELAY, VOLTAGE MONITORING RELAY, AND AUXILIARY CONTACTS AS REQUIRED FOR FIRE ALARM SHUNT TRIP OPERATION OF ELEVATOR POWER PER NEC ARTICLE 620. EC SHALL COORDINATE EXACT DISCONNECT SIZING AND FIRE ALARM RELAY SPECIFICATION WITH THE APPROVED ELEVATOR SUBMITTALS AND FIRE ALARM SYSTEM SUBMITTALS PRIOR TO ORDERING.
10.	EACH SERVICE MAIN FUSE OR CIRCUIT BREAKER SHALL BE LOCATED WITHIN A SEPARATE VERTICAL SECTION OF THE SWITCHBOARD EQUIPMENT AND PROVIDED WITH PHYSICAL BARRIERS SEPARATING EACH MAIN/SECTION AS REQUIRED PER NEC 230.71(B).
11.	SERVICE CONDUCTORS TO RUN "OUTSIDE OF BUILDING" - UNDER SLAB OR CONCRETE ENCASED PER NEC 230.6.
12.	PROVIDE TYPE 2, UL 1449 (4TH EDITION) LISTED EXTERNAL SPD WITH 40kA/MODE PROTECTION. PROVIDE BREAKER SIZE AND WIRING PER MANUFACTURER'S INSTRUCTIONS. PROVIDE #CG40-120/240-2G OR APPROVED EQUAL.
13.	NEW DIESEL EMERGENCY LIFE-SAFETY STANDBY GENERATOR, BASIS OF DESIGN: CUMMINS 80KW/100KVA, 277/480V, 3-PHASE, (RATED 80KW AT SITE ELEVATION). PROVIDE OPEN SET (NO ENCLOSURE), QTY. (2) ADJUSTABLE CIRCUIT BREAKERS SIZED AS SHOWN, 12-HOUR STATE RATED, SUB-BASE FUEL TANK UL 142 LISTED W/ NFPA 30-37 FUEL TANK ACCESSORIES. BATTERIES W/ WARMING PADS & THERMOSTAT, COOLANT HEATER, ANY OTHER COLD WEATHER ACCESSORIES AND FUEL ADDITIVES, ANNUNCIATOR. DELIVERY TO SITE W/ OFFLOADING, INITIAL FUEL FILL AND START-UP WITH 2 HOUR LOAD BANK TESTING. PROVIDE VERTICAL DISCHARGE OPTION FOR AIR INTAKE/EXHAUST. CONTRACTOR SHALL INCLUDE THE FULL MATERIAL AND LABOR COSTS OF PROCUREMENT, INSTALLATION, AND START-UP TESTING OF GENERATOR AND ATS WITHIN BID ESTIMATE AND PRICING. CONTRACTOR IS RESPONSIBLE FOR ALL SITE PREPARATION AND CONDITIONS TO ACCOMMODATE GENERATOR DELIVERY/OFF-LOADING AND PERMITTING. CONTRACTOR SHALL INSTALL FINAL TERMINATIONS FOR LOW-VOLTAGE CONTROLS/COMMUNICATIONS CABLING AS REQUIRED BY MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL COORDINATE ALL CONTROL/COMMUNICATIONS CABLING (RACEWAY AND WIRING) INSTALLATION REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK.
14.	EC SHALL PROVIDE EPO SWITCH AND CONNECT EPO TO GENERATOR EQUIPMENT CONTROLS SUCH THAT THE EPO TURNS OFF THE GENERATOR UPON COMPRESSION AND ACTIVATES THE GENERATOR UPON RELEASE. SEE TO #1/E-010 FOR MORE INFORMATION.
15.	PROVIDE 1" CONDUIT FROM GENERATOR DIGITAL CONTROLLER TO ATS EQUIPMENT FOR GENERATOR START/STOP SIGNAL CONTROL WIRING. REFER APPROVED GENERATOR EQUIPMENT SUBMITTALS, SHOP DRAWINGS, AND INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION.
16.	PROVIDE 1" CONDUIT FROM GENERATOR DIGITAL CONTROLLER TO REMOTE ANNUNCIATOR PANEL FOR ANNUNCIATOR WIRING. REFER TO POWER PLAN AND COORDINATE WITH OWNER FOR FINAL ANNUNCIATOR LOCATION IN MONITORED AREA
17.	PROVIDE (3) 1" CONDUITS TO PANEL 'LS1' FOR BRANCH CIRCUIT WIRING FOR GENERATOR ACCESSORY EQUIPMENT INCLUDING GENERATOR BATTERY CHARGER, COOLANT/BLOCK HEATER, BATTERY WARMING PAD, ETC. REFER TO POWER PLANS FOR MORE INFORMATION.
18.	AUXILIARY GROUNDING ELECTRODE (GROUND ROD), PROVIDED ONLY AS REQUIRED BY MANUFACTURER FOR GENERATOR ENCLOSURE GROUNDING. GENERATOR GROUNDED CONDUCTOR (NEUTRAL) WIRING SHALL NOT BE SWITCHED BY 3-POLE ATS, AND SHALL INSTEAD BE SOLIDLY CONNECTED TO THE SERVICE SUPPLIED SYSTEM GROUNDED CONDUCTOR (NEUTRAL TERMINALS AT MAIN DISCONNECT), THEREFORE, THE GENERATOR IS NOT CONSIDERED A SEPARATELY DERIVED SYSTEM PER NEC. CONTRACTOR AND MANUFACTURER SHALL NOT BOND NEUTRAL AND GROUND AT GENERATOR EQUIPMENT.
19.	PROVIDE AN "ALL-IN-ONE" SOLUTION FOR COMPLIANCE WITH NEC 700.3 TEMPORARY SOURCE OF EMERGENCY POWER FOR MAINTENANCE OR REPAIR OF THE (PERMANENT) ALTERNATE SOURCE OF POWER (PERMANENT GENERATOR SET). PRODUCT SHALL CONTAIN A MANUAL TRANSFER SWITCH WITH CAM-TYPE CONNECTIONS FOR CONNECTION OF PORTABLE SOURCE OF POWER (TEMPORARY DIESEL GENSET). PRODUCT SHALL INCLUDE TRANSFER OF THE ATS START/STOP COMMANDS TO THE TEMPORARY GENERATOR. PROVIDE AN ILLUMINATED REMOTE ANNUNCIATOR ADJACENT TO THE PERMANENT GENERATOR'S REMOTE ANNUNCIATOR TO INDICATE STATUS OF PERMANENT AND TEMPORARY GENERATORS (CONNECTED VS. DISCONNECTED). CONTRACTOR SCOPE SHALL INCLUDE 'EMTS', CAM, CONNECTORS, ATS CONTROLS/TIE-IN, AND ALTERNATE ANNUNCIATOR AS INDICATED. SCOPE SHALL NOT INCLUDE PURCHASE OR INSTALLATION OF TEMPORARY MOBILE GENERATOR SET.
20.	EC SHALL VERIFY WITH MECHANICAL CONTRACTOR THAT FINAL APPROVED EQUIPMENT SHORT CIRCUIT CURRENT RATING (AIC RATING) EXCEEDS AVAILABLE FAULT CURRENT PER FAULT CALCULATIONS TABLE, SHEET E6.01



1 | ELECTRICAL ONE-LINE DIAGRAM

E6.00 | NO SCALE

COLORADO REGISTERED BRIAN BROOKS 35717 1/8/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN

3630 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble Steamboat Springs, CO

REVISIONS		
No.	Description	Date
1	GMP SUBMITTAL	01.22.2024
2	PERMIT COMMENT RESPONSE	02.08.2024
3	GMP SET REVISIONS	02.09.2024
4	IFC	03.15.2024
5	RFI #59	04.30.2024
25	RFI #186	07.29.2024
27	ASI 003	08.02.2024
29	RFI #233	08.19.2024
30	RFI #233	08.19.2024
43	ASI 007	01.08.2025

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL ONE LINE DIAGRAM

SHEET NO.

E6.00

1/9/2025 9:25:21 AM

FAULT CURRENT AND VOLTAGE DROP CALCULATION TABLE (COMMERCIAL)

POINT	LOCATION DESCRIPTION	LENGTH (L) (ft)	LOAD ON FEEDER (Amps)	Power Factor (%)	VOLTAGE (EL-L)	PHASE	WIRE SIZE	CONDUCTOR MATERIAL	CONDUCTOR TYPE	CONDUIT MATERIAL	VOLTAGE CLASS	Conductor Volt Loss	C VALUE	# OF PARALLEL RUNS	Isc AVAILABLE UPSTREAM	Isc AT EQUIP (I3ph) OR (IL-L)	% OF VOLTAGE DROP	VOLTAGE AT START (VL-L)	VOLTAGE AT END (VL-L)	POINT
F0	UTILITY XFMR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	53,100	--	480	--	F0
F1	'HMSB'	90	2974	90%	480	3	600	ALUMINUM	THREE SINGLE CONDUCTORS	STEEL	600V	95	20093	12	53,100	49,556	0.4%	480	478	F1
F2a	PANEL 'HM5'	200	222	90%	480	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	2	49,556	20,732	0.8%	478	474	F2a
F2b	AWHP-01	50	74	90%	480	3	1	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	424	4678	1	20,732	11,521	0.3%	474	473	F2b
F2c	AWHP-02	50	74	90%	480	3	1	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	424	4678	1	20,732	11,521	0.3%	474	473	F2c
F2d	AWHP-03	50	74	90%	480	3	1	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	424	4678	1	20,732	11,521	0.3%	474	473	F2d
F3a	B-01	180	520	90%	480	3	300	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	141	14922	2	49,556	23,842	1.4%	478	471	F3a
F3b	B-02	180	520	90%	480	3	300	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	141	14922	2	49,556	23,842	1.4%	478	471	F3b
F4a	WWHP-02	140	96	90%	480	3	3X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	234	9110	1	49,556	13,222	0.7%	478	475	F4a
F4b	WWHP-03	140	96	90%	480	3	3X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	234	9110	1	49,556	13,222	0.7%	478	475	F4b
F4c	WWHP-04	140	69	90%	480	3	1	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	424	4678	1	49,556	7,802	0.9%	478	474	F4c
F5a	DH-01	150	203	90%	480	3	3X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	234	9110	1	49,556	12,564	1.5%	478	471	F5a
F5b	DH-02	150	203	90%	480	3	3X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	234	9110	1	49,556	12,564	1.5%	478	471	F5b
F6	XFMR 'TPG' PRIMARY	5	168	90%	480	3	300	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	141	14922	1	49,556	46,754	0.0%	478	478	F6
F7	XFMR 'TPG' SECONDARY											---	----			10,826	---		---	F7
F8	PANEL 'LPG'	5	387	90%	208	3	500	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	96	21390	2	10,826	10,713	0.0%	208	208	F8
F9	PANEL 'LP1'	105	214	90%	208	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	2	10,713	7,853	0.880%	208	206	F9
F10	PANEL 'LP2'	20	43	90%	208	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	1	7,853	7,129	0.067%	206	206	F10
F11	PANEL 'LP4'	40	27	90%	208	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	1	7,129	6,018	0.085%	206	206	F11
F13	PANEL 'HML1'	105	94	90%	480	3	350	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	125	16812	1	49,556	23,411	0.257%	478	477	F13
F14	PANEL 'HML3'	40	52	90%	480	3	2X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	281	7301	1	23,411	16,004	0.122%	477	476	F14
F15	ELEV-1B (NOTE 5)	220	40	90%	480	3	10	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	1908	981	1	16,004	1,147	3.498%	476	459	F15
F16	ATS-E1	20	7	90%	480	3	1	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	268	7493	1	49,556	33,545	0.008%	478	478	F16
F17	PANEL 'HEG'	5	7	90%	480	3	1	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	268	7493	1	33,545	31,038	0.002%	478	478	F17
F18	PANEL 'HE3'	155	2	90%	480	3	4	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	831	2350	1	31,038	3,701	0.054%	478	478	F18
F19	ATS-L1	20	99	90%	480	3	2X	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	188	11423	1	49,556	37,740	0.078%	478	478	F19
F20	PANEL 'HSG'	15	99	90%	480	3	2X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	281	7301	1	37,740	29,490	0.087%	478	477	F20
F21	ELEV-2A (NOTE 5)	100	40	90%	480	3	8	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	1255	1558	1	29,490	3,766	1.046%	477	472	F21
F22	XFMR 'TSG' PRIMARY	135	35	90%	480	3	6	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	802	2430	1	29,490	4,267	0.801%	477	473	F22
F23	XFMR 'TSG' SECONDARY											---	----			2,445	---		---	F23
F24	PANEL 'LSG'	5	82	90%	208	3	1	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	424	4678	1	2,445	2,393	0.084%	208	208	F24
F25	XFMR 'TEV' PRIMARY	5	170	90%	480	3	300	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	141	14922	1	49,556	46,754	0.025%	478	478	F25
F26	XFMR 'TEV' SECONDARY											---	----			10,826	---		---	F26
F27	PANEL 'LEV'	25	393	90%	208	3	350	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	125	16812	2	10,826	10,146	0.295%	208	207	F27
F28	PANEL 'HMA'	160	396	90%	480	3	500	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	96	21390	2	49,556	29,696	0.634%	478	475	F28
F29	XFMR 'TMA' PRIMARY	5	86	90%	480	3	4X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	186	11174	1	29,696	28,337	0.017%	475	475	F29
F30	XFMR 'TMA' SECONDARY											---	----			6,442	---		---	F30
F31	PANEL 'LMA'	5	198	90%	208	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	2	6,442	6,376	0.039%	208	208	F31
F32	XFMR 'TP5' DISC.	180	119	90%	480	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	1	49,556	14,149	0.725%	478	474	F32
F33	XFMR 'TP5' PRIMARY	5	119	90%	480	3	4X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	186	11174	1	14,149	13,833	0.023%	474	474	F33
F34	XFMR 'TP5' SECONDARY											---	----			5,839	---		---	F34
F35	PANEL 'LP5'	5	274	90%	208	3	250	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	163	12862	2	5,839	5,784	0.054%	208	208	F35
F36	PANEL 'LS2'	175	7	90%	208	3	4	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	519	3825	1	2,393	1,252	0.306%	208	207	F36
F37	FIRE PUMP CTRL PANEL	145	96	90%	208	3	1X	ALUMINUM	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	344	5838	1	53,100	4,432	2.302%	480	469	F37

NOTES:

1. ALL CALCULATIONS WERE DONE USING BUSSMAN "POINT-TO-POINT" METHOD.
2. LET THRU TAKEN FROM BUSSMAN "CURRENT LIMITATION CURVES."
2. ALL YELLOW SQUARES REQUIRE USER INPUT.
3. VERIFY THAT THIS CELL REFERENCES THE CORRECT VALUE UPSTREAM OF THE EQUIPMENT.
4. THIS CALCULATION TABLE DOES NOT TAKE INTO ACCOUNT SECONDARY TRANSFORMERS.
5. ELEVATOR DISCONNECT SHALL BE PROVIDED WITH CURRENT LIMITING FUSING AS REQUIRED TO LIMIT AVAILABLE FAULT CURRENT TO LESS THAN 5,000 AMPS. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.

FAULT CURRENT AND VOLTAGE DROP CALCULATION TABLE

POINT	LOCATION DESCRIPTION	LENGTH (L) (ft)	LOAD ON FEEDER (Amps)	Power Factor (%)	VOLTAGE (EL-L)	PHASE	WIRE SIZE	CONDUCTOR MATERIAL	CONDUCTOR TYPE	CONDUIT MATERIAL	VOLTAGE CLASS	Conductor Volt Loss	C VALUE	# OF PARALLEL RUNS	Isc AVAILABLE UPSTREAM	f L-L	M L-L	Isc AT EQUIP (I3ph) OR (IL-L)	% OF VOLTAGE DROP	VOLTAGE AT START (VL-L)	VOLTAGE AT END (VL-L)	POINT
FX0	500KVA UTILITY XFMR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	59,400	--	208	--	FX0
FX1	'RMSB'	85	1,491	90%	208	3	400	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	91	20565	6	59,400	0.34	0.75	44,304	0.9%	208	206	FX1
FX2	METERSTACK A	20	921	90%	208	3	350	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	98	19703	4	44,304	0.09	0.91	40,512	0.2%	206	206	FX2
FX3	METERSTACK B	20	1,047	90%	208	3	350	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	98	19703	4	44,304	0.09	0.91	40,512	0.2%	206	206	FX3
FX4	1ST FLR 1 BEDROOM UNIT	80	124	90%	208	1	1X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	263	9209	1	40,512	3.38	0.23	9,241	1.3%	206	203	FX4
FX5	1ST FLR 2 BEDROOM UNIT	140	126	90%	208	1	1X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	263	9209	1	40,512	5.92	0.14	5,853	2.2%	206	201	FX5
FX6	1ST FLR 3 BEDROOM UNIT	50	157	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	1.43	0.41	16,697	0.7%	206	204	FX6
FX7	1ST FLR 4 BEDROOM UNIT	240	159	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	6.85	0.13	5,163	3.4%	206	199	FX7
FX8	2ND FLR 1 BEDROOM UNIT	90	124	90%	208	1	1X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	263	9209	1	40,512	3.81	0.21	8,428	1.4%	206	203	FX8
FX9	2ND FLR 2 BEDROOM UNIT	155	126	90%	208	1	1X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	263	9209	1	40,512	6.56	0.13	5,361	2.5%	206	200	FX9
FX10	2ND FLR 3 BEDROOM UNIT	65	157	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	1.85	0.35	14,194	0.9%	206	204	FX10
FX11	2ND FLR 4 BEDROOM UNIT	250	159	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	7.13	0.12	4,982	3.6%	206	198	FX11
FX12	3RD/4TH FLR 1 BED UNITS	100	157	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	2.85	0.26	10,516	1.4%	206	203	FX12
FX13A	3RD/4TH FLR 2 BED FLEX	110	157	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	3.14	0.24	9,791	1.5%	206	202	FX13A
FX13B	3RD/4TH FLR 2 BED UNITS	220	156	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	6.28	0.14	5,568	3.1%	206	199	FX13B
FX14	3RD FLR 3 BED UNITS	80	156	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	2.28	0.30	12,344	1.1%	206	203	FX14
FX15	3RD FLR 4 BED UNITS	260	159	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	7.42	0.12	4,813	3.7%	206	198	FX15
FX16	4TH FLR 2 BED UNITS	225	156	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	6.42	0.13	5,461	3.2%	206	199	FX16
FX17	4TH FLR 3 BED UNITS	165	182	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	4.71	0.18	7,099	2.7%	206	200	FX17
FX18	4TH FLR 3 BED CORNER UNIT	95	206	90%	208	1	3X	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	187	13656	1	40,512	2.71	0.27	10,920	1.8%	206	202	FX18
FX19	4TH FLR 4 BED UNITS	270	209	90%	208	1	300	COPPER	THREE-CONDUCTOR CABLE	STEEL	600V	125	20617	1	40,512	5.10	0.16	6,640	3.4%	206	199	FX19

NOTES:

1. ALL CALCULATIONS WERE DONE USING BUSSMAN "POINT-TO-POINT" METHOD.
2. LET THRU TAKEN FROM BUSSMAN "CURRENT LIMITATION CURVES."
2. ALL YELLOW SQUARES REQUIRE USER INPUT.
3. VERIFY THAT THIS CELL REFERENCES THE CORRECT VALUE UPSTREAM OF THE EQUIPMENT.
4. THIS CALCULATION TABLE DOES NOT TAKE INTO ACCOUNT SECONDARY TRANSFORMERS.

TRANSFORMER SCHEDULE - ALUMINUM WINDINGS (2016 DOE EFFICIENCY STANDARDS)

KVA RATING	PRIMARY FLA	SECONDARY FLA	PRIMARY PROTECTION	PRIMARY FEEDER	SECONDARY PROTECTION	SECONDARY FEEDER	GROUNDING ELECTRODE CONDUCTOR (GEC)	TRANSFORMER IMPEDANCE	APPROX. DIMENSIONS HIGH	APPROX. DIMENSIONS WIDE	APPROX. DIMENSIONS DEEP	APPROX. WEIGHT	SPECIFIC NOTES
3	3.6	8.3	15A/3P	(3#12, 1#12G) CU, 3/4"C	15A/3P	(4#12, 1#8G) CU, 3/4"C	1#8CU, 3/4"C	4.57%	15	15	11	140LBS	1,2
6	7.2	16.7	15A/3P	(3#12, 1#12G) CU, 3/4"C	20A/3P	(4#12, 1#8G) CU, 3/4"C	1#8CU, 3/4"C	4.57%	15	15	11	145LBS	1,2
9	10.8	25.0	15A/3P	(3#12, 1#12G) CU, 3/4"C	30A/3P	(4#10, 1#8G) CU, 3/4"C	1#8CU, 3/4"C	4.57%	20	20	15	245LBS	1,2
15	18.1	41.7	25A/3P	(3#10, 1#10G) CU, 3/4"C	50A/3P	(4#6, 1#8G) CU, 1-1/4"C	1#8CU, 3/4"C	3.74%	26	21.88	17.75	225LBS	
30	36.1	83.3	45A/3P	(3#6, 1#10G) CU, 1"C	100A/3P	(4#1/0, 1#6G) CU, 1-1/2"C	1#6, 3/4"C	2.74%	36.88	24.88	21.13	409LBS	
45	54.2	125.0	70A/3P	3#3, 1#6G, 1-1/4"C	150A/3P	4#3/0, 1#4, 2"C	1#4, 3/4"C	3.51%	36.88	24.88	21.13	416LBS	
75	90.3	208.3	125A/3P	3#3/0, 1#4G, 2"C	250A/3P	4#350, 1#1/0, 3"C	1#1/0G, 3/4"C	3.61%	43	30.54	24	570LBS	
112.5	135.4	312.5	175A/3P	3#4/0, 1#4G, 2-1/2"C	400A/3P	2[4#250, 1#2G, 2-1/2"C]	1#1/0G, 3/4"C	4.37%	51	34.5	31.5	976LBS	
150	180.5	416.7	225A/3P	3#300, 1#2G, 2-1/2"C	500A/3P	2[4#350, 1#1/0G, 3"C]	1#3/0G, 3/4"C	3.46%	51	34.5	31.5	1239LBS	
225	270.8	625.0	350A/3P	2[3#4/0, 1#1G, 2-1/2"C]	800A/3P	3[4#400, 1#1/0G, 3"C]	1#4/0G, 3/4"C	4.29%	60	38	33.5	1571LBS	
300	361.0	833.3	450A/3P	2[3#300, 1#1/0G, 2-1/2"C]	1000A/3P	4[4#350, 1#1/0G, 3"C]	1#4/0G, 3/4"C	4.45%	66.18	42.18	33.5	2157LBS	
500	601.7	1388.9	750A/3P	3[3#400, 1#3/0G, 3"C]	1600A/3P	6[4#400, 1#1/0G, 3"C]	1#250G, 3/4"C	4.57%	60	56	36	3450LBS	1,2
750	902.5	2083.3	1200A/3P	4[3#500, 1#250G, 3-1/2"C]	2500A/3P	9[4#500, 1#1/0G, 3"C]	1#250G, 3/4"C	4.57%	74	56	41	3950LBS	1,2

GENERAL NOTES:

A. ALL TRANSFORMERS ARE 480V, 3PHASE, DELTA PRIMARY AND 208Y/120V, 3PHASE SECONDARY.
B. ALL CONDUCTORS ARE THWN, ALUMINUM, UNLESS NOTED AS COPPER (CU). SEE PLANS FOR INCREASED CONDUCTOR SIZE DUE TO VOLTAGE DROP.
C. BONDING AND GROUNDING CONDUCTORS ARE TO BE INSTALLED PER NEC 250.30 - GROUNDING SEPERATELY DERIVED ALTERNATING CURRENT SYSTEMS.
D. WEIGHT SHOWN FOR REFERENCE ONLY, AND MAY VARY BY MANUFACTURER.

