© GRIMM AND PARKER ARCHITECTURE, INC.

ELECTRICAL SPECIFICATIONS

1. GENERAL

1.1 RELATED DOCUMENTS:

A. REQUIREMENTS OF THE GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS, AND SPECIAL CONDITIONS APPLY TO THIS SECTION.
B. ARCHITECTURAL, STRUCTURAL, MECHANICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS.

1.2 WORK INCLUDED:

A. ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
B. PERMITS AND INSPECTIONS REQUIRED FOR WORK.
C. TEMPORARY ELECTRIC FOR SITE DURING CONSTRUCTION AS REQUIRED.

1.3 JOB CONDITIONS:

A. COORDINATE WITH BUILDING CONSTRUCTION AND WITH OTHER TRADES.
B. IN CASE OF CONFLICT BETWEEN SPECIFICATIONS AND DRAWINGS, CONSULT ARCHITECT IMMEDIATELY FOR DETERMINATION OF PROCEDURE METHOD.

1.4 CONFORMANCE TO REGULATIONS:

A. WORK SHALL CONFORM WITH 2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE, NFPA, 2026 VH MDCR, 2026 UNIVERSAL DESIGN, 2020 ENTERPRISE GREEN COMMUNITIES, DOE EFFICIENT NEW HOMES PROGRAM; MULTIFAMILY VERSION 2, REV. 2., ENERGY STAR MFNC 1.1, EPA INDOOR AIRPLUS V2, AND LOCAL ORDINANCES AND THE RULES AND REGULATIONS OF THE UTILITIES.
B. WORK SHALL BE IN ACCORDANCE WITH THE OWNER'S BUILDING CRITERIA AND TENANT BUILD-OUT REQUIREMENTS.

1.5 QUALITY ASSURANCE:

A. MEET OR EXCEED RECOMMENDATIONS OF: IEEE, IES, NEMA AND UL.
B. NOTIFY ARCHITECT IMMEDIATELY OF CONFLICTS AND DEFICIENCIES. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN RESOLVED.

1.6 MATERIALS AND EQUIPMENT:

A. PROVIDE NEW MATERIALS AND EQUIPMENT UNLESS OTHERWISE NOTED.
B. FURNISH (INCLUDING FREIGHT AND UNLOADING) AND INSTALL UNLESS OTHERWISE NOTED.
C. EQUIPMENT PROVIDED FOR THIS PROJECT SHALL BE NEW UNLESS NOTED OTHERWISE.

1.7 UTILITIES AND CONNECTIONS:

A. OWNER WILL PAY ANY UTILITY SERVICE FEES DIRECTLY TO THE RESPECTIVE UTILITY COMPANIES.
B. PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED BUT NOT PROVIDED OR FURNISHED BY THE UTILITY COMPANIES TO BRING SERVICE INTO THE BUILDING.

1.8 SUBMITTALS:

A. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR EQUIPMENT IN ACCORDANCE WITH THE ARCHITECT'S REQUIREMENTS.
B. UPON COMPLETION OF THE INSTALLATION, AND PRIOR TO ACCEPTANCE BY THE OWNER, CONTRACTOR SHALL FURNISH AS-BUILT DOCUMENTATION AND O&M MANUALS IN ACCORDANCE WITH THE ARCHITECT'S REQUIREMENTS.
C. PROVIDE WIRING DIAGRAMS SPECIFIC TO THIS PROJECT FOR ALL ROOMS WITH LOW VOLTAGE DEVICES SHOWING INTERCONNECTIONS BETWEEN POWER PACK, SWITCHES, AND OCCUPANCY SENSORS.

1.9 PROJECT CLOSEOUT:

A. REPAIR DAMAGED AND DEFECTIVE EQUIPMENT AND MATERIALS. REPLACE ITEMS THAT CANNOT BE PROPERLY REPAIRED.
B. CLEAN EXPOSED AND SEMI-EXPOSED SURFACES OF EQUIPMENT AND MATERIALS.
C. TOUCH-UP SHOP-APPLIED FINISHES TO RESTORE DAMAGED AND SOILED AREAS.
D. INSTRUCT OWNER'S REPRESENTATIVE IN OPERATION AND MAINTENANCE OF ELECTRICAL SYSTEMS UTILIZING THE OPERATION AND MAINTENANCE MANUAL.
E. INSTRUCTION PERIOD SHALL OCCUR AFTER SUBSTANTIAL COMPLETION OF ELECTRICAL SYSTEMS AND PRIOR TO COMPLETION OF THE PROJECT. COORDINATE WITH THE ARCHITECT AND OWNER.

2. PRODUCTS

2.1 RACEWAYS & FITTINGS:

A. CONDUIT SIZES SHALL BE AS REQUIRED BY THE CODE (UNLESS INDICATED OR SPECIFIED OTHERWISE) FOR THE NUMBER AND SIZE OF WIRE INDICATED. MINIMUM SIZE CONDUIT SHALL BE 1/2" ELECTRICAL TRADE SIZE. FLEXIBLE METAL CONDUIT USED FOR LIGHTING FIXTURE WHIPS MAY BE 3/8" WHERE ALLOWED BY THE CODE.
B. USE ELECTRICAL METALLIC TUBING EXCEPT AS FOLLOWS: USE RIGID NONMETALLIC CONDUIT IN OR UNDER ON GRADE CONCRETE SLABS. USE FLEXIBLE METAL CONDUIT FOR MOTOR AND EQUIPMENT CONNECTIONS IN DRY LOCATIONS. USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT IN WET OR DAMP LOCATIONS.

2.2 WIRE AND CABLE:

A. CONDUCTORS SHALL BE COPPER, MINIMUM SIZE NO. 12 AWG. OTHER WIRE SIZES SHALL BE AS NOTED OR AS REQUIRED FOR THE CIRCUIT SIZE. CONDUCTOR INSULATION SHALL BE THHN/THWN.
B. BRANCH CIRCUIT WIRING WHERE CONCEALED IN WALLS AND ABOVE CEILINGS MAY BE TYPE MC (METAL CLAD) CABLE WHERE ALLOWED BY THE CODE.
C. SERVICE ENTRANCE CABLE (SE) MAY BE USED WHERE ALLOWED AND INSTALLED IN ACCORDANCE WITH NEC ARITCLE 338. FOR APARTMENT PANEL FEEDERS, USE MC FEEDERS OR CONDUIT & WIRE FOR APARTMENT FEEDERS WHERE SE CABLE IS NOT ALLOWED.
D. NM CABLE (ROMEX) MAY BE USED WHERE ALLOWED AND INSTALLED IN ACCORDANCE WITH NEC ARTICLE 334.

2.3 BOXES:

A. GALVANIZED SHEET STEEL TYPE. SINGLE DEVICE BOX SHALL BE "NON-GANGABLE" TYPE AND FOR MULTIPLE DEVICES "GANGABLE" TYPE SHALL BE USED. BOXES FOR EXPOSED WORK SHALL BE 4" SQUARE TYPE. BOXES FOR EXPOSED WORK IN WET LOCATIONS SHALL BE DIE CAST TYPE WITH THREADED HUBS. SECTIONAL BOXES SHALL NOT BE USED IN MASONRY OR CONCRETE. SIZED FOR NUMBER OF CONDUCTORS, FITTINGS AND DEVICES AS REQUIRED BY THE CODE.

2.4 WIRING DEVICES:

A. 20 AMPERE SPECIFICATION GRADE.
B. COVERPLATES SHALL BE AS FOLLOWS: INTERIOR RECESSED - SMOOTH UNBREAKABLE NYLON; SURFACE - 4" SQUARE RAISED COVER. GALVANIZED; WEATHERPROOF - DIE CAST ALUMINUM, GFCI TYPE, WATERTIGHT WHILE IN USE TYPE, USE EXTERNAL OPERATING TYPE FOR WEATHERPROOF SWITCHES.
C. DEVICE AND PLATE COLOR SHALL BE AS SELECTED BY ARCHITECT.
D. GFCI OUTLETS TO BE SELF-TESTING TYPE.

2.5 DISCONNECT SWITCHES:

A. SAME MANUFACTURER AS THE PANELBOARDS, NEMA 3R FOR OUTDOOR USE.
B. DISCONNECT SWITCHES SHALL BE FUSED OR NON-FUSED AS INDICATED AND BE VISIBLE BLADE TYPE WITH EXTERNAL OPERATING HANDLE AND COVER INTERLOCK AND PAD LOCKING.

2.6 GROUNDING:

A. CONNECTIONS TO BUILDING STEEL, GROUND RODS AND PIPING SYSTEMS SHALL BE MADE WITH BRONZE OR BRASS BOLTED TYPE FITTINGS DESIGNED FOR THE USE.
B. GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZE AS INDICATED ON THE DRAWINGS AND AS DESCRIBED IN ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.

2.7 PANELBOARDS (OR GEAR):

A. PANELBOARDS SHALL BE AS SCHEDULED OR BY: SQUARE-D, EATON, OR SIEMENS. PANELS TO HAVE MINIMUM 20" WIDE CABINETS AND COPPER BUS BARS.
B. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC, MOLDED CASE, BOLT-ON TYPE. MULTI-POLE SHALL BE COMMON TRIP TYPE. BREAKERS FOR HVAC EQUIPMENT SHALL BE "HACR" RATED WHERE REQUIRED.
C. PANELBOARDS SHALL HAVE LOCKABLE DOORS, LOCKS SHALL BE KEYED ALIKE.
D. PANELBOARDS AND SWITCHBOARDS SHALL BE FULLY RATED OR HAVE A UL LISTED SERIES CONNECTED RATING OF A MINIMUM 65,000 AIC. OBTAIN AND SUBMIT FAULT CURRENT VERIFICATION LETTER FROM THE POWER COMPANY TO THE LOCAL AUTHORITY HAVING JURISDICTION IF REQUIRED.
E. ELECTRIC GEAR SHALL COMPLY WITH NEC 240.87.
F. METER STACKS SHALL BE THE SAME MANUFACTURER AS PANELBOARDS AND SHALL BE TYPE APPROVED BY THE POWER COMPANY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL AS REQUIRED.
G. ALL LABELING ON EXTERIOR GEAR SHALL BE UV RESISTANT.
H. METER STACKS SHALL BE THE SAME MANUFACTURER AS PANELBOARDS AND SHALL BE TYPE APPROVED BY THE POWER COMPANY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL AS REQUIRED.
I. ELECTRICIAN SHALL PROVIDE A COORDINATION STUDY FOR ALL GEAR IF REQUIRED BY LOCAL AUTHORITY. PROVIDE ADJUSTABLE BREAKERS AS REQUIRED FOR A FULLY COORDINATED SYSTEM.
J. PROVIDE ADD-ALTERNATE IN BID FOR 100KAIC RATED METER STACK.

2.8 FUSES:

A. BRANCH CIRCUIT FUSES SHALL BE TIME-DELAY, DUAL ELEMENT, CURRENT LIMITING, CLASS RK-5.

2.9 ELECTRIC SERVICE:

A. SERVICE SHALL BE 120/208 VOLT, 1 PHASE, 3 WIRE.

2.10 DRIVERS & ACCESSORIES:

A. LED DRIVERS SHALL BE ELECTRONIC TYPE WITH EQUAL TO OR LESS THAN 10% THD AND A 3 YEAR WARRANTY, VOLTAGE TO MATCH SYSTEM VOLTAGE.
B. ACCESSORIES SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING FOR A COMPLETE LIGHTING FIXTURE INSTALLATION: PLASTER FRAMES, TEE BAR HANGERS, FIXTURE STUDS AND HOLD DOWN CLIPS FOR SUSPENDED CEILINGS.

2.11 LIGHTING FIXTURES:

A. LIGHTING FIXTURES SHALL BE AS SPECIFIED ON THE DRAWINGS.
B. PHOTOCELLS: SWIVEL MOUNT, 1800 WATT, TORK SERIES 2020 OR EQUAL.
C. TIMECLOCKS: ASTRONOMIC, 7 DAY, 100 HOUR BATTERY BACKUP, TORK SERIES EWZ100 OR EQUAL.
D. CONTACTOR: MECHANICALLY HELD, ELECTRICALLY OPERATED, NUMBER OF POLES AS REQUIRED.

2.12 EMPTY CONDUIT SYSTEMS:

A. PROVIDE FOR USE BY THE OWNER'S CABLING CONTRACTOR. CONDUIT SYSTEM SHALL BE AS DESCRIBED ON THE DRAWINGS FOR DATA, TELEPHONE, TELEVISION, SOUND SECURITY ETC.

2.13 FIRE ALARM SYSTEM:

A. PROVIDE A COMPLETE ADDRESSABLE FIRE ALARM SYSTEM FOR BUILDING AS INDICATED ON THE PLANS AND NOTED HEREIN.
B. PROVIDE PROPERLY SIZED BATTERY TO BACK UP PANEL UPON LOSS OF NORMAL POWER.
C. PROVIDE CONTROL PANEL WITH INTEGRAL DACT (DIGITAL ALARM COMMUNICATING TRANSMITTER) TO PROVIDE OFF-SITE MONITORING OF THE SYSTEMS. MONITORING SHALL BE AS APPROVED BY THE LOCAL AUTHORITY. POTS LINES SHALL BE PROVIDED AS REQUIRED FOR THIS MONITORING.
D. FIRE ALARM CONTRACTOR SHALL PROVIDE ALL DRAWINGS, CALCULATIONS, PRODUCT DATA, ETC. TO THE LOCAL AUTHORITY REQUIRED FOR PERMITTING AND INSPECTIONS OF THE SYSTEM.
E. SIGNALING DEVICES SHALL BE ADA COMPLIANT.
F. CABLE SHALL BE FIRE PROTECTIVE SIGNALING TYPE.
G. ALL ACCESSORIES, EXPANDERS, ANNUNCIATORS, GRAPHIC PANELS, ETC. SHALL BE INCLUDED AS REQUIRED FOR A COMPLETE FULLY FUNCTIONING SYSTEM MEETING STATE AND LOCAL CODE REQUIREMENTS.
H. FIRE PUMP CONTROLLER SHALL HAVE INTEGRAL AUTOMATIC TRANSFER SWITCH, SERVICE ENTRANCE RATED.

3. EXECUTION:

3.1 RACEWAYS & FITTINGS:

A. INSTALL CONDUITS CONCEALED IN WALLS, CEILINGS OR FLOORS UNLESS INDICATED OR SPECIFIED OTHERWISE. CONDUITS MAY BE INSTALLED EXPOSED IN UNFINISHED AREAS (IE: EQUIPMENT ROOMS). INSTALL EXPOSED CONDUITS IN RUNS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES OR CEILINGS. EXPOSED AND CONCEALED CONDUITS SHALL PASS THROUGH WALLS, FLOORS OR CEILINGS AT RIGHT ANGLES. UNDERGROUND CONDUITS SHALL HAVE BURY DEPTH AS REQUIRED BY THE CODE.
B. ENSURE THAT CONDUITS ARE IN ALIGNMENT BETWEEN BENDS, ELBOWS AND TERMINATIONS; THAT BENDS ARE FREE OF CRIMPS, THAT JOINTS AND TERMINATIONS ARE TIGHT AND SECURE; THAT INTERIORS ARE SMOOTH AND FREE OF BURRS AND FOREIGN OBJECTS; AND THAT INTERIORS ARE FULL SIZE ENTIRE LENGTH. DURING CONSTRUCTION, CLOSE ENDS OF CONDUITS WITH METAL OR PLASTIC CAPS INTENDED FOR THE PURPOSE.
C. FIELD BENDING OF CONDUITS AND TUBING SHALL BE MADE WITH HAND OR POWERED EQUIPMENT APPROVED FOR THE PURPOSE. USE OF TORCHES TO BEND NONMETALLIC CONDUIT IS NOT APPROVED. RADIUS OF BENDS SHALL BE AS PER THE CODE FOR TYPE OF CONDUIT AND TUBING USED. CONDUITS PASSING THROUGH A FIRE RATED WALL OR FLOOR SHALL NOT LESSEN THE RATING OF THE STRUCTURE THROUGH WHICH THEY PASS. FINAL INSTALLATION OF CONDUITS PENETRATING WATERPROOF CONSTRUCTION SHALL BE COMPLETELY WATERTIGHT.
D. SLEEVE CONDUITS PASSING THROUGH CONCRETE FLOOR SLABS AND CONCRETE, MASONRY, TILE AND GYPSUM WALLS.
E. CONDUIT SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE AT INTERVALS REQUIRED BY THE CODE. USE STANDARD CONDUIT HANGERS, ONE HOLE SNAP STRAPS, THIN WALL CONDUIT CLAMPS, MALLEABLE IRON PIPE STRAPS, STRUT CHANNEL, BEAM CLAMPS, U-BOLTS AND ALL-THREAD RODS. DO NOT USE WIRE TIES, STAB-ON CLIPS OR PERFORATED STRAP IRON.
F. PAINT ANY EXPOSED CONDUITS NOT WITHIN UTILITY ROOMS TO MATCH SURROUNDINGS.

3.2 WIRE AND CABLE:

A. SPLICE CONDUCTORS NO. 10 AND SMALLER WITH STEEL SPRING WIRE CONNECTOR WITH THERMOPLASTIC SHELL. SPLICE CONDUCTORS NO.8 AND LARGER WITH MECHANICAL TYPE, TAP CONNECTORS WITH INSULATED COVERS OR SPLIT BOLTS TAPED TO CONDUCTOR INSULATION VALUE.
B. INSTALL CONDUCTORS IN RACEWAYS. CONDUCTORS SHALL BE CONTINUOUS FROM POINT OF ORIGIN TO PANEL OR EQUIPMENT TERMINATION WITHOUT RUNNING SPLICES IN INTERMEDIATE BOXES. CONDUCTORS OF DIFFERENT VOLTAGES SHALL NOT BE PULLED INTO SAME RACEWAY.
C. CABLE SHALL BE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE WITH STAPLES OR ONE-HOLE STRAPS AT INTERVALS REQUIRED BY THE CODE. BORED HOLES SHALL NOT EXCEED 1" DIAMETER AND SHALL BE A MINIMUM OF 2'-0" FROM STRUCTURAL BEARING POINTS, NOTCHING OF STRUCTURAL MEMBERS IS PROHIBITED. PROVIDE GUARD STRIPS AT LEAST AS HIGH AS CABLE WHERE RUN ACROSS TOP OF STRUCTURE IN ACCESSIBLE ATTIC SPACES.
D. DO NOT RUN ANY WIRE OR CABLE IN PLUMBING WALLS UNTIL PIPING SYSTEMS HAVE BEEN COMPLETED.PLUMBING SHALL PRESIDE IN THESE WALLS.
E. DO NOT SHARE NEUTRAL CONDUCTORS FOR 120 VOLT CIRCUITS.
F. COLOR CODE CONDUCTORS TO INDUSTRY STANDARDS.
G. INCREASE WIRE SIZES AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP BASED ON FEEDER/BRANCH CIRCUIT LENGTH.

3.3 BOXES:

A. SECURE BOXES TO STRUCTURE BY MEANS OF SCREWS, BOLTS, ROD HANGERS OR OTHER APPROVED MEANS. RACEWAYS ENTERING OR LEAVING BOX SHALL NOT BE USED AS SUPPORT. BOXES SHALL BE LEVEL AND PLUMB. BOXES FOR FLUSH EQUIPMENT SHALL BE PLACED TO WITHIN 1/4" OF THE FINISHED SURFACE, PROVIDE EXTENSIONS OR PLASTER RINGS AS REQUIRED. JUNCTION AND PULL BOXES SHALL BE INSTALLED READILY ACCESSIBLE, UNOBSTRUCTED BY PIPING, DUCTS OR OTHER EQUIPMENT.
B. BOXES SHALL BE MOUNTED AT HEIGHT INDICATED ON THE DRAWINGS OR DIRECTLY ADJACENT TO PIECE OF EQUIPMENT SERVED. SEAL SPARE OR UNUSED OPENINGS IN BOXES WITH APPROVED FITTINGS. FOR BOXES INSTALLED IN WET LOCATIONS PROVIDE CLEAR SILICONE CAULK BETWEEN BOX AND SURROUNDING SURFACE TO PREVENT WATER ENTRY.
C. BOXES IN RATED CONSTRUCTION SHALL BE SUITABLE FOR THE USE AND INSTALLED IN ACCORDANCE WITH THE CODE.

3.4 WIRING DEVICES:

A. INSTALL DEVICES APPROXIMATELY AT THE LOCATIONS INDICATED ON THE DRAWINGS. DETERMINE EXACT LOCATION BY CONDITIONS OF CONSTRUCTION. COORDINATE LOCATIONS TO AVOID CONFLICT WITH OTHER EQUIPMENT BEING INSTALLED. INSTALL DEVICES STRAIGHT AND SOLID TO BOX. MOUNTING HEIGHTS OF WALL OUTLETS SHALL BE AS INDICATED ON THE DRAWINGS AND SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTER OF THE OUTLET. WHERE DEVICES ARE SHOWN GROUPED TOGETHER, PROVIDE A SINGLE, MULTIPLE GANG PLATE.
B. COORDINATE PLACEMENT IN AND AROUND KNEE SPACES, LAVATORIES AND OTHER EQUIPMENT TO AVOID CONFLICTS WITH MIRRORS AND OTHER APPURTENANCES, REFER TO ARCHITECTURAL DRAWINGS. SWITCHES SHALL BE LOCATED TO STRIKE SIDE OF THE DOOR, VERIFY FINAL DOOR SWINGS.
C. WHERE GFCI OUTLETS ARE USED TO PROVIDE FEED-THRU PROTECTION FOR DOWNSTREAM OUTLETS ON SAME CIRCUIT, DO NOT FEED-THRU WIRE ACROSS PARTITIONS, USE A SEPARATE DEVICE.
D. VERIFY THE NEMA CONFIGURATIONS OF ALL OUTLETS WITH OWNER.

3.5 DISCONNECT SWITCHES:

A. MOUNT SWITCHES ON WALL OR AT ASSOCIATED PIECE OF EQUIPMENT. WALL MOUNTED SWITCHES SHALL BE 48 INCHES ABOVE FINISHED FLOOR. PROVIDE ENGRAVED PLASTIC LAMINATE NAMEPLATE FOR EACH DISCONNECT SWITCH LOCATED ON FRONT OUTSIDE COVER, NAMEPLATE SHALL INDICATE ITEM SERVED.
B. SWITCHES SCHEDULED ARE FOR DESIGN BASED EQUIPMENT, REVIEW OTHER TRADES' SUBMITTALS TO DETERMINE IF SUBSTITUTIONS HAVE BEEN MADE, PROVIDE SWITCH TO MATCH EQUIPMENT SUPPLIED.

3.6 GROUNDING:

A. CONDUIT SYSTEM SHALL NOT BE USED FOR GROUNDING.
B. FOR BONDING OF SERVICE EQUIPMENT PROVIDE BONDING BUSHINGS AND JUMPERS WHERE REQUIRED. WELDING OF CONDUIT AND FITTINGS WILL NOT BE CONSIDERED ACCEPTABLE FOR THE PURPOSE OF BONDING.
C. PROVIDE PROTECTION FROM PHYSICAL DAMAGE FOR ANY EXPOSED SECTION OF THE GROUNDING ELECTRODE CONDUCTOR SYSTEM.

3.7 PANELBOARDS:

A. NEATLY PRINT CIRCUIT DESIGNATIONS ON DIRECTORY CARD. NOTATIONS SHALL INDICATE THE NATURE AND LOCATION OF LOADS SERVED.
B. PROVIDE ENGRAVED LAMINATE NAMEPLATE FOR EACH NEW PANELBOARD LOCATED ON OUTSIDE OF DOOR, NAMEPLATE SHALL INCLUDE PANELBOARD DESIGNATION ON THE DRAWINGS, SERVICE VOLTAGE, PHASE AND AMPERAGE.
C. BREAKERS SCHEDULED ARE FOR DESIGN BASED EQUIPMENT, REVIEW OTHER TRADES' SUBMITTALS TO DETERMINE IF SUBSTITUTIONS HAVE BEEN MADE, PROVIDE BREAKERS TO MATCH EQUIPMENT SUPPLIED.
D. LABEL METER STACKS WITH ENGRAVED LAMINATE PLATES AS TO APARTMENT NUMBER THAT IS APPROVED BY THE POWER CO. AND THE OWNER'S MATRIX.
E. ASSEMBLE METER STACK SECTIONS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

3.8 ELECTRIC SERVICE:

A. PROVIDE LABOR AND MATERIALS NOT FURNISHED BY THE POWER COMPANY. DO WORK REGARDING THE ELECTRICAL SERVICE AND ITS EQUIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE POWER COMPANY. IF THE CONTRACT DOCUMENTS INDICATE WORK THAT IS TO EXCEED THESE REQUIREMENTS, FOLLOW THE CONTRACT DOCUMENTS.
B. LABEL EQUIPMENT FOR THE ELECTRIC SERVICE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THIS DIVISION. MAIN SWITCHES OR BREAKERS ARE TO BE IDENTIFIED AS SUCH IN ADDITION TO IDENTIFYING THE ITEM FED.
C. NOTIFY THE POWER COMPANY OF THE TIMING REQUIREMENTS FOR THE PROJECT AND ARRANGE FOR METERING EQUIPMENT, CONNECTIONS AND SERVICE.

3.9 FUSES:

A. INSTALL FUSES IN SWITCHES.
B. BRANCH CIRCUIT FUSES SCHEDULED ARE FOR DESIGN BASED EQUIPMENT, REVIEW OTHER TRADES' SUBMITTALS TO DETERMINE IF SUBSTITUTIONS HAVE BEEN MADE, PROVIDE FUSES TO MATCH EQUIPMENT SUPPLIED.

3.10 LIGHTING FIXTURES:

A. INSTALLATION OF FIXTURES SHALL BE IN A NEAT, WORKMANLIKE MANNER. PROVIDE STRAPS, SUPPORTS, HANGERS AND OTHER MATERIALS REQUIRED FOR PROPER INSTALLATION.
B. SURFACE MOUNTED FIXTURES SHALL NOT HAVE GAPS BETWEEN THE FIXTURE AND ATTACHING SURFACE UNLESS MOUNTING IS DESIGNED TO HOLD FIXTURE OFF CEILING, OR EXCEPT WHERE REQUIRED BY THE CODE REGULATION. CONTINUOUS ROWS OF FIXTURES SHALL BE INSTALLED SO AS TO PROVIDE PERFECT ALIGNMENT.
C. SUPPORT SURFACE MOUNTED FIXTURES DIRECTLY FROM THE BUILDING STRUCTURE AND NOT FROM THE CEILING GRID SYSTEM. USE ALL-THREAD RODS, BEAM CLAMPS, PIPE CLAMPS AND PIPE OR PERFORATED STEEL CHANNEL FOR SUPPORT. WIRE TIES AND STAB-ON CLIPS WILL NOT BE ACCEPTED. THE SUPPORT ASSEMBLY SHALL BE CAPABLE OF SUPPORTING 150 POUNDS IN ADDITION TO THE FIXTURE WEIGHT INDEFINITELY.
D. RECESSED FIXTURES SHALL NOT HAVE GAPS BETWEEN THE FIXTURE TRIM AND ADJACENT SURFACE. WHERE LIGHT LEAKS OCCUR, SUITABLE GASKETS SHALL BE INSTALLED.
E. RECESSED LIGHTING FIXTURES INSTALLED IN MODULAR OR INTEGRATED CEILINGS SHALL BE OF THE PROPER TYPE FOR THE TYPE OF CEILING BEING INSTALLED. VERIFY TYPE OF CONSTRUCTION PRIOR TO ORDERING OF FIXTURES. ADDITIONAL CEILING TIES SHALL BE INSTALLED AT EACH CORNER OF THE LIGHTING FIXTURE TO REINFORCE THE CEILING SYSTEM.
F. CONNECT EXIT AND EMERGENCY LIGHTING FIXTURES TO BRANCH CIRCUIT SERVING NORMAL LIGHTING IN AREA AHEAD OF LOCAL SWITCHING OR TO NIGHT LIGHTING CIRCUIT AS SHOWN.
G. MOUNT CONTACTORS AND TIMECLOCKS ADJACENT TO PANELBOARD AND SET TIMECLOCK TO HOURS DIRECTED BY THE OWNER. PHOTOCELLS SHALL BE LOCATED IN AN ACCESSIBLE LOCATION EITHER BELOW SOFFIT OR ABOVE ROOF LINE FACING NORTH, DO NOT ATTACH PHOTOCELLS ON FACE OF BUILDING.
H. PERMANENT FIXTURES SHALL NOT BE USED AS TEMPORARY LIGHTING DURING CONSTRUCTION.

3.11 EMPTY CONDUIT SYSTEMS:

A. LEAVE CONDUITS WITH PULL CORDS. AT COMPLETION OF THE PROJECT, PROVIDE BLANK COVERPLATES FOR ANY OUTLET BOXES NOT UTILIZED AND LEFT SPARE BY THE OWNER'S CABLING CONTRACTOR.
B. PAINT ALL SIDES AND EDGES OF EQUIPMENT SPACE BACKBOARD WITH 2 COATS OF GRAY ENAMEL PAINT PRIOR TO INSTALLATION.
C. COORDINATE WITH THE UTILITIES SELECTED BY THE OWNER AND PROVIDE ALL MEANS REQUIRED FOR SERVICES TO THE BUILDING.

3.12 FIRE ALARM SYSTEM:

A. ON CALL FROM INITIATING DEVICE, SYSTEM SHALL SOUND EVACUATION THROUGHOUT BUILDING AND NOTIFY CENTRAL STATION. SPRINKLER TAMPER SWITCHES TO SOUND TROUBLE SIGNAL.
B. COORDINATE FLOW AND TAMPER SWITCHES WITH SPRINKLER CONTRACTOR AND SHUTDOWN OF ROOF TOP UNITS WITH HVAC CONTRACTOR. VERIFY EXACT QUANTITIES AND LOCATIONS OF FLOW AND TAMPER SWITCHES WITH THE SPRINKLER CONTRACTOR REQUIRED FOR RISER, STANDPIPES, PIV'S, AND FIRE SERVICE LINE.
C. DUCT MOUNTED SMOKE DETECTORS SHALL BE TIED TO FIRE ALARM SYSTEM. COORDINATE WITH HVAC CONTRACTOR.
D. TEST SYSTEM TO INDUSTRY STANDARDS AND PROVIDE WRITTEN DOCUMENTATION TO THE ARCHITECT OF SYSTEM ACCEPTANCE.
E. COORDINATE FINAL FIRE PUMP GENERATOR + TRANSFER SWITCH CHARACTERISTICS WITH FIRE PUMP DESIGN DRAWINGS. INCREASE SIZES, OVER CURRENT PROTECTION, WIRING, ETC. AS REQUIRED.

NOTE: REFER TO APARTMENT UNIT SPECIFICATIONS ON SHEET E-500 FOR ADDITIONAL REQUIREMENTS IN APARTMENT UNITS.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

ELECTRICAL SPECIFICATIONS

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

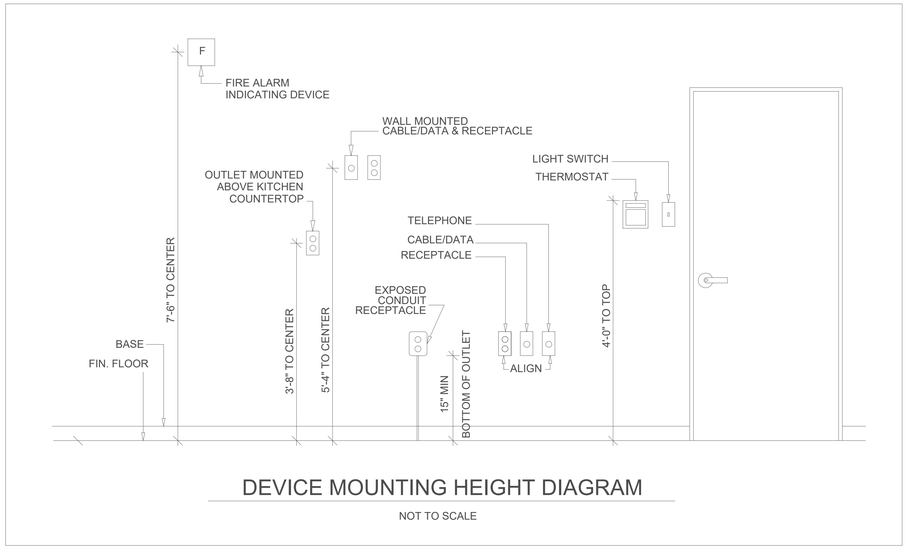
DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

2E-001

06/30/2026
CONSTRUCTABILITY REVIEW

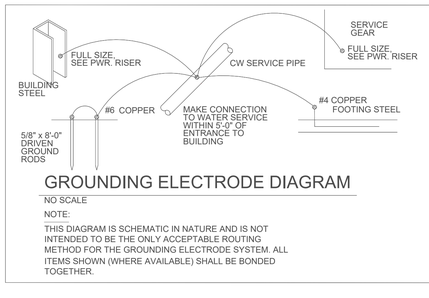
© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



DEVICE MOUNTING HEIGHT DIAGRAM

NOT TO SCALE



GROUNDING ELECTRODE DIAGRAM

NO SCALE

NOTE:

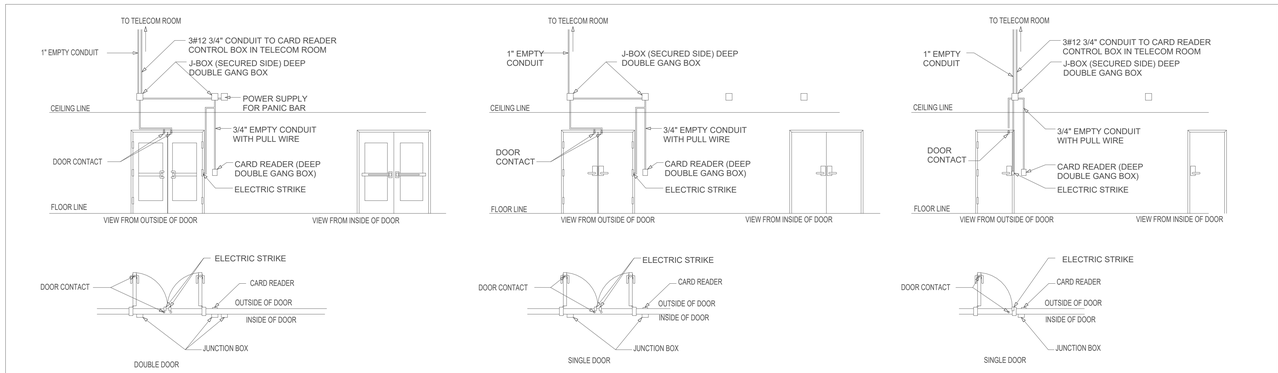
THIS DIAGRAM IS SCHEMATIC IN NATURE AND IS NOT INTENDED TO BE THE ONLY ACCEPTABLE ROUTING METHOD FOR THE GROUNDING ELECTRODE SYSTEM. ALL ITEMS SHOWN (WHERE AVAILABLE) SHALL BE BONDED TOGETHER.

LIGHTING FIXTURE CONTROLS SYMBOLS LIST

S	SINGLE POLE WALL SWITCH AT 48" AFF TO TOP OF BOX.
S3	3-WAY DIMMER SWITCH AT 48" AFF TO TOP OF BOX.
SOC	SENSOR SWITCH WSX-PDT-SA PASSIVE INFRARED DUAL TECHNOLOGY MICROPHONIC LINE VOLTAGE WALL MOUNT SENSOR AT 48" AFF. MANUAL ON/AUTO OFF.
M	SENSOR SWITCH CM-PDT-10 PASSIVE INFRARED DUAL TECHNOLOGY MICROPHONIC LOW VOLTAGE CEILING MOUNT SENSOR WIRE TO REPECTIVE POWER PACK, WIDE AREA TYPE.
CM	SENSOR SWITCH CM-PDT-11 PASSIVE INFRARED DUAL TECHNOLOGY MICROPHONIC LOW VOLTAGE CEILING MOUNT SENSOR WIRE TO REPECTIVE POWER PACK.
PP	SENSOR SWITCH PP-20 POWER PACK LOCATED ABOVE ACCESSIBLE CEILING. UTILIZE ACCESS PANEL WHERE LOCATED ABOVE HARD CEILING.
PC	PHOTOCELL, LOCATE IN ACCESSIBLE LOCATION AND SHIELD FROM SURROUNDING LIGHT SOURCES. WITH CIRCUIT

LIST NOTES:

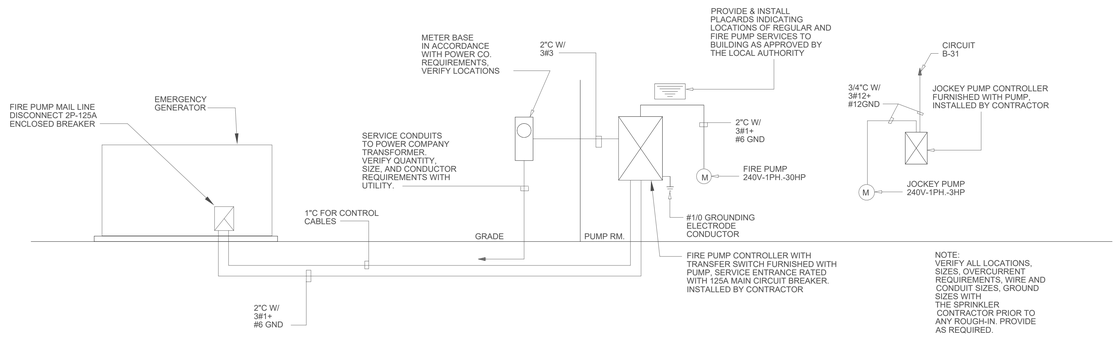
1. ALL SENSORS SWITCH COMPONENTS AND WIRING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
2. ADJUST SENSITIVITY, OVERRIDE SWITCHES (WHERE APPLICABLE AND TIME DELAYS TO THE SATISFACTION OF THE OWNER.
3. ALTERNATE MANUFACTURERS: LEVITON, LUTRON, DOUGLAS.
4. PROVIDE ACCESS PANELS FOR POWER PACKS WHERE INSTALLED ABOVE HARD CEILINGS.



