

DEMOLITION NOTES

- A. THE EXISTING CONDITIONS SHOWN WERE TAKEN FROM AVAILABLE RECORD INFORMATION. FIELD VERIFY ALL CONDITIONS THAT MAY AFFECT CONSTRUCTION. IF ANY DISCREPANCIES ARE DISCOVERED, NOTIFY THE ENGINEER IN WRITING AND REQUEST DIRECTION PRIOR TO COMMENCING WORK.
- B. EXISTING LIGHT FIXTURES SHALL BE CAREFULLY REMOVED (DO NOT DAMAGE) AND RETURNED TO THE OWNER.
- C. ANY AND ALL EQUIPMENT HAVING ELECTRICAL CONNECTIONS THAT REQUIRE DISCONNECTING AND/OR RE-CONNECTING AS A RESULT OF CONSTRUCTION SHALL BE INCLUDED AS A PART OF THIS CONTRACT.
- D. THE EXISTING ELECTRICAL DEVICES, CONDUIT, AND/OR EQUIPMENT THAT FOR ANY REASON OBSTRUCTS CONSTRUCTION SHALL BE RELOCATED UNLESS OTHERWISE NOTED. LOCATION IS TO BE AS CLOSE AS POSSIBLE TO THE ORIGINAL LOCATION.
- E. ALL CIRCUITS, CONDUIT AND WIRE THAT ARE NOT TO REMAIN IN SERVICE SHALL BE REMOVED BACK TO THE FIRST ACCESSIBLE JUNCTION BOX WHERE IT SHALL BE TIED OFF AND LABELED AS SPARE WITH CIRCUIT NUMBER INDICATED.
- F. REMOVE ALL ABANDONED WIRE AND CABLING.

GENERAL NOTES

1. SYMBOLS LEGENDS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. THE SYMBOLS REPRESENT THE TYPE OF DEVICES THAT MAY BE REQUIRED IN THE WORK; QUANTITIES AND LOCATIONS ARE AS SHOWN ON THE PLAN SHEETS.
2. PROVIDE 3/4" CONDUIT & #12 CONDUCTORS UNLESS NOTED OTHERWISE. PROVIDE ONE NEUTRAL CONDUCTOR FOR EACH UNGROUNDED CONDUCTOR OF SINGLE PHASE LINE-NEUTRAL BRANCH CIRCUITS. DO NOT SHARE NEUTRAL CONDUCTORS.
3. EACH FEEDER AND BRANCH CIRCUIT CONDUIT SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NFPA 70, ARTICLE 250.
4. ALL ELECTRICAL EQUIPMENT IN PORTIONS OF THE BUILDING NOT BEING REMODELED SHALL BE LEFT IN WORKING CONDITION. RESTORE ANY CIRCUITS INTERRUPTED.
5. ALL NEW LIGHT FIXTURES AND FIXTURES IN AREAS ADJACENT DEMOLITION & CONSTRUCTION AREAS ARE TO BE THOROUGHLY CLEANED IMMEDIATELY PRIOR TO NOTICE OF SUBSTANTIAL COMPLETION.
6. THE FOLLOWING IS PART OF THIS PROJECT AND ALL COSTS PERTAINING THERETO SHALL BE INCLUDED IN THE BASE BID:
- A. NEW ELECTRICAL EQUIPMENT AND APPARATUS SHALL BE COORDINATED AND CONNECTED INTO THE EXISTING SYSTEM AS REQUIRED.
- B. POWER WIRING AND CABLE INSTALLATIONS SHALL BE CONCEALED ABOVE ACCESSIBLE CEILINGS AND IN WALLS. EXPOSED WIRING SHALL BE INSTALLED IN APPROVED SURFACE METAL RACEWAY WHERE INDICATED.
- C. WHERE EXISTING CONDUITS ARE INDICATED FOR REUSE, FIELD VERIFY INTEGRITY OF REUSED RACEWAYS PRIOR TO INSTALLATION OF CONDUCTORS. PROVIDE NEW RACEWAYS WHERE EXISTING ARE UNUSABLE.
- D. LOCATIONS OF ALL WALL MOUNTED DEVICES SUCH AS SWITCHES, RECEPTACLES, AND OUTLETS ARE SHOWN DIAGRAMMATICALLY DETERMINE EXACT DEVICE LOCATIONS IN FIELD, COORDINATE INSTALLATIONS WITH FIXED CASEWORK, DOORS AND RELITES.
- E. PROVIDE PENETRATIONS THROUGH WALLS, FLOORS, AND CEILINGS AS REQUIRED. PROVIDE SUITABLE FIRE RATED MATERIALS AND SEAL ALL CEILING, FLOOR, AND WALL PENETRATIONS TO MATCH FIRE RATING OF SURFACES PENETRATED.