SPECIFIC NOTES:

1. TRANSFORMER IMPEDANCE IS THE ASSUMED VALUE AND IS USED FOR FAULT-CURRENT CALCULATIONS. IF SUBMITTED TRANSFORMER IS OF A DIFFERENT VALUE, REVISED CALCULATIONS MAY BE REQUIRED.
2. EC TO FIELD VERIFY WEIGHTS OF NON DOE 2016 AS THEY MAY VARY BY MANUFACTURER.

FEEDER SCHEDULE (ALUMINUM)

KEY/ AMPS	FEEDER CONDUIT AND CONDUCTORS	KEY/ AMPS	FEEDER CONDUIT AND CONDUCTORS
SERVICE ENTRANCE FEEDERS		SDS XFMR FEEDERS (NOTE 1)	
A400N	2[4#250, 3"C]	A150S	4#3/0, 1#1/0G, 2-1/2"C
A600N	2[4#500, 3-1/2"C]	A250S	4#350, 1#1/0G, 3"C
A800N	3[4#400, 3"C]	A400S	2[4#250, 1#3/0G, 3"C]
A1000N	4[4#350, 3"C]	A500S	2[4#350, 1#3/0G, 3"C]
A1200N	4[4#500, 3"C]	A800S	3[4#400, 1#250G, 3"C]
A1600N	6[4#400, 3"C]	A1000S	4[4#350, 1#3/0G, 3"C]
A2000N	6[4#600, 3-1/2"C]	A1600S	6[4#400, 1#3/0G, 3"C]
A2500N	9[4#500, 3-1/2"C]	A2500S	9[4#500, 1#3/0G, 3-1/2"C]
A3000N	10[4#500, 3-1/2"C]		
A3500N	12[4#350, 3"C]		
A4000N	12[4#600, 3-1/2"C]		
EQUIPMENT FEEDERS			
A20NG	4#10, 1#10G, 3/4"C	A20G	3#10, 1#10G, 3/4"C
A30NG	4#8, 1#8G, 1"C	A30G	3#8, 1#8G, 1"C
A40NG	4#8, 1#8G, 1"C	A40G	3#8, 1#8G, 1"C
A50NG	4#6, 1#8G, 1"C	A50G	3#6, 1#8G, 1"C
A60NG	4#4, 1#8G, 1-1/4"C	A60G	3#4, 1#8G, 1-1/4"C
A70NG	4#3, 1#6G, 1-1/2"C	A70G	3#3, 1#6G, 1-1/2"C
A100NG	4#1, 1#6G, 1-1/2"C	A100G	3#1, 1#6G, 1-1/2"C
A125NG	4#2/0, 1#4G, 2"C	A125G	3#2/0, 1#4G, 1-1/2"C
A150NG	4#3/0, 1#4G, 2"C	A150G	3#3/0, 1#4G, 1-1/2"C
A175NG	4#4/0, 1#4G, 2"C	A175G	3#4/0, 1#4G, 2"C
A200NG	4#250, 1#4G, 2-1/2"C	A200G	3#250, 1#4G, 2"C
A225NG	4#300, 1#2G, 2-1/2"C	A225G	3#300, 1#2G, 2"C
A250NG	4#350, 1#2G, 3"C	A250G	3#350, 1#2G, 2-1/2"C
A300NG	4#500, 1#2G, 3"C	A300G	3#500, 1#2G, 3"C
A350NG	4#600, 1#1G, 3-1/2"C	A350G	3#600, 1#1G, 3"C
A400NG	2[4#250, 1#1G, 2-1/2"C]	A400G	2[3#250, 1#1G, 2"C]
A450NG	2[4#300, 1#1/0G, 2-1/2"C]	A450G	2[3#300, 1#1/0G, 2-1/2"C]
A500NG	2[4#350, 1#1/0G, 3"C]	A500G	2[3#350, 1#1/0G, 2'-1/2"C]
A600NG	2[4#500, 1#2/0G, 3"C]	A600G	2[4#500, 1#2/0G, 3"C]
A700NG	3[4#350, 1#3/0G, 3"C]	A700G	3[3#350, 1#3/0G, 3"C]
A800NG	3[4#400, 1#3/0G, 3"C]	A800G	3[4#400, 1#3/0G, 2-1/2"C]
A1000NG	3[4#600, 1#4/0G, 3-1/2"C]	A1000G	3[3#600, 1#4/0G, 3"C]
A1200NG	4[4#500, 1#250G, 3-1/2"C]	A1200G	6[3#400, 1#350G, 3"C]
A1600NG	6[4#400, 1#350G, 3"C]	A1600G	6[3#400, 1#350G, 3"C]
A2000NG	3[4#600, 1#400G, 3-1/2"C]	A2000G	6[4#600, 1#400G, 3-1/2"C]
A4000NG	12[4#600, 1#400G, 3-1/2"C]		
GROUNDING CONDUCTORS		ABBREVIATIONS	
AG8	1#8, 3/4" C	MECH	SEE MECH SCHEDULE
AG6	1#6, 3/4" C	XFMR	SEE XFMR SCHEDULE
AG4	1#4, 3/4" C		
AG2	1#2, 3/4" C		
AG10	1-1/0, 3/4" C		
AG20	1-2/0, 3/4" C		
AG30	1-3/0, 3/4" C		

NOTES:

1. FEEDER FOR SECONDARY OF SEPARATELY DERIVED SYSTEM (SDS). GROUND SIZE PER NEC 250.66.
2. ALL CONDUCTORS ARE SINGLE CONDUCTOR ALUMINUM THWN UNLESS NOTED OTHERWISE. AMPACITY BASED ON NEC TABLE 310.16.
3. ALL CONDUITS ARE EMT UNLESS NOTED OTHERWISE, FILL RATIOS BASED ON NEC ANNEX C TABLE C1.

FEEDER SCHEDULE

KEY/ AMPS	FEEDER CONDUIT AND CONDUCTORS	KEY/ AMPS	FEEDER CONDUIT AND CONDUCTORS
SERVICE ENTRANCE FEEDERS		SDS XFMR FEEDERS (NOTE 1)	
400N	2[4#3/0, 2"C]	30S	4#10, 1#8G, 3/4"C
600N	2[4#350, 3"C]	50S	4#6, 1#8G, 1-1/4"C
800N	2[4#500, 3-1/2"C]	100S	4#1, 1#6G, 1-1/2"C
1000N	3[4#400, 3-1/2"C]	150S	4#1/0, 1#6G, 2"C
1200N	4[4#350, 3"C]	250S	4#250, 1#2G, 3"C
1600N	5[4#400, 3-1/2"C]	400S	2[4#3/0, 1#2G, 2"C]
2000N	6[4#400, 3-1/2"C]	500S	2[4#250, 1#1/0G, 3"C]
2500N	7[4#500, 3-1/2"C]	800S	2[4#500, 1#2/0G, 3-1/2"C]
3000N	8[4#500, 3-1/2"C]	1000S	3[4#400, 1#4/0G, 3-1/2"C]
3500N	10[4#500, 3-1/2"C]	1600S	5[4#400, 1#350G, 3-1/2"C]
4000N	11[4#500, 3-1/2"C]	2500S	7[4#500, 1#500G, 3-1/2"C]
EQUIPMENT FEEDERS			
20NG	4#12, #12G, 3/4"C	20G	3#12, #12G, 3/4"C
30NG	4#10, 1#10G, 3/4"C	30G	3#10, 1#10G, 3/4"C
40NG	4#8, 1#10G, 1"C	40G	3#8, 1#10G, 1"C
50NG	4#6, 1#10G, 1-1/4"C	50G	3#6, 1#10G, 1"C
60NG	4#4, 1#10G, 1-1/4"C	60G	3#4, 1#10G, 1"C
70NG	4#4, 1#8G, 1-1/4"C	70G	3#4, 1#8G, 1-1/4"C
80NG	4#3, 1#8G, 1-1/4"C	80G	3#3, 1#8G, 1-1/4"C
90NG	4#2, 1#8G, 1-1/2"C	90G	3#2, 1#8G, 1-1/4"C
100NG	4#1, 1#8G, 1-1/2"C	100G	3#1, 1#8G, 1-1/2"C
110NG	4#1, 1#6G, 2"C	110G	3#1, 1#6G, 1-1/2"C
125NG	4#1/0, 1#6G, 2"C	125G	3#1/0, 1#6G, 1-1/2"C
150NG	4#1/0, 1#6G, 2"C	150G	3#1/0, 1#6G, 1-1/2"C
175NG	4#2/0, 1#6G, 2"C	175G	3#2/0, 1#6G, 2"C
200NG	4#3/0, 1#6G, 2-1/2"C	200G	3#3/0, 1#6G, 2"C
225NG	4#4/0, 1#4G, 2-1/2"C	225G	3#4/0, 1#4G, 2"C
250NG	4#250, 1#4G, 3"C	250G	3#250, 1#4G, 2-1/2"C
300NG	4#350, 1#4G, 3"C	300G	3#350, 1#4G, 2-1/2"C
350NG	4#500, 1#3G, 3-1/2"C	350G	3#500, 1#3G, 3"C
400NG	2[4#3/0, 1#3G, 2-1/2"C]	400G	2[3#3/0, 1#3G, 2"C]
450NG	2[4#4/0, 1#2G, 2-1/2"C]	450G	2[3#4/0, 1#2G, 2"C]
500NG	2[4#250, 1#2G, 3"C]	500G	2[3#250, 1#2G, 2-1/2"C]
600NG	2[4#350, 1#1G, 3"C]	600G	2[3#350, 1#1G, 2-1/2"C]
700NG	2[4#500, 1#1/0G, 3-1/2"C]	700G	2[3#500, 1#1/0G, 3"C]
800NG	2[4#500, 1#1/0G, 3-1/2"C]	800G	2[3#500, 1#1/0G, 3"C]
1000NG	3[4#400, 1#2/0G, 3-1/2"C]	1000G	3[3#400, 1#2/0G, 3"C]
1200NG	4[4#350, 1#3/0G, 3"C]	1200G	4[3#350, 1#3/0G, 3"C]
1600NG	5[4#400, 1#4/0G, 3-1/2"C]	1600G	5[3#400, 1#4/0G, 3"C]
2000NG	6[4#400, 1#250G, 3-1/2"C]	2000G	6[3#400, 1#250G, 3"C]
GROUNDING CONDUCTORS		ABBREVIATIONS	
G8	1#8, 3/4" C	MECH	SEE MECH SCHEDULE
G6	1#6, 3/4" C	XFMR	SEE XFMR SCHEDULE
G4	1#4, 3/4" C		
G2	1#2, 3/4" C		
G10	1-1/0, 3/4" C		
G20	1-2/0, 3/4" C		
G30	1-3/0, 3/4" C		

NOTES:

1. FEEDER FOR SECONDARY OF SEPARATELY DERIVED SYSTEM (SDS). GROUND SIZE PER NEC 250.66.
2. ALL CONDUCTORS ARE SINGLE CONDUCTOR COPPER THWN UNLESS NOTED OTHERWISE. AMPACITY BASED ON NEC TABLE 310.16.
3. ALL CONDUITS ARE EMT UNLESS NOTED OTHERWISE, FILL RATIOS BASED ON NEC ANNEX C TABLE C1.

LOAD SUMMARY: HMSB

LOAD DESCRIPTION	LOAD	NOTES
HM5	219456 VA	
PANEL 'HMA'	295983 VA	
PANEL 'HML1'	50917 VA	
XFMR 'TEV'	119808 VA	
B-1	432000 VA	
B-2	432000 VA	
WWHP-2	79809 VA	
WWHP-3	79809 VA	
WWHP-4	57363 VA	
DH-1	93699 VA	
DH-2	93699 VA	
XFMR 'TP5'	80858 VA	
XFMR 'TPG'	144137 VA	
PANEL 'HEG'	4500 VA	
PANEL 'HSG'	62125 VA	

TOTAL NEW LOAD	2246 kVA
@ 480/277V, 3PH	2702 A
TOTAL EST. DEMAND	2294 kVA
@480/277V, 3PH	2759 A

THEREFORE THE 4000A SERVICE IS JUSTIFIED.

Notes:

COLORADO REGISTERED PROFESSIONAL ENGINEER
JON BROOKS
35717
1/8/2025

TOWN STAMP

359
DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
2	GMP SET REVISIONS	02.09.2024
3	IFC	03.15.2024
9	RFI #59	04.30.2024
25	RFI #186	07.29.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024
30	RFI #233	08.15.2024
43	ASI 007	01.08.2025

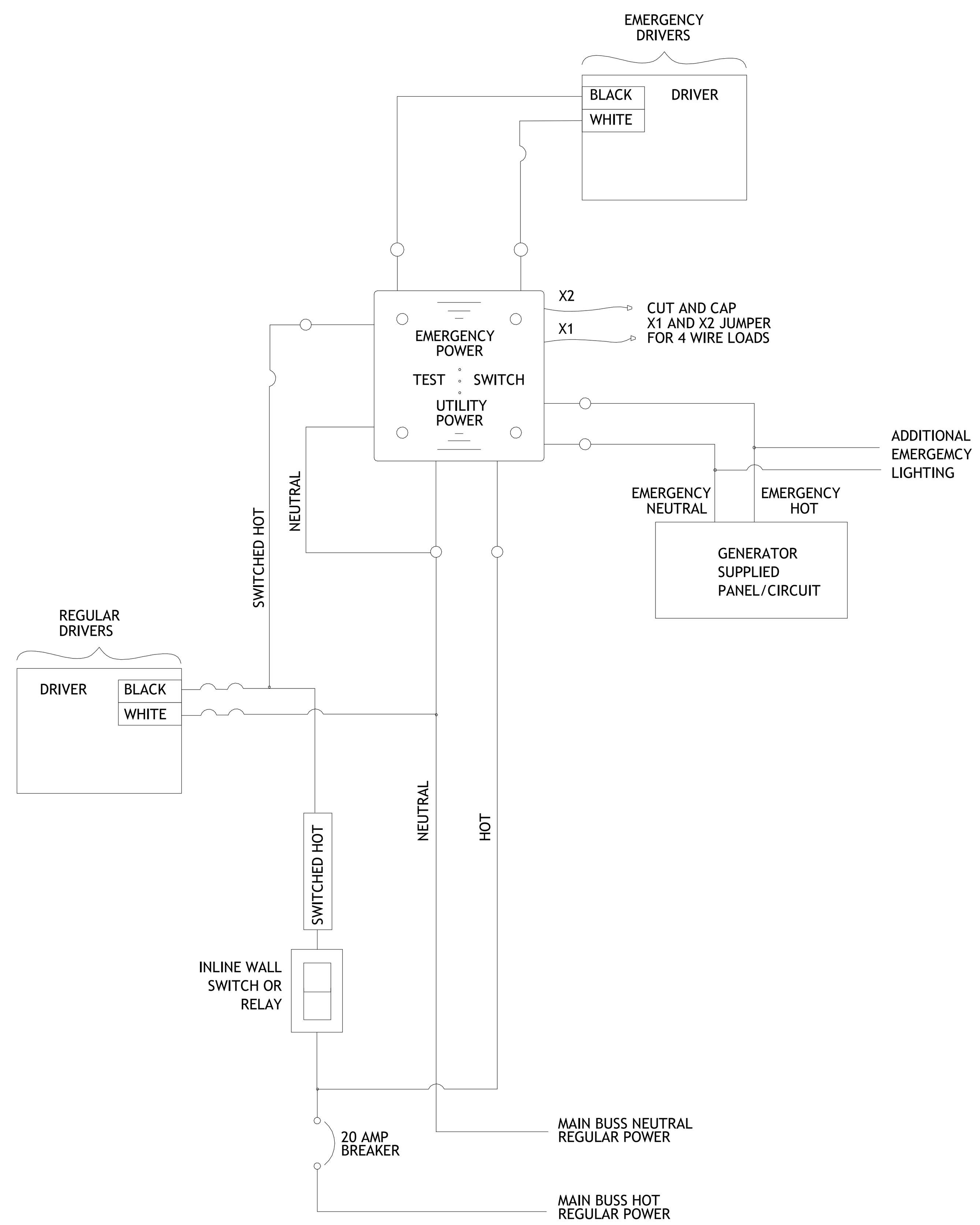
PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL ONE-LINE SCHEDULES

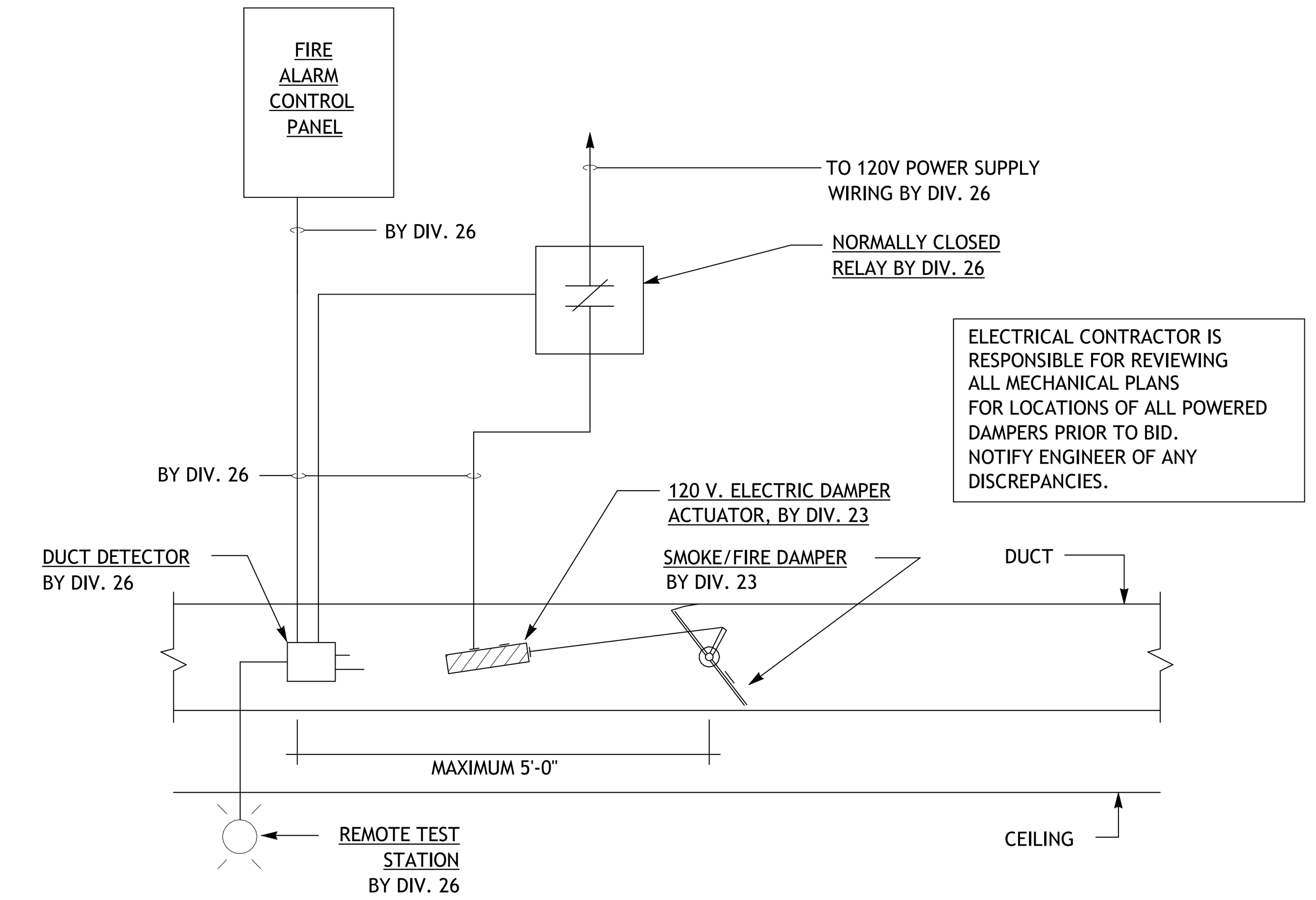
SHEET NO.
E6.01



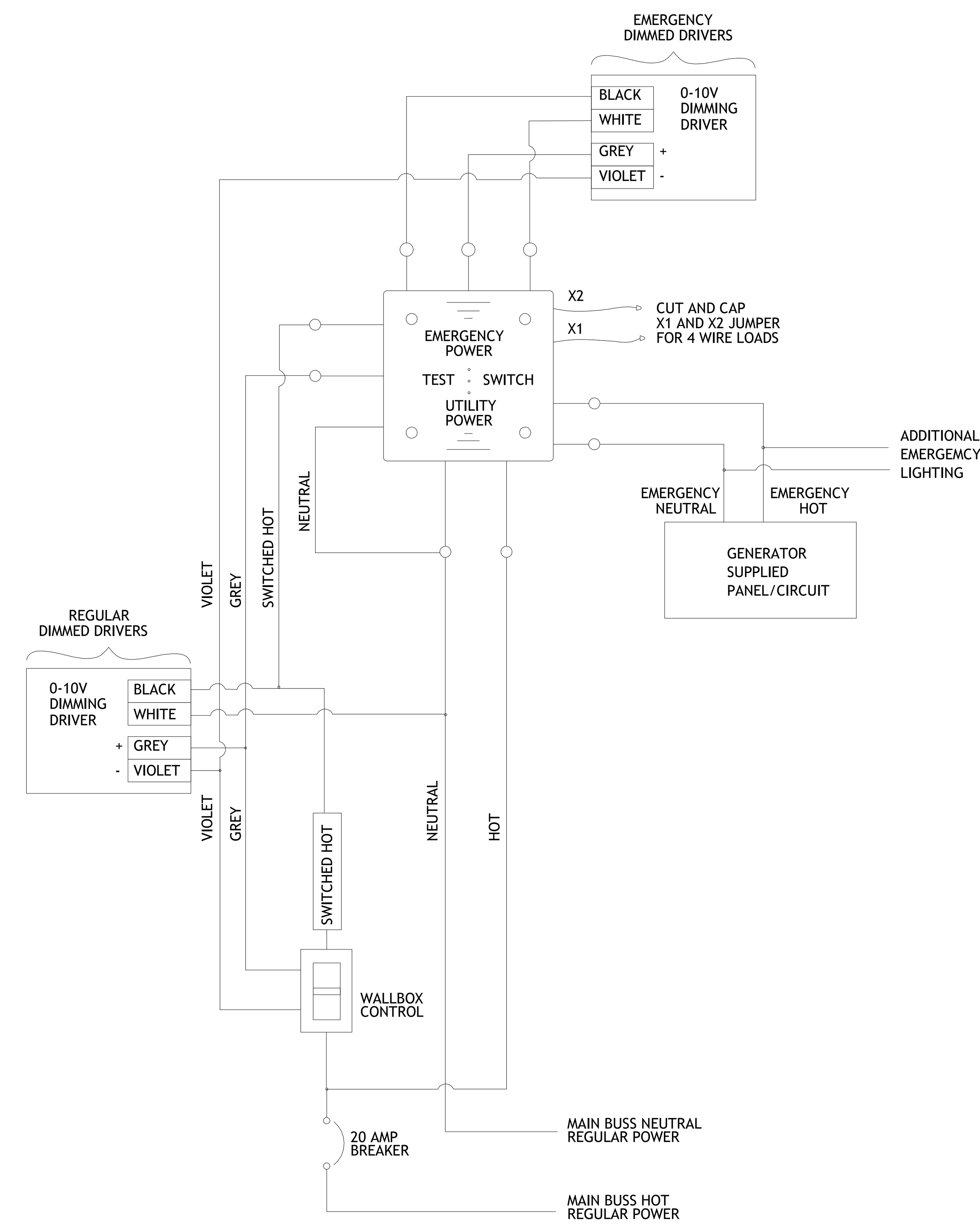
EMERGENCY LIGHTING CONTROL DEVICE GENERAL NOTES

1. USE WITH MANUFACTURER CONTROL TO DETERMINE THE SUITABILITY OF THE SPECIFIED DIMMER FOR SHUNT TRIP OPERATION.
2. EM SWITCHING DEVICE SHALL BE INSTALLED DOWNSTREAM OF THE EM LIGHTING INVERTER AND POWERED WITH THE SAME CIRCUIT AS THE ZONE IT IS CONTROLLING.
3. REFER TO LIGHTING DESIGN DRAWINGS, EL-SERIES SHEETS, FOR ADDITIONAL INFORMATION FOR LIGHTING FIXTURES AND LIGHTING CONTROLS SPECIFICATIONS. COORDINATE INSTALLATION REQUIREMENTS WITH CONSULTANT DRAWINGS AND FINAL APPROVED LIGHTING CONTROL SHOP DRAWINGS PRIOR TO COMMENCING WORK.

