

ABBREVIATIONS

Ⓜ	AT
A	AMPERE
A.F.	AMP FRAME
A.F.C.	ABOVE FINISHED CEILING
A.F.F.	ABOVE FINISHED FLOOR
A.I.C.	AMPERE INTERRUPTING CAPACITY
Al	ALUMINUM
AM	AMMETER
AMP.	AMPERE
A.S.	AMP SENSOR
A.T.	AMP TRIP
A.T.C.	AUTOMATIC TEMPERATURE CONTROL
A.T.S.	AUTOMATIC TRANSFER SWITCH
AUX.	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BKR	BREAKER
BLDG.	BUILDING
C.	CONDUIT
C/B	CIRCUIT BREAKER
CUH.	CABINET UNIT HEATER
CKT.	CIRCUIT
CLG.	CEILING
C.T.	CURRENT TRANSFORMER
CU.	COPPER
DEMO.	DEMOLITION
D.C.	DIRECT CURRENT
DIA.	DIAMETER
DISC.	DISCONNECT
DWG.	DRAWING
E.	EXISTING TO REMAIN
E.A.	EACH
E.C.	ELECTRICAL CONTRACTOR
EF.	EXHAUST FAN
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMERG.	EMERGENCY
EUH.	ELECTRIC UNIT HEATER
EMT	ELECTRICAL METALLIC TUBING
E.O.	ELECTRICALLY OPERATED
EBBH	ELECTRIC BASEBOARD HEATER
EQUIP.	EQUIPMENT
E.W.C.	ELECTRIC WATER COOLER
EXST	EXISTING
F/A	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
F.S.	FLOW SWITCH
FUT.	FUTURE
GA.	GAUGE
G.C.	GENERAL CONTRACTOR
G.F.I.	GROUND FAULT INTERRUPTER
G.F.S.C.	GROUND FAULT SENSING RELAY COIL
G/GND.	GROUND
H.I.D.	HIGH INTENSITY DISCHARGE
H.P.	HORSEPOWER
HVAC	HEATING, VENTILATING, AIR CONDITIONING
HW.	HOT WATER HEATER
IMC	INTERMEDIATE METAL CONDUIT
J.B.	JUNCTION BOX
KVA.	KILOVOLT AMPERE
KW.	KILOWATT
KWH.	KILOWATT HOUR
L.I.M.	LINE ISOLATION MONITOR
L.S.	LIMIT SWITCH
LIG.	LIGHTING
L.V.	LOW VOLTAGE
MBC	MODULAR BUILDING CONTROL
M.C.	MECHANICAL CONTRACTOR
M.C.B.	MAIN CIRCUIT BREAKER
MCP	MOTOR CIRCUIT PROTECTOR
MFR.	MANUFACTURER
M.L.O.	MAIN LUGS ONLY
MIN.	MINIMUM
M.O.	MECHANICALLY OPERATED
MTD.	MOUNTED
M.T.S.	MANUAL TRANSFER SWITCH
MV.	MEDIUM VOLTAGE
N.C.	NORMALLY CLOSED
N.I.C.	NOT IN CONTRACT
N.O.	NORMALLY OPEN
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.C.B.	OIL CIRCUIT BREAKER
PB	PULL BOX
P.C.	PLUMBING CONTRACTOR
P.F.	POWER FACTOR
PH.	PHASE
PV	POST INDICATING VALVE
PNL	PANEL
PR.	PRIMARY
P.S.I.	POUNDS PER SQUARE INCH
P.T.	POTENTIAL TRANSFORMER
PWR.	POWER
(R)	EXST TO BE RELOCATED/EXST RELOCATED
REQ.	REQUIRED
RECP.T.	RECEPTACLE(S)
RGS.	RIGID GALVANIZED STEEL
SEC.	SECONDARY
S.L.D.	SINGLE LINE DIAGRAM
SPEC.	SPECIFICATION
SS.	SUBSTATION
S.T.	SHUNT TRIP
STD.	STANDARD
SW.	SWITCH
SWBD.	SWITCHBOARD
SWGR.	SWITCHGEAR
SYS.	SYSTEM
TEL.	TELEPHONE
TEMP.	TEMPERATURE
TV.	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP.	TYPICAL
U.C.	UNDERCOUNTER
U.N.O.	UNLESS NOTED OTHERWISE
U.L.	UNDERWRITERS' LABORATORY
U.V.	UNDER VOLTAGE
V.	VOLT
VM	VOLTMETER
W/	WITH
W/P	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER
XMT	TRANSMITTER
XPR	TRANSPONDER
XP	EXPLOSION PROOF
Ⓟ	PHASE

