

GENERAL NOTES

- NOT ALL SYMBOLS INDICATED IN THE LEGEND APPEAR ON THE DRAWINGS. COORDINATE WORK ACCORDINGLY. COMPLY WITH SPECIFICATIONS AND NOTES BELOW AS APPLICABLE.
- ALL RECEPTACLES SHALL BE INSTALLED 18" AFF TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.
- MOUNT PANELS IN RESIDENTIAL SPACES SO NO CIRCUIT BREAKER HANDLE IS HIGHER THAN 44" AFF.
- ALL WIRING SHALL BE COPPER UNLESS DESIGNATED AS "AL" UNLESS OTHERWISE NOTED. ALL WIRING SHALL BE #12 AWG AND #12 EQUIPMENT GROUNDING CONDUCTOR. HOMERUNS FED FROM A 20A-1P, 120V CIRCUIT IN EXCESS OF 70' SHALL BE #10 AWG.
- 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.
- TEST ALL EMERGENCY LIGHTING UNITS FOR PROPER OPERATION OF LAMPS AND BATTERIES.
- SEE MECHANICAL PLAN FOR HVAC UNITS, PUMPS AND FANS CONTROLLED BY THERMOSTATS (PROVIDED BY ATC CONTRACTOR).
- 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 MFR RECOMMENDATION.
- ALL WORK SHALL COMPLY WITH NFPA70, NFPA72, NFPA101 & ALL FEDERAL, STATE & LOCAL REGULATIONS.
- ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN FIRE RATING FOR THE SEPARATION.
- ALL ENCLOSURES, CONDUIT BODIES AND THEIR COVERS CONTAINING FIRE ALARM SYSTEM CONDUCTORS SHALL BE PAINTED RED.
- AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH ALL FEEDERS AND BRANCH CIRCUITS. SIZE IN ACCORDANCE WITH NFPA 70 ARTICLE 250.
- PROVIDE TWO BALLASTS FOR EACH FIXTURE INDICATED AS REQUIRING DUAL LEVEL SWITCHING. ONE BALLAST TO CONTROL OUTER LAMPS AND THE SECOND BALLAST TO CONTROL INNER LAMPS).
- COORDINATE INSTALLATION OF VOICE/DATA OUTLETS WITH OWNER, MIS OR COMMUNICATIONS CONTRACTOR.
- LOCATE DISCONNECTS AT EQUIPMENT AS REQUIRED BY MANUFACTURER. LOCATIONS ON DRAWINGS ARE APPROXIMATE.
- OPERATE ALL FLUORESCENT AND METAL HALIDE LAMPS FROM INITIAL INSTALLATION FOR 100 HOURS AT FULL OUTPUT (NO DIMMING) TO SEASON LAMPS AND STABILIZE LAMP COLOR.
- PROVIDE RISER OR PLENUM RATED CABLES ABOVE SUSPENDED CEILINGS.
- THE CONTRACTOR SHALL SET ALL ELECTRONIC BREAKERS TO SPECIFIED TRIP SETTINGS BEFORE ENERGIZING EQUIPMENT.
- PROVIDE EXPANSION FITTINGS FOR ALL UNDERGROUND RACEWAYS ENTERING ENCLOSURES ATTACHED TO FIXED STRUCTURES.
- OUTDOOR RECEPTACLE COVERS SHALL COMPLY WITH NFPA 70 - ARTICLE 406.9.
- ALL CONDUCTOR INSULATION FOR BUILDING WIRE SHALL BE THWN/THHN UNLESS NOTED OTHERWISE.
- PROVIDE LABEL ON SERVICE EQUIPMENT INDICATING AVAILABLE SHORT CIRCUIT CURRENT OBTAIN VALUES FROM ENGINEER.
- PROVIDE ARC FAULT LABELS PER NFPA 70-ARTICLE 110.24
- IF BUILDING REQUIRES TWO SERVICE ENTRANCES, PROVIDE SIGNS PER NFPA 70-230.
- 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
- 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
- MINIMUM WIRE SIZE ON ALL BRANCH CIRCUITS SHALL BE #12.
- PROVIDE SIGN AT SERVICE ENTRANCE EQUIPMENT INDICATING TYPE AND LOCATION OF EMERGENCY GENERATOR PER NEC 700.7.