2 | EMERGENCY CONTROL DEVICE DIAGRAM
E6.02 | NTS



3 | ELECTRIC FIRE SMOKE DAMPER
E6.02 | NTS



EMERGENCY LIGHTING CONTROL DEVICE GENERAL NOTES

1. USE WITH MANUFACTURER CONTROL TO DETERMINE THE SUITABILITY OF THE SPECIFIED DIMMER FOR SHUNT TRIP OPERATION.
2. EM SWITCHING DEVICE SHALL BE INSTALLED DOWNSTREAM OF THE EM LIGHTING INVERTER AND POWERED WITH THE SAME CIRCUIT AS THE ZONE IT IS CONTROLLING.
3. REFER TO LIGHTING DESIGN DRAWINGS, EL-SERIES SHEETS, FOR ADDITIONAL INFORMATION FOR LIGHTING FIXTURES AND LIGHTING CONTROLS SPECIFICATIONS. COORDINATE INSTALLATION REQUIREMENTS WITH CONSULTANT DRAWINGS AND FINAL APPROVED LIGHTING CONTROL SHOP DRAWINGS PRIOR TO COMMENCING WORK.

1 | EMERGENCY CONTROL DEVICE DIAGRAM
E6.02 | NTS

COLORADO REGISTERED PROFESSIONAL ENGINEER
JON BROOKS
35717
3/20/2024

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL DIAGRAMS

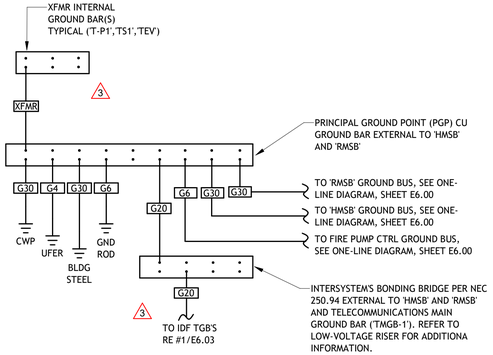
SHEET NO.

E6.02

3/20/2024 4:42:25 PM

GENERAL GROUNDING NOTES

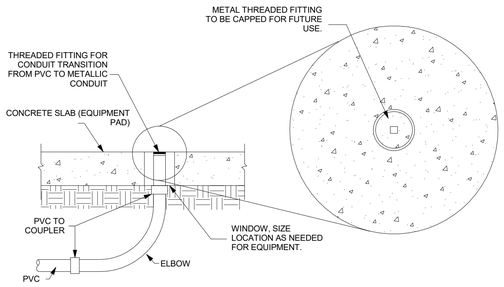
1. ALL CABLES TO BE TERMINATED ONTO BUS BAR WITH TWO HOLE COMPRESSION LUGS AND ATTACHED TO BUS BAR WITH TAB COMPRESSION BELLEVILLE WASHERS AND TORK BOLT ASSEMBLY.
2. ALL GROUND CONNECTORS SHALL BE STRANDED.
3. ALL BUS BARS SHALL BE ATTACHED TO SURFACE WITH NON-CONDUCTIVE STAND-OFFS.
4. GROUND BUS BAR AND GROUNDING SYSTEM SHALL BE UL LISTED AND COMPLY WITH MANUFACTURERS INSTALLATION INSTRUCTIONS.



GROUNDING ELECTRODE SYSTEMS NOTES

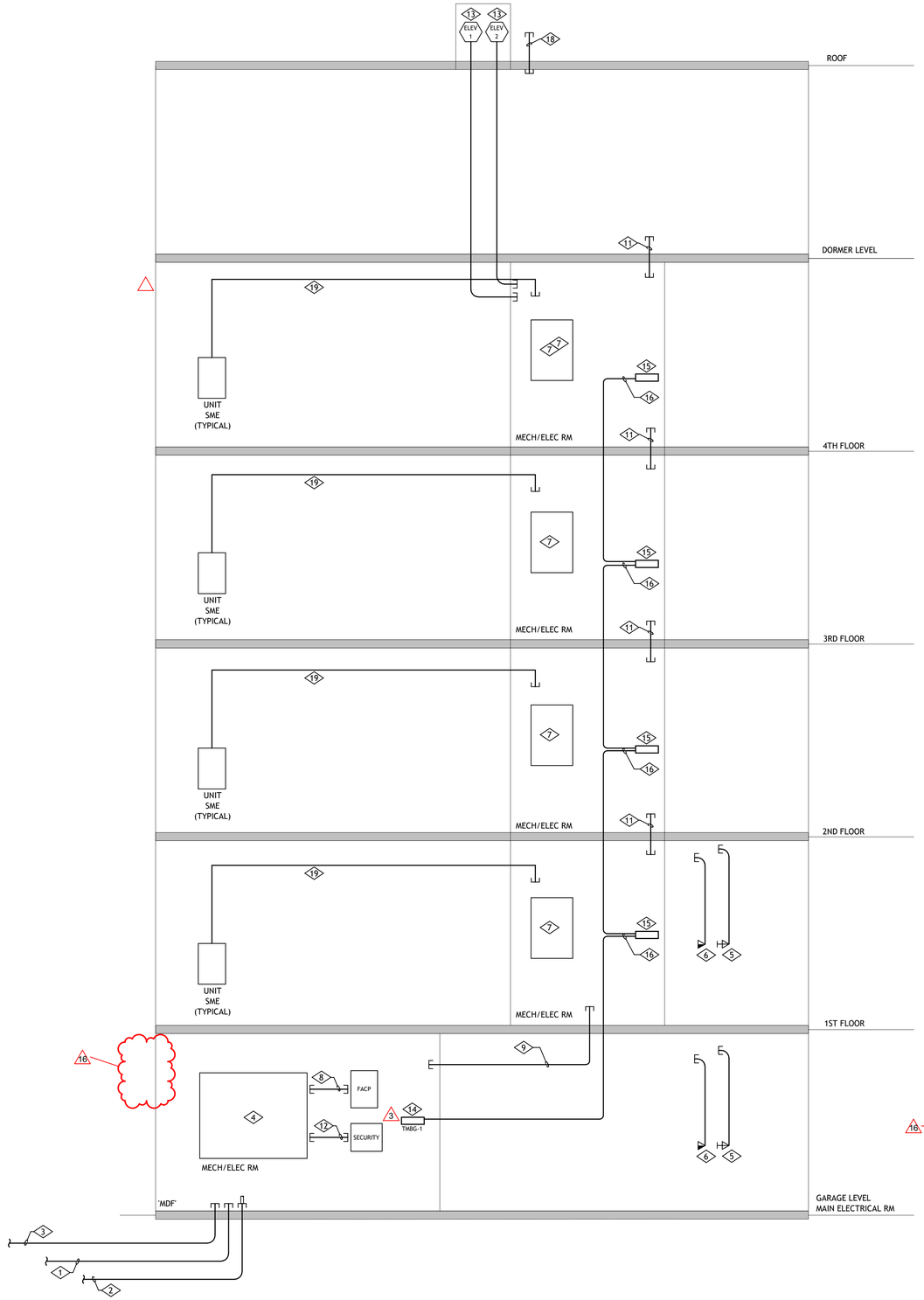
1. METAL UNDERGROUND WATER PIPE - MAKE CONNECTION TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10' OR AND ELECTRICALLY CONTINUOUS TO THE POINTS OF CONNECTION TO THE GROUNDING ELECTRODE CONDUCTOR AND BONDING CONDUCTORS. CONNECTION POINT TO BE AT A MAXIMUM OF 5' OF THE POINT OF ENTRANCE ON THE INTERIOR OF THE BUILDING.
2. BUILDING STEEL - THE METAL FRAME OF THE BUILDING OR STRUCTURE, WHERE ANY OF THE FOLLOWING METHODS ARE USED TO MAKE AN EARTH CONNECTION:
   A. AT LEAST ONE STRUCTURAL METAL MEMBER THAT IS IN DIRECT CONTACT WITH THE EARTH FOR 10' OR MORE, WITH OR WITHOUT CONCRETE ENCASEMENT.
   B. HOLD-DOWN BOLTS SECURING THE STRUCTURAL STEEL COLUMN THAT ARE CONNECTED TO A CONCRETE ENCASED ELECTRODE THAT COMPLIES WITH 250.52(A)(3) AND IS LOCATED IN THE SUPPORT FOOTING OR FOUNDATION. THE HOLD-DOWN BOLTS SHALL BE CONNECTED TO THE CONCRETE-ENCASED ELECTRODE BY WELDING, EXOTHERMIC WELDING, THE USUAL STEEL TIE WIRES, OR OTHER APPROVED MEANS.
3. UFER GROUND (CONCRETE-ENCASED ELECTRODE) - AN ELECTRODE ENCASED BY AT LEAST 2" OF CONCRETE, LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH EARTH, CONSISTING OF AT LEAST 20' OF ONE OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS OF NOT LESS THAN 1/2" IN DIAMETER, OR CONSISTING OF AT LEAST 20' OF BARE COPPER CONDUCTOR NOT SMALLER THAN NO. 4 AWG. REINFORCING BARS SHALL BE PERMITTED TO BE BONDED TOGETHER BY THE USUAL STEEL TIE WIRES OR OTHER EFFECTIVE MEANS.
4. GROUND ROD - ROD IS TO BE 8FT IN LENGTH AND SHALL BE MADE OF IRON OR STEEL AT LEAST 5/8" DIAMETER. INSTALLATION METHODS FOR GROUND ROD SHALL BE IN COMPLIANCE WITH THE NEC SUCH THAT AT LEAST 8' OF LENGTH IS IN CONTACT WITH THE EARTH.

3 | ELEC DISTRIBUTION GROUNDING ONE-LINE DIAGRAM & NOTES
E6.03 | NTS



TYPICAL FOR POWER CONDUITS WHERE TERMINATION IS TO BE FLUSH WITH FINISHED GRADE.

2 | EV CHARGING CONDUIT DETAIL
E6.03 | NTS



1 | LOW VOLTAGE RISER DIAGRAM
E6.03 | NTS

GENERAL NOTES

1. PROVIDE EMT FOR ALL CABLING ROUTED THROUGH AREAS WITH EXPOSED STRUCTURAL CEILINGS AND THROUGH INACCESSIBLE CEILINGS, COORDINATE CONDUIT SIZE REQUIREMENTS WITH CABLE INSTALLER.
2. ALL EXPOSED CONDUIT SHALL BE CONCEALED TO THE GREATEST EXTENT POSSIBLE, AND SHALL BE INSTALLED PARALLEL AND CLOSE TO STRUCTURAL MEMBERS, PAINT CONDUIT TO MATCH ADJACENT FINISHES.
3. PROVIDE PULLCORD FOR ALL CONDUIT INSTALLED FOR CABLE.
4. PROVIDE PULLBOXES AS REQUIRED BY ABLE INSTALLER FOR RUNS EXCEEDING MAXIMUM PULL DISTANCE, AS IDENTIFIED BY CABLE INSTALLER.
5. ALL FREELY RUN ARMORED METALLIC FIBER OPTIC CABLING, CONTRACTOR SHALL GROUND CABLING ARMOR TO THE NEAREST PBB OR SBB.
6. PROVIDE SLEEVES AND CONDUIT BETWEEN FLOORS FOR ROUTING OF CABLE. COORDINATE CONDUIT SIZE WITH CABLE INSTALLER. COORDINATE LOCATION OF RACEWAY WITH ARCHITECT AND CABLE INSTALLER.
7. ALL CONDUIT AND CABLING IN CRAWL SPACE IS TO BE SUPPORTED BY AND TIGHT TO STRUCTURE ABOVE WHERE CONDUIT TRANSITIONS FROM BEING SUPPORTED BY STRUCTURE INTO SOIL. ADD LOOP AND/OR FLEXIBLE CONDUIT FOR ANTICIPATED SOIL MOVEMENT.
8. ALL UNDERGROUND CONDUIT BENDS ARE TO BE GALVANIZED RIGID CONDUIT. UNDERGROUND CONDUIT EXTENDING ABOVE SLAB IS ALSO TO BE GALVANIZED RIGID CONDUIT. REFER TO SPECIFICATIONS FOR FULL CONDUIT REQUIREMENTS.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1.	NEW (1) 4" PVC CONDUIT ROUTED 30" BELOW GRADE FOR CONNECTION TO SITE TELEPHONE SERVICE POINT. ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT SIZING AND QUANTITY WITH SERVICE PROVIDER PRIOR TO INSTALLATION.
2.	NEW (1) 4" PVC CONDUIT ROUTED 30" BELOW GRADE FOR CONNECTION TO SITE FIBER OPTIC SERVICE POINT. ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT SIZING AND QUANTITY WITH SERVICE PROVIDER PRIOR TO INSTALLATION.
3.	NEW (1) 4" PVC CONDUIT ROUTED 30" BELOW GRADE FOR CONNECTION TO SITE CATV SERVICE POINT. ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT SIZING AND QUANTITY WITH SERVICE PROVIDER PRIOR TO INSTALLATION.
4.	GC SHALL PROVIDE MAIN TELEPHONE TERMINAL BOARD 'MTTB' CONSISTING OF 3/4 INCH, FIRE-RETARDANT TREATED PLYWOOD INSTALLED FLOOR TO CEILING IN ROOM, FOR LENGTHS AS INDICATED ON THE PLAN DRAWINGS. ALL RECEPTACLE DEVICES SHOWN IN BACKBOARD ON PLANS SHALL BE FLUSH MOUNT, UON.
5.	NEW TYPICAL WORK AREA COMMUNICATIONS OUTLET FOR STRUCTURED CABLE TERMINATIONS. PROVIDE 2-INCH DEEP, 2-GANG BOX WITH 1-GANG PLASTER RING. PROVIDE 1" CONDUIT TO ACCESSIBLE CEILING AND BUSH END. RECEPTACLE FACEPLATE, JACK, CABLING, AND TERMINATIONS BY OTHERS.
6.	NEW TYPICAL WORK AREA OUTLET FOR CABLE TV TERMINATION. PROVIDE 2-INCH DEEP, 2-GANG BOX WITH 1-GANG PLASTER RING. PROVIDE 1-1/4" CONDUIT TO ACCESSIBLE CEILING AND BUSH END. CATV RECEPTACLE FACEPLATE, JACK, CABLING, AND TERMINATIONS BY OTHERS.
7.	GC SHALL PROVIDE 3/4" X 8FT HIGH, FIRE-RETARDANT SATELLITE EQUIPMENT ROOM BACKBOARD FOR LENGTHS AS INDICATED ON THE PLANS. ALL RECEPTACLE DEVICES SHOWN IN BACKBOARD ON PLANS SHALL BE FLUSH MOUNT, UON.
8.	PROVIDE (1) 1/2" CONDUIT FOR FIRE ALARM CONTROL PANEL COMMUNICATIONS CABLING RACEWAY.
9.	PROVIDE (4) 2" CONDUIT FOR LOW VOLTAGE CABLING RACEWAY BETWEEN MDF AND 2ND FLOOR ELECTRICAL ROOM AS INDICATED.
10.	NOT USED.
11.	PROVIDE (4) 2" CONDUIT SLEEVES FOR LOW VOLTAGE CABLING BETWEEN EACH FLOOR AT LOCATIONS SHOWN.
12.	ROUTE (1) 1/2" CONDUIT FOR SECURITY CONTROL PANEL COMMUNICATIONS CABLING RACEWAY.
13.	PROVIDE (1) 3/4"C WITH PULL WIRE TO ELEVATOR CONTROL PANEL FOR ELEVATOR COMMUNICATIONS CABLING RACEWAY. CABLING SHALL BE FURNISHED BY OTHERS.
14.	TELECOMMUNICATIONS PRIMARY BONDING BAR 'TMGB-1' FUNCTIONING AS INTERSYSTEM BONDING TERMINATION DEVICE, COMPLYING WITH NEC 250.94.
15.	TELECOMMUNICATIONS SECONDARY GROUNDING BAR 'SBB'.
16.	PROVIDE #1/0AWG GREEN COPPER GROUNDING CONDUCTOR (TYPICAL) BETWEEN GROUNDING BUSSES AS INDICATED.
17.	NOT USED.
18.	PROVIDE (2) 2"C RACEWAY BETWEEN 6TH FLOOR ELEC ROOM/IT ROOM AND STUB OUT AT ROOF FOR FUTURE LOW VOLTAGE CABLING AND EMERGENCY RESPONDER COMM. SYSTEMS (ERCS) AS REQUIRED. EC SHALL COORDINATE EXACT STUB OUT LOCATION AT ROOF PRIOR TO ROUGH-IN.
19.	PROVIDE (1) 1" RACEWAY WITH PULL-STRING FROM LOW-VOLTAGE TELECOMMUNICATIONS SYSTEM BACKBOARD TO EACH UNIT STRUCTURED MEDIA ENCLOSURE FOR LOW-VOLTAGE CABLING (CATEGORY 6 CABLING AND RG11 BY OTHERS). VERIFY EXACT CONDUIT SIZE AND REQUIREMENTS WITH CABLING INSTALLERS PRIOR TO COMMENCING WORK. REFER TO PLANS FOR LOCATIONS AND QUANTITIES.

COLORADO REGISTERED PROFESSIONAL ENGINEER
APPROVED
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024
16	RFI #134	07.01.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

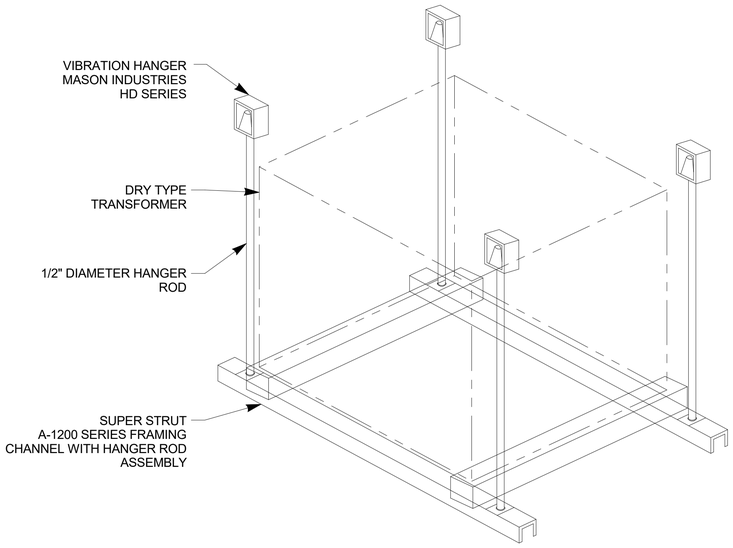
The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL RISER DIAGRAMS AND DETAILS

SHEET NO.
E6.03

7/1/2024 12:22:10 PM



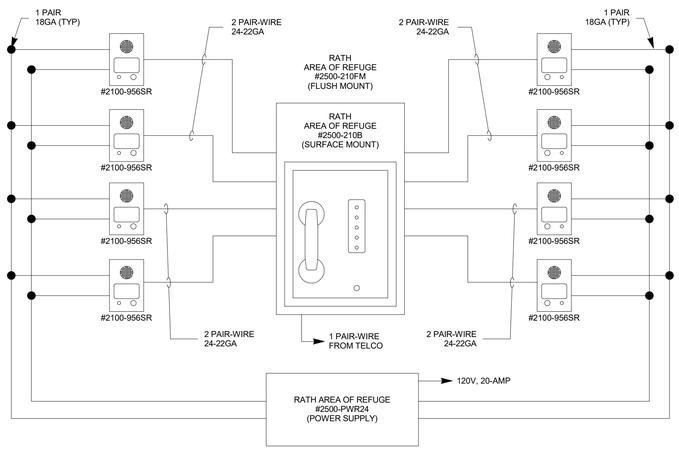
NOTES:

1. FASTEN VIBRATION HANGER RIGIDLY TO STRUCTURE ABOVE. SIZE TO ACCOMMODATE TRANSFORMER WEIGHT. BOT TRANSFORMER TO STRUT.

2. INSTALL FLEXIBLE CONDUIT BETWEEN PRIMARY AND SECONDARY CONDUIT AND TRANSFORMER HOUSING.

3 | SUSPENDED TRANSFORMER DETAIL

E6.04 | NTS

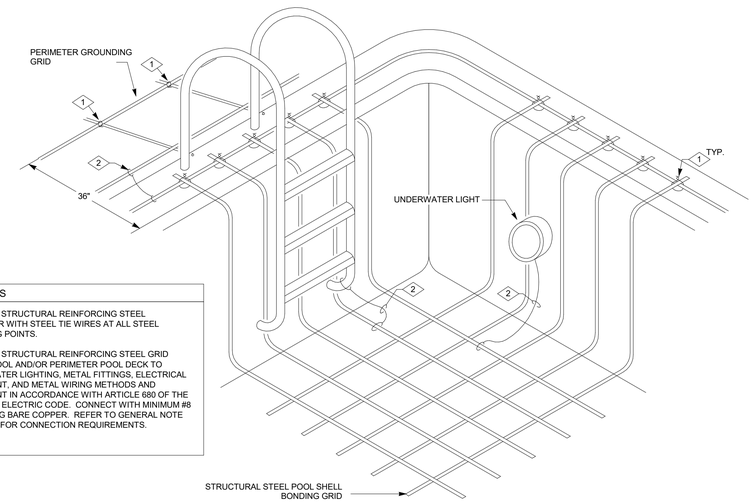


2 | TWO-WAY COMMUNICATION SYSTEMS DIAGRAM

E6.04 | NTS

ELECTRICAL REQUIREMENTS FOR POOL BONDING

1. ALL GROUNDING AND BONDING OF ALL METALLIC PARTS ASSOCIATED WITH THE POOL AND/OR WHIRLPOOL ARE TO BE IN COMPLIANCE WITH NEC SECTION 680.
2. STRUCTURAL REINFORCING STEEL TERMINOLOGY IN NOTES BELOW REFERS TO REBAR OR WIREMESH INSTALLATIONS.
3. BONDING TO CONDUCTIVE POOL SHELLS SHALL BE ACCOMPLISHED WITH REINFORCING STEEL BONDED WITH STEEL TIE WIRES, OR EQUAL, AND SHALL THEREBY SERVE AS A COMMON BONDING GRID FOR ALL PARTS REQUIRED TO BE BONDED TOGETHER. WHERE EPOXY-COATED REBAR IS UTILIZED, THEN A COPPER CONDUCTOR GRID SYSTEM SHALL BE INSTALLED, WITH MINIMUM #8 AWG BARE SOLID CONDUCTORS BONDED AT ALL CROSS POINT, CONFORM TO THE CONTOUR OF THE POOL, BE ARRANGED IN A 12" X 12" GRID PATTERN, AND BE SECURED WITHIN OR UNDER THE POOL NO MORE THAN 6" FROM THE OUTER CONTOUR OF THE POOL.
4. BONDING TO PERIMETER SURFACES SHALL BE ACCOMPLISHED WITH REINFORCING STEEL REBAR BONDED WITH STEEL TIE WIRES, OR EQUAL. WHERE EPOXY-COATED REBAR IS UTILIZED, THEN A SINGLE #8 AWG COPPER, BARE, SOLID CONDUCTOR SHALL BE INSTALLED 18" TO 24" WITHIN THE INSIDE WALL OF THE POOL, AND WITHIN 4" TO 6" UNDER THE SURFACE.
5. THE FOLLOWING PARTS SHALL BE BONDED TOGETHER AND CONNECTED TO THE COMMON BONDING GRID. BONDING LUGS SHALL BE SUPPLIED BY POOL CONTRACTOR.
   - A. ALL METALLIC PARTS OF THE POOL STRUCTURE, INCLUDING COPYING STONES, DECK, PERMANENT PLAY STRUCTURES, PERMANENT EXERCISE STRUCTURES.
   - B. ALL METAL FITTINGS WITHIN OR ATTACHED TO THE POOL STRUCTURE.
   - C. METAL PARTS ASSOCIATED WITH THE POOL WATER CIRCULATING SYSTEM, INCLUDING PUMPS, FILTERS, AND HEATERS.
   - D. METAL PARTS ASSOCIATED WITH POOL COVERS.
   - E. METAL SHEATHED CABLES AND RACEWAYS, METAL PIPING, AND ALL FIXED METAL PARTS WITHIN 5 FEET HORIZONTALLY OF INSIDE WALLS OF POOL AND WITHIN 12 FEET ABOVE THE MAXIMUM WATER LEVEL OF THE POOL.
   - F. METAL PARTS ASSOCIATED WITH OBSERVATION STANDS, TOWERS, PLATFORMS, AND DIVING STRUCTURES.
   - G. METAL PARTS ASSOCIATED WITH THE POOL SLIDE TOWER, SLIDE STAIRS, AND ASSOCIATED SLIDE STRUCTURE.
6. ISOLATED PARTS THAT ARE NOT MORE THAN 4" IN ANY DIMENSION AND DO NOT GENETRATE INTO THE POOL STRUCTURE MORE THAN 1" SHALL NOT REQUIRE BONDING.
7. BONDING CONDUCTORS SHALL BE MINIMUM #8 SOLID COPPER, INSULATED. E.C. SHALL COORDINATE APPROVED CONNECTOR TYPE AND METHOD WITH LOCAL ELECTRICAL AND/OR POOL INSPECTOR.
8. SPECIFIC MANUFACTURER'S INSTRUCTIONS REGARDING BONDING OR GROUNDING OF POOL EQUIPMENT, WHETHER INDICATED HEREIN OR NOT, SHALL BE STRICTLY FOLLOWED.
9. THE COMMON BONDING GRID SHALL NOT BE CONNECTED TO ANY ELECTRICAL DISTRIBUTION EQUIPMENT.
10. ANY PARTS IN ADDITION TO THOSE DESCRIBED HEREIN THAT ARE INDICATED BY POOL CONTRACTOR OR LOCAL INSPECTION AUTHORITY SHALL BE BONDED TO THE COMMON BONDING GRID WITH NO ADDITIONAL COSTS INCURRED BY THE OWNER.
11. ROPE ANCHORS WHICH ARE ATTACHED TO A STAINLESS STEEL GUTTER ARE INTERNALLY BONDED TO GUTTER AND SO DO NOT REQUIRE ADDITIONAL BONDING.
12. THE ELECTRICAL CONTRACTOR SHALL COORDINATE BONDING WITH POOL CONTRACTOR AND GENERAL CONTRACTOR.



DETAIL NOTES

1. BOND ALL STRUCTURAL REINFORCING STEEL TOGETHER WITH STEEL TIE WIRES AT ALL STEEL CROSSING POINTS.
2. CONNECT STRUCTURAL REINFORCING STEEL GRID WITHIN POOL AND/OR PERIMETER POOL DECK TO UNDERWATER LIGHTING, METAL FITTINGS, ELECTRICAL EQUIPMENT, AND METAL WIRING METHODS AND EQUIPMENT IN ACCORDANCE WITH ARTICLE 680 OF THE NATIONAL ELECTRIC CODE. CONNECT WITH MINIMUM #8 SOLID AWG BARE COPPER. REFER TO GENERAL NOTE #3 ABOVE FOR CONNECTION REQUIREMENTS.

1 | POOL BONDING REQUIREMENTS

E6.04 | NTS

COLORADO REGISTERED
CHRISTOPHER J. BROOKS
35717
3/20/2024
PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	GMP SUBMITTAL	01.22.2024
2	PERMIT COMMENT RESPONSE	02.28.2024
3	IFC	03.15.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

3

SHEET TITLE

ELECTRICAL DETAILS

SHEET NO.

E6.04

3/20/2024 4:42:25 PM

LOAD SUMMARY RMSB

UNIT QTY: = 42

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD	
70,797	3	=	212,391	VA

SMALL APPLIANCES

QTY	VA / EA		LOAD	
84	1,500	=	126,000	VA

LAUNCHY CIRCUITS:

42	1,500	=	63,000	VA
			401,391	VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	42	1,000	VA	=	42,000 VA
HOOD OVER COOKTOP	42	250	VA	=	10,500 VA
DISHWASHER	42	1,200	VA	=	50,400 VA
GARBAGE DISPOSAL	42	1,176	VA	=	49,392 VA
WASHING MACHINE	42	1,500	VA	=	63,000 VA
3 HOT TUB	3	10,000	VA	=	30,000 VA
FIREPLACE FAN&HEATER	42	2,300	VA	=	2,300 VA
					247,592 VA

9

ELECTRIC COOKING

OVEN/RANGE	84	8,000	VA	=	672,000 VA
					672,000 VA

DRYERS:

ELECTRIC DRYER	42	5,000	VA	=	210,000 VA

HEATING AND AIR CONDITIONING LOADS:

HEAT PUMP					
25					
27 HP-X-XX	69	1997	VA	=	137779.2 VA
		100%		=	137779.2 VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS					
ERV-X-XX	61	1498	VA	=	91353.6 VA
		65%	X	=	59379.84 VA
			MAX LOAD:	=	137779 VA

DEMAND LOADS

TOTAL ELECTRICAL LOAD			9	1,668,762 VA
DEMAND FACTOR BASED ON	42	UNITS		28%
			3	467,253 VA
TOTAL ELECTRICAL LOAD WITH DEMAND APPLIED				2,246 A
AMPS AT 208V/1-PHASE				1,299 A
AMPS AT 208V/3-PHASE				

9

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

RISER: METERSTACK A

UNIT QTY: = 20

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD	
31,746	3	=	95,238	VA

SMALL APPLIANCES

QTY	VA / EA		LOAD	
40	1,500	=	60,000	VA

LAUNCHY CIRCUITS:

20	1,500	=	30,000	VA
			185,238	VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	20	1,000	VA	=	20,000 VA
HOOD OVER COOKTOP	20	250	VA	=	5,000 VA
DISHWASHER	20	1,200	VA	=	24,000 VA
GARBAGE DISPOSAL	20	1,176	VA	=	23,520 VA
3 WASHING MACHINE	20	1,500	VA	=	30,000 VA
FIREPLACE FAN&HEATER	20	2,300	VA	=	2,300 VA
					104,820 VA

9

ELECTRIC COOKING

OVEN/RANGE	40	8,000	VA	=	320,000 VA
					320,000 VA

DRYERS:

ELECTRIC DRYER	20	5,000	VA	=	100,000 VA

HEATING AND AIR CONDITIONING LOADS:

HEAT PUMP					
25					
27 HP-X-XX	29	1997	VA	=	57907.2 VA
		100%	X	=	57907.2 VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS					
ERV-X-XX	25	1498	VA	=	37440 VA
		65%	X	=	24336 VA
			MAX LOAD:	=	57907 VA

DEMAND LOADS

TOTAL ELECTRICAL LOAD				767,965 VA
DEMAND FACTOR BASED ON	20	UNITS		38%
			3	291,827 VA
TOTAL ELECTRICAL LOAD WITH DEMAND APPLIED				1,403 A
AMPS AT 208V/1-PHASE				811 A
AMPS AT 208V/3-PHASE				

9

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

RISER: METERSTACK B

UNIT QTY: = 22

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD	
39,051	3	=	117,153	VA

SMALL APPLIANCES

QTY	VA / EA		LOAD	
44	1,500	=	66,000	VA

LAUNCHY CIRCUITS:

22	1,500	=	33,000	VA
			216,153	VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	22	1,000	VA	=	22,000 VA
HOOD OVER COOKTOP	22	250	VA	=	5,500 VA
DISHWASHER	22	1,200	VA	=	26,400 VA
GARBAGE DISPOSAL	22	1,176	VA	=	25,872 VA
WASHING MACHINE	22	1,500	VA	=	33,000 VA
3 HOT TUB	3	10,000	VA	=	30,000 VA
FIREPLACE FAN&HEATER	22	2,300	VA	=	2,300 VA
					145,072 VA

9

ELECTRIC COOKING

OVEN/RANGE	44	8,000	VA	=	352,000 VA
					352,000 VA

DRYERS:

ELECTRIC DRYER	22	5,000	VA	=	110,000 VA

HEATING AND AIR CONDITIONING LOADS:

HEAT PUMP					
25					
27 HP-X-XX	40	1997	VA	=	79872 VA
		100%	X	=	79872 VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS					
ERV-X-XX	36	1498	VA	=	53913.6 VA
		65%	X	=	35043.84 VA
			MAX LOAD:	=	79872 VA

DEMAND LOADS

TOTAL ELECTRICAL LOAD				903,097 VA
DEMAND FACTOR BASED ON	22	UNITS		36%
			3	325,115 VA
TOTAL ELECTRICAL LOAD WITH DEMAND APPLIED				1,563 A
AMPS AT 208V/1-PHASE				903 A
AMPS AT 208V/3-PHASE				

9

3 3 3 3 3 3

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble

Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
21	INFI #59	04.30.2024
25	INFI #166	07.29.2024
27	ADD 003	08.22.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL RESIDENTIAL RISER LOAD SUMMARY

3

SHEET NO.

E6.05

8/5/2024 10:47:37 PM

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 1BS - 1 BED STANDARD

Item	Qty / Area	Load / Rate		=	Total	
LIGHTING & GENERAL RECEPTACLES	AREA(S.F.):	VA / S.F.			LOAD	
	951	3		=	2,853	VA
SMALL APPLIANCES	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:	1	1,500		=	1,500	VA
					7,353	VA
APPLIANCES: APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,176	VA
ELECTRIC COOKING RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS: ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS GENERAL LOADS					35,529	VA
1ST 10KW	100% NEC DEMAND				10,000	VA
REMAINDER	40% NEC DEMAND				10,212	VA
HEATING AND AIR CONDITIONING LOADS: HEAT PUMP HP-X-XX	1	2267	VA	=	2267.2	VA
		100%	X	=	2267.2	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973	VA
		MAX LOAD:		=	2267	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	22,479	VA
AMPS AT 208V, 1PH				=	108.1	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 2BF - 2 BED FLEX

Item	Qty / Area	Load / Rate		=	Total	
LIGHTING & GENERAL RECEPTACLES	AREA(S.F.):	VA / S.F.			LOAD	
	1,148	3		=	3,444	VA
SMALL APPLIANCES	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:	1	1,500		=	1,500	VA
					7,944	VA
APPLIANCES: APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
HOOD OVER COOKTOP	1	250	VA	=	250	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,426	VA
ELECTRIC COOKING RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS: ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS GENERAL LOADS					36,370	VA
1ST 10KW	100% NEC DEMAND				10,000	VA
REMAINDER	40% NEC DEMAND				10,548	VA
HEATING AND AIR CONDITIONING LOADS: HEAT PUMP HP-X-XX	1	2267	VA	=	2267.2	VA
		100%	X	=	2267.2	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973	VA
		MAX LOAD:		=	2267	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	22,815	VA
AMPS AT 208V, 1PH				=	109.7	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 2BS - 2 BED STANDARD & TYPE A

Item	Qty / Area	Load / Rate		=	Total	
LIGHTING & GENERAL RECEPTACLES	AREA(S.F.):	VA / S.F.			LOAD	
	1,303	3		=	3,909	VA
SMALL APPLIANCES	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:	1	1,500		=	1,500	VA
					8,409	VA
APPLIANCES: APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,176	VA
ELECTRIC COOKING RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS: ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS GENERAL LOADS					36,585	VA
1ST 10KW	100% NEC DEMAND				10,000	VA
REMAINDER	40% NEC DEMAND				10,634	VA
HEATING AND AIR CONDITIONING LOADS: HEAT PUMP HP-X-XX	1	2371	VA	=	2371.2	VA
		100%	X	=	2371.2	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973	VA
		MAX LOAD:		=	2371	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	23,005	VA
AMPS AT 208V, 1PH				=	110.6	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 2BS - 2 BED STANDARD LOFT

Item	Qty / Area	Load / Rate		=	Total	
LIGHTING & GENERAL RECEPTACLES	AREA(S.F.):	VA / S.F.			LOAD	
	1,918	3		=	5,754	VA
SMALL APPLIANCES	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:	1	1,500		=	1,500	VA
					10,254	VA
APPLIANCES: APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,176	VA
ELECTRIC COOKING RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS: ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS GENERAL LOADS					38,430	VA
1ST 10KW	100% NEC DEMAND				10,000	VA
REMAINDER	40% NEC DEMAND				11,372	VA
HEATING AND AIR CONDITIONING LOADS: HEAT PUMP HP-X-XX	2	2371	VA	=	4742.4	VA
		100%	X	=	4742.4	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS ERV-1-XX	2	1498	VA	=	2995.2	VA
		65%	X	=	1947	VA
		MAX LOAD:		=	4742	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	26,114	VA
AMPS AT 208V, 1PH				=	125.6	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 2BK - 2 BED KNUCKLE

Item	Qty / Area	Load / Rate		=	Total	
LIGHTING & GENERAL RECEPTACLES	AREA(S.F.):	VA / S.F.			LOAD	
	1,277	3		=	3,831	VA
SMALL APPLIANCES	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:	1	1,500		=	1,500	VA
					8,331	VA
APPLIANCES: APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
HOOD OVER COOKTOP	1	250	VA	=	250	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,426	VA
ELECTRIC COOKING RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS: ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS GENERAL LOADS					36,757	VA
1ST 10KW	100% NEC DEMAND				10,000	VA
REMAINDER	40% NEC DEMAND				10,703	VA
HEATING AND AIR CONDITIONING LOADS: HEAT PUMP HP-X-XX	1	2371	VA	=	2371.2	VA
		100%	X	=	2371.2	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973	VA
		MAX LOAD:		=	2371	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	23,074	VA
AMPS AT 208V, 1PH				=	110.9	AMPS

COLORADO REGISTERED JON BROOKS 35717 2/18/2025 PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
9	RFI #59	04.30.2024
25	RFI #186	07.29.2024
27	ASI 003	08.02.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL RESIDENTIAL LOAD SUMMARY 1-2 BEDRMS

SHEET NO.
E6.12

8/5/2024 10:47:58 PM

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BF - 3 BED FLEX & FLEX 01

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
1,756	3	=	5,268 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

1	1,500	=	1,500 VA
			9,768 VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
3 WASHING MACHINE	1	1,500	VA	=	1,500 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					7,176 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

9

DRYERS:

ELECTRIC DRYER	1	5,000	VA	=	5,000 VA
					5,000 VA

DEMAND LOADS

GENERAL LOADS			37,944 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		11,178 VA

HEATING AND AIR CONDITIONING LOADS:

25 27

HEAT PUMP						
HP-X-XX	2	2267	VA	=	4534.4	VA
		100%	X	=	4534.4	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973.44	VA
		MAX LOAD		=	4534	VA

3

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	25,712	VA
AMPS AT 208V, 1PH	=	123.6	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BF - 3 BED FLEX LOFT

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
1,756	3	=	5,268 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

2	1,500	=	3,000 VA
			11,268 VA

20

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
20 DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
3 WASHING MACHINE	2	1,500	VA	=	3,000 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					8,676 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

20

DRYERS:

ELECTRIC DRYER	2	5,000	VA	=	10,000 VA
					10,000 VA

DEMAND LOADS

GENERAL LOADS			45,944 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		14,378 VA

HEATING AND AIR CONDITIONING LOADS:

25 27

HEAT PUMP						
HP-X-XX	3	2371	VA	=	7113.6	VA
		100%	X	=	7113.6	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	2	1498	VA	=	2995.2	VA
		65%	X	=	1946.88	VA
		MAX LOAD		=	7114	VA

3

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	31,491	VA
AMPS AT 208V, 1PH	=	151.4	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BS - 3 BED STANDARD & TYPE A

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
1,729	3	=	5,187 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

1	1,500	=	1,500 VA
			9,687 VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
3 WASHING MACHINE	1	1,500	VA	=	1,500 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					7,176 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

DRYERS:

ELECTRIC DRYER	1	5,000	VA	=	5,000 VA
					5,000 VA

DEMAND LOADS

GENERAL LOADS			37,863 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		11,145 VA

HEATING AND AIR CONDITIONING LOADS:

25 27

HEAT PUMP						
HP-X-XX	2	2267	VA	=	4534.4	VA
		100%	X	=	4534.4	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973.44	VA
		MAX LOAD		=	4534	VA

3

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	25,680	VA
AMPS AT 208V, 1PH	=	123.5	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BC - 3 BED STANDARD LOFT

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
1,729	3	=	5,187 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

2	1,500	=	3,000 VA
			11,187 VA

22

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
22 DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
3 WASHING MACHINE	2	1,500	VA	=	3,000 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					8,676 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

22

DRYERS:

ELECTRIC DRYER	2	5,000	VA	=	10,000 VA
					10,000 VA

DEMAND LOADS

GENERAL LOADS			45,863 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		14,345 VA

HEATING AND AIR CONDITIONING LOADS:

25 27

HEAT PUMP						
HP-X-XX	3	2267	VA	=	6801.6	VA
		100%	X	=	6801.6	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	2	1498	VA	=	2995.2	VA
		65%	X	=	1946.88	VA
		MAX LOAD		=	6802	VA

3

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	31,147	VA
AMPS AT 208V, 1PH	=	149.7	AMPS

9

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BC - 3 BED CORNER

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
1,883	3	=	5,649 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

1	1,500	=	1,500 VA
			10,149 VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
3 WASHING MACHINE	1	1,500	VA	=	1,500 VA
WINE COOLER	1	240	VA	=	240 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					7,416 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

DRYERS:

ELECTRIC DRYER	1	5,000	VA	=	5,000 VA
					5,000 VA

DEMAND LOADS

GENERAL LOADS			38,565 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		11,426 VA

HEATING AND AIR CONDITIONING LOADS:

25 27

HEAT PUMP						
HP-X-XX	2	2267	VA	=	4534.4	VA
		100%	X	=	4534.4	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	2	1498	VA	=	2995.2	VA
		65%	X	=	1946.88	VA
		MAX LOAD		=	4534	VA

3

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	25,960	VA
AMPS AT 208V, 1PH	=	124.8	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BC - 3 BED CORNER LOFT

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
2,447	3	=	7,341 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

1	1,500	=	1,500 VA
			11,841 VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
WASHING MACHINE	1	1,500	VA	=	1,500 VA
3 HOT TUB	1	10,000	VA	=	10,000 VA
WINE COOLER	1	240	VA	=	240 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					17,416 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

DRYERS:

ELECTRIC DRYER	1	5,000	VA	=	5,000 VA
					5,000 VA

DEMAND LOADS

GENERAL LOADS			50,257 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		16,103 VA

HEATING AND AIR CONDITIONING LOADS:

25 27

HEAT PUMP						
HP-X-XX	3	2267	VA	=	6801.6	VA
		100%	X	=	6801.6	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	3	1498	VA	=	4492.8	VA
		65%	X	=	2920.32	VA
		MAX LOAD		=	6802	VA

3

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	32,904	VA
AMPS AT 208V, 1PH	=	158.2	AMPS

9

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 3BK - 3 BED KNUCKLE

LIGHTING & GENERAL RECEPTACLES

AREA(S.F.):	VA / S.F.		LOAD
1,883	3	=	5,649 VA

SMALL APPLIANCES

2	1,500	=	3,000 VA

LAUNDRY CIRCUITS:

1	1,500	=	1,500 VA
			10,149 VA

APPLIANCES:

APPLIANCE	#	LOAD			
MICROWAVE	1	1,000	VA	=	1,000 VA
DISHWASHER	1	1,200	VA	=	1,200 VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176 VA
WASHING MACHINE	1	1,500	VA	=	1,500 VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300 VA
					7,176 VA

ELECTRIC COOKING

RANGE/OVEN	2	8,000	VA	=	16,000 VA
					16,000 VA

DRYERS:

ELECTRIC DRYER	1	5,000	VA	=	5,000 VA
					5,000 VA

DEMAND LOADS

GENERAL LOADS			38,325 VA
1ST 10KW	100% NEC DEMAND		10,000 VA
REMAINDER	40% NEC DEMAND		11,330 VA

HEATING AND AIR CONDITIONING LOADS:

27

HEAT PUMP						
HP-X-XX	1	2267	VA	=	2267.2	VA
		100%	X		2267.2	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	1	1498	VA	=	1497.6	VA
		65%	X	=	973.44	VA
		MAX LOAD		=	2267	VA

TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS	=	23,597	VA
AMPS AT 208V, 1PH	=	113.4	AMPS

9

25

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024
9	RFI #59	04.30.2024
20	RFI #168	07.26.2024
22	RFI #170	07.26.2024
25	RFI #166	07.29.2024
27	ASI 003	08.02.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL RESIDENTIAL LOAD SUMMARY 3 BEDRMS

SHEET NO.

