GENERAL NOTES

1. ALL WIRING SHALL BE RUN CONCEALED UNLESS SPECIFIED OTHERWISE.
2. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
3. ALL FLOOR, MASONRY WALLS AND STRUCTURAL CEILING PENETRATIONS SHALL BE SLEEVED.
4. PROVIDED FIRE/MOISTURE SEAL FOR WALL, FLOOR OR CEILING PENETRATIONS.
5. PLACE ALL CABLE/WIRING IN CONDUIT OR RACEWAY. DO NOT LAY ON, OR SUPPORT CONDUIT FROM SUSPENDED CEILING OR PIPING AND DUCTWORK.
6. OUTLET BOXES SHALL BE MOUNTED FLUSH. CONDUIT SHALL BE RUN CONCEALED. WHERE WALLS ARE BLOCK, DEVICES AND WIRING SHALL BE SURFACE MOUNTED. PROVIDE WIREMOLD OR EQUAL TO SURFACE MOUNTED RACEWAY WITH FINISHED BOXES.
7. ALL WIRING WITHIN UTILITY CLOSETS MAY BE IN SURFACE MOUNTED CONDUIT. EMT MAY BE UTILIZED.
8. FLEXIBLE CONDUIT CONNECTIONS SHALL BE A MAXIMUM OF 6'-0".
9. CIRCUIT NUMBERS SHOWN ARE DIAGRAMMATIC. ELECTRICAL CONTRACTOR SHALL UTILIZE SPARE CIRCUIT AND PROVIDE CIRCUIT BREAKERS TO MATCH EXISTING. MINIMUM AIC RATING SHALL BE 10,000.
10. MC TYPE CONDUCTOR WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS. MC CABLE SHALL BE UTILIZED ONLY WHERE COMPLETELY CONCEALED.

LIGHTING NOTES

1. ALL CONDUIT, WIRING AND ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE, NATIONAL FIRE PROTECTION ASSOCIATION, AMERICAN'S WITH DISABILITIES ACT (ADA) AND ANY APPLICABLE LOCAL REGULATIONS.
2. ALL CONDUIT, FIXTURES AND OUTLETS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATION AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD, EXCEPT WHERE SPECIFIC DIMENSIONS AND DETAILS ARE SHOWN.
3. ALL LIGHTING FIXTURE SPACING DIMENSIONS AND MOUNTING HEIGHTS ARE RECOMMENDED LOCATIONS. SLIGHT VARIATIONS WHERE NECESSARY TO AVOID INTERFERENCE SHALL BE DETERMINED IN THE FIELD.
4. THE ELECTRICAL CONTRACTOR SHALL CONSULT AND COOPERATE WITH CONTRACTORS OF OTHER TRADES TO AVOID ANY INTERFERENCE IN THE INSTALLATION OF THEIR RESPECTIVE EQUIPMENT.
5. ALL CONDUIT SHALL BE (EMT). NO CONDUIT SMALLER THAN 3/4 INCH ELECTRICAL. TRADE SIZE SHALL BE USED, UNLESS SPECIFICALLY CALLED FOR ON THE DRAWINGS, EXCEPT THAT 1/2 INCH CONDUIT MAY BE USED FOR LIGHTING FIXTURE STEMS WHERE APPLICABLE.
6. MINIMUM SIZE OF CONDUCTOR SHALL BE #12 AWG UNLESS OTHERWISE NOTED.
7. MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
   a.) LIGHT SWITCHES, 4'-0" FROM FLOOR TO CENTERLINE.
   b.) LIGHTING PANELBOARDS, 6'-6" FROM FLOOR TO TOP.
   c.) LIGHT FIXTURES – SEE LIGHTING FIXTURE SCHEDULE, MOUNTING HEIGHT OF FIXTURE IS MEASURED TO BOTTOM OF REFLECTOR.
8. WHERE REQUIRED, ADDITIONAL SUPPORT STEEL FOR THE LIGHTING INSTALLATION SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SEISMIC RESTRAINTS SHALL BE INCLUDED AS PER MAINE STATE BUILDING CODE.
9. PROVIDE SEPARATE UN-SWITCHED NEUTRAL TO ALL EMERGENCY LIGHT FIXTURES CONTAINING EMERGENCY BALLASTS.
10. E.C. SHALL COORDINATE THE UNDERCABINET LIGHTING FIXTURE LOCATIONS WITH THE ARCHITECTURAL UNIT PLANS FOR EXACT LOCATIONS. PROVIDE END CAPS, JOINERS, ETC. FOR FIXTURES AS REQUIRED.