LIGHTING AND RECEPTACLE NOTES

1. LIGHTING SYSTEMS SHALL BE PROVIDED WITH CONTROLS AS ZONED ON THE LIGHTING PLANS. SWITCHING AND DIMMING ZONES ARE INDICATED ADJACENT TO EACH FIXTURE.
2. MANUAL CONTROLS SHALL ALLOW OCCUPANTS TO UNIFORMLY REDUCE ILLUMINATION LEVELS AT LEAST 50%. EXCEPTION: CORRIDORS, RESTROOMS, LOBBIES, MECHANICAL, ELECTRICAL, AND INFORMATION TECHNOLOGY (IDF) ROOMS CONTROLLED BY OCCUPANCY SENSORS.
3. EACH AREA THAT IS REQUIRED TO HAVE A MANUAL CONTROL SHALL ALSO HAVE AUTOMATIC TIME SWITCH CONTROL. PROVIDE TIMED OVERRIDE SWITCHES THAT WILL SERVE A MAXIMUM AREA OF 2500 SF IN LOCATIONS SHOWN ON PLANS. EXCEPTIONS:
- A. EMERGENCY EGRESS LIGHTING CONTROLLED BY OCCUPANCY SENSORS.
- B. LIGHTING IN SPACES CONTROLLED BY OCCUPANCY SENSORS.
4. LUMINAIRES PROVIDING MEANS OF EGRESS ILLUMINATION AND HAVING BOTH NORMAL AND EMERGENCY POWER SOURCES SHALL BE CONTROLLED BY A COMBINATION OF U.L. 924 LISTED EMERGENCY RELAYS AND OCCUPANCY SENSORS THAT ENABLES THE LIGHTING TO BE SHUT OFF WHEN THE AREAS SERVED ARE UNOCCUPIED AND AUTOMATICALLY ILLUMINATES IN THE EVENT OF NORMAL POWER SOURCE FAILURE.
5. THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED THAT WHICH IS PROVIDED BY A 20 AMPERE CIRCUIT LOADED TO NOT MORE THAN 80 PERCENT.
6. PROVIDE FUNCTIONAL TESTING OF AUTOMATIC LIGHTING CONTROLS. SUBMIT WRITTEN PROCEDURES FOR FUNCTIONAL TESTING OF ALL AUTOMATIC CONTROLS WITH DESCRIPTION OF THE EXPECTED SYSTEM RESPONSE.

