ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)
1PH	1 PHASE
2C	TWO-CONDUCTOR (3C, 4C, ETC.)
2W	TWO-WIRE (3W, 4W, ETC.)
3PH	3 PHASE
A	AMPERE
AAP	ALARM ANNUNCIATOR PANEL
AC	ABOVE COUNTER AIR CONDITIONER ALTERNATING CURRENT
ACC	ACCESSIBLE
ACLG	ABOVE CEILING
ADO	AUTOMATIC DOOR OPENER
A/E	ARCHITECT/ENGINEER
AF	AMP FRAME
AFC	AVAILABLE FAULT CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT CIRCUIT INTERRUPTER
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ALT	ALTERNATE
AMP	AMPERE
APPROX	APPROXIMATELY
ARCH	ARCHITECT, ARCHITECTURAL
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BATT	BATTERY
BC	BARE COPPER
BD	BOARD
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
BYP	BYPASS
C	CONDUIT
CAB	CABINET
CALC	CALCULATED
CAP	CAPACITY
CAT	CATALOG, CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCR	CONTROL CONTACTOR
CCTV	CLOSED CIRCUIT TELEVISION
cd	CANDELA
CD	CONTRUCTION DOCUMENTS
CF	CONTRACTOR-FURNISHED
CKT	CIRCUIT
CLG	CEILING
COAX	COAXIAL CABLE
COMM	COMMUNICATION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CPT	CONTROL POWER TRANSFORMER
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CTR	CENTER
CU	COPPER
CU FT	CUBIC FEET
dB	DECIBEL
DB	DIRECT BURIAL
DC	DIRECT CURRENT
DCP	DIMMER CONTROL PANEL
DEG C	DEGREES CELSIUS
DEG F	DEGREES FAHRENHEIT
DEMO	DEMOLISH/DEMOLITION
DEPT	DEPARTMENT
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DS	SAFETY DISCONNECT SWITCH
DT	DOUBLE THROW
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EG	EQUIPMENT GROUND
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMI	ELECTROMAGNETIC INTERFERENCE
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
ERCSP	ELEVATOR RECALL CONTROL AND SUPERVISORY PANEL
ESMT	EASMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WALL HEATER ELECTRIC WATER HEATER
EX	EXISTING
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FOOTCANDLE
FCU	FAN COIL UNIT
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FU	FUSE
FUDS	FUSED SAFETY DISCONNECT SWITCH
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL (CONDUIT)
GYP BD	GYPSUM BOARD
HID	HIGH-INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HT	HEIGHT
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
IESNA	ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
IR	INFRARED
IW	INTERLOCK WITH
IWH	INSTANTEOUS WATER HEATER
J-BOX	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KVAR	KILOVOLT-AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LED	LIGHT-EMITTING DIODE
LF	LINEAR FEET/FOOT
LM	LUMEN
LPS	LOW PRESSURE SODIUM
LRA	LOCKED ROTOR AMPS
LT	LIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR METAL-CLAD (CONDUIT)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MFR	MANUFACTURER
MFS	MAIN FUSED DISCONNECT SWITCH
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLGW	MEMPHIS LIGHT, GAS, AND WATER
MLO	MAIN LUGS ONLY
MOA	MULTIOUTLET ASSEMBLY
MRS	MOTOR-RATED SWITCH
MSBD	MAIN SWITCHBOARD
MT	MOUNT
MTS	MANUAL TRANSFER SWITCH
MTR	MOTOR, MOTORIZED
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OL	OVERLOAD
PA	PUBLIC ADDRESS
PACS	PHYSICAL ACCESS CONTROL SYSTEM
PB	PULL BOX OR PUSHBUTTON
PBPU	PREFABRICATED BEDSIDE PATIENT UNIT
PCB	POLYCHLORINATED BYPHENYL
PC	PHOTOELECTRIC CELL
PED	PEDESTAL
PEND	PENDANT
PF	POWER FACTOR
PH	PHASE
PIR	PASSIVE INFRARED
PIV	POST INDICATING VALVE
PNL	PANEL
PoE	POWER-OVER-ETHERNET
PR	PAIR
PRI	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE (CONDUIT)
PWR	POWER
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
RCPT, REC	RECEPTACLE
REQD	REQUIRED
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RMS	ROOT MEAN SQUARE
RTU	ROOF TOP UNIT
SC	SURFACE CONDUIT
SEC	SECONDARY
SF	SQUARE FEET/FOOT
SHT	SHEET
SLC	SIGNALING LINE CIRCUIT
SI	INTERNATIONAL SYSTEM OF UNITS
SIM	SIMILAR
SN	SOLID NEUTRAL
SPEC	SPECIFICATION
SPKR	SPEAKER
SP	SPARE
SR	SURFACE RACEWAY
SS	STAINLESS STEEL
SSW	SELECTOR SWITCH
SS	STOP/START PUSHBUTTONS
STD	STANDARD
SURF	SURFACE MOUNTED
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
SYS	SYSTEM
TC	TIMECLOCK
TCBB	TELCO BACKBOARD
TCP	TEMPERATURE CONTROL PANEL
TEL	TELEPHONE
TEL/DATA	TELEPHONE/DATA
TERM	TERMINAL
TGB	TELCO GROUND BAR
TMGB	TELCO MAIN GROUND BAR
TP	TWISTED PAIR
TPS	TWISTED PAIR SHIELDED
TR	TAMPER RESISTANT
T-STAT	THERMOSTAT
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TYP	TYPICAL
UC	UNDER COUNTER
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORY
UT	UNDERGROUND TELEPHONE
UTP	UNSHIELDED TWISTED PAIR
UTIL	UTILITY
UV	UNIT VENTILATOR OR ULTRAVIOLET
V	VOLT
VA	VOLT-AMPERES
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
W	WATT
W/	WITH
WH	WATER HEATER
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER

ELECTRICAL SYMBOL LEGEND

SYMBOL	HEIGHT	DESCRIPTION
	18"	120V DUPLEX RECEPTACLE
	18"	120V DUPLEX RECEPTACLE EMERGENCY
	18"	120V QUADRUPLEX RECEPTACLE
	18"	120V QUADRUPLEX RECEPTACLE EMERGENCY
		RECEPTACLE MODIFIERS: GFI: GROUND FAULT CURRENT INTERUPTER WP: WEATHERPROOF ENCLOSURE
		JUNCTION BOX, PURPOSE AS NOTED
	72" TOP MAX	DISCONNECT SWITCH NON-FUSED
	72" TOP MAX	DISCONNECT SWITCH FUSED
	18"	DATA/TELCO OUTLET
	18"	DATA OUTLET
	48"	TELCO OUTLET
$	48"	SINGLE POLE WALL SWITCH
		SWITCH MODIFIERS: M: MOTOR-RATED OC: OCCUPANCY SENSOR, DUAL TECHNOLOGY T: ELECTRONIC TIMER VC: VACANCY SENSOR, DUAL TECHNOLOGY 3: 3-WAY SWITCH 4: 4-WAY SWITCH
		PHOTOCELL
	48"	CARD READER
	48"	CARD READER WITH KEYPAD
		ELECTRONIC LOCKING MECHANISM
		DOOR CONTACT
		REQUEST FOR EXIT SENSOR
		CCTV DOME CAMERA
		CCTV CAMERA MODIFIERS: F: FIXED PTZ: PAN/TILT/ZOOM
	48"	PUSH PLATE/DOOR SWITCH
		AUTOMATIC DOOR OPERATOR
		EMERGENCY BLUE LIGHT PHONE
		HEAT DETECTOR
		PANEL - 480V
		PANEL - 208V
		PANEL - SPECIAL
		SPECIAL PANELS: ERCSP: ELEVATOR RECALL CONTROL AND SUPERVISORY PANEL FACP: FIRE ALARM CONTROL PANEL PACS: PHYSICAL ACCESS CONTROL SYSTEM TCP: TEMPERATURE CONTROL PANEL

ALL HEIGHTS ARE TO CENTER OF DEVICE UNLESS NOTED OTHERWISE.
TOP: HEIGHT TO TOP OF DEVICE
ANY HEIGHTS INDICATED IN PLANS SHALL SUPERCEDE THOSE LISTED HERE.