POWER NOTES

1. ALL CONDUIT, WIRING AND ELECTRICAL EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST STANDARDS OF THE NATIONAL & STATE ELECTRICAL CODES AND ANY APPLICABLE LOCAL REGULATIONS.
2. ALL CONDUITS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATION AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD, EXCEPT WHERE SPECIFIC DIMENSIONS AND DETAILS ARE SHOWN. ALL CONDUIT RUNS SHALL BE RIGIDLY SUPPORTED.
3. THE ELECTRICAL CONTRACTOR SHALL CONSULT AND COOPERATE WITH CONTRACTORS OF OTHER TRADES TO AVOID ANY INTERFERENCE IN THE INSTALLATION OF THEIR RESPECTIVE EQUIPMENT.
4. ALL CONDUIT SHALL BE EMT. NO CONDUIT SMALLER THAN 3/4 INCH ELECTRICAL TRADE SIZE SHALL BE USED, UNLESS SPECIFICALLY CALLED FOR ON THE DRAWINGS.
5. VISIT SITE AND EXAMINE CONDITIONS UNDER WHICH WORK MUST BE PERFORMED. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS COMPLETE ACCEPTANCE OF EXISTING CONDITIONS INCLUDING PREPARATORY WORK DONE BY OTHERS.
6. PERFORM WORK AND PROVIDE MATERIALS AND EQUIPMENT TO MAKE INSTALLATION COMPLETE IN EVERY DETAIL UNDER THIS CONTRACT WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS.
7. MATERIAL AND EQUIPMENT SHALL BE UNDERWRITER LABORATORIES LISTED FOR INTENDED SERVICE. MATERIALS AND INSTALLATION SHALL MEET REQUIREMENTS OF STATE ELECTRICAL CODE.
8. WIRING DEVICES SHALL BE SPECIFICATION GRADE, 20 AMP, WITH SMOOTH PLASTIC DEVICE PLATES AS MANUFACTURED BY HUBBELL, OR EQUAL IN COMMON AREAS AND RESIDENTIAL GRADE 15AMP RECEPTACLES IN THE APARTMENTS. COLOR AS APPROVED BY ARCHITECT.
9. CONDUCTORS AND CABLE SHALL BE MINIMUM #12 AWG, 600 VOLT, COPPER WITH TYPE THHN/THWN INSULATION. PROVIDE SEPARATE GREEN GROUND IN ALL FEEDERS. WIRE SIZE #8 AWG AND LARGER SHALL BE STRANDED, #10 AWG AND SMALLER SHALL BE SOLID. COLOR CODE CONDUCTORS BLACK, RED, BLUE, WITH WHITE NEUTRAL AND GREEN GROUND EXCEPT AS NOTED FOR 120 VOLT
10. INTERIOR BRANCH CIRCUITRY SHALL BE RUN IN "EMT", "MC" OR "RGS".
11. MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
    a.) CONVENIENCE RECEPTACLE (GENERAL), 1'-6" FROM FLOOR TO CENTERLINE.
    b.) CONVENIENCE RECEPTACLE (OFFICE), 1'-6" FROM FLOOR TO CENTERLINE.
    c.) TELEPHONE OUTLETS, 1'-6" FROM FLOOR TO CENTERLINE.
12. PROVIDE SEPARATE HOT, GROUND AND NEUTRAL CONDUCTOR FOR ALL CIRCUITS CONNECTED TO ARC-FAULT CIRCUIT BREAKERS.

OUTLETS IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS OR SIMILAR AREAS SHALL BE LOCATED WITHIN 6'-0" OF THE ROOM OPENING. ALL SUBSEQUENT OUTLETS SHALL BE SPACED AS TO NOT EXCEED 12'-0" BETWEEN OUTLETS. CONTRACTOR SHALL PROVIDE NECESSARY BLOCKING, SUPPORTS AND HANGERS IF STUDS DO NOT ALLOW THE 12'-0" SPACING TO BE ACHIEVED.