STRUCTURED CABLE SYSTEM PATHWAY NOTES

1. SYSTEM CABLING PATHWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF TIA-569.
2. CABLE SUPPORTS SHALL NOT BE PLACED MORE THAT 5' APART.
3. CABLE "SAG" BETWEEN SUPPORTS SHALL NOT EXCEED 12".
4. CABLE LENGTHS SHALL NOT EXCEED 295', INCLUDING PATCH CORD LENGTHS AT COMM ROOMS AND WORKSTATIONS. IF A CABLE LENGTH WILL EXCEED 295', INFORM THE ICT ENGINEER IMMEDIATELY BEFORE INSTALLATION.
5. CABLE MINIMUM BEND RADIUS AND MAXIMUM PULLING TENSION SHALL NOT BE EXCEED. REFER TO MANUFACTURER'S REQUIREMENTS AND REFERENCE DOCUMENTS.
6. CABLES SHALL BE INSTALLED IN CONTINUOUS LENGTHS FROM ORIGIN TO DESTINATION (NO SPLICES).
7. CABLES SHALL BE INSTALLED ABOVE FIRE-SPRINKLER SYSTEMS AND SUPPORTED INDEPENDENTLY OF SPRINKLER PIPING OR ANY ANCILLARY EQUIPMENT OR HARDWARE. THE CABLE SYSTEM AND SUPPORT HARDWARE SHALL BE INSTALLED SO THAT IT DOES NOT OBSCURE ANY VALVES, FIRE ALARM CONDUIT, BOXES, OR OTHER CONTROLLED DEVICES.
8. CABLES SHALL NOT BE ATTACHED TO CEILING GRID OR LIGHTING FIXTURE WIRES.
9. AT NO POINT SHALL CABLES REST ON ACOUSTIC CEILING GRIDS OR PANELS, OR BE ATTACHED TO ANY PORTION OF THE BUILDING MECHANICAL OR PIPING SYSTEMS. PROVIDE COMPLETE CABLE SUPPORT PATHWAYS CONSISTING OF CONDUIT, RACEWAY, LADDER RACK, CABLE TRAY, J-HOOKS OR BRIDAL RINGS.
10. ANY CABLE DAMAGED DURING INSTALLATION OR EXCEEDING RECOMMENDED INSTALLATION PARAMETERS SHALL BE REPLACED PRIOR TO FINAL ACCEPTANCE AT NO ADDITIONAL COST TO THE OWNER.
11. CABLES AND PATHWAYS SHALL BE CLEARLY LABELED IN ACCORDANCE WITH TIA-606-C.
12. PROVIDE "VELCRO" TYPE (HOOK AND LOOP) TIE WRAPS FOR BUNDLING / MANAGING HORIZONTAL AND BACKBONE CABLING. PLACE EVERY 5' FOR CABLE RUNS IN CEILING AND EVERY 18" AFTER ENTERING TELECOMMUNICATIONS ROOM. PLASTIC "ZIP-TIES" SHALL NOT BE PERMITTED WITHIN THE STRUCTURED CABLING SYSTEM.
13. HORIZONTAL UTP PAIR UNTWIST AT THE TERMINATION SHALL NOT EXCEED 0.5".
14. PROVIDE (1) 2" CONDUIT SLEEVE WITH INSULATED BUSHINGS FOR PENETRATION INTO OFFICES, EXAM ROOMS, ETC, AS REQUIRED TO FACILITATE CABLE ROUTING WHETHER SHOWN ON DRAWINGS OR NOT.
15. ALL PENETRATIONS MUST BE FIRE-STOPPED IN ACCORDANCE OF THE NFPA, NEC AND TO THE SATISFACTION OF THE AHI.
16. ALL TELECOMMUNICATION ROOMS AND PATHWAYS SHALL ADHERE TO TIA-569-D.
17. ALL TELECOMMUNICATION BONDING AND GROUNDING SHALL ADHERE TO TIA-607-D.
18. NOT ALL PARTS SHOWN. ENSURE A COMPLETE WORKING INSTALLATION INCLUDING MISCELLANEOUS INSTALLATION MATERIALS, CONNECTORS, CONSUMABLES, AND APPURTENANCES.
19. PROVIDE NETWORK/TELEPHONY CABLES TO THE FOLLOWING LOCATIONS FROM THE NEAREST COMMUNICATIONS ROOM, UNLESS OTHERWISE NOTED.
- A. ELEVATOR CONTROL PANELS/ENCLOSURES
- B. BUILDING SYSTEM MANAGEMENT PANELS/ENCLOSURES
- C. ENERGY SYSTEM MANAGEMENT PANELS/ENCLOSURES
- D. FIRE ALARM CONTROL SYSTEM PANELS/ENCLOSURES
- E. ACCESS CONTROL SYSTEM PANELS/ENCLOSURES
- F. TWO-WAY EMERGENCY COMMUNICATIONS SYSTEMS PANELS/ENCLOSURES

