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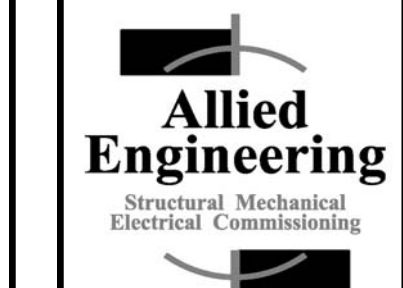
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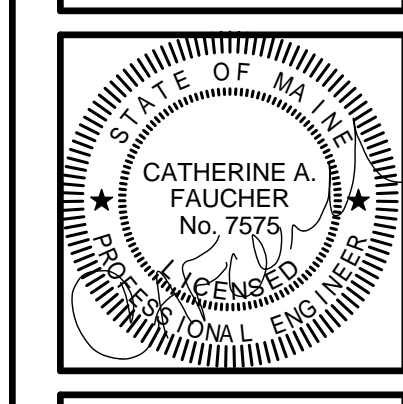


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CASCO BAY HIGH SCHOOL - RENOVATIONS  
196 Allen Avenue  
Portland, ME

No.	Date	Description
		Revision Schedule



JOB NO.  
17056

DRWN. CHK  
DLL CAF

SCALE:  
12" = 1'-0"

ISSUE  
Permitting Set  
19 February 2018

TITLE  
ELECTRICAL GENERAL NOTES  
AND LEGENDS

SHEET  
**E100**

- BRANCH CIRCUIT WIRING NOT SHOWN. REFER TO SCHEDULES FOR CIRCUITING INFORMATION.
- EXISTING CONDITIONS ARE NOT SHOWN. REMOVE AND LEGALLY DISPOSE OF EXISTING ELECTRICAL ITEMS AS REQUIRED TO CREATE INDICATED CONDITIONS. NOTHING SHALL BE ABANDONED IN PLACE EXCEPT FOR RACEWAYS CONCEALED WITHIN EXISTING MASONRY PARTITIONS. PROVIDE BLANK COVERS AS REQUIRED TO COVER EXISTING BOXES THAT BECAME UNUSED AS A RESULT OF THIS PROJECT.
- WHERE REMOVALS IMPACT WIRING TO EXISTING ITEMS TO REMAIN, PROVIDE WIRING AND CONNECTIONS AS REQUIRED TO RE-FEED ITEMS TO REMAIN.
- EXISTING RACEWAYS AND BOXES SHALL BE PERMITTED TO BE REUSED WHERE THEY ARE LOCATED IN THE SAME LOCATION AS AN INDICATED ITEM AND WHERE THEY COMPLY WITH PROJECT SPECIFICATIONS FOR NEW WORK.
- 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 LIGHT FIXTURES AND OTHER ELECTRICAL ITEMS WITH ARCHITECTURAL INTERIOR ELEVATIONS.