GROUNDING SYMBOLS

— G —	GROUND BUS BAR
⊕	GROUND LOOP TEST WELL
⊖	GROUND ROD
⊕ ⊖	BLANK PLATE WITH GROUND STUD (BOLT AND FOUR (4) NUTS) FOR GROUNDING CONNECTION

SINGLE LINE SYMBOLS

	UTILITY METERING
	(CT) CURRENT TRANSFORMER
	(VT) VOLTAGE TRANSFORMER
	RELAY
	DRAW OUT DEVICE/CONNECTIONS
	CIRCUIT BREAKER
	DISCONNECT SWITCH
	FUSE
	CONTACTOR
	MOTOR STARTER W/THERMAL OVERLOADS
	COMBINATION MOTOR STARTER W/THERMAL OVERLOADS AND CIRCUIT BREAKER OR MOTOR CIRCUIT PROTECTOR
	VARIABLE FREQUENCY DRIVE (VFD) WITH LOCKABLE CIRCUIT BREAKER DISCONNECT SWITCH AND SOLID STATE STARTER FOR BYPASS
	INDICATING LIGHT/HAND, OFF, AUTO SWITCH
	RECTIFIER/INVERTER
	CAPACITOR
	CONTROL INTERLOCK
	KEY INTERLOCK
	LIGHTNING ARRESTOR
	TRANSFORMER
	SHIELDED ISOLATION TRANSFORMER
	DELTA/WYE CONNECTION
	TRANSFER SWITCH
	TRANSFER SWITCH W/BYPASS ISOLATION
	GENERATOR
	STARTER, CONTROL PANEL
	PANEL
	HEATER
	MOTOR
	POWER FEEDER DESIGNATION OR CIRCUIT CONTINUATION AS NOTED

SECURITY SYSTEM SYMBOLS

PROVIDE JUNCTION BOX (SINGLE GANG BOX W/SINGLE GANG PLASTER RING) AND EMPTY 3/4" RACEWAY UP TO ACCESSIBLE CEILING W/PULLSTRING FOR ALL SECURITY DEVICES.

	SECURITY ALARM DEVICE AND/OR CONTACT
	[ALARM CONTROL FUNCTION] AS - BURGLAR ALARM SWITCH BZ - DOOR RELEASE BUZZER CCV - CLOSED CIRCUIT TV CAMERA CR - CARD READER CRS - CARD READER CONTROLLER DA - BURGLAR ALARM EA - EXIT ALARM EH - ELECTRIC DOOR HINGE EL - ELECTRICAL MAGNETIC LOCK ES - ELECTRIC DOOR STRIKE GS - GUARD TOUR STATION HS - HOLD UP BUTTON "SILENT ALARM" KP - KEY PAD KS - LOCAL KEY SWITCH FOR ALARM BYPASS MD - MOTION DETECTOR MR - MANUAL DOOR RELEASE MS - MAGNETIC SWITCH PS - POWER SUPPLY SD - SOUND DETECTOR SC - SECURITY DOOR CONTACTS
	GB - GLASSBREAK SENSOR
	CCTV CAMERA
	[CAMERA CONTROL FUNCTION] PTZ - PAN/TILT/DOOM
	SP - SECURITY PANEL