E6.13

8/5/2024 10:47:58 PM

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 4BE - 4 BED EAST

LIGHTING & GENERAL RECEPTACLES						
	AREA(S.F.):	VA / S.F.			LOAD	
	2,423	3		=	7,269	VA
SMALL APPLIANCES						
	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:						
	1	1,200		=	1,200	VA
					11,469	VA
APPLIANCES:						
APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
[3] WASHING MACHINE	1	1,500	VA	=	1,500	VA
WINE COOLER	1	240	VA	=	240	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,416	VA
ELECTRIC COOKING						
RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS:						
ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS						
GENERAL LOADS					39,885	VA
1ST 10KW		100% NEC DEMAND			10,000	VA
REMAINDER		40% NEC DEMAND			11,954	VA
HEATING AND AIR CONDITIONING LOADS: [25] [27]						
HEAT PUMP						
HP-X-XX	2	2371	VA	=	4742.4	VA
		100%	X	=	4742.4	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	2	1498	VA	=	2995.2	VA
		65%	X	=	1946.88	VA
		MAX LOAD:		= [3]	4742	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	26,696	VA
AMPS AT 208V, 1PH				=	128.3	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 4BE - 4 BED EAST LOFT

LIGHTING & GENERAL RECEPTACLES						
	AREA(S.F.):	VA / S.F.			LOAD	
	3,035	3		=	9,105	VA
SMALL APPLIANCES						
	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:						
	1	1,500		=	1,500	VA
					13,605	VA
APPLIANCES:						
APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
[3] HOT TUB	1	10,000	VA	=	10,000	VA
WINE COOLER	1	240	VA	=	240	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					17,416	VA
ELECTRIC COOKING						
RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS:						
ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS						
GENERAL LOADS					52,021	VA
1ST 10KW		100% NEC DEMAND			10,000	VA
REMAINDER		40% NEC DEMAND			16,808	VA
HEATING AND AIR CONDITIONING LOADS: [25] [27]						
HEAT PUMP						
HP-X-XX	3	2371	VA	=	7113.6	VA
		100%	X	=	7113.6	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	3	1498	VA	=	4492.8	VA
		65%	X	=	2920.32	VA
		MAX LOAD:		= [3]	7114	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	33,922	VA
AMPS AT 208V, 1PH				=	163.1	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 4BN - 4 BED NORTH

LIGHTING & GENERAL RECEPTACLES						
	AREA(S.F.):	VA / S.F.			LOAD	
	2,263	3		=	6,789	VA
SMALL APPLIANCES						
	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:						
	1	1,500		=	1,500	VA
					11,289	VA
APPLIANCES:						
APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
[3] WASHING MACHINE	1	1,500	VA	=	1,500	VA
WINE COOLER	1	240	VA	=	240	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					7,416	VA
ELECTRIC COOKING						
RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS:						
ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS						
GENERAL LOADS					39,705	VA
1ST 10KW		100% NEC DEMAND			10,000	VA
REMAINDER		40% NEC DEMAND			11,882	VA
HEATING AND AIR CONDITIONING LOADS: [25] [27]						
HEAT PUMP						
HP-X-XX	2	2371	VA	=	4742.4	VA
		100%	X	=	4742.4	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	2	1498	VA	=	2995.2	VA
		65%	X	=	1946.88	VA
		MAX LOAD:		= [3]	4742	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	26,624	VA
AMPS AT 208V, 1PH				=	128.0	AMPS

LOAD SUMMARY (OPTIONAL CALCULATION NEC220.84)

UNIT NO.: 4BN - 4 BED NORTH LOFT

LIGHTING & GENERAL RECEPTACLES						
	AREA(S.F.):	VA / S.F.			LOAD	
	2,886	3		=	8,658	VA
SMALL APPLIANCES						
	2	1,500		=	3,000	VA
LAUNDRY CIRCUITS:						
	1	1,500		=	1,500	VA
					13,158	VA
APPLIANCES:						
APPLIANCE	#	LOAD				
MICROWAVE	1	1,000	VA	=	1,000	VA
DISHWASHER	1	1,200	VA	=	1,200	VA
GARBAGE DISPOSAL	1	1,176	VA	=	1,176	VA
WASHING MACHINE	1	1,500	VA	=	1,500	VA
[3] HOT TUB	1	10,000	VA	=	10,000	VA
WINE COOLER	1	240	VA	=	240	VA
FIREPLACE FAN&HEATER	1	2,300	VA	=	2,300	VA
					17,416	VA [9]
ELECTRIC COOKING						
RANGE/OVEN	2	8,000	VA	=	16,000	VA
					16,000	VA
DRYERS:						
ELECTRIC DRYER	1	5,000	VA	=	5,000	VA
					5,000	VA
DEMAND LOADS						
GENERAL LOADS					51,574	VA
1ST 10KW		100% NEC DEMAND			10,000	VA
REMAINDER		40% NEC DEMAND			16,630	VA
HEATING AND AIR CONDITIONING LOADS: [25] [27]						
HEAT PUMP						
HP-X-XX	3	2371	VA	=	7113.6	VA
		100%	X	=	7113.6	VA
THERMAL STORAGE OR OTHER HEATING SYSTEMS						
ERV-X-XX	3	1498	VA	=	4492.8	VA
		65%	X	=	2920.32	VA
		MAX LOAD:		= [3]	7114	VA
TOTAL ELECTRICAL LOAD WITH DEMAND FACTORS				=	33,743	VA
AMPS AT 208V, 1PH				=	162.2	AMPS [9]

COLORADO REGISTERED PROFESSIONAL ENGINEER
JON BROOKS
35717
2/18/2025

TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
9	RFI #59	04.30.2024
25	RFI #186	07.29.2024
27	ASI 003	08.02.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL RESIDENTIAL LOAD SUMMARY 4 BEDRMS

SHEET NO.

E6.14

8/5/2024 10:47:58 PM

LOAD CENTER '1BS'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 150A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 1 BEDRM STANDARD - 1BS | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	ERV UNIT ERV-X-XX	2	15		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	SME	20
21	REFRIGERATOR	1	20	DUAL	A	GFCI	40	2	OVEN	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	--	--	--	24
25	FIREPLACE	1	20	AFCI	A	AFCI	20	1	SPARE	26
27	FIREPLACE FAN	1	20	AFCI	B				BUSSED SPACE	28
29	SPARE	1	20		A				BUSSED SPACE	30

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '2BF'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 150A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 2 BEDRM FLEX - 2BF | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	ERV UNIT ERV-X-XX	2	15		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	MICROWAVE OVEN	20
21	REFRIGERATOR	1	20	DUAL	A		20	1	SME	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	40	2	OVEN	24
25	FIREPLACE	1	20	AFCI	A	GFCI	--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B				BUSSED SPACE	28
29	SPARE	1	20		A				BUSSED SPACE	30

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '2BS & TYPE A'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 150A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 2 BEDRM STANDARD - 2BS | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	ERV UNIT ERV-X-XX	2	15		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	SME	20
21	REFRIGERATOR	1	20	DUAL	A	GFCI	40	2	OVEN (G1)	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	--	--	--	24
25	FIREPLACE	1	20	AFCI	A	AFCI	20	1	SPARE	26
27	FIREPLACE FAN	1	20	AFCI	B				BUSSED SPACE	28
29	SPARE	1	20		A				BUSSED SPACE	30

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

G1. BREAKER SHALL BE 40A/2P IN NON-TYPE A UNITED AND 30A/2P IN TYPE-A UNITS.

LOAD CENTER '2BS LOFT'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 200A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 2 BEDRM STANDARD LOFT - 2BS LOFT | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	SME	20
21	REFRIGERATOR	1	20	AFCI	A	AFCI	20	1	SPARE	22
23	LAUNDRY CIRCUIT	1	20	AFCI	B		15	2	ERV UNIT ERV-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B	GFCI	40	2	OVEN	28
29	ERV UNIT ERV X-XX	2	15		A	GFCI	--	--	--	30
31	--	--	--		B	GFCI	20	1	SPARE	32
33	SPARE	1	20		A		20	1	SPARE	34
35	SPARE	1	20		B		20	1	SPARE	36
37	SPARE	1	20		A		20	1	SPARE	38
39	SPARE	1	20		B				BUSSED SPACE	40
41	SPARE	1	20		A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '2BK'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 150A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 2 BEDRM KNUCKLE - 2BK | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	ERV UNIT ERV-X-XX	2	15		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	SME	20
21	REFRIGERATOR	1	20	DUAL	A	GFCI	40	2	OVEN	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	--	--	--	24
25	FIREPLACE	1	20	AFCI	A	AFCI	20	1	SPARE	26
27	FIREPLACE FAN	1	20	AFCI	B				BUSSED SPACE	28
29	SPARE	1	20		A				BUSSED SPACE	30

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '3BF'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 200A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 3 BEDRM FLEX - 3BF | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	25		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	20
21	REFRIGERATOR	1	20	DUAL	A		25	--	--	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		20	1	SME	24
25	FIREPLACE	1	20	AFCI	A	GFCI	40	2	OVEN	26
27	FIREPLACE FAN	1	20	AFCI	B	GFCI	--	--	--	28
29	SPARE	1	20		A				BUSSED SPACE	30
31	SPARE	1	20		B				BUSSED SPACE	32
33	SPARE	1	20		A				BUSSED SPACE	34
35	SPARE	1	20		B				BUSSED SPACE	36

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '3BF LOFT'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 200A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 3 BEDRM FLEX - 3BF LOFT | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	2	HEAT PUMP UNIT HP-X-XX	20
21	REFRIGERATOR	1	20	DUAL	A		--	--	--	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		20	1	SME	28
29	DRYER	2	30	GFCI	A	GFCI	40	2	OVEN	30
31	--	--	--	GFCI	B	GFCI	--	--	--	32
33	LAUNDRY CIRCUIT	1	20	DUAL	A	AFCI	20	1	SPARE	34
35	ERV UNIT ERV-X-XX	2	15		B	GFCI	20	1	SPARE	36
37	--	--	--		A		20	1	SPARE	38
39	SPARE	1	20		B				BUSSED SPACE	40
41	SPARE	1	20		A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '3BS & TYPE A'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 200A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 3 BEDRM STANDARD - 3BS | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	20
21	REFRIGERATOR	1	20	DUAL	A		--	--		22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		20	1	SME	24
25	FIREPLACE	1	20	AFCI	A	GFCI	40	2	OVEN (G1)	26
27	FIREPLACE FAN	1	20	AFCI	B	GFCI	--	--	--	28
29	SPARE	1	20		A				BUSSED SPACE	30
31	SPARE	1	20		B				BUSSED SPACE	32
33	SPARE	1	20		A				BUSSED SPACE	34
35	SPARE	1	20		B				BUSSED SPACE	36

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

G1. BREAKER SHALL BE 40A/2P IN NON-TYPE A UNITED AND 30A/2P IN TYPE-A UNITS.

LOAD CENTER '3BS LOFT'

VOLTAGE L-L: 208 | LOCATION: VARIES, SEE PLANS
VOLTAGE L-G: 120 | BUS RATING: 200A
TYPE: 1PH/3W | MAIN CB: M.L.O.
MOUNTING: RECESSED | AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
NOTES: 3 BEDRM STANDARD LOFT 3BS LOFT | FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	2	HEAT PUMP UNIT HP-X-XX	20
21	REFRIGERATOR	1	20	DUAL	A		--	--	--	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		20	1	SME	28
29	DRYER	2	30	GFCI	A	GFCI	40	2	OVEN	30
31	--	--	--	GFCI	B	GFCI	--	--	--	32
33	LAUNDRY CIRCUIT	1	20	DUAL	A	AFCI	20	1	SPARE	34
35	ERV UNIT ERV-X-XX	2	15		B	GFCI	20	1	SPARE	36
37	--	--	--		A		20	1	SPARE	38
39	SPARE	1	20		B				BUSSED SPACE	40
41	SPARE	1	20		A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024
20	RFI #40	04.12.2024
9	RFI #59	04.30.2024
20	RFI #148	07.26.2024
22	RFI #170	07.26.2024
24	ASD 001	07.26.2024
25	RFI #186	07.29.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL UNIT LOAD CENTERS

SHEET NO.
E6.15

7/30/2024 5:47:09 PM

LOAD CENTER '3BC'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 3 BEDRM CORNER - 3BC

LOCATION: VARIES, SEE PLANS
BUS RATING: 200A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	ERV UNIT ERV-X-XX	2	15		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	GFCI	20	1	WINE COOLER	20
21	REFRIGERATOR	1	20	DUAL	A		20	1	SME	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	40	2	OVEN	24
25	FIREPLACE	1	20	AFCI	A	GFCI	--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		20	2	HEAT PUIMP HP-X-XX	28
29	SPARE	1	20		A		--	--	--	30
31	SPARE	1	20		B		15	2	ERV UNIT ERV-X-XX	32
33	SPARE	1	20		A		--	--	--	34
35	SPARE	1	20		B		20	1	SPARE	36

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '3BC LOFT'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 3 BEDRM CORNER - 3BC LOFT

LOCATION: VARIES, SEE PLANS
BUS RATING: 200A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	SME	20
21	REFRIGERATOR	1	20	DUAL	A		20	1	SPARE	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	60	2	HOT TUB	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		20	2	HEAT PUMP UNIT HP-X-XX	28
29	WINE COOLER	1	20		A		--	--	--	30
31	ERV UNIT ERV-X-XX	2	15		B		15	2	ERV UNIT ERV-X-XX	32
33	--	--	--		A		--	--	--	34
35	SPARE	1	20		B		15	2	ERV UNIT ERV-X-XX	36
37	SPARE	1	20		A		--	--	--	38
39	SPARE	1	20		B	GFCI	40	2	OVEN	40
41	SPARE	1	20		A	GFCI	--	--	--	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '4BE'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 4 BEDRM EAST - 4BE

LOCATION: VARIES, SEE PLANS
BUS RATING: 200A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	20
21	REFRIGERATOR	1	20	DUAL	A		--	--	--	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		20	2	HEAT PUMP UNIT HP-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		15	2	ERV UNIT ERV-X-XX	28
29	SME	1	20		A		--	--	--	30
31	ERV UNIT ERV-X-XX	2	15		B		15	2	ERV UNIT ERV-X-XX	32
33	--	--	--		A		--	--	--	34
35	SPARE	1	20		B		20	1	SPARE	36
37	SPARE	1	20		A		--	--	--	38
39	SPARE	1	20		B				BUSSED SPACE	40
41	SPARE	1	20		A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '4BE LOFT'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 4 BEDRM EAST LOFT - 4BE

LOCATION: VARIES, SEE PLANS
BUS RATING: 225A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	50	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	GFCI	60	2	HOT TUB	20
21	REFRIGERATOR	1	20	DUAL	A		--	--	--	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		20	2	HEAT PUMP UNIT HP-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		15	2	ERV UNIT ERV-X-XX	28
29	SME	1	20		A		--	--	--	30
31	ERV UNIT ERV-X-XX	2	15		B		15	2	ERV UNIT ERV-X-XX	32
33	--	--	--		A		--	--	--	34
35	SPARE	1	20		B	GFCI	20	1	WINE COOLER	36
37	SPARE	1	20		A	GFCI	40	2	OVEN	38
39	SPARE	1	20		B	GFCI	--	--	--	40
41	SPARE	1	20		A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '4BN'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 4 BEDRM NORTH - 4BN LOFT

LOCATION: VARIES, SEE PLANS
BUS RATING: 200A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	20
21	REFRIGERATOR	1	20	DUAL	A		--	--	-	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		15	2	ERV UNIT ERV-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	-	26
27	FIREPLACE FAN	1	20	AFCI	B	GFCI	20	1	WINE COOLER	28
29	SME	1	20		A	GFCI	40	2	OVEN	30
31	SPARE	1	20		B	GFCI	--	--	--	32
33	SPARE	1	20		A	AFCI	20	1	SPARE	34
35	SPARE	1	20		B	GFCI	20	1	SPARE	36
37	SPARE	1	20		A		20	1	SPARE	38
39	SPARE	1	20		B				BUSSED SPACE	40
41	SPARE				A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '4BN LOFT'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 4 BEDRM NORTH - 4BN LOFT

LOCATION: VARIES, SEE PLANS
BUS RATING: 225A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	30	2	DRYER	6
7	--	--	--		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	GFCI	60	2	HOT TUB	20
21	REFRIGERATOR	1	20	DUAL	A		--	--	--	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B		20	2	HEAT PUMP UNIT HP-X-XX	24
25	FIREPLACE	1	20	AFCI	A		--	--	--	26
27	FIREPLACE FAN	1	20	AFCI	B		15	2	ERV UNIT ERV-X-XX	28
29	SME	1	20		A		--	--	--	30
31	ERV UNIT ERV-X-XX	2	15		B		15	2	ERV UNIT ERV-X-XX	32
33	--	--	--		A		--	--	--	34
35	SPARE	1	20		B	GFCI	20	1	WINE COOLER	36
37	SPARE	1	20		A	GFCI	40	2	OVEN	38
39	SPARE	1	20		B	GFCI	--	--	--	40
41	SPARE	1	20		A				BUSSED SPACE	42

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

LOAD CENTER '3BK'

VOLTAGE L-L: 208
VOLTAGE L-G: 120
TYPE: 1PH/3W
MOUNTING: RECESSED
NOTES: 3 BEDRM CORNER KNUCKLE 3BC K

LOCATION: VARIES, SEE PLANS
BUS RATING: 150A
MAIN CB: M.L.O.
AIC RATING: VARIES, SEE ONE-LINE DIAGRAM
FED FROM: VARIES, SEE ONE-LINE DIAGRAM

CIR. NO	LOAD DESCRIPTION	CIRCUIT BREAKER POLE	TRIP	TYPE	BUS	CIRCUIT BREAKER TYPE	TRIP	POLE	LOAD DESCRIPTION	CIR NO
1	HEAT PUMP UNIT HP-X-XX	2	20		A	GFCI	40	2	RANGE	2
3	--	--	--		B	GFCI	--	--	--	4
5	ERV UNIT ERV-X-XX	2	15		A	GFCI	30	2	DRYER	6
7	-	-	-		B	GFCI	--	--	--	8
9	DISHWASHER	1	20	DUAL	A	DUAL	20	1	BATHROOM CIRCUIT	10
11	DISPOSAL	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	12
13	MICROWAVE/HOOD	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	14
15	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B	AFCI	15	1	LIGHTING/RECEPTACLES	16
17	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	A	AFCI	15	1	LIGHTING/RECEPTACLES	18
19	KITCHEN APPLIANCE RECEPT.	1	20	DUAL	B		20	1	SME	20
21	REFRIGERATOR	1	20	DUAL	A	GFCI	40	2	OVEN	22
23	LAUNDRY CIRCUIT	1	20	DUAL	B	GFCI	--	--	--	24
25	FIREPLACE	1	20	AFCI	A	AFCI	20	1	SPARE	26
27	FIREPLACE FAN	1	20	AFCI	B				BUSSED SPACE	28
29	SPARE	1	20		A				BUSSED SPACE	30
31	SPARE	1	20		B				BUSSED SPACE	32
33	SPARE	1	20		A				BUSSED SPACE	34
35	SPARE	1	20		B				BUSSED SPACE	36

BREAKER TYPES:
AFCI: CIRCUIT BREAKER TO BE AFCI PROTECTED.
GFCI: CIRCUIT BREAKER TO BE GFCI PROTECTED.
DUAL: CIRCUIT BREAKER TO BE DUAL FUNCTION AFCI AND GFCI PROTECTED.

COLORADO REGISTERED
APPROVED
35717
2/18/2025
PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.26.2024
3	IFC	03.15.2024
6	RFI #40	04.12.2024
9	RFI #59	04.30.2024
25	RFI #186	07.29.2024

PROJECT NUMBER 20015
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL UNIT LOAD CENTERS

SHEET NO.

E6.16

7/29/2024 5:47:59 PM

POOL EQUIPMENT NOTES

A. PROVIDE 120V CONTROL WIRING AS REQUIRED PER POOL EQUIPMENT SCHEDULE ON POOL DRAWINGS.

B. REFER TO POOL DRAWINGS FOR EQUIPMENT LOCATIONS.

C. FIELD VERIFY ALL EQUIPMENT LOADS, VOLTAGES, AND RECOMMENDED FUSE SIZING PRIOR TO ENERGIZING CIRCUIT.

D. THE ELECTRICAL CONTRACTOR SHALL REVIEW ALL AQUATICS PLANS AND PROVIDE ALL WORK AS CALLED OUT TO BE COMPLETED BY THE ELECTRICAL CONTRACTOR. COORDINATE WITH POOL CONTRACTOR.

E. ALL DISCONNECTS SHALL BE NEMA 3R RATED WITH NON-METALLIC ENCLOSURE AND STAINLESS STEEL HARDWARE FOR CORROSION RESISTANCE.

F. MOTORS REQUIRING STARTERS SHALL UTILIZE COMBINATION STARTER/DISCONNECT. STARTERS SHALL BE NON-REVERSING WITH NEMA SIZE AS LISTED. ALL STARTERS SHALL UTILIZE CIRCUIT BREAKERS FOR OVERCURRENT PROTECTION. ELECTRICAL CONTRACTOR TO VERIFY ALL PUMPS AND MOTORS REQUIREING STARTERS TO BE PROVIDED BY EC PRIOR TO COMMENCING WORK AND ORDERING MOTOR STARTERS.

G. PROVIDE FLEXIBLE CONDUIT CONNECTION AT ALL PUMP MOTORS, MINIMUM 18" IN LENGTH.

H. WHERE MOTOR IS WITHIN SIGHT (PER THE DEFINITION OF THE NEC) OF THE MCC, THE INDICATED DISCONNECT SWITCH IS NOT REQUIRED.

I. ALL MOTORS GREATER THAN 7.5 HORSEPOWER ARE TO BE PROVIDED WITH THREE PHASE PROTECTION.

J. ELECTRICAL CONTRACTOR SHALL REFERENCE POOL WIRING DIAGRAMS AND SEQUENCE OF OPERATIONS FOR INTERLOCKS PROVIDED ON THE AQUATIC DESIGNERS DRAWINGS.

K. ALL POOL, SPA AND/OR HOT-TUB ELECTRICAL RECEPTACLES, DEVICES, LIGHTING, UNDERWATER LUMINAIRES, PUMPS/MOTORS, AND EQUIPMENT SHALL BE PROVIDED WITH GFCI PROTECTION AND SPGFCI PROTECTION IN ACCORDANCE WITH NEC ARTICLE 680 REQUIREMENTS, INCLUDING BUT NOT LIMITED TO SECTIONS: 680.5, 680.12, 680.21 (C), 680.22(A)(4), 680.22 (A)(4), 680.22(B)(4), AND 680.23(A)(3).WHERE NOT PROVIDED BY THE POOL CONTRACTOR, THE ELECTRICAL CONTRACTOR SHALL PROVIDE VARIABLE FREQUENCY DRIVE AS INDICATED IN THE POOL EQUIPMENT SCHEDULE PER THE FOLLOWING SPECIFICATIONS.
   a. MANUFACTURER SHALL BE: ABB, ALLEN BRADLEY, OR APPROVED EQUAL.
   b. VFD UNIT ENCLOSURE SHALL BE NEMA-12 RATED.
   c. UNIT SHALL BE PROVIDED WITH MANUAL SPEED ADJUSTMENT VIA KEYPAD OR DIAL MOUNTED ON THE ENCLOSURE'S EXTERIOR.
   d. UNIT SHALL BE PROVIDED WITH REQUIRED NUMBER OF OUTPUTS FOR CONNECTION TO EXTERNAL RELAY(S) AND EQUIPMENT.
   e. UNIT SHALL BE PROVIDED WITH MANUFACTURER'S PERFORMED FIELD TEST OF DRIVE.
   f. UNIT SHALL BE PROVIDED WITH OWNER OPERATIONAL AND MAINTENANCE TRAINING OF DEVICE.
   g. UNIT SHALL BE SUITABLE FOR OPERATING ENVIRONMENT FROM 0 DEGREES TO 40 DEGREES CELCIUS, AND HUMIDITY UP TO 90% NON-CONDENSING.
   h. PROVIDE VFD WITH CAPABILITY OF 30 SECOND RAMP UP TO FULL SPEED AND 5 SECOND RAMP DOWN FROM FULL SPEED TO ZERO FOR ALL APPLICATIONS USING FILTRATION SYSTEM WITH REGENERATIVE MEDIA FILTER. COORDINATE LOCATIONS WITH POOL CONTRACTOR.
   i. PROVIDE VFD WITH REQUIRED NUMBER OF OUTPUTS FOR CONNECTION TO ALL EXTERNAL RELAY(S) AND EQUIPMENT AS REQUIRED BY THE POOL CONTRACTOR'S DRAWINGS.

L. PROVIDE CLEARLY LABELED EMERGENCY SHUTOFF BUTTONS FOR THE PURPOSE OF STOPPING THE MOTORS THAT PROVIDE POWER TO ALL NON-FILTRATION PUMPS PER POOL ENGINEER. EMERGENCY SHUTOFF BUTTON LOCATIONS SHALL BE COORDINATED WITH THE OWNER OR THE OWNER'S RISK MANAGEMENT CONSULTANT.

M. PROVIDE CLEARLY LABELED EMERGENCY POWER OFF (EPO) SWITCH(ES) FOR EMERGENCY SHUTDOWN OF ALL POOL WATER HEATER/BOILER SYSTEMS AS REQURED BY CODE. EPO SWITCH LOCATIONS SHALL BE AT EACH EGRESS DOOR LEADING FROM THE ROOM HOUSING THE POOL WATER HEATER SYSTEM(S) AND SHALL BE COORDINATED WITH THE POOL ENGINEER AND OWNER'S RISK MANAGEMENT CONSULTANT.