2014 NEC – 210.8(A) GROUND FAULT CIRCUIT-INTERRUPTER PROTECTION IN DWELLING UNITS

ALL 120VOLT SINGLE PHASE 15 AND 20 AMP RECEPTACLES INSTALLED IN DWELLING UNIT SHALL HAVE GROUND FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL. AREAS INCLUDE: BATHROOMS, GARAGES, OUTDOORS, CRAWL SPACES, UNFINISHED BASEMENTS, KITCHENS, SINKS, BOAT HOUSES, BATHTUBS OR SHOWER STALLS, LAUNDRY AREAS PER NEC ARTICLE 210.8(A).

521CMR: ACCESSIBLE GROUP 1 AND GROUP 2 UNITS (9.5.6)

ELECTRICAL OUTLETS, TELEPHONE OUTLETS, CABLE TV JACKS AND OTHER WALL OUTLETS SHALL BE LOCATED BETWEEN 15" AND 48" ABOVE THE FLOOR, MEASURED AT THE CENTERLINE OF THE LOWEST RECEPTACLE. ALL OUTLETS SHALL BE LOCATED NO LESS THAN 18" FROM INTERIOR CORNERS. WHEN OUTLETS ARE LOCATED ON WALLS ABOVE COUNTERS OR OTHER FIXTURES THAT ARE 22" OR GREATER IN DEPTH, THEY SHALL BE NO HIGHER THAN 44". IN GROUP 1 AND 2 UNITS, AT LEAST ONE ELECTRICAL OUTLET MUST BE PROVIDED ON THE SAME WALL AS THE TELEPHONE OUTLET AND THE DOOR CHIME. WHEREVER EXTERIOR DECKS, PATIOS AND BALCONIES ARE PROVIDED, AS EXTERIOR ELECTRICAL OUTLET SHALL ALSO BE PROVIDED. CONTRACTOR SHALL PROVIDE NECESSARY BLOCKING, SUPPORTS AND HANGERS IF STUDS DO NOT ALLOW THE 12"-0" SPACING TO BE ACHIEVED.

2014 NEC – 210.12(A) ARC FAULT CIRCUIT-INTERRUPTER PROTECTION IN DWELLING UNITS

PANELBOARD SHALL CONTAIN ARC-FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKERS FOR ALL 120VOLT SINGLE PHASE 15 AND 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS ETC. PER NEC ARTICLE 210.12(A).

2014 NEC – 406.12 TAMPER-RESISTANT RECEPTACLES IN DWELLING UNITS

IN ALL AREAS SPECIFIED IN 210.52, ALL NONLOCKING-TYPE, 125 VOLT, 15 AND 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER RESISTANT RECEPTACLES. AREAS INCLUDE: KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, BEDROOM, SUNROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNIT.