POWER DEVICE SYMBOLS

	SINGLE RECEPTACLE - 125V, 2P, 3W
	DUPLEX RECEPTACLE - 125V, 2P, 3W
	QUADRAPLEX RECEPTACLE - 125V, 2P, 3W
	DUPLEX GROUND FAULT MASTER RECEPTACLE - 125V, 2P, 3W
	DUPLEX GROUND FAULT SLAVE RECEPTACLE - 125V, 2P, 3W
	DUPLEX RECEPTACLE ON EMERGENCY POWER - 125V, 2P, 3W
	SINGLE RECEPTACLE ON EMERGENCY POWER - 125V, 2P, 3W
	SPECIAL PURPOSE RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE ON EMERGENCY POWER
	CEILING MOUNTED JUNCTION BOX W/HANGING RECEPTACLE CORD
	FIRE RATED POKETHRU
	FLOOR OUTLET WITH DEVICE AS SHOWN
	CONDUIT STUB-UP WITH DEVICE AS SHOWN
	CLOCK HANGER
	LOCAL CONTROL PANEL
	CLOCK SIGNAL GENERATOR
	JUNCTION BOX
	OUTLET BOX WITH BLANK COVER
	PULL BOX
	FLOOR BOX
	UNDERFLOOR/TRENCH DUCT JUNCTION BOX
	RACEWAY ENTRANCE END FITTING
	PUSH BUTTON
	EMERGENCY SHUTDOWN PUSH BUTTON
	FURNITURE SYSTEM

POWER RACEWAY SYMBOLS

	BUS DUCT RISER
	BUS DUCT RISER WITH PLUG IN SWITCH
	BUS DUCT
	BUS DUCT WITH PLUG IN SWITCH
	CABLE TRAY
	CELLULAR FLOOR SYSTEM
	TRENCH DUCT
	UNDERFLOOR SYSTEM
	SURFACE MOUNTED MULTI-OUTLET RACEWAY
	SURFACE MOUNTED WIREWAY

AUDIO/VISUAL SYMBOLS

	WALL MOUNTED SPEAKER
	CEILING MOUNTED SPEAKER
	WALL MOUNTED SPEAKER VOLUME CONTROL
	TV - TELEVISION (CATV)
	AV - AUDIO & VISUAL JUNCTION BOX

NURSE CALL SYSTEM SYMBOLS

	NURSECALL EQUIPMENT CABINET
	NURSECALL CONTROL STATION
	NURSECALL DOME LIGHT
	NURSECALL MULTI DOME LIGHT
	NURSECALL EMERGENCY PULLCORD
	NURSECALL SINGLE PATIENT STATION
	NURSECALL DUTY STATION
	NURSECALL STAFF STATION
	NURSECALL CODE BLUE STATION

LIGHTING SYMBOLS

	LIGHT FIXTURE
	RECESSED OR SURFACE MOUNTED TROFFER FIXTURE
	INDUSTRIAL, UNDERCOUNTER, STRIP, OR CASEWORK FIXTURE
	INDUSTRIAL OR STRIP LIGHT FIXTURE ON EMERGENCY POWER/BATTERY
	DOWNLIGHT FIXTURE
	DOWNLIGHT FIXTURE ON EMERGENCY POWER/BATTERY
	DIRECTIONAL (WALL WASH) DOWNLIGHT FIXTURE
	WALL OR SURFACE MOUNTED FIXTURE
	WALL OR SURFACE MOUNTED FIXTURE ON EMERGENCY/BATTERY
	EXIT FIXTURE, CEILING MOUNTED, ARROWS AS INDICATED
	EXIT FIXTURE, WALL OR SURFACE MOUNTED, ARROWS AS INDICATED
	EXIT FIXTURE NEAR FLOOR, WALL OR SURFACE MOUNTED, ARROWS AS INDICATED
	EMERGENCY BATTERY UNIT WITH ADJUSTABLE HEAD(S)
	EMERGENCY BATTERY UNIT FOR REMOTE EMERGENCY FIXTURES
	TRACK SYSTEM WITH DOWNLIGHT OR FLOOD LIGHTING
	EXTERIOR LUMINAIRE - POLE OR WALL MOUNTED
	EXTERIOR DIRECTIONAL FLOOD LUMINAIRE - POLE OR WALL MOUNTED
	EXTERIOR AREA LIGHTING FIXTURE
	EXTERIOR WALKWAY LIGHTING FIXTURE
	PHOTO CELL CONTROL SWITCH
	MOTION SENSOR LIGHTING CONTROL, CEILING MOUNTED
	SINGLE POLE SWITCH (SHOWN WITHOUT SUBSCRIPT)