POOL SPECIFIC NOTES

1. WHERE VFD IS PROVIDED FOR ALL 120V/1-PH, 208V/1-PH, OR 208V/3-PH POOL OR SPA MOTORS OR PUMPS, CONTRACTOR SHALL PROVIDE AND INSTALL CLASS A GFCI DEVICE ON LOAD SIDE OF VFD AND AHEAD OF MOTOR CONNECTION PER NEC 680.5. GFCI DEVICE SHALL BE CLASS A WITH 5MA TRIP SETTING AND HAVE CURRENT RATING TO MEET OR EXCEED NAMEPLATE AMPERAGE RATING OF ASSOCIATED PUMP. BASIS OF DESIGN IS LITTELFUSE SB5000 SERIES, OR APPROVED EQUIVALENT. FIELD COORDINATE INSTALLATION LOCATION AND MOUNTING WITH POOL CONTRACTOR PRIOR TO ROUGH-IN.
2. POWER FOR FEED PUMPS IS PROVIDED VIA CHEMICAL CONTROLLER. EC SHALL COORDINATE INTERCONNECTION REQUIREMENTS WITH POOL CONTRACTOR AND APPROVED POOL EQUIPMENT SHOP DRAWINGS AND WIRING DIAGRAMS. REFER TO POOL CONSULTANT/AQUATICS (SP-SERIES) DRAWINGS FOR ADDITIONAL INFORMATION.
3. LOW VOLTAGE CONTROL WIRING CONNECTIONS ARE REQUIRED BETWEEN THE PUMP VFD'S, FILTRATION SYSTEM, WATER CHEMISTRY CONTROLLER, UV TREATMENT SYSTEM, CHLORINE SYSTEM, ACID FEED SYSTEM, FLOW METER, HEATING SYSTEM, AND/OR ACTIVITY FEATURE SYSTEM FOR CONTROLS AND AUTOMATION OF POOL EQUIPMENT. CONDUIT SHALL BE PROVIDED BY EC. ALL LOW VOLTAGE CONTROL WIRING SHALL BE PROVIDED BY POOL CONTRACTOR. EC SHALL COORDINATE INTERCONNECTION REQUIREMENTS WITH POOL CONTRACTOR AND APPROVED POOL EQUIPMENT SHOP DRAWINGS AND WIRING DIAGRAMS. REFER TO POOL CONSULTANT/AQUATICS (SP-SERIES) DRAWINGS FOR ADDITIONAL INFORMATION.

POOL EQUIPMENT SCHEDULE

KEY		EQUIPMENT DESCRIPTION	LOAD (HP/kW /FLA)	ELECTRICAL	MOCP	FEEDER	DISCONNECT	STARTER NEMA SIZE	STARTER AUX CONTACT	PANEL	CIRCUIT	NOTES
P	1	POOL CIRCULATION PUMP	3 HP	208 V/1-3596 VA	35A MOCP	2#8, 1#10G, 1"C	30A/2P	NEMA 0	3 NO/NC	LMA	12,14	1, 3
P	2	POOL WATERFALL PUMP	3 HP	208 V/1-3596 VA	35A MOCP	2#8, 1#10G, 1"C	30A/2P	NEMA 0	3 NO/NC	LMA	27,29	1, 3
SP	3	SPA JET PUMP	5 HP	208 V/1-5824 VA	60A MOCP	2#4, 1#10G, 1"C	60A/2P	NEMA 1	3 NO/NC	LMA	7,9	1, 3
SP	4	SPA CIRCULATION PUMP	5 HP	208 V/1-5824 VA	60A MOCP	2#4, 1#10G, 1"C	60A/2P	NEMA 1	3 NO/NC	LMA	16,18	1, 3
SS24	7A	SPA SANITIZER - CHLORINE FEEDER	4 FLA	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	5-20R			LMA	28	2, 3
PS4	7B	POOL SANITIZER - CHLORINE FEEDER	4 FLA	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	5-20R			LMA	28	2, 3
SA25	8A	SPA PH BALANCER - ACID FEEDER	--	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	5-20R			LMA	30	2, 3
PA5	8B	POOL PH BALANCER - ACID FEEDER	--	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	5-20R			LMA	30	2, 3
CC6	9A	CHEMICAL CONTROLLER	4 FLA	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	5-20R			LMA	24	2, 3
CC26	9B	CHEMICAL CONTROLLER	4 FLA	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	5-20R			LMA	24	2, 3
AF32	10	AUTO-FILL CONTROLLER SPA	4 FLA	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/1P			LMA	26	3
AF13	11	AUTO-FILL CONTROLLER POOL	4 FLA	120 V/1-500 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/1P			LMA	26	3
SB	12	SPA JET BLOWER	2 HP	120 V/1-2004 VA	25A MOCP	2#10, 1#10G, 3/4"C	30A/1P	NEMA 0		LMA	32	1

MECHANICAL EQUIPMENT GENERAL NOTES

A. REFER TO MECHANICAL PLANS FOR SPECIFIC EQUIPMENT LOCATIONS AND REQUIREMENTS.

B. PRIOR TO ROUGH-IN, COORDINATE ALL MECHANICAL EQUIPMENT POWER AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR'S FINAL SHOP DRAWINGS.

C. PROVIDE ALL 120V CONTROL WIRING, REFER TO SPECIFICATIONS FOR FURTHER CONTROL WIRING CLARIFICATION.

D. FOR ANY VAV SYSTEM COORDINATE POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR AND PROVIDE 120V CONNECTIONS AT EACH VAV BOX, OR AT CENTRAL CONTROL PANEL LOCATION(S) AS REQUIRED. IF EXACT QUANTITIES AND LOCATIONS FOR CONTROL PANELS ARE NOT KNOWN AT BID TIME, E.C. IS TO INCLUDE ONE 120V CONNECTION AT EACH VAV DEVICE IN THE BASE BID PRICE AND PROVIDE A CREDIT DURING CONSTRUCTION IF LESS CONNECTIONS ARE REQUIRED.

E. EXTERIOR DISCONNECT SWITCHES ARE TO BE PROVIDED AS NEMA 3R EQUIPMENT UNLESS OTHERWISE NOTED.

F. PROVIDE WEATHERPROOF 120 VOLT GFCI RECEPTACLES WITHIN 25' OF ALL ROOFTOP HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT. CIRCUIT TO SPARE CIRCUIT ON NEAREST 120V PANELBOARD OR AS INDICATED ON PLANS.

G. PROVIDE DUCT DETECTION ON ALL RETURN AIR SYSTEMS OF 2,000 CFM OR GREATER, AND FOR ALL SUPPLY AIR SYSTEMS 15,000 CFM OR GREATER, INCLUDING THOSE SYSTEMS SERVING MULTIPLE FLOORS. PROVIDE ADDITIONAL DUCT DETECTORS AND INSTALL REMOTE INDICATOR LIGHTS AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.

H. FOR ANY BOILER MECHANICAL SYSTEM, E.C. IS TO PROVIDE AN EMERGENCY PUSHBUTTON OFF AND ANY CONTROL WIRING REQUIRED. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR AND EQUIPMENT PRIOR TO INSTALLATION.

I. EC TO PROVIDE HAND/OFF/AUTO STARTERS FOR ALL MOTORS WHEN NOT INDICATED AS TO BE PROVIDED BY THE MECHANICAL CONTRACTOR ON THE MECHANICAL PLANS. SIZE OF STARTER TO BE BASED UPON SIZE OF MOTOR HORSEPOWER INDICATED.

MECHANICAL EQUIPMENT SPECIFIC NOTES

1. EC SHALL INTERLOCK FANS. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.
2. EC SHALL INTERLOCK FAN WITH CORRESPONDING HEAT PUMP. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.
3. EC SHALL VERIFY EQUIPMENT VOLTAGE, PHASE AND ELECTRICAL CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

MECHANICAL EQUIPMENT SCHEDULE

KEY		EQUIPMENT DESCRIPTION	LOAD	ELECTRICAL	MOCP/MFS	FEEDER	DISCONNECT	PANEL	CIRCUIT	NOTES
AWHP	1	HEAT PUMP WATER HEATER	74 MCA	480 V/3-61518 VA	100A MOCP	3#1, 1#8G, 1-1/2"C	100A/3P	HWS	1,3,5	
AWHP	2	HEAT PUMP WATER HEATER	74 MCA	480 V/3-61518 VA	100A MOCP	3#1, 1#8G, 1-1/2"C	100A/3P	HWS	2,4,6	
AWHP	3	HEAT PUMP WATER HEATER	74 MCA	480 V/3-61518 VA	100A MOCP	3#1, 1#8G, 1-1/2"C	100A/3P	HWS	7,9,11	
B	1	ELECTRIC BOILER	432 kW	480 V/3-432000 VA	SEE ONE-LINE	2[3#500, 1#1/0G, 3"C]	800A/3P	HWSB	5	
B	2	ELECTRIC BOILER	432 kW	480 V/3-432000 VA	SEE ONE-LINE	2[3#500, 1#1/0G, 3"C]	800A/3P	HWSB	6	
BBH	1-02	ELECTRIC BASEBOARD HEATER	2.4 FLA	120 V/1-288 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPH	2	
BBH	3-12	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPH	5	
BBH	3-13	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPH	7	
BBH	B-01	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LMA	2	
BBH	B-02	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LMA	4	
BBH	B-03	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LMA	4	
BBH	B-04	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LMA	2	
BBH	B-05	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPG	43	
BBH	B-07	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPG	39	
BBH	B-08	ELECTRIC BASEBOARD HEATER	2.4 FLA	120 V/1-290 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPG	1	
BBH	B-09	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPG	31	
BBH	B-10	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPG	31	
BBH	B-11	ELECTRIC BASEBOARD HEATER	4.9 FLA	120 V/1-590 VA	15A MOCP	2#12, 1#12G, 3/4"C	INTEGRAL	LPG	43	
BP	01	FIRE WATER BOOSTER PUMP	SEE ONE-LINE	480 V/3-79716 VA	N/A	SEE ONE-LINE	SEE ONE-LINE			
BP	02	FIRE WATER JOCKEY PUMP	3 HP	480 V/3-3987 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HSG	13,15,17	
CUH	1-01	CABINET UNIT HEATER	6 KW	208 V/1-6000 VA	40A MOCP	2#8, 1#8G, 1"C	60A/2P	LP1	35,37	
CUH	1-02	CABINET UNIT HEATER	6 KW	208 V/1-6000 VA	40A MOCP	2#8, 1#8G, 1"C	60A/2P	LP1	44,46	
CUH	1-03	CABINET UNIT HEATER	6 KW	208 V/1-6000 VA	40A MOCP	2#8, 1#8G, 1"C	60A/2P	LP1	45,47	
CUH	1-04	CABINET UNIT HEATER	6 KW	208 V/1-6000 VA	40A MOCP	2#8, 1#8G, 1"C	60A/2P	LP1	48,50	
CUH	B-01	CABINET UNIT HEATER	6 KW	208 V/1-6000 VA	40A MOCP	2#8, 1#8G, 1"C	60A/2P	LPG	28,30	
DH	1	DUCT HEATER	93.7 KW	480 V/3-93699 VA	SEE ONE-LINE	3#3/0, 1#4G, 2"C	200A/3P	HMSB	10	
DH	2	DUCT HEATER	93.7 KW	480 V/3-93699 VA	SEE ONE-LINE	3#3/0, 1#4G, 2"C	200A/3P	HMSB	11	
DH	3	DUCT HEATER	12.6 KW	480 V/3-12600 VA	20A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	13,15,17	
DH	B-01	DUCT HEATER	3 KW	208 V/1-3000 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LPG	20,22	
EF	1-01	EXHAUST FAN	80 W	120 V/1-80 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LP1	3	
EF	R-01	EXHAUST FAN	10 HP	480 V/3-11634 VA	35A MOCP	3#8, 1#10G, 1"C	60A/3P	HWS	13,15,17	2
EF	R-02	EXHAUST FAN	10 HP	480 V/3-11634 VA	35A MOCP	3#8, 1#10G, 1"C	60A/3P	HWS	19,21,23	2
EF	R-03	EXHAUST FAN	10 HP	480 V/3-11634 VA	35A MOCP	3#8, 1#10G, 1"C	60A/3P	HWS	8,10,12	2
ELEV	1B	ELEVATOR B (EAST)	10 HP	480 V/3-11634 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWL	4,6,8	
ELEV	2A	ELEVATOR A (WEST)	15 HP	480 V/3-17451 VA	40A MOCP	3#8, 1#10G, 1"C	60A/3P	HSG	7,9,11	
ERV	5-01	ENERGY RECOVERY VENTILATOR	27.1 MCA	208 V/1-5638 VA	35A MOCP	2#8, 1#10G, 1"C	60A/2P	LP5	67,69	
ERV	B-01	ENERGY RECOVERY VENTILATOR	11.55 MCA	208 V/1-2402 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LPG	24,26	
GF	1	GLYCOL FEED SYSTEM	1/3 HP	120 V/1-864 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LMA	34	
GF	2	GLYCOL FEED SYSTEM	1/3 HP	120 V/1-864 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LMA	36	
GF	B-01	GARAGE EXHAUST FAN	3/4 HP	208 V/3-1332 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	LSG	17,19,21	
GF	B-02A	GARAGE EXHAUST FAN	1 HP	480 V/3-1728 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HSG	1,3,5	1
GF	B-02B	GARAGE EXHAUST FAN	1 HP	480 V/3-1728 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HSG	1,3,5	1
GF	B-03	GARAGE EXHAUST FAN	1/3 HP	208 V/3-900 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	LSG	16,18,20	
GF	B-04A	GARAGE EXHAUST FAN	1 HP	480 V/3-1728 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HSG	2,4,6	1
GF	B-04B	GARAGE EXHAUST FAN	1 HP	480 V/3-1728 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HSG	2,4,6	1
HP	1-01	WATER TO AIR HEAT PUMP	10.9 MCA	208 V/1-2266 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP1	19,21	
HP	1-11	WATER TO AIR HEAT PUMP	11.4 MCA	208 V/1-2370 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP1	22,24	
HP	1-12	WATER TO AIR HEAT PUMP	21.9 MCA	208 V/3-7884 VA	30A MOCP	3#10, 1#10G, 3/4"C	30A/3P	LP1	49,51,53	
HP	2-01	WATER TO AIR HEAT PUMP	10.9 MCA	208 V/1-2266 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP2	1,3	
HP	3-01	WATER TO AIR HEAT PUMP	10.9 MCA	208 V/1-2266 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP4	1,3	29
HP	4-01	WATER TO AIR HEAT PUMP	10.9 MCA	208 V/1-2266 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP4	9,11	
HP	5-01	WATER TO AIR HEAT PUMP	11.4 MCA	208 V/1-2370 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP5	20,22	
HP	5-02	WATER TO AIR HEAT PUMP	11.4 MCA	208 V/1-2370 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LP5	75,77	
HP	B-01	WATER TO AIR HEAT PUMP	10.9 MCA	208 V/1-2266 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	LMA	1,3	
HP	B-02	WATER TO AIR HEAT PUMP	21.9 MCA	208 V/3-7884 VA	30A MOCP	3#10, 1#10G, 3/4"C	30A/3P	LPG	50,52,54	
HWRP	1	DOMESTIC HOT WATER RECIRCULATION PUMP	2 HP	120 V/1-2880 VA	50A MOCP	2#6, 1#10G, 1"C	60A/1P	LMA	25	
P	1	BUILDING HEATING WATER PUMP	10 HP	480 V/3-11634 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWA	1,3,5	
P	2	BUILDING HEATING WATER PUMP	10 HP	480 V/3-11634 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWA	2,4,6	
P	3	BUILDING HEATING WATER PUMP	10 HP	480 V/3-11634 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWA	7,9,11	
P	4	BUILDING HEATING WATER PUMP	10 HP	480 V/3-11634 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWA	8,10,12	
P	5	BUILDING HEATING WATER PUMP	15 HP	480 V/3-17451 VA	40A MOCP	3#8, 1#10G, 1"C	60A/3P	HWA	25,27,29	
P	6	BUILDING HEATING WATER PUMP	15 HP	480 V/3-17451 VA	40A MOCP	3#8, 1#10G, 1"C	60A/3P	HWA	31,33,35	
P	7	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	37,39,41	
P	8	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	43,45,47	
P	9	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	20,22,24	
P	10	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	26,28,30	
P	11	BUILDING HEATING WATER PUMP	3 HP	480 V/3-3987 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	32,34,36	
P	12	BUILDING HEATING WATER PUMP	3 HP	480 V/3-3987 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	32,34,36	
P	13	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	49,51,53	
P	14	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	38,40,42	
P	15	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	44,46,48	
P	16	BUILDING HEATING WATER PUMP	5 HP	480 V/3-6315 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	HWA	50,52,54	
SP	1	SUMP PUMP	1/2 HP	120 V/1-1176 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LPG	55	
SP	2	SUMP PUMP	1/2 HP	120 V/1-1176 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LPG	57	
ST	02D	STORAGE TANK	20 KW	480 V/3-19998 VA	30A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWA	56,58,60	
TF	1-01	TRANSFER FAN	1/10 HP	120 V/1-528 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LP1	1	2
TF	2-01	TRANSFER FAN	1/10 HP	120 V/1-528 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LP2	2	29
TF	3-01	TRANSFER FAN	1/10 HP	120 V/1-528 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LP4	6	
TF	4-01	TRANSFER FAN	1/10 HP	120 V/1-528 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LP4	13	
TF	B-01	TRANSFER FAN	3/4 HP	208 V/3-1332 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	LPG	44,46,48	
TF	B-02	TRANSFER FAN	1/10 HP	120 V/1-528 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/1P	LMA	8	
TF	B-03	TRANSFER FAN	3/4 HP	208 V/3-1332 VA	15A MOCP	3#12, 1#12G, 3/4"C	30A/3P	LSG	23,25,27	
TF	B-04	TRANSFER FAN	1/4 HP	120 V/1-1152 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LPG	8	
TF	B-05	TRANSFER FAN	1/4 HP	120 V/1-1152 VA	15A MOCP	2#12, 1#12G, 3/4"C	30A/1P	LMA	10	
UH	1	UNIT HEATER	18.4 FLA	480 V/3-15291 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWA	19,21,23	
UH	2	UNIT HEATER	18.4 FLA	480 V/3-15291 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWL	1,3,5	3
UH	3	UNIT HEATER	18.4 FLA	480 V/3-15291 VA	25A MOCP	3#10, 1#10G, 3/4"C	30A/3P	HWL	6,8,10	
UH	4	UNIT HEATER	12.2 FLA	277 V/1-3375 VA	20A MOCP	2#12, 1#12G, 3/4"C	30A/2P	HWL	9	
WWHP	1a	WATER TO WATER HEAT PUMP	42 MCA	480 V/3-34902 VA	50A MOCP	3#6, #10G, 1"C	60A/3P	HWA	14,16,18	
WWHP	1b	WATER TO WATER HEAT PUMP	42 MCA	480 V/3-34902 VA	50A MOCP	3#6, #10G, 1"C	60A/3P	HWA	55,57,59	
WWHP	2	WATER TO WATER HEAT PUMP	96 MCA	480 V/3-79809 VA	SEE ONE-LINE	3#1/0, 1#6G, 2"C	200A/3P	HWSB	7	
WWHP	3	WATER TO WATER HEAT PUMP	96 MCA	480 V/3-79809 VA	SEE ONE-LINE	3#1/0, 1#6G, 2"C	200A/3P	HWSB	8	
WWHP	4	WATER TO WATER HEAT PUMP	69 MCA	480 V/3-57363 VA	SEE ONE-LINE	3#1, 1#8G, 1-1/2"C	100A/3P	HWSB	9	

COLORADO REGISTERED LAND PROFESSIONAL ENGINEER 35717 1/8/2025 TOWN STAMP

359 DESIGN
3620 OSAGE STREET DENVER, CO 80211 720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	ASI 001	03.15.2024
14	RFI #62	06.18.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024
37	RFI #188	10.25.2024
43	ASI 007	01.08.2025

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL SCHEDULES

SHEET NO.
E7.00

1/9/2025 9:55:24 AM

3

UNIT MECHANICAL EQUIPMENT SCHEDULE (ERV)

KEY	DESCRIPTION	VOLTS	PH	LOAD HP,W,A	MOCP/ MFS	BRANCH CIRCUIT (WIRE AND CONDUIT)	DISCONNECT	CIRCUIT NUMBER	NOTES
ERV-1-02	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-03A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-03B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-04	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-05	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-06	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-07A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-07B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-08	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-09	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-1-10	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-02	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-03A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-03B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-04	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-05	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-06	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-07A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-07B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-08	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-09	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-10	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-11	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-12A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-2-12B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-02	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-03A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-03B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-04	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-05	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-06	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-07A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-07B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-08	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-09	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-10	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-11	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-12A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-3-12B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-02	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-03A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-03B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-03C	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-04A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-04B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-05A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-05B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-06A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-06B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-07A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-07B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-07C	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-08A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-08B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-09A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-09B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-10	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-11	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-12A	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
ERV-4-12B	ENERGY RECOVERY VENTILATOR	208	1	7.2 MCA	15 A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	

COLORADO REGISTERED
CHRIS BROOKS
35717
3/20/2024
PROFESSIONAL ENGINEER

TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.28.2024
3	IFC	03.15.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL UNIT SCHEDULES

SHEET NO.

E7.01

3/20/2024 4:45:27 PM

3

UNIT MECHANICAL EQUIPMENT SCHEDULE (HP) PART 1

KEY	DESCRIPTION	VOLTS	PH	LOAD HP,W,A	MOCP/ MFS	BRANCH CIRCUIT (WIRE AND CONDUIT)	DISCONNECT	CIRCUIT NUMBER	NOTES
HP-1-02	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-03A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-03B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-04A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-04B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-05A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-05B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-06	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-07A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-07B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-08	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-09	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-1-10	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-02	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-03A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-03B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-04A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-04B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-05A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-05B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-06	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-07A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-07B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-08	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-09	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-10	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-11	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-12A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-2-12B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	

27

UNIT MECHANICAL EQUIPMENT SCHEDULE (HP) PART 2

KEY	DESCRIPTION	VOLTS	PH	LOAD HP,W,A	MOCP/ MFS	BRANCH CIRCUIT (WIRE AND CONDUIT)	DISCONNECT	CIRCUIT NUMBER	NOTES
HP-3-02	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-03A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-03B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-04A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-04B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-05A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-05B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-06	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-07A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-07B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-08	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-09	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-10	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-11	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-12A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-3-12B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-02	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-03A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-03B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-03C	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-04A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-04B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-04C	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-05A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-05B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-05C	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-06A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-06B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-07A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-07B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-07C	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-08A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-08B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-09A	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-09B	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-10	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-11	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-12A	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-12B	WATER TO AIR HEAT PUMP	208	1	11.4 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	
HP-4-12C	WATER TO AIR HEAT PUMP	208	1	10.9 MCA	20A	2#12, 1#12G, 3/4"C	30A/2P	SEE UNIT LOAD CENTER	

27

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
3	ATC	03.15.2024
27	ASI 003	08.22.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL UNIT SCHEDULES

SHEET NO.