FIRE ALARM NOTES

1. THE ELECTRICAL CONTRACTOR SHALL COMPLETE A CERTIFICATE CERTIFYING THAT THE SYSTEM HAS BEEN 100 PERCENT TESTED AND FUNCTIONS IN COMPLETE COMPLIANCE WITH THE SYSTEM SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS. THE CERTIFICATE SHALL BE SIGNED BY THE INSTALLER, ELECTRICAL CONTRACTOR AND THE OWNER. AFTER RECEIPT OF THE CERTIFICATION, THE FIRE PREVENTION OFFICER AND/OR THE FIRE ALARM SUPERVISOR WILL CONDUCT AN INSPECTION IN THE COMPANY OF THE INSTALLER AND A REPRESENTATIVE OF THE OWNER WITHIN SCOPE OF WORK.
2. ALL PULL STATIONS MUST BE OF THE DOUBLE ACTION TYPE. BREAKGLASS RODS WILL NOT BE PERMITTED.
3. ALL FIRE ALARM VISUAL DEVICES SHALL BE SYNCHRONIZED.
4. ALL WIRING METHODS SHALL BE AS APPROVED BY THE WIRING INSPECTOR AND THE FIRE DEPARTMENT.
5. ALL SYSTEM COMPONENTS SHALL BE UL LISTED.
6. ALL WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NFPA 72 SERIES PAMPHLETS, AND ALL STATE AND LOCAL CODES.
7. THE ELECTRICAL CONTRACTOR MUST OBTAIN AN ELECTRICAL PERMIT FROM THE TOWN BUILDING DEPARTMENT AND A PERMIT FROM THE FIRE DEPARTMENT PRIOR TO COMMENCEMENT OF EQUIPMENT INSTALLATION. A FLOOR PLAN SHOWING ALL ALARM DEVICES, LOCATION OF MASTER BOX, PANELS, ANNUNCIATORS, A ONE-LINE WIRING DIAGRAM AND AN ANNUNCIATOR DETAIL SHOWING ZONE LABELING WILL BE REQUIRED TO BE SUBMITTED BEFORE THE FIRE DEPARTMENT ISSUES A PERMIT.
8. INSTALLATION OF EQUIPMENT SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
9. ALL FIRE ALARM EQUIPMENT, INSTALLATION AND OPERATION SHALL BE IN CONFORMANCE WITH THE PORTLAND FIRE DEPARTMENT INSTALLATION REQUIREMENTS AND SYSTEM INSTALLATION GUIDELINES.
10. ALL EQUIPMENT SHOWN ON DRAWINGS IS DIAGRAMMATIC.
11. PROVIDE AND INSTALL ALL NECESSARY WIRE, CONDUIT, RELAYS AND CONNECTIONS FROM ALL DUCT SMOKE DETECTORS TO THEIR ASSOCIATED EXHAUST FAN AND SUPPLY FAN CONTROLLERS. UPON ACTIVATION OF A DUCT SMOKE DETECTOR, IN ADDITION TO SOUNDING THE GENERAL ALARM, THE DUCT SMOKE DETECTOR SHALL IMMEDIATELY SHUT DOWN THE ASSOCIATED FAN.
12. THE FIRE ALARM SYSTEM SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY BOTH THE ENGINEER AND THE PORTLAND FIRE DEPARTMENT. THE SHOP DRAWINGS MUST BE SIGNED OFF BY THE FIRE DEPARTMENT AND ENGINEER PRIOR TO ORDERING AND INSTALLATION OF EQUIPMENT.
13. ABSOLUTELY NO CONNECTIONS WILL BE MADE TO THE MUNICIPAL FIRE ALARM CIRCUITS, EXCEPT BY PORTLAND FIRE DEPARTMENT PERSONNEL.
14. ALL WORK BEYOND THE MASTER BOX AND INSIDE OF THE BUILDING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
15. ALL JOINTS AND CONNECTIONS SHALL BE IN JUNCTION BOXES. ALL CONNECTIONS NOT ON APPROVED TERMINAL STRIPS SHALL BE SOLDERED AND TAPED. ALL JUNCTION BOXES SHALL BE PAINTED RED.
16. ALL EQUIPMENT SHALL BE MADE AVAILABLE FOR TEST AND INSPECTION WHEN REQUIRED BY THE FIRE DEPARTMENT.
17. ALL EQUIPMENT USED SHALL BE OF A TYPE APPROVED BY THE FIRE CHIEF THROUGH THE ALARM SUPERINTENDENT AND THE FIRE PREVENTION OFFICER.
18. ALL SYSTEMS SHALL BE DC, SUPERVISED, BATTERY STANDBY FIRE ALARM SYSTEM. A SEPARATE AC CIRCUIT MUST BE PROVIDED FOR THE FIRE ALARM SYSTEM. STANDBY BATTERIES AND THE CHARGER SYSTEM SHALL BE SUPERVISED.
19. THE BATTERIES USED WITH THE FIRE ALARM CONTROL PANEL SHALL BE CAPABLE OF OPERATING THE PANEL FOR TWENTY-FOUR (24) HOURS WITH A FIVE (5) MINUTE RING-DOWN AT THE END OF THE TWENTY-FOUR (24) HOUR PERIOD. THE CALCULATION USED TO DETERMINE BATTERY CAPACITY SHALL BE PRESENTED TO THE FIRE DEPARTMENT AT THE TIME OF INSPECTION. PROVIDE BATTERY CALCULATIONS WITH SHOP DRAWINGS.
20. ALL FIRE ALARM CONTROL PANELS SHALL HAVE A SIGN, RED IN COLOR, WITH THE WORDS "FIRE ALARM CONTROL" ENGRAVED ON IT. THE SIGN SHALL BE ON THE FRONT OF THE PANEL WITH MINIMUM ONE (1) INCH LETTERS.
21. UPON ACTIVATION OF ANY FIRE ALARM DEVICE, THE CONTROL PANEL SHALL SOUND THE EVACUATION SIGNALS, FLASH THE EVACUATION LIGHTS, INDICATE THE ZONE OF ACTIVATION AT THE PANEL AND TRIP THE MASTER BOX.
22. THE VISUAL INDICATORS OF THE EVACUATION SIGNALS MUST STAY ILLUMINATED UNTIL THE SYSTEM IS RESET.
23. AUDIBLE DEVICES INSTALLED IN SLEEPING AREAS SHALL HAVE A SOUND LEVEL OF AT LEAST 15dB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5dB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS OR A SOUND LEVEL OF AT LEAST 75dB, WHICHEVER IS GREATER, MEASURED AT THE PILLOW LEVEL IN THE AREA REQUIRED TO BE SERVED BY THE SYSTEM USING THE A-WEIGHTED SCALE (dBA).
24. REFER TO BOOK SPECIFICATIONS FOR PLANS AND SPECIFICATIONS FOR THE BI-AMPLIFICATION SYSTEM PER THE CITY OF PORTLAND.