E1	GENERAL NOTES
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- LIGHTING SWITCHES**
- \$a LIGHT SWITCH, 20A, 125/277V
  - \$3 THREE-WAY LIGHT SWITCH
  - \$4 FOUR-WAY LIGHT SWITCH
  - \$2 TWO-POLE SWITCH
  - \$C CONTROL STATION - REFER TO DETAIL G8/E001
  - \$K KEY OPERATED SWITCH
  - \$M MOTOR RATED SWITCH
  - \$P SINGLE POLE SWITCH WITH RED PILOT LIGHT - RED LIGHT SHALL GLOW WHEN CIRCUIT IS ENERGIZED
  - \$a MULTI-GANGED SWITCHES, GANG UNDER ONE PLATE, LETTER INDICATES SWITCHING
  - \$b
  - \$os OCCUPANCY SENSOR SWITCH, WALL MOUNTED
  - \$os2 2-BUTTON OCCUPANCY SENSOR SWITCH
  - \$os3 OCCUPANCY SENSOR SWITCH WIRED FOR 3-WAY OPERATION
  - \$osd OCCUPANCY SENSOR SWITCH WITH DIMMING - COORDINATE DIMMING TECHNOLOGY WITH LOAD TO BE DIMMED
  - \$oc OCCUPANCY SENSOR, CEILING MOUNTED
  - \$od OCCUPANCY SENSOR, WALL MOUNTED
  - \$d DIMMER SWITCH - COORDINATE DIMMING TECHNOLOGY WITH LOAD TO BE DIMMED
  - \$F HANDICAP SWITCHES FOR HOOD LIGHT AND FAN
  - \$L
  - \$T TIMER SWITCH
  - \$LV LOW VOLTAGE LIGHT SWITCH, MOMENTARY CONTACT
  - \$Lvb LOW VOLTAGE LIGHT SWITCH CONTROLLING MULTIPLE LIGHTING GROUPS
  - \$Ehab WALL STATION - REFER TO DETAIL J10/E001 - LOWER CASE LETTERS INDICATE SWITCHING, MULTIPLE LOWER CASE LETTERS INDICATE MANUAL CONTROL OF MULTIPLE SWITCH GROUPS
  - LTC LIGHTING TIME CLOCK
  - LC LIGHTING CONTACTOR
  - LCP LIGHTING CONTROL PANEL
  - PC OUTDOOR PHOTOELECTRIC SWITCH
  - DS DAYLIGHT HARVESTING SENSOR
  - DS DAYLIGHT HARVESTING SENSOR MOUNTED IN SOLATUBE
- NOTES:
- MOUNT LIGHT SWITCHES WITH CENTERLINE 48" AFF, UNO
  - LOWER CASE LETTER AT SWITCH INDICATES SWITCHING

**EMERGENCY LIGHTING**

- HATCHING INDICATES FIXTURE CONNECTED TO LIFE SAFETY EMERGENCY GENERATOR BRANCH U.N.O. FIXTURES SHALL BE UNSWITCHED AND REMAIN ON U.N.O. - "EM" INDICATES EMERGENCY WHERE SYMBOL HATCHING IS UNCLEAR
- BP# EMER BATTERY UNIT WITH NO HEADS, MT 7'-6" AFF
  - BP# INDICATES BATTERY UNIT DESIGNATION, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING BRANCH CIRCUIT, U.N.O.
  - E EMER BATTERY UNIT WITH INTEGRAL HEADS, MT 7'-6" AFF
  - BP# INDICATES BATTERY UNIT DESIGNATION, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING BRANCH CIRCUIT, U.N.O. "C" INDICATES CEILING MOUNTED
  - BP# SINGLE REMOTE EMERGENCY LIGHT HEAD, MOUNT 7'-6" AFF
  - BP# INDICATES BATTERY UNIT CONNECTED TO
  - BP# DOUBLE REMOTE EMERGENCY LIGHT HEAD, MOUNT 7'-6" AFF
  - BP# INDICATES BATTERY UNIT CONNECTED TO
  - BP# DOUBLE REMOTE EMERGENCY LIGHT HEAD, CEILING MOUNTED, BP# INDICATES BATTERY UNIT CONNECTED TO
  - EXIT SIGN, CEILING MOUNTED, SHADING INDICATES FACE(S) ARROWHEAD INDICATES CHEVRON(S) REQUIRED, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING BRANCH CIRCUIT, U.N.O.
  - EXIT SIGN, WALL MOUNTED, SHADING INDICATES FACE(S) MOUNT AT 7'-6" AFF OR OVER DOOR, CONNECT TO UNSWITCHED PORTION OF AREA LIGHTING BRANCH CIRCUIT, U.N.O.
  - INV CENTRAL LIGHTING INVERTER
- REFER TO LUMINAIRE SCHEDULE FOR FIXTURE TYPES
- TYPICAL FOR ALL FIXTURE TYPES :**
- INDICATES LUMINAIRE TYPE ON SCHEDULE
  - R1 3 LOWER CASE LETTER INDICATES SWITCH GROUP
  - # INDICATES CIRCUIT NUMBER

NOTE:  
WHERE INDICATED ON PLANS, FIXTURES EQUIPPED WITH EMERGENCY BATTERY DRIVER, CONNECT TO BOTH SWITCHED AND UNSWITCHED PORTION OF LIGHTING CIRCUIT IN ACCORDANCE WITH EMERGENCY BATTERY DRIVER MANUFACTURER'S INSTRUCTIONS.