E7.02

8/5/2024 10:47:59 PM

PANEL: LP1

LOCATION: MECH. 78
SUPPLY FROM: LPG
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MLO
MAINS RATING: 400 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	M	TF-1-01	15	1		528	288						1	15	BBH 1-01L, 1-02	E	2
3	M	EF-1-01	20	1				80	360				1	20	EWC	R	4
5	L	LTG - LVL 1 CORRIDOR	20	1						120	360		1	20	EWC	R	6
7	E	IRRIGATION CONTROLLER	20	1		500	1080						1	20	REC - LOUNGE	R	8
9	L	LTG - LOUNGE	20	1				492	900				1	20	REC - LOUNGE	R	10
11	R	RCPTS - MAINTENANCE	20	1						540	360		1	20	REC - LOUNGE	R	12
13	R	REC - LOUNGE TV	20	1		1000	1920						1	20	GRILL TIMER / SHUT OFF	E	14
15	R	RCPTS - CORRIDORS	20	1				1440	1920				1	20	GRILL TIMER / SHUT OFF	E	16
17	E	AUTOMATED ACCESS DOOR OPERATOR	20	1						1500	1575	GFCI	2	30	HEAT TRACE DOWNSPOUT	E	18
19	E	HP-1-01	20	2		1133	1575					GFCI	--	--	--	--	20
21	--	--	--	--				1133	1185				2	20	HP-1-11	E	22
23	R	REC - LOUNGE	20	1						180	1185		--	--	--	--	24
25	E	GRILL POWER	30	2		1320	180						1	20	REC - FITNESS	R	26
27	--	--	--	--				1320	1575			GFCI	2	30	HEAT TRACE DOWNSPOUT	E	28
29	E	GRILL POWER	30	2						1320	1575	GFCI	--	--	--	--	30
31	--	--	--	--		1320	360						1	20	REC - FITNESS	R	32
33	R	REC - FITNESS	20	1				180	360				1	20	REC - FITNESS FLOOR	R	34
35	E	CUH-1-01	40	2						3000	360		1	20	REC - FITNESS FLOOR	R	36
37	--	--	--	--		3000	360						1	20	IDF QUAD	R	38
39	R	IDF QUAD	20	1				360	1080				1	20	REC - FITNESS	R	40
41	R	REC - EXT GFI	20	1						360	1080		1	20	REC - LOUNGE	R	42
43	R	REC - EXT GFI	20	1		1080	3000						2	40	CUH-1-02	E	44
45	E	CUH-1-03	40	2				3000	3000				--	--	--	--	46
47	--	--	--	--						3000	3000		2	40	CUH-1-04	E	48
49	E	HP-1-12	30	3		2628	3000						--	--	--	--	50
51	--	--	--	--				2628	0				1	20	SPARE	--	52
53	--	--	--	--						2628	0		1	20	SPARE	--	54
		--NOT A SPACE--				--	6952						3	200	PANEL 'LP2'		
		--NOT A SPACE--						--	6449				--	--	--		
		--NOT A SPACE--								--	4771		--	--	--		
				Total Load:		31224 VA		27462 VA		26914 VA							
				Total Amps:		261 A		230 A		224 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	1122 VA	1403 VA		
RECEPTACLE:	20080 VA	15040 VA	TOTAL CONN. LOAD:	85600 VA
MOTOR:	2192 VA	2324 VA	TOTAL EST. LOAD:	80973 VA
EQUIPMENT:	62206 VA	62206 VA	TOTAL CONN.:	238 A
KITCH EQUIP:			TOTAL EST. DEMAND:	225 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: LPG

LOCATION: ELECTRICAL ROOM
SUPPLY FROM: TPG
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 18kAIC
MAINS TYPE: MCB
MAINS RATING: 600 A
MCB RATING: 500 A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	BBH-B-08	20	1		290	1500						1	20	AUTOMATED ACCESS DOOR OPERATOR	E	2
3	R	MDF QUAD RECPT	20	1				360	500				1	20	EWC	R	4
5	L	LTG - GARAGE	20	1						308	540		1	20	REC - GARAGE LOBBY	R	6
7	R	REC - TRASH/GARAGE	20	1		540	1152						1	15	TF-B-04	M	8
9	R	REC - GARAGE STORAGE	20	1				900	1176				1	20	MOTORIZED DAMPER	M	10
11	E	AUTOMATED ACCESS DOOR OPERATOR	20	1						1000	1260		1	20	REC - GARAGE LOCKER RM	R	12
13	E	BOOT DRYER	20	1		1440	180						1	20	REC - ELEV-2A SHAFT	R	14
15	--	SPARE	20	1				0	0				1	20	SPARE	--	16
17	E	BOOT DRYER	20	1						1440	180		1	20	REC - ELEV-1B SHAFT	R	18
19	R	RCPT - EBIKE	20	1		180	1500						2	20	DH-B-01	E	20
21	E	HEAT TRACE - GUTTER,UNIT 211 PIPE	30	2	GFCI			975	1500				--	--	--	--	22
23	--	--	--	--	GFCI					975	1201		2	15	ERV-B-01	E	24
25	E	GARAGE DE-ICING SYSTEM	30	2	GFCI	2496	1201						--	--	--	--	26
27	--	--	--	--	GFCI			2496	3000				2	40	CUH-B-01	E	28
29	R	REC - MAIN ELEC RM	20	1						360	3000		--	--	--	--	30
31	E	BBH-B-09, BBH-B-10	15	1		1180	180						1	20	RCPT - BUILDING STORAGE 122 EBIKE	R	32
33	R	RCPT - BUILDING STORAGE 122 EBIKE	20	1				180	360				1	20	REC - GENERATOR RM / EXT GARAGE	R	34
35	--	SPARE	20	1						0	180		1	20	RCPT - EBIKE	R	36
37	R	RCPT - BUILDING STORcAGE 122 EBIKE	20	1		180	360						1	20	MDF QUAD RECPT	R	38
39	E	BBH-B-07	15	1				590	2496			GFCI	2	30	GARAGE DE-ICING SYSTEM	E	40
41	R	RCPT - BUILDING STORAGE 122 EBIKE	20	1						180	2496	GFCI	--	--	--	--	42
43	E	BBH-B-05, BBH B-11	15	1		1180	444						3	15	TF-B-01	M	44
45	E	GARAGE DOOR OPERATOR	20	3				1919	444				--	--	--	--	46
47	--	--	--	--						1919	444		--	--	--	--	48
49	--	--	--	--		1919	2628						3	30	HP-B-02	E	50
51	--	SPARE	20	1				0	2628				--	--	--	--	52
53	--	SPARE	20	1						0	2628		--	--	--	--	54
55	M	SP-1	20	1		1176	0						1	20	SPARE	--	56
57	M	SP-2	20	1				1176	0				1	20	SPARE	--	58
59	--	SPARE	20	1						0	0		1	20	SPARE	--	60
61		SPARE				0	0						1	20	SPARE	--	62
63		SPARE						0	0				1	20	SPARE	--	64
65		SPARE								0	0		1	20	SPARE	--	66
67	--	BUSSED SPACE	--	1		--	31224						3	400	PANEL 'LP1' (SUB-FEED BREAKER)	L; E;...	68
69	--	BUSSED SPACE	--	1				--	27462				--	--	--	--	70
71	--	BUSSED SPACE	--	1						--	26914		--	--	--	--	72
				Total Load:		50950 VA		48162 VA		45025 VA							
				Total Amps:		429 A		405 A		375 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	1430 VA	1788 VA		
RECEPTACLE:	26700 VA	18350 VA	TOTAL CONN. LOAD:	144137 VA
MOTOR:	8204 VA	8537 VA	TOTAL EST. LOAD:	136478 VA
EQUIPMENT:	107803 VA	107803 VA	TOTAL CONN.:	400 A
KITCH EQUIP:			TOTAL EST. DEMAND:	379 A
CONTINUOUS:				
EXISTING:				

NOTES:

COLORADO REGISTERED CLINT BROOKS 35717 1/8/2025 PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
2	DMP SET REVISIONS	02.09.2024
5	IFC	03.15.2024
14	RFI #82	06.18.2024
26	RFI #132	07.29.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024
31	RFI #234	09.16.2024
36	RFI #228.1	10.09.2024
43	ASI 007	01.08.2025

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL PANEL SCHEDULES

SHEET NO.

E7.10

1/9/2025 9:55:24 AM

27

PANEL: LP4

LOCATION:
SUPPLY FROM: LP2
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MLO
MAINS RATING: 225 A
MCB RATING: N/A

Notes: FEED THRU-LUGS

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	HP-3-01	20	2		1133	1440						1	20	RCPTS - CORRIDORS	R	2
3	--	--	--	--				1133	540				1	20	RCPTS - MAINTENANCE	R	4
5	E	BBH-3-12	15	1						590	528		1	15	TF-3-01	M	6
23	E	BBH-3-13	15	1		590	170						1	20	LTG - LVL 3 CORRIDOR	L	8
9	E	HP-4-01	20	2				1133	360				1	20	IDF QUAD LVL 3	R	10
11	--	--	--	--						1133	360		1	20	IDF QUAD LVL 3	R	12
13	M	TF-4-01	15	1		528	540						1	20	RCPTS - MAINTENANCE	R	14
15	L	LTG - LVL 4 CORRIDOR	20	1				170	1440				1	20	RCPTS - CORRIDORS	R	16
17	--	SPARE	20	1						0	360		1	20	IDF QUAD LVL 4	R	18
19	--	SPARE	20	1		0	360						1	20	IDF QUAD LVL 4	R	20
21	--	SPARE	20	1				0	0				1	20	SPARE	--	22
23	--	SPARE	20	1						0	0		1	20	SPARE	--	24
25	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	26
27	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	28
29	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	42
				Total Load:		4761 VA		4776 VA		2971 VA							
				Total Amps:		42 A		42 A		25 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	340 VA	425 VA		
RECEPTACLE:	5400 VA	5400 VA	TOTAL CONN. LOAD:	12508 VA
MOTOR:	1056 VA	1188 VA	TOTAL EST. LOAD:	12725 VA
EQUIPMENT:	5712 VA	5712 VA	TOTAL CONN.:	35 A
KITCH EQUIP:			TOTAL EST. DEMAND:	35 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: LP2

LOCATION: LVL 2 MECH
SUPPLY FROM: LP1
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MLO
MAINS RATING: 225 A
MCB RATING: N/A

Notes: FEED THRU-LUGS

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	HP-2-01	20	2		1133	528						1	15	TF-2-01	M	2
3	--	--	--	--				1133	540				1	20	RCPTS - MAINTENANCE	R	4
5	R	IDF QUAD	20	1						360	1440		1	20	RCPTS - CORRIDORS	R	6
7	R	IDF QUAD	20	1		360	170						1	20	LTG - LVL 2 CORRIDOR	L	8
9	--	SPARE	20	1				0	0				1	20	SPARE	--	10
11	--	SPARE	20	1						0	0		1	20	SPARE	--	12
13	--	SPARE	20	1		0	0						1	20	SPARE	--	14
15	--	SPARE	20	1				0	0				1	20	SPARE	--	16
17	--	SPARE	20	1						0	0		1	20	SPARE	--	18
19	--	SPARE	20	1		0	0						1	20	SPARE	--	20
21	--	SPARE	20	1				0	0				1	20	SPARE	--	22
23	--	SPARE	20	1						0	0		1	20	SPARE	--	24
25	--	SPARE	20	1		0	0						1	20	SPARE	--	26
27	--	SPARE	20	1				0	0				1	20	SPARE	--	28
29	--	SPARE	20	1						0	0		1	20	SPARE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	42
		--NOT A SPACE--				--	4761						3	200	PANEL 'LP3'		
		--NOT A SPACE--						--	4776				--	--	--		
		--NOT A SPACE--								--	2971		--	--	--		
				Total Load:		6952 VA		6449 VA		4771 VA							
				Total Amps:		60 A		56 A		40 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	510 VA	638 VA		
RECEPTACLE:	8100 VA	8100 VA	TOTAL CONN. LOAD:	18172 VA
MOTOR:	1584 VA	1716 VA	TOTAL EST. LOAD:	18432 VA
EQUIPMENT:	7978 VA	7978 VA	TOTAL CONN.:	50 A
KITCH EQUIP:			TOTAL EST. DEMAND:	51 A
CONTINUOUS:				
EXISTING:				

NOTES:

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	DMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
27	ASI 005	08.02.2024
29	ASI 005	08.14.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL PANEL SCHEDULES

SHEET NO.

E7.11

8/14/2024 3:05:28 PM

PANEL: HSG

LOCATION: ELEC ROOM
SUPPLY FROM: HMSB
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 35kAIC
MAINS TYPE: MLO
MAINS RATING: 125 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	M	GF-B-02A, 02B	15	3		1152	1152						3	15	GF-B-04A, 04B	M	2
3	--	--	--	--				1152	1152				--	--	--	--	4
5	--	--	--	--						1152	1152		--	--	--	--	6
7	LM	ELEV-2A	40	3	ST	5817	0						1	20	SPARE	--	8
9	--	--	--	--	ST			5817	0				1	20	SPARE	--	10
11	--	--	--	--	ST					5817	0		1	20	SPARE	--	12
13	M	GF-02	15	3		1329	0						1	20	SPARE	--	14
15	--	--	--	--				1329	0				1	20	SPARE	--	16
17	--	--	--	--						1329	0		1	20	SPARE	--	18
19	--	SPARE	20	1		0	0						1	20	SPARE	--	20
21	--	SPARE	20	1				0	0				1	20	SPARE	--	22
23	--	SPARE	20	1						0	0		1	20	SPARE	--	24
25	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	26
27	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	28
29	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	10234						3	45	PANEL 'LSG' VIA XFMR 'TSG'	E; Spa...	38
39	--	BUSSED SPACE	--	1				--	11722				--	--	--	--	40
41	--	BUSSED SPACE	--	1						--	11458		--	--	--	--	42
				Total Load:		19684 VA		21172 VA		20908 VA							
				Total Amps:		71 A		77 A		76 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:				
RECEPTACLE:			TOTAL CONN. LOAD:	61765 VA
MOTOR:	21519 VA	22516 VA	TOTAL EST. LOAD:	67125 VA
EQUIPMENT:	22795 VA	22795 VA	TOTAL CONN.:	74 A
KITCH EQUIP:			TOTAL EST. DEMAND:	81 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: HEG

LOCATION: ELEC ROOM
SUPPLY FROM: HMSB
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 35kAIC
MAINS TYPE: MLO
MAINS RATING: 125 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	L	LTG EM - GARAGE	20	1		1628	1042						1	20	LTG EM - LVL 1	L	2
3	L	LTG - SITE S	20	1				70	140				1	20	LTG - SITE NW	L	4
5	--	SPARE	20	1						0	0		1	20	SPARE	--	6
7	--	SPARE	20	1		0	0						1	20	SPARE	--	8
9	--	SPARE	20	1				0	0				1	20	SPARE	--	10
11	--	SPARE	20	1						0	0		1	20	SPARE	--	12
13	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	14
15	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	16
17	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	18
19	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	20
21	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	22
23	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	24
25	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	26
27	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	28
29	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	1080						3	60	PANEL 'HE3'	L; Spare	38
39	--	BUSSED SPACE	--	1				--	540				--	--	--	--	40
41	--	BUSSED SPACE	--	1						--	0		--	--	--	--	42
				Total Load:		3750 VA		750 VA		0 VA							
				Total Amps:		14 A		3 A		0 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	4500 VA	5625 VA		
RECEPTACLE:			TOTAL CONN. LOAD:	4500 VA
MOTOR:			TOTAL EST. LOAD:	5625 VA
EQUIPMENT:			TOTAL CONN.:	5 A
KITCH EQUIP:			TOTAL EST. DEMAND:	7 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: LSG

3

LOCATION: POOL ROOM 122
SUPPLY FROM: TSG
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MCB
MAINS RATING: 100 A
MCB RATING: 100 A

Notes:

3 CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	3 CKT
1	E	2-WAY COMM	20	1		500	1176						1	20	MOTORIZED DAMPER	M	2
3	E	FACP	20	1				500	240				1	20	ELEVATOR SMOKE CURTAIN	E	4
5	E	GENERATOR WARMING PAD	20	1						1920	3598		3	30	GENERATOR COOLANT HEATER	E	6
7	E	ELEVATOR SMOKE CURTAIN	20	1		240	3598						--	--	--	--	8
9	E	GENERATOR BATTERY CHARGER	20	1				1920	3598				--	--	--	--	10
11	M	MOTORIZED DAMPER	20	1						1176	1176		1	20	MOTORIZED DAMPER	M	12
13	M	MOTORIZED DAMPER	20	1		1176	1176						1	20	MOTORIZED DAMPER	M	14
15	M	MOTORIZED DAMPER	20	1				1176	300				3	15	GF-B-03	M	16
17	M	GF-B-01	15	3						444	300		--	--	--	--	18
19	--	--	--	--		444	300						--	--	--	--	20
21	--	-- 27	--	--				444	1920				1	20	ELEV-2A CAB LIGHTING AND FAN	E	22
23	M	TF-B-03	15	3						444	1920		1	20	ELEV-1B CAB LIGHTING AND FAN	E	24
25	--	--	--	--		444	200						1	20	ELEV VISUAL COMM. SYSTEM	E	26
27	--	--	--	--				444	200				1	20	ELEV VISUAL COMM. SYSTEM	E	28
29	--	SPARE	20	1						0	0		--	--	--	--	30
31	--	SPARE	20	1		0	0						1	20	SPARE	--	32
33	--	SPARE	20	1				0	0				1	20	SPARE	--	34
35	--	SPARE	20	1						0	0		1	20	SPARE	--	36
37	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	40
3 41	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	42
		--NOT A SPACE--				--	980						3	60	PANEL 'LS2'		
		--NOT A SPACE--						--	980				--	--	--		
		--NOT A SPACE--								--	480		--	--	--		
				Total Load:		10234 VA		11722 VA		11458 VA							
				Total Amps:		85 A		99 A		97 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:				
RECEPTACLE:			TOTAL CONN. LOAD:	33415 VA
MOTOR:	10620 VA	10953 VA	TOTAL EST. LOAD:	33748 VA
EQUIPMENT:	22795 VA	22795 VA	TOTAL CONN.:	93 A
KITCH EQUIP:			TOTAL EST. DEMAND:	94 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: HE3

LOCATION: Stor. 01 97
SUPPLY FROM: HEG
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 14kAIC
MAINS TYPE: MLO
MAINS RATING: 125 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	L	LTG EM - LVL 2	20	1		540	540						1	20	LTG EM - LVL 3	L	2
3	L	LTG EM - LVL 4	20	1				540	0				1	20	SPARE	--	4
5	--	SPARE	20	1						0	0		1	20	SPARE	--	6
7	--	SPARE	20	1		0	0						1	20	SPARE	--	8
9	--	SPARE	20	1				0	0				1	20	SPARE	--	10
11	--	SPARE	20	1						0	0		1	20	SPARE	--	12
13	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	14
15	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	16
17	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	18
19	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	20
21	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	22
23	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	24
25	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	26
27	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	28
29	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	42
				Total Load:		1080 VA		540 VA		0 VA							
				Total Amps:		4 A		2 A		0 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	1620 VA	2025 VA		
RECEPTACLE:			TOTAL CONN. LOAD:	1620 VA
MOTOR:			TOTAL EST. LOAD:	2025 VA
EQUIPMENT:			TOTAL CONN.:	2 A
KITCH EQUIP:			TOTAL EST. DEMAND:	2 A
CONTINUOUS:				
EXISTING:				

NOTES:

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.08.2024
2	ATC	03.15.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL PANEL SCHEDULES

SHEET NO.
E7.12

3/14/2024 3:06:00 PM

PANEL: LMA

LOCATION: BOILER ROOM 123
SUPPLY FROM: TMA
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MCB
MAINS RATING: 400 A
MCB RATING: 400 A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A	A	B	B	C	C	CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	HP-B-01	20	2		1133	1180						1	15	BBH B-01, BBH B-04	E	2
3	--	--	--	--				1133	1180				1	15	BBH-B-02, BBH B-03	E	4
5	R	REC - PANELS GFI	20	1						180	0		1	20	SPARE	--	6
7	M	SP-3 (SPA PUMP)	60	2	GFCI	2912	528						1	15	TF-B-02	M	8
9	--	--	--	--	GFCI			2912	1152				1	15	TF-B-05	E	10
11	--	SPARE	20	1	GFCI					0	1798	GFCI	2	35	P-1 (POOL CIRC. PUMP)	M	12
13	--	SPARE	20	1		0	1798					GFCI	--	--	--	--	14
15	R	R	20	1				360	2912			GFCI	2	60	SP-4 (SPA PUMP)	M	16
17	--	SPARE	20	1						0	2912	GFCI	--	--	--	--	18
19	--	SPARE	20	1		0	0						1	20	SPARE	--	20
21	R	RECEPTS - MEP RM	20	1				720	0				1	20	SPARE	--	22
23	R	REC - POOL RM	20	1						540	1000	GFCI	1	20	CC-6, CC-26 (CHEMICAL...	E	24
25	E	HWRP-1	50	1		2880	1000					GFCI	1	20	AF-32, AF-13 (AUTO-FILL WATER...	E	26
27	M	P-2 (POOL WATERFALL PUMP)	35	2	GFCI			1798	1000			GFCI	1	20	PS-4, SS-24 (SANITIZERS)	E	28
29	--	--	--	--	GFCI					1798	1000	GFCI	1	20	PA-5, SA-25 (ACID BALANCERS)	E	30
31	--	SPARE	20	1	GFCI	0	2004					GFCI	1	25	SB-37 (SPA JET AIR BLOWER)	E	32
33	E	PSC-1 CONTROLLER	20	1	GFCI			500	864				1	15	GF-1	E	34
35	L	POOLS/SPA LTG VIA PSC-1	20	1	GFCI					300	864		1	15	GF-2	E	36
37	--	SPARE	20	1	GFCI	0	0						1	20	SPARE	--	38
39	--	SPARE	20	1				0	0				1	20	SPARE	--	40
41	--	SPARE	20	1						0	0		1	20	SPARE	--	42
43	--	SPARE	20	1		0	0						1	20	SPARE	--	44
45	--	SPARE	20	1				0	0				1	20	SPARE	--	46
47	--	SPARE	20	1						0	0		1	20	SPARE	--	48
49	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	50
51	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	52
53	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	54
55	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	56
57	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	58
59	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	60
		Total Load:				13435 VA		14531 VA		10392 VA							
		Total Amps:				116 A		125 A		87 A							

CB TYPE LEGEND
GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND
N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	300 VA	375 VA		
RECEPTACLE:	1800 VA	1800 VA	TOTAL CONN. LOAD:	38358 VA
MOTOR:	19368 VA	20824 VA	TOTAL EST. LOAD:	39889 VA
EQUIPMENT:	16890 VA	16890 VA	TOTAL CONN.:	106 A
KITCH EQUIP:			TOTAL EST. DEMAND:	111 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: HMA

