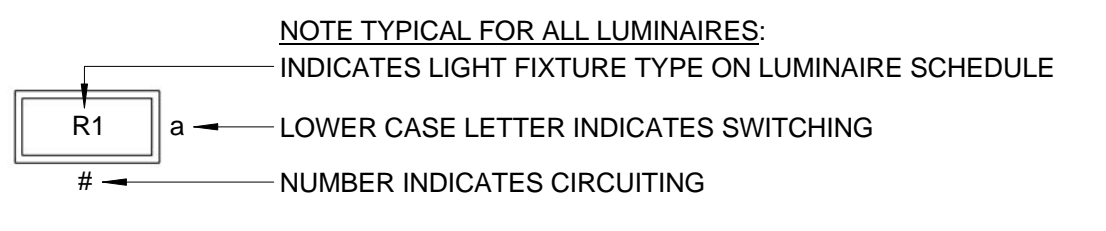


A	AMPERE	MT	MOUNT
AC	ALTERNATING CURRENT	MTS	MANUAL TRANSFER SWITCH
AFF	ABOVE FINISHED FLOOR	MCP	MOTOR CONTROL PANEL
AFG	ABOVE FINISHED GRADE	MH	METAL HALIDE
AHU	AIR HANDLING UNIT	MDP	MAIN DISTRIBUTION PANEL
AIC	AMPERES INTERRUPTING CAPACITY	MIN	MINIMUM
ATS	AUTOMATIC TRANSFER SWITCH	N	NEUTRAL
AWG	AMERICAN WIRE GAUGE	NC	NORMALLY CLOSED
BAS	BUILDING AUTOMATION SYSTEM	NEC	NATIONAL ELECTRICAL CODE
BKBD	BACKBOARD	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
C	CONDUIT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CAT	CATALOG, CATEGORY	NIC	NOT IN CONTRACT
CATV	CABLE TV	NF	NON-FUSED
CB	CIRCUIT BREAKER	NO	NORMALLY OPEN
CCTV	CLOSED CIRCUIT TELEVISION	NO, #	NUMBER
CM	CIRCULAR MILS	NTS	NOT TO SCALE
COMM	COMMUNICATIONS	OC	ON CENTER
CU	MECH CONDENSING UNIT	OCC	OCCUPANCY
CU	COPPER	OH	OVERHEAD
CUH	CABINET UNIT HEATER	P	POLE
DDC	DIGITAL DIRECT CONTROL	PA	PUBLIC ADDRESS
DN	DOWN	PH	PHASE
DW	DISHWASHER	PIR	PASSIVE INFRARED
DWG	DRAWING	PNL	PANELBOARD
EF	EXHAUST FAN	P/O	PART OF
ELEV	ELEVATOR	PV	PHOTOVOLTAIC
EMT	ELECTRICAL METALLIC TUBING	PVC	POLY-VINYL CHLORIDE
EP	EXPLOSION PROOF	REC, RECEPT	RECEPTACLE
ERU	ENERGY RECOVERY UNIT	REF	REFRIGERATOR
EWC	ELECTRIC WATER COOLER	RF	RETURN FAN
FACP	FIRE ALARM CONTROL PANEL	RG	RIGID GALVANIZED STEEL
FB	FLOOR BOX	RM	ROOM
FLA	FULL LOAD AMPS	RMC	RIGID METAL CONDUIT
FWE	FURNISHED WITH EQUIPMENT	RTU	ROOFTOP UNIT
G, GNDGROUND		REF	REFRIGERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SF	SUPPLY FAN
GFP	GROUND FAULT PROTECTION	SPDT	SINGLE POLE, DOUBLE T HROW
HID	HIGH INTENSITY DISCHARGE	SQ	SQUARE
HOA	HAND-OFF-AUTO SELECTOR SWITCH	TEL	TELEPHONE
HP	HORSEPOWER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
HVAC	HEATING, VENTILATION AND COOLING UNIT	TYP	TYPICAL
IDS	INTRUSION DETECTION SYSTEM	UF	UNDER FLOOR
IG	ISOLATED GROUND	UG	UNDERGROUND
IMC	INTERMEDIATE METAL CONDUIT	UH	UNIT HEATER
IR	INFRARED	UL	UNDERWRITER'S LABORATORY
K	KILO	UNO	UNLESS NOTED OTHERWISE
KCMIL	KILO CIRCULAR MILS	UPS	UNINTERRUPTIBLE POWER SUPPLY
KW	KILOWATT	V	VOLTS
KVA	KILO VOLT-AMPS	VFD	VARIABLE FREQUENCY DRIVE
LAN	LOCAL AREA NETWORK	W	WATT
LC	LIGHTING CONTACTOR	WP	WEATHERPROOF
LF	LINEAR FEET	WG	WIREGUARD
LC	LOADCENTER	XFMR	TRANSFORMER
LCP	LIGHTING CONTROL PANEL	(E)	EXISTING ITEM TO REMAIN
LED	LIGHT EMITTING DIODE	(R)	REMOVE ITEM AND DISPOSE OF PROPERLY
LTG	LIGHTING	(ER)	RELOCATED ITEM AT NEW LOCATION
MAX	MAXIMUM	(RL)	REMOVE AND RELOCATE
MCB	MAIN CIRCUIT BREAKER		
MECH	MECHANICAL		
MH	MOUNTING HEIGHT		
MICRO	MICROWAVE		
MLO	MAIN LUG ONLY		