ABBREVIATIONS

A	AMP	LTG	LIGHTING
AC	ALTERNATING CURRENT, ABOVE COUNTER	LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT CIRCUIT BREAKER TRIP FUNCTIONS AS INDICATED
ADA	AMERICANS WITH DISABILITIES ACT	MCC	MOTOR CONTROL CENTER
AF	AMP FRAME	MCCB	MOLDED CASE CIRCUIT BREAKER
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MDP	MAIN DISTRIBUTION PANEL
AFG	ABOVE FINISHED GRADE	MH	MANHOLE
AIC	AMPERES INTERRUPTING CAPACITY	MIS	MANAGEMENT INFORMATION SYSTEM
AL	ALUMINUM	MLO	MAIN LUGS ONLY
AT	AMP TRIP	MTS	MANUAL TRANSFER SWITCH
ATC	AUTOMATIC TEMPERATURE CONTROL	NC	NORMALLY CLOSED OF NURSE CALL
ATS	AUTOMATIC TRANSFER SWITCH	NEC	NATIONAL ELECTRICAL CODE
AWG	AMERICAN WIRE GAUGE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
BLDG	BUILDING	NL	NIGHT LIGHT
C	CONDUIT	NO	NORMALLY OPEN
CB	CIRCUIT BREAKER	NO.	NUMBER
CI	CAST IRON	OL	OVERLOAD
CKT	CIRCUIT	P	POLE
CL	CENTERLINE	PA	PUBLIC ADDRESS
CMP	CENTRAL MAINE POWER (ELECTRIC UTILITY)	PB	PUSH BUTTON
CMU	CONCRETE MASONRY UNIT	PF	POWER FACTOR
CT	CURRENT TRANSFORMER	PH	PHASE
CONC	CONCRETE	PNL	PANEL
CS	CARBON STEEL	TP1-2	TELE-POWER POLE - POLE AND CIRCUIT NUMBER AS INDICATED
CU	COPPER	PSNH	PUBLIC SERVICE OF NEW HAMPSHIRE (ELECTRIC UTILITY)
CUH	CABINET UNIT HEATER	PT	POTENTIAL TRANSFORMER
DL	DAMP LOCATION	PVC	POLYVINYL CHLORIDE
EC	ELECTRICAL CONTRACTOR	RL	ELECTRICAL EQUIPMENT TO BE RELOCATED
EF	EXHAUST FAN	RM	ELECTRICAL EQUIPMENT TO REMAIN
ERL	EXISTING RELOCATE	RSC	RIGID STEEL CONDUIT
ERV	EXISTING REMOVE	RTU	ROOF TOP UNIT
ETR	EXISTING TO REMAIN	RV	ELECTRICAL EQUIPMENT TO REMOVE
EUH	ELECTRIC UNIT HEATER	RVNR	REDUCED VOLTAGE, NON-REVEISING
EWC	ELECTRICAL WATER COOLER	SB	SMART BOARD
FACP	FIRE ALARM CONTROL PANEL	SF	SUPPLY FAN
FAPS	FIRE ALARM PULL STATION	SLD	SINGLE LINE DIAGRAM
FRP	FIBER REINFORCED PLASTIC	SM	MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT
FWNR	FULL VOLTAGE, NON-REVERSING FURNISHED WITH UNIT	SS	SOLID STATE
FWU	FURNISHED WITH UNIT	SWBD-1	SWITCHBOARD NUMBER AS DESIGNATED
DC	DIRECT CURRENT	TC	TIME CLOCK
GFI	GROUND FAULT INTERRUPTER	TS	TRANSFER SWITCH
GND	GROUND	T&B	TOP AND BOTTOM
HD	HIGH INTENSITY DISCHARGE	TYP	TYPICAL
HOA	HAND-OFF-AUTOMATIC	UG	UNDERGROUND
HP	HORSEPOWER	V	VOLT
HPS	HIGH PRESSURE SODIUM	VA	VOLT-AMPERE
HZ	HERTZ	VFD	VARIABLE FREQUENCY DRIVE
ICB	INSULATED CASE CIRCUIT BREAKER	W	WATT
JB	JUNCTION BOX	W/	WITH
KAC	THOUSAND AMP INTERRUPTING CAPACITY	WP	WEATHERPROOF TRANSFORMER
KCMIL	THOUSAND CIRCULAR MIL	XFMR	TRANSFORMER
KV	THOUSAND VOLTS	XP	EXPLOSION PROOF
KVA	THOUSAND VOLT-AMPS	3PH	THREE PHASE
KW	THOUSAND WATTS (KILOWATT)	4W	FOUR WIRE
LC	LIGHTING CONTACTORS	3W	THREE WIRE
LCP	LATERAL CONTROL PIT		
LED	LIGHT EMITTING DIODE		
LP	LIGHTING PANELBOARD		

