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RENOVATIONS TO  
RICHARD'S 3rd FLOOR

MAINE MEDICAL CENTER  
Portland, Maine

Scale: NONE  
Project Number: 03-103  
Date: MAY 25, 2004  
Revisions:



CONSTRUCTION  
DOCUMENTS

E-1

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GENERAL NOTES

- ALL GENERAL NOTES, SYMBOL LIST & DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL ELECTRICAL DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION IN THE DESIGN.
- ALL WORK PERFORMED ON THIS CONTRACT SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER AND SHALL BE IN COMPLIANCE WITH NEC, NFPA, BOCA, OSHA, AND ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES
- THESE DRAWINGS ARE, IN GENERAL, MADE TO SCALE BUT ALL MEASUREMENTS SHALL BE TAKEN FROM FIGURED DIMENSIONS, AND NOT BY SCALING.
- THE ELECTRICAL CONTRACTOR SHALL CONFER WITH ALL OTHER TRADES RELATIVE TO THE LOCATION OF APPARATUS AND EQUIPMENT AND SELECT LOCATIONS SO AS NOT TO CONFLICT WITH WORK OF OTHER TRADES.
- LIGHTING FIXTURE MANUFACTURERS NAME & MODEL NUMBER ARE USED FOR DESCRIPTIVE PURPOSES ONLY AND ARE INTENDED TO INDICATE THE STANDARD OF MATERIAL OR ARTICLES REQUIRED. ALL OTHER EQUIPMENT SHALL NOT BE SUBSTITUTED EXCEPT UNDER THE PROVISIONS OF SECTION 3A, ARTICLE 9, (CONDITIONS OF THE CONTRACT) OR OTHERWISE ALLOWED BY SPECIFICATION.
- ALL EQUIPMENT SHOWN ON THESE DRAWINGS IS INTENDED TO BE GENERALLY REPRESENTATIVE OF THE EQUIPMENT WHICH WILL BE INSTALLED UNDER THIS CONTRACT, BUT IT SHALL NOT BE ASSUMED THAT THE DRAWINGS INDICATE THE SPECIFIC CONFIGURATION, ARRANGEMENT OR POINTS OF CONNECTION OF THE ACTUAL EQUIPMENT UNLESS NOTED OTHERWISE.
- ALL MOUNTING HEIGHTS GIVEN IN LEGEND ARE TYPICAL, UNLESS NOTED OTHERWISE IN SPECIFICATION, SECTION 16010, OR ON THESE DRAWINGS.
- COORDINATE W/ CONTROLS CONTRACTOR TO PROVIDE POWER FOR ALL MISCELLANEOUS CONTROL OPERATORS AND PANELS
- CIRCUIT BREAKERS USED FOR LIGHTING CIRCUITS SHALL BE SWITCH DUTY RATED AND APPROVED FOR USE WITH H.I.D. FIXTURES. CIRCUIT BREAKERS USED FOR HVAC AND REFRIGERATION EQUIPMENT SHALL BE "HACR" RATED.
- ALL HOME RUNS FOR LIGHTING OR POWER CIRCUITS LONGER THAN 150 FEET SHALL BE INCREASED ONE SIZE. (IE: #12 TO #10)
- ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS SHALL BE SIZED FOR THE O.C.D. RATING FOR THAT CIRCUIT ACCORDING TO NEC ART 310 UNLESS OTHERWISE INDICATED ON THESE DRAWINGS. IN NO CASE SHALL CONDUCTORS SMALLER THAN NO. 12 AWG BE USED FOR POWER OR LIGHTING CIRCUITS.
- PROVIDE 3/8" NYLON ROPE IN ALL EMPTY SERVICE RACEWAYS.
- ALL SLEEVES AND OTHER PENETRATIONS THRU FIRE RATED ASSEMBLIES SHALL BE SEALED AFTER CABLE INSTALLATION WITH A FIRE RETARDANT COMPOUND.
- ALL FLUSH MOUNTED PANELBOARDS SHALL BE PROVIDED WITH (2) 1-1/4" EMPTY CONDUITS BETWEEN PANEL & SUSPENDED CEILING.
- THE CONTRACTOR IS RESPONSIBLE FOR FIRESTOPPING AROUND ALL CONDUITS, CABLES AND ELECTRICAL EQUIPMENT AT ALL PARTITIONS PIERCED PER NEC 300-21 AND B.O.C.A.
- THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL SIESMIC REQUIREMENTS FOR THE INSTALLATION OF ELECTRICAL EQUIPMENT UNDER B.O.C.A.
- GROUNDING SHALL BE PER N.E.C. ARTICLE 250, INSTALL GROUNDING CONDUCTORS WITH ALL FEEDERS AND BRANCH CIRCUITS.
- "NM" TYPE CABLE IS NOT ALLOWED.
- ALL WIRING RUN TO A RECESSED PANEL SHALL NOT BE INSTALLED IN A CONDUIT SLEEVE TO THE PANEL BUT SHALL INSTEAD BE TERMINATED IN A WIREWAY ABOVE THE PANEL IN THE CEILING SPACE.
- EXISTING WIRING AND ELECTRICAL DEVICES/EQUIPMENT SHALL NOT BE REUSED INCLUDING CATV, LIGHTING, POWER AND INTERCOM AND SHALL BE REMOVED UNLESS OTHERWISE NOTED. ALL REMOVED EQUIPMENT, FIXTURES, DEVICES AND THE LIKE SHALL BE TURNED OVER TO THE HOSPITAL OR DISPOSED OF AT THE HOSPITAL'S DIRECTION.
- ALL WORK SHALL BE COORDINATED WITH THE ARCHITECTURAL PHASING PLANS.