ABBREVIATIONS

@	AT	MAG	MAGNETIC
A/C	AIR CONDITIONING(ER)	MAN	MANUAL
A (AMP)	AMPERE	MAT	MATERIAL
AC	ABOVE COUNTER, ALTERNATING CURRENT	MAX	MAXIMUM
ADJ	ADJUSTABLE	MCA	MINIMUM CIRCUIT AMPACITY
ADJT	ADJACENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AHJ	AUTHORITY HAVING JURISDICTION	MEZZ	MEZZANINE
AIC	AMPERE INTERRUPTING CAPACITY	MG	MOTOR GENERATOR
ALT	ALTERNATE	MIN	MINIMUM
ANN	ANNUNCIATOR	MISC	MISCELLANEOUS
ARCH	ARCHITECT; ARCHITECTURAL	MLO	MAIN LUG ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MOCB	MAXIMUM OVERCURRENT PROTECTION
AUTO	AUTOMATIC	MS	MAGNETIC STARTER
AUX	AUXILIARY	MTD	MOUNTED
AWG	AMERICAN WIRE GAUGE	MTG	MOUNTING
		MTR	MOTOR
BKBD	BACKBOARD	N	NORTH; NEUTRAL
BKR	BREAKER	N/A	NOT APPLICABLE
BLDG	BUILDING	NC	NORMALLY CLOSED
		NEC	NATIONAL ELECTRICAL CODE
C	CONDUIT	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CAP	CAPACITY	NESC	NATIONAL ELECTRICAL SAFETY CODE
CB	CIRCUIT BREAKER	NEUT	NEUTRAL
CKT	CIRCUIT	NFPA	NATIONAL FIRE PROTECTION ASSOC.
CLG	CEILING	NIC	NOT IN CONTRACT
CLR	CLEAR	NO	NORMALLY OPEN
COL	COLUMN	NTS	NOT TO SCALE
COM	COMMUNICATION		
CPS	CYCLES PER SECOND	OC	ON CENTER
CT	CURRENT TRANSFORMER	OFCI	OWNER FURNISHED CONTRACTOR
CTL	CONTROL		
CU	COPPER	OFOI	OWNER FURNISHED OWNER INSTALLED
		OL	OVERLOAD
DC	DIRECT CURRENT	OS	OPTIONAL STANDBY
DISC SW	DISCONNECT SWITCH		
DISC	DISCONNECT	P	PRIMARY
DN	DOWN	PA	PUBLIC ADDRESS
DWG	DRAWING	PAR	PARALLEL
		PB	PULL BOX
E	EXIST, EAST	PE	PHOTO ELECTRIC
EDH	ELECTRIC DUCT HEATER	PF	POWER FACTOR
EF	EXHAUST FAN	PH	PHASE
EGC	EQUIPMENT GROUNDING CONDUCTOR	PIV	POST INDICATOR VALVE
EL	ELEVATION	PNL	PANEL
ELEC	ELECTRIC(AL)	POC	POINT OF CONNECTION
ELEV	ELEVATOR	PWR	POWER
EM	EMERGENCY		
EMT	ELECTRICAL METALLIC TUBING	QTY	QUANTITY
ENCL	ENCLOSURE		
ENTR	ENTRANCE	R (R)	RELOCATE (D)
EP	EXPLOSION PROOF	RAD	RADIUS
EPO	EMERGENCY POWER OFF	RECPT	RECEPTACLE
EQUIP/EOP	EQUIPMENT	REF	REFRIGERATOR
EWC	ELECTRIC WATER COOLER	RLA	RATED LOAD AMPS
EWB	ELECTRIC WATER HEATER	RPM	REVOLUTIONS PER MINUTE
EXH	EXHAUST		
EXT	EXTERIOR	S	SOUTH
EXIST	EXISTING	SC	SECURITY
		SD	SMOKE DETECTOR
F	FAHRENHEIT/FUSE	SECT	SECTION
FA	FIRE ALARM	SF	SUPPLY FAN
FAA	FIRE ALARM ANNUNCIATOR	SHT	SHEET
FAP	FIRE ALARM PANEL	SPEC	SPECIFICATION
FC	FOOTCANDLE	SPL	SPECIAL
FCU	FAN COIL UNIT	SQ	SQUARE
FD	FIRE DAMPER	STOR	STORAGE
FDR	FEEDER	SPD	SURGE PROTECTION DEVICE
FIXT	FIXTURE	SW	SWITCH
FLA	FULL LOAD AMPS	SWBD	SWITCHBOARD
FSD	FIRE/SMOKE DAMPER	SYM	SYMMETRICAL
		SYS	SYSTEM
GEC	GROUNDING ELECTRODE CONDUCTOR		
GEN	GENERATOR	T	THERMOSTAT
GFI	GROUND FAULT CIRCUIT INTERRUPTER	TB	TERMINAL BOX
GFR	GROUND FAULT RELAY	TC	TIME CLOCK
		TEL	TELEPHONE
H	HEIGHT	TV	TELEVISION
HOA	HAND OFF AUTOMATIC	TYP	TYPICAL
HOR	HORIZONTAL		
HP	HORSEPOWER	UFC	UNIFORM FIRE CODE
HR	HOUR	UG	UNDERGROUND
HT	HEIGHT	UH	UNIT HEATER
HW	HOT WATER	UL	UNDERWRITERS LABORATORIES
HZ	HERTZ	UON	UNLESS OTHERWISE NOTED
		UV	UNIT VENTILATOR
IBC	INTERNATIONAL BUILDING CODE		
IC	INTERCOM	V	VOLT
IES	ILLUMINATING ENGINEERING SOCIETY	VAV	VARIABLE AIR VOLUME
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS	VEL	VELOCITY
IG	ISOLATED GROUND	VM	VOLTMETER
IMC	INTERMEDIATE METAL CONDUIT	VOL	VOLUME
IN	INCH		
		W	WATT, WEST
JB	JUNCTION BOX	W/	WITH
		W/O	WITHOUT
KCMIL	THOUSAND CIRCULAR MILLS	WH	WATER HEATER
KVA	KILOVOLT AMPERES	WHM	WATTHOUR METER
KVAR	KILOVOLT AMPERES REACTIVE	WP	WEATHERPROOF
KW	KILOWATT		
KWH	KILOWATT HOUR	X	REACTANCE
		XFMR	TRANSFORMER
LBS	POUNDS	XMTR	TRANSMITTER
LF	LINEAR FEET (FEET)		
LRA	LOCKED ROTOR AMPS	Z	IMPEDANCE
LS	LIFE SAFETY		
LT	LIGHT	&	AND
LTG	LIGHTING	IE:	THAT IS
LV	LOW VOLTAGE		

