## GENERAL NOTES

1. NOT ALL SYMBOLS INDICATED IN THE LEGEND APPEAR ON THE DRAWINGS. COORDINATE WORK ACCORDINGLY. COMPLY WITH SPECIFICATIONS AND NOTES BELOW AS APPLICABLE.

2. ALL RECEPTACLES SHALL BE INSTALLED 18" AFF TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.

3. ALL WIRING SHALL BE COPPER. UNLESS OTHERWISE NOTED ALL WIRING SHALL BE 2\*12 AWG AND 1\*12 EQUIPMENT GROUNDING CONDUCTOR. HOMERUNS FED FROM A 20A-1P, 120V CIRCUIT IN EXCESS OF 70' SHALL BE

4. CONNECT BATTERY BACKED EMERGENCY AND EXIT LIGHTING TO NEAREST LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. CONNECT REMOTE HEADS WITH \*10 AWG COPPER CONDUCTORS. AC EXIT FIXTURES SHALL BE CONNECTED TO NEAREST EMERGENCY CIRCUIT OR AS INDICATED.

5. TEST ALL EMERGENCY LIGHTING UNITS FOR PROPER OPERATION OF LAMPS AND BATTERIES.

6. SEE MECHANICAL PLAN FOR HVAC UNITS, PUMPS AND FANS CONTROLLED BY THERMOSTATS (PROVIDED BY ATC CONTRACTOR).

7. FUSES AND OVERLOAD UNITS FOR MOTORS SHALL BE SIZED BASED ON ACTUAL MOTOR NAMEPLATE DATA AND IN ACCORDANCE WITH NEC. CIRCUIT BREAKERS FOR MOTORS ARE SUPPLIED AT MAX VALUE PER NEC (2.5 x FLA). SIZE IN THE FIELD IN ACCORDANCE WITH MFGR RECOMMENDATION.

8. ALL WORK SHALL COMPLY WITH THE LATEST REQUIREMENTS OF NFPA70, NFPA72, NFPA101 & ALL FEDERAL, STATE & LOCAL REGULATIONS.

9. ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN FIRE RATING FOR THE SEPARATION.

10. ALL ENCLOSURES, CONDUIT BODIES AND THEIR COVERS CONTAINING FIRE ALARM SYSTEM CONDUCTORS SHALL BE PAINTED RED.

11. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH ALL FEEDERS AND BRANCH CIRCUITS. SIZE IN ACCORDANCE WITH NFPA 70

12. COORDINATE INSTALLATION OF VOICE/DATA OUTLETS WITH OWNER, MIS OR COMMUNICATIONS CONTRACTOR.

13. LOCATE DISCONNECTS AT EQUIPMENT AS REQUIRED BY MANUFACTURER. LOCATIONS ON DRAWINGS ARE APPROXIMATE.

14. PROVIDE RISER OR PLENUM RATED CABLES ABOVE SUSPENDED CEILINGS. 15. THE CONTRACTOR SHALL SET ALL ELECTRONIC BREAKERS TO SPECIFIED TRIP SETTINGS BEFORE ENERGIZING EQUIPMENT.

16. PROVIDE EXPANSION FITTINGS FOR ALL UNDERGROUND RACEWAYS ENTERING ENCLOSURES ATTACHED TO FIXED STRUCTURES.

17. ALL CONDUCTOR INSULATION FOR BUILDING WIRE SHALL BE THWN/THHN UNLESS NOTED OTHERWISE.

18. PROVIDE LABEL ON SERVICE EQUIPMENT INDICATING AVAILABLE SHORT CIRCUIT CURRENT OBTAIN VALUES FROM ENGINEER.

19. PROVIDE ARC FAULT LABELS PER NFPA 70-ARTICLE 110.24

20. OUTLETS INSTALLED IN FIRE RATED WALLS BACK TO BACK SHALL BE SEPARATED BY 24" MINIMUM OR BE PROTECTED WITH "PUTTY PADS" PER 2009 INTERNATIONAL BUILDING CODE SECTION 713.3.2