GENERAL NOTES

1. ALL ELECTRICAL DEVICES, FIXTURES, EQUIPMENT AND FEEDERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDED PROCEDURES, ALL APPLICABLE LOCAL AND STATE CODES, AMERICAN DISABILITIES ACT AND WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE AND VA STANDARDS.
2. PROVIDE ADDITIONAL SUPPORT FOR DEVICES, FIXTURES, EQUIPMENT AND FEEDERS WHERE THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
3. FIRESTOP, DRAFTSTOP, SMOKESTOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PENETRATIONS THROUGH WALLS, PARTITIONS, FLOORS, CEILING, AND ROOFS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, UL LISTING REQUIREMENT AND THE APPLICABLE BUILDING CODES.
4. VERIFY CEILING SYSTEMS AND PROVIDE MOUNTING ACCESSORIES, TRIMS AND ALL REQUIRED MOUNTING HARDWARE TO SUIT THE PARTICULAR INSTALLATION.
5. PROTECT EXISTING UNDERGROUND AND BUILDING INTERIOR UTILITIES DURING CONSTRUCTION.
6. BRANCH CIRCUIT CONDUCTORS SHALL BE 12 AWG COPPER MINIMUM.
7. COORDINATE ANY AND ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING CONSTRUCTION.
8. ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INDICATING EQUIPMENT SERVED AND ROOM NUMBER (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT LOCATION, OR SPARE, OR SPACE.
9. MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY STANDARD AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED. ALL PRODUCTS MUST COMPLY WITH "BUY AMERICAN ACT".
10. ALL FEEDERS AND CIRCUITRY SHALL BE TORQUED PER THE PANEL, BREAKER, AND/OR PARTICULAR EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
11. CIRCUITRY TO SWITCHES, RECEPTACLES, AND ALL OTHER DEVICES SHALL BE TERMINATED ON THE DEVICE'S SCREW TERMINALS.
12. MOUNTING HEIGHTS INDICATED ARE TO CENTER OF DEVICE, OUTLET, FIXTURE, OR EQUIPMENT UNLESS NOTED OTHERWISE.
13. ALL WIRE TERMINATIONS SHALL BE RATED FOR 75 DEGREES C.
14. ALL CONDUCTORS SHALL HAVE THHN/THWN INSULATION, UNLESS OTHERWISE NOTED.
15. ALL CONDUIT SHALL BE RGS OR EMT UNLESS OTHERWISE NOTED. USE LFMC ON VIBRATING EQUIPMENT. USE PVC FOR UNDERGROUND OR CONCRETE-ENCASED. UNDERGROUND BRANCH CIRCUITS MAY BE DIRECT-BURIED PVC. UNDERGROUND FEEDERS SHALL BE CONCRETE-ENCASED.
16. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL-LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
17. NO CONDUIT SHALL BE ROUTED BELOW THE LEVEL OF THE DOUBLE-TEE CONSTRUCTION. ALL CONDUITS ROUTED THROUGH DOUBLE-TEES SHALL BE THROUGH THE KNOCKOUTS PROVIDED FOR CONDUIT ROUTING. COORDINATE KNOCKOUT SIZE AND LOCATION WITH PRECAST PROVIDER.
18. IN CASE OF CONFLICTS OR DISCREPANCIES WITHIN OR AMONG THE CONTRACT DOCUMENTS, THE BETTER QUALITY, MORE STRINGENT REQUIREMENTS OR GREATER QUANTITY OF WORK, AS DETERMINED BY THE GOVERNMENT, SHALL BE PROVIDED.
19. IF FIBER IS USED TO REPLACE 4PR DUE TO DISTANCE LIMITATIONS, FIBER SHALL BE INSTALLED IN INNERDUCT.
20. APPLY FOR NEW GARAGE SERVICE ON BEHALF OF THE OWNER WITH MEMPHIS LIGHT, GAS, AND WATER (MLGW). COORDINATE ALL WORK WITH MLGW AND THE OWNER. COMPLY WITH ALL MLGW REQUIREMENTS FOR NEW INSTALLATIONS.
21. COORDINATE EXACT LOCATION OF ALL ELEVATOR-RELATED EQUIPMENT AND DEVICES WITH THE ELEVATOR INSTALLER.
22. DO NOT INSTALL CONDUIT ON THE EXTERIOR SURFACE OF THE STRUCTURE. WHERE FIXTURES OR DEVICES ARE SHOWN TO BE ON THE EXTERIOR OF THE STRUCTURE, PROVIDE A JUNCTION BOX ON THE BACK SIDE OF THE SPANDREL AND ROUTE CONDUCTORS DIRECTLY THROUGH SPANDREL.
23. UNO, ALL 20 A BRANCH CIRCUIT WIRING SHALL BE 2-12 AWG, 12 AWG G, 3/4" C.
24. COORDINATE ALL SPECIFIC DEVICE LOCATIONS WITH OTHER TRADES, INCLUDING PAINTED SIGNAGE.
25. COORDINATE EXACT CAMERA ANGLES WITH THE VA POLICE.