ABBREVIATIONS

A/AMP	AMPERE	IMC	INTERMEDIATE METALLIC CONDUIT
AC	ALTERNATING CURRENT	JB	JUNCTION BOX
AF	AMPERE FRAME	KVA	KILOVOLT-AMPERE
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AFG	ABOVE FINISHED GRADE	LTG	LIGHTING
AIC	APRERE INTERRUPTING CAPACITY	PWR	POWER
AL	ALUMINUM	MCB	MAIN CIRCUIT BREAKER
AT	AMPERE TRIP	MEC	MAINE ELECTRICAL CODE
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
AWG	AMERICAN WIRE GAUGE	MTG	MOUNTING
C	CONDUIT	MTD	MOUNTED
CKT	CIRCUIT	MCC	MOTOR CONTROL CENTER
CB	CIRCUIT BREAKER	NEC	NATIONAL ELECTRICAL CODE
CU	COPPER	NS	NON-SYSTEM
CL	CENTERLINE	NTS	NOT TO SCALE
DC	DIRECT CURRENT	No., #	NUMBER
DE	DUAL ELEMENT	PC	PLUMBING CONTRACTOR
DWG	DRAWING	RPM	REVOLUTIONS PER MINUTE
EC	ELECTRICAL CONTRACTOR	RMS	ROOT MEAN SQUARE VALUE
EMH	ELECTRICAL MANHOLE	RGS	RIGID STEEL CONDUIT
EWC	ELECTRIC WATER COOLER	SF	SQUARE FOOT
EMT	ELECTRIC METALLIC CONDUIT	SN	SOLID NEUTRAL
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	SWBD	SWITCHBOARD
GC	GENERAL CONTRACTOR	TYP	TYPICAL
GND	GROUND	V	VOLTS
GFI	GROUND FAULT INTERRUPTING	VA	VOLT-AMPERE
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	VFD	VARIABLE FREQUENCY DRIVE
HP	HORSEPOWER	WP	WEATHERPROOF