Neill and Gunter

ABBREVIATIONS

ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
C	CONDUIT
CB	CIRCUIT BREAKER
CL	CENTER LINE
CCTV	CLOSED CIRCUIT TELEVISION
CLF	CURRENT LIMITING FUSE
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
CWP	CONDENSER WATER PUMP
DT	DISTRIBUTION TRANSFORMER
DW	DISHWASHER
DWG	DRAWING
EBB	ELECTRIC BASEBOARD HEATER
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EUH	ELECTRIC UNIT HEATER
EWC	ELECTRIC WATER COOLER
EX	EXISTING EQUIPMENT (AS NOTED)
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OWNER
FC	FAN COIL
GD	GARBAGE DISPOSER
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRC	GALVANIZED RIGID STEEL CONDUIT
H	HUMIDIFIER
HD	HAND / HAIR DRYER
HH	HAND HOLE
HP	HORSEPOWER / HEAT PUMP
HPS	HIGH PRESSURE SODIUM
HRU	HEAT RECOVERY UNIT
HV	HIGH VOLTAGE
HWP	HOT WATER CIRC. PUMP
IG	ISOLATED GROUND
IR	INFRA-RED
KW	KILOWATT
KWH	KILOWATT HOUR
LIG	LONG/INSTANTANEOUS/GROUND FAULT LIGHTING
LTG	LIGHTING
MATV	MASTER ANTENNA TELEVISION
MB	MAIN BREAKER
MD	MAIN DISCONNECT
MDP	MAIN DISTRIBUTION PANEL
MH	MAN HOLE / METAL HALIDE
MLO	MAIN LUGS ONLY
MMC	MAINE MEDICAL CENTER
MTD	MOUNTED
MW	MICROWAVE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE (NFPA-70)
NF	NOT FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
NTU	NURSE CALL TERMINAL UNIT
OC	ON CENTER
OCD	OVERCURRENT DEVICE
PB	PULL BOX
PM	"PLUGMOLD" UTILIZED
PT	POTENTIAL TRANSFORMER
RCU	REFRIGERATION CONDENSING UNIT
RECP	RECEPTACLE
REF	REFRIGERATOR
REQ'D	REQUIRED
RF	RETURN FAN
RGE	RANGE
RGS	RIGID GALVANIZED STEEL CONDUIT
RH	RANGE HOOD
RT	ROOF TOP MOUNTED IN A WEATHERPROOF ENCLOSURE
RTAC	ROOF TOP AIR CONDITIONER
SF	SUPPLY FAN
S/N	SOLID NEUTRAL
SOV	SOLENOID VALVE
TBD	TO BE DETERMINED
TR	TAMPER RESISTANT
TV	TELEVISION
TYP	TYPICAL
UC	UNDER COUNTER
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UV	UNIT VENTILATORS
VB	X-RAY VIEW BOX
WC	WATER COOLER
WH	WATER HEATER
WP	WEATHERPROOF
XFMR	TRANSFORMER
SS	SURGE SUPPRESSOR RECEPTACLE
WM	INSTALL WITH "WIREMOLD"