LIGHT FIXTURE SCHEDULE

SYMBOL	LABEL	TYPE OF LAMP	DRIVER	LUMENS	WATTS/ FIXTURE	VOLTAGE	DESCRIPTION	BASIS OF DESIGN FIXTURE (SEE NOTE 5)
	A	40 LEDs 4000K 70 CRI	MULTI-LEVEL 350mA DRIVER	5105	46 (HIGH) 17 (LOW)	277	12" SQUARE PENDANT MOUNT LED PARKING STRUCTURE LUMINAIRE; TYPE V SHORT DISTRIBUTION; WITH INTEGRAL PIR OCCUPANCY SENSOR, AMBIENT LIGHT SENSOR AND FIELD ADJUSTABLE MULTI-LEVEL OPTION DRIVER (350mA HIGH LEVEL AND 125mA LOW LEVEL); BLACK. MOUNT SUCH THAT BOTTOM OF FIXTURE IS 2" ABOVE BOTTOM OF DOUBLE TEE, CENTERED BETWEEN RIBS UNLESS TO AVOID SEAMS.	CREE MODEL # PKG-304-5S-PD-04-E-UL-BK-350-ML-40K ML HIGH 350mA: FULL POWER ML LOW 125mA: POSITION 4 (COORDINATE ML OPTIONS) OR APPROVED EQUAL
	B	LED 4000K 80 CRI	ELEC. DRIVER	3,251	26	277	4' LINEAR, LENSED, WALL OR CEILING SURFACE MOUNT LED, WITH OCCUPANCY SENSOR AND AMBIENT LIGHT SENSOR. DIMS TO 10% WHEN UNOCCUPIED.	LITHONIA MODEL # WL4-30L-EZ1-LP840-...ADCX-DIM10 OR APPROVED EQUAL
	C	LED 4000K 80 CRI	ELEC. DRIVER	6,643	64	MVOLT	4' ROUGH-SURFACE VANDAL-RESISTANT LINEAR LED WITH CLEAR POLYCARBONATE LENS; MEDIUM DISTRIBUTION; INSTALLED SUCH THAT IT IS FLUSH WITH BOTTOM OF DOUBLE-TEE CONSTRUCTION.	LITHONIA MODEL # VAP-6000LM-...MD-MVOLT-...80CRI OR APPROVED EQUAL
	EB	LED	--	--	5	277	SURFACE MOUNT EMERGENCY DOUBLE HEAD EMERGENCY LIGHT FIXTURE WITH 90-MINUTE BATTERY BACKUP, SUITABLE FOR DAMP LOCATIONS.	LITHONIA MODEL # ...12 OR APPROVED EQUAL
	EXA	LED	--	--	2.7	277	SINGLE-FACE LED EMERGENCY EXIT SIGN WITH ... INDICATOR ... RED FACE. CEILING OR SU... REQUIRED. INSTALL SUCH THAT THE ENTIRE FACE IS VISIBLE BELOW THE DOUBLE Ts.	LITHONIA MODEL # WLTE-GY-1-R OR APPROVED EQUAL
	G	LED 4000K 80 CRI	ELEC. DRIVER	4,000	42	277	4' x ... ENCLOSED AND GASKETED FIBERGLASS EXTREME ENVIRONMENT LED WITH RIBBED FROSTED ACRYLIC SHIELDING, WET LOCATION LISTED.	COLUMBIA MODEL # LXEM4-40LW-RFA-EU OR APPROVED EQUAL
	PP1	120 LEDs 4000K 70 CRI	ONE 525mA ELEC. DRIVER	17,710	202	277	ONE-HEAD, RECTANGULAR, LED, POLE-MOUNTED EXTERIOR AREA LUMINAIRE WITH 25' POLE. BLACK BODY, BLACK POLE. SUITABLE FOR WET LOCATIONS. TYPE II MEDIUM DISTRIBUTION WITH BACKLIGHT SHIELD. EACH HEAD SHALL HAVE INTEGRAL PHOTOCELL TO SWITCH FIXTURES BETWEEN FULL POWER AT NIGHT AND OFF DURING DAY. PROVIDE POLE BASE PER DETAILS.	CREE MODEL # ARE-EDG-2MB-DA-12-E-UL-BK-525-P-40K OR APPROVED EQUAL
	PP2	120 LED 4000K 70 CRI	TWO 525mA ELEC. DRIVERS	17,710 (PER HEAD)	404	277	TWO-HEAD, RECTANGULAR, LED, POLE-MOUNTED EXTERIOR AREA LUMINAIRE WITH 25' POLE. BLACK BODY, BLACK POLE. SUITABLE FOR WET LOCATIONS. TYPE IV MEDIUM DISTRIBUTION. EACH HEAD SHALL HAVE INTEGRAL PHOTOCELL TO SWITCH FIXTURES BETWEEN FULL POWER AT NIGHT AND OFF DURING DAY. PROVIDE FOR POLE-MOUNTED SECURITY CAMERAS. COORDINATE WITH PRECAST MANUFACTURER FOR POLE BASE.	CREE MODEL # ARE-EDG-4M-DA-12-E-UL-BK-525-P-40K OR APPROVED EQUAL
	PP3	120 LED 4000K 70 CRI	THREE 525mA ELEC. DRIVERS	17,710 (PER HEAD)	606	277	THREE-HEAD, RECTANGULAR, LED, POLE-MOUNTED EXTERIOR AREA LUMINAIRE WITH 25' POLE. SUITABLE FOR WET LOCATIONS. TYPE IV MEDIUM DISTRIBUTION. EACH HEAD SHALL HAVE INTEGRAL PHOTOCELL TO SWITCH FIXTURES BETWEEN FULL POWER AT NIGHT AND OFF DURING DAY. BLACK FINISH. PROVIDE FOR POLE-MOUNTED SECURITY CAMERAS. COORDINATE WITH PRECASE MANUFACTURER FOR POLE BASE.	CREE MODEL # ARE-EDG-4M-DA-12-E-UL-BK-525-P-40K OR APPROVED EQUAL
	S	LED 4100K	ELEC. DRIVER	1200	14	MVOLT	7" LED IN-GRADE LUMINAIRE DESIGNED FOR ARCHITECTURAL UP-LIGHTING. NARROW SPOT OPTICS, STAINLESS STEEL FINISH, WITH FLAT, FROSTED, SLIP-RESISTANT LENS. CAST FLUSH IN CONCRETE SIDEWALK.	HYDREL MODEL # PDX7 SS 12LED WHY41K MVOLT NSP FLCSR OR APPROVED EQUAL
	T	LED 4000K	ELEC. DRIVER	661	8.5	MVOLT	LED BOLLARD LIGHT. SQUARE WITH FIXED DOWNLIGHT HEAD. 36" TALL, TYPE 2 DISTRIBUTION, WITH EDGE-LIT GLASS LENS. BLACK FINISH. SYMBOL ARROW INDICATES OPTICS AIMING.	EATON/COOPER LUMIERE MODEL # 303-B1-LEDB1-4000-UNV-T2-BK-3S-EDGE
	W	LED 4000K 70 CRI	ELEC. DRIVER	3,851	47	277	EXTERIOR WALL MOUNTED LED LUMINAIRE WITH TWO (2) ELECTRONIC DRIVERS AND TYPE IV DISTRIBUTION. SUITABLE FOR WET LOCATIONS. INTEGRAL PHOTOCELL FOR DUSK-TO-DAWN OPERATION. BLACK FINISH	LITHONIA MODEL # WST LED-2-10A700/40K-SR4-MVOLT-PE-DBLXD OR APPROVED EQUAL