21. PROVIDE AIR VAPOR BARRIER BOXES FOR WIRING DEVICES IN EXTERIOR WALLS AND INTERIOR SOUND CONTROL WALLS BETWEEN RESIDENT ROOMS. INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE LESSCO MODEL NUMBER: VAPORBOX

22. MINIMUM WIRE SIZE ON ALL BRANCH CIRCUITS SHALL BE \*12.

23. PROVIDE SIGN AT SERVICE ENTRANCE FOUIPMENT INDICATING TYPE AND LOCATION OF EMERGENCY GENERATOR PER NEC 700.7.

## ARRREVIATIONS

LED LIGHT EMITTING DIODE

Α	AMP	LP	LIGHTING PANELBOARD
AC	ALTERNATING CURRENT, ABOVE COUNTER	LTG	LIGHTING
ADA	AMERICANS WITH DISABILITIES ACT	LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
AF	AMP FRAME		CIRCUIT BREAKER TRIP FUNCTIONS AS INDICATED
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MCC	MOTOR CONTROL CENTER
AFF	ABOVE FINISHED FLOOR	MCCB	MOLDED CASE CIRCUIT BREAKER
AFG	ABOVE FINISHED GRADE	MCB	MAIN CIRCUIT BREAKER
AIC	AMPERES INTERRUPTING CAPACITY	MDP	MAIN DISTRUBITION PANEL
AL	ALUMINUM	MH	MANHOLE
AT	AMP TRIP	MLO	MAIN LUGS ONLY
ATC	AUTOMATIC TEMPERATURE CONTROL	MTS	MANUAL TRANSFER SWITCH
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED OF NURSE CALL
AWG	AMERICAN WIRE GAUGE	NEC	NATIONAL ELECTRICAL CODE
BLDG	BUILDING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
С	CONDUIT	NL	NIGHT LIGHT
СВ	CIRCUIT BREAKER	NO	NORMALLY OPEN
CI	CAST IRON	NO.	NUMBER
CKT	CIRCUIT	OL	OVERLOAD
Ų.	CENTERLINE	Р	POLE
CMP	CENTRAL MAINE POWER (ELECTRIC UTILITY)	PA	PUBLIC ADDRESS
CMU	CONCRETE MASONRY UNIT	PB	PUSH BUTTON
CT	CURRENT TRANSFORMER	PF	POWER FACTOR
CONC	CONCRETE	PH	PHASE
CS	CARBON STEEL	PNL	PANEL
CU	COPPER	TP1-2	TELE-POWER POLE - POLE AND CIRCUIT NUMBER AS INDICAT
CUH	CABINET UNIT HEATER	PSNH	PUBLIC SERVICE OF NEW HAMPSHIRE (ELECTRIC UTILITY)
DL	DAMP LOCATION	PT	POTENTIAL TRANSFORMER
EC	ELECTRICAL CONTRACTOR	PVC	POLYVINYL CHLORIDE
EF	EXHAUST FAN	RL	ELECTRICAL EQUIPMENT TO BE RELOCATED
ER	EXISTING REMAINS IN PLACE	RM	ELECTRICAL EQUIPMENT TO REMAIN
ERL	EXISTING RELOCATE	RSC	RIGID STEEL CONDUIT
ERM	EXISTING REMOVE	RTU	ROOF TOP UNIT
EUH	ELECTRIC UNIT HEATER	RV	ELECTRICAL EQUIPMENT TO REMOVE
EWC	ELECTRICAL WATER COOLER	RVNR	REDUCED VOLTAGE, NON-REVESING
FACP	FIRE ALARM CONTROL PANEL	SB	SMART BOARD
FAPS	FIRE ALARM PULL STATION	SF	SUPPLY FAN
FRP	FIBER REINFORCED PLASTIC	SLD	SINGLE LINE DIAGRAM
FVNR	FULL VOLTAGE, NON-REVERSING	SM	MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT
FWU	FURNISHED WITH UNIT	SS	
DC	DIRECT CURRENT		SOLID STATE SWITCHBOARD NUMBER AS DESIGNATED
GFI	GROUND FAULT INTERRUPTER	TC	TIME CLOCK
GND	GROUND	TS	TRANSFER SWITCH
HID	HIGH INTENSITY DISCHARGE	T&B	TOP AND BOTTOM
HOA HP	HAND-OFF-AUTOMATIC HORSEPOWER	TYP	TYPICAL
nr HPS	HIGH PRESSURE SODIUM	UG	UNDERGROUND
nrs HZ	HERTZ	V	VOLT
nz ICB	INSULATED CASE CIRCUIT BREAKER	V VA	VOLT-AMPERE
JB	JUNCTION BOX	VFD	VARIABLE FREQUENCY DRIVE
KAIC	THOUSAND AMP INTERRUPTING CAPACITY	W	WATT
KCMIL	THOUSAND CIRCULAR MIL	W/	WITH
KV	THOUSAND CINCOLAN WILL THOUSAND VOLTS	WP	WEATHERPROOF
KVA	THOUSAND VOLTS THOUSAND VOLT-AMPS	XFMR	TRANSFORMER
KW	THOUSAND WATTS (KILOWATT)	XP	EXPLOSION PROOF
LC	LIGHTING CONTACTORS	3PH	THREE PHASE
LCP	LATERAL CONTROL PIT	4 W	FOUR WIRE
	LIGHT CHITTING DIODE	3.W	TUDEE WIDE