BRANCH CIRCUIT AND FEEDER SYMBOLS

- BRANCH CIRCUIT OR FEEDER CONCEALED UNLESS OTHERWISE NOTED
- BRANCH CIRCUIT DIAGONAL LINES INDICATE NUMBER OR CONDUCTORS, NO DIAGONAL LINES INDICATES TWO (2) CONDUCTORS (1 PHASE AND 1 NEUTRAL). GROUND WIRE(S) NOT INDICATED. MINIMUM SIZE CONDUCTOR #12 AWG AND 3/4" CONDUIT, UNLESS OTHERWISE NOTED
- 4#1,1#6G-1 1/2"C — INDICATES (3) #1 AWG(PHASE), (1)#1 AWG(NEUTRAL), (1) #6 GROUND IN A 1 1/2" CONDUIT
- FLEXIBLE CONNECTION TO MOTOR OR EQUIPMENT
- P1-1 20A/1P — HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1. DIAGONAL LINES INDICATE (1) PHASE AND (1) NEUTRAL CONDUCTOR. (1) GROUNDING CONDUCTOR UNDERSTOOD.
- P1-1,3 (2)20A/1P — HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1 & 3. DIAGONAL LINES INDICATE (2) PHASE AND (2) NEUTRAL CONDUCTOR. (2) GROUNDING CONDUCTOR UNDERSTOOD.
- P1-1,3,5 (3)20A/1P — HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1, 3 & 5. DIAGONAL LINES INDICATE (3) PHASE AND (3) NEUTRAL CONDUCTOR. (3) GROUNDING CONDUCTOR UNDERSTOOD.
- P1-1,3,5 20A/3P — HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1, 3 & 5. DIAGONAL LINES INDICATE (3) PHASE AND (1) NEUTRAL CONDUCTOR. (1) GROUNDING CONDUCTOR UNDERSTOOD.
- P1-1,3,5 20A/3P — HOMERUN TO PANELBOARD 'P1' CIRCUIT NUMBER 1, 3 & 5. DIAGONAL LINES INDICATE (3) PHASE CONDUCTORS. NEUTRAL CONDUCTOR NOT REQUIRED. (1) GROUNDING CONDUCTOR UNDERSTOOD.

OCCUPANCY SENSORS

- * WALL MOUNTED OCCUPANCY SENSOR, 180', 300SF COVERAGE (20'W x 25'L), BY PHILIPS LIGHTING CONTROLS OR EQUAL: PHILIPS LIGHTING CONTROLS No. ITS2U-COLOR
- * WALL MOUNTED DUAL CIRCUIT RELAY OCCUPANCY SENSOR, 180', 300SF COVERAGE (20'W x 25'L), BY PHILIPS LIGHTING CONTROLS OR EQUAL: PHILIPS LIGHTING CONTROLS No. ITSABU-COLOR
- * D WALL MOUNTED DIMMABLE OCCUPANCY SENSOR, 180', 300SF COVERAGE (20'W x 25'L) BY PHILIPS LIGHTING CONTROLS OR EQUAL: PHILIPS LIGHTING CONTROLS No. ITSEBU-COLOR (MARK X BALLAST), No. ITSHDFU-COLOR (PHILIPS HDF BALLAST) OR No. ITSEBAU-COLOR (PHILIPS AMBISTAR BALLAST)
- * C CEILING MOUNTED OCCUPANCY SENSOR, 360' TWO-SIDED, 1955SF COVERAGE (50' DIAMETER), BY PHILIPS LIGHTING CONTROLS OR EQUAL: PHILIPS LIGHTING CONTROLS No. ITSCS (FOR PARTIAL COVERAGE APPLICATIONS, A PROVIDED MASK CAN BE TRIMMED TO ADJUST COVERAGE)

* COVERAGE DIMENSIONS APPLY TO DEVICE BEING CENTERED. ACTUAL COVERAGE'S CAN VARY ON THE SHAPE AND USE OF APPLICABLE SPACE. COVERAGE MAY BE REDUCED IF DEVICE IS MOUNTED GREATER THAN 12 FEET HIGH. SENSORS REQUIRE RELAY PACKS, PHILIPS LIGHTING CONTROLS No. ITSRP1U (SINGLE CIRCUIT), ITSRP2 (TWO CIRCUIT) OR ITSRP4 (FOUR CIRCUIT).