- 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, WIRED TO FACP
- S SMOKE DETECTOR, WIRED TO FACP
- H HEAT DETECTOR, WIRED TO FACP
- D DUCT SMOKE DETECTOR, WIRED TO FACP
- G GAS DETECTOR, WIRED TO FACP
- RTS REMOTE TEST INDICATOR FOR DUCT SMOKES, MOUNT ON CEILING BENEATH UNIT, OR WALL MOUNT WHERE INDICATED ON PLANS
- P- MANUAL PULL STATION, MOUNT 48" AFF
- HORN/STROBE, WALL MOUNTED CANDELA AS NOTED ON PLANS, WIRED TO FACP
- HORN/STROBE, CEILING MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
- STROBE ONLY INDICATING APPLIANCE, WALL MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
- STROBE ONLY INDICATING APPLIANCE, CEILING MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
- HORN/STROBE WITH PULL STATION DIRECTLY BELOW
- MAGNETIC DOOR HOLD OPEN DEVICE, WIRED TO FACP
- TRANSFORMER
- K- KNOX BOX, MOUNT 60" AFF
- SD SMOKE DAMPER, WIRED TO FACP
- FSD FIRE AND SMOKE DAMPER, WIRED TO FACP
- HORN/STROBE, CANDELA AS NOTED ON PLANS, WIRED TO FACP
- SPEAKER/STROBE, WALL MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP
- SPEAKER/STROBE, CEILING MOUNTED, CANDELA AS NOTED ON PLANS, WIRED TO FACP

D2	FIRE ALARM
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- PANELBOARD - SURFACE MOUNTED
- PANELBOARD - FLUSH MOUNTED
- AS AF FUSED DISCONNECT SWITCH
- NON-FUSED DISCONNECT SWITCH
- 00 MOTOR STARTER - NUMBER INDICATES NEMA SIZE
- 00 COMBINATION MOTOR STARTER/FUSED DISCONNECT
- MOTOR OR FAN
- M METER AND CABINET
- JUNCTION BOX
- JUNCTION BOX - WALL MOUNTED
- DOUBLE GANG JUNCTION BOX - WALL MOUNTED 18" AFF
- JUNCTION BOX - FLUSH CEILING MOUNTED
- JUNCTION BOX - PEDESTAL MOUNTED
- TRANSFORMER - NUMBER INDICATES DESIGNATION SEE TRANSFORMER SCHEDULE
- VFD VARIABLE FREQUENCY DRIVE
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR
- POWER SHUTOFF SWITCH - WALL MOUNTED 48" TO CENTER LINE, INTERLOCK TO CONTROL SHUNT TRIP CIRCUIT BREAKER IN PANELBOARD SERVING AREA
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- WIRING UNDERGROUND OR UNDERSLAB
- HOMERUN - (2)#12+(1)#12G UNO (EXCEPT LIGHTING CIRCUITS: (1)#12+(1)#10N+(1)#12G UNO)
- 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 DIV 08, WIRED BY DIV 26
- ENCLOSED CIRCUIT BREAKER
- ATS AUTOMATIC TRANSFER SWITCH
- H- HAND DRYER, COORDINATE HEIGHT WITH ARCHITECTURAL PLANS
- ENCLOSED CONTACTOR
- OVERHEAD DATA DROP
- DATA OUTLET FLUSH IN CEILING
- Mechanical Equipment Tag - REFER TO SCHEDULES FOR POWER AND DATA REQUIREMENTS.