NOTE
SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT NECESSARILY INDICATE THEIR INCORPORATION INTO THE DESIGN

- CENTERLINE 48" AFF, UNO -
- \$₁₈ LIGHT SWITCH, 20A, 125/277V, LETTER INDICATES SWITCHING
- \$ THREE-WAY LIGHT SWITCH
- \$₄ FOUR-WAY LIGHT SWITCH
- \$₂ TWO-POLE SWITCH
- \$_K KEY OPERATED SWITCH
- \$_M MOTOR RATED SWITCH
- \$_P SINGLE POLE SWITCH WITH RED PILOT LIGHT - RED LIGHT SHALL GLOW WHEN CIRCUIT IS ENERGIZED
- \$₂ MULTI-GANGED SWITCHES, GANG UNDER ONE PLATE, LETTER INDICATES SWITCHING
- \$_{OS} OCCUPANCY SENSOR SWITCH, WALL MOUNTED
- \$_{OS2} 2-BUTTON OCCUPANCY SENSOR SWITCH
- \$_{OSD} OCCUPANCY SENSOR DIMMER SWITCH, COORDINATE DIMMING TECHNOLOGY WITH DIMMED LOAD IN EACH AREA
- (OS) OCCUPANCY SENSOR, CEILING MOUNTED
- (OS) OCCUPANCY SENSOR, WALL MOUNTED
- \$_D DIMMER SWITCH, COORDINATE DIMMING TECHNOLOGY WITH DIMMED LOAD IN EACH AREA
- \$_{LV} LOW VOLTAGE SWITCH, MOMENTARY CONTACT
- \$_{LV2} 2-BUTTON LOW VOLTAGE SWITCH
- \$_{LV4} 4-BUTTON LOW VOLTAGE SWITCH
- \$_{LVD} LOW VOLTAGE DIMMER SWITCH
- \$_{SP} HANDICAP SWITCHES FOR HOOD LIGHT AND FAN
- \$_T TIMER SWITCH, 60 MINUTES
- LTC LIGHTING TIME CLOCK
- LC LIGHTING CONTACTOR
- LCP LIGHTING CONTROL PANEL
- PC PHOTOCELL

- HATCHING OR "EM" INDICATES FIXTURE CONNECTED TO UL924 LISTED LIGHTING INVERTER. EMERGENCY FIXTURES SHALL OPERATE CONTINUOUSLY.
- EXIT SIGN WITH BATTERY, CEILING MOUNTED, SHADING INDICATES FACE(S), ARROWHEAD INDICATES CHEVRON(S) REQUIRED, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING.
- EXIT SIGN WITH BATTERY, WALL MOUNTED, SHADING INDICATES FACE(S), MOUNT AT 7'-6" AFF OR OVER DOOR, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING.
- UL924 LISTED EMERGENCY LIGHTING INVERTER - PROVIDE POWER CAPACITY AS REQUIRED TO SERVE THE CONNECTED LOAD ON EACH FLOOR - DUAL-LITE DLS SERIES OR APPROVED EQUAL.