CARD READER ELECTRIC STRIKE DETAIL

NO SCALE

NOTE: DIAGRAMS ARE GENERAL IN NATURE. COORDINATE WITH FINAL EQUIPMENT SUPPLIER'S INSTALLATION GUIDELINES PRIOR TO ROUGH-IN.



FIRE PUMP RISER DIAGRAM

NO SCALE

NOTE:
INSTALL FIRE PUMP EQUIPMENT IN ACCORDANCE WITH NFPA 20. PROVIDE AND INSTALL ACCESSORIES, DEVICES, FIRE ALARM INTERLOCKS/MONITORING, WIRING TRANSITION BOXES, ETC. AS REQUIRED FOR A COMPLETE SYSTEM. VERIFY SERVICE REQUIREMENTS AND METER LOCATION WITH POWER COMPANY.

ABBREVIATIONS

A	AMPS
AFF	ABOVE FINISHED FLOOR
AH	AIR HANDLER
AL	ALUMINUM
ALT	ALTERNATIVE
AUTO	AUTOMATIC
BR	BED ROOM
C	CONDUIT
CL	CLOSET
CU	COPPER
CW	WASHER
D	DRYER
DISP	DISPOSER
DW	DISHWASHER
DTL/DTS	DOWN TO LIGHT/SWITCH
EC	EMPTY CONDUIT
EH	EXHAUST HOOD
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
ER	ELEVATOR RECALL
EXT	EXTERIOR
FSS/INFSS	FUSIBLE/NON-FUSIBLE SAFETY SWITCH
GEC	GROUNDING ELECTRODE CONDUCTOR
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTOR
GND	GROUND
HP	HORSEPOWER
HR	HOUR
IM	ICE MACHINE
I.T.	INFORMATION TECHNOLOGY
JAN	JANITOR
KAIC	KILO-AMPERE INTERRUPT CURRENT
KIT	KITCHEN
KV	KILO-VOLT
L	LAUNDRY
LT	LIGHT
M/E	MICROWAVE/EXHAUST COMBINATION
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NL	NIGHT LIGHT (UNSWITCHED)
NO.	NUMBER
O.C.	ON CENTER
P	POLE
PH	PHASE (AFTER NUMBER 1 OR 3)
PNL	PANEL
REC	RECEPTACLE
REF	REFRIGERATOR
SER	SERVICE ENTRANCE RATED
STOR	STORAGE
UTL	UP TO LIGHT
DTL	DOWN TO LIGHT
V	VOLT
W	WIRE
W/	WITH
W.I.C.	WALK-IN CLOSET
W/D	COMBINATION WASHER/DRYER
WH	WALL HEATER
WP	WEATHERPROOF

SYMBOLS LIST

A-1	OUTLET FOR CEILING OR WALL MOUNTED LED LIGHTING FIXTURE WITH CIRCUIT NUMBER
A-1	OUTLET FOR CEILING OR WALL MOUNTED LED LIGHTING FIXTURE WITH CIRCUIT NUMBER
A-1	OUTLET FOR CEILING OR WALL MOUNTED EXIT LIGHTING FIXTURE WITH BATTERY BACKUP WITH CIRCUIT NUMBER
A-1	OUTLET FOR CEILING OR WALL MOUNTED COMBINATION EXIT/EMERGENCY EGRESS LIGHTING FIXTURE WITH BATTERY BACKUP WITH CIRCUIT NUMBER
A-1	OUTLET FOR CEILING OR WALL MOUNTED EMERGENCY EGRESS LIGHTING FIXTURE WITH BATTERY BACKUP WITH CIRCUIT NUMBER WITH CIRCUIT NUMBER
A-1	GENERAL PURPOSE DUPLEX RECEPTACLE AT 18" AFF TO BOTTOM OF BOX, WITH CIRCUIT NUMBER
A-1	GENERAL PURPOSE DUPLEX RECEPTACLE AT 48" AFF TO TOP OF BOX, WITH CIRCUIT NUMBER
GFCI A-1	GROUND FAULT CIRCUIT INTERRUPTER AT 18" AFF TO BOTTOM OF BOX, WITH CIRCUIT NUMBER
GFCI A-1	GROUND FAULT CIRCUIT INTERRUPTER AT 48" AFF TO TOP OF BOX, WITH CIRCUIT NUMBER
USB A-1	GENERAL PURPOSE DUPLEX RECEPTACLE WITH (2) INTEGRATED USB PORTS ABOVE COUNTER/DESK, MOUNTED HORIZONTALLY AND CENTERED 6" ABOVE THE FINISHED SURFACE OR 2" ABOVE BACK SPLASH UNLESS NOTED OTHERWISE. WITH CIRCUIT NUMBER, HUBBEL USB20AC OR EQUAL. USB PORTS CONFIGURED AS (1) USB-A AND (1) USB-C
	DEEP DOUBLE GANG JUNCTION BOX FOR DOOR CONTROL DEVICES AT 48" AFF. ROUTE 1" EMPTY CONDUIT (EC) TO CONTROL PANEL. ROUTE 3/4" EC TO DOOR ACCESS DEVICE, A 3/4" EC TO DOOR CONTACTS, AND A 3/4" EC TO ELECTRIC STRIKE. COORDINATE ALL REQUIREMENTS WITH OWNER AND SECURITY SYSTEM PROVIDER PRIOR TO ANY ROUGH-IN. PROVIDE ADDITIONAL 120V CONNECTION FOR CONTROLLERS, TRANSFORMERS, ETC. AS REQUIRED. WIRE TO CIRCUIT INDICATED. SEE CARD READER DETAIL.
A-1	GENERAL PURPOSE QUADRAPLEX RECEPTACLE AT 18" AFF TO BOTTOM OF BOX, WITH CIRCUIT NUMBER
EWC A-1	OUTLET FOR ELECTRIC WATER COOLER COORDINATE LOCATION WITH PLUMBING ROUGH-IN DRAWINGS, WITH CIRCUIT NUMBER
UC REF. A-1	OUTLET FOR UNDERCOUNTER REFRIGERATOR HEIGHT TO SUIT APPLIANCE SERVED WITH CIRCUIT NUMBER
REF. A-1	OUTLET FOR REFRIGERATOR HEIGHT TO SUIT APPLIANCE SERVED WITH CIRCUIT NUMBER
DISP. A-1	SWITCHED OUTLET FOR DISPOSER HEIGHT TO SUIT APPLIANCE SERVED WITH CIRCUIT NUMBER
A-1	FLUSH FLOOR OUTLET WITH DUPLEX RECEPTACLE WITH CIRCUIT NUMBER WITH BRASS COVERPLATE
A-1	DUAL SERVICE FLUSH FLOOR OUTLET WITH DUPLEX RECEPTACLE WITH CIRCUIT NUMBER AND A 1" EC STUBBED INTO ACCESSIBLE CEILING SPACE FOR LOW VOLTAGE CABLE (DATA, TELEPHONE OR TELEVISION), WITH BRASS COVERPLATE
	OUTLET FOR LOW VOLTAGE CABLE (DATA OR TELEPHONE) AT 18" AFF TO BOTTOM OF BOX WITH A 3/4" EC STUBBED INTO ACCESSIBLE CEILING SPACE
	OUTLET FOR LOW VOLTAGE CABLE (TELEVISION) AT 48" AFF TO TOP OF BOX WITH A 3/4" EC STUBBED INTO ACCESSIBLE CEILING SPACE
TV	JUNCTION BOX FOR HDMI CABLE AT TELEVISION LOCATION
J	JUNCTION BOX AT 18" AFF TO BOTTOM OF BOX OR AT ASSOCIATED PIECE OF EQUIPMENT
AQ	AIR QUALITY SENSOR (120V-1PH) FURNISHED AND INSTALLED BY HVAC, WIRED BY ELECTRICIAN
	FIRE ALARM PULL STATION AT 48" AFF TO TOP OF BOX
F	AUDIO/VISUAL FIRE ALARM SIGNAL DEVICE AT 6'-8" AFF
V	VISUAL ONLY FIRE ALARM SIGNAL DEVICE AT 6'-8" AFF
S	CEILING MOUNTED SMOKE DETECTOR
FS	SPRINKLER WATER FLOW SWITCH
TS	SPRINKLER TAMPERPROOF SWITCH
C/CO	COMBINATION CEILING MOUNTED SINGLE STATION AC/BATTERY CARBON MONOXIDE AND SMOKE DETECTOR
FAA	FIRE ALARM ANNUNCIATOR PANEL
FAC	FIRE ALARM CONTROL PANEL
EXP	FIRE ALARM EXPANDER PANEL
H	CEILING MOUNTED HEAT DETECTOR
A-1	SAFETY SWITCH AT 48" AFF TO TOP OF BOX OR AT ASSOCIATED PIECE OF EQUIPMENT, CIRCUIT NUMBER SHOWN WHERE APPLICABLE
M	MOTOR OUTLET
	EXHAUST FAN (120V-1PH) FURNISHED AND INSTALLED BY DIVISION 15 WIRED UNDER THIS DIVISION
A-1	PHOTOCELL, LOCATE IN ACCESSIBLE LOCATION AND SHIELD FROM SURROUNDING LIGHT SOURCES, WITH CIRCUIT NUMBER
	PANELBOARD
EQ	EQUIPMENT EQUIPMENT DESIGNATION SEE SCHEDULE
	SWITCH LEG WIRING, 2 #12 - CROSS MARKS INDICATE NUMBER OF CONDUCTORS IF MORE THAN TWO
A	LIGHTING FIXTURE TYPE, SEE SCHEDULE.
1	KEYED DRAWING NOTE
	EQUIPMENT TAG

MEI Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

ELECTRICAL DETAILS

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

2E-002

06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.

PANEL A

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS:600 | MAIN: LUGS ONLY

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
1	20	RECS. CORRIDOR 1ST FLOOR (1)	6.0	100%	1	29.5		2	125%	18.8	ELEC. WATER HEATER 4	25	2
1	20	RECS. BIKE STORAGE	6.0	100%	3		29.5	4	125%	18.8	----	--	-
1	20	RECS. CORRIDOR 2ND FLOOR (1)	0.0	100%	5	6.0		6	100%	6.0	RECS. LOBBY	20	1
1	20	RECS. CORRIDOR 2ND FLOOR (1)	0.0	100%	7		6.0	8	100%	6.0	RECS. OFFICE	20	1
1	20	RECS. MAINT RM.	3.0	100%	9	9.0		10	100%	6.0	MAINT. OFFICE	20	1
1	20	RECS. MAINT RM.	3.0	100%	11		6.0	12	100%	3.0	MAINT. WORKSHOP	20	1
1	20	RECS. LAUNDRY ROOM	4.5	100%	13	10.5		14	100%	6.0	MAINT. WORKSHOP	20	1
2	30	DRYER	23.0	100%	15		27.5	16	100%	4.5	MAINT. WORKSHOP	20	1
-	--	----	23.0	100%	17	29.0		18	100%	6.0	RECS. 3RD FLR. CORRIDOR (1)	20	1
2	30	DRYER	23.0	100%	19		26.0	20	100%	3.0	RECS. 3RD FLR. CORRIDOR (1)	20	1
-	--	----	23.0	100%	21	29.0		22	100%	6.0	RECS. 4TH FLR. CORRIDOR (1)	201	1
2	30	DRYER	23.0	100%	23		26.0	24	100%	3.0	RECS. 4TH FLR. CORRIDOR (1)	20	1
-	--	----	23.0	100%	25	26.0		26	100%	3.0	DATA BOARD RECS. THIRD FLOOR	20	1
1	15	WASHER	10.0	100%	27		11.5	28	100%	1.5	REC. BATHROOM	20	1
1	15	WASHER	10.0	100%	29	6.0		30	100%	6.0	ROOFTOP RECS.	20	1
1	15	WASHER	10.0	100%	31		16.0	32	100%	6.0	ROOFTOP RECS.	20	1
1	20	RECS MEETING AREAS.	6.0	100%	33	23.3		34	125%	13.8	LIGHTS 1ST FLR.	20	1
1	20	RECS MEETING AREAS.	4.5	100%	35		24.5	36	125%	16.0	EXTERIOR LIGHTS	20	1
1	20	RECS. FLEX KITCHEN COUNTERS	4.5	100%	37	21.8		38	125%	13.8	LIGHTS 1ST FLR.	20	1
1	20	RECS. FLEX KITCHEN COUNTERS	3.0	100%	39		20.3	40	125%	13.8	LIGHTS 2ND FLR.	20	1
1	20	REFRIGERATOR	10.0	100%	41	27.3		42	125%	13.8	LIGHTS 3RD/4TH FLR.	20	1
1	20	SECURITY SYSTEM PANEL (2)	10.0	100%	43		33.0	44	100%	23.0	AH-3 BIKE RM.	25	2
1	20	SITE LIGHTING	2.0	125%	45	25.5		46	100%	23.0	----	--	-
1	20	SPARE	0.0	100%	47		19.0	48	100%	19.0	OHP-3 BIKE RM.	20	2
1	20	SPARE	0.0	100%	49	19.0		50	100%	19.0	----	--	-
1	20	SPARE	0.0	100%	51		19.8	52	100%	19.8	IHP STAIR A	20	2
1	20	SPARE	0.0	100%	53	19.8		54	100%	19.8	----	--	-
1	20	SPARE	0.0	100%	55		46.1	56	100%	46.1	AH-7 MAINT. SHOP	50	2
1	20	SPARE	0.0	100%	57	46.1		58	100%	46.1	----	--	-
1	20	SPARE	0.0	100%	59		24.9	60	100%	24.9	OHP-7 MAINT. SHOP	25	2
1	20	SPARE	0.0	100%	61	24.9		62	100%	24.9	----	--	-
1	20	SPARE	0.0	100%	63		46.1	64	100%	46.1	AH-5 MECH. RM	50	2
1	20	SPARE	0.0	100%	65	46.1		66	100%	46.1	----	--	-
1	20	SPARE	0.0	100%	67		25.0	68	100%	25.0	OHP-5 MECH. RM	25	2
1	20	SPARE	0.0	100%	69	25.0		70	100%	25.0	----	--	-
1	20	SPARE	0.0	100%	71		46.1	72	100%	46.1	AH-6 LAUNDRY	50	2
1	20	SPARE	0.0	100%	73	46.1		74	100%	46.1	----	--	-
1	20	SPARE	0.0	100%	75		34.0	76	100%	34.0	OHP-6 LAUNDRY	35	2
1	20	SPARE	0.0	100%	77	34.0		78	100%	34.0	----	--	-
1	20	SPARE	0.0	100%	79		0.0	80	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	81	31.8		82	125%	25.4	ELEC. WATER HEATER 5	35	2
1	20	SPARE	0.0	100%	84		31.8	84	125%	25.4	----	--	-
						535.5	519.0						

[1] - GFCI BREAKER.
[2] - PROVIDE BREAKER WITH RED HANDLE LOCK.
--WITH INTEGRAL 160KA TVSS.
SQUARE-D NQ OR EQUAL
SEE SPEC. NOTES

PANEL B

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS: 400 | MAIN: LUGS ONLY

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
1	20	RECS. ELEC. RM.	3.0	100%	1	26.5		2	125%	18.8	ELEC. WATER HEATER 4	25	2
1	20	RECS. WATER RM.	3.0	100%	3		26.5	4	125%	18.8	----	--	-
1	20	RECS 1ST FLR. CORRIDOR (1)	6.0	100%	5	72.0		6	100%	66.0	WATER BOOSTER PUMP	90	2
1	20	RECS 1ST FLR. CORRIDOR (1)	6.0	100%	7		72.0	8	100%	66.0	----	--	-
1	20	RECS. LAUNDRY ROOM	4.5	100%	9	14.5		10	100%	10.0	SPRNK. AIR COMP.	20	1
1	20	RECS 2ND FLR. CORRIDOR (1)	6.0	100%	11		11.0	12	100%	5.0	TRASH SHUTE CONTRLLER	20	1
1	20	RECS 2ND/3RD FLR. CORRIDOR (1)	6.0	100%	13	38.8		14	125%	26.3	TRASH COMPACTOR	30	2
1	20	RECS 3RD FLR. CORRIDOR (1)	6.0	100%	15		38.8	16	125%	26.3	----	--	-
1	20	RECS 4TH FLR. CORRIDOR (1)	6.0	100%	17	12.0		18	100%	6.0	DATA BOARD QUAD RECS.	20	1
1	20	RECS 4TH FLR. CORRIDOR (1)	0.0	100%	19		19.8	20	100%	19.8	IHP/FCU STAIRS B	25	2
1	20	RADON FAN RECEPTACLE ON ROOF	1.5	100%	21	21.3		22	100%	19.8	----	--	-
1	20	ROOF	1.5	100%	23		11.5	24	100%	10.0	FIRE ALARM CONTROL PANEL	20	1
1	20	SPARE	0.0	100%	25	20.0		26	100%	20.0	DATA BOARD 240V REC.	30	2
1	20	ROOFTOP RECS.	6.0	100%	27		26.0	28	100%	20.0	----	--	-
1	20	ROOFTOP RECS.	6.0	100%	29	20.0		30	100%	20.0	DATA BOARD REC.	30	1
2	20	FIRE JOCKEY PUMP	12.4	100%	31		15.4	32	100%	3.0	DATA BOARD RECS. THIRD FLOOR	20	1
-	--	----	12.4	100%	33	17.4		34	100%	5.0	FIRE ALARM EXPANDER PANEL (2)	20	1
1	20	SITE LIGHTING	2.0	125%	35		22.5	36	125%	16.0	LIGHTING INVERTER BOX (3)	30	1
1	20	SPARE	0.0	100%	37	13.8		38	125%	11.0	EXTERIOR LIGHTS	20	1
1	20	SPARE	0.0	100%	39		17.3	40	125%	13.8	LIGHTS 1ST/2ND FLR.	20	1
1	20	SPARE	0.0	100%	41	17.3		42	125%	13.8	LIGHTS 3RD/4TH FLR.	20	1
1	20	SPARE	0.0	100%	43		19.8	44	100%	19.8	IHP/FCU WATER RM.	20	2
1	20	SPARE	0.0	100%	45	19.8		46	100%	19.8	----	--	-
1	20	SPARE	0.0	100%	47		19.8	48	100%	19.8	IHP/FCU ELEC RM.	20	2
1	20	SPARE	0.0	100%	49	19.8		50	100%	19.8	----	--	-
1	20	SPARE	0.0	100%	51		19.8	52	100%	19.8	IHP/FCU TRASH RM.	20	2
1	20	SPARE	0.0	100%	53	19.8		54	100%	19.8	----	--	-
						332.9	320.2						

[1] - GFCI BREAKER.
[2] - PROVIDE BREAKER WITH RED HANDLE LOCK.
[3] - WIRE CIRCUIT THROUGH PHOTOCELL. COORINATE WITH ZONE INVERTER DETAIL ON SHEET 2E-004.
--WITH INTEGRAL 160KA TVSS.
SQUARE-D NQ OR EQUAL
SEE SPEC. NOTES

SEVICE LOAD SUMMARY

52 UNITS

TYPE		LOAD (KW)
TOTAL APT. LIGHTING/RECEPTACLE LOAD		155.87
SMALL APPLIANCES		156.00
ELEC. RANGE		416.00
LAUNDRY		312.00
ELEC. WATER HEATER		234.00
DISPOSER		41.60
DISHWASHER		62.40
REFRIGERATOR		62.40
HVAC		415.80
TOTAL	=	1,851.07
DEMAND FACTOR OF 25%		
PER NEC TABLE 220-84	=	462.77
HOUSE LOADS	=	183.62
AT 240 VOLT, SINGLE PHASE	=	2693.28 AMPS

FIRST FLOOR METER STACK LOAD CALC.

36 UNITS

TYPE		LOAD (KW)
TOTAL APT. LIGHTING LOAD		106.25
SMALL APPLIANCES		108.00
ELEC. RANGE		288.00
LAUNDRY		216.00
ELEC. WATER HEATER		162.00
DISPOSER		28.80
DISHWASHER		43.20
REFRIGERATOR		43.20
HVAC		284.40
TOTAL	=	1,279.85
DEMAND FACTOR OF 30%		
PER NEC TABLE 220-84	=	383.95
AT 240 VOLT, SINGLE PHASE	=	1599.8 AMPS

2ND FLOOR METER STACK LOAD CALC.

16 UNITS

TYPE		LOAD (KW)
TOTAL APT. LIGHTING LOAD		49.62
SMALL APPLIANCES		48.00
ELEC. RANGE		128.00
LAUNDRY		96.00
ELEC. WATER HEATER		72.00
DISPOSER		12.80
DISHWASHER		19.20
REFRIGERATOR		19.20
HVAC		126.40
TOTAL	=	571.22
DEMAND FACTOR OF 32%		
PER NEC TABLE 220-84	=	182.79
AT 240 VOLT, SINGLE PHASE	=	761.62 AMPS

B2 HOUSE SWBD SECTION

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS: 1000 | MAIN: 1000A MAIN BREAKER

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
2	600	PANEL A	510.0	100%	1	510.0		2	100%	0.0	PROVISIONAL	--	1
-	--	----	506.0	100%	3		506.0	4	100%	0.0	PROVISIONAL	--	1
2	400	PANEL B	313.1	100%	5	313.1		6	100%	0.0	PROVISIONAL	--	1
-	--	----	297.9	100%	7		297.9	8	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	9	0.0		10	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	11		0.0	12	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	13	0.0		14	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	15		0.0	16	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	17	0.0		18	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	19		0.0	20	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	21	0.0		22	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	23		0.0	24	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	25	0.0		26	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	27		0.0	28	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	29	0.0		30	100%	0.0	PROVISIONAL	--	1
						823.1	803.9						

SEE SPEC. NOTES

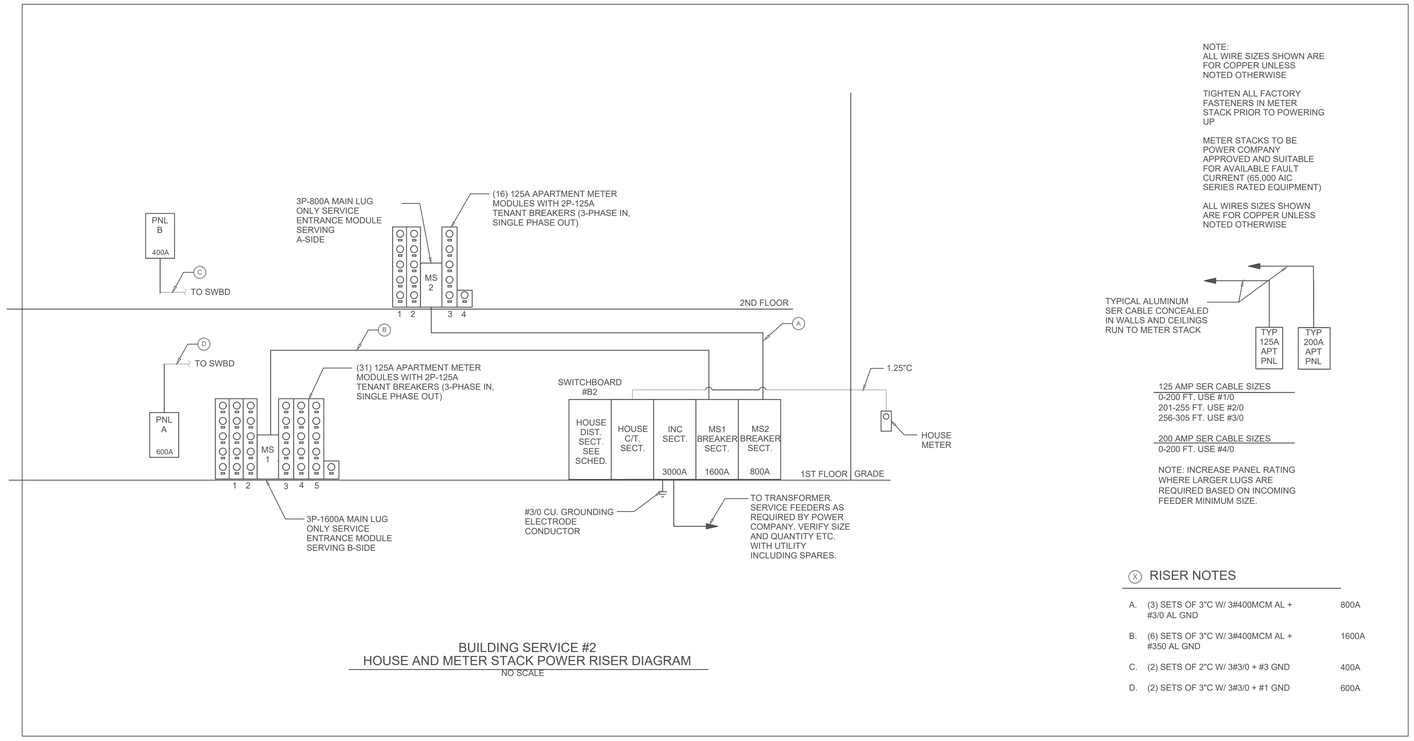
B2 EQUIPMENT CONNECTION SCHEDULE

ITEM	DESCRIPTION	VOLTS	PH	FLA	WIRE	GND	MOCP	DISCONNECT	PNL.&CKT.	REMARKS
IHP/FCU 1	INDOOR/OUTDOOR HEAT PUMP	240	1	20.8	#10	#10	25	2P-30A-NFSS NEMA 3R	SEE PANEL SCHEDULES	NOTE 1
IHP/FCU 2	INDOOR/OUTDOOR HEAT PUMP	240	1	19.8	#12	#12	20	2P-30A-NFSS NEMA 3R		NOTE 1
OHP-3	OUTDOOR HEAT PUMP 3	240	1	19.0	#12	#12	20	2P-30A-NFSS NEMA 3R		
AH-3	AIR HANDLER 3	240	1	23.0	#10	#10	25	2P-30A-NFSS		
OHP-4	OUTDOOR HEAT PUMP 4	240	1	24.9	#10	#10	25	2P-30A-NFSS NEMA 3R		
AH-4	AIR HANDLER 4	240	1	46.1	#8	#10	50	2P-60A-NFSS		
OHP-5	OUTDOOR HEAT PUMP 5	240	1	24.9	#10	#10	25	2P-30A-NFSS NEMA 3R		
AH-5	AIR HANDLER 5	240	1	46.1	#8	#10	50	2P-60A-NFSS		
OHP-6	OUTDOOR HEAT PUMP 6	240	1	34.0	#8	#10	35	2P-60A-NFSS NEMA 3R		
AH-6	AIR HANDLER 6	240	1	46.1	#8	#10	50	2P-60A-NFSS		
OHP-7	OUTDOOR HEAT PUMP 7	240	1	24.9	#10	#10	25	2P-30A-NFSS NEMA 3R		
AH-7	AIR HANDLER 7	240	1	46.1	#8	#10	50	2P-60A-NFSS		
EWH-4	ELEC. WATER HEATER 4	240	1	18.8	#10	#10	25A	2P-30A-NFSS		
EWH-5	ELEC. WATER HEATER 5	240	1	25.4	#8	#10	35A	2P-60A-NFSS		
WBP	WATER BOOSTER PUMP	240	1	66.0	#3	#8	90A	2P-100A-NFSS		

SCHEDULE NOTES

-- VERIFY FINAL CONNECTIONS, ELECTRICAL CHARACTERISTICS, ETC. WITH FINAL EQUIPMENT SELECTIONS. CONTRACTOR IS RESPONSIBLE FOR CORRECTNESS OF ALL BREAKERS, WIRES, ETC.

NOTE 1: WIRE THROUGH CONTROLLER AS REQUIRED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. INDOOR UNIT WIRED THROUGH OUTDOOR UNIT.



BUILDING SERVICE #2
HOUSE AND METER STACK POWER RISER DIAGRAM
NO SCALE

NOTE:
ALL WIRE SIZES SHOWN ARE FOR COPPER UNLESS NOTED OTHERWISE

TIGHTEN ALL FACTORY FASTENERS IN METER STACK PRIOR TO POWERING UP.

METER STACKS TO BE POWER COMPANY APPROVED AND SUITABLE FOR AVAILABLE FAULT CURRENT (65,000 AIC SERIES RATED EQUIPMENT)

ALL WIRES SIZES SHOWN ARE FOR COPPER UNLESS NOTED OTHERWISE

125 AMP SER CABLE SIZES
0-200 FT. USE #1/0
201-255 FT. USE #2/0
256-305 FT. USE #3/0

200 AMP SER CABLE SIZES
0-200 FT. USE #4/0

NOTE: INCREASE PANEL RATING WHERE LARGER LUGS ARE REQUIRED BASED ON INCOMING FEEDER MINIMUM SIZE.

RISER NOTES

A.	(3) SETS OF 3"C W/ 3#400MCM AL + #3/0 AL GND	800A
B.	(6) SETS OF 3"C W/ 3#400MCM AL + #350 AL GND	1600A
C.	(2) SETS OF 2"C W/ 3#3/0 + #3 GND	400A
D.	(2) SETS OF 3"C W/ 3#3/0 + #1 GND	600A

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

POWER RISER & SCHEDULES

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

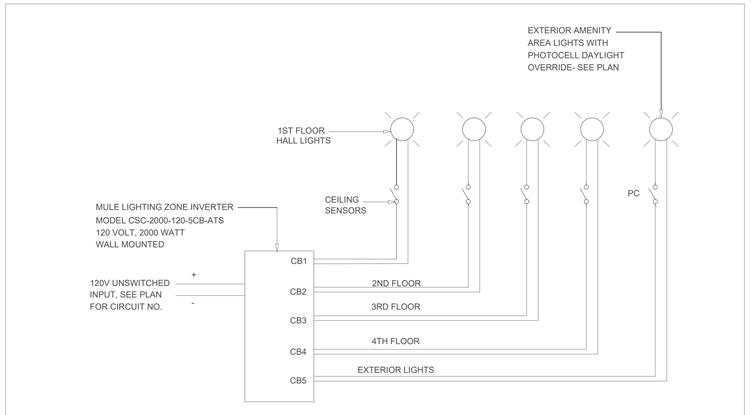
DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

2E-003
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.

	Fixture Type	WATTS/AMPS	Product	
	Interior - Common Areas			
F1	LF-Can_Light-US-GP (Corridor - Common Area)	12	BEGA Surface Mounted Downlight	4 3/8" D | 4" W | 8.00W LED| Finish: White
F2	LF-Troffer_Light-FB - 2'x4' (2 lamp) - 120V	45	Eralux Mont Blanc Commercial LED Lighting | Center Basked Troffer	2x4' | 30K | Finish: White
F2E	LF-Troffer_Light-FB - 2'x4' (2 lamp) - 120V	45	Eralux Mont Blanc Commercial LED Lighting | Center Basked Troffer	2x4' | 30K | Finish: White WITH EM. BATTERY BACKUP
F3	LF-Utility Sconce-NH		TBD	
F4	Res-1x4 NonHosted Light - Adjustable - 1x4	40	Globalux SLP Surface Mounted Flat Panel	1x4' | 3000K | Finish: White
F4E	Res-1x4 NonHosted Light - Adjustable - 1x4	40	Globalux SLP Surface Mounted Flat Panel	1x4' | 3000K | Finish: White WITH EM. BATTERY BACKUP
F5	Downlight - Recessed Can - 4" Fluorescent - 120V		Eterna Light Prima 3 Round Baffle	60W equivalent LED medium base A19, 120V, 08 or 15W. Air tight IC rating | 3" Dia | 3000K | Energy Star | Damp location listed | Finish: White | Baffle
F6	LF-Linear-Recessed - 3"x6'	36	Axis Lighting Sculpt Recessed Mount	3" W| 6' L| Finish: White
F7	LF-Linear-Recessed - 3"x4'	32.7	Axis Lighting Sculpt Recessed Mount	3" W| 4' L| Finish: White
F8	LF-Pendant-Globe (Laundry)	14	Axis Lighting Luna Orb Pendant	Pendant Fixture | Acrylic Globe | Finish: White
F9	LF-Can_Light-US-GP (Fitness Room)	18	Utopia MCR Metal Cylinder Round	4" | Finish: White w/White or Chrome Interior
F10	LF-Pendant-Dining_Maker-LED - Opta 28 LED (Community Room)		Axis Lighting Shade Big Dome	Sloped ceiling compatible. Acrylic | Finish: White 22W LED
F11	Lighting-Wall-Sconce-Tech_Lighting-Ellis_24 (bathroom vanity)		Visual Comfort Ellis 24 Bath OR Visual Comfort Ellis 36 Bath	24 or 36" L | 5" H - Size dependant on location. Finish: Polished Nickel & White Acrylic LED 3000K | Energy Star Rated Warm color temperature
F12	LF-Troffer_Light-FB - 2'x2' (1 lamp) - 120V	35	Eralux Mont Blanc Commercial LED Lighting | Center Basked Troffer	2x2' | 30K | Finish: White
E1	EM EXIT DEVICE W/BATTERY BACKUP			
E2	EM EGRESS DEVICE W/BATTERY BACKUP			
	Interior - Unit			
	LF-Flat Round-CH - WIC/BATH 7 1/2"		Globalux RDL LED Found Low Profile Flush	7" | Finish: White 15W LED 3000K Motion activated.
	LF-Linear-Surface_Mount - 6"x2' (Bath)		Visual Comfort Ellis 24 Bath OR Visual Comfort Ellis 36 Bath	24 or 36" L | 5" H - Size dependant on location. Finish: Satin Nickel & White Acrylic LED 3000K | Energy Star Rated Warm color temperature
	LF-Round-Pendant (Kitchen Island)		Visual Comfort Entra 3" Cylinder	8" H x 3" diameter Finish: White or Polished Nickel 10W | 3000K | Energy Star | Cable to match.
	LF-Linear-Suface_Mount - 1"x4" (Kitchen)		Globalux SLP Surface Mounted Flat Panel	1'x4' | 3/4" H Finish: White w/ Acrylic Lense LED 3000K | Energy Star | Rated Note \VH requires a 4' long fixture in the kitchen.
	LF-Flat Round-CH - Foyer/BR 14"		Globalux DCR LED Ringed Decorative Ceiling Mount - 14"	Provide switched outlet 14" diameter | 4" H Finish: Brushed Nickle and White Acrylic LED 3000K | Energy Star Rated
	LF-Flat Round-CH - Dining/Public Corridor 16"		Globalux DCR LED Ringed Decorative Ceiling Mount - 16"	Provide switched outlet 16" diameter | 4" H Finish: Brushed Nickle and White Acrylic LED 3000K | Energy Star Rated
	LF-Utility Sconce-NH (W/D)			
	LF-3_vanity-UH-GP (bathroom vanity)		Visual Comfort Ellis 24 Bath OR Visual Comfort Ellis 36 Bath	24 or 36" L | 5" H - Size dependant on location. Finish: Satin Nickel & White Acrylic LED 3000K | Energy Star Rated Warm color temperature
	Exterior			
F12	LF-Linear-Recessed - 3"x6' (Corridor/Lobby Spaces)	60	Axis Lighting Extend 4 Surface	3" W| 6' L| Finish: White | Surface or Recessed as Required
F13	LF-Linear-Recessed - 3"x4' (Corridor/Lobby Spaces)	40	Axis Lighting Extend 4 Surface	3" W| 4' L| Finish: White | Surface or Recessed as Required
F14	LF-Wall Sconce - InterGlobal-WH (Ext. Corridor)	10	WAC Lighting Dot Ceiling Mount (Wall Mount)	2.5" Thick | 12" Diameter | Exterior Grade Stainless Steel, Glass 27W LED | 3000K
F15	LF-Wall Sconce - Shade On (Unit Entry, corridor)	11	WAC Lighting Caliber Outdoor Wall Sconce 3000K	14" T | 4" D (Max.) | 4.5" W | 3" Diameter Lens ADA Compliant | Exterior Grade Brushed Aluminum, Glass 11W LED | 3000K
F16	Exterior Sconces at Main Entries		A WE Lighting Helion	5"W | 31"H | 3.39"D Finish: White Acrylic, Silver and White | Mounted above 6'-8" AFF to base. 3000K | 26W LED
F17	Exterior Sconces above Back-Of-House Doors		A WE Lighting Bloc	6"W | 5.5"H | 6"D Finish: White Acrylic, Silver and White | Mounted above 6'-8" AFF to base. 3000K | 26W LED
F18	Exterior Sconces at Side + Residence Entries (exterior wall)		A WE Lighting Pillar	4"W | 7"H | 5"D Finish: White Acrylic, Silver and White | Mounted above 6'-8" AFF to base. 3000K | 26W LED
F19	Exterior Wall Packs		TBD	



ZONE INVERTER #1 WIRING SCHEMATIC

NO SCALE

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

LIGHTING SCHEDULE & DIAGRAM

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

2E-004

06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.