SYMBOL LEGEND

	SURFACE MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING
	RECESSED MOUNTED POWER PANEL, SEE PANEL SCHEDULES FOR RATING
	ELECTRIC MOTOR DRIVEN EQUIPMENT, HP SHOWN
H, DS, DW @	JUNCTION BOX, "H" DENOTES RANGE HOOD, "DS" DENOTES DISPOSAL UNIT, "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 AUXILIARY CONTACTS AND HAND-OFF-AUTO SWITCH AND RED RUN LIGHT. PROVIDED AND INSTALLED BY EC UNLESS NOTED OTHERWISE.
VFD	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 PLATE. MOUNT 18" AFF, BOTTOM RECEPTACLE SWITCHED.
	GROUND FAULT DUPLEX RECEPTACLE 20A, 125V, TAMPER PROOF WITH MATCHING PLATE FURNISHED W/ OUTLET. FLUSH MOUNTED 45" AFF UNLESS OTHERWISE NOTED.
	REFRIGERATOR DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF AND MATCHING PLATE. MOUNT RECEPTACLE AT 48" AFF.
USB	DUPLEX RECEPTACLE, 20A, 125V SPEC GRADE GROUNDING TYPE, TAMPER PROOF WITH (2) USB CHARGING PORTS, COLOR BY ARCH. MOUNT 18" AFF UNLESS NOTED OTHERWISE.
CL	FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE - 20A, 125V SPEC GRADE GROUNDING TYPE. "CL" DENOTES CEILING MOUNTED
	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 OTHERWISE NOTED. (+)ASTERISK DENOTES *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
	DOOR PUSHBUTTON-DOORBELL
	DOOR ELECTRIC STRIKE
	DOOR CHIME WITH STROBE-ADA COMMUNICATIONS REQUIREMENT
	LIGHTING FIXTURES, CAPITAL LETTERS DENOTE TYPE PER LIGHTING FIXTURE SCHEDULE. LOWER CASE LETTERS INDICATE SWITCH CONTROL. "ob" INDICATES INBOARD LAMPS CONTROLLED BY OUTBOARD SWITCHED "a" AND "b". DIAGONAL INDICATED NIGHT LIGHT (UNSWITCHED)
	SELF CONTAINED EMERGENCY LIGHT W/2 HEADS DUAL-LITE (LED) MODEL LZ25NI-03L, 25 WATTS FOR 90 MINUTES, COLOR BY ARCHITECT
	EMERGENCY LIGHTING BATTERY PACK DUAL-LITE No LM130-12VI-0 SELF-DIAGNOSTIC
	INTERIOR REMOTE HEAD DUAL-LITE (LED) MODEL No CPRD 1203L, COLOR BY ARCHITECT
	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-I OR APPROVED EQUAL COLOR BY ARCHITECT
	SECURITY CAMERA LOCATION, COORDINATE AND PROVIDE DUPLEX RECEPTACLE, DATA AND CONDUIT PER MANUFACTURERS RECOMMENDATIONS
DT	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.
PIR	DEVICES SHALL PROVIDE FULL COVERAGE IN AREAS INSTALLED. DT INDICATES DUAL TECHNOLOGY PIR INDICATED PASSIVE INFRARED TECHNOLOGY
	WALL MOUNTED SWITCH MOTION SENSOR. MOUNT AT 48" AFF UNLESS OTHERWISE NOTED
	SINGLE POLE SWITCH, 120V, 20A, SPEC GRADE, GROUNDING TYPE, MOUNT 48" AFF, 3-3-WAY, 4-4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.
	SWITCH WITH PILOT LIGHT, SWITCH SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE IDENTIFYING USE
	REMOTE RANGE HOOD FAN SWITCH, CONNECT TO HOOD FAN THRU HOOD JUNCTION BOX.
	REMOTE RANGE HOOD LIGHT SWITCH, CONNECT TO HOOD LIGHT THRU JUNCTION BOX.
	BURNER SAFETY SWITCH, PROVIDE WITH RED PLATE, MOUNTED 72" AFF