- ▽ EXISTING DATA OUTLET TO REMAIN
 - ▽ EXISTING TEL/DATA OUTLET TO REMAIN
 - ▽ TELEPHONE WALL OUTLET, 44" AFF UNO
 - ▽ TELEPHONE OUTLET FOR ELEVATOR CONNECTION
 - ▽ TELEPHONE OUTLET, 18" AFF UNO
 - ▽ (1) TEL(4) DATA OUTLET, 18" AFF UNO "c" INDICATES ABOVE COUNTER
 - ▽ (2) DATA OUTLET, 18" AFF UNO "c" INDICATES ABOVE COUNTER
 - ▽ (1) TEL(2) DATA OUTLET, 18" AFF UNO "c" INDICATES ABOVE COUNTER
 - ▽ (2) DATA OUTLET, 18" AFF UNO "c" INDICATES ABOVE COUNTER
 - (WA) WIRELESS ACCESS POINT CEILING MOUNTED
 - (WA) WIRELESS ACCESS POINT WALL MOUNTED
 - (TV) CATV OUTLET - MOUNT AT 54" AFF U.N.O.
 - (CR) CARD READER
- PROVIDE BOXES, RACKS, ETC. WHERE INDICATED OR NEEDED
 - IN AREAS WITHOUT CEILINGS, CONDUIT PROVIDED TO NEAREST ACCESSIBLE CORRIDOR CEILING - 1" CONDUIT TO SINGLE GANG BOXES, 1 1/4" CONDUIT TO DOUBLE GANG BOXES.
 - PROVIDE BLANK INSERTS FOR ALL OUTLET OPENINGS IN PLATES THAT ARE UNUSED

F5 TECHNOLOGY

- ⊕ 20A, 125V, 2P, 3W, NEMA 5-20R
 - ⊕ 20A, 125V, 2P, 3W, NEMA L5-20R (TWISTLOCK)
 - ⊕ 30A DRYER RECEPTACLE - 125/250V, 3P, 4W, GROUNDING, NEMA 14-30R, (3)#10+(1)#10G TO 30A, 2P CIRCUIT BREAKER
 - ⊕ 30A, 250V, 2P, 3W, NEMA 6-30R
 - ⊕ 50A RANGE RECEPTACLE - 125/250V, 3P, 4W, GROUNDING, NEMA 14-50R, (3)#6+(1)#10 TO 50A, 2P CIRCUIT BREAKER
- NOTE:**
PROVIDE MATCHING CORD AND PLUG FOR SINGLE RECEPTACLES
- F⊕ DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
 - F⊕ DOUBLE DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
 - F⊕ JUNCTION BOX, MOUNT IN FLUSH FLOOR BOX
 - F⊕ FLUSH FLOOR BOX INCLUDING:
(4) DUPLEX RECEPTACLES
(4) TELEPHONE OUTLETS
(4) DATA OUTLETS
(4) USB CHARGING OUTLETS WITH (2) USB JACKS EACH
 - P⊕ DUPLEX RECEPTACLE, PEDESTAL MOUNTED
 - P⊕ SINGLE RECEPTACLE, PEDESTAL MOUNTED
 - P⊕ JUNCTION BOX, PEDESTAL MOUNTED
 - C⊕ DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
 - C⊕ DOUBLE DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
 - C⊕ DUPLEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
 - C⊕ DOUBLE DUPLEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
 - C⊕ DATA OUTLET, FLUSH MOUNTED IN CEILING, SEE MATRIX FOR TYPE
 - C⊕ JUNCTION BOX, FLUSH MOUNTED IN CEILING
 - ⊕ OVERHEAD RECEPTACLE DROP, DUPLEX
 - ⊕ OVERHEAD RECEPTACLE DROP, DOUBLE DUPLEX
 - ⊕ OVERHEAD RECEPTACLE DROP, GFCI
 - ⊕ OVERHEAD DATA DROP, SEE MATRIX FOR TYPE
 - 4⊕- USB CHARGING OUTLET, NUMBER INDICATES NUMBER OF JACKS

D7 FIRE ALARM SYSTEM

- EXISTING DUPLEX RECEPTACLE TO REMAIN
 - EXISTING DOUBLE DUPLEX RECEPTACLE TO REMAIN
 - ⊕c DUPLEX RECEPTACLE - 20A, 125V, 2P, 3W, NEMA 5-20R "c" INDICATES ABOVE COUNTER
 - ⊕ DOUBLE DUPLEX RECEPTACLE
 - ⊕ DUPLEX RECEPTACLE CONNECTED TO XXX
 - ⊕ GFCI DUPLEX RECEPTACLE, MOUNT 44" AFF UNO
 - ⊕ GFCI DOUBLE DUPLEX RECEPTACLE, MOUNT 44" AFF UNO
 - WP⊕ GFCI RECEPTACLE WITH WEATHERPROOF COVER
 - WP⊕ GFCI RECEPTACLE IN WP ENCLOSURE ON ROOF
 - ⊕ MULTI-OUTLET STRIP, PROVIDE OUTLETS 24" OC UNO, MOUNT 44" AFF UNO
- NOTES:**
- MOUNT RECEPTACLES WITH CENTERLINE 18" AFF UNO
 - MOUNT EXTERIOR RECEPTACLES WITH CENTERLINE 24" AFF UNO