ELECTRICAL SPECIFICATIONS

1. GENERAL

1.1 RELATED DOCUMENTS:

A. REQUIREMENTS OF THE GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS, AND SPECIAL CONDITIONS APPLY TO THIS SECTION.
B. ARCHITECTURAL, STRUCTURAL, MECHANICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS.

1.2 WORK INCLUDED:

A. ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.
B. PERMITS AND INSPECTIONS REQUIRED FOR WORK.
C. TEMPORARY ELECTRIC FOR SITE DURING CONSTRUCTION AS REQUIRED.

1.3 JOB CONDITIONS:

A. COORDINATE WITH BUILDING CONSTRUCTION AND WITH OTHER TRADES.
B. IN CASE OF CONFLICT BETWEEN SPECIFICATIONS AND DRAWINGS, CONSULT ARCHITECT IMMEDIATELY FOR DETERMINATION OF PROCEDURE METHOD.

1.4 CONFORMANCE TO REGULATIONS:

A. WORK SHALL CONFORM WITH 2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE, NFPA, 2026 VH MDCR, 2026 UNIVERSAL DESIGN, 2020 ENTERPRISE GREEN COMMUNITIES, DOE EFFICIENT NEW HOMES PROGRAM; MULTIFAMILY VERSION 2, REV. 2., ENERGY STAR MFNC 1.1, EPA INDOOR AIRPLUS V2, AND LOCAL ORDINANCES AND THE RULES AND REGULATIONS OF THE UTILITIES.
B. WORK SHALL BE IN ACCORDANCE WITH THE OWNER'S BUILDING CRITERIA AND TENANT BUILD-OUT REQUIREMENTS.

1.5 QUALITY ASSURANCE:

A. MEET OR EXCEED RECOMMENDATIONS OF: IEEE, IES, NEMA AND UL.
B. NOTIFY ARCHITECT IMMEDIATELY OF CONFLICTS AND DEFICIENCIES. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN RESOLVED.

1.6 MATERIALS AND EQUIPMENT:

A. PROVIDE NEW MATERIALS AND EQUIPMENT UNLESS OTHERWISE NOTED.
B. FURNISH (INCLUDING FREIGHT AND UNLOADING) AND INSTALL UNLESS OTHERWISE NOTED.
C. EQUIPMENT PROVIDED FOR THIS PROJECT SHALL BE NEW UNLESS NOTED OTHERWISE.

1.7 UTILITIES AND CONNECTIONS:

A. OWNER WILL PAY ANY UTILITY SERVICE FEES DIRECTLY TO THE RESPECTIVE UTILITY COMPANIES.
B. PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED BUT NOT PROVIDED OR FURNISHED BY THE UTILITY COMPANIES TO BRING SERVICE INTO THE BUILDING.

1.8 SUBMITTALS:

A. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR EQUIPMENT IN ACCORDANCE WITH THE ARCHITECT'S REQUIREMENTS.
B. UPON COMPLETION OF THE INSTALLATION, AND PRIOR TO ACCEPTANCE BY THE OWNER, CONTRACTOR SHALL FURNISH AS-BUILT DOCUMENTATION AND O&M MANUALS IN ACCORDANCE WITH THE ARCHITECT'S REQUIREMENTS.
C. PROVIDE WIRING DIAGRAMS SPECIFIC TO THIS PROJECT FOR ALL ROOMS WITH LOW VOLTAGE DEVICES SHOWING INTERCONNECTIONS BETWEEN POWER PACK, SWITCHES, AND OCCUPANCY SENSORS.

1.9 PROJECT CLOSEOUT:

A. REPAIR DAMAGED AND DEFECTIVE EQUIPMENT AND MATERIALS. REPLACE ITEMS THAT CANNOT BE PROPERLY REPAIRED.
B. CLEAN EXPOSED AND SEMI-EXPOSED SURFACES OF EQUIPMENT AND MATERIALS.
C. TOUCH-UP SHOP-APPLIED FINISHES TO RESTORE DAMAGED AND SOILED AREAS.
D. INSTRUCT OWNER'S REPRESENTATIVE IN OPERATION AND MAINTENANCE OF ELECTRICAL SYSTEMS UTILIZING THE OPERATION AND MAINTENANCE MANUAL.
E. INSTRUCTION PERIOD SHALL OCCUR AFTER SUBSTANTIAL COMPLETION OF ELECTRICAL SYSTEMS AND PRIOR TO COMPLETION OF THE PROJECT. COORDINATE WITH THE ARCHITECT AND OWNER.

2. PRODUCTS

2.1 RACEWAYS & FITTINGS:

A. CONDUIT SIZES SHALL BE AS REQUIRED BY THE CODE (UNLESS INDICATED OR SPECIFIED OTHERWISE) FOR THE NUMBER AND SIZE OF WIRE INDICATED. MINIMUM SIZE CONDUIT SHALL BE 1/2" ELECTRICAL TRADE SIZE. FLEXIBLE METAL CONDUIT USED FOR LIGHTING FIXTURE WHIPS MAY BE 3/8" WHERE ALLOWED BY THE CODE.
B. USE ELECTRICAL METALLIC TUBING EXCEPT AS FOLLOWS: USE RIGID NONMETALLIC CONDUIT IN OR UNDER ON GRADE CONCRETE SLABS. USE FLEXIBLE METAL CONDUIT FOR MOTOR AND EQUIPMENT CONNECTIONS IN DRY LOCATIONS. USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT IN WET OR DAMP LOCATIONS.

2.2 WIRE AND CABLE:

A. CONDUCTORS SHALL BE COPPER, MINIMUM SIZE NO. 12 AWG. OTHER WIRE SIZES SHALL BE AS NOTED OR AS REQUIRED FOR THE CIRCUIT SIZE. CONDUCTOR INSULATION SHALL BE THHN/THWN.
B. BRANCH CIRCUIT WIRING WHERE CONCEALED IN WALLS AND ABOVE CEILINGS MAY BE TYPE MC (METAL CLAD) CABLE WHERE ALLOWED BY THE CODE.
C. SERVICE ENTRANCE CABLE (SE) MAY BE USED WHERE ALLOWED AND INSTALLED IN ACCORDANCE WITH NEC ARITCLE 338. FOR APARTMENT PANEL FEEDERS, USE MC FEEDERS OR CONDUIT & WIRE FOR APARTMENT FEEDERS WHERE SE CABLE IS NOT ALLOWED.
D. NM CABLE (ROMEX) MAY BE USED WHERE ALLOWED AND INSTALLED IN ACCORDANCE WITH NEC ARTICLE 334.

2.3 BOXES:

A. GALVANIZED SHEET STEEL TYPE. SINGLE DEVICE BOX SHALL BE "NON-GANGABLE" TYPE AND FOR MULTIPLE DEVICES "GANGABLE" TYPE SHALL BE USED. BOXES FOR EXPOSED WORK SHALL BE 4" SQUARE TYPE. BOXES FOR EXPOSED WORK IN WET LOCATIONS SHALL BE DIE CAST TYPE WITH THREADED HUBS. SECTIONAL BOXES SHALL NOT BE USED IN MASONRY OR CONCRETE. SIZED FOR NUMBER OF CONDUCTORS, FITTINGS AND DEVICES AS REQUIRED BY THE CODE.

2.4 WIRING DEVICES:

A. 20 AMPERE SPECIFICATION GRADE.
B. COVERPLATES SHALL BE AS FOLLOWS: INTERIOR RECESSED - SMOOTH UNBREAKABLE NYLON; SURFACE - 4" SQUARE RAISED COVER. GALVANIZED; WEATHERPROOF - DIE CAST ALUMINUM, GFCI TYPE, WATERTIGHT WHILE IN USE TYPE, USE EXTERNAL OPERATING TYPE FOR WEATHERPROOF SWITCHES.
C. DEVICE AND PLATE COLOR SHALL BE AS SELECTED BY ARCHITECT.
D. GFCI OUTLETS TO BE SELF-TESTING TYPE.

2.5 DISCONNECT SWITCHES:

A. SAME MANUFACTURER AS THE PANELBOARDS, NEMA 3R FOR OUTDOOR USE.
B. DISCONNECT SWITCHES SHALL BE FUSED OR NON-FUSED AS INDICATED AND BE VISIBLE BLADE TYPE WITH EXTERNAL OPERATING HANDLE AND COVER INTERLOCK AND PAD LOCKING.

2.6 GROUNDING:

A. CONNECTIONS TO BUILDING STEEL, GROUND RODS AND PIPING SYSTEMS SHALL BE MADE WITH BRONZE OR BRASS BOLTED TYPE FITTINGS DESIGNED FOR THE USE.
B. GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZE AS INDICATED ON THE DRAWINGS AND AS DESCRIBED IN ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.

2.7 PANELBOARDS (OR GEAR):

A. PANELBOARDS SHALL BE AS SCHEDULED OR BY: SQUARE-D, EATON, OR SIEMENS. PANELS TO HAVE MINIMUM 20" WIDE CABINETS AND COPPER BUS BARS.
B. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC, MOLDED CASE, BOLT-ON TYPE. MULTI-POLE SHALL BE COMMON TRIP TYPE, BREAKERS FOR HVAC EQUIPMENT SHALL BE "HACR" RATED WHERE REQUIRED.
C. PANELBOARDS SHALL HAVE LOCKABLE DOORS, LOCKS SHALL BE KEYED ALIKE.
D. PANELBOARDS AND SWITCHBOARDS SHALL BE FULLY RATED OR HAVE A UL LISTED SERIES CONNECTED RATING OF A MINIMUM 65,000 AIC. OBTAIN AND SUBMIT FAULT CURRENT VERIFICATION LETTER FROM THE POWER COMPANY TO THE LOCAL AUTHORITY HAVING JURISDICTION IF REQUIRED.
E. ELECTRIC GEAR SHALL COMPLY WITH NEC 240.87.
F. METER STACKS SHALL BE THE SAME MANUFACTURER AS PANELBOARDS AND SHALL BE TYPE APPROVED BY THE POWER COMPANY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL AS REQUIRED.
G. ALL LABELING ON EXTERIOR GEAR SHALL BE UV RESISTANT.
H. METER STACKS SHALL BE THE SAME MANUFACTURER AS PANELBOARDS AND SHALL BE TYPE APPROVED BY THE POWER COMPANY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL AS REQUIRED.
I. ELECTRICIAN SHALL PROVIDE A COORDINATION STUDY FOR ALL GEAR IF REQUIRED BY LOCAL AUTHORITY. PROVIDE ADJUSTABLE BREAKERS AS REQUIRED FOR A FULLY COORDINATED SYSTEM.
J. PROVIDE ADD-ALTERNATE IN BID FOR 100KAIC RATED METER STACK.

2.8 FUSES:

A. BRANCH CIRCUIT FUSES SHALL BE TIME-DELAY, DUAL ELEMENT, CURRENT LIMITING, CLASS RK-5.

2.9 ELECTRIC SERVICE:

A. SERVICE SHALL BE 120/208 VOLT, 1 PHASE, 3 WIRE.

2.10 DRIVERS & ACCESSORIES:

A. LED DRIVERS SHALL BE ELECTRONIC TYPE WITH EQUAL TO OR LESS THAN 10% THD AND A 3 YEAR WARRANTY, VOLTAGE TO MATCH SYSTEM VOLTAGE.
B. ACCESSORIES SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING FOR A COMPLETE LIGHTING FIXTURE INSTALLATION: PLASTER FRAMES, TEE BAR HANGERS, FIXTURE STUDS AND HOLD DOWN CLIPS FOR SUSPENDED CEILINGS.

2.11 LIGHTING FIXTURES:

A. LIGHTING FIXTURES SHALL BE AS SPECIFIED ON THE DRAWINGS.
B. PHOTOCELLS: SWIVEL MOUNT, 1800 WATT, TORK SERIES 2020 OR EQUAL.
C. TIMECLOCKS: ASTRONOMIC, 7 DAY, 100 HOUR BATTERY BACKUP, TORK SERIES EWZ100 OR EQUAL.
D. CONTACTOR: MECHANICALLY HELD, ELECTRICALLY OPERATED, NUMBER OF POLES AS REQUIRED.

2.12 EMPTY CONDUIT SYSTEMS:

A. PROVIDE FOR USE BY THE OWNER'S CABLING CONTRACTOR. CONDUIT SYSTEM SHALL BE AS DESCRIBED ON THE DRAWINGS FOR DATA, TELEPHONE, TELEVISION, SOUND SECURITY ETC.

2.13 FIRE ALARM SYSTEM:

A. PROVIDE A COMPLETE ADDRESSABLE FIRE ALARM SYSTEM FOR BUILDING AS INDICATED ON THE PLANS AND NOTED HEREIN.
B. PROVIDE PROPERLY SIZED BATTERY TO BACK UP PANEL UPON LOSS OF NORMAL POWER.
C. PROVIDE CONTROL PANEL WITH INTEGRAL DACT (DIGITAL ALARM COMMUNICATING TRANSMITTER) TO PROVIDE OFF-SITE MONITORING OF THE SYSTEMS. MONITORING SHALL BE AS APPROVED BY THE LOCAL AUTHORITY. POTS LINES SHALL BE PROVIDED AS REQUIRED FOR THIS MONITORING.
D. FIRE ALARM CONTRACTOR SHALL PROVIDE ALL DRAWINGS, CALCULATIONS, PRODUCT DATA, ETC. TO THE LOCAL AUTHORITY REQUIRED FOR PERMITTING AND INSPECTIONS OF THE SYSTEM.
E. SIGNALING DEVICES SHALL BE ADA COMPLIANT.
F. CABLE SHALL BE FIRE PROTECTIVE SIGNALING TYPE.
G. ALL ACCESSORIES, EXPANDERS, ANNUNCIATORS, GRAPHIC PANELS, ETC. SHALL BE INCLUDED AS REQUIRED FOR A COMPLETE FULLY FUNCTIONING SYSTEM MEETING STATE AND LOCAL CODE REQUIREMENTS.
H. FIRE PUMP CONTROLLER SHALL HAVE INTEGRAL AUTOMATIC TRANSFER SWITCH, SERVICE ENTRANCE RATED.

3. EXECUTION:

3.1 RACEWAYS & FITTINGS:

A. INSTALL CONDUITS CONCEALED IN WALLS, CEILINGS OR FLOORS UNLESS INDICATED OR SPECIFIED OTHERWISE. CONDUITS MAY BE INSTALLED EXPOSED IN UNFINISHED AREAS (IE: EQUIPMENT ROOMS). INSTALL EXPOSED CONDUITS IN RUNS PARALLEL OR PERPENDICULAR TO WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES OR CEILINGS. EXPOSED AND CONCEALED CONDUITS SHALL PASS THROUGH WALLS, FLOORS OR CEILINGS AT RIGHT ANGLES. UNDERGROUND CONDUITS SHALL HAVE BURY DEPTH AS REQUIRED BY THE CODE.
B. ENSURE THAT CONDUITS ARE IN ALIGNMENT BETWEEN BENDS, ELBOWS AND TERMINATIONS; THAT BENDS ARE FREE OF CRIMPS, THAT JOINTS AND TERMINATIONS ARE TIGHT AND SECURE; THAT INTERIORS ARE SMOOTH AND FREE OF BURRS AND FOREIGN OBJECTS; AND THAT INTERIORS ARE FULL SIZE ENTIRE LENGTH. DURING CONSTRUCTION, CLOSE ENDS OF CONDUITS WITH METAL OR PLASTIC CAPS INTENDED FOR THE PURPOSE.
C. FIELD BENDING OF CONDUITS AND TUBING SHALL BE MADE WITH HAND OR POWERED EQUIPMENT APPROVED FOR THE PURPOSE. USE OF TORCHES TO BEND NONMETALLIC CONDUIT IS NOT APPROVED. RADIUS OF BENDS SHALL BE AS PER THE CODE FOR TYPE OF CONDUIT AND TUBING USED. CONDUITS PASSING THROUGH A FIRE RATED WALL OR FLOOR SHALL NOT LESSEN THE RATING OF THE STRUCTURE THROUGH WHICH THEY PASS. FINAL INSTALLATION OF CONDUITS PENETRATING WATERPROOF CONSTRUCTION SHALL BE COMPLETELY WATERTIGHT.
D. SLEEVE CONDUITS PASSING THROUGH CONCRETE FLOOR SLABS AND CONCRETE, MASONRY, TILE AND GYPSUM WALLS.
E. CONDUIT SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE AT INTERVALS REQUIRED BY THE CODE. USE STANDARD CONDUIT HANGERS, ONE HOLE SNAP STRAPS, THIN WALL CONDUIT CLAMPS, MALLEABLE IRON PIPE STRAPS, STRUT CHANNEL, BEAM CLAMPS, U-BOLTS AND ALL-THREAD RODS. DO NOT USE WIRE TIES, STAB-ON CLIPS OR PERFORATED STRAP IRON.
F. PAINT ANY EXPOSED CONDUITS NOT WITHIN UTILITY ROOMS TO MATCH SURROUNDINGS.

3.2 WIRE AND CABLE:

A. SPLICE CONDUCTORS NO. 10 AND SMALLER WITH STEEL SPRING WIRE CONNECTOR WITH THERMOPLASTIC SHELL. SPLICE CONDUCTORS NO.8 AND LARGER WITH MECHANICAL TYPE, TAP CONNECTORS WITH INSULATED COVERS OR SPLIT BOLTS TAPED TO CONDUCTOR INSULATION VALUE.
B. INSTALL CONDUCTORS IN RACEWAYS. CONDUCTORS SHALL BE CONTINUOUS FROM POINT OF ORIGIN TO PANEL OR EQUIPMENT TERMINATION WITHOUT RUNNING SPLICES IN INTERMEDIATE BOXES. CONDUCTORS OF DIFFERENT VOLTAGES SHALL NOT BE PULLED INTO SAME RACEWAY.
C. CABLE SHALL BE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE WITH STAPLES OR ONE-HOLE STRAPS AT INTERVALS REQUIRED BY THE CODE. BORED HOLES SHALL NOT EXCEED 1" DIAMETER AND SHALL BE A MINIMUM OF 2'-0" FROM STRUCTURAL BEARING POINTS, NOTCHING OF STRUCTURAL MEMBERS IS PROHIBITED. PROVIDE GUARD STRIPS AT LEAST AS HIGH AS CABLE WHERE RUN ACROSS TOP OF STRUCTURE IN ACCESSIBLE ATTIC SPACES.
D. DO NOT RUN ANY WIRE OR CABLE IN PLUMBING WALLS UNTIL PIPING SYSTEMS HAVE BEEN COMPLETED.PLUMBING SHALL PRESIDE IN THESE WALLS.
E. DO NOT SHARE NEUTRAL CONDUCTORS FOR 120 VOLT CIRCUITS.
F. COLOR CODE CONDUCTORS TO INDUSTRY STANDARDS.
G. INCREASE WIRE SIZES AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP BASED ON FEEDER/BRANCH CIRCUIT LENGTH.

3.3 BOXES:

A. SECURE BOXES TO STRUCTURE BY MEANS OF SCREWS, BOLTS, ROD HANGERS OR OTHER APPROVED MEANS. RACEWAYS ENTERING OR LEAVING BOX SHALL NOT BE USED AS SUPPORT. BOXES SHALL BE LEVEL AND PLUMB. BOXES FOR FLUSH EQUIPMENT SHALL BE PLACED TO WITHIN 1/4" OF THE FINISHED SURFACE, PROVIDE EXTENSIONS OR PLASTER RINGS AS REQUIRED. JUNCTION AND PULL BOXES SHALL BE INSTALLED READILY ACCESSIBLE, UNOBSTRUCTED BY PIPING, DUCTS OR OTHER EQUIPMENT.
B. BOXES SHALL BE MOUNTED AT HEIGHT INDICATED ON THE DRAWINGS OR DIRECTLY ADJACENT TO PIECE OF EQUIPMENT SERVED. SEAL SPARE OR UNUSED OPENINGS IN BOXES WITH APPROVED FITTINGS. FOR BOXES INSTALLED IN WET LOCATIONS PROVIDE CLEAR SILICONE CAULK BETWEEN BOX AND SURROUNDING SURFACE TO PREVENT WATER ENTRY.
C. BOXES IN RATED CONSTRUCTION SHALL BE SUITABLE FOR THE USE AND INSTALLED IN ACCORDANCE WITH THE CODE.

3.4 WIRING DEVICES:

A. INSTALL DEVICES APPROXIMATELY AT THE LOCATIONS INDICATED ON THE DRAWINGS. DETERMINE EXACT LOCATION BY CONDITIONS OF CONSTRUCTION. COORDINATE LOCATIONS TO AVOID CONFLICT WITH OTHER EQUIPMENT BEING INSTALLED. INSTALL DEVICES STRAIGHT AND SOLID TO BOX. MOUNTING HEIGHTS OF WALL OUTLETS SHALL BE AS INDICATED ON THE DRAWINGS AND SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTER OF THE OUTLET. WHERE DEVICES ARE SHOWN GROUPED TOGETHER, PROVIDE A SINGLE, MULTIPLE GANG PLATE.
B. COORDINATE PLACEMENT IN AND AROUND KNEE SPACES, LAVATORIES AND OTHER EQUIPMENT TO AVOID CONFLICTS WITH MIRRORS AND OTHER APPURTENANCES, REFER TO ARCHITECTURAL DRAWINGS. SWITCHES SHALL BE LOCATED TO STRIKE SIDE OF THE DOOR, VERIFY FINAL DOOR SWINGS.
C. WHERE GFCI OUTLETS ARE USED TO PROVIDE FEED-THRU PROTECTION FOR DOWNSTREAM OUTLETS ON SAME CIRCUIT, DO NOT FEED-THRU WIRE ACROSS PARTITIONS, USE A SEPARATE DEVICE.
D. VERIFY THE NEMA CONFIGURATIONS OF ALL OUTLETS WITH OWNER.

3.5 DISCONNECT SWITCHES:

A. MOUNT SWITCHES ON WALL OR AT ASSOCIATED PIECE OF EQUIPMENT. WALL MOUNTED SWITCHES SHALL BE 48 INCHES ABOVE FINISHED FLOOR. PROVIDE ENGRAVED PLASTIC LAMINATE NAMEPLATE FOR EACH DISCONNECT SWITCH LOCATED ON FRONT OUTSIDE COVER, NAMEPLATE SHALL INDICATE ITEM SERVED.
B. SWITCHES SCHEDULED ARE FOR DESIGN BASED EQUIPMENT, REVIEW OTHER TRADES' SUBMITTALS TO DETERMINE IF SUBSTITUTIONS HAVE BEEN MADE, PROVIDE SWITCH TO MATCH EQUIPMENT SUPPLIED.

3.6 GROUNDING:

A. CONDUIT SYSTEM SHALL NOT BE USED FOR GROUNDING.
B. FOR BONDING OF SERVICE EQUIPMENT PROVIDE BONDING BUSHINGS AND JUMPERS WHERE REQUIRED. WELDING OF CONDUIT AND FITTINGS WILL NOT BE CONSIDERED ACCEPTABLE FOR THE PURPOSE OF BONDING.
C. PROVIDE PROTECTION FROM PHYSICAL DAMAGE FOR ANY EXPOSED SECTION OF THE GROUNDING ELECTRODE CONDUCTOR SYSTEM.

3.7 PANELBOARDS:

A. NEATLY PRINT CIRCUIT DESIGNATIONS ON DIRECTORY CARD. NOTATIONS SHALL INDICATE THE NATURE AND LOCATION OF LOADS SERVED.
B. PROVIDE ENGRAVED LAMINATE NAMEPLATE FOR EACH NEW PANELBOARD LOCATED ON OUTSIDE OF DOOR, NAMEPLATE SHALL INCLUDE PANELBOARD DESIGNATION ON THE DRAWINGS, SERVICE VOLTAGE, PHASE AND AMPERAGE.
C. BREAKERS SCHEDULED ARE FOR DESIGN BASED EQUIPMENT, REVIEW OTHER TRADES' SUBMITTALS TO DETERMINE IF SUBSTITUTIONS HAVE BEEN MADE, PROVIDE BREAKERS TO MATCH EQUIPMENT SUPPLIED.
D. LABEL METER STACKS WITH ENGRAVED LAMINATE PLATES AS TO APARTMENT NUMBER THAT IS APPROVED BY THE POWER CO. AND THE OWNER'S MATRIX.
E. ASSEMBLE METER STACK SECTIONS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

3.8 ELECTRIC SERVICE:

A. PROVIDE LABOR AND MATERIALS NOT FURNISHED BY THE POWER COMPANY. DO WORK REGARDING THE ELECTRICAL SERVICE AND ITS EQUIPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE POWER COMPANY. IF THE CONTRACT DOCUMENTS INDICATE WORK THAT IS TO EXCEED THESE REQUIREMENTS, FOLLOW THE CONTRACT DOCUMENTS.
B. LABEL EQUIPMENT FOR THE ELECTRIC SERVICE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THIS DIVISION. MAIN SWITCHES OR BREAKERS ARE TO BE IDENTIFIED AS SUCH IN ADDITION TO IDENTIFYING THE ITEM FED.
C. NOTIFY THE POWER COMPANY OF THE TIMING REQUIREMENTS FOR THE PROJECT AND ARRANGE FOR METERING EQUIPMENT, CONNECTIONS AND SERVICE.

3.9 FUSES:

A. INSTALL FUSES IN SWITCHES.
B. BRANCH CIRCUIT FUSES SCHEDULED ARE FOR DESIGN BASED EQUIPMENT, REVIEW OTHER TRADES' SUBMITTALS TO DETERMINE IF SUBSTITUTIONS HAVE BEEN MADE, PROVIDE FUSES TO MATCH EQUIPMENT SUPPLIED.

3.10 LIGHTING FIXTURES:

A. INSTALLATION OF FIXTURES SHALL BE IN A NEAT, WORKMANLIKE MANNER. PROVIDE STRAPS, SUPPORTS, HANGERS AND OTHER MATERIALS REQUIRED FOR PROPER INSTALLATION.
B. SURFACE MOUNTED FIXTURES SHALL NOT HAVE GAPS BETWEEN THE FIXTURE AND ATTACHING SURFACE UNLESS MOUNTING IS DESIGNED TO HOLD FIXTURE OFF CEILING, OR EXCEPT WHERE REQUIRED BY THE CODE REGULATION. CONTINUOUS ROWS OF FIXTURES SHALL BE INSTALLED SO AS TO PROVIDE PERFECT ALIGNMENT.
C. SUPPORT SURFACE MOUNTED FIXTURES DIRECTLY FROM THE BUILDING STRUCTURE AND NOT FROM THE CEILING GRID SYSTEM. USE ALL-THREAD RODS, BEAM CLAMPS, PIPE CLAMPS AND PIPE OR PERFORATED STEEL CHANNEL FOR SUPPORT. WIRE TIES AND STAB-ON CLIPS WILL NOT BE ACCEPTED. THE SUPPORT ASSEMBLY SHALL BE CAPABLE OF SUPPORTING 150 POUNDS IN ADDITION TO THE FIXTURE WEIGHT INDEFINITELY.
D. RECESSED FIXTURES SHALL NOT HAVE GAPS BETWEEN THE FIXTURE TRIM AND ADJACENT SURFACE. WHERE LIGHT LEAKS OCCUR, SUITABLE GASKETS SHALL BE INSTALLED.
E. RECESSED LIGHTING FIXTURES INSTALLED IN MODULAR OR INTEGRATED CEILINGS SHALL BE OF THE PROPER TYPE FOR THE TYPE OF CEILING BEING INSTALLED. VERIFY TYPE OF CONSTRUCTION PRIOR TO ORDERING OF FIXTURES. ADDITIONAL CEILING TIES SHALL BE INSTALLED AT EACH CORNER OF THE LIGHTING FIXTURE TO REINFORCE THE CEILING SYSTEM.
F. CONNECT EXIT AND EMERGENCY LIGHTING FIXTURES TO BRANCH CIRCUIT SERVING NORMAL LIGHTING IN AREA AHEAD OF LOCAL SWITCHING OR TO NIGHT LIGHTING CIRCUIT AS SHOWN.
G. MOUNT CONTACTORS AND TIMECLOCKS ADJACENT TO PANELBOARD AND SET TIMECLOCK TO HOURS DIRECTED BY THE OWNER. PHOTOCELLS SHALL BE LOCATED IN AN ACCESSIBLE LOCATION EITHER BELOW SOFFIT OR ABOVE ROOF LINE FACING NORTH, DO NOT ATTACH PHOTOCELLS ON FACE OF BUILDING.
H. PERMANENT FIXTURES SHALL NOT BE USED AS TEMPORARY LIGHTING DURING CONSTRUCTION.

3.11 EMPTY CONDUIT SYSTEMS:

A. LEAVE CONDUITS WITH PULL CORDS. AT COMPLETION OF THE PROJECT, PROVIDE BLANK COVERPLATES FOR ANY OUTLET BOXES NOT UTILIZED AND LEFT SPARE BY THE OWNER'S CABLING CONTRACTOR.
B. PAINT ALL SIDES AND EDGES OF EQUIPMENT SPACE BACKBOARD WITH 2 COATS OF GRAY ENAMEL PAINT PRIOR TO INSTALLATION.
C. COORDINATE WITH THE UTILITIES SELECTED BY THE OWNER AND PROVIDE ALL MEANS REQUIRED FOR SERVICES TO THE BUILDING.

3.12 FIRE ALARM SYSTEM:

A. ON CALL FROM INITIATING DEVICE, SYSTEM SHALL SOUND EVACUATION THROUGHOUT BUILDING AND NOTIFY CENTRAL STATION. SPRINKLER TAMPER SWITCHES TO SOUND TROUBLE SIGNAL.
B. COORDINATE FLOW AND TAMPER SWITCHES WITH SPRINKLER CONTRACTOR AND SHUTDOWN OF ROOF TOP UNITS WITH HVAC CONTRACTOR. VERIFY EXACT QUANTITIES AND LOCATIONS OF FLOW AND TAMPER SWITCHES WITH THE SPRINKLER CONTRACTOR REQUIRED FOR RISER, STANDPIPES, PIV'S, AND FIRE SERVICE LINE.
C. DUCT MOUNTED SMOKE DETECTORS SHALL BE TIED TO FIRE ALARM SYSTEM. COORDINATE WITH HVAC CONTRACTOR.
D. TEST SYSTEM TO INDUSTRY STANDARDS AND PROVIDE WRITTEN DOCUMENTATION TO THE ARCHITECT OF SYSTEM ACCEPTANCE.
E. COORDINATE FINAL FIRE PUMP GENERATOR + TRANSFER SWITCH CHARACTERISTICS WITH FIRE PUMP DESIGN DRAWINGS. INCREASE SIZES, OVER CURRENT PROTECTION, WIRING, ETC. AS REQUIRED.

NOTE: REFER TO APARTMENT UNIT SPECIFICATIONS ON SHEET E-500 FOR ADDITIONAL REQUIREMENTS IN APARTMENT UNITS.

MEI Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

ELECTRICAL SPECIFICATIONS

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

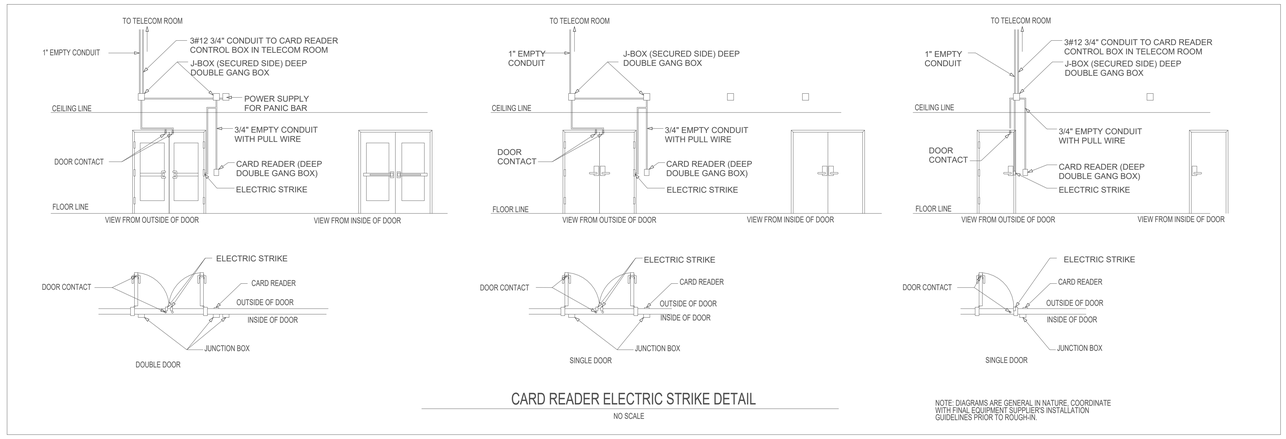
DATE	SUBMISSION / REVISION / IP
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

3E-001

06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

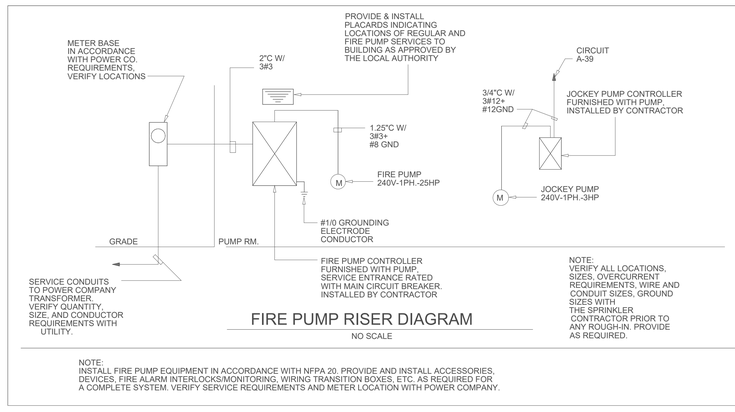
© GRIMM AND PARKER ARCHITECTURE, INC.



CARD READER ELECTRIC STRIKE DETAIL

NO SCALE

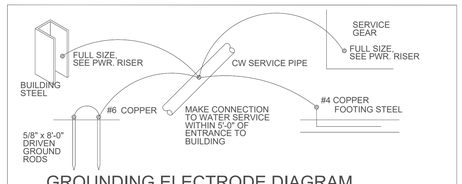
NOTE: DIAGRAMS ARE GENERAL IN NATURE. COORDINATE WITH FINAL EQUIPMENT SUPPLIER'S INSTALLATION GUIDELINES PRIOR TO ROUGH-IN.



FIRE PUMP RISER DIAGRAM

NO SCALE

NOTE:
INSTALL FIRE PUMP EQUIPMENT IN ACCORDANCE WITH NFPA 20. PROVIDE AND INSTALL ACCESSORIES, DEVICES, FIRE ALARM INTERLOCKS/MONITORING, WIRING TRANSITION BOXES, ETC. AS REQUIRED FOR A COMPLETE SYSTEM. VERIFY SERVICE REQUIREMENTS AND METER LOCATION WITH POWER COMPANY.



GROUNDING ELECTRODE DIAGRAM

NO SCALE

NOTE:
THIS DIAGRAM IS SCHEMATIC IN NATURE AND IS NOT INTENDED TO BE THE ONLY ACCEPTABLE ROUTING METHOD FOR THE GROUNDING ELECTRODE SYSTEM. ALL ITEMS SHOWN (WHERE AVAILABLE) SHALL BE BONDED TOGETHER.