FIRE ALARM SYSTEM SYMBOLS

	FIRE ALARM MANUAL PULL STATION WITH PROTECTIVE COVER
	FIRE ALARM WALL MOUNTED AUDIO/VISUAL UNIT
	FIRE ALARM SIREN
	FIRE ALARM HORN
	FIRE ALARM STROBE
	FIRE ALARM BELL
	FIRE EVACUATION SPEAKER
	REMOTE ANNUNCIATOR
	FIRE ALARM CONTROL PANEL
	FIRE ALARM AUXILIARY POWER PANEL (BOOSTER)
	REMOTE CONDITION LIGHT
	ELECTRIC DOOR HOLDER PROVIDED WITH DOOR HARDWARE MOUNTED AND WIRED BY ELECTRICAL CONTRACTOR
	FIRE ALARM ADDRESSABLE RELAY
	AUTOMATIC DETECTOR
	ALARM INITIATING CONTACT

COMMUNICATIONS SYSTEM SYMBOLS

	TELE/ DATA JUNCTION BOX (DOUBLE GANG BOX W/SINGLE GANG PLASTER RING) AND EMPTY 1" RACEWAY UP TO ACCESSIBLE CEILING W/PULLSTRING (SEE SPECIFICATIONS)
	TELEPHONE JUNCTION BOX (SAME PROVISIONS AS ABOVE)
	DATA JUNCTION BOX (SAME PROVISIONS AS ABOVE)
	JUNCTION BOX FOR WIRELESS ACCESS POINT (MOUNTED ABOVE ACCESSIBLE CEILING)
	BRANCH CIRCUIT WIRING TO PANEL
	BRANCH CIRCUIT CONDUIT & WIRE HOMERUN TO PANELBOARD
	BRANCH CIRCUIT INTERCONNECTING WIRING

DRAWING LOG

REVISION	DATE	BY	CHKD	APP'D	DESCRIPTION
1	2014-12-11				ISSUE FOR PERMIT
2	2015-01-26				STATE APPROVAL
3					BLDG. DEPT. REVIEW
4					REVIEW
5					REVIEW
6					REVIEW
7					REVIEW
8					REVIEW
9					REVIEW
10					REVIEW
11					REVIEW
12					REVIEW
13					REVIEW
14					REVIEW
15					REVIEW
16					REVIEW
17					REVIEW
18					REVIEW
19					REVIEW
20					REVIEW

APPLICABLE CODES:

■	NATIONAL ELECTRIC CODE, 2012 ED.
■	INTERNATIONAL BUILDING CODE, 2009 ED.
■	NATIONAL FIRE PROTECTION AGENCY, 2012 ED.
■	HEALTHCARE GUIDELINES, 2012 ED.