3W THREE WIRE

## SYMBOL LEGEND

SURFACE MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING RECESSED MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING

(1/4) ELECTRIC MOTOR DRIVEN EQUIPMENT, HP SHOWN

H, DS, DW JUNCTION BOX, "H" DENOTES RANGE HOOD, "DS" DENOTES DISPOSAL,

"DW" DENOTES DISHWASHER SM MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE MOUNTED AT UNIT

DISCONNECT SWITCH, SIZE AND NUMBER OF POLES AS INDICATED ON DRAWING. PROVIDED BY EC UNLESS NOTED OTHERWISE. PROVIDE FUSES

WHERE RECOMMENDED BY MANUFACTURER. COMBINATION MOTOR STARTER/ DISCONNECT SWITCH WITH AUXILARY CONTACTS AND HAND-OFF-AUTO SWITCH AND RED RUN LIGHT. PROVIDED

AND INSTALLED BY EC UNLESS NOTED OTHERWISE. VARIABLE FREQUENCY DRIVE, PROVIDED BY MC, INSTALLED AND WIRED BY EC

DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT 18" AFF UNLESS NOTED OTHERWISE.

QUAD RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT 18" AFF UNLESS NOTED OTHERWISE

DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATÉ. MOUNT 18" AFF, BOTTOM RECEPTACLE SWITCHED.

GROUND FAULT DUPLEX RECEPTACLE 20A, 125V, TAMPER PROOF WITH MATCHING

REFRIGERATOR DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT RECEPTACLE AT 48" AFF.

① DUPLEX RECEPTACLE WITH ISOLATED GROUND, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT 18" AFF

UNLESS NOTED OTHERWISE. CL FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE- 20A, 125V SPEC GRADE GROUNDING

TYPE. "CL" DENOTES CEILING MONTED -♥ RANGE OUTLET 50 AMP, 250 VOLT, GROUNDING TYPE FLUSH MOUNTED 18" AFF

→ DRYER OUTLET 30 AMP, 250 VOLT, GROUNDING TYPE FLUSH MOUNTED 18" AFF

----- RACEWAY & WIRING OR MC CABLE RUN CONCEALED IN WALLS/CEILINGS ---- RACEWAY & WIRING RUN EXPOSED \_\_\_\_ RACEWAY & WIRING RUN CONCEALED UNDER FLOOR OR BURIED 30" BELOW FINISH GRADE

HOME RUN TO PANEL, WITH

PANEL AND CIRCUIT NUMBER

BRANCH CIRCUIT WIRING SHALL CONSIST OF (1)1/2"C-2\*12AWG+1\*12GND UNLESS OTHER WISE NOTED. (\*)ASTERISK DENOTED \*10AWG FOR ALL CIRCUITS CONTAINED IN HOME RUN. (\*\*)DOUBLE ASTERISK DENOTES (1)3/4"C-2\*8AWG+1\*10GND. PROVIDE EQUIPMENT GROUNDS IN ACCORDANCE WITH NFPA 70, ARTICLE 250.