LOCATION: MEP 108
SUPPLY FROM: HMSB
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 35kAIC
MAINS TYPE: MLO
MAINS RATING: 600 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A	A	B	B	C	C	CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	M	P-1	25	3		3878	3878						3	25	P-2	M	2
3	--	--	--	--				3878	3878				--	--	--	--	4
5	--	--	--	--						3878	3878		--	--	--	--	6
7	M	P-3	25	3		3878	3878						3	25	P-4	M	8
9	--	--	--	--				3878	3878				--	--	--	--	10
11	--	--	--	--						3878	3878		--	--	--	--	12
13	E	DH-3	20	3		4200	11634						3	50	WWHP-1a	M	14
15	--	--	--	--				4200	11634				--	--	--	--	16
17	--	--	--	--						4200	11634		--	--	--	--	18
19	M	UH-01	25	3		5097	2105						3	15	P-9	M	20
21	--	--	--	--				5097	2105				--	--	--	--	22
23	--	--	--	--						5097	2105		--	--	--	--	24
25	M	P-5	40	3		5817	2105						3	15	P-10	M	26
27	--	--	--	--				5817	2105				--	--	--	--	28
29	--	--	--	--						5817	2105		--	--	--	--	30
31	M	P-6	40	3		5817	2658						3	15	P-11, 12	M	32
33	--	--	--	--				5817	2658				--	--	--	--	34
35	--	--	--	--						5817	2658		--	--	--	--	36
37	M	P-7	15	3		2105	2105						3	15	P-14	M	38
39	--	--	--	--				2105	2105				--	--	--	--	40
41	--	--	--	--						2105	2105		--	--	--	--	42
43	M	P-8	15	3		2105	2105						3	15	P-15	M	44
45	--	--	--	--				2105	2105				--	--	--	--	46
47	--	--	--	--						2105	2105		--	--	--	--	48
49	M	P-13	15	3		2105	2105						3	15	P-16	M	50
51	--	--	--	--				2105	2105				--	--	--	--	52
53	--	--	--	--						2105	2105		--	--	--	--	54
55	M	WWHP-1b	50	3		11634	6666						3	30	ST-02D STORAGE TANK HEATER	E	56
57	--	--	--	--				11634	6666				--	--	--	--	58
59	--	--	--	--						11634	6666		--	--	--	--	60
61	--	SPARE	20	1		0	0						1	20	SPARE	--	62
63	--	SPARE	20	1				0	0				1	20	SPARE	--	64
65	--	SPARE	20	1						0	0		1	20	SPARE	--	66
67	--	SPARE	20	1		0	13435						3	175	PANEL 'LMA' VIA XFMR 'TMA'	L; E;...	68
69	--	SPARE	20	1				0	14531				--	--	--	--	70
71	--	SPARE	20	1						0	10392		--	--	--	--	72
73	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	74
75	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	76
77	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	78
79	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	80
81	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	82
83	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	84
		Total Load:				99310 VA		100406 VA		96267 VA							
		Total Amps:				360 A		364 A		348 A							

CB TYPE LEGEND
GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND
N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	300 VA	375 VA		
RECEPTACLE:	1800 VA	1800 VA	TOTAL CONN. LOAD:	295983 VA
MOTOR:	244395 VA	253121 VA	TOTAL EST. LOAD:	304784 VA
EQUIPMENT:	49488 VA	49488 VA	TOTAL CONN.:	356 A
KITCH EQUIP:			TOTAL EST. DEMAND:	367 A
CONTINUOUS:				
EXISTING:				

NOTES:

COLORADO REGISTERED PROFESSIONAL ENGINEER
JON BROOKS
35717
1/8/2025
TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3437

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	GMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
3	IFC	03.15.2024
27	ASI 003	08.02.2024
43	ASI 007	01.08.2025

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL PANEL SCHEDULES

SHEET NO.
E7.13

1/9/2025 9:36:25 AM

PANEL: HML1

LOCATION: MECH. 78
SUPPLY FROM: HMSB
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 35kAIC
MAINS TYPE: MLO
MAINS RATING: 250 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A	B	C	CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	M	UH-02	25	3		5097	150			1	20	LTG - SITE N	L	2
3	--	--	--	--			5097	2226		1	20	LTG - GARAGE	L	4
5	--	--	--	--				5097	5097	3	25	UH-03	M	6
7	L	LTG - LVL 1	20	1		1390	5097			--	--	--	--	8
9	M	UH-4	20	1			3375	5097		--	--	--	--	10
11	--	SPARE	20	1				0	0	1	20	SPARE	--	12
13	--	SPARE	20	1		0	0			1	20	SPARE	--	14
15	--	SPARE	20	1			0	0		1	20	SPARE	--	16
17	--	SPARE	20	1				0	0	1	20	SPARE	--	18
19	--	SPARE	20	1		0	0			1	20	SPARE	--	20
21	--	SPARE	20	1			0	0		1	20	SPARE	--	22
23	--	SPARE	20	1				0	0	1	20	SPARE	--	24
25	--	SPARE	20	1		0	0			1	20	SPARE	--	26
27	--	SPARE	20	1			0	0		1	20	SPARE	--	28
29	--	SPARE	20	1				0	0	1	20	SPARE	--	30
31	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	4758			3	125	PANEL 'HML3'	L; Spa...	38
39	--	BUSSED SPACE	--	1			--	4558		--	--	--	--	40
41	--	BUSSED SPACE	--	1				--	3878	--	--	--	--	42
				Total Load:		16492 VA		20353 VA		14072 VA				
				Total Amps:		61 A		75 A		51 A				

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	5326 VA	6658 VA		
RECEPTACLE:			**TOTAL CONN. LOAD:**	50917 VA
MOTOR:	45591 VA	49414 VA	**TOTAL EST. LOAD:**	56071 VA
EQUIPMENT:			**TOTAL CONN.:**	61 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	67 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: HML3

LOCATION: Stor. 01 97
SUPPLY FROM: HML1
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 25kAIC
MAINS TYPE: MLO
MAINS RATING: 125 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A	B	C	CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	L	LTG - LVL 2	20	1		440	440			1	20	LTG - LVL 3	L	2
3	L	LTG - LVL 4 & DORMER	20	1			680	3878		3	25	ELEV-1B	M	4
5	--	SPARE	20	1				0	3878	--	--	--	--	6
7	--	SPARE	20	1		0	3878			--	--	--	--	8
9	--	SPARE	20	1			0	0		1	20	SPARE	--	10
11	--	SPARE	20	1				0	0	1	20	SPARE	--	12
13	--	SPARE	20	1		0	0			1	20	SPARE	--	14
15	--	SPARE	20	1			0	0		1	20	SPARE	--	16
17	--	SPARE	20	1				0	0	1	20	SPARE	--	18
19	--	SPARE	20	1		0	0			1	20	SPARE	--	20
21	--	SPARE	20	1			0	0		1	20	SPARE	--	22
23	--	SPARE	20	1				0	0	1	20	SPARE	--	24
25	--	SPARE	20	1		0	0			1	20	SPARE	--	26
27	--	SPARE	20	1			0	0		1	20	SPARE	--	28
29	--	SPARE	20	1				0	0	1	20	SPARE	--	30
31	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	42
				Total Load:		4758 VA		4558 VA	3878 VA					
				Total Amps:		18 A		17 A	14 A					

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	1560 VA	1950 VA		
RECEPTACLE:			**TOTAL CONN. LOAD:**	13194 VA
MOTOR:	11634 VA	14543 VA	**TOTAL EST. LOAD:**	16493 VA
EQUIPMENT:			**TOTAL CONN.:**	16 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	20 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: LEV

LOCATION: ELEC ROOM
SUPPLY FROM: TEV
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 18kAIC
MAINS TYPE: MCB
MAINS RATING: 600 A
MCB RATING: 500 A (100% RATED)

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A	B	C	CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	C	EV-CHARGER	60	2		4992	4992			2	60	EV-CHARGER	C	2
3	--	--	--	--			4992	4992		--	--	--	--	4
5	C	EV-CHARGER	60	2				4992	4992	2	60	EV-CHARGER	C	6
7	--	--	--	--		4992	4992			--	--	--	--	8
9	C	EV-CHARGER	60	2			4992	4992		2	60	EV-CHARGER	C	10
11	--	--	--	--				4992	4992	--	--	--	--	12
13	C	EV-CHARGER	60	2		4992	4992			2	60	EV-CHARGER	C	14
15	--	--	--	--			4992	4992		--	--	--	--	16
17	C	EV-CHARGER	60	2				4992	4992	2	60	EV-CHARGER	C	18
19	--	--	--	--		4992	4992			--	--	--	--	20
21	C	EV-CHARGER	60	2			4992	4992		2	60	EV-CHARGER	C	22
23	--	--	--	--				4992	4992	--	--	--	--	24
25	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	26
27	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	28
29	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	30
31	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	42
43	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	44
45	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	46
47	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	48
49	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	50
51	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	52
53	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	54
55	--	BUSSED SPACE	--	1		--	--			1	--	BUSSED SPACE	--	56
57	--	BUSSED SPACE	--	1			--	--		1	--	BUSSED SPACE	--	58
59	--	BUSSED SPACE	--	1				--	--	1	--	BUSSED SPACE	--	60
				Total Load:		39936 VA		39936 VA	39936 VA					
				Total Amps:		333 A		333 A	333 A					

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:				
RECEPTACLE:			**TOTAL CONN. LOAD:**	119808 VA
MOTOR:			**TOTAL EST. LOAD:**	149760 VA
EQUIPMENT:			**TOTAL CONN.:**	333 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	416 A
CONTINUOUS:	119808 VA	149760 VA		
EXISTING:				

NOTES:

COLORADO REGISTERED LON BROOKS 35717 1/8/2025 PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3620 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.28.2024
18	REFI #136	07.02.2024
19	ASI 004	07.08.2024
29	REFI #204	08.14.2024
31	REFI #234	09.16.2024
43	ASI 007	01.08.2025

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE

IFC SET

SHEET TITLE

ELECTRICAL PANEL SCHEDULES

SHEET NO.

E7.14

1/9/2025 9:55:25 AM

PANEL: LS2

LOCATION: LVL 2 MECH
SUPPLY FROM: LSG
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MCB
MAINS RATING: 60 A
MCB RATING: 60 A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	SMOKE CURTAIN CONTROL PANEL	20	1		500	240						1	20	ELEVATOR SMOKE CURTAIN	E	2
3	E	SMOKE CURTAIN CONTROL PANEL	20	1				500	240				1	20	ELEVATOR SMOKE CURTAIN	E	4
5	E	ELEVATOR SMOKE CURTAIN	20	1						240	240		1	20	ELEVATOR SMOKE CURTAIN	E	6
7	E	ELEVATOR SMOKE CURTAIN	20	1		240	360						1	20	RCPTS - ERCS/DAS	R	8
9	E	ELEVATOR SMOKE CURTAIN	20	1			240	0					1	20	SPARE		10
11	--	SPARE	20	1						0	0		1	20	SPARE	--	12
13	--	SPARE	20	1		0	0						1	20	SPARE	--	14
15	--	SPARE	20	1				0	0				1	20	SPARE	--	16
17	--	SPARE	20	1						0	0		1	20	SPARE	--	18
19	--	SPARE	20	1		0	0						1	20	SPARE	--	20
21	--	SPARE	20	1				0	0				1	20	SPARE	--	22
23	--	SPARE	20	1						0	0		1	20	SPARE	--	24
25	--	SPARE	20	1		0	0						1	20	SPARE	--	26
27	--	SPARE	20	1				0	0				1	20	SPARE	--	28
29	--	SPARE	20	1						0	0		1	20	SPARE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	42
				Total Load:		1340 VA		980 VA		480 VA							
				Total Amps:		12 A		9 A		4 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:				
RECEPTACLE:	360 VA	360 VA	**TOTAL CONN. LOAD:**	2800 VA
MOTOR:			**TOTAL EST. LOAD:**	2800 VA
EQUIPMENT:	2440 VA	2440 VA	**TOTAL CONN.:**	8 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	8 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: HM5

LOCATION:
SUPPLY FROM: HMSB
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 35K AIC
MAINS TYPE: MLO
MAINS RATING: 400 A
MCB RATING: N/A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	AWHP-1	100	3		20506	20506						3	100	AWHP-2	E	2
3	--	--	--	--				20506	20506				--	--	--	--	4
5	--	--	--	--						20506	20506		--	--	--	--	6
7	E	AWHP-3	100	3		20506	3878						3	35	EF R-03	M	8
9	--	--	--	--				20506	3878				--	--	--	--	10
11	--	--	--	--						20506	3878		--	--	--	--	12
13	M	EF R-01	35	3		3878	0						1	20	SPARE	--	14
15	--	--	--	--				3878	0				1	20	SPARE	--	16
17	--	--	--	--						3878	0		1	20	SPARE	--	18
19	M	EF R-02	35	3		3878	0						1	20	SPARE	--	20
21	--	--	--	--				3878	0				1	20	SPARE	--	22
23	--	--	--	--						3878	0		1	20	SPARE	--	24
25	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	26
27	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	28
29	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	30
31	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	32
33	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	34
35	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	36
37	--	BUSSED SPACE	--	1		--	--						1	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	1				--	--				1	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	1						--	--		1	--	BUSSED SPACE	--	42
				Total Load:		73152 VA		73152 VA		73152 VA							
				Total Amps:		264 A		264 A		264 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:				
RECEPTACLE:			**TOTAL CONN. LOAD:**	219456 VA
MOTOR:	34902 VA	37811 VA	**TOTAL EST. LOAD:**	222365 VA
EQUIPMENT:	184554 VA	184554 VA	**TOTAL CONN.:**	264 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	267 A
CONTINUOUS:				
EXISTING:				

NOTES:

PANEL: LP5

LOCATION: LVL 4 MECH
SUPPLY FROM: TP5
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10kAIC
MAINS TYPE: MCB
MAINS RATING: 400 A
MCB RATING: 400 A

Notes:

CKT	LOAD TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	LOAD TYPE	CKT
1	E	HEAT TRACE AWHP	30	2	GFCI	100	0						1	20	SPARE	--	2
3	--	--	--	--	GFCI			100	0				1	20	SPARE	--	4
5	--	SPARE	20	1						0	0		1	20	SPARE	--	6
7	E	HEAT TRACE GUTTER	30	2	GFCI	1500	0						1	20	SPARE	--	8
9	--	--	--	--	GFCI			1500	0				1	20	SPARE	--	10
11	M	MOTORIZED DAMPER	20	1						600	0		1	20	SPARE	--	12
13	--	SPARE	20	1		0	--						1	--	BUSSED SPACE	--	14
15	--	SPARE	20	1				0	--				1	--	BUSSED SPACE	--	16
17	--	SPARE	20	1						0	--		1	--	BUSSED SPACE	--	18
19	E	HEAT TRACE GUTTER / DOWNSPOUT	30	2	GFCI	1898	1185						2	20	HP-5-01	E	20
21	--	--	--	--	GFCI			1898	1185				--	--	--	--	22
23	E	HEAT TRACE DOWNSPOUT	30	2	GFCI					428	360		1	20	RCPT	R	24
25	--	--	--	--	GFCI	428	1250					GFCI	2	30	HEAT TRACE GUTTER	E	26
27	E	HEAT TRACE GUTTER / DOWNSPOUT	30	2	GFCI			1935	1250			GFCI	--	--	--	--	28
29	--	--	--	--	GFCI					1935	428	GFCI	2	30	HEAT TRACE DOWNSPOUT	E	30
31	E	HEAT TRACE GUTTER	30	2	GFCI	1148	428					GFCI	--	--	--	--	32
33	--	--	--	--	GFCI			1148	0				1	20	SPARE	--	34
35	E	HEAT TRACE GUTTER	30	2	GFCI					1500	750	GFCI	2	30	HEAT TRACE GUTTER / DOWNSPOUT	E	36
37	--	--	--	--	GFCI	1500	750					GFCI	--	--	--	--	38
39	E	HEAT TRACE DOWNSPOUT	30	2	GFCI			795	1250			GFCI	2	30	HEAT TRACE GUTTER	E	40
41	--	--	--	--	GFCI					795	1250	GFCI	--	--	--	--	42
43	E	HEAT TRACE GUTTER / DOWNSPOUT	30	2	GFCI	1523	885					GFCI	2	30	HEAT TRACE DOWNSPOUT	E	44
45	--	--	--	--	GFCI			1523	885			GFCI	--	--	--	--	46
47	E	HEAT TRACE GUTTER / DOWNSPOUT	30	2	GFCI					1928	1500	GFCI	2	30	HEAT TRACE GUTTER	E	48
49	--	--	--	--	GFCI	1928	1500					GFCI	--	--	--	--	50
51	E	HEAT TRACE GUTTER / DOWNSPOUT	30	2	GFCI			1935	1648			GFCI	2	30	HEAT TRACE GUTTER / DOWNSPOUT	E	52
53	--	--	--	--	GFCI					1935	1648	GFCI	--	--	--	--	54
55	E	HEAT TRACE GUTTER	30	2	GFCI	1250	1928					GFCI	2	30	HEAT TRACE GUTTER / DOWNSPOUT	E	56
57	--	--	--	--	GFCI			1250	1928			GFCI	--	--	--	--	58
59	E	HEAT TRACE GUTTER	30	2	GFCI					1500	1685	GFCI	2	30	HEAT TRACE GUTTER / DOWNSPOUT	E	60
61	--	--	--	--	GFCI	1500	1685					GFCI	--	--	--	--	62
63	E	HEAT TRACE GUTTER	30	2	GFCI			1500	1500			GFCI	2	30	HEAT TRACE GUTTER	E	64
65	--	--	--	--	GFCI					1500	1500	GFCI	--	--	--	--	66
67	E	ERV-5-01	35	2	GFCI	2819	1500					GFCI	2	30	HEAT TRACE GUTTER	E	68
69	--	--	--	--	GFCI			2819	1500			GFCI	--	--	--	--	70
71	--	SPARE	20	1	GFCI					0	1500	GFCI	2	30	HEAT TRACE GUTTER	E	72
73	--	SPARE	20	1		0	1500					GFCI	--	--	--	--	74
75	E	HP-5-02	20	2				1185	0				1	20	SPARE	--	76
77	--	--	--	--						1185	0		1	20	SPARE	--	78
79	--	SPARE SUB-FEED	200	3		0	--						1	--	BUSSED SPACE	--	80
81	--	--	--	--				0	--				1	--	BUSSED SPACE	--	82
83	--	--	--	--						0	--		1	--	BUSSED SPACE	--	84
				Total Load:		28202 VA		28732 VA		23925 VA							
				Total Amps:		240 A		245 A		199 A							

CB TYPE LEGEND

GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND

N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

LOAD TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:				
RECEPTACLE:	360 VA	360 VA	**TOTAL CONN. LOAD:**	80858 VA
MOTOR:	600 VA	650 VA	**TOTAL EST. LOAD:**	80908 VA
EQUIPMENT:	79898 VA	79898 VA	**TOTAL CONN.:**	224 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	225 A
CONTINUOUS:				
EXISTING:				

NOTES:

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
2/18/2025
TOWN STAMP

359 DESIGN
3630 OSAGE STREET
DENVER, CO 80211
720.512.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
	DMP SUBMITTAL	01.22.2024
1	PERMIT COMMENT RESPONSE	02.08.2024
2	DMP SET REVISIONS	02.09.2024
3	IFC	03.15.2024
27	ASI 003	08.02.2024
29	ASI 005	08.14.2024
32	RFI #045	09.16.2024
37	RFI #188	12.20.2024
41	RFI #204.1	12.20.2024

PROJECT NUMBER **20019**
ISSUE DATE **03/15/2024**

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL PANEL SCHEDULES

SHEET NO.
E7.15

02/18/2024 5:28:37 PM

mandatory requirements listed in the Inspection Checklist.

Cole Wellborn, Project Designer — Name - Title
Cole Wellborn — Signature
03/14/2024 — Date

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Steamboat Amble
Project Type: New Construction
Exterior Lighting Zone 3 (Other (LZ3))

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Entry canopy	4221 ft2	0.4	Yes	1688
Walkway < 10 feet wide	716 ft of	0.6	Yes	430
			Total Tradable Watts (a) =	2118
			Total Allowed Watts =	2118
			Total Allowed Supplemental Watts (b) =	500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Entry canopy (4221 ft2): Tradable Wattage				
LED: ED1: Other:	1	5	14	70
LED: ED2: Other:	1	6	8	48
LED: ED3: Other:	1	24	14	336
LED: EL1: Other:	1	36	5	180
LED: EW1: Other:	1	9	18	162
LED: EW3: Other:	1	5	12	60
LED: EW4: Other:	1	12	8	96
LED: EZ1: Other:	1	4	2	8
Walkway < 10 feet wide (716 ft of walkway length): Tradable Wattage				
LED: EB1: Other:	1	18	15	270
LED: EF1: Other:	1	9	6	54
LED: EH1: Other:	1	23	2	46
			Total Tradable Proposed Watts =	1330

Exterior Lighting PASSES: Design 49% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED: R1: Other:	1	5	48	240
6-Common Space Types:Locker Room				
LED: C6: Other:	1	1	30	30
LED: D1: Other:	1	37	20	740
LED: V1: Other:	1	1	49	49
LED: W3: Other:	1	4	9	36
7-Common Space Types:Storage >=1000 sq.ft.				
LED: S1: Other:	1	7	40	280
LED: S2: Other:	1	8	64	512
8-Common Space Types:Lounge/Breakroom				
LED: C1: Other:	1	16	14	224
LED: C5: Other:	1	3	8	24
LED: C6: Other:	1	2	30	60
LED: D1: Other:	1	26	20	520
LED: D2: Other:	1	5	20	100
LED: L1: Other:	1	15	4	60
LED: L2: Other:	1	51	4	204
LED: P1: Other:	1	2	100	200
LED: S1: Other:	1	1	40	40
LED: V1: Other:	1	1	49	49
9-Common Space Types:Electrical/Mechanical				
LED: A1: Other:	1	2	75	150
LED: EW2: Other:	1	2	10	20
LED: S1: Other:	1	11	40	440
LED: S2: Other:	1	6	64	384
			Total Proposed Watts =	10296

Interior Lighting PASSES: Design 30% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Cole Wellborn, Project Designer — Name - Title
Cole Wellborn — Signature
03/14/2024 — Date

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Steamboat Amble
Project Type: New Construction

Construction Site: Owner/Agent: Designer/Contractor:

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Enhanced Envelope Performance, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Parking Garage:Garage Area	16619	0.14	2327
2-Hotel:Hotel Lobby	408	1.06	432
3-Common Space Types:Corridor/Transition >=8 ft wide	8588	0.66	5668
4-Common Space Types:Stairwell	2685	0.58	1557
5-Gymnasium/Fitness Center:Exercise Area	512	0.50	256
6-Common Space Types:Locker Room	1853	0.48	889
7-Common Space Types:Storage >=1000 sq.ft.	2385	0.46	1097
8-Common Space Types:Lounge/Breakroom	2496	0.62	1548
9-Common Space Types:Electrical/Mechanical	2374	0.43	1021
		Total Allowed Watts =	14795

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Parking Garage:Garage Area				
LED: G1: Other:	1	42	34	1428
2-Hotel:Hotel Lobby				
LED: C6: Other:	1	2	30	60
LED: D1: Other:	1	7	20	140
LED: W2: Other:	1	4	40	160
LED: W5: Other:	1	2	8	16
3-Common Space Types:Corridor/Transition >=8 ft wide				
LED: C6: Other:	1	7	30	210
LED: D1: Other:	1	139	20	2780
LED: W4: Other:	1	42	10	420
4-Common Space Types:Stairwell				
LED: W1: Other:	1	18	40	720
5-Gymnasium/Fitness Center:Exercise Area				

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.4.1 [FI18][3]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19][3]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57][3]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33][3]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL26][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL27][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.5 [EL28][3,n4]	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.6 [EL30][3,n4]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

COMcheck Software Version COMcheckWeb
Inspection Checklist

Energy Code: 2018 IECC

Requirements: 26.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. **Location on plans/spec:** G0.10-G0.22

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

3/20/2024 4:42:22 PM

COLORADO REGISTERED — CODY BROOKS — 35717 — 3/20/2024 — PROFESSIONAL ENGINEER
TOWN STAMP

359 DESIGN
3020 OSAGE STREET
DENVER, CO 80211
720.532.3427

AE DESIGN
Integrated Lighting, Technology and Electrical Solutions
1900 Wazee Street Suite #205
Denver, CO 80202 303.296.3034
aedesign-inc.com Proj #:6219.00

The Amble
Steamboat Springs, CO

REVISIONS

No.	Description	Date
1	PERMIT COMMENT RESPONSE	02.06.2024
3	IFC	03.15.2024

PROJECT NUMBER 20019
ISSUE DATE 03/15/2024

The Amble

ISSUE
IFC SET

SHEET TITLE
ELECTRICAL LIGHTING COMPLIANCE

SHEET NO.
E8.00