LIGHTING FIXTURE CONTROLS SYMBOLS LIST

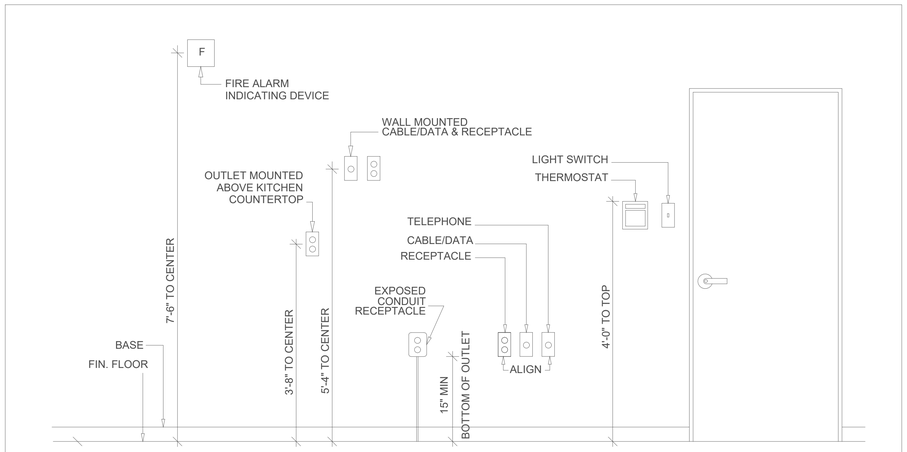
- S — SINGLE POLE WALL SWITCH AT 48" AFF TO TOP OF BOX.
- S3 — 3-WAY DIMMER SWITCH AT 48" AFF TO TOP OF BOX.
- SOC — SENSOR SWITCH WSX-PDT-SA PASSIVE INFRARED DUAL TECHNOLOGY MICROPHONIC LINE VOLTAGE WALL MOUNT SENSOR AT 48" AFF. MANUAL ON/AUTO OFF.
- CM — SENSOR SWITCH CM-PDT-10 PASSIVE INFRARED DUAL TECHNOLOGY MICROPHONIC LOW VOLTAGE CEILING MOUNT SENSOR WIRE TO REPECTIVE POWER PACK, WIDE AREA TYPE.
- CM — SENSOR SWITCH CM-PDT-11 PASSIVE INFRARED DUAL TECHNOLOGY MICROPHONIC LOW VOLTAGE CEILING MOUNT SENSOR WIRE TO REPECTIVE POWER PACK.
- PP — SENSOR SWITCH PP-20 POWER PACK LOCATED ABOVE ACCESSIBLE CEILING. UTILIZE ACCESS PANEL WHERE LOCATED ABOVE HARD CEILING.
- PC — PHOTOCELL, LOCATE IN ACCESSIBLE LOCATION AND SHIELD FROM SURROUNDING LIGHT SOURCES. WITH CIRCUIT

LIST NOTES:

1. ALL SENSORS SWITCH COMPONENTS AND WIRING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
2. ADJUST SENSITIVITY, OVERRIDE SWITCHES (WHERE APPLICABLE AND TIME DELAYS TO THE SATISFACTION OF THE OWNER.
3. ALTERNATE MANUFACTURERS: LEVITON, LUTRON, DOUGLAS.
4. PROVIDE ACCESS PANELS FOR POWER PACKS WHERE INSTALLED ABOVE HARD CEILINGS.

ABBREVIATIONS

A	AMPS
AFF	ABOVE FINISHED FLOOR
AH	AIR HANDLER
AL	ALUMINUM
ALT	ALTERNATIVE
AUTO	AUTOMATIC
BR	BED ROOM
C	CONDUIT
CL	CLOSET
CU	COPPER
CW	WASHER
D	DRYER
DISP	DISPOSER
DW	DISHWASHER
DTL/DTS	DOWN TO LIGHT/SWITCH
EC	EMPTY CONDUIT
EH	EXHAUST HOOD
ELEC	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
ER	ELEVATOR RECALL
EXT	EXTERIOR
FSS/NFSS	FUSIBLE/NON-FUSIBLE SAFETY SWITCH
GEC	GROUNDING ELECTRODE CONDUCTOR
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTOR
GND	GROUND
HP	HORSEPOWER
HR	HOUR
IM	ICE MACHINE
I.T.	INFORMATION TECHNOLOGY
JAN	JANITOR
KAIC	KILO-AMPERE INTERRUPT CURRENT
KIT	KITCHEN
KV	KILO-VOLT
L	LAUNDRY
LT	LIGHT
ME	MICROWAVE/EXHAUST COMBINATION
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NL	NIGHT LIGHT (UNSWITCHED)
NO.	NUMBER
O.C.	ON CENTER
P	POLE
PH	PHASE (AFTER NUMBER 1 OR 3)
PNL	PANEL
REC	RECEPTACLE
REF	REFRIGERATOR
SER	SERVICE ENTRANCE RATED
STOR	STORAGE
UTL	UP TO LIGHT
DTL	DOWN TO LIGHT
V	VOLT
W	WIRE
WI	WITH
W.I.C.	WALK-IN CLOSET
W/D	COMBINATION WASHER/DRYER
WH	WALL HEATER
WP	WEATHERPROOF



DEVICE MOUNTING HEIGHT DIAGRAM

NOT TO SCALE

SYMBOLS LIST

- A-1 — OUTLET FOR CEILING OR WALL MOUNTED LED LIGHTING FIXTURE WITH CIRCUIT NUMBER
- A-1 — OUTLET FOR CEILING OR WALL MOUNTED LED LIGHTING FIXTURE WITH CIRCUIT NUMBER
- A-1 — OUTLET FOR CEILING OR WALL MOUNTED EXIT LIGHTING FIXTURE WITH BATTERY BACKUP WITH CIRCUIT NUMBER
- A-1 — OUTLET FOR CEILING OR WALL MOUNTED COMBINATION EXIT/EMERGENCY EGRESS LIGHTING FIXTURE WITH BATTERY BACKUP WITH CIRCUIT NUMBER
- A-1 — OUTLET FOR CEILING OR WALL MOUNTED EMERGENCY EGRESS LIGHTING FIXTURE WITH BATTERY BACKUP WITH CIRCUIT NUMBER WITH CIRCUIT NUMBER
- A-1 — GENERAL PURPOSE DUPLEX RECEPTACLE AT 18" AFF TO BOTTOM OF BOX, WITH CIRCUIT NUMBER
- A-1 — GENERAL PURPOSE DUPLEX RECEPTACLE AT 48" AFF TO TOP OF BOX, WITH CIRCUIT NUMBER
- GFCI A-1 — GROUND FAULT CIRCUIT INTERRUPTER AT 18" AFF TO BOTTOM OF BOX, WITH CIRCUIT NUMBER
- GFCI A-1 — GROUND FAULT CIRCUIT INTERRUPTER AT 48" AFF TO TOP OF BOX, WITH CIRCUIT NUMBER
- USB A-1 — GENERAL PURPOSE DUPLEX RECEPTACLE WITH (2) INTEGRATED USB PORTS ABOVE COUNTER/DESK, MOUNTED HORIZONTALLY AND CENTERED 6" ABOVE THE FINISHED SURFACE OR 2" ABOVE BACK SPLASH UNLESS NOTED OTHERWISE, WITH CIRCUIT NUMBER, HUBBEL USB20AC OR EQUAL. USB PORTS CONFIGURED AS (1) USB-A AND (1) USB-C
- CR — DEEP DOUBLE GANG JUNCTION BOX FOR DOOR CONTROL DEVICES AT 48" AFF. ROUTE 1" EMPTY CONDUIT (EC) TO CONTROL PANEL. ROUTE 3/4" EC TO DOOR ACCESS DEVICE, A 3/4" EC TO DOOR CONTACTS, AND A 3/4" EC TO ELECTRIC STRIKE. COORDINATE ALL REQUIREMENTS WITH OWNER AND SECURITY SYSTEM PROVIDER PRIOR TO ANY ROUGH-IN. PROVIDE ADDITIONAL 120V CONNECTION FOR CONTROLLERS, TRANSFORMERS, ETC. AS REQUIRED. WIRE TO CIRCUIT INDICATED. SEE CARD READER DETAIL.
- A-1 — GENERAL PURPOSE QUADRAPLEX RECEPTACLE AT 18" AFF TO BOTTOM OF BOX, WITH CIRCUIT NUMBER
- EWC A-1 — OUTLET FOR ELECTRIC WATER COOLER COORDINATE LOCATION WITH PLUMBING ROUGH-IN DRAWINGS, WITH CIRCUIT NUMBER
- UC REF A-1 — OUTLET FOR UNDERCOUNTER REFRIGERATOR HEIGHT TO SUIT APPLIANCE SERVED WITH CIRCUIT NUMBER
- REF. A-1 — OUTLET FOR REFRIGERATOR HEIGHT TO SUIT APPLIANCE SERVED WITH CIRCUIT NUMBER
- DISP. A-1 — SWITCHED OUTLET FOR DISPOSER HEIGHT TO SUIT APPLIANCE SERVED WITH CIRCUIT NUMBER
- A-1 — FLUSH FLOOR OUTLET WITH DUPLEX RECEPTACLE WITH CIRCUIT NUMBER WITH BRASS COVERPLATE
- A-1 C — DUAL SERVICE FLUSH FLOOR OUTLET WITH DUPLEX RECEPTACLE WITH CIRCUIT NUMBER AND A 1" EC STUBBED INTO ACCESSIBLE CEILING SPACE FOR LOW VOLTAGE CABLE (DATA, TELEPHONE OR TELEVISION), WITH BRASS COVERPLATE
- OUTLET FOR LOW VOLTAGE CABLE (DATA OR TELEPHONE) AT 18" AFF TO BOTTOM OF BOX WITH A 3/4" EC STUBBED INTO ACCESSIBLE CEILING SPACE
- OUTLET FOR LOW VOLTAGE CABLE (TELEVISION) AT 48" AFF TO TOP OF BOX WITH A 3/4" EC STUBBED INTO ACCESSIBLE CEILING SPACE
- TV — JUNCTION BOX FOR HDMI CABLE AT TELEVISION LOCATION
- J — JUNCTION BOX AT 18" AFF TO BOTTOM OF BOX OR AT ASSOCIATED PIECE OF EQUIPMENT
- AQ — AIR QUALITY SENSOR (120V-1PH) FURNISHED AND INSTALLED BY HVAC, WIRED BY ELECTRICIAN
- M — FIRE ALARM PULL STATION AT 48" AFF TO TOP OF BOX
- F — AUDIO/VISUAL FIRE ALARM SIGNAL DEVICE AT 6'-8" AFF
- V — VISUAL ONLY FIRE ALARM SIGNAL DEVICE AT 6'-8" AFF
- S — CEILING MOUNTED SMOKE DETECTOR
- SF — SPRINKLER WATER FLOW SWITCH
- ST — SPRINKLER TAMPERPROOF SWITCH
- S/CO — COMBINATION CEILING MOUNTED SINGLE STATION AC/BATTERY CARBON MONOXIDE AND SMOKE DETECTOR
- FAA — FIRE ALARM ANNUNCIATOR PANEL
- FACP — FIRE ALARM CONTROL PANEL
- FEXP — FIRE ALARM EXPANDER PANEL
- CEILING MOUNTED HEAT DETECTOR
- A-1 — SAFETY SWITCH AT 48" AFF TO TOP OF BOX OR AT ASSOCIATED PIECE OF EQUIPMENT, CIRCUIT NUMBER SHOWN WHERE APPLICABLE
- MOTOR OUTLET
- EXHAUST FAN (120V-1PH) FURNISHED AND INSTALLED BY DIVISION 15 WIRED UNDER THIS DIVISION
- A-1 — PHOTOCELL, LOCATE IN ACCESSIBLE LOCATION AND SHIELD FROM SURROUNDING LIGHT SOURCES, WITH CIRCUIT NUMBER
- PANELBOARD
- EQUIPMENT EQUIPMENT DESIGNATION SEE SCHEDULE
- SWITCH LEG WIRING, 2 #12 - CROSS MARKS INDICATE NUMBER OF CONDUCTORS IF MORE THAN TWO
- 1 — LIGHTING FIXTURE TYPE, SEE SCHEDULE.
- 1 — KEYED DRAWING NOTE
- EQUIPMENT TAG

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

ELECTRICAL DETAILS

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

3E-002

06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.

HOUSE SWBD SECTION

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS: 800 | MAIN: 800A MAIN BREAKER

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
2	400	PANEL A	220.7	100%	1	220.7		2	100%	0.0	PROVISIONAL	--	1
-	--	----	236.4	100%	3		236.4	4	100%	0.0	PROVISIONAL	--	1
2	225	PANEL B	129.4	100%	5	129.4		6	100%	0.0	PROVISIONAL	--	1
-	--	----	116.9	100%	7		116.9	8	100%	0.0	PROVISIONAL	--	1
2	400	PANEL EV	280.0	100%	9	280.0		10	100%	0.0	PROVISIONAL	--	1
-	--	----	280.0	100%	11		280.0	12	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	13	0.0		14	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	15		0.0	16	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	17	0.0		18	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	19		0.0	20	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	21	0.0		22	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	23		0.0	24	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	25	0.0		26	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	27		0.0	28	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	29	0.0		30	100%	0.0	PROVISIONAL	--	1
						630.0	633.3						

SEE SPEC. NOTES

PANEL A

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS: 400 | MAIN: MLO

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
1	20	RECS. WATER RM.	4.5	100%	1	34.5		2	100%	30.0	WATER BOOSTER PUMP	40	2
1	20	RECS. MAINT. STORAGE	4.5	100%	3		34.5	4	100%	30.0	----	--	-
1	20	RECS. BIKE STORAGE	3.0	100%	5	26.0		6	100%	23.0	AH-3	25	2
1	20	RECS. 1ST FLR CORRIDOR	6.0	100%	7		29.0	8	100%	23.0	----	--	-
1	20	RECS. LAUNDRY RM.	4.5	100%	9	10.5		10	100%	6.0	DATA BOARD QUAD RECS.	20	1
1	20	RECS. 1ST FLR CORRIDOR (1)	6.0	100%	11		26.0	12	100%	20.0	DATA BOARD 240V REC.	30	2
1	20	RECS. GAS RM	4.5	100%	13	24.5		14	100%	20.0	----	--	-
2	30	DRYER	23.0	100%	15		43.0	16	100%	20.0	DATA BOARD REC.	30	1
-	--	----	23.0	100%	17	24.0		18	100%	1.0	EXHAUST FAN GAS STORAGE	15	1
2	30	DRYER	23.0	100%	19		33.0	20	100%	10.0	FACP (2)	20	1
-	--	----	23.0	100%	21	43.0		22	125%	16.0	LIGHTING INVERTER BOX (3)	30	1
1	15	WASHER	10.0	100%	23		27.3	24	125%	13.8	LIGHTS 1ST FLOOR	20	1
1	15	WASHER	10.0	100%	25	23.8		26	125%	11.0	LIGHTS 2ND/3RD FLOORS	20	1
1	20	RECS. 1ST FLR (1)	1.5	100%	27		7.8	28	125%	5.0	LIGHTS 4TH FLOOR	20	1
1	20	RECS. ELEC. RM.	3.0	100%	29	13.0		30	100%	10.0	SPRNK. AIR COMP.	20	1
1	20	SECURITY PANEL	10.0	100%	31		10.0	32	100%	0.0	EWH4	20	1
1	20	EXTERIOR RECS.	4.5	100%	33	4.5		34	100%	0.0	LIGHTS 1ST FLOOR	20	1
1	20	RECS. 2ND FLR CORRIDOR (1)	6.0	100%	35		13.5	36	125%	6.0	SITE LIGHTING	20	1
1	20	RECS. 2ND FLR CORRIDOR (1)	4.5	100%	37	4.5		38	100%	0.0	SPARE	20	1
2	20	SPRINKLER JOCKEY PUMP	12.4	100%	39		12.4	40	100%	0.0	SPARE	20	1
-	--	----	12.4	100%	41	12.4		42	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	43		0.0	44	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	45	0.0		46	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	47		0.0	48	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	49	0.0		50	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	51		0.0	52	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	53	0.0		54	100%	0.0	SPARE	20	1
						220.7	236.4						

[1] - GFCI BREAKER
[2] - PROVIDE BREAKER WITH RED HANDLE LOCK.
[3] - WIRE CIRCUIT THROUGH PHOTOCELL. COORINATE WITH ZONE INVERTER DETAIL ON SHEET 3E-005.
--WITH INTEGRAL 160KA TVSS.
SQUARE-D NQ OR EQUAL
SEE SPEC. NOTES

PANEL B

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS: 225 | MAIN: MLO

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
1	20	RECS 3RD FLR. CORRIDOR (1)	6.0	100%	1	40.0		2	100%	34.0	CHP-3	35	2
1	20	RECS 3RD FLR. CORRIDOR (1)	4.5	100%	3		38.5	4	100%	34.0	----	--	-
1	20	RECS 4TH FLR. CORRIDOR (1)	6.0	100%	5	26.8		6	100%	20.8	IHP STAIR B	25	2
1	20	RECS 4TH FLR. CORRIDOR (1)	4.5	100%	7		25.3	8	100%	20.8	----	--	-
1	20	EXTERIOR RECS.	6.0	100%	9	26.8		10	100%	20.8	IHP STAIR A	25	2
1	20	ROOFTOP RECS.	6.0	100%	11		26.8	12	100%	20.8	----	--	-
1	20	RADON FAN RECEPTACLE ON ROOF	6.0	100%	13	30.8		14	125%	19.8	IHP ELEC. RM.	20	2
1	20	(1)	1.5	100%	15		26.3	16	125%	19.8	----	--	-
1	20	SPARE	0.0	100%	17	5.0		18	100%	5.0	FIRE ALARM EXPANDER PANEL (2)	20	1
1	20	SPARE	0.0	100%	19		0.0	20	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	21	0.0		22	125%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	23		0.0	24	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	25	0.0		26	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	27		0.0	28	100%	0.0	SPARE	20	1
1	20	SPARE	0.0	100%	29	0.0		30	100%	0.0	SPARE	20	1
						129.4	116.9						

[1] - GFCI BREAKER.
[2] - PROVIDE BREAKER WITH RED HANDLE LOCK.

--WITH INTEGRAL 160KA TVSS.
SQUARE-D NQ OR EQUAL
SEE SPEC. NOTES

PANEL EV

VOLTS: 120/240 | PHASE: 1 | WIRES: 3 | MOUNTING: SURFACE
AMPS: 400 | MAIN: MLO

BRKR P	BRKR A	DESCRIPTION	CIRCUIT AMPS	CIRCUIT DEMAND	CIRCUIT NO.	PHASE LOAD A	PHASE LOAD B	CIRCUIT NO.	CIRCUIT DEMAND	CIRCUIT AMPS	DESCRIPTION	BRKR A	BRKR P
2	40	EV CHARGER #1	32.0	125%	1	80.0		2	125%	32.0	EV CHARGER #3	40	2
-	--	----	32.0	125%	3		80.0	4	125%	32.0	----	--	-
2	40	EV CHARGER #2	32.0	125%	5	80.0		6	125%	32.0	EV CHARGER #4	40	2
-	--	----	32.0	125%	7		80.0	8	125%	32.0	----	--	-
2	40	PROVISIONAL EV CHARGER #1	32.0	125%	9	80.0		10	125%	32.0	PROVISIONAL EV CHARGER #3	40	2
-	--	----	32.0	125%	11		80.0	12	125%	32.0	----	--	-
2	40	PROVISIONAL EV CHARGER #2	32.0	125%	13	40.0		14	100%	0.0	PROVISIONAL	--	1
-	--	----	32.0	125%	15		40.0	16	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	17	0.0		18	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	19		0.0	20	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	21	0.0		22	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	23		0.0	24	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	25	0.0		26	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	27		0.0	28	100%	0.0	PROVISIONAL	--	1
1	--	PROVISIONAL	0.0	100%	29	0.0		30	100%	0.0	PROVISIONAL	--	1
						280.0	280.0						

SQUARE-D NQ OR EQUAL
SEE SPEC. NOTES

EQUIPMENT CONNECTION SCHEDULE

ITEM	DESCRIPTION	VOLTS	PH	FLA	WIRE	GND	MOCP	DISCONNECT	PNL.&CKT.	REMARKS
IHP/FCU	INDOOR/OUTDOOR HEAT PUMP	240	1	19.8	#12	#12	20	2P-30A-NFSS NEMA 3R		NOTE 1
OHP-3	OUTDOOR HEAT PUMP 3	240	1	34.0	#10	#10	35	2P-60A-NFSS NEMA 3R		
AH-3	AIR HANDLER 3	240	1	23.0	#10	#10	25	2P-30A-NFSS NEMA 3R	SEE PANEL SCHEDULES	
EWH-4	ELEC. WATER HEATER 4	240	1	18.8	#12	#12	20A	2P-30A-NFSS		
EWH-5	ELEC. WATER HEATER 5	240	1	25.4	#10	#10	30A	2P-30A-NFSS		
EF-2	EXHAUST FAN	120	1	1.0	#12	#12	15A	TOGGLE SWITCH		

SCHEDULE NOTES

-- VERIFY FINAL CONNECTIONS, ELECTRICAL CHARACTERISTICS, ETC. WITH FINAL EQUIPMENT SELECTIONS. CONTRACTOR IS RESPONSIBLE FOR CORRECTNESS OF ALL BREAKERS, WIRES, ETC.

NOTE 1: WIRE THROUGH CONTROLLER AS REQUIRED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. INDOOR UNIT WIRED THROUGH OUTDOOR UNIT.

METER STACK LOAD CALC

34 UNITS

TYPE		LOAD (KW)
TOTAL APT. LIGHTING/RECEPTACLE LOAD		102.29
SMALL APPLIANCES		102.00
ELEC. RANGE		272.00
LAUNDRY		204.00
ELEC. WATER HEATER		153.00
DISPOSER		27.20
DISHWASHER		40.80
REFRIGERATOR		40.80
HVAC		268.60
TOTAL	=	1,210.69
DEMAND FACTOR OF 30% PER NEC TABLE 220-84	=	363.21
AT 240 VOLT, SINGLE PHASE	=	1513.35 AMPS

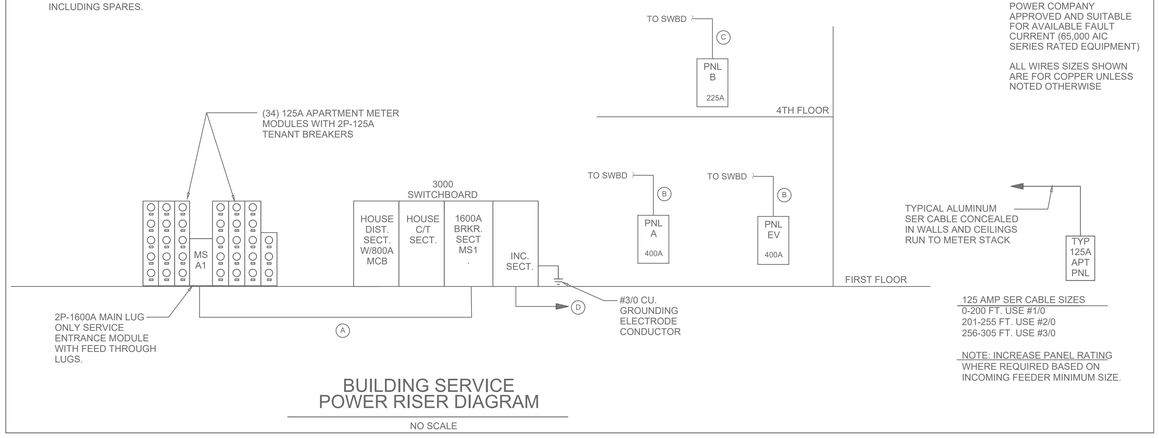
SEVICE LOAD CALC

34 UNITS

TYPE		LOAD (KW)
TOTAL APT. LIGHTING/RECEPTACLE LOAD		102.29
SMALL APPLIANCES		102.00
ELEC. RANGE		272.00
LAUNDRY		204.00
ELEC. WATER HEATER		153.00
DISPOSER		27.20
DISHWASHER		40.80
REFRIGERATOR		40.80
HVAC		268.60
TOTAL	=	1,210.69
DEMAND FACTOR OF 30% PER NEC TABLE 220-84	=	363.21
HOUSE LOADS	=	151.59
AT 240 VOLT, SINGLE PHASE	=	2144.98 AMPS

Ⓐ FEEDER NOTES

A. (6) SETS OF 3"C W/ 3#400MCM AL + #350MCM AL GND. — 1600A
B. (2) SETS OF 2"C W/ 3#3/0 CU + #3 CU GND. — 400A
C. 2.5"C W/ 3#4/0 CU + #4 CU GND. — 225A
D. ROUTE SERVICE FEEDER CONDUITS TO POWER CO. TRANSFORMER AS DIRECTED BY UTILITY. VERIFY QUANTITY, SIZES, ETC. WITH POWER CO. INCLUDING SPARES.



NOTE:
TIGHTEN ALL FACTORY FASTENERS IN METER STACK PRIOR TO POWERING UP

METER STACKS TO BE POWER COMPANY APPROVED AND SUITABLE FOR AVAILABLE FAULT CURRENT (65,000 AIC SERIES RATED EQUIPMENT)

ALL WIRES SIZES SHOWN ARE FOR COPPER UNLESS NOTED OTHERWISE

125 AMP SER CABLE SIZES
0-200 FT. USE #1/0
201-255 FT. USE #2/0
256-305 FT. USE #3/0

NOTE: INCREASE PANEL RATING WHERE REQUIRED BASED ON INCOMING FEEDER MINIMUM SIZE.

BUILDING SERVICE POWER RISER DIAGRAM

NO SCALE

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

GRIMM AND PARKER
123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GP #25144

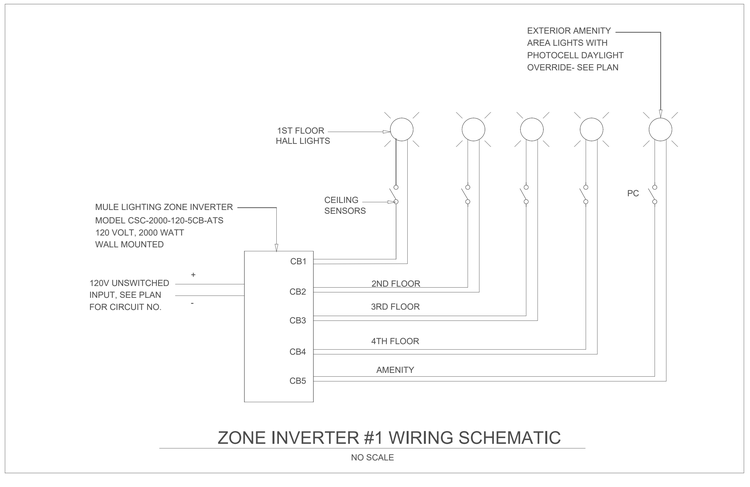
POWER RISER & SCHEDULES
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

3E-003
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



ZONE INVERTER #1 WIRING SCHEMATIC

NO SCALE

Fixture Type	WATTS/AMPS	Product	
Interior - Common Areas			
LF-Can_Light-US-GP (Corridor - Common Area)	12	BEGA Surface Mounted Downlight	4 3/8" D | 4" W | 8.00W LED| Finish: White
LF-Troffer_Light-FB - 2'x4' (2 lamp) - 120V	45	Eralux Mont Blanc Commercial LED Lighting | Center Basked Troffer	2x4' | 30K | Finish: White
LF-Troffer_Light-FB - 2'x4' (2 lamp) - 120V	45	Eralux Mont Blanc Commercial LED Lighting | Center Basked Troffer	2x4' | 30K | Finish: White WITH EM. BATTERY BACKUP
LF-Utility Sconce-NH		TBD	
Res-1x4 NonHosted Light - Adjustable - 1x4	40	Globalux SLP Surface Mounted Flat Panel	1x4' | 3000K | Finish: White
Downlight - Recessed Can - 4" Fluorescent - 120V		Eterna Light Prima 3 Round Baffle	60W equivalent LED medium base A19, 120V, 08 or 15W, Air tight IC rating | 3" Dia.| 3000K | Energy Star | Damp location listed | Finish: White | Baffle
LF-Linear-Recessed - 3"x6'	36	Axis Lighting Sculpt Recessed Mount	3" W| 6' L| Finish: White
LF-Linear-Recessed - 3"x4'	32.7	Axis Lighting Sculpt Recessed Mount	3" W| 4' L| Finish: White
LF-Pendant-Globe (Laundry)	14	Axis Lighting Luna Orb Pendant	Pendant Fixture | Acrylic Globe | Finish: White
LF-Can_Light-US-GP (Fitness Room)	18	Utopia MCR Metal Cylinder Round	4" | Finish: White w/White or Chrome Interior
LF-Pendant-Dining_Maker-LED - Opta 28 LED (Community Room)		Axis Lighting Shade Big Dome	Sloped ceiling compatible. Acrylic | Finish: White 22W LED
Lighting-Wall-Sconce-Tech_Lighting-Ellis_24 (bathroom vanity)		Visual Comfort Ellis 24 Bath OR Visual Comfort Ellis 36 Bath	24 or 36" L | 5" H - Size dependant on location. Finish: Polished Nickel & White Acrylic LED 3000K | Energy Star Rated Warm color temperature
LF-Troffer_Light-FB - 2'x2' (1 lamp) - 120V	35	Eralux Mont Blanc Commercial LED Lighting | Center Basked Troffer	2x2' | 30K | Finish: White
EM EXIT DEVICE W/BATTERY BACKUP			
EM EGRESS DEVICE W/BATTERY BACKUP			
Interior - Unit			
LF-Flat Round-CH - WIC/BATH 7 1/2"		Globalux RDL LED Found Low Profile Flush	7" | Finish: White 15W LED 3000K Motion activated.
LF-Linear-Surface_Mount - 6"x2' (Bath)		Visual Comfort Ellis 24 Bath OR Visual Comfort Ellis 36 Bath	24 or 36" L | 5" H - Size dependant on location. Finish: Satin Nickel & White Acrylic LED 3000K | Energy Star Rated Warm color temperature
LF-Round-Pendant (Kitchen Island)		Visual Comfort Entra 3" Cylinder	8" H x 3" diameter Finish: White or Polished Nickel 10W | 3000K | Energy Star | Cable to match.
LF-Linear-Suface_Mount - 1"x4" (Kitchen)		Globalux SLP Surface Mounted Flat Panel	1'x4' | 3/4" H Finish: White w/ Acrylic Lense LED 3000K | Energy Star | Rated Note VH requires a 4' long fixture in the kitchen.
LF-Flat Round-CH - Foyer/BR 14"		Globalux DCR LED Ringed Decorative Ceiling Mount - 14"	Provide switched outlet 14" diameter | 4" H Finish: Brushed Nickle and White Acrylic LED 3000K | Energy Star Rated
LF-Flat Round-CH - Dining/Public Corridor 16"		Globalux DCR LED Ringed Decorative Ceiling Mount - 16"	Provide switched outlet 16" diameter | 4" H Finish: Brushed Nickle and White Acrylic LED 3000K | Energy Star Rated
LF-Utility Sconce-NH (W/D)			
LF-3_vanity-UH-GP (bathroom vanity)		Visual Comfort Ellis 24 Bath OR Visual Comfort Ellis 36 Bath	24 or 36" L | 5" H - Size dependant on location. Finish: Satin Nickel & White Acrylic LED 3000K | Energy Star Rated Warm color temperature
Exterior			
LF-Linear-Recessed - 3"x6' (Corridor/Lobby Spaces)	60	Axis Lighting Extend 4 Surface	3" W| 6' L| Finish: White | Surface or Recessed as Required
LF-Linear-Recessed - 3"x4' (Corridor/Lobby Spaces)	40	Axis Lighting Extend 4 Surface	3" W| 4' L| Finish: White | Surface or Recessed as Required
LF-Wall Sconce - InterGlobal-WH (Ext. Corridor)	10	WAC Lighting Dot Ceiling Mount (Wall Mount)	2.5" Thick | 12" Diameter | Exterior Grade Stainless Steel, Glass 27W LED | 3000K
LF-Wall Sconce - Shade On (Unit Entry, corridor)	11	WAC Lighting Caliber Outdoor Wall Sconce 3000K	14" T | 4" D (Max.) | 4.5" W | 3" Diameter Lens ADA Compliant | Exterior Grade Brushed Aluminum, Glass 11W LED | 3000K
Exterior Sconces at Main Entries		A WE Lighting Helion	5"W | 31"H | 3.39"D Finish: White Acrylic, Silver and White | Mounted above 6'-8" AFF to base. 3000K | 26W LED
Exterior Sconces above Back-Of-House Doors		A WE Lighting Bloc	6"W | 5.5"H | 6"D Finish: White Acrylic, Silver and White | Mounted above 6'-8" AFF to base. 3000K | 26W LED
Exterior Sconces at Side + Residence Entries (exterior wall)		A WE Lighting Pillar	4"W | 7"H | 5"D Finish: White Acrylic, Silver and White | Mounted above 6'-8" AFF to base. 3000K | 26W LED
Exterior Wall Packs		TBD	
Parking Lighting		Eralux Genesys SA4 and SA5	20' tall post | Finish: Bronze or Aluminum

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

LIGHTING SCHEDULE & DIAGRAM

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

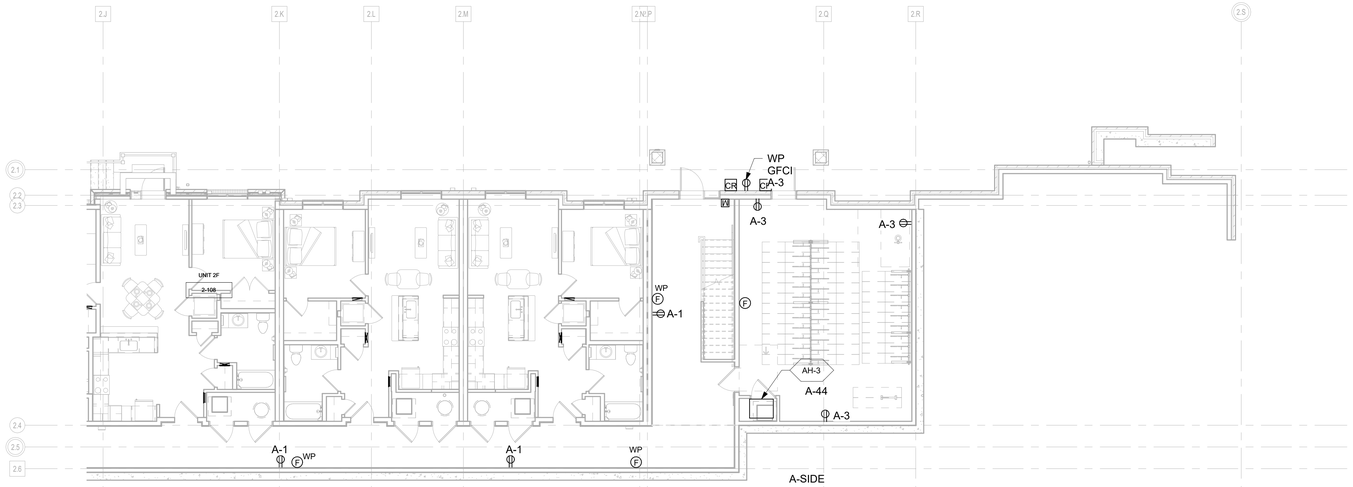
DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

3E-004

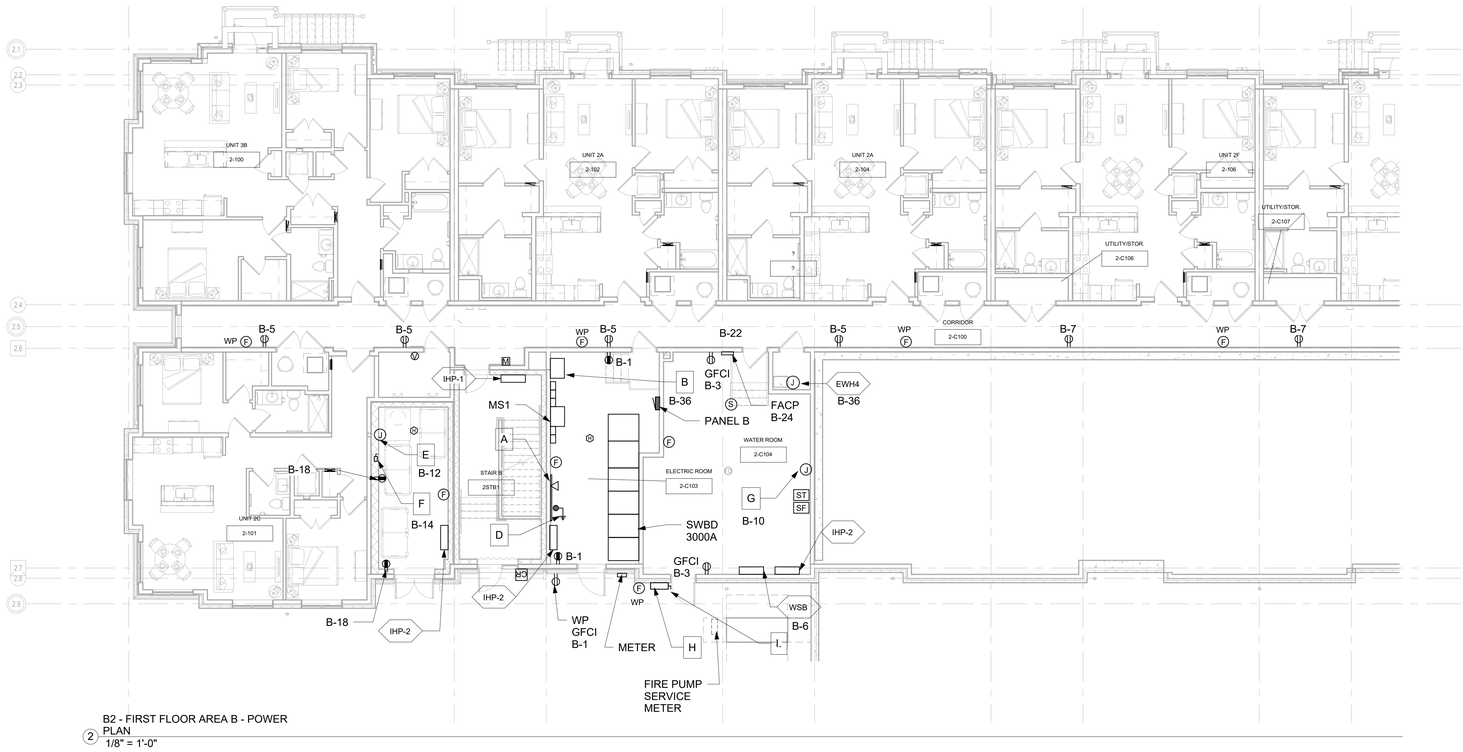
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



B2 - FIRST FLOOR AREA A - POWER PLAN
1/8" = 1'-0"



B2 - FIRST FLOOR AREA B - POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. 6'x8' 3/4" FRT PLYWOOD BACKBOARD FOR COMMUNICATIONS SPACE WITH (2) 4" CONDUITS TO BUILDING INTERFACE, WITH (2) QUAD RECEPTACLES WIRED TO CIRCUIT B-18, AND (1) 2P-30A RECEPTACLE TO CIRCUIT B-26, AND 1P-30A RECEPTACLE TO CIRCUIT B-30. (VERIFY CONDUIT QUANTITY, TERMINATION & REQUIREMENTS WITH UTILITIES).