	SINGLE POLE DIMMER SWITCH, 120V, 20A, SPEC. GRADE, GROUNDING TYPE, MOUNT 48" AFF, 3-3-WAY, 4-4-WAY, LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.
	PHOTOCELL
	LIGHTING CONTACTOR
	TIMECLOCK
	TELEPHONE/DATA DUAL JACK, MOUNT 18" AFF. RUN TWO CABLES BACK TO TBB. SEE SPECIFICATIONS FOR FURTHER INFORMATION
	DATA JACK, RUN TWO CABLES BACK TO TBB. SEE SPECIFICATIONS FOR FURTHER INFO
	FLUSH FLOOR MOUNTED TELEPHONE/DATA DUAL JACK, RUN TWO CABLES BACK TO TBB. "CL" DENOTES CEILING MOUNTED
	TELEPHONE JACK, MOUNT 18" AFF UNLESS NOTED OTHERWISE, RUN ONE CABLE BACK TO TBB. TELEPHONE BACK BOARD
	WiFiROUTER, RUN CABLE BACK TO TBB OR IT ROOM. MOUNT ABOVE CEILING, "W" DENOTES WALL MOUNTED AT 72" AFF
	INTERCOM PANEL IN UNIT
	INTERCOM STATION AT FRONT ENTRY
	CARD READER LOCATION: PROVIDE BOX AND 3/4" CONDUIT TO NEAREST LOCATION ABOVE SUSPENDED CEILING. PROVIDE 120V DOOR STRIKE POWER FROM NEAREST RECEPTACLE CIRCUIT.
	FIRE ALARM CONTROL PANEL WITH DEDICATED TELEPHONE JACK
	FIRE ALARM ANNUNCIATOR PANEL
	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 MINI-HORN, "CL" DENOTES CEILING MOUNTED. NO DESIGNATION EQUALS 15cd
	FIRE ALARM PULL STATION, MOUNT 48" AFF
	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
	SYSTEM CONNECTED FIXED TEMPERATURE HEAT DETECTOR
	SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED.
	SMOKE DETECTOR, PHOTOELECTRIC TYPE, SYSTEM CONNECTED. "ER" DENOTES ELEVATOR RECALL
	SYSTEM CONNECTED SMOKE DETECTOR, PHOTOELECTRIC TYPE, WITH SOUNDER BASE
	CARBON MONOXIDE DETECTOR
	DUCT SMOKE DETECTOR & TEST STATION
	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
	SPRINKLER SYSTEM TAMPER SWITCH } WIRED BY EC, VERIFY LOCATIONS WITH SPRINKLER CONTRACTOR.
	MAGNETIC DOOR HOLD
	NURSE CALL BASE STATION
	NURSE CALL PULL STATION
	NURSE CALL ANNUNCIATOR LIGHT
	WP DENOTES WEATHERPROOF CONSTRUCTION
	RP DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE REPLACED
	RM OR ETR DENOTES EXISTING ELECTRICAL EQUIPMENT TO REMAIN
	RL DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE RELOCATED
	RV DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER AND MODEL NUMBER	LAMP INFO	REMARKS
A			4'-0" LOW PROFILE WRAPAROUND
B		LED	SURFACE MOUNTED DOWNLIGHT
C			DECORATIVE WALL SCONCE
D		LED	UNDERCABINET LIGHTBAR
E			TRACK LIGHTING w/ PENDANT
F			TRACK LIGHTING w/ LINE VOLTAGE FIXTURE HEADS
G			CLOSET FIXTURE
H			DECORATIVE WALL SCONCE

NOTES:

- FIXTURES SHALL BE ENERGY STAR RATED OR HAVE HIGH PERFORMANCE BALLASTS AND LAMPS TO MEET STATE EFFICIENCY CRITERIA.
- CONTRACTOR SHALL APPLY FOR ALL STATE EFFICIENCY INCENTIVES ON OWNERS BEHALF.

NOT FOR CONSTRUCTION

BENNETT ENGINEERING
MECHANICAL • ELECTRICAL
(207) 865-9475

IDEAL ELECTRIC
86 China Rd.
Winslow, ME 04901

65 MUNJOY ST. APARTMENTS
65 Munjoy St., Portland, ME 04101
ELECTRICAL NOTES, LEGEND, DETAILS & FIXTURE SCHEDULE

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