STANDARD MOUNTING HEIGHTS

9" BELOW FINISH CEILING	WALL-MOUNTED CLOCKS & PROGRAM BELLS (OR AS SHOWN ON ARCHITECTURAL DETAILS)
6" ABOVE DOOR	NURSE CALL DOME LIGHT
6" ABOVE CABINET	BLUE LIGHTS AT FIRE CABINETS
10'-0"	BATTERY LIGHTING UNITS AND REMOTE WALL MOUNTED LIGHT HEADS (OR 1'-0" BELOW FINISHED CEILING TO TOP OF UNIT).
8'-6"	PENDANT-HUNG INDUSTRIAL AND STRIP LIGHTING FIXTURES.
7'-8"+	TELEVISION OUTLET AND SERVICE RECEPTACLE - FOR SHELF MOUNTED TV. IN BEDROOMS.
CENTERED ABOVE DOOR OR WINDOW OPENING	WARNING AND SIGNALING FIXTURES/SIGNS.
6'-8"	FIRE ALARM SIGNAL DEVICES AND ILLUMINATED FIRE SIGNALS (6'-8" OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER)
6'-6"	TOP OF FLUSH AND SURFACE MOUNTED ELECTRICAL POWER DISTRIBUTION PANELS (POWER AND LIGHTING PANELS) AND TELEPHONE CABINETS.
6'-3"	TOP OF WALL-MOUNTED EXIT FIXTURES (NOT MOUNTED ABOVE DOORS).
6'-0"	TOP OF HIGHEST ELECTRICAL SAFETY DISCONNECT SWITCHES, MAGNETIC STARTERS, CONTACTORS.
5'-0"	PATIENT BED HEAD WALL LIGHTING FIXTURE (TO BOTTOM OF UNIT), PATIENT MONITOR JUNCTION BOX
4'-6"	WALL MOUNTED INTERCOM, NURSE CALL STATIONS, CLOCK CONTROL PANEL, WALL MOUNTED TELEPHONE, PAY STATIONS, AND TELEVISION CONTROLLERS (3'-6" FOR ADA COMPLIANT DEVICES)
4'-0"	WALL MOUNTED LIGHTING SWITCHES (TOP OF SWITCH IN 'ON' POSITION), MANUAL MOTOR STARTERS, THERMOSTATS, WALL-MOUNTED WIREMOLD, G.F.I. RECEPTABLES IN TOILET ROOMS OR AT SINKS NOT IN CASEWORK (TOP OF DEVICE)
3'-6"	FIRE ALARM PULL STATIONS, FIREMEN'S TWO WAY PHONES, CARD READERS, DEVICES AT ADA COMPLIANT LOCATIONS.
2'-6"	PULLCORD FOR TOILET
2'-0"	ELECTRICAL RECEPTABLES WITHIN MECHANICAL SPACES, ELECTRICAL AND ELEVATOR ROOMS.
18"	ELECTRICAL RECEPTABLES, TELEPHONE OUTLETS, COMPUTER OUTLETS, INTERCOM OUTLETS FOR DESKS
15"	FINISHED FLOOR
00"	FINISHED FLOOR

MOUNTING HEIGHT NOTES:

- MOUNTING HEIGHTS TO CENTER OF DEVICE UNLESS OTHERWISE NOTED. IN MASONRY CONSTRUCTION THE ABOVE MOUNTING HEIGHTS SHALL BE USED FOR REFERENCE TO NEAREST BLOCK OR BRICK COURSING.
- IN O.R. SUITE MOUNTING HEIGHT TO BOTTOM OF DEVICES UNLESS OTHERWISE NOTED. FOR EXACT LOCATION OF ALL DEVICES IN O.R. SUITE, REFER TO ARCHITECTURAL DRAWINGS.
- THE ABOVE MOUNTING HEIGHTS SHALL BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE IN THE DRAWINGS OR SPECIFICATIONS.
- A "+" BESIDE A DEVICE INDICATES THAT DEVICE IS MOUNTED ABOVE A COUNTER OR CASEWORK. COORDINATE WITH ARCHITECTURAL DETAILS AND CASEWORK CONTRACTOR.