B. EMERGENCY LIGHTING INVERTER. MULE LIGHTING CEPS-EM OR EQUAL. 2800WATTS, 120V INPUT, 120V OUTPUT, (6) 20A OUTPUT CIRCUIT BREAKERS.

C. NOT USED.

D. 2"X10" GROUNDING BUS BAR WITH #6 GND TO SWITCHBOARD.

E. TRASH CHUTE CONTROLLER. WIRE TRASH CHUTE EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES. VERIFY EXACT POINT OF CONNECTION PRIOR TO ROUGH-IN.

F. FINAL CONNECTION TO TRASH COMPACTOR WILL BE FUTURE. ELECTRICIAN SHALL IN STALL ALL INFRASTRUCTURE UNDER BASE BID.

G. FOR SPRINKLER AIR COMPRESSOR. VERIFY ROUGH-IN LOCATION WITH SPRINKLER CONTRACTOR.

H. WATER FLOW NOTIFICATION DEVICE. VERIFY FINAL LOCATION WITH FIRE MARSHAL.

I. 2P-400A-FSS FOR FUTURE PV SYSTEM. RUN WITH 3" CONDUIT TO HOUSE DISTRIBUTION PANEL.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B2 FIRST FLOOR AREA A/B - POWER PLAN

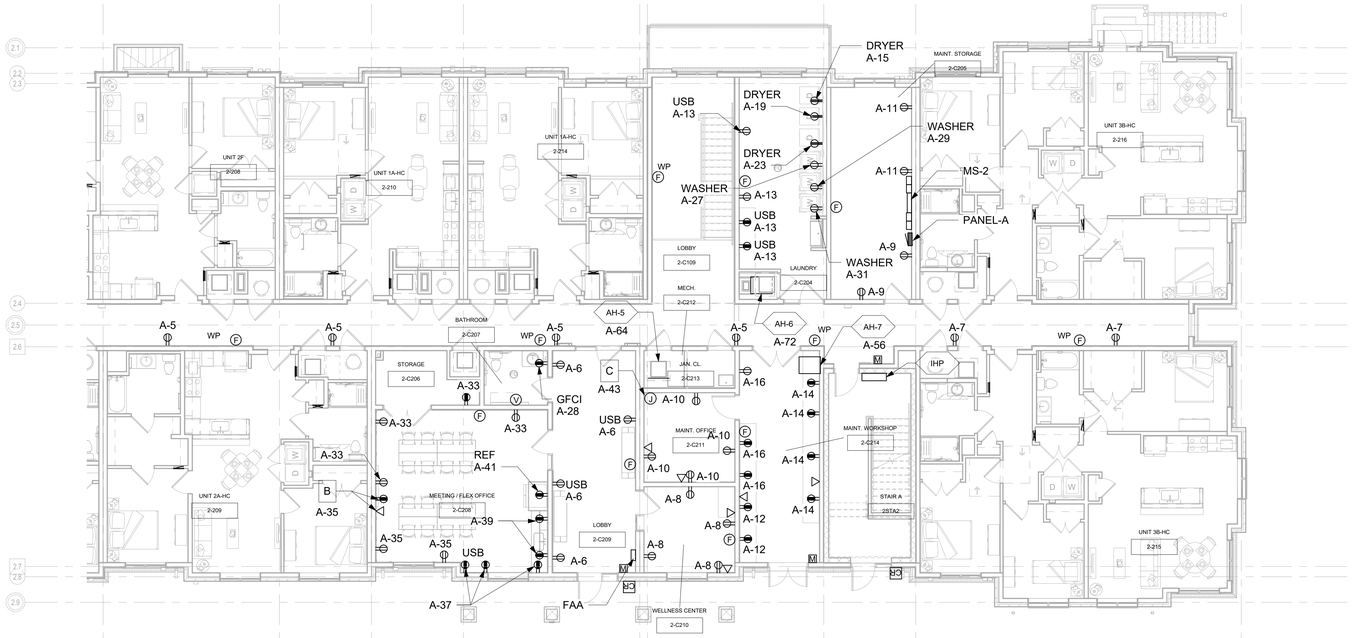
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

2E-101
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B2 - SECOND FLOOR AREA A - POWER PLAN
1/8" = 1'-0"



2 B2 - SECOND FLOOR AREA B - POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. TRASH CHUTE INTERLOCK WIRING. WIRE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES. INTERLOCK WITH CONTROLLER, AND OTHER FLOORS. VERIFY EXACT LOCATION WITH CHUTE SUPPLIER PRIOR TO THE ROUGH-IN.

B. FOR WALL MOUNTED TELEVISION. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO TOUGH-IN. COORDINATE WITH MOUNTING HARDWARE.

C. SECURITY SYSTEM CONTROL PANEL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

B2 SECOND FLOOR AREA A/B - POWER PLAN

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

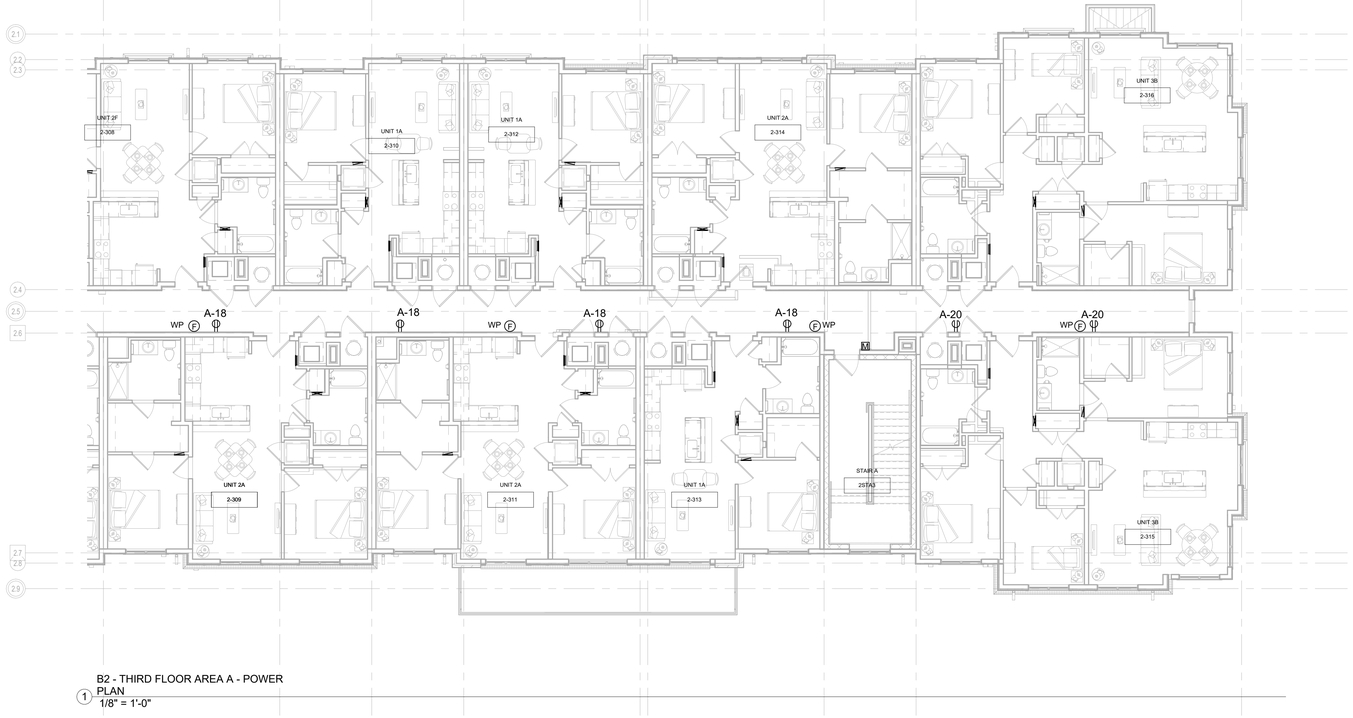
DATE	SUBMISSION / REVISION / #
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

2E-102

06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B2 - THIRD FLOOR AREA A - POWER PLAN
1/8" = 1'-0"



2 B2 - THIRD FLOOR AREA B - POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. TRASH CHUTE INTERLOCK WIRING. WIRE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES. INTERLOCK WITH CONTROLLER, AND OTHER FLOORS. VERIFY EXACT LOCATION WITH CHUTE SUPPLIER PRIOR TO THE ROUGH-IN.

B. 6'X8'X3/4" FRT PLYWOOD BACKBOARD FOR COMMUNICATIONS SPACE (2) 3" CONDUITS TO MAIN COMMUNICATIONS BOARD IN ELEC. ROOM. (VERIFY TERMINATION & REQUIREMENTS WITH UTILITIES). PROVIDE & INSTALL (2) DUPLEX RECEPTACLES TO BACKBOARD WIRED TO CIRCUITS B-32.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B2 THIRD FLOOR AREA A/B - POWER PLAN

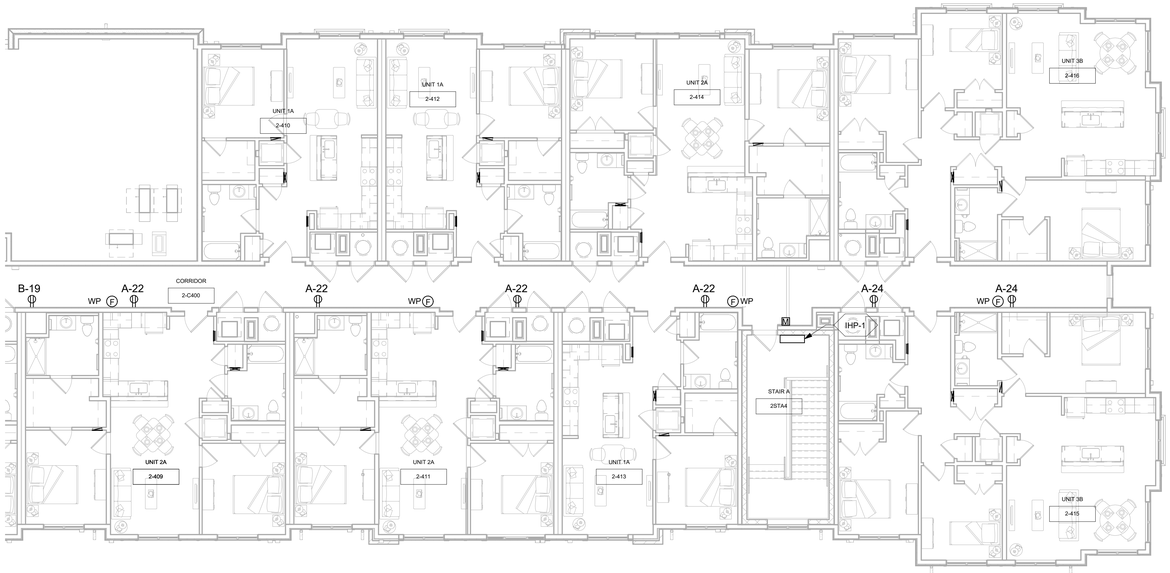
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

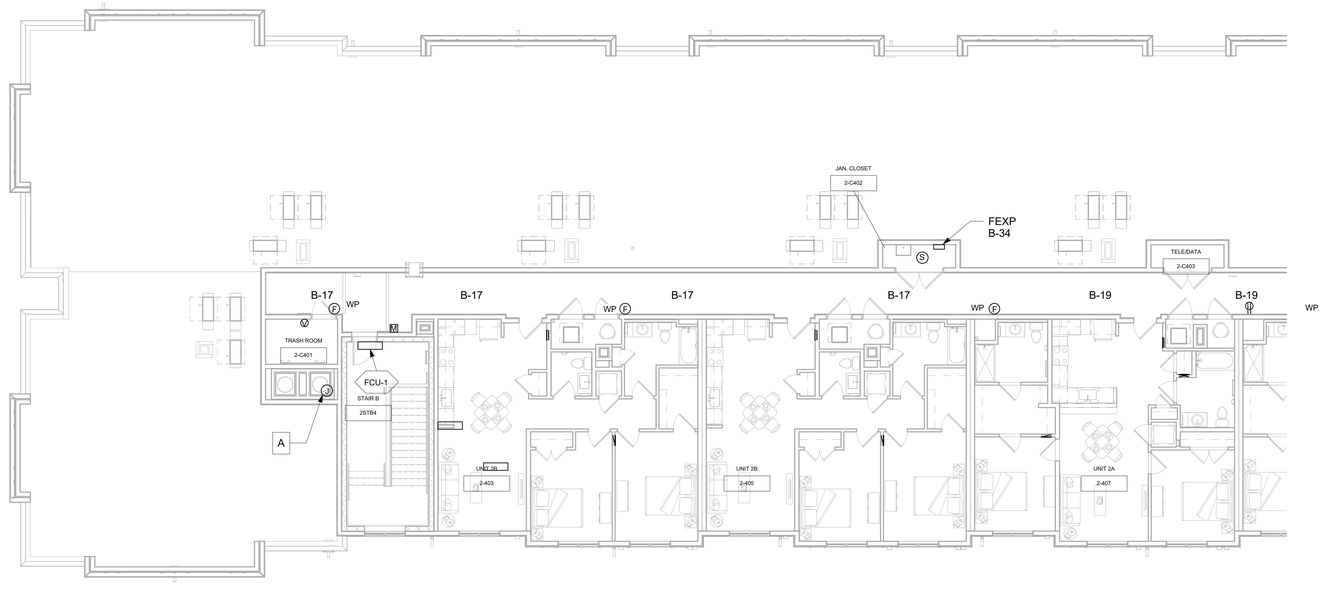
2E-103
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



B2 - FOURTH FLOOR AREA A - POWER PLAN
1/8" = 1'-0"



B2 - FOURTH FLOOR AREA B - POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. TRASH CHUTE INTERLOCK WIRING. WIRE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES. INTERLOCK WITH CONTROLLER, AND OTHER FLOORS. VERIFY EXACT LOCATION WITH CHUTE SUPPLIER PRIOR TO THE ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

B2 FOURTH FLOOR AREA A/B - POWER PLAN

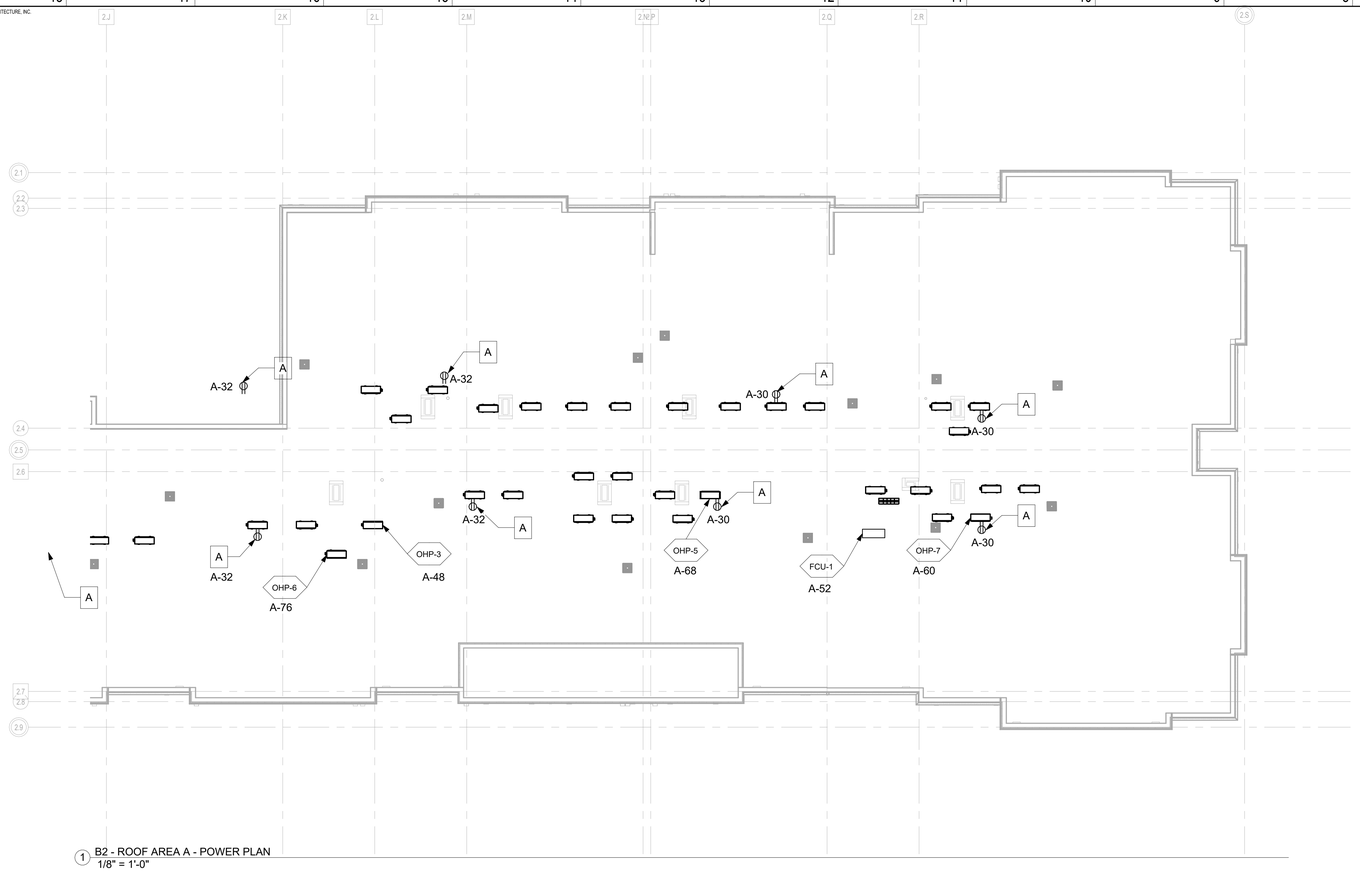
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #:
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

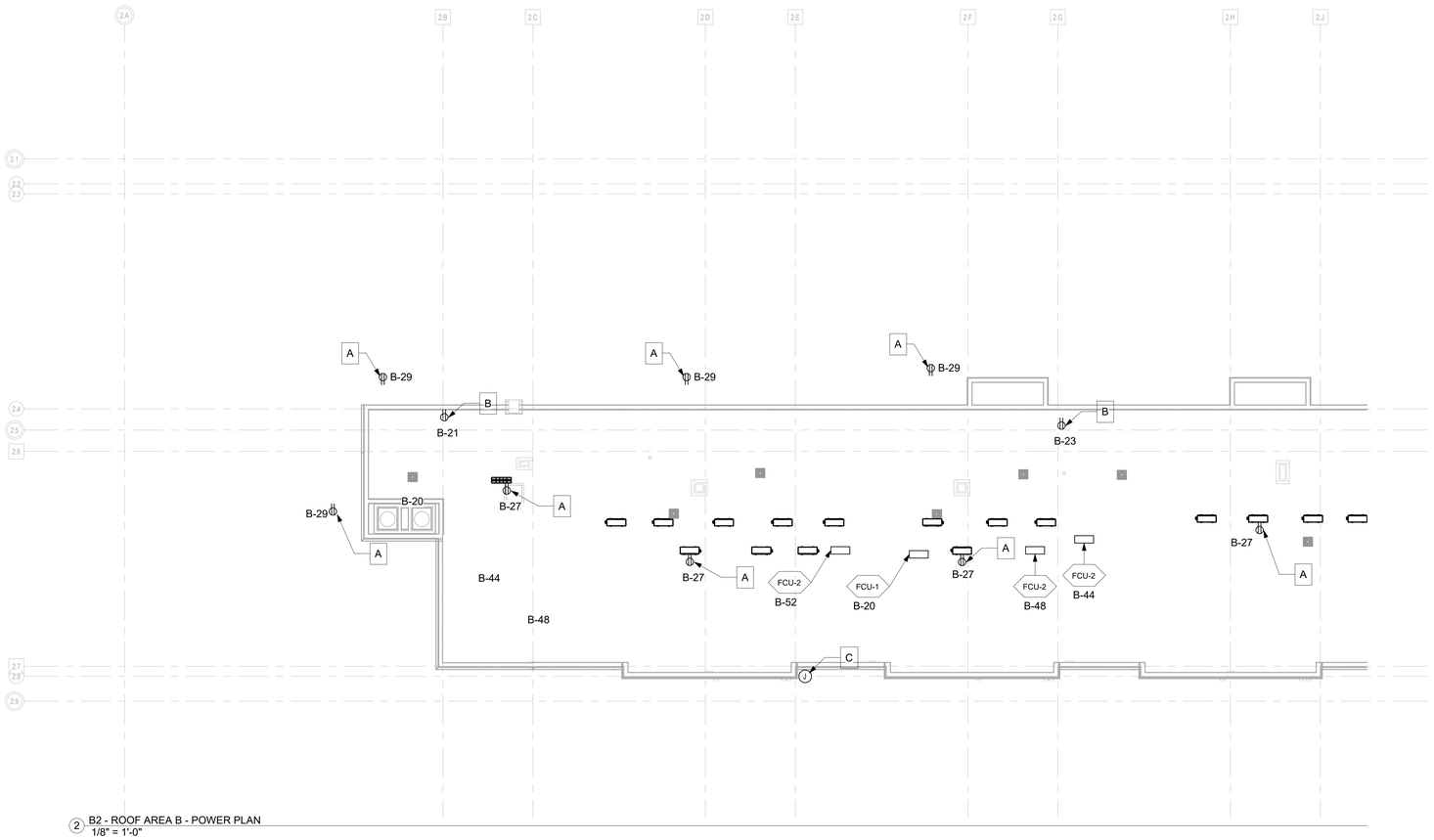
2E-104
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B2 - ROOF AREA A - POWER PLAN
1/8" = 1'-0"



2 B2 - ROOF AREA B - POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. WEATHERPROOF, GFCI RECEPTACLE MOUNTED ON SIDE OF UNIT.

B. WEATHERPROOF, GFCI RECEPTACLE FOR RADON FAN, LOCATE RECEPTACLE IN BOX AS DIRECTED BY OWNER. SEE PLUMBING PLANS FOR RADON VENT PIPING STACKS. VERIFY FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.

C. JUNCTION BOX TO 4" CONDUIT FOR FUTURE PHOTOVOLTAIC EQUIPMENT. SEE SHEET 2E-101 FOR FIRST FLOOR LOCATION.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B2 ROOF AREA A/B - POWER PLAN

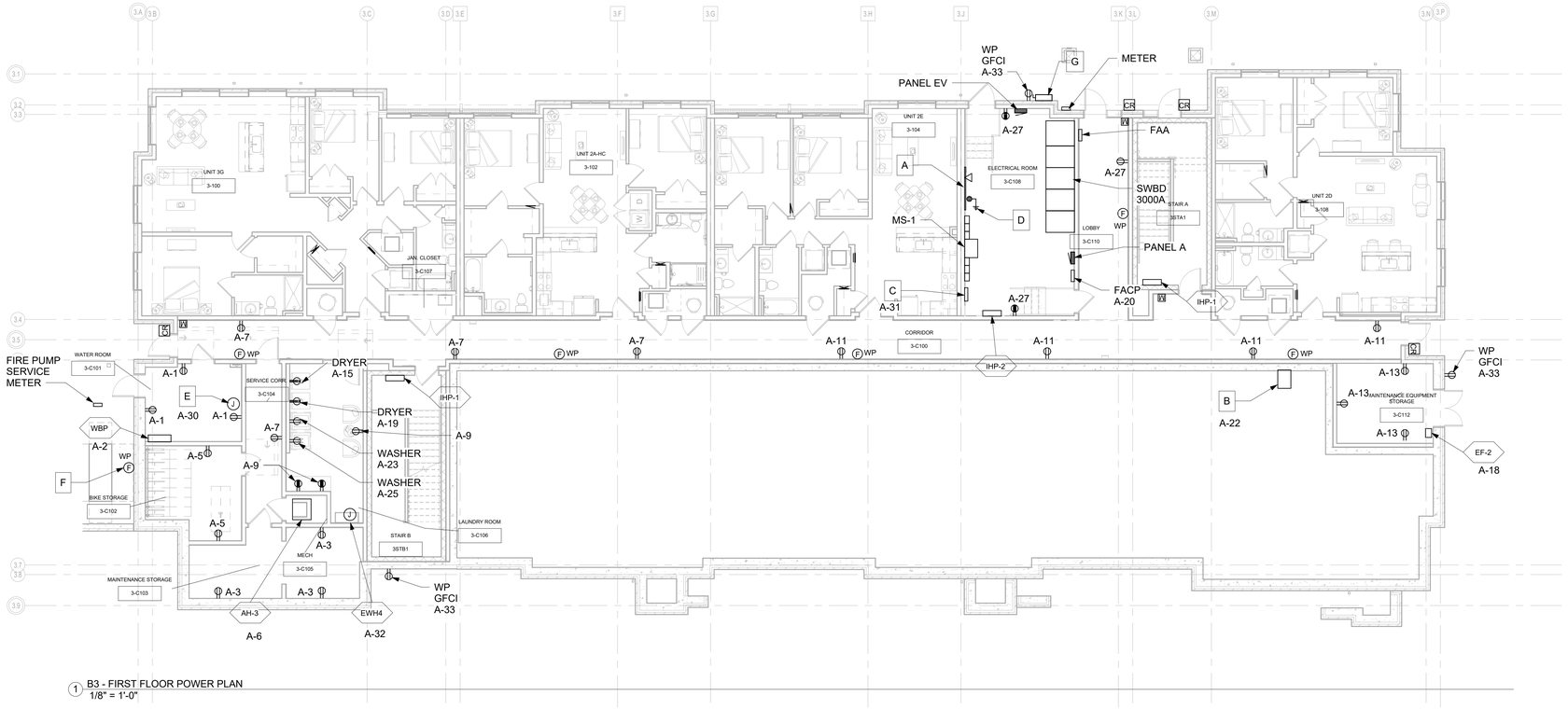
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #:
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

2E-105
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B3 - FIRST FLOOR POWER PLAN
1/8" = 1'-0"



2 B3 - SECOND FLOOR POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. 6'x8' 3/4" FRT PLYWOOD BACKBOARD FOR COMMUNICATIONS SPACE WITH 4" CONDUITS TO BUILDING INTERFACE, WITH (2) QUAD RECEPTACLES WIRED TO CIRCUIT A-26, AND (1) 2P-30A RECEPTACLE TO CIRCUIT A-28, AND 1P-30A RECEPTACLE TO CIRCUIT A-32. (VERIFY CONDUIT QUANTITY, TERMINATION & REQUIREMENTS WITH UTILITIES).

B. EMERGENCY LIGHTING INVERTER. MULE LIGHTING CEPS-EM OR EQUAL. 2800WATTS, 120V INPUT, 120V OUTPUT, (10) 20A OUTPUT CIRCUIT BREAKERS.

C. SECURITY SYSTEM CONTROL PANEL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.

D. 2"X10" GROUNDING BUS BAR WITH #6 GND TO SWITCHBOARD.

E. FOR SPRINKLER AIR COMPRESSOR. VERIFY ROUGH-IN WITH FIRE MARSHAL.

F. WATER FLOW NOTIFICATION DEVICE. VERIFY FINAL LOCATION WITH FIRE MARSHAL.

G. 2P-400A-FSS FOR FUTURE PV SYSTEM. RUN WITH 3" CONDUIT TO HOUSE DISTRIBUTION PANEL.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B3 FIRST & SECOND FLOOR - POWER PLAN

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #:
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

3E-101
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B3 - THIRD FLOOR POWER PLAN
1/8" = 1'-0"



2 B3 - FOURTH FLOOR POWER
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. xxx

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B3 THIRD & FOURTH FLOOR - POWER PLAN

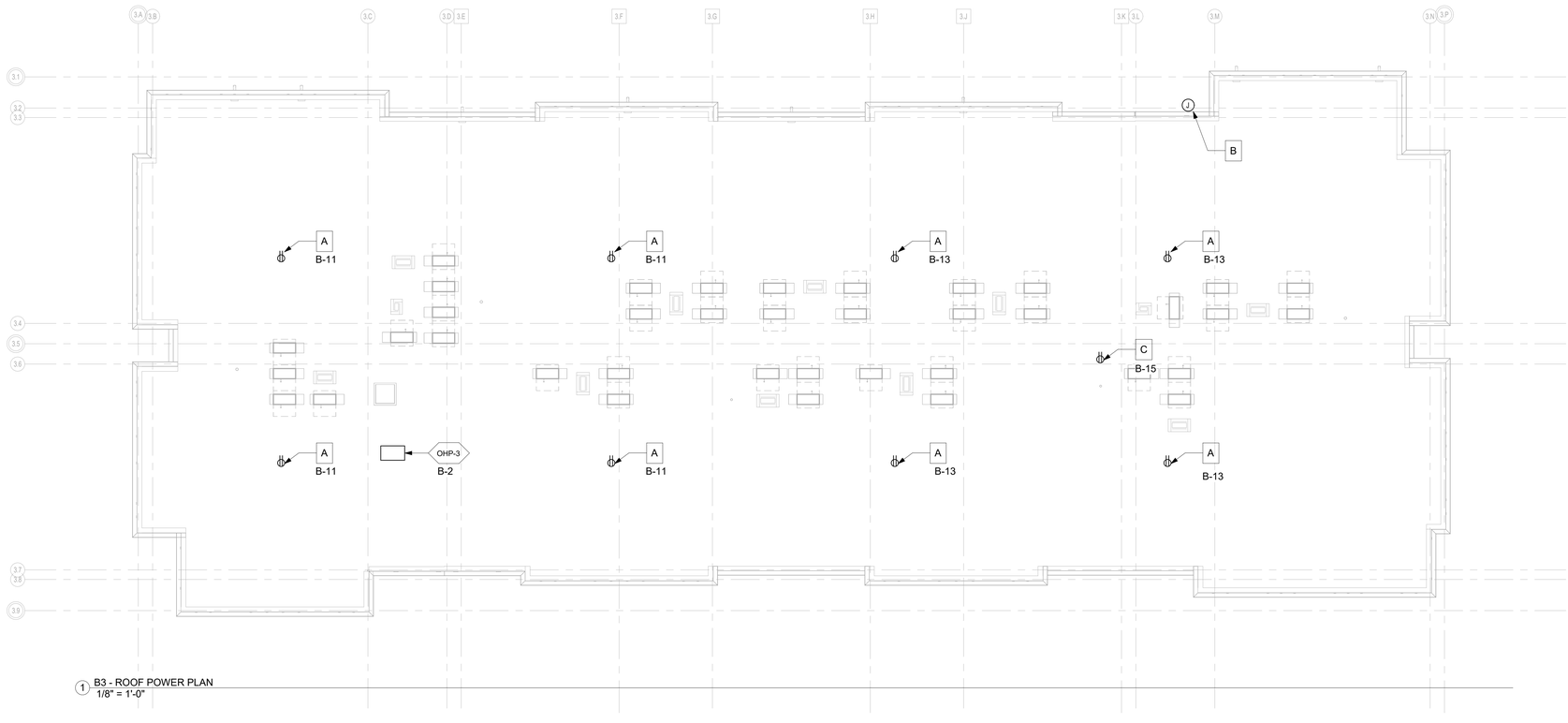
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

3E-102
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B3 - ROOF POWER PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. WEATHERPROOF, GFCI RECEPTACLE MOUNTED ON SIDE OF UNIT.

B. JUNCTION BOX TO 4" CONDUIT FOR FUTURE PHOTOVOLTAIC EQUIPMENT. SEE SHEET 2E-101 FOR FIRST FLOOR LOCATION.

C. WEATHERPROOF, GFCI RECEPTACLE FOR RADON FAN, LOCATE RECEPTACLE IN BOX AS DIRECTED BY OWNER. SEE PLUMBING PLANS FOR RADON VENT PIPING STACKS. VERIFY FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B3 ROOF - POWER PLAN

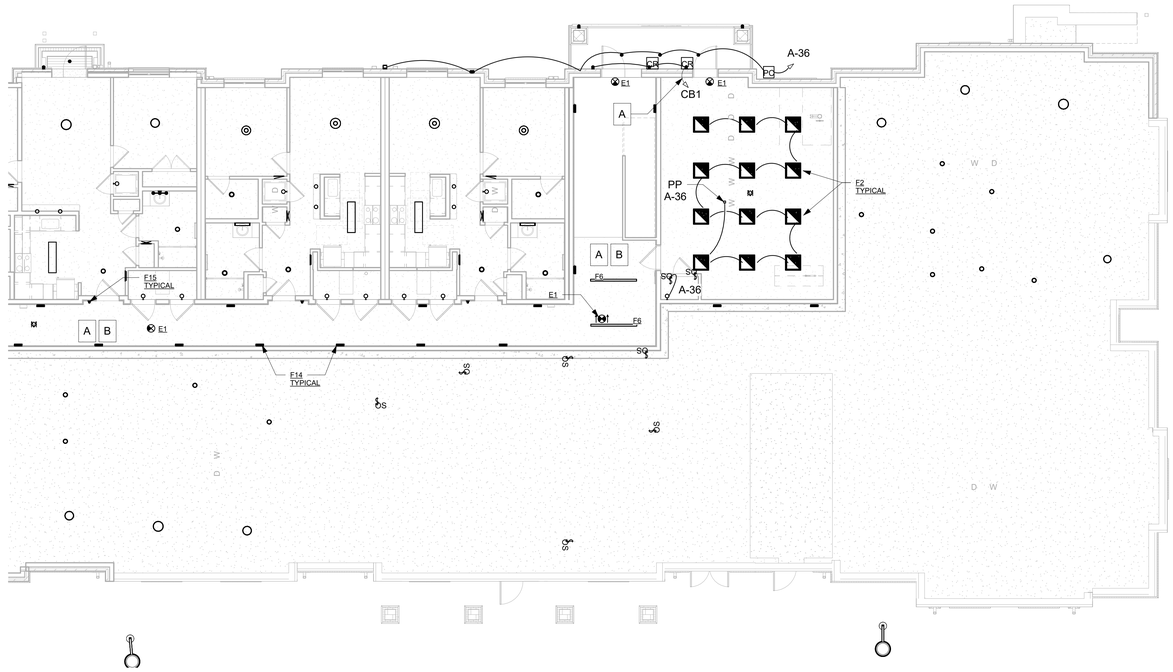
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / P...
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

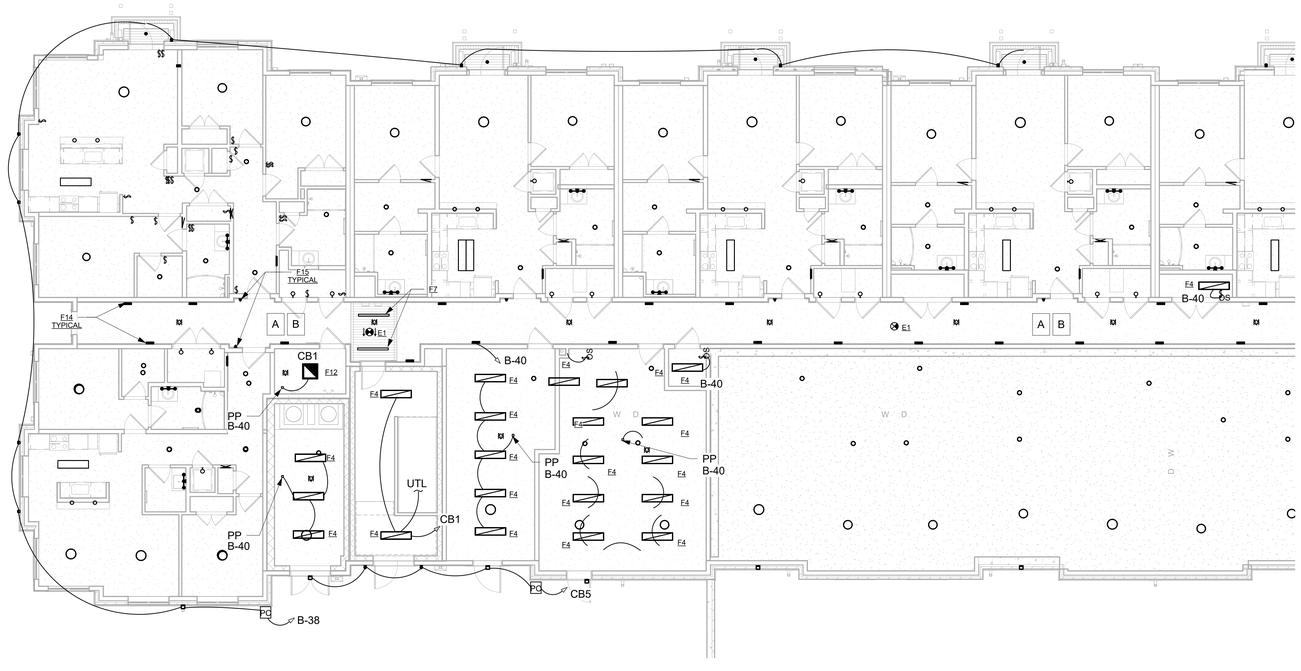
3E-103
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



B2 - FIRST FLOOR AREA A - LIGHTING PLAN
1/8" = 1'-0"



B2 - FIRST FLOOR AREA B - LIGHTING PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--WIRE EMERGENCY EXIT/EGRESS FIXTURES TO LIGHTING CIRCUIT SERVING THAT AREA AHEAD OF ALL SWITCHING.