FIRE ALARM & LIFE SAFETY

FP	FIRE ALARM PULL STATION MTD 48" A.F.F.
SD	SMOKE DETECTOR
EL	EL = ELEVATOR CONTROL
SD	DUCT SMOKE DETECTOR - SHALL BE FROM THE SAME MANUFACTURER AS THE BUILDING FIRE ALARM SYSTEM
RTS	REMOTE TEST STATION
HD	HEAT DETECTOR - TEMP. AS INDICATED
135°	HR = COMBINATION RATE OF RISE AND FIXED TEMPERATURE (135°F, 200°F - 15' MINUTE)
200°	HF = FIXED TEMPERATURE ONLY (135°, 200°)
HA	HA = RATE ANTICIPATION 194°F
F	ALARM SPEAKER/STROBE LIGHT, MTD 80" A.F.F. (75 CANDELA)
FS	FIRE ALARM STROBE LIGHT, MTD 80" A.F.F. (75 CANDELA)
DH	FIRE ALARM SYSTEM MAGNETIC DOOR HOLDER
DC	FIRE ALARM SYSTEM DOOR CLOSER
FPS	FIRE ALARM BATTERY BACK-UP POWER SUPPLY
EXIT	EXIT SIGN, RED LETTERING (SEE FIXTURE SCHEDULE)

MISCELLANEOUS SYSTEMS

EXISTING	EXISTING "SIMPLEX" CLOCK
SP	SPEAKER
CCTV	CCTV CAMERA

PANELS & CIRCUITS

□	ELECTRICAL PANEL, SURFACE MOUNTED
□	ELECTRICAL PANEL, FLUSH MOUNTED
←	HOME RUN TO CIRCUIT AND PANEL BOARD INDICATED. ARROWS INDICATE POLES,
LP1-3 (PAR)	INDICATES PARTIAL CIRCUIT
INDICATES CIRCUIT NUMBER	
INDICATES PANEL	
→	ELECTRICAL FEED TO EQUIPMENT
MULTIPLE ARROWHEADS	INDICATES MULTIPLE CIRCUITS
↪	DIRECT CONNECTION OF EQUIPMENT NOTED. USE FLEXIBLE CABLE OF TYPE APPROVED FOR LOCATION.
~	CONDUIT RUN FLEXIBLE METALLIC
~	CABLE FLEXIBLE
→	CONDUIT TURNING DOWN
↗	CONDUIT TURNING UP
↗↘	CONDUIT RUN UP AND DOWN
→	CONDUIT OR CABLE RUN, ABOVE GRADE
→	CONDUIT OR CABLE RUN, FEEDER CONCEALED
T	TRANSFORMER, SIZE & TYPE AS INDICATED
J	JUNCTION BOX - SIZED IN ACCORDANCE WITH NEC - "C" INDICATES MOUNTING IN CEILING SPACE
30NF	3 POLE, NON-FUSIBLE DISCONNECT SWITCH 30 = AMPACITY. VOLTAGE AS REQ'D.
40	3 POLE FUSIBLE DISCONNECT SWITCH 60 = CLIP SIZE, 40 = FUSE SIZE VOLTAGE AS REQ'D
3R	3 POLE WEATHERPROOF DISCONNECT SWITCH SIZE & CONFIGURATION AS NOTED ABOVE
S	MANUAL STARTER - FLUSH TYPE IN FINISHED AREAS.
S	MOTOR, HP AS INDICATED
COORDINATE W/ ACTUAL EQUIPMENT FURNISHED.	
COMBINATION MAGNETIC STARTER - NEMA SIZE AS REQUIRED (MINIMUM SIZE 1) PROVIDE W/ H-0-A SWITCH AND GREEN RUN LIGHT ON COVER.	

NURSE CALL

NC <sub>T</sub>	NURSE CALL TOILET PULL STATION
NC <sub>1</sub>	NURSE CALL STATION. NUMBER INDICATES BOX GANG QUANTITY.
NC <sub>Z</sub>	NURSE CALL CORRIDOR LIGHT. PROVIDE 2-GANG BACK BOX. "Z" INDICATES ZONE LIGHT
DS	NURSE CALL DUTY STATION
ZL	NURSE CALL ZONE LIGHT
MS	NURSE CALL MASTER STATION

RECEPTACLE OUTLETS

LETTER IS CIRCUIT CONTROL GROUP.  
"42" INDICATES MOUNTED AT 42" A.F.F.  
"GFI" INDICATES GFI OUTLET (PROTECTS DOWNSTREAM RECEPTACLES ON SAME CIRCUIT.)  
"TR" INDICATES TAMPER RESISTANT.  
ADJUST TO MINIMIZE CUT OF BLOCK AND TILE.  
MOUNT WITH GROUND TERMINAL AT TOP.