A5 RECEPTACLES

- FACP FIRE ALARM CONTROL PANEL, MOUNT WITH TOP OF PANEL NOT MORE THAN 72" AFF
- FAA FIRE ALARM ANNUNCIATOR, MOUNT WITH TOP OF PANEL NOT MORE THAN 72" AFF
- ⊕ SMOKE DETECTOR
- ⊕ SMOKE DETECTOR, "E" INDICATES CONNECTION FOR ELEVATOR RECALL
- SS⊕ SINGLE STATION SMOKE DETECTOR WITH AUDIBLE INDICATING APPLIANCE, WALL MOUNTED
- AV⊕ SS SINGLE STATION SMOKE DETECTOR WITH AUDIBLE/VISUAL INDICATING APPLIANCE
- ⊕ HEAT DETECTOR
- ⊕ DUCT SMOKE DETECTOR
- RTS- REMOTE TEST/INDICATOR FOR DUCT SMOKES, MOUNT ON CEILING BENEATH UNIT, OR WALL MOUNT WHERE INDICATED ON PLANS
- E- MANUAL PULL STATION, MOUNT 48" AFF
- E- HORN/STROBE, CANDELA AS NOTED ON PLANS
- E- CEILING MOUNTED HORN/STROBE, CANDELA AS NOTED ON PLANS
- 15E- STROBE ONLY INDICATING APPLIANCE, CANDELA AS NOTED ON PLANS
- R E- STROBE, 15 CANDELA, 120V, CONNECT TO OPERATE UPON ACTIVATION OF ROOM SMOKE DETECTOR
- E- S- SPEAKER/STROBE, CANDELA AS NOTED ON PLANS
- E- S- CEILING MOUNTED SPEAKER/STROBE, CANDELA AS NOTED ON PLANS
- M- MINI HORN
- E- E- HORN/STROBE WITH PULL STATION DIRECTLY BELOW
- ⊕ MAGNETIC DOOR HOLD OPEN DEVICE
- T- TRANSFORMER
- ⊕ SPRINKLER SYSTEM WATER FLOW SWITCH, PROVIDED UNDER DIVISION 23, WIRED UNDER DIVISION 26
- ⊕ SPRINKLER SYSTEM TAMPER SWITCH, PROVIDED UNDER DIVISION 23, WIRED UNDER DIVISION 26
- ⊕ SPRINKLER SYSTEM CHECK VALVE PRESSURE SWITCH, FURNISHED AND INSTALLED UNDER DIVISION 23, WIRED UNDER DIVISION 26
- ⊕ SPRINKLER SYSTEM EXCESS PRESSURE PUMP, FURNISHED AND INSTALLED UNDER DIVISION 23, WIRED UNDER DIVISION 26
- K- KNOX BOX, MOUNT 60" AFF
- S- SMOKE DAMPER