KEYED NOTES

A. WIRE 50% OF CORRIDOR LIGHTS IN AN ALTERNATING PATTERN THROUGH EMERGENCY POWER LIGHTING INVERTER. WIRE THE SAME FIXTURES THROUGH OCCUPANCY CONTROLLED DIMMER TO 50% DIMMING WHILE UNOCCUPIED.

B. ALL CORRIDOR OCCUPANCY SENSORS TO BE 'LT' OUTDOOR RATED WITH 50% DIMMING.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B2 FIRST FLOOR AREA A/B - LIGHTING PLAN

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

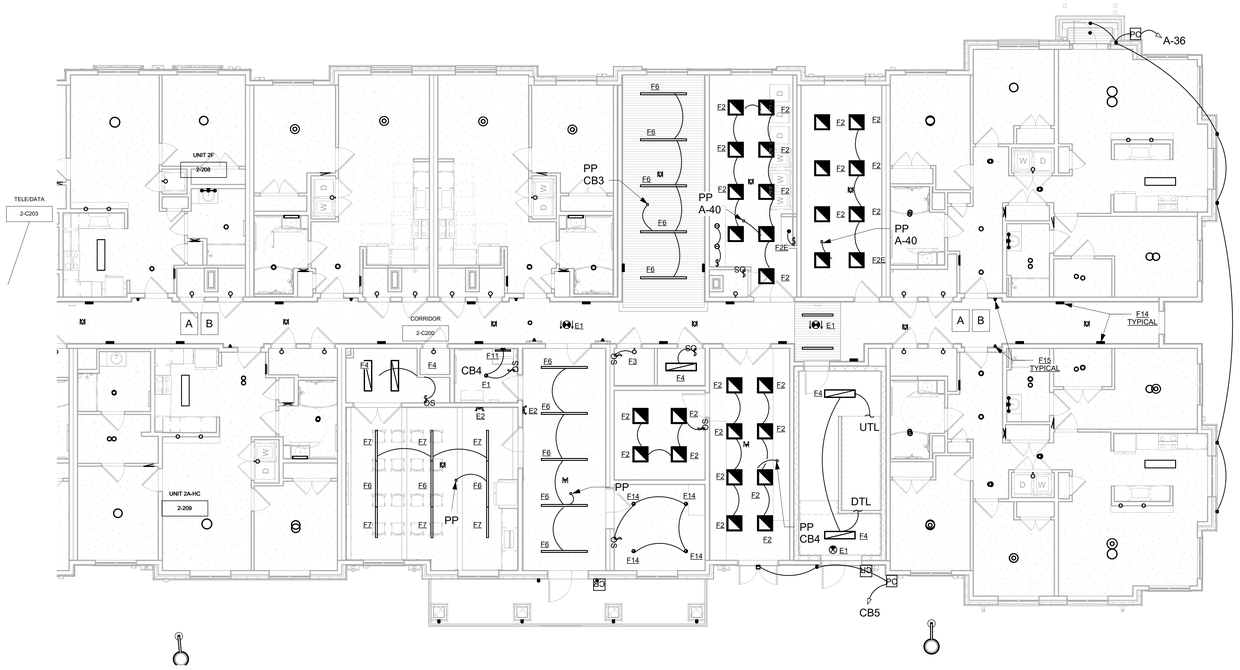
DATE	SUBMISSION / REVISION / #
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

2E-201

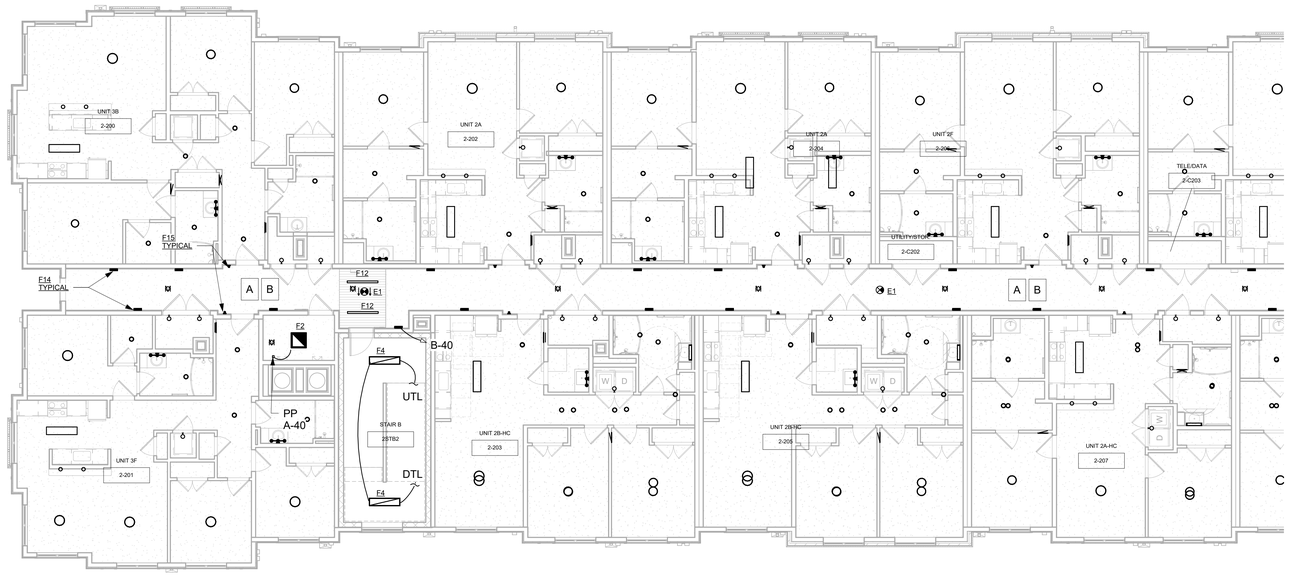
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B2 - SECOND FLOOR AREA A - LIGHTING PLAN
1/8" = 1'-0"



2 B2 - SECOND FLOOR AREA B - LIGHTING PLANS
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--WIRE EMERGENCY EXIT/EGRESS FIXTURES TO LIGHTING CIRCUIT SERVING THAT AREA AHEAD OF ALL SWITCHING.

KEYED NOTES

A. WIRE 50% OF CORRIDOR LIGHTS IN AN ALTERNATING PATTERN THROUGH EMERGENCY POWER LIGHTING INVERTER. WIRE THE SAME FIXTURES THROUGH OCCUPANCY CONTROLLED DIMMER TO 50% DIMMING WHILE UNOCCUPIED.

B. ALL CORRIDOR OCCUPANCY SENSORS TO BE 'LT' OUTDOOR RATED WITH 50% DIMMING.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

B2 SECOND FLOOR AREA A/B - LIGHTING PLAN

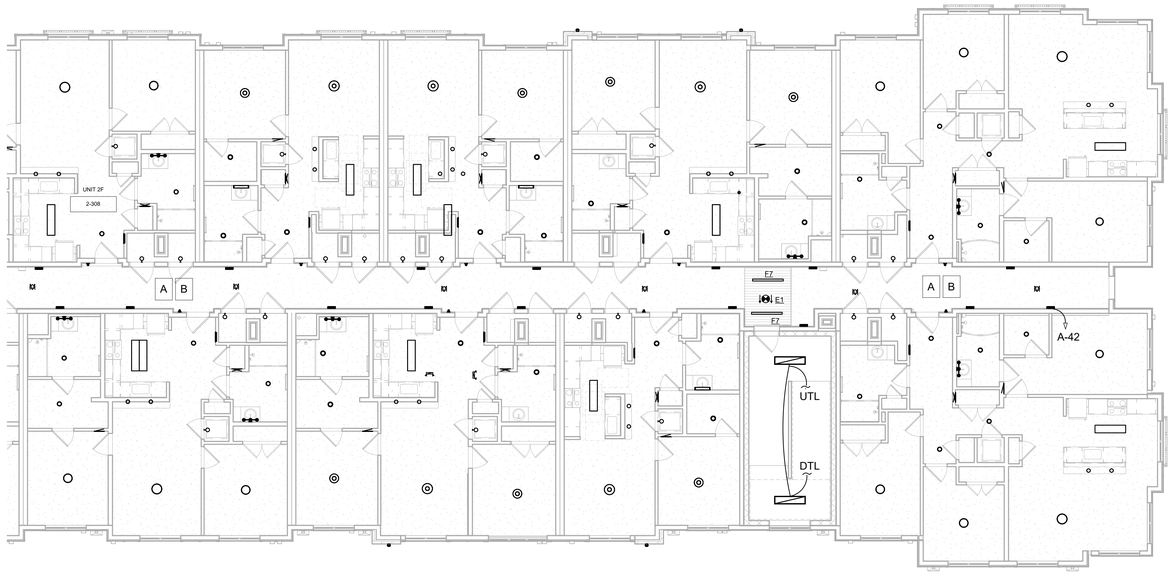
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

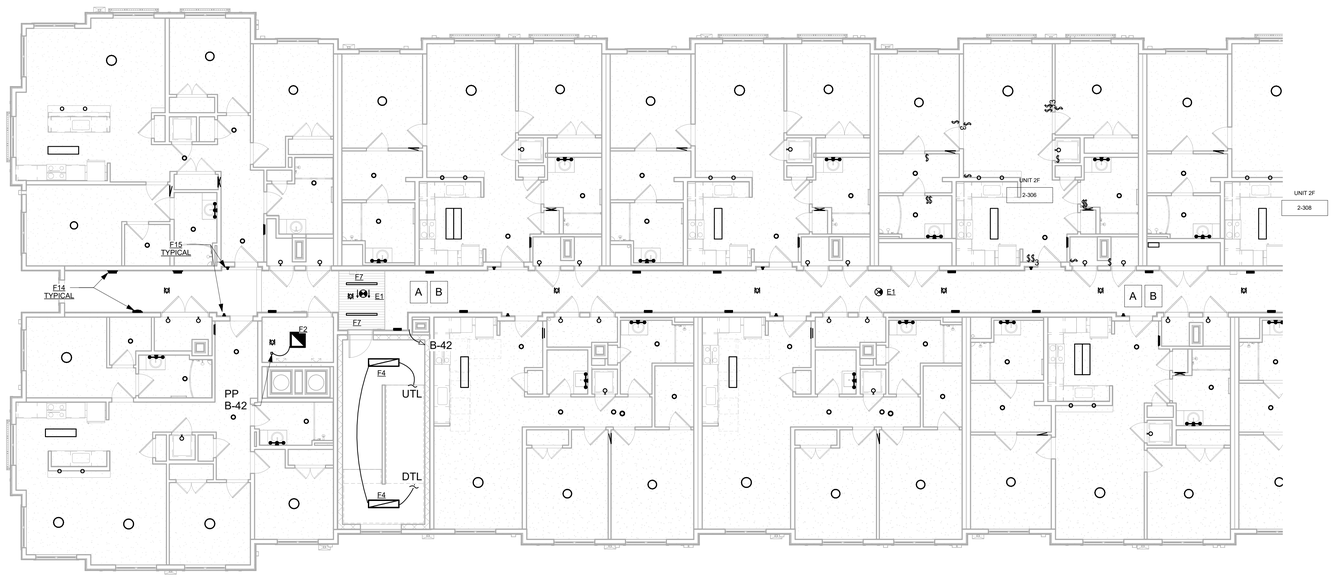
2E-202
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B2 - THIRD FLOOR AREA A - LIGHTING PLANS
1/8" = 1'-0"



2 B2 - THIRD FLOOR AREA B - LIGHTING PLANS
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--WIRE EMERGENCY EXIT/EGRESS FIXTURES TO LIGHTING CIRCUIT SERVING THAT AREA AHEAD OF ALL SWITCHING.

KEYED NOTES

A. WIRE 50% OF CORRIDOR LIGHTS IN AN ALTERNATING PATTERN THROUGH EMERGENCY POWER LIGHTING INVERTER. WIRE THE SAME FIXTURES THROUGH OCCUPANCY CONTROLLED DIMMER TO 50% DIMMING WHILE UNOCCUPIED.

B. ALL CORRIDOR OCCUPANCY SENSORS TO BE 'LT' OUTDOOR RATED WITH 50% DIMMING.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B2 THIRD FLOOR AREA A/B - LIGHTING PLAN

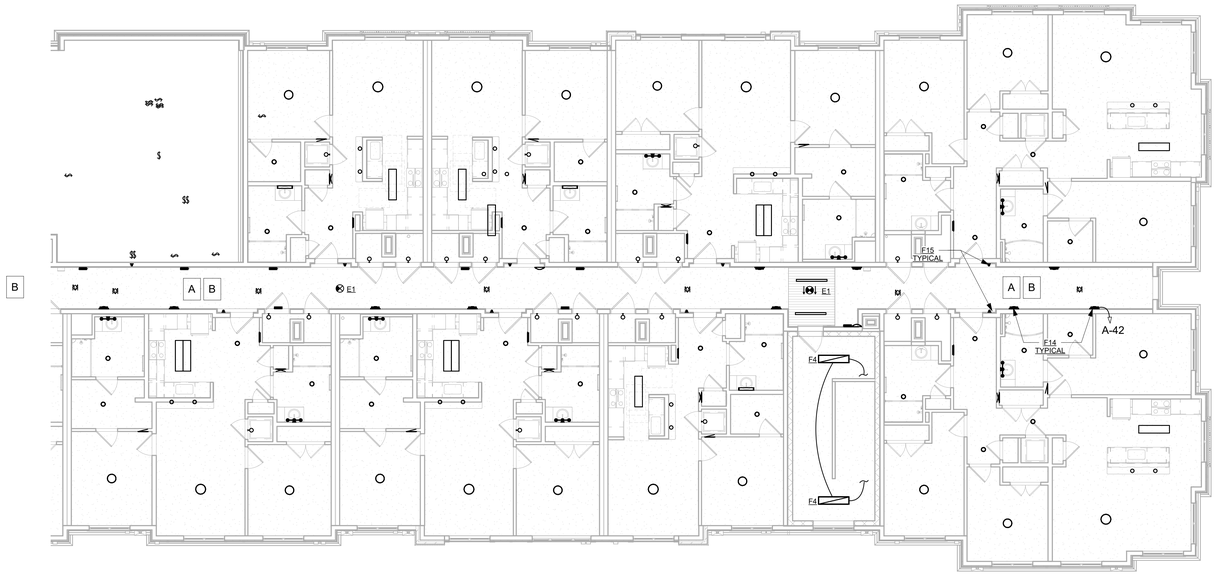
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

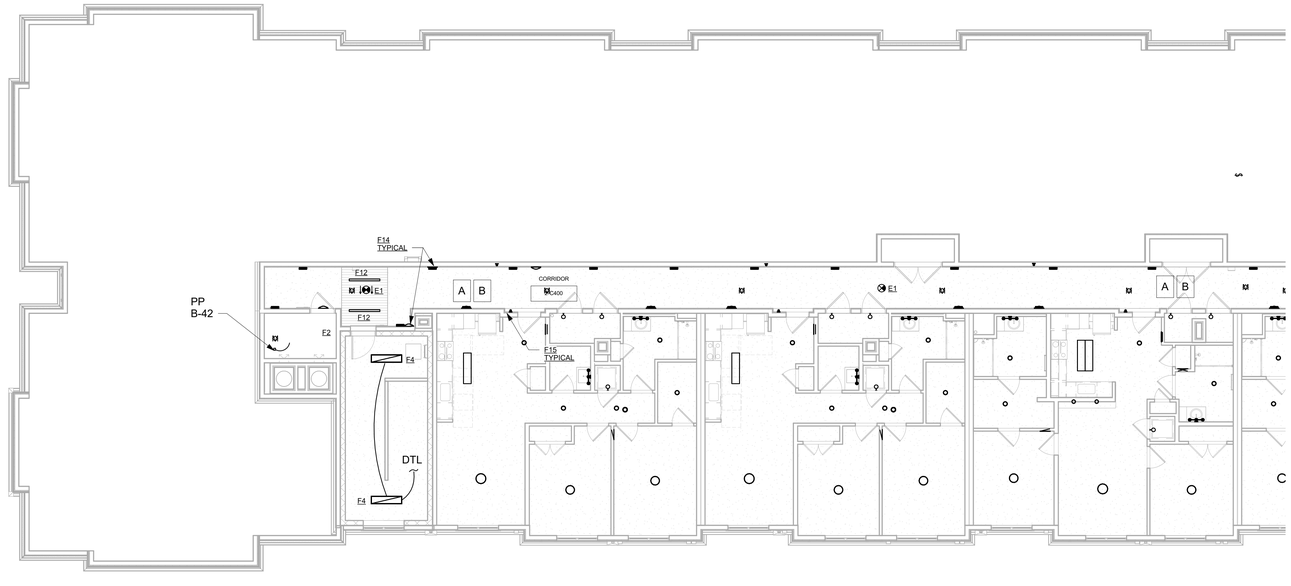
2E-203
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



B2 - FOURTH FLOOR AREA A - LIGHTING PLANS
1/8" = 1'-0"



B2 - FOURTH FLOOR AREA B - LIGHTING PLANS
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--WIRE EMERGENCY EXIT/EGRESS FIXTURES TO LIGHTING CIRCUIT SERVING THAT AREA AHEAD OF ALL SWITCHING.

KEYED NOTES

A. WIRE 50% OF CORRIDOR LIGHTS IN AN ALTERNATING PATTERN THROUGH EMERGENCY POWER LIGHTING INVERTER. WIRE THE SAME FIXTURES THROUGH OCCUPANCY CONTROLLED DIMMER TO 50% DIMMING WHILE UNOCCUPIED.

B. ALL CORRIDOR OCCUPANCY SENSORS TO BE 'LT' OUTDOOR RATED WITH 50% DIMMING.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B2 FOURTH FLOOR AREA A/B - LIGHTING PLAN

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

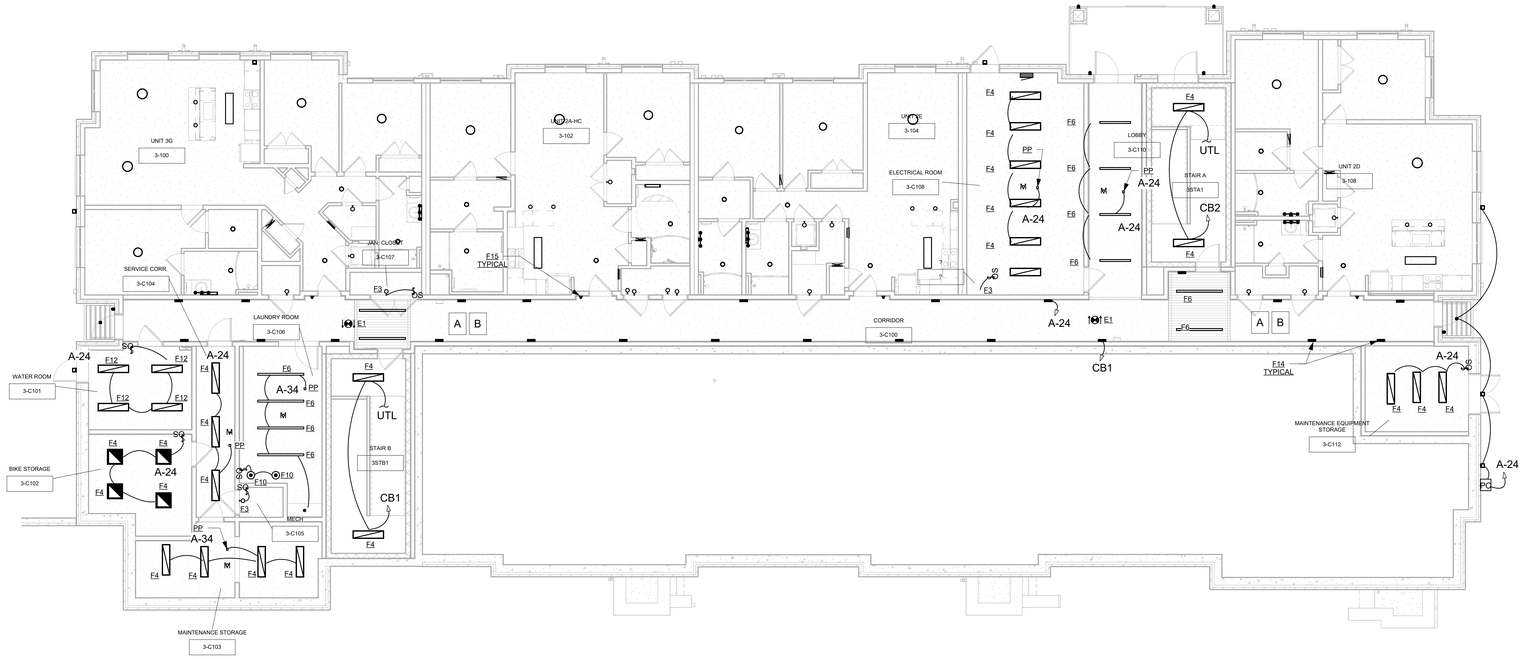
DATE	SUBMISSION / REVISION / #:
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

2E-204

06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B3 - FIRST FLOOR LIGHTING PLAN
1/8" = 1'-0"



2 B3 - SECOND FLOOR LIGHTING PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--WIRE EMERGENCY EXIT/EGRESS FIXTURES TO LIGHTING CIRCUIT SERVING THAT AREA AHEAD OF ALL SWITCHING.

KEYED NOTES

A. WIRE 50% OF CORRIDOR LIGHTS IN AN ALTERNATING PATTERN THROUGH EMERGENCY POWER LIGHTING INVERTER. WIRE THE SAME FIXTURES THROUGH OCCUPANCY CONTROLLED DIMMER TO 50% DIMMING WHILE UNOCCUPIED.

B. ALL CORRIDOR OCCUPANCY SENSORS TO BE 'LT' OUTDOOR RATED WITH 50% DIMMING.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

B3 FIRST & SECOND FLOOR - LIGHTING PLAN

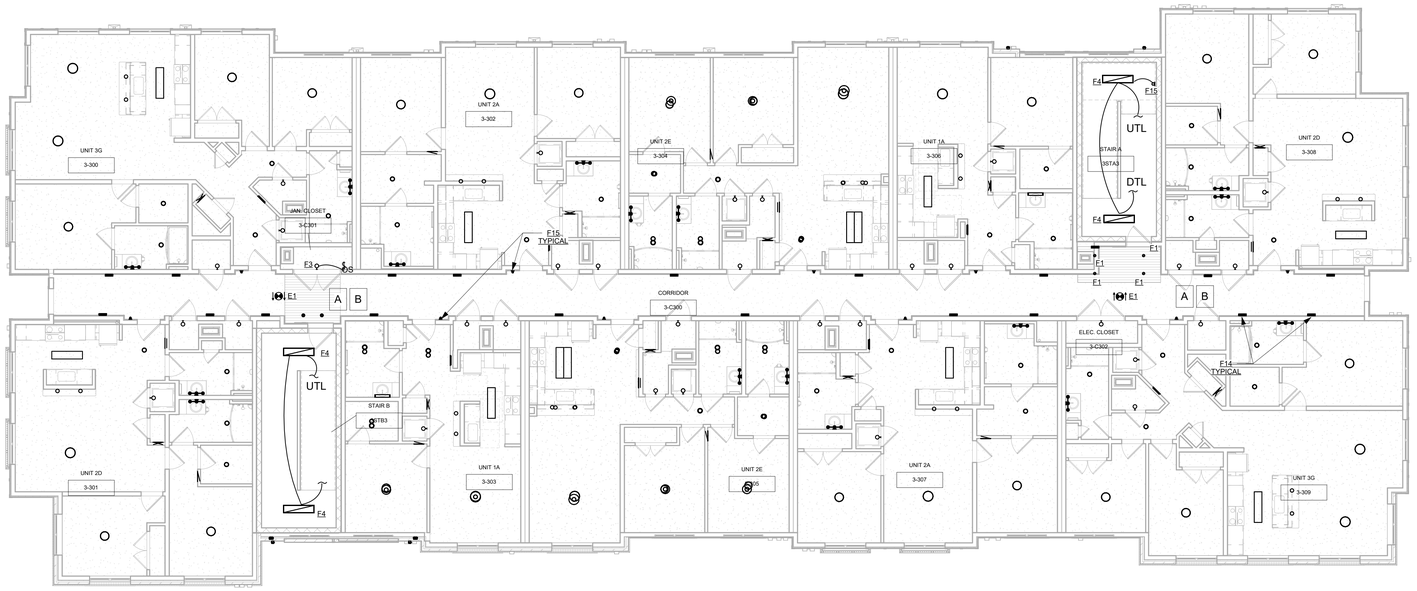
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

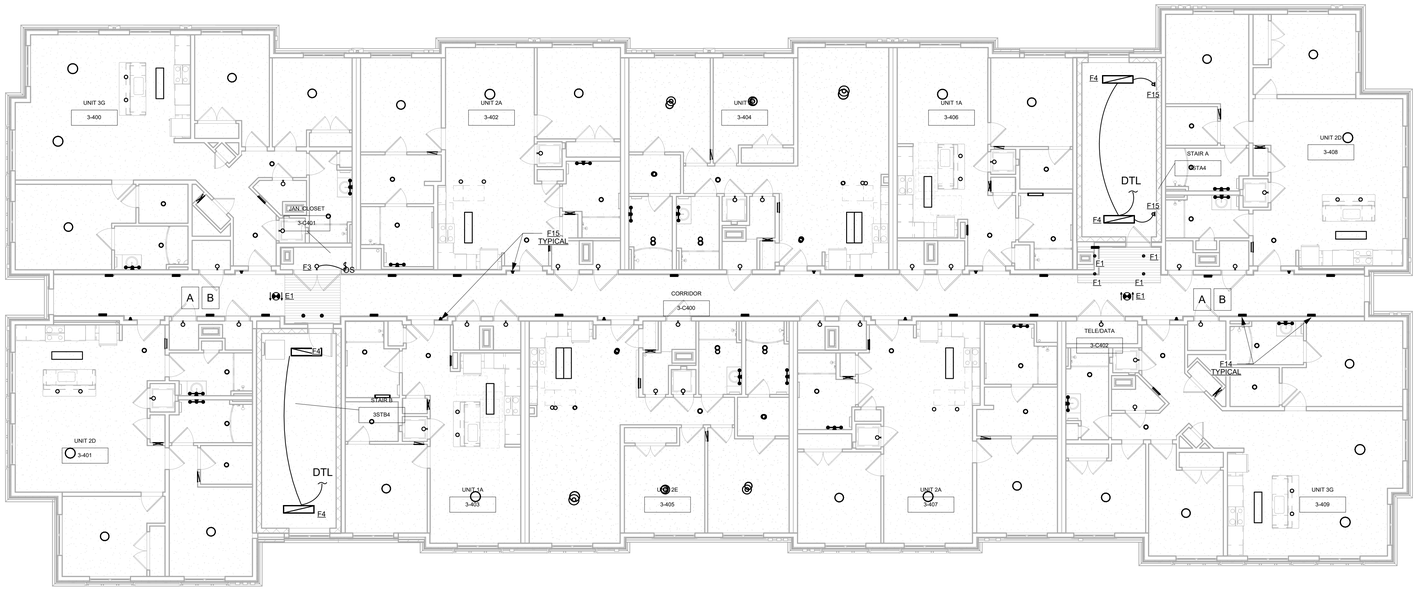
3E-201
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B3 - THIRD FLOOR LIGHTING PLAN
1/8" = 1'-0"



2 B3 - FOURTH FLOOR HVAC PLAN
1/8" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--WIRE EMERGENCY EXIT/EGRESS FIXTURES TO LIGHTING CIRCUIT SERVING THAT AREA AHEAD OF ALL SWITCHING.

KEYED NOTES

A. WIRE 50% OF CORRIDOR LIGHTS IN AN ALTERNATING PATTERN THROUGH EMERGENCY POWER LIGHTING INVERTER. WIRE THE SAME FIXTURES THROUGH OCCUPANCY CONTROLLED DIMMER TO 50% DIMMING WHILE UNOCCUPIED.

B. ALL CORRIDOR OCCUPANCY SENSORS TO BE 'LT' OUTDOOR RATED WITH 50% DIMMING.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

B3 THIRD & FOURTH FLOOR - LIGHTING PLAN

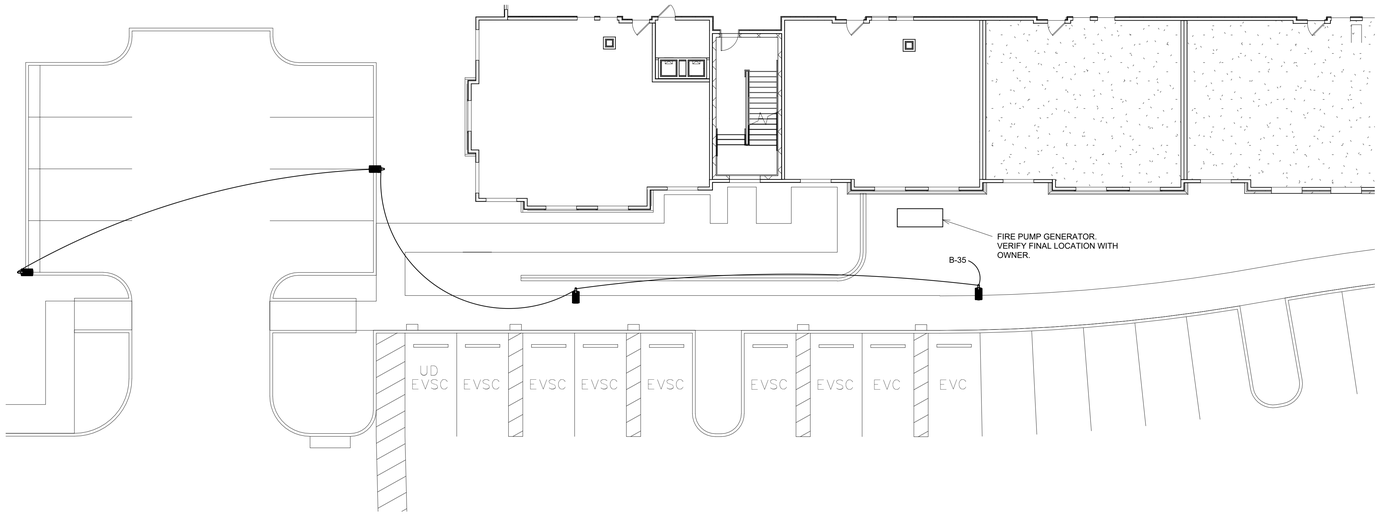
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / IP	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

3E-202
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B2 - SITE ELECTRICAL PLAN 1
3/32" = 1'-0"



2 B2 - SITE ELECTRICAL PLAN 2
3/32" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

KEYED NOTES

A. RECEPTACLE AND DATA OUTLET FOR MAIL KIOSK. WEATHERPROOF AND GFCI RATED. VERIFY ALL REQUIREMENTS AND LOCATION WITH OWNER/MANUFACTURER PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

B2 SITE ELECTRICAL PLAN

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

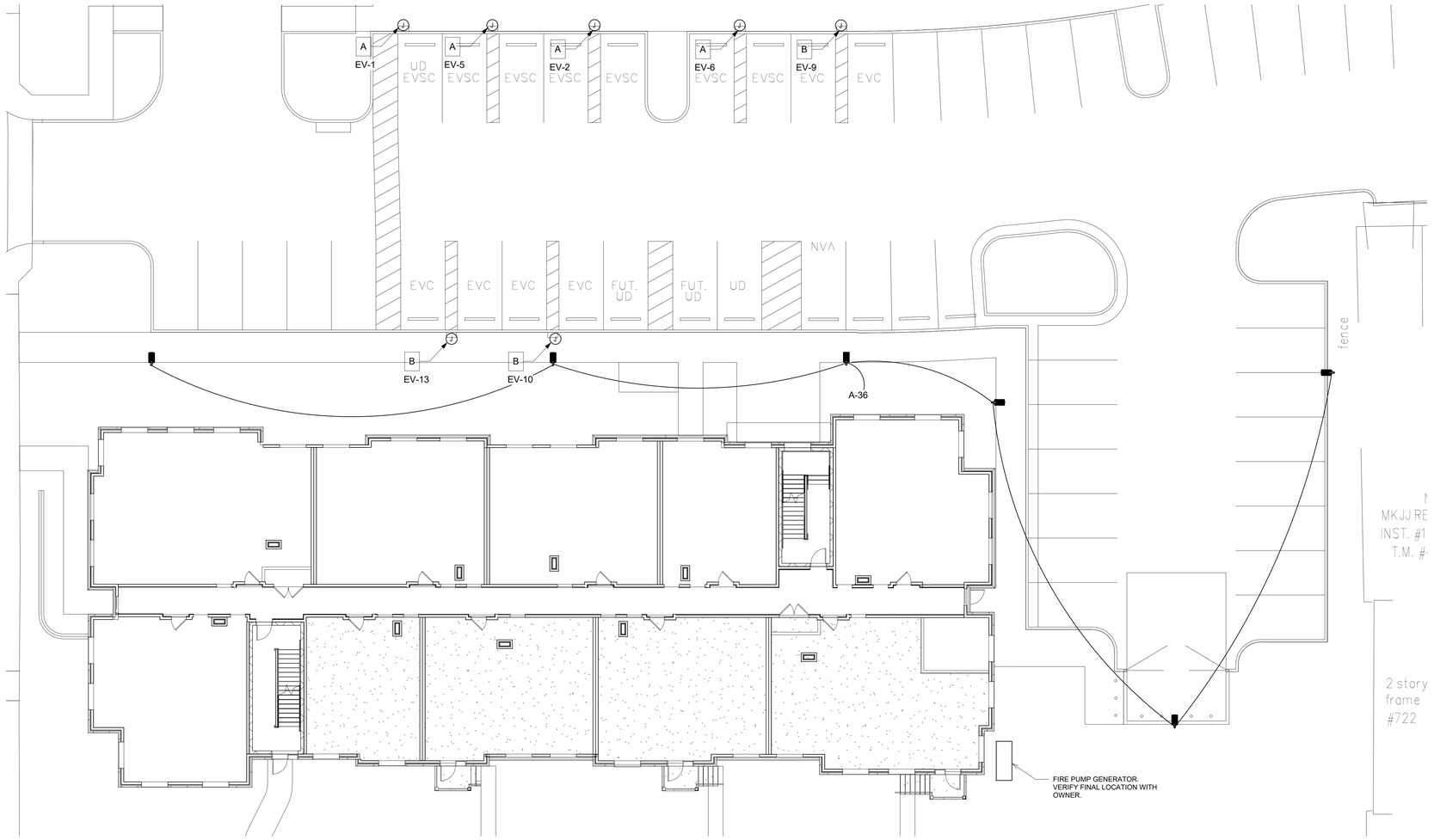
DATE	SUBMISSION / REVISION / IS...	
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

2E-301
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.