ELECTRICAL SHEET INDEX SITE	
E0.03	PHOTOMETRIC PLAN
E0.00	GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX
E0.02	ELECTRICAL - SITE PLAN
E2.00	LIGHTING SCHEDULE AND CUT-SHEETS

Registration:



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SYMBOLS LEGEND - GENERAL	
SYMBOL	DESCRIPTION
	DRAWING CONSTRUCTION ("FLAG") NOTE
	EQUIPMENT IDENTIFIER
	MATCHLINE
	REVISION CLOUD (ENCIRCLES DRAWING CHANGES MADE SINCE THE PREVIOUS RELEASE)
	REVISION REFERENCE
	EXISTING TO BE REMOVED (HATCH)
	HEAVY LINEWEIGHT INDICATES NEW WORK
	LIGHT LINEWEIGHT INDICATES EXISTING INFORMATION
	POINT OF CONNECTION
	DETAIL REFERENCE DETAIL IDENTIFICATION NUMBER SHEET WHERE DETAIL IS DRAWN
	ELEVATION REFERENCE ELEVATION IDENTIFICATION NUMBER SHEET WHERE ELEVATION IS DRAWN
	SECTION REFERENCE SECTION IDENTIFICATION NUMBER SHEET WHERE SECTION IS DRAWN
	NORTH REFERENCE