GENERAL NOTES

- THIS SHEET IS INTENDED TO BE A STANDARD LEGEND, SYMBOL AND ABBREVIATION SHEET. ALL ABBREVIATIONS AND SYMBOLS MAY NOT APPEAR IN THE DRAWING SET.
- THE WORK SCOPE MAY INCLUDE WIRING TO MECHANICAL, PLUMBING, FIRE PROTECTION, ARCHITECTURAL, CIVIL, ETC. ITEMS SPECIFIED AND LOCATED ON OTHER DRAWING SETS. THE ELECTRICAL DRAWINGS SHOW APPROXIMATE LOCATIONS FOR THESE ITEMS. FOR EXACT LOCATIONS OF THESE ITEMS, REFER TO THE RESPECTIVE TRADE DRAWINGS.
- WHEN ARCHITECTURAL REFLECTED CEILING PLANS ARE PROVIDED, REFER TO THESE FOR LOCATIONS OF LIGHTING FIXTURES AND COORDINATION OF OTHER CEILING MOUNTED DEVICES. IN ALL OTHER CASES, ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES.
- ALL DEVICES MOUNTED ON WALLS, IN MILLWORK, CABINETS, ETC. SHALL BE COORDINATED WITH THE ARCHITECTURAL DETAILS AND/OR ELEVATIONS.
- WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL."
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE EXPANSION FITTINGS IN ALL RACEWAYS CROSSING CONSTRUCTION OR EXPANSION JOINTS. REFER TO STRUCTURAL DRAWINGS FOR LOCATION OF JOINTS.
- SHOP DRAWINGS: CONTRACTORS SHALL PROVIDE SHOP DRAWINGS FOR ALL SPECIFIED EQUIPMENT. CONTRACTOR SHALL PROVIDE COORDINATED SHOP DRAWINGS FOR PIPING AND SHEETMETAL, SHOWING COORDINATION WITH OTHER DISCIPLINES. NO EQUIPMENT, PIPING OR DUCTWORK SHALL BE INSTALLED WITHOUT AN APPROVED SHOP DRAWING. WORK OR EQUIPMENT INSTALLED WITHOUT ENGINEER'S APPROVAL WILL BE SUBJECT TO REMOVAL AND REWORK PER THE ENGINEERS SOLE DISCRETION REGARDLESS OF DESIGN DOCUMENTS. ALL COST WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL ALLOW TEN (10) BUSINESS DAYS FOR ENGINEERS REVIEW. ALL WORK SHALL BE INSTALLED PER THE APPROVED SHOP DRAWING. FIELD MODIFICATIONS TO THE APPROVED SHOP DRAWING SHALL BE SUBMITTED FOR ENGINEER APPROVAL PRIOR TO INSTALLATION.

RestorixHealth
Excellence in Wound Care

DEANIS NOSKIN ARCHITECTS
1740 10th Ave SE
Portland, ME 04103
Tel: 603.763.1111

Z&F CONSULTING
MECHANICAL, ELECTRICAL, PLUMBING
ARCHITECTURAL
1000 BRIGHTON AVENUE
PORTLAND, ME 04103
Tel: 603.763.1111

STATE: MAINE
LION ZABUJOWICZ, P.E.
PROFESSIONAL ENGINEER
LICENSE NO.: 13682

MAINE MEDICAL CENTER
BRIGHTON CAMPUS
WOUND CARE AND
HYPERBARIC MEDICINE
335 BRIGHTON AVENUE
PORTLAND, ME 04103

KEY PLAN: GROUND FLOOR

ISSUE DATES:

▲ JANUARY 26, 2015
STATE APPROVALS

▲ MARCH 20, 2015
BLDG. DEPT. REVIEW

DRAWN BY: ARE

CHECKED BY: JZ

SCALE: AS NOTED

PROJECT NO.: P14110

SHEET TITLE:
ELECTRICAL COVER SHEET

DRAWING NO.:
E-0

©2014