⊖	SINGLE RECEPTACLE OUTLET NEMA 5-20R, HEAVY DUTY
⊖	DUPLEX RECEPTACLE OUTLET NEMA 5-20R, HEAVY DUTY
⊖	QUADRUPLEX RECEPTACLE OUTLET (DOUBLE DUPLEX) NEMA 5-20R, HEAVY DUTY
⊖	DUPLEX RECEPTACLE OUTLET, EMERGENCY CIRCUIT, NEMA 5-20R, HEAVY DUTY, RED DEVICE, AND BACKPLATE
⊖	QUADRUPLEX RECEPTACLE OUTLET (DOUBLE DUPLEX) EMERGENCY CIRCUIT, NEMA 5-20R, HEAVY DUTY, RED DEVICE, AND BACKPLATE
RGE	RANGE OUTLET NEMA 14-50R ("D" INDICATES DRYER OUTLET NEMA 14-30R)
DW	SPECIAL PURPOSE CONNECTION LETTER(S) BESIDE SYMBOL INDICATES ACTUAL EQUIPMENT SERVED.
⊖	FLOOR SINGLE RECEPTACLE OUTLET W/ COVER. NEMA 5-20R
⊖	FLOOR DUPLEX RECEPTACLE OUTLET W/ COVER. NEMA 5-20R
DW	FLOOR SPECIAL PURPOSE OUTLET W/ COVER LETTER(S) BESIDE SYMBOL INDICATES ACTUAL EQUIPMENT SERVED.
WM/#	"WIREMOLD" WITH SINGLE NEMA 5-20R OUTLETS AS SHOWN. OUTLETS SHALL BE CIRCUITED ALTERNATELY. WALL MOUNT AS SHOWN ON THE DWG'S. # SHOWS NUMBER OF DUPLEX RECEPTACLES.
W	VOICE OUTLET AS NOTED (ONE VOICE LINE) W = WALL PHONE, 54" A.F.F. P = PAY PHONE, 42" A.F.F.
▼	STANDARD MMC VOICE/DATA DROP (1 CAT-5e FOR DATA AND A SPLIT CAT-3 FOR VOICE)
▼ <sup>D</sup>	DUAL DATA DROP (STANDARD MMC DROP PLUS ANOTHER CAT-5e FOR DATA)
▼ <sup>V</sup>	SINGLE VOICE OUTLET/JACK, 18" A.F.F. (ONE VOICE LINE)
▼ <sup>E</sup>	EXISTING DROP (JACK NUMBERING SHOWN HAS BEEN SUPPLIED BY MMC NETWORK SERVICES DEPARTMENT)
▼ <sup>#</sup>	MULTIPLE DROP (JACK NUMBERING SHOWN HAS BEEN SUPPLIED BY MMC NETWORK SERVICES DEPARTMENT)
TV	COAXIAL CABLE TELEVISION OUTLET

SWITCHES / CONTROLS

SWITCHES LOCATED IN THE SAME AREA SHALL BE GANGED UNDER COMMON PLATE WHENEVER PRACTICAL. GROUP SWITCHES, THERMOSTATS ETC. TOGETHER. SWITCHES SHALL BE LOCATED ON STRIKE SIDE OF DOOR. ADJUST TO MINIMIZE CUT OF BLOCK OR TILE. LETTER IS SWITCH CONTROL GROUP.

\$	SINGLE POLE SWITCH
\$ <sub>2</sub>	DOUBLE POLE SWITCH
\$ <sub>3</sub>	THREE-WAY SWITCH
\$ <sub>4</sub>	FOUR-WAY SWITCH
\$ <sub>D</sub>	DIMMER SWITCH, PROVIDE SWITCH FOR FIXTURES ACTUALLY SERVED.
\$ <sub>HP</sub>	MOTOR SWITCH, HORSEPOWER RATED
LC	LIGHTING CONTACTOR - NUMBER OF POLES AS REQUIRED
TM	24 HOUR TIMER
PE	PHOTOELECTRIC CONTROL - LOCATED ON EXTERIOR WALL - ORIENT TO NORTH ELEVATION
T	WALL MTD. THERMOSTAT - "LC" INDICATES W/ LOCKING COVER

ABBREVIATIONS, SYMBOLS AND NOTES

CAD FILE 25485E003

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