D9 POWER DISTRIBUTION

- BRANCH CIRCUIT WIRING NOT SHOWN. CIRCUITING SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARD PRACTICE. RECEPTACLE BRANCH CIRCUITS SHALL BE CONNECTED TO UNUSED POLE PLACES IN EXISTING BRANCH-CIRCUIT PANELBOARDS SERVING AREA. PROVIDE A 20A, 1P CIRCUIT BREAKER FOR EACH RECEPTACLE CIRCUIT UNLESS OTHERWISE INDICATED OR NOTED. CONNECT NO MORE THAN SIX DUPLEX CONVENIENCE RECEPTACLES PER BRANCH CIRCUIT.
- CONNECT LIGHTING TO EXISTING LIGHTING BRANCH CIRCUITS SERVING AREA. CONNECTED LOAD ON LIGHTING CIRCUITS SHALL NOT EXCEED 12 AMPS. WHERE LOADS ARE ADDED TO EXISTING BRANCH CIRCUITS, VERIFY THAT THE EXISTING CIRCUITS HAVE ADEQUATE CAPACITY TO SUPPORT THE ADDITIONAL LOAD WITHOUT EXCEEDING SPECIFIED MAXIMUM LOAD.
- IN AREAS WHERE LIGHTING AND CONTROLS ARE INDICATED, REMOVE EXISTING LIGHTING AND CONTROLS AS REQUIRED TO CREATE INDICATED CONDITIONS.
- REMOVE EXISTING ELECTRICAL ITEMS IN WALLS AND CEILINGS TO BE REMOVED UNDER OTHER DIVISIONS. WHERE REMOVALS IMPACT WIRING TO EXISTING ITEMS TO REMAIN, PROVIDE WIRING AND CONNECTIONS AS REQUIRED TO RE-FEED EXISTING ITEMS TO REMAIN.
- DISCONNECT, REMOVE, RELOCATE, AND RECONNECT ELECTRICAL CONDUIT, WIRING, DEVICES, BOXES, FIXTURES, EQUIPMENT, ETC. AS INDICATED AND AS REQUIRED TO FACILITATE THE WORK OF DIVISION 26 AND OTHER DIVISIONS. THESE DRAWINGS ARE NOT INTENDED TO INDICATE ITEMS TO BE REMOVED. DISCONNECT AND REMOVE WIRING FOR ITEMS TO BE REMOVED BY THE POINT OF CONNECTION AT THE SOURCE. NOTHING SHALL BE ABANDONED IN PLACE.
- DO NOT SCALE THE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS FOR EXACT DIMENSIONS.
- THE LOCATION OF EQUIPMENT, OUTLETS, ETC. AS GIVEN ON THE DRAWINGS IS APPROXIMATE. IT SHALL BE UNDERSTOOD THAT THESE LOCATIONS ARE SUBJECT TO MODIFICATION AS MAY BE FOUND NECESSARY OR DESIRABLE AT THE TIME OF INSTALLATION IN ORDER TO MEET PROJECT REQUIREMENTS. SUCH CHANGES SHALL BE MADE WITHOUT EXTRA CHARGE.
- ALL ELECTRICAL DEVICES, WHEN INSTALLED, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. COVER PLATES SHALL BE INSTALLED AFTER FINISH MATERIALS HAVE BEEN APPLIED.
- COORDINATE ALL WORK WITH OTHER DIVISIONS AND THE OWNER.
- VERIFY EXACT POWER REQUIREMENTS OF EQUIPMENT PRIOR TO ROUGH IN.
- COORDINATE LOCATIONS OF WALL MOUNTED LIGHT FIXTURES AND OTHER ELECTRICAL ITEMS WITH ARCHITECTURAL INTERIOR ELEVATIONS.

A7 ELECTRICAL GENERAL NOTES

- PANELBOARD, SURFACE MOUNTED
- PANELBOARD, FLUSH MOUNTED
- ⊕ FUSED DISCONNECT SWITCH
- ⊕ NON-FUSED DISCONNECT SWITCH
- ⊕ MOTOR STARTER
- ⊕ COMBINATION MOTOR STARTER/FUSED DISCONNECT
- ⊕ MOTOR OR FAN
- (M) METER AND CABINET
- ⊕ JUNCTION BOX - CEILING MOUNTED
- ⊕ JUNCTION BOX - WALL MOUNTED
- (C) JUNCTION BOX FOR CLOCK POWER
- (H) JUNCTION BOX MOUNTED AT 32" FOR HAND DRYER
- T- TRANSFORMER - NUMBER INDICATES DESIGNATION SEE TRANSFORMER SCHEDULE
- VFD VARIABLE FREQUENCY DRIVE
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR
- E- EMERGENCY SHUTOFF SWITCH - WALL MOUNTED 48" TO CENTERLINE - PROVIDE TAMPER-PROOF COVER
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- - - WIRING UNDERGROUND OR UNDERSLAB
- ← INDICATES ONE OUTLET CONNECTED TO AN INDIVIDUAL 20A 120V BRANCH CIRCUIT
- ← SINGLE-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
- ← 3-PHASE HOMERUN OR MULTIPLE HOMERUN UTILIZING THE SAME CONDUIT
- ~ FLEXIBLE CONNECTION
- || GROUNDING SYSTEM
- ⊕ MOTORIZED DOOR OPERATOR AND PUSH PADDLE - FURNISHED BY DIVISION 08, WIRED BY DIVISION 26
- ⊕ DOORBELL PUSHBUTTON
- ⊕ DOORBELL CHIME
- ~ SYSTEMS FURNITURE WHIP

D9 POWER DISTRIBUTION

- Mark Date Description
- Project Status
- ISSUED FOR CONSTRUCTION**
- SEPTEMBER 21, 2016
- Drawing Title
- ELECTRICAL LEGENDS, ABBREVIATIONS AND GENERAL NOTES**
- Scale: 12" = 1'-0"
- Drawing Number
- E-00.1**

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SEPTEMBER 21, 2016

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