B2 SITE ELECTRICAL PLAN



1 B3 - SITE ELECTRICAL PLAN
3/32" = 1'-0"

GENERAL NOTES

--FOR ALL 1P-20A CIRCUITS OVER 100 FEET, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

--SITE LIGHTING SHOWN FOR CIRCUITING PURPOSES ONLY. SITE LIGHTING DESIGN BY CIVIL ENGINEER, SEE CIVIL PLANS FOR EXACT LOCATIONS AND FIXTURE TYPES.

KEYED NOTES

A. STUB UP AND CAP OFF 1.5" CONDUIT FOR ELECTRIC VEHICLE CHARGING STATION. CONDUIT RUN FROM PANEL 'EV' LOCATED IN ELECTRICAL ROOM. VERIFY FINAL LOCATION WITH OWNER.

B. STUB UP AND CAP OFF 1.5" CONDUIT WITH PULL STRING RUN FROM PANEL 'EV' LOCATED IN ELECTRICAL ROOM FOR FUTURE ELECTRIC VEHICLE CHARGING STATION. VERIFY FINAL LOCATION WITH OWNER.

C. CONNECTION FOR MAIL KIOSK. VERIFY ALL REQUIREMENTS AND LOCATION WITH OWNER/MANUFACTURER PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

B3 SITE ELECTRICAL PLAN

ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

3E-301

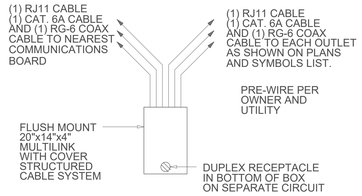
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.

SYMBOLS LIST - APARTMENTS

- OUTLET FOR CEILING OR WALL MOUNTED LED LIGHTING FIXTURE
- OUTLET FOR CEILING OR WALL MOUNTED LED LIGHTING FIXTURE
- OUTLET FOR CEILING MOUNTED PADDLE FAN
- S — SINGLE POLE WALL SWITCH AT 48" AFF
- S_3 — THREE-WAY WALL SWITCH AT 48" AFF
- GENERAL PURPOSE DUPLEX RECEPTACLE AT 18" AFF
- GENERAL PURPOSE DUPLEX RECEPTACLE AT 44" AFF
- USB / USB — GENERAL PURPOSE DUPLEX RECEPTACLE WITH (2) INTEGRATED USB PORTS. MOUNTED HORIZONTALLY AND CENTERED 6" ABOVE THE FINISHED SURFACE OR 2" ABOVE BACK SPLASH UNLESS NOTED OTHERWISE. USB PORTS CONFIGURED AS (1) USB-A AND (1) USB-C
- ED — OUTLET FOR DRYER HEIGHT TO SUIT APPLIANCE SERVED
- W — OUTLET FOR LAUNDRY OR WASHER HEIGHT TO SUIT APPLIANCE SERVED
- SWD — 250 VOLT DEVICE FOR STACKED WASHER/ DRYER, HEIGHT TO SUIT APPLIANCE SERVED
- REF. — OUTLET FOR REFRIGERATOR HEIGHT TO SUIT APPLIANCE SERVED
- ER — 250 VOLT DEVICE FOR ELECTRIC RANGE HEIGHT TO SUIT APPLIANCE SERVED
- PD — OUTLET FOR TELEPHONE/DATA LINES ROUGH-IN AND PREWIRE AT 18" AFF UNLESS NOTED
- TV — OUTLET FOR TELEVISION LINE. ROUGH-IN AND PREWIRE AT 18" AFF UNLESS NOTED
- MW/EH — OUTLET FOR CONNECTION TO MICROWAVE HOOD OUTLET TO SUIT APPLIANCE SERVED
- EH (J) — OUTLET FOR EXHAUST HOOD WITH WALL MOUNTED CONTROL SWITCH
- DW — OUTLET FOR CONNECTION TO DISHWASHER
- DISP. — SWITCHED OUTLET FOR DISPOSER HEIGHT TO SUIT APPLIANCE SERVED
- (FL) — EXHAUST FAN/LIGHT COMBO FURNISHED BY HVAC, WIRED BY ELECTRICIAN
- (WH) — ELECTRIC WATER HEATER
- [S] — CEILING MOUNTED SINGLE STATION AC/BATTERY SMOKE DETECTOR
- [S/CO] — COMBINATION CEILING MOUNTED SINGLE STATION AC/BATTERY CARBON MONOXIDE AND SMOKE DETECTOR
- (F) — AUDIO/VISUAL FIRE ALARM SIGNAL DEVICE AT 6'-8" AFF.
- (V) — VISUAL ONLY FIRE ALARM SIGNAL DEVICE AT 6'-8" AFF
- R (V) — REMOTE STROBE DEVICE WIRED TO SINGLE STATION SMOKE DETECTORS SERVING THIS UNIT.
- STRUCTURED CABLE UNIT DISTRIBUTION FLUSH MOUNT BOX, SEE DETAIL ON SHEET E-300
- SCB — PANELBOARD/LOAD CENTER
- SWITCH LEG WIRING
- AFF — ABOVE FINISHED FLOOR
- C/EC — CONDUIT/EMPTY CONDUIT
- WP — WEATHERPROOF
- GFCI — GROUND FAULT CIRCUIT INTERRUPTOR TYPE DEVICE



NOTE: WIRE ADDITIONAL S-ONE BOXES WHERE REQUIRED. COORDINATE WITH OWNER AND COMMUNICATIONS SUPPLIERS.

UNIT STRUCTURED CABLE WIRING DETAIL

NO SCALE

APARTMENT ELEC. SPECS.

A1. RECEPTACLE AND LIGHTING OUTLETS SHOWN AT THIS SCALE ARE GENERAL IN NATURE. FINAL FIELD PLACEMENT OF OUTLETS SHALL NOT EXCEED CODE REQUIREMENTS. OUTLETS ABOVE COUNTER IN KITCHENS SHALL BE MOUNTED ALONG CENTERLINE OF SPACE BETWEEN BACKSPLASH AND BOTTOM OF OVERHEAD CABINETS. BELOW COUNTER PENINSULA RECEPTACLE SHALL BE NO LESS THAN 12" BELOW COUNTERTOP. COORDINATE LOCATIONS OF OUTLETS IN AND AROUND LAVATORIES, COUNTERS, MIRRORS, AND OTHER ARCHITECTURAL ELEMENTS. DO NOT INSTALL OUTLETS BACK-TO-BACK IN SHARED PARTITION WALLS BETWEEN UNITS.

A2. BRANCH CIRCUIT WIRING CONCEALED IN WALLS OR CEILING SPACES MAY BE TYPE NM (ROMEX) COPPER WHERE ALLOWED BY CODE, MINIMUM SIZE #14 FOR 15 AMP CIRCUITS, #12 FOR 20 AMP CIRCUITS, #10 FOR 30 AMP CIRCUITS. FOR BRANCH CIRCUITS LARGER THAN 30A USE PROPER SER OR SEU ALUMINUM CABLE. HVAC/WATER HEATER CLOSETS ARE USED AS RETURN AIR PLENUM SPACES, USE APPROVED WIRING METHODS IN THESE CLOSETS.

A3. PROVIDE QUANTITY OF WIRES IN RUNS TO PROVIDE A COMPLETE INSTALLATION.

A4. CABLE PASSING THRU FIRE RATED CONSTRUCTION SHALL NOT LESSEN THE RATING OF THE CONSTRUCTION. CABLES PENETRATING EXTERIOR WALLS SHALL BE COMPLETELY WATERTIGHT. GIVE SPECIAL CONSIDERATIONS TO OUTLETS IN SHEER WALLS WHERE WIRING OCCURS ON BOTH SIDES OF THE WALL.

A5. SUPPORT CABLE DIRECTLY FROM THE BUILDING STRUCTURE.

A6. BOXES SHALL BE FIBERGLASS, PLASTIC OR STEEL, SIZED FOR NUMBER OF CONDUCTORS AND DEVICES. BOXES IN RATED CONSTRUCTION WHERE REQUIRED SHALL BE PLACED A MINIMUM OF 24" ON CENTER IF ON ONE SIDE OF ASSEMBLY AND STAGGERED A MINIMUM OF 24" ON CENTER IF ON BOTH SIDES OF ASSEMBLY, IF SPACING CANNOT BE MAINTAINED PROVIDE PROPER BOX PROTECTION.

A7. WIRING DEVICES SHALL BE RESIDENTIAL GRADE TYPE, COVERPLATES SHALL BE HIGH-IMPACT PLASTIC, MID-SIZED. WEATHERPROOF COVERPLATES SHALL BE WATERTIGHT IN USE TYPE. DEVICE/PLATE COLOR SHALL BE AS DIRECTED BY THE OWNER OR ARCHITECT. USE TAMPER-RESISTANT RECEPTACLES IN ALL ROOMS. SWITCHES SHALL BE DECORA TYPE.

A8. PROVIDE LOCAL DISCONNECTS FOR EQUIPMENT. DISCONNECT SWITCHES SHALL BE GENERAL DUTY NON-FUSED AND RATED FOR EQUIPMENT SERVED.

A9. PROVIDE GROUND FAULT PROTECTION FOR OUTLETS IN ACCORDANCE WITH NEC 210.8. FEED-THRU PROTECTION CAN BE USED IF DEVICES ARE IN THE SAME ROOM. DO NOT CROSS PARTITIONS WITH FEED THRU WIRING. PROVIDE SEPARATE DEVICES.

A10. PROVIDE ARC-FAULT PROTECTION FOR ALL OUTLETS (INCLUDING LIGHTING, SMOKE DETECTORS, ETC.) IN ACCORDANCE WITH NEC 210.12. PROVIDE AFCI BREAKERS FOR SUCH CIRCUITS IN PANELBOARDS.

A11. WIRE SMOKE AND COMBINATION DETECTORS IN TANDEM TO PROVIDE COMMON ALARM WITHIN INDIVIDUAL APARTMENT UNIT. SMOKE DETECTORS SHALL BE DUAL SENSOR PHOTOELECTRIC/IONIZATION TYPE HARD-WIRED WITH BATTERY BACKUP. SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 36" FROM HVAC REGISTERS AND CEILING FANS.

A12. PANEL SCHEDULES INDICATE A MINIMUM NUMBER OF CIRCUITS TO PROVIDE, CONTRACTOR MAY PROVIDE ADDITIONAL CIRCUITS TO SIMPLIFY ROUGH-IN.

A13. PRE-WIRE BUILDING FOR TELEPHONE, INTERNET AND TELEVISION TO OWNER'S SPECIFICATIONS.

A14. VERIFY EXACT LOCATION, CHARACTERISTICS AND CONFIGURATION OF CONNECTIONS REQUIRED FOR OWNER FURNISHED EQUIPMENT AND EQUIPMENT SPECIFIED UNDER OTHER DIVISIONS. IF ALTERNATE EQUIPMENT IS USED PROVIDE PROPER OVERCURRENT PROTECTION, DEVICES AND CIRCUIT REQUIRED. EQUIVALENT EQUIPMENT TO THAT SPECIFIED MAY BE SUBSTITUTED, HOWEVER, THE CONTRACTOR SHALL MAKE ANY ADJUSTMENTS AND CHANGES REQUIRED TO ACCOMMODATE THE SUBSTITUTIONS AT NO COST TO THE OWNER. CONTRACTOR SHALL GUARANTEE EQUIVALENCE OF SUBSTITUTED EQUIPMENT.

A15. RESIDENT UNIT LOAD CENTERS SHALL BE AS SCHEDULED OR BY SQUARE-D, EATON OR SIEMENS, AND BE PROVIDED WITH A SURGE SUPPRESSOR.

A16. ALL ACCESSIBLE OR CONVERTIBLE APARTMENTS SHALL ALSO COMPLY WITH THE FOLLOWING ACCESSIBILITY REQUIREMENTS:

A. MAXIMUM HEIGHT OF CIRCUIT BREAKERS IN PANELBOARD SHALL BE 48" AFF.

B. PROVIDE A SWITCH ABOVE KITCHEN COUNTER FOR EXHAUST HOOD TO OVERRIDE FRONT MOUNT CONTROLS.

C. SINGLE STATION SMOKE AND COMBINATION DETECTORS SHALL BE AUDIO/VISUAL TYPE. PROVIDE AND INSTALL A REMOTE STROBE DEVICE IN BATHROOMS.

D. INSTALL RECEPTACLES, SWITCHES, CONTROLS, ELECTRIC PANELS AT 15" AFF MINIMUM TO BOTTOM AND 48" AFF MAXIMUM TO TOP OF THE DEVICE AS MEASURED FROM FINISHED FLOOR, UNLESS NOTED. WHEN ELECTRICAL DEVICES ARE INSTALLED ABOVE A COUNTER AND THE INSTALLATION HEIGHT EXCEEDS 2'-10" PROVIDE A DUPLICATE ALTERNATE DEVICE LOCATED AS FOR EXAMPLE, FOR A DISPOSAL SWITCH ABOVE A 3'-0" HEIGHT COUNTER (THE PRIMARY LOCATION) PROVIDE A 3-WAY SWITCH SYSTEM AND LOCATE THE OTHER SWITCH (SECONDARY) IN AN ACCESSIBLE LOCATION. NOTE THAT THE PLANS SHOW THE LOCATION OF THE PRIMARY ELECTRICAL DEVICE BUT NOT THE SECONDARY DEVICE.

E. KITCHEN COUNTERTOP RECEPTACLES AND SWITCHES SHALL BE PROVIDED IN BACKSPLASH OF COUNTER OR IN BOXES PROTRUDING 1.5" FROM WALL AS REQUIRED. MAXIMUM OBSTRUCTION TO DEVICES SHALL NOT EXCEED 24".

TYPICAL 1BD UNIT PANEL A

VOLTS: 120/240 — PHASE:1 WIRE:3 — MOUNTING: FLUSH
AMPS: 125 — MAIN: LUGS ONLY

BRKR P	BRKR A	DESCRIPTION	CKT NO.	CKT NO.	DESCRIPTION	BRKR A	BRKR P
2	20	OHP	1	2	GEN.LTS. & RECS. (A)	15	1
-	--	----	3	4	GEN.LTS. & RECS. (A)	15	1
2	25	INDOOR UNIT	5	6	GEN.LTS. & RECS. (A)	15	1
-	--	----	7	8	GEN.LTS. & RECS. (A)	15	1
2	30	ELEC. WATER HEATER	9	10	REFRIGERATOR (A)(G)	20	1
-	--	----	11	12	DISPOSER (A)(G)	20	1
2	50	ELECTRIC RANGE (A)(G)	13	14	SMALL APPLIANCE (A)	20	1
-	--	----	15	16	SMALL APPLIANCE (A)	20	1
2	30	DRYER/SWD (G)	17	18	MICROWAVE-HOOD (A)	15	1
-	--	----	19	20	STRUCTURED CABLE (A)	15	1
1	20	LAUNDRY (A)(G)	21	22	DISHWASHER (A)(G)	20	1
1	20	BATH OUTLET (A)	23	24	OUTDOOR REC	15	1
1	15	SMOKE DETECTOR (A)	25	26	SPARE (A)	15	1
1	15	SPARE (A)	27	28	SURGE SUPRESSOR	--	2
1	15	GEN.LTS. & RECS. (A)	29	30	--	--	-
1	20	SPARE (A)	31	32	DEHUMIDIFIER (A)	15	1
1	20	SPARE (A)	33	34	ERV	15	1
1	20	SPARE (A)	35	36	SPARE (A)	15	1
1	20	SPARE (A)	37	38	SPARE (A)	15	1

(A) = AFCI BREAKER
(G) = GFCI BREAKER

SEE SPEC NOTES

LOAD SUMMARY

	LOAD (KW)
GEN. LTS/REC. LOAD 660SQ. FT. X 3W	2.24
SMALL APPLIANCES	3.00
ELEC. RANGE	8.00
LAUNDRY	6.20
ELEC. WATER HEATER	4.50
DISPOSER	1.50
DISHWASHER	1.20
REFRIGERATOR	1.20
DEHUMIDIFIER	0.50
ERV	0.17
TOTAL =	28.51
1ST 10KVA AT 100%	10.00
REMAINDER AT 40%	7.41
HVAC SYSTEM	6.28
STRIP HEAT AT 65%	2.47
TOTAL =	26.16
TOTAL AT 240V 1PHASE = =	108.96 AMPS

TYPICAL 2BD/3BD UNIT PANEL B

VOLTS: 120/240 — PHASE:1 WIRE:3 — MOUNTING: FLUSH
AMPS: 125 — MAIN: LUGS ONLY

BRKR P	BRKR A	DESCRIPTION	CKT NO.	CKT NO.	DESCRIPTION	BRKR A	BRKR P
2	20	OHP	1	2	GEN.LTS. & RECS (A)	15	1
-	--	----	3	4	GEN.LTS. & RECS (A)	15	1
2	25	INDOOR UNIT	5	6	GEN.LTS. & RECS (A)	15	1
-	--	----	7	8	GEN.LTS. & RECS (A)	15	1
2	30	ELEC. WATER HEATER	9	10	GEN.LTS. & RECS (A)	15	1
-	--	----	11	12	REFRIGERATOR (A)(G)	20	1
2	50	ELECTRIC RANGE (A)(G)	13	14	DISPOSER (A)(G)	20	1
-	--	----	15	16	SMALL APPLIANCE (A)	20	1
2	30	DRYER/SWD (G)	17	18	SMALL APPLIANCE (A)	15	1
-	--	----	19	20	MICROWAVE/HOOD (A)	15	1
1	20	LAUNDRY (A)(G)	21	22	STRUCTURED CABLE (A)	20	1
1	20	BATH OUTLET (A)	23	24	DISHWASHER (A)(G)	20	1
1	20	BATH OUTLET (A)	25	26	SMOKE DETECTORS (A)	15	1
1	15	OUTDOOR REC	27	28	SURGE SUPRESSOR	--	2
1	15	SPARE (A)	29	30	--	--	-
1	20	GEN.LTS. & RECS (A)	31	32	DEHUMIDIFIER (A)	15	1
1	15	SPARE (A)	33	34	ERV	15	1
1	15	SPARE (A)	35	36	SPARE (A)	15	1
1	15	SPARE (A)	37	38	SPARE (A)	15	1

(A) = AFCI BREAKER
(G) = GFCI BREAKER

SEE SPEC NOTES

LOAD SUMMARY

	LOAD (KW)
GEN. LTS/REC LOAD 1305 SQ. FT. X 3W	3.92
SMALL APPLIANCES	3.00
ELEC. RANGE	8.00
LAUNDRY	6.20
ELEC. WATER HEATER	4.50
DISPOSER	0.75
DISHWASHER	1.20
REFRIGERATOR	1.20
DEHUMIDIFIER	0.50
ERV	0.17
TOTAL =	29.44
1ST 10KVA AT 100%	10.00
REMAINDER AT 40%	7.77
HVAC SYSTEM	6.28
STRIP HEAT AT 65%	2.47
TOTAL =	26.52
TOTAL AT 240V 1PHASE = =	110.51 AMPS

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

APARTMENT SPECIFICATIONS
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

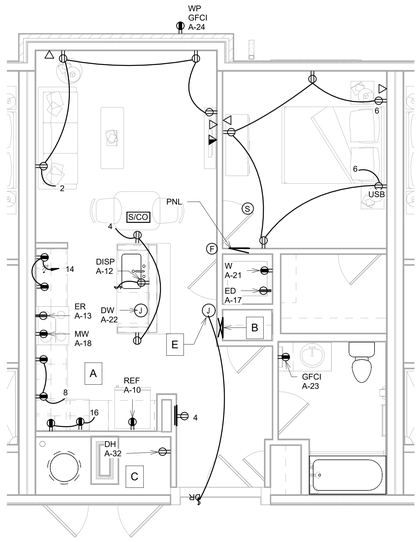
DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

E-500

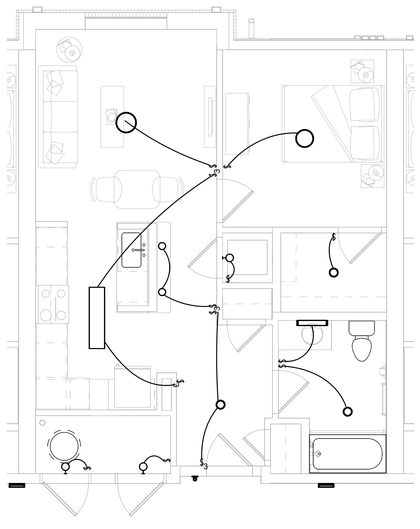
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

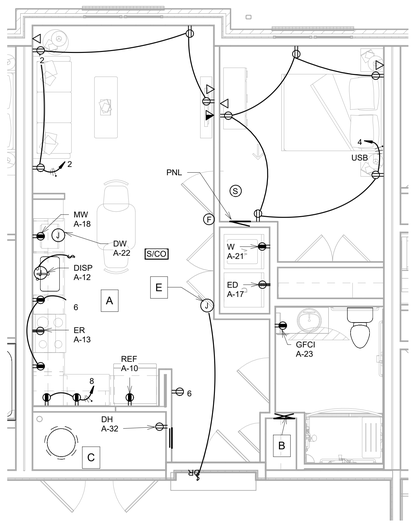
© GRIMM AND PARKER ARCHITECTURE, INC.



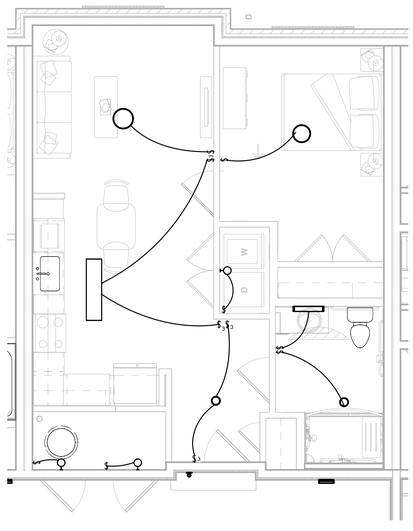
1 B1 - Unit 1A Power
1/4" = 1'-0"



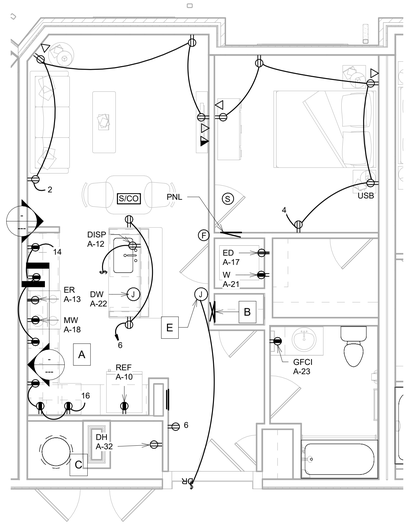
2 B1 - Unit 1A Lighting
1/4" = 1'-0"



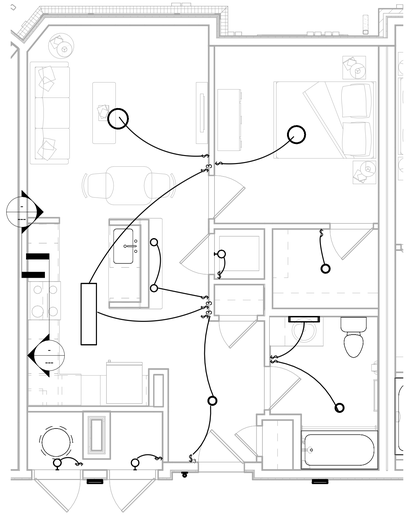
3 B1 - Unit 1A-HC Power
1/4" = 1'-0"



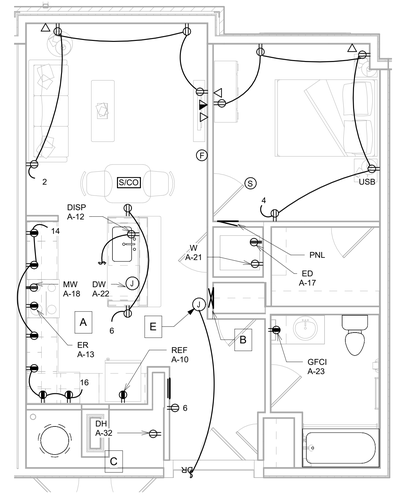
4 B1 - Unit 1A-HC Lighting
1/4" = 1'-0"



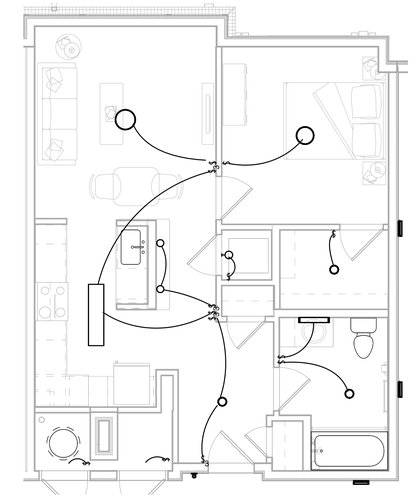
5 B1 - Unit 1B Power
1/4" = 1'-0"



6 B1 - Unit 1B Lighting
1/4" = 1'-0"



7 B1 - Unit 1C Power
1/4" = 1'-0"



8 B1 - Unit 1C Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN. OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

UNIT 1A, 1A-HC, 1B, 1C

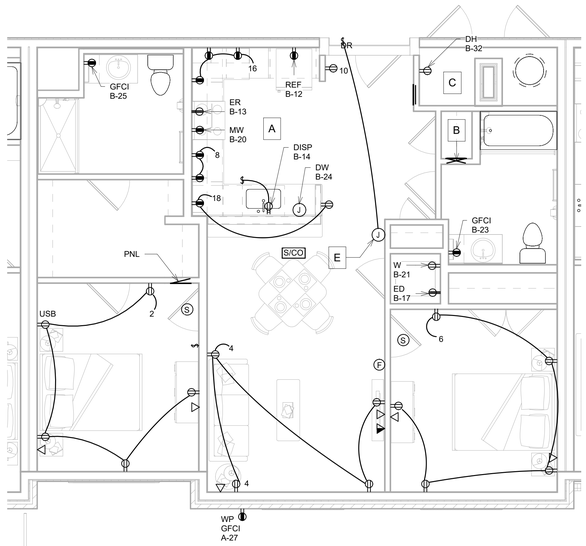
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

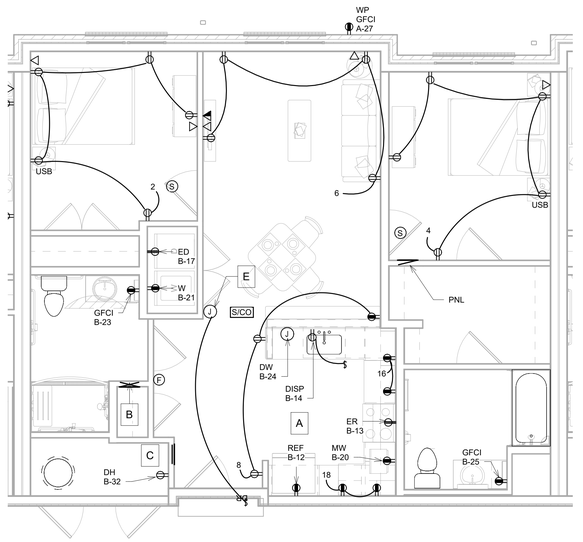
E-501
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

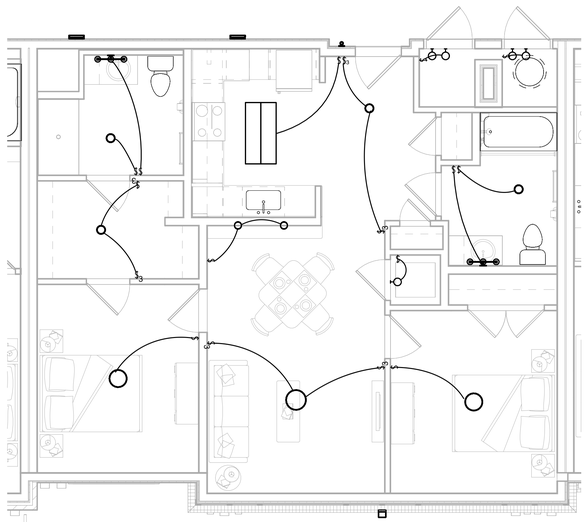
© GRIMM AND PARKER ARCHITECTURE, INC.



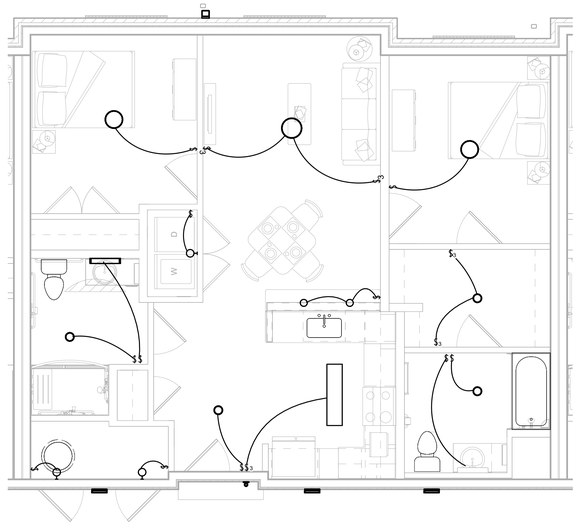
1 B1 - Unit 2A Power
1/4" = 1'-0"



3 B1 - Unit 2A-HC Power
1/4" = 1'-0"



2 B1 - Unit 2A Lighting
1/4" = 1'-0"



4 B1 - Unit 2A-HC Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

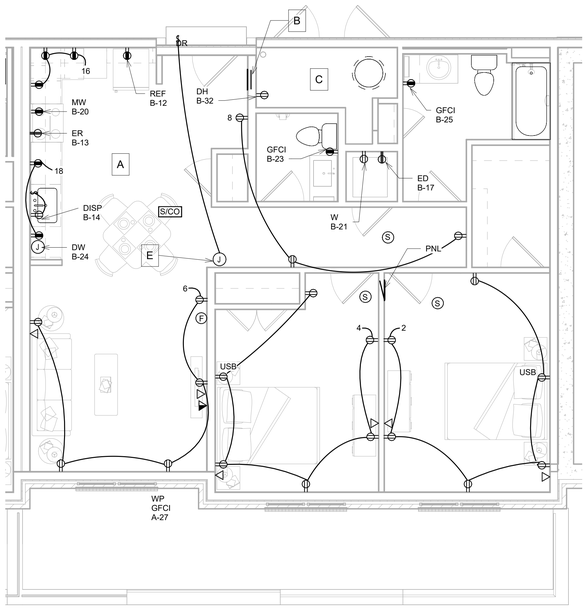
UNIT 2A, 2A-HC
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

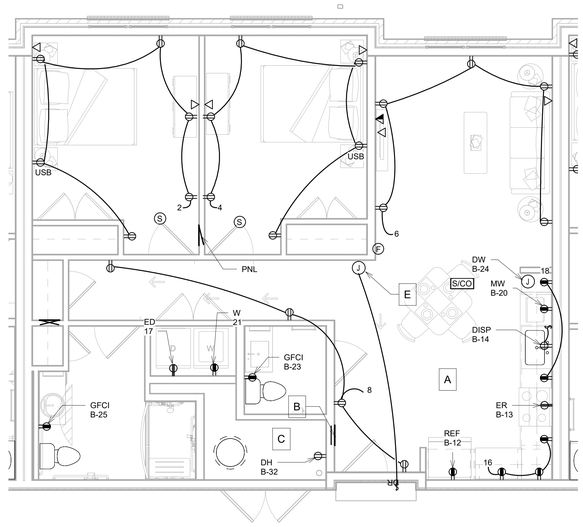
E-502
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

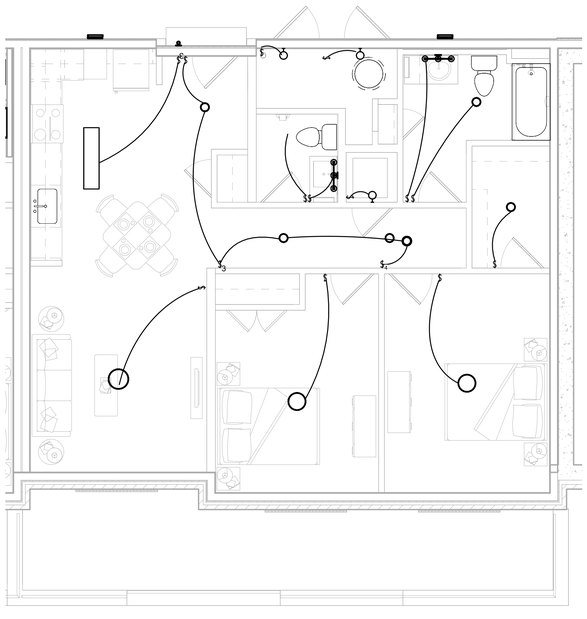
© GRIMM AND PARKER ARCHITECTURE, INC.



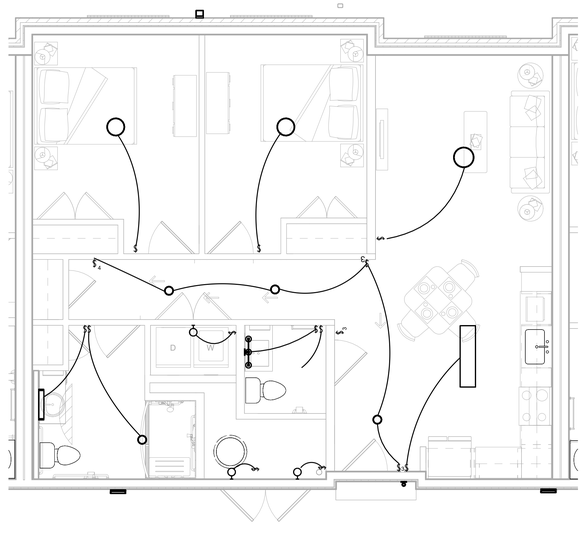
1 B1 - Unit 2B Power
1/4" = 1'-0"



5 B1 - Unit 2B-HC Power
1/4" = 1'-0"



2 B1 - Unit 2B Lighting
1/4" = 1'-0"



6 B1 - Unit 2B-HC Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

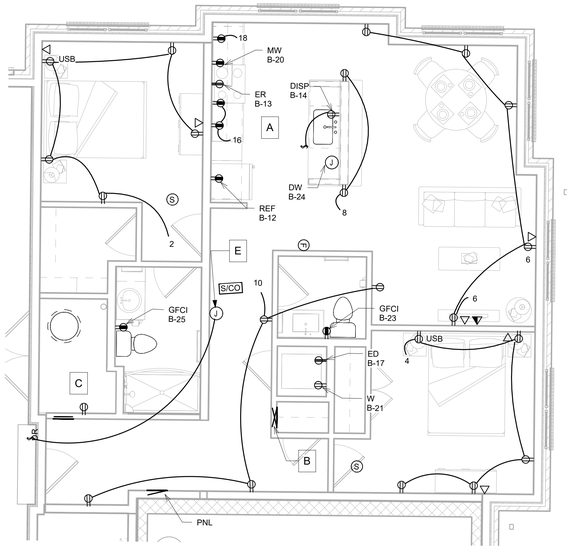
UNIT 2B, 2B-HC
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / IS...
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

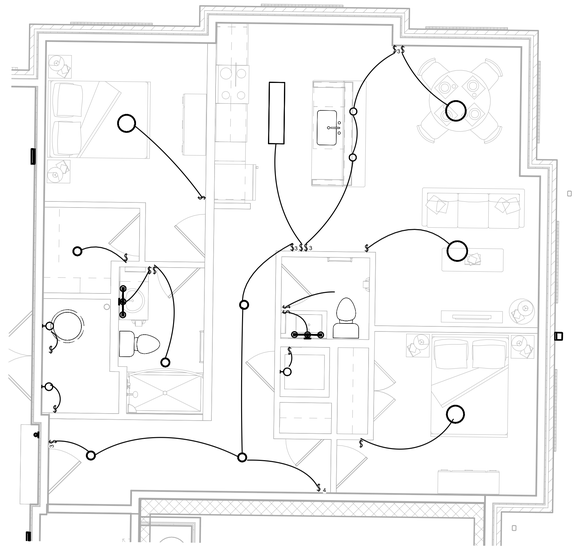
E-503
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

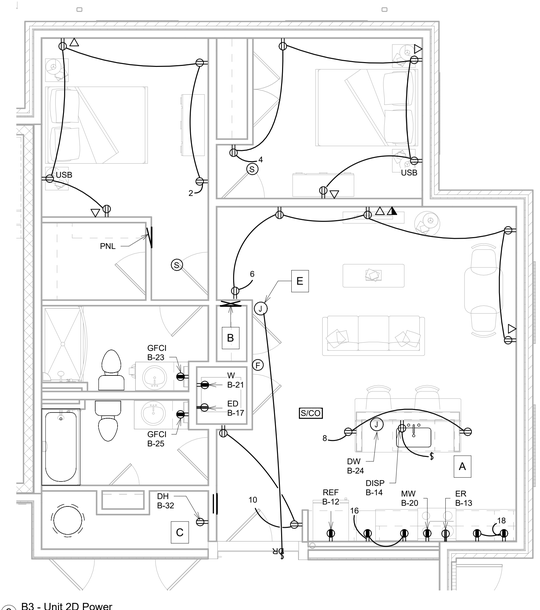
© GRIMM AND PARKER ARCHITECTURE, INC.