FIRE ALARM SYSTEM

- 15 — AUDIBLE/VISUAL DEVICE, TOP OF DEVICE MOUNTED NOT LESS THAN 90" AFF AND NOT LESS THAN 6" BELOW FINISHED CEILING
- 15 — VISUAL DEVICE, ENTIRE LENS MOUNTED NOT LESS THAN 80" AFF AND NOT MORE THAN 96" AFF
- 520 Hz LOW FREQUENCY MINIHORN DEVICE, TOP OF DEVICE MOUNTED NOT LESS THAN 90" AFF AND NOT LESS THAN 6" BELOW FINISHED CEILING
- A 15 — CEILING MOUNTED AUDIBLE/VISUAL DEVICE
- V 15 — CEILING MOUNTED VISUAL DEVICE
- M — MANUAL PULL STATION, MOUNTING HEIGHT 48" TO CENTERLINE AFF
- S NS D,R — SMOKE DETECTOR, "D" INDICATES DUCT MOUNTED SMOKE DETECTOR, "R" INDICATES ELEVATOR RECALL, "NS" INDICATES NON-SYSTEM
- H F,C — HEAT DETECTOR, "F" INDICATES 190' FIXED TEMPERATURE, "C" INDICATES MOUNTED ABOVE HUNG CEILING
- B NS — COMBINATION SMOKE/CARBON MONOXIDE DETECTOR, 120 VOLT HARDWIRE WITH BATTERY BACKUP, "NS" INDICATES NON-SYSTEM
- PS — FLOW SWITCH
- PS — PRESSURE SWITCH
- TS — TAMPER SWITCH
- LS — LOW PRESSURE ALARM SWITCH
- ALARM BELL, 120 VOLT HARDWIRED, EXTERIOR MOUNTED, WEATHERPROOF
- RED INDICATING BEACON, EXTERIOR MOUNTED, WEATHERPROOF
- REMOTE LED INDICATOR
- FIRE ALARM MASTER BOX
- KB — FIRE DEPARTMENT KEY BOX
- MM — MONITOR MODULE
- RTS — REMOTE TEST STATION
- ANN — FIRE ALARM ANNUNCIATOR PANEL
- FACP — FIRE ALARM CONTROL PANEL
- FPA — FIRE PUMP ANNUNCIATOR PANEL, BY OTHER WIRED BY EC
- RMB — RADIO MASTER BOX

SITE SYMBOLS

- UNDERGROUND CONDUIT OR DUCTBANK, REFER TO DRAWING E0.07
- E — MANHOLE, "E" DENOTES POWER, "C" DENOTES COMMUNICATIONS. MANHOLES SHALL BE PRECAST CONCRETE AND SHALL MEET OR EXCEED UTILITY REQUIREMENTS
- UTILITY POLE
- A — SECTION "A-A"
- Q — SITE LIGHTING FIXTURE, REFER TO LIGHTING FIXTURE SCHEDULE
- T — PAD MOUNTED TRANSFORMER

MISCELLANEOUS

- UM — UTILITY METER
- ECH 1 — MECHANICAL EQUIPMENT TAG, REFER TO MECHANICAL SCHEDULE
- TEL — COMMUNICATION SMART PANEL
- INT — APARTMENT INTERCOM UNIT BY OTHERS. REFER TO SHEET E0.07 FOR REQUIREMENTS WITH 120V RECEPTACLE
- CR — CARD READER
- DS — OVERHEAD GARAGE DOOR SENSOR

LIGHTING FIXTURE SYMBOLS

- A B C — FLUORESCENT LIGHTING FIXTURE, CEILING/SURFACE/RECESSED/PENDANT OR WALL MOUNTED. "A" DENOTES LIGHTING FIXTURE TYPE (SEE FIXTURE SCHEDULE), "2" DENOTES CIRCUIT NUMBER, "a" DENOTES SWITCH CONTROL
- B a,2 — COMPACT FLUORESCENT LIGHT FIXTURE, CEILING/SURFACE/RECESSED OR PENDANT MOUNTED. "B" DENOTES LIGHTING FIXTURE TYPE, "a" DENOTES CIRCUIT NUMBER, "b" DENOTES SWITCH CONTROL
- FLUORESCENT LIGHTING FIXTURE CONNECTED TO THE EMERGENCY GENERATOR, OR CONTAINS AN EMERGENCY BALLAST. SEE LIGHTING NOTE 9.
- EB EB — EMERGENCY BATTERY UNIT WITH TWO (2) HEADS
- EXIT SIGN, SHADED REGION INDICATES FACE

SWITCHING SYMBOLS

- S_a — SINGLE POLE SWITCH, RATED 20A, 120/277V, MOUNTING HEIGHT 48" TO CENTERLINE OF TOGGLE SWITCH IN "ON" POSITION, "a" DENOTES FIXTURE SWITCH CONTROL
- S_3 — THREE WAY SWITCH, RATED 20A, 120/277V, MOUNTING HEIGHT 48" TO CENTERLINE OF TOGGLE SWITCH IN "ON" POSITION, "a" DENOTES FIXTURE SWITCH CONTROL
- S_4 — FOUR WAY SWITCH, RATED 20A, 120/277V, MOUNTING HEIGHT 48" TO CENTERLINE OF TOGGLE SWITCH IN "ON" POSITION, "a" DENOTES FIXTURE SWITCH CONTROL
- S_M — MANUAL MOTOR STARTER, RATED 20A, 250V, COORDINATE MOUNTING HEIGHT IN FIELD, MOUNTING HEIGHT SHALL NOT EXCEED 6'-7" AFF