CABLE TV JUNCTION BOX "CTV", SIZE AS REQUIRED BY CABLE UTILITY

TV OUTLET LOCATION, CABLE AND JACKS BY EC

TEMPERATURE CONTROL PANEL, PROVIDED BY MC WIRED BY EC

PUSHBUTTON FOR ELECTRICALLY OPERATED DOOR, FURN W/ DOOR OPERATOR, WIRED BY EC

O DOOR PUSHBUTTON-DOORBELL

DOOR ELECTRIC STRIKE

NIGHT LIGHT (UNSWITCHED)

모스S DOOR CHIME WITH STROBE-ADA COMMUNICATIONS REQUIREMENT

LIGHTING FIXTURES, CAPITAL LETTERS DENOTE TYPE PER

LIGHTING FIXTURE SCHEDULE. LOWER CASE LETTERS INDICATE  $D \mapsto$ SWITCH CONTROL. "ab" INDICATES INBOARD LAMPS CONTROLLED BY OUTBOARD SWITCHED "a" AND "b". DIAGONAL INDICATED

SELF CONTAINED EMERGENCY LIGHT W/2 HEADS DUAL-LITE (LED) MODEL LZ25NI-03L. 25 WATTS FOR 90 MINUTES, COLOR BY ARCHITECT

BATT EMERGENCY LIGHTING BATTERY PACK DUAL-LITE No LM130-12VI-0 SELF-DIAGNOSTIC

P INTERIOR REMOTE HEAD DUAL-LITE (LED) MODEL No CPRD 1203L, COLOR BY ARCHITECT

P√ EXTERIOR REMOTE HEAD DUAL-LITE (LED) MODEL No OCRD 1203L COLOR BY ARCHITECT EXIT LIGHT FIXTURE, UNSWITCHED, DUAL-LITE LX-U-R-W-E OR APPROVED EQUAL

EXIT/ EMERGENCY LIGHT COMBO, DUAL-LITE No EVCU-R-D4-IOR APPROVED EQUAL COLOR BY ARCHITECT

SECURITY CAMERA LOCATION, COORDINATE AND PROVIDE DUPLEX RECEPTACLE, DATA AND CONDUIT PER MANUFACTURERS RECOMMENDATIONS

CEILING MOUNTED MOTION SENSOR (WATTSTOPPER OR EQUAL) CORRIDORS: WT-2255 SENSOR & B120E-P POWER PACK. OTHER COMMON SPACES: WT-605 SENSOR & B120E-P POWER PACK. SENSORS AND RELAYS TO CONTROL CIRCUITS IN SPACES INDICATED. DEVICES SHALL PROVIDE FULL COVERAGE IN AREAS INSTALLED. DT INDICATES DUAL TECHNOLOGY

PIR INDICATED PASSIVE INFRARED TECHNOLOGY  $S_{MS}$  WALL MOUNTED SWITCH MOTION SENSOR. MOUNT AT 48" AFF UNLESS OTHER WISE NOTE S SINGLE POLE SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF, 3=3-WA

 $\mathbb{S}_4 \mathbb{S}_3$  4=4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD. SWITCH WITH PILOT LIGHT, SWITCH SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE SPL IDENTIFYING USE

 $S_{\mathsf{RF}}$  REMOTE RANGE HOOD FAN SWITCH, CONNECT TO HOOD FAN THRU HOOD JUNCTION BOX.

SRL REMOTE RANGE HOOD LIGHT SWITCH, CONNECT TO HOOD LIGHT THRU JUNCTION BOX. SB BURNER SAFETY SWITCH, PROVIDE WITH RED PLATE, MOUNTED 72" AFF

D. D SINGLE POLE DIMMER SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF  $\mathcal{D}_4 \mathcal{D}_3$  3=3-WAY, 4=4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.

PC PHOTOCELL LC LIGHTING CONTACTOR

TC TIMECLOCK

▼ TELEPHONE/DATA DUAL JACK, MOUNT 18"AFF, RUN TWO CAT 6 CABLES BACK TO TBB

∇ DATA JACK, RUN TWO CAT 6 CABLES BACK TO TBB.