NOTES:
1. EM - EMERGENCY LIGHT (CIRCUITED FROM EMERGENCY POWER).
EM NL - UN-SWITCHED NIGHT LIGHT (CIRCUITED FROM EMERGENCY POWER).
2. VERIFY ALL LIGHT FIXTURE MOUNTING TYPES AND COLORS WITH ARCHITECT.
3. MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY AND PERFORMANCE STANDARD, AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED.
4. FOR ALL LED FIXTURES, THE FIXTURE SHALL BE CAPABLE OF SELF-RESETTING TO THE SWITCHED/CONTROLLED STATE DURING ANY FLUCTUATION IN POWER SUPPLY WHERE AUTOMATIC PROTECTIVE MEASURES DISABLE THE LED LAMPS. PROVIDE A LETTER OR STATEMENT FROM THE MANUFACTURER, OR OTHER ACCEPTABLE PROOF, THAT ALL LED FIXTURES, WITH OR WITHOUT BROWNOUT PROTECTION, WILL RETURN TO THE SWITCHED/CONTROLLED STATE AUTOMATICALLY. PROVIDE STATEMENT WITH THE FIXTURE SUBMITTALS.
5. UNO, WHERE FIXTURES ARE INSTALLED ON DOUBLE-T CONSTRUCTION, FIXTURE SHALL BE SUSPENDED 2" ABOVE BOTTOM OF Ts. WHERE FIXTURE IS INSTALLED PERPENDICULAR TO Ts, FIXTURE SHALL BE MOUNTED BELOW AND FLUSH WITH Ts.
6. IF OTHER THAN BASIS-OF-DESIGN FIXTURES ARE TO BE SUBMITTED, REQUEST BASIS-OF-DESIGN PHOTOMETRIC CALCULATIONS FROM THE ENGINEER. PROVIDE PHOTOMETRIC CALCULATIONS BASED ON SUBMITTED FIXTURES FOR REVIEW AND APPROVAL. SUBMITTED FIXTURES SHALL PROVIDE SIMILIAR ILLUMINATION AND OPERATING CHARACTERISTICS AS THE BASIS-OF-DESIGN FIXTURES.