**SINGLE RECEPTACLES**

- MOUNT 46" AFF U.N.O.
- 20A, 125V, 2P, 3W, NEMA 5-20R
  - GFCI 20A, 125V, 3W, NEMA 5-20R - MOUNT 46" AFF UNO
  - 20A, 125V, 2P, 3W, NEMA L5-20R (TWISTLOCK)
  - 30A, 125/250V, 3P, 4W, GROUNDING, NEMA 14-30R, (3)#10+(1)#10G TO 30A
  - 30A, 480V, 2P, 3W, NEMA 8-30R, (2)#10+(1)#10G
  - 50A, 250V, 3P, 3W, GROUNDING, NEMA 10-50R, (3)#6+(1)#10
  - 50A, 480V, 2P, 3W, NEMA 8-50L, GROUNDING, (3)#6+(1)#8G
  - 30A, 125V, 3W, NEMA L5-30R (TWIST LOCK), (2)#10+(1)#10G TO 30A, 1P CIRCUIT BREAKER
  - OVERHEAD RECEPTACLE CORD DROP
  - OVERHEAD RECEPTACLE DROP, GFCI 20A, 125V, 2P, 3W, NEMA 5-20R

NOTE:  
PROVIDE MATCHING CORD AND PLUG FOR SINGLE RECEPTACLES FOR NEW EQUIPMENT AND WHERE NOTED FOR RELOCATED EQUIPMENT

**FLOOR AND CEILING DEVICES**

- DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
- DOUBLE DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W, NEMA 5-20R, MOUNT IN FLUSH FLOOR BOX
- DUPLEX RECEPTACLE, PEDESTAL MOUNTED
- SINGLE RECEPTACLE, PEDESTAL MOUNTED
- DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
- DOUBLE DUPLEX RECEPTACLE, FLUSH MOUNTED IN CEILING
- DUPLEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
- DOUBLE DUPLEX GFCI RECEPTACLE, FLUSH MOUNTED IN CEILING
- OVERHEAD RECEPTACLE DROP, DUPLEX
- OVERHEAD RECEPTACLE DROP, DOUBLE DUPLEX
- OVERHEAD RECEPTACLE DROP, GFCI
- OVERHEAD RETRACTABLE CORD REEL, DOUBLE DUPLEX
- OVERHEAD RETRACTABLE CORD REEL, GFCI
- MULTI-SERVICE FLUSH FLOOR BOX - WIREMOLD EFB45 SERIES OR APPROVED EQUAL, COVER SHALL BE FLUSH STYLE WITH FLOOR INSERT, COVER FINISH COLOR SHALL BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD FINISHES.

**RECEPTACLES**

- DUPLEX RECEPTACLE - 20A, 125V, 2P, 3W, NEMA 5-20R
- DOUBLE DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE, HATCH INDICATES AFCI PROTECTION
- GFCI DUPLEX RECEPTACLE, MOUNT 46" AFF UNO
- GFCI DOUBLE DUPLEX RECEPTACLE, MOUNT 46" AFF UNO
- GFCI RECEPTACLE FOR ELECTRIC WATER COOLER - COORDINATE LOCATION WITH DIVISION 22.
- GFCI RECEPTACLE IN WP ENCLOSURE ON ROOF
- GFCI RECEPTACLE WITH WEATHERPROOF COVER
- MULTI-OUTLET STRIP, (8) SINGLE 5-20R SINGLE RECEPTACLES MOUNTED VERTICALLY IN CABINET, REFER TO ARCHITECTURAL PLANS.
- SURFACE RACEWAY WITH DIVIDER, MOUNT 44" AFF UNO, PROVIDE NEMA 5-20 RECEPTACLES AND TECHNOLOGY OUTLETS AS SHOWN ON PLAN
- LAPTOP CHARGING CART RECEPTACLES, FOR EACH CART LOCATION PROVIDE (2) 20A, 125V, 2P, 3W, NEMA 5-20R RECEPTACLES, WIRE AND CONNECT EACH RECEPTACLE TO A DEDICATED 20A, 1P, 120V CIRCUIT.

- NOTES:
- MOUNT RECEPTACLES WITH CENTERLINE 18" AFF UNO
  - MOUNT EXTERIOR RECEPTACLES WITH CENTERLINE 24" AFF UNO

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

A4	ABBREVIATIONS
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A3	RECEPTACLES
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A2	POWER DISTRIBUTION
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A1	LUMINAIRES AND SWITCHES
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