CL FLUSH FLOOR MOUNTED TELEPHONE/DATA DUAL JACK, RUN TWO CAT 6 CABLES BACK TO TBB. "CL" DENOTES CEILING MOUNTED

▼ TELEPHONE JACK, MOUNT 18"AFF UNLESS NOTED OTHERWISE, RUN ONE CAT 6 CABLE BACK TO TBB. TELEPHONE BACK BOARD

WIFIROUTER, OCE CAT 6 CABLE BACK TO TBB OR IT ROOM. MOUNT ABOVE CEILING,

"W" DENOTES WALL MOUNTED AT 72" AFF INTERCOM PANEL IN UNIT

INTERCOM PANEL AT RECEPTION

CARD READER LOCATION: PROVIDE BOX AND 3/4" CONDUIT TO NEAREST LOCATION ABOVE SUSPENDED CEILING. PROVIDE 120V DOOR STRIKE POWER FROM NEAREST RECEPTACLE CIRCUIT.

FACE FIRE ALARM CONTROL PANEL WITH DEDICATED TELEPHONE JACK

ANN FIRE ALARM ANNUNCIATOR PANEL

FEM FIRE EXTINGUISHER ELECTRONIC MONITOR-SHALL BE ACCOMPLISHED THROUGH USE OF AN ADDRESSABLE INTERFACE DEVICE AND SHALL PROVIDE INPUT TO THE FACP

FIRE ALARM AUDIO/VISUAL, MOUNT 6'-8"AFF, NUMBER DENOTES CANDELA RATING. "MH" DENOTES MINIHORN, "CL" DENOTES CEILING MOUNTED. NO DESIGNATION EQUALS 15cd

F FIRE ALARM PULL STATION, MOUNT 48"AFF

15 SDJ FIRE ALARM VISUAL STROBE ONLY, FLUSH MOUNT 6'-8" AFF, NUMBER DENOTES CANDELA RATINGS. "CL" DENOTES CEILING MOUNTED

SYSTEM CONNECTED SMOKE / CARBON MONOXIDE DETECTOR,

PHOTOELECTRIC TYPE 135° SYSTEM CONNECTED FIXED TEMPERATURE HEAT DETECTOR

SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED.

SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED. "ER" DENOTES ELEV RECALL SYSTEM CONNECTED SMOKE DETECTOR, PHOTOELECTRIC TYPE, WITH SOUNDER BASE

© CARBON MONOXIDE DETECTOR

SD DUCT SMOKE DETECTOR & TEST STATION

FD/SD FIRE/SMOKE DAMPER, SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE ALL WIRING CONNECTIONS AND FIRE ALARM DUCT SMOKE DETECTORS, ADDRESSABLE MODULES AND PROGRAMMING.

SPRINKLER SYSTEM FLOW SWITCH | SUPPLIED BY SPRINKLER CONTRACTOR \rightarrow WIRED BY EC, VERIFY LOCATIONS WITH

SPRINKLER SYSTEM TAMPER SWITCH SPRINKLER CONTRACTOR.

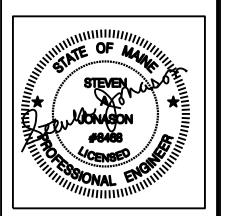
S CEILING MOUNTED SPEAKER, COORDINATE SPAKER WIRE RUN WITH OWNERS IT PRIOR TO ROUGH-IN

Richard Curtis

& Associates

PO Box 9739-1150 Portland, ME 04104-5039 Phone: (207)797-6300 Fax: (207)797-6303 rcurtisassociates@maine.rr.com





Uwner:

SSA REALTY

One City Center Portland, ME 04103

Contractor: DMC PAINTING & REMOLDING 59 Sanford St Portland, ME 04103 207-856-1838

| Project:

RENOVATIONS AZZ DT OFFICES

550 Forest Avenue

Portland, ME 04103

Project No: 10403

Drawing Title:

ABBREVIATIONS k symbols

|Scale: 1/8"=1'-0" |Date: 09 Dec 2016 **IRevision Dates:** 10/21/16-75% Progress | 12/09/16-Final Review 1/04/17-For Permit

Drawing Number