LIGHTNING PROTECTION SYSTEM:

PROVIDE A U.L. MASTER LABEL LIGHTNING PROTECTION SYSTEM WHICH COMPLIES WITH CURRENT NATIONALLY RECOGNIZED CODES AND STANDARDS. SYSTEM SHALL CONSIST OF AIR TERMINALS (LIGHTNING RODS) SPACED AT 20 FEET ON CENTER ALONG THE PERIMETER, WITHIN 2 FEET OF EACH CORNER CONNECTED TO HEAVY CABLES EXTENDED TO GROUNDING RODS MINIMUM 10 FEET IN DEPTH. INSTALL TRANSIENT SURGE SUPPRESSORS AT ELECTRICAL AND TELEPHONE SERVICE ENTRIES. BOND LIGHTNING PROTECTION SYSTEM TO BUILDING GROUNDING ELECTRODE SYSTEM. ALL WORK TO COMPLY WITH U.L. STANDARD 780 AND NATIONAL ELECTRICAL CODE, CURRENT EDITION.

LIGHTING CONTROL NOTES

1. PROGRAM TYPE 'A' FIXTURES TO PROVIDE 1 FC WHEN UNOCCUPIED. WHEN OCCUPANCY IS DETECTED, FIXTURE SHALL PROVIDE 5 FC.
2. PROGRAM TYPE 'A' FIXTURES WITHIN 75' OF ANY ENTRANCE, INCLUDING TOP LEVEL ENTRANCE (TRANSITIONING FROM UNCOVERED TO COVERED) TO TURN OFF WHEN PHOTOCELL DETECTS 50 FC. ALL OTHER TYPE 'A' FIXTURES SHALL BE SET TO TURN OFF WHEN 10 FC IS DETECTED.
3. PROGRAM TYPE 'B' FIXTURES TO DIM TO 10% WHEN UNOCCUPIED AND 100% WHEN OCCUPIED.
4. PROVIDE TYPE 'PP' FIXTURES WITH INTEGRAL PHOTOCELLS SET FOR TYPICAL DUSK-TO-DAWN OPERATION.
5. CIRCUIT TYPE 'S' AND 'T' FIXTURES THROUGH THE PHOTOCELL-CONTROLLED LIGHTING CONTACTOR SET FOR TYPICAL DUSK-TO-DAWN OPERATION.
6. ADJUST ALL LIGHTING CONTROLS IN THE FIELD AS REQUIRED OR AS DIRECTED BY THE OWNER OR THE ENGINEER.

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

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Revisions:	Date

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BID SET

Drawing Title: ELECTRICAL NOTES, LEGENDS, AND LIGHT FIXTURE SCHEDULE	Project Title: CONSTRUCT PARKING GARAGE ON WEST LOT	Project Number: 15-412 Building Number:	OFFICE OF FACILITIES MANAGEMENT
Approved for Design Concept: FACILITY MANAGEMENT DIVISION MANAGER	Location: MEMPHIS, TN Date: 11/14/2016 · Checked By: JKM · Drawn By: SCB	Drawing Number: EE001	VA Project Number: 614-319 VA U.S. Department of Veterans Affairs

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