RECEPTACLES AND OUTLETS

- 5 — DUPLEX CONVENIENCE RECEPTACLE OUTLET, GROUNDING TYPE, RATED 20A, 125V TYPE. "5" DENOTES CIRCUIT NUMBER, MOUNTING HEIGHT 18" TO CENTERLINE AFF
- GROUND FAULT INTERRUPTING 20A, 125V RECEPTACLE, MOUNTING HEIGHT 18" TO CENTERLINE AFF
- DUPLEX CONVENIENCE OUTLET, MOUNTING HEIGHT 42" TO CENTERLINE AFF OR 6" ABOVE COUNTER TOP. OUTLETS MOUNTED NEXT TO HOSPITAL BEDS SHALL BE MOUNTED 48" TO CENTERLINE AFF
- GROUND FAULT DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER TOP
- DOUBLE DUPLEX CONVENIENCE OUTLET
- SWITCHED DOUBLE DUPLEX OUTLET
- USB DUPLEX CONVENIENCE OUTLET, MOUNTING HEIGHT 42" TO CENTERLINE AFF OR 6" ABOVE COUNTER TOP.
- J — JUNCTION BOX
- TEL — APARMENT "SMART" PANEL FOR TEL/COM
- VZ — VERIZON SUPPLIED APARMENT "SMART" PANEL FOR TEL/COM
- * TV — CABLE TELEVISION CONNECTION, FLUSH MOUNTING 18" TO CENTERLINE AFF WITH 1 GANG REDUCER COVER PLATE
- * TELEPHONE OUTLET, FLUSH MOUNTING HEIGHT 18" TO CENTERLINE AFF. "W" DENOTES WALL PHONE, MOUNTING HEIGHT 5'-0" TO CENTERLINE AFF, "P" DENOTES PAY PHONE, "F" DENOTES FAX MACHINE.
- * 2 GANG TELEPHONE/COMPUTER OR DATA OUTLET, FLUSH MOUNTING 18" TO CENTERLINE AFF WITH 1 GANG REDUCER COVER PLATE

* INDICATES 4"x4" BOX WITH 1" CONDUIT TO ABOVE HUNG CEILING WITH PULL WIRE

MOTOR AND CONTROLS

- 1.5 — MOTOR, NUMERAL INDICATES HORSEPOWER
- 3R — DISCONNECT SWITCH, NON-FUSIBLE TYPE, RATED 30A/3P, IN NEMA TYPE "1" ENCLOSURE, UNLESS OTHERWISE NOTED. "3R" DENOTES NEMA TYPE ENCLOSURE
- 30AF 20AT — DISCONNECT SWITCH, FUSED TYPE, RATED 30A, 20A FUSE, 3 POLE IN NEMA TYPE "1" ENCLOSURE, UNLESS OTHERWISE NOTED
- ST — SHUNT TRIP DISCONNECT, REFER TO ELEVATOR MANUFACTURER'S RECOMMENDATIONS
- CP — EQUIPMENT CONTROL PANEL
- VFD — VARIABLE FREQUENCY DRIVE

PANELBOARD AND TERMINAL CABINET

- LIGHTING OR POWER PANEL, SURFACE
- TELEPHONE TERMINAL 4'x8' 3/4" PLYWOOD BACKBOARD, PAINTED BLACK

BLW
BLW Engineers, Inc.
311 Great Road, Post Office Box 1451
Littleton, Massachusetts 01460
T: 978.486.4201 F: 978.426.0067
www.blwengineers.com
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Mixed Use Development

York & High Street
Portland, Maine

REVISION:

ISSUED: 11.23.16 - Issue for Permit

project architect: ---
drawn by: CMF

ELECTRICAL LEGEND AND NOTES

sheet number:
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