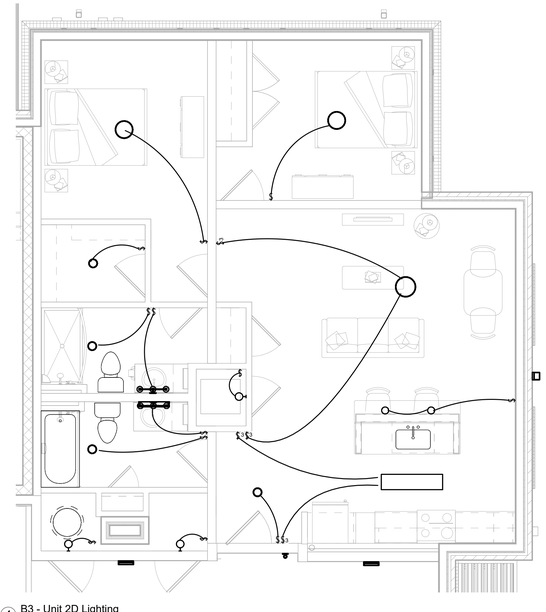
1 B1 - Unit 2C Power
1/4" = 1'-0"



2 B1 - Unit 2C Lighting
1/4" = 1'-0"



3 B3 - Unit 2D Power
1/4" = 1'-0"



4 B3 - Unit 2D Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

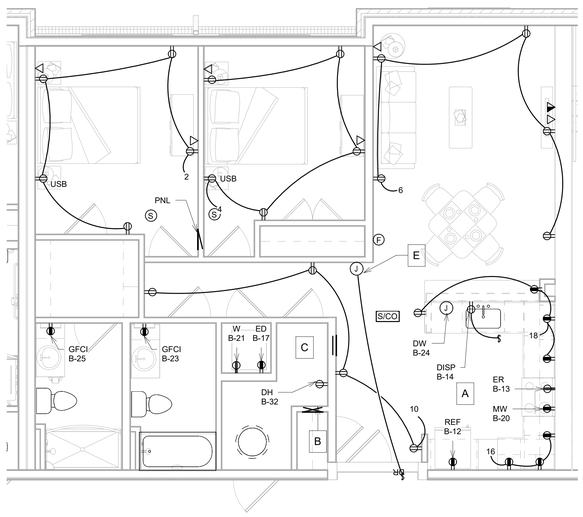
UNIT 2C, 2D
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #:
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

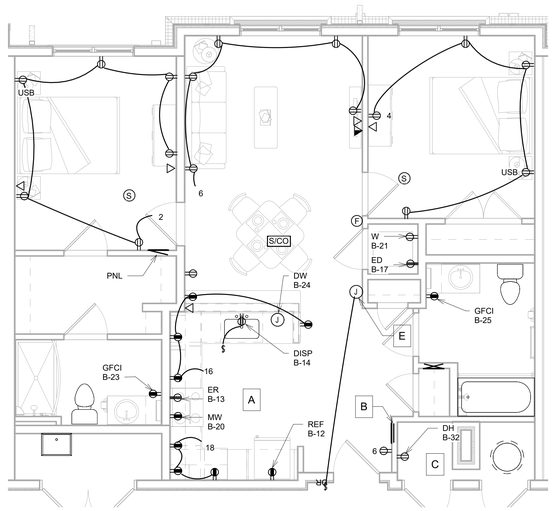
E-504
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



1 B3 - Unit 2E Power
1/4" = 1'-0"



3 B2 - Unit 2F Power
1/4" = 1'-0"

2 B3 - Unit 2E Lighting
1/4" = 1'-0"

4 B2 - Unit 2F Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

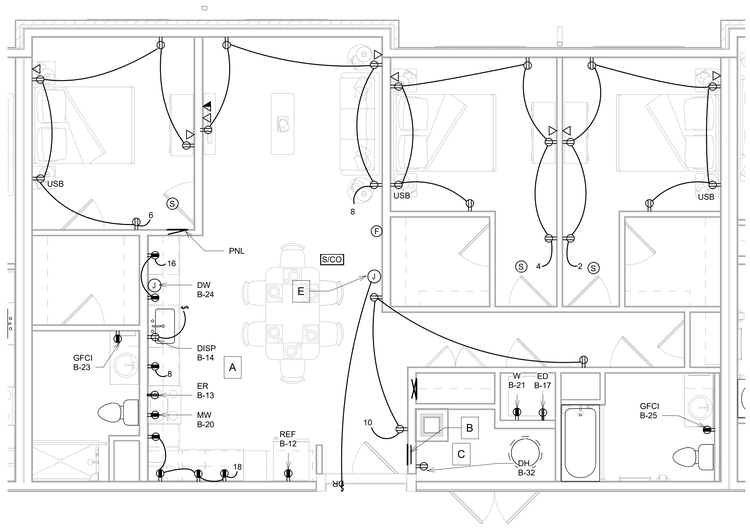
UNIT 2E, 2F
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

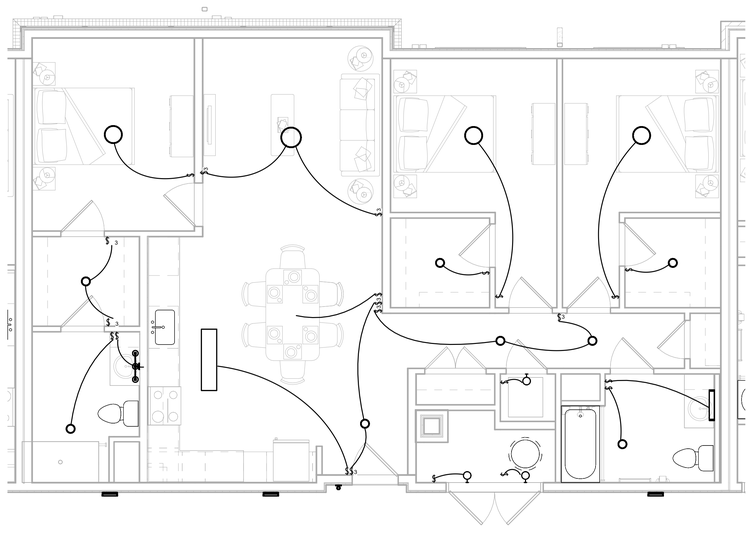
E-505
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

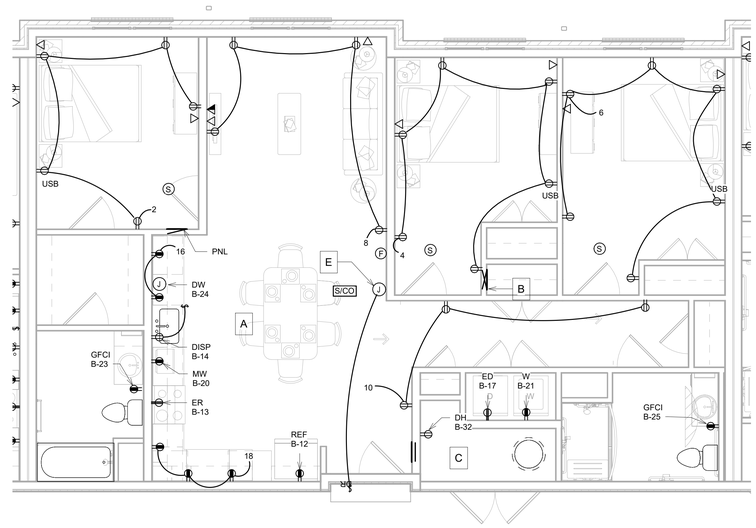
© GRIMM AND PARKER ARCHITECTURE, INC.



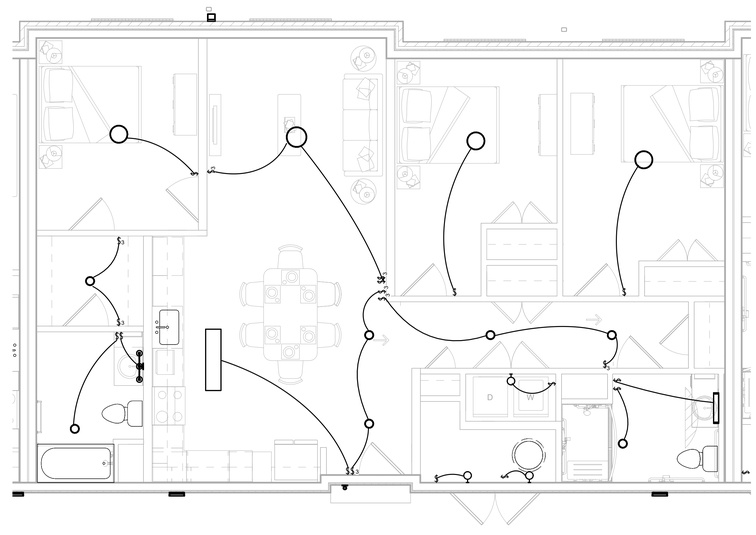
1 B1 - Unit 3A Power
1/4" = 1'-0"



2 B1 - Unit 3A Lighting
1/4" = 1'-0"



3 B1 - Unit 3A-HC Power
1/4" = 1'-0"



4 B1 - Unit 3A-HC Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

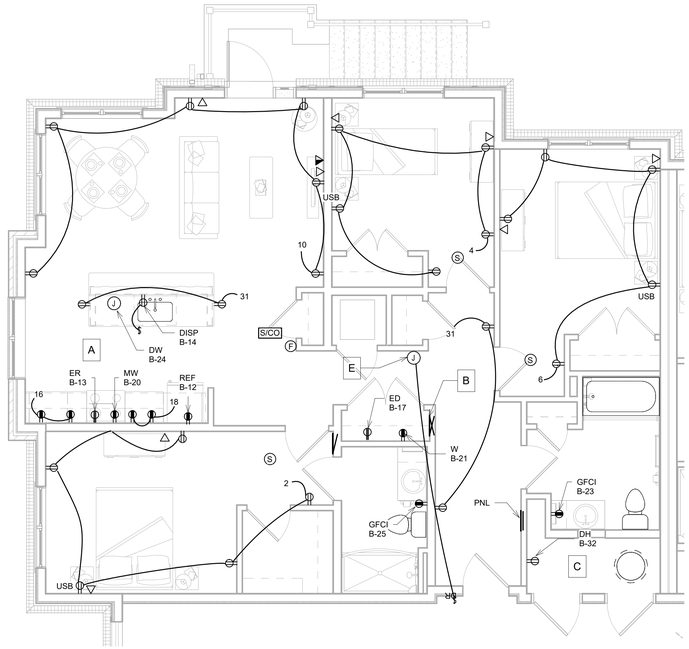
UNIT 3A, 3A-HC
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

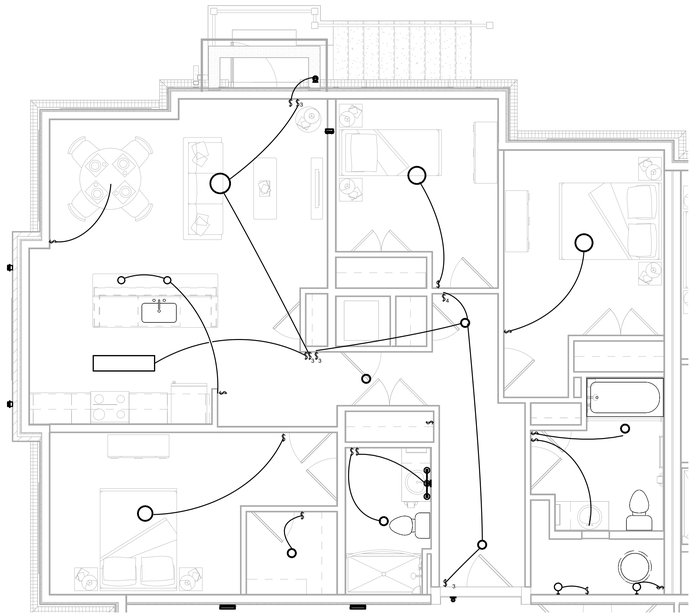
E-506
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

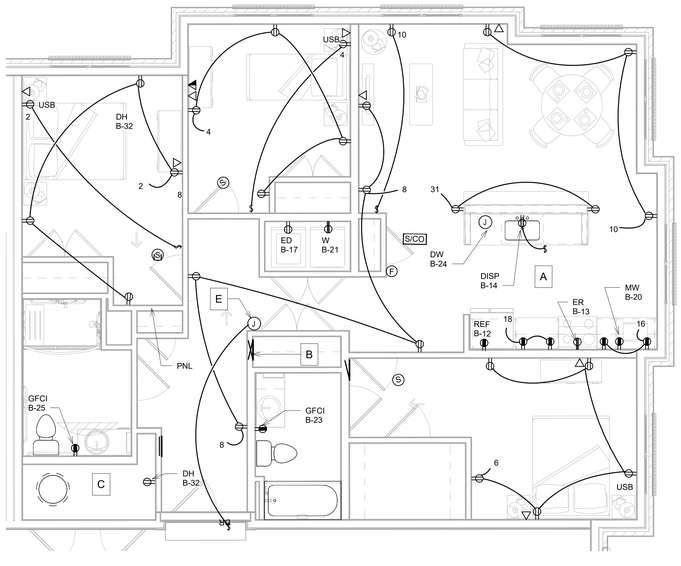
© GRIMM AND PARKER ARCHITECTURE, INC.



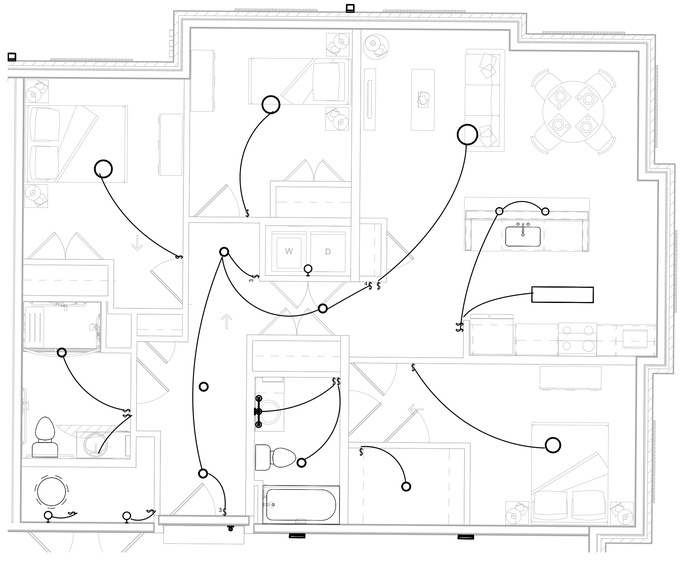
1 B2 - Unit 3B Power
1/4" = 1'-0"



2 B2 - Unit 3B Lighting
1/4" = 1'-0"



3 B1 - Unit 3B-HC Power
1/4" = 1'-0"



4 B1 - Unit 3B-HC Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

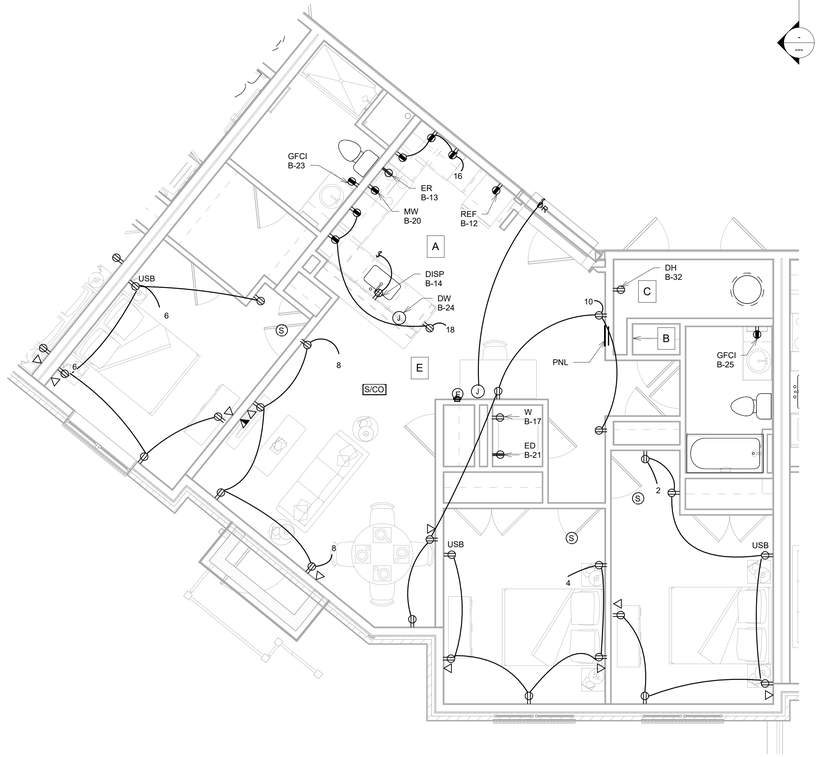
UNIT 3B, 3B-HC
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / IS...
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

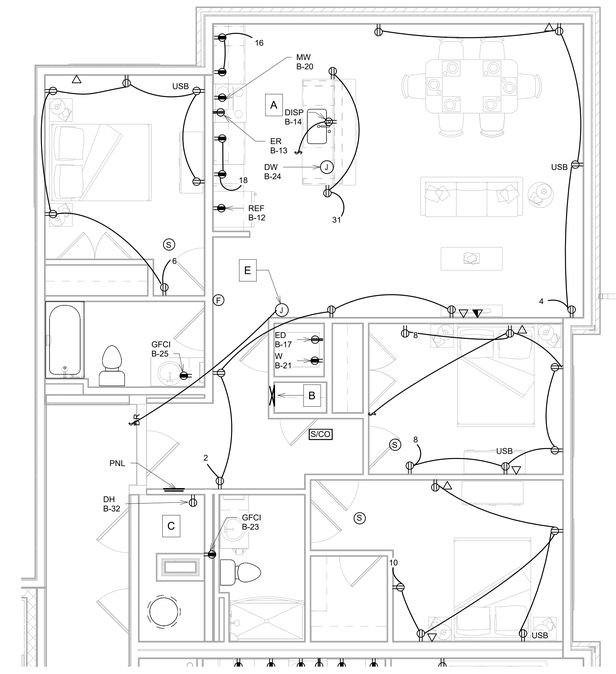
E-507
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

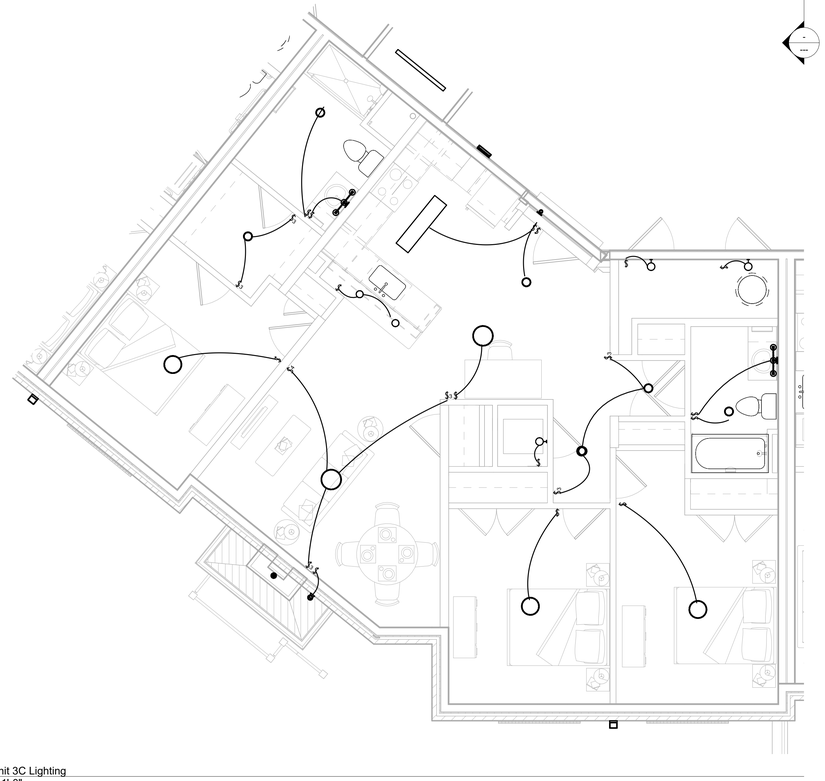
© GRIMM AND PARKER ARCHITECTURE, INC.



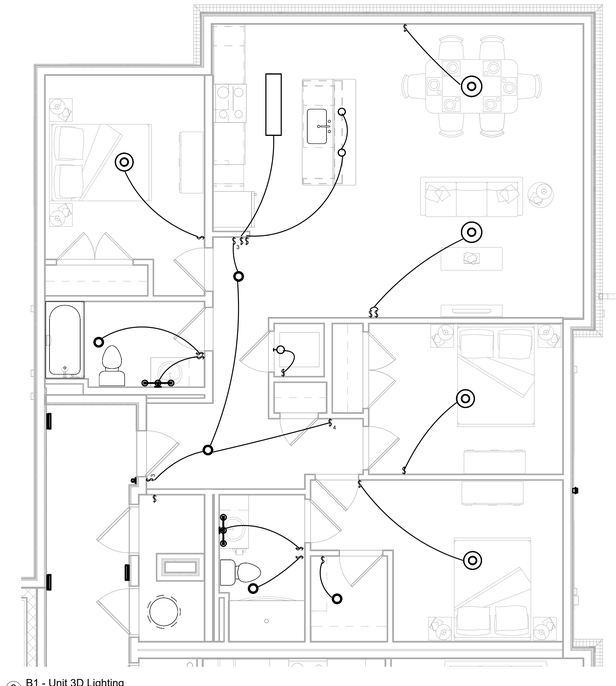
1 B1 - Unit 3C Power
1/4" = 1'-0"



4 B1 - Unit 3D Power
1/4" = 1'-0"



2 B1 - Unit 3C Lighting
1/4" = 1'-0"



3 B1 - Unit 3D Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS. SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

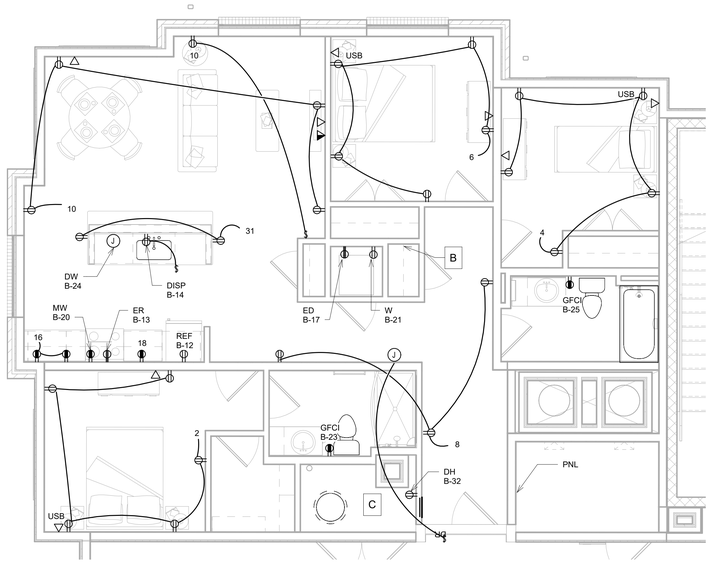
UNIT 3C, 3D
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #:
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

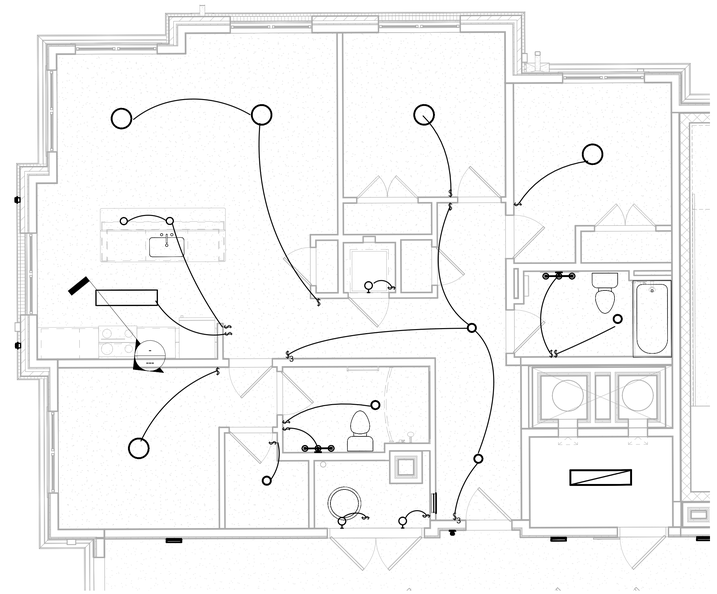
E-508
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

© GRIMM AND PARKER ARCHITECTURE, INC.



3 B1 - Unit 3F Power
1/4" = 1'-0"



4 B1 - Unit 3F Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS, SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

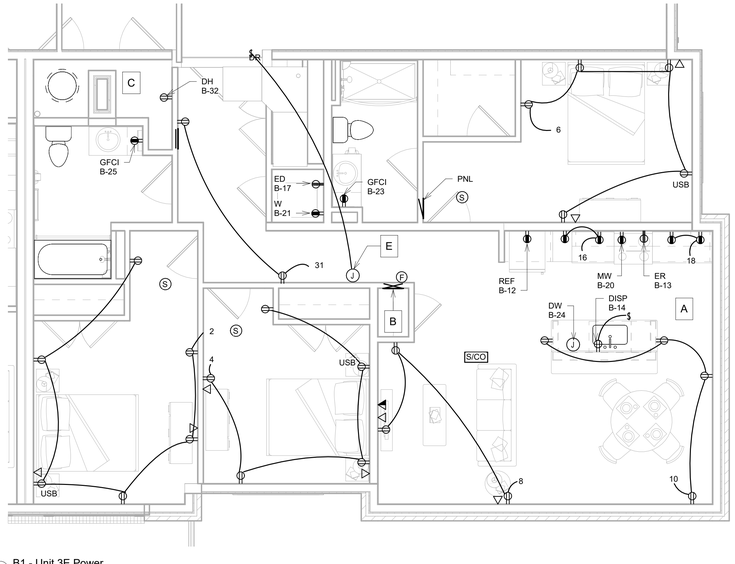
--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

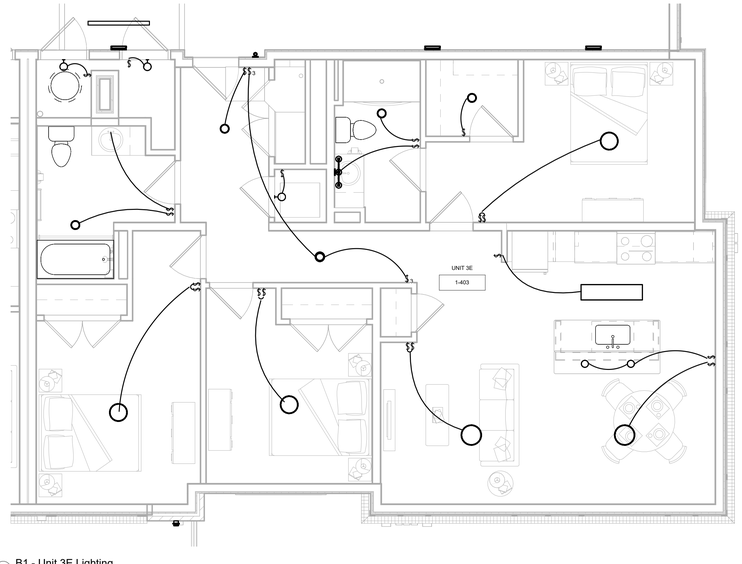
--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.



1 B1 - Unit 3E Power
1/4" = 1'-0"



2 B1 - Unit 3E Lighting
1/4" = 1'-0"

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

G+P GRIMM AND PARKER

GP #25144

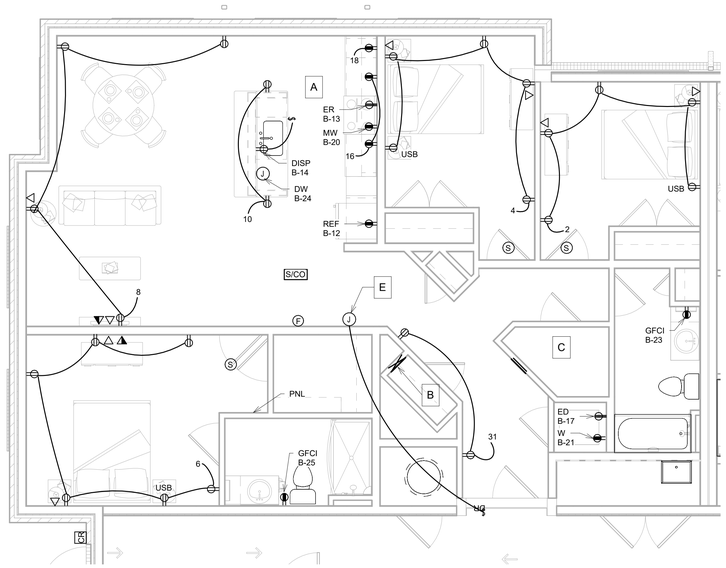
UNIT 3E, 3F
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION	#
5/14/2026	VH 4% HOTC APP.	A
06/30/2026	CONSTRUCTION ABILITY REVIEW	

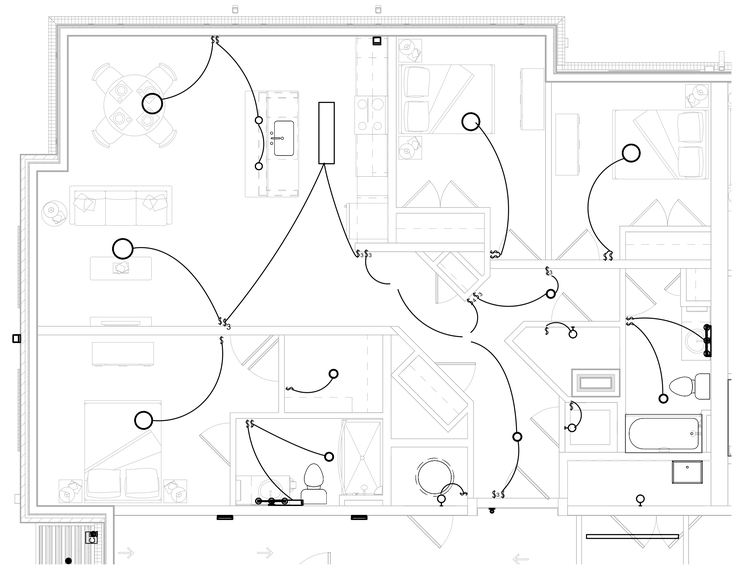
E-509
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.

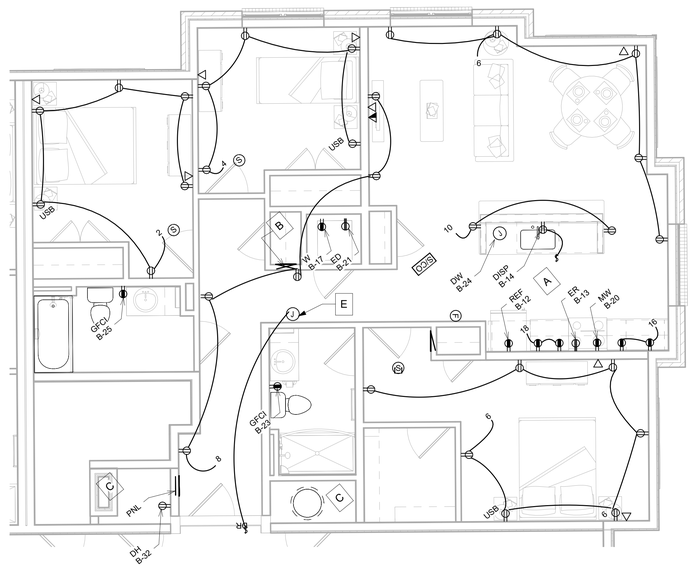
© GRIMM AND PARKER ARCHITECTURE, INC.



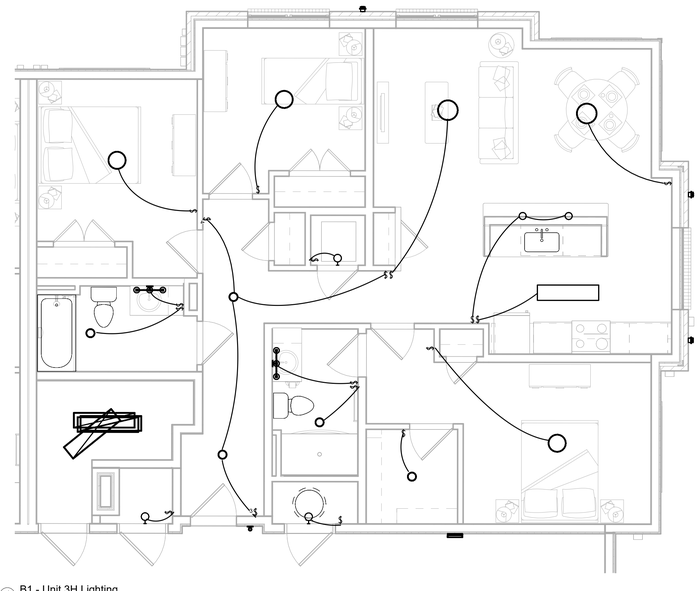
1 B3 - Unit 3G Power
1/4" = 1'-0"



2 B3 - Unit 3G Lighting
1/4" = 1'-0"



3 B1 - Unit 3H Power
1/4" = 1'-0"



4 B1 - Unit 3H Lighting
1/4" = 1'-0"

GENERAL NOTES

--SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LAYOUTS. SPECIFICATIONS, QUANTITIES, ETC. FIXTURES SHOWN ON THIS SHEET ARE FOR GENERAL SWITCHING PURPOSES ONLY.

--REFER TO HVAC DRAWINGS FOR INDOOR/OUTDOOR UNIT AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING FOR EACH IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--REFER TO PLUMBING DRAWINGS FOR WATER HEATER LOCATIONS AND REQUIREMENTS. PROVIDE AND INSTALL DISCONNECTS AND WIRING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.

--INSTALL ALL UNIT WASHERS LEFT OF UNIT DRYERS.

KEYED NOTES

A. ALL RECEPTACLES SERVING COUNTERTOPS IN KITCHEN AREA, AND ALL BATHROOM RECEPTACLES TO BE GFCI TYPE.
B. STRUCTURED CABLE BOX. SEE SHEET E-300 FOR DETAIL.
C. MECHANICAL CLOSET WITH HVAC EQUIPMENT AND WATER HEATER (SEE HVAC & PLUMBING PLANS). WIRE OUTSIDE AIR FAN, OA CONTROLLER, AND DAMPER IN THIS CLOSET TO 120V CIRCUIT THROUGH TIMER AND RELAY PROVIDED BY HVAC CONTRACTOR. (SEE OUTSIDE AIR SYSTEM DETAIL ON SHEET E300). COORDINATE WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. COORDINATE DEHUMIDIFIER OUTLET WITH EQUIPMENT & DUCT WORK FOR ACCESSIBILITY PRIOR TO ROUGH-IN.
D. WEATHER PROOF GFCI RECEPTACLE. LOCATE ABOVE BALCONY RAILING HEIGHT AT OPERABLE DOOR.
E. DOOR BELL SYSTEM. WIRE TO CIRCUIT SERVING GENERAL RECEPTACLES IN THIS AREA. VERIFY ALL REQUIREMENTS PRIOR TO ROUGH-IN.

MEI
Engineering, Inc.
Mechanical - Electrical - Industrial Consultants
1592 CF Pours Drive
Harrisonburg, VA 22802
(540) 432-6272
MEIengineeringinc.com

123 East Main St.
2nd Floor
Charlottesville, VA 22902
Tel: 434.296.5353
www.grimmandparker.com

GRIMM AND PARKER

GP #25144

UNIT 3G, 3H
ROANOKE GATEWAY
624 BULLITT AVE SE ROANOKE, VA 24022

DATE	SUBMISSION / REVISION / #
5/14/2026	VH 4% HOTC APP. A
06/30/2026	CONSTRUCTION ABILITY REVIEW

E-510
06/30/2026
CONSTRUCTABILITY REVIEW

© GRIMM AND PARKER ARCHITECTURE, INC.