SYMBOLS LEGEND - POWER	
SYMBOL	DESCRIPTION
	TRANSFORMER
	POLE-MOUNTED TRANSFORMER
	POLE
	DELTA
	WYE
	MEDIUM VOLTAGE CABLE TERMINATOR
	LIGHTNING ARRESTORS
	SURGE ARRESTORS
	NEUTRAL GROUNDING RESISTOR
	METER
	MICROPROCESSOR CONTROLLED MONITOR REFER TO SPECIFICATIONS FOR METERING VALUES AND PROTECTIVE FUNCTIONS
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
	INDICATING INSTRUMENT AM-AMMETER; VM-VOLTMETER; FM-FREQUENCY METER; KVAR-KILOVAR METER; KWH-KILOWATT HOUR METER; KWHH-KILOWATT HOUR DEMAND METER
	INSTRUMENT SWITCH AS-AMMETER SWITCH; VS-VOLTMETER SWITCH; SS-SYNCHRONIZING SWITCH; SV-SUPERVISORY (LOCAL-REMOTE) SWITCH
	SEPARABLE CONNECTOR
	DRAWOUT AC TYPE POWER CIRCUIT BREAKER

SYMBOLS LEGEND - POWER	
SYMBOL	DESCRIPTION
	CIRCUIT BREAKER ST - INDICATES SHUNT TRIP
	ENCLOSED CIRCUIT BREAKER (PLAN VIEW) xxxA/xP - AMPS/POLES
	ENCLOSED CIRCUIT BREAKER (ONE-LINE DIAGRAM) xxxA/xP - AMPS/POLES
	BREAKER WITH EXTERNAL GROUND FAULT RELAY AND CT
	CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION
	MOTOR-OPERATED CIRCUIT BREAKER
	SWITCH WITH EXTERNAL GROUND FAULT RELAY AND CT
	MOV SURGE PROTECTION
	RESISTOR
	FUSE
	MOTOR THERMAL OVERLOADS - (3) UNLESS OTHERWISE NOTED
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	SOLENOID VALVE
	MOTOR-OPERATED VALVE
	THERMOSTAT
	TERMINAL BLOCK
	INDICATING LIGHT - TYPE AS NOTED A-AMBER; B-BLUE; G-GREEN; R-RED; W-WHITE
	BATTERY

SYMBOLS LEGEND - POWER	
SYMBOL	DESCRIPTION
	2-POSITION SELECTOR SWITCH
	3-POSITION SELECTOR SWITCH HAND-OFF-AUTOMATIC
	ON-OFF SELECTOR SWITCH
	2-CIRCUIT PUSHBUTTON
	PUSHBUTTON SWITCH MOMENTARY CONTACT
	EQUIPMENT CONNECTION
	GENERATOR
	MOTOR CONNECTION
	SMOKE DAMPER
	FIRE SMOKE DAMPER
	STARTER 3-POLE, NEMA SIZE 1 MINIMUM UNLESS NOTED OTHERWISE COMBINATION STARTER HP RATED, 3-POLE, NEMA SIZE 1 MINIMUM, UNLESS NOTED OTHERWISE - OVERCURRENT PROTECTION AS REQUIRED BY EQUIPMENT MANUFACTURER OR AS NOTED
	DISCONNECT SWITCH 3-POLE UNLESS NOTED OTHERWISE
	FUSED DISCONNECT SWITCH 3-POLE UNLESS NOTED OTHERWISE
	CONTACTOR
	RELAY COIL CR-CONTROL RELAY; TD-TIME DELAY RELAY; UV-UNDERVOLTAGE RELAY; M-MOTOR CONTACTOR;
	MOTOR-RATED SWITCH - SIZE OL PER MOTOR REQUIREMENTS
	EQUIPMENT EMERGENCY SHUTDOWN SWITCH

SYMBOLS LEGEND - SECURITY	
SYMBOL	DESCRIPTION
	CARD READER. (KP = KEYPAD) (WP = WEATHERPROOF)
	DOOR/WINDOW CONTACT
	ELECTRIC STRIKE
	REQUEST TO EXIT PUSHBUTTON
	REQUEST TO EXIT SENSOR
	CCTV CAMERA - CEILING MOUNTED (WP = WEATHERPROOF) (° = ANGLE OF CAMERA VIEW (IE. 180°, 270°, 360°, PTZ))
	CCTV CAMERA - WALL MOUNTED (WP = WEATHERPROOF) (° = ANGLE OF CAMERA VIEW (IE. 180°, 270°, 360°, PTZ))
	PANIC / DURESS BUTTON
	INTERCOM OUTLET (D = DESK MOUNTED) (W = WALL MOUNTED @ +48" AFF)
	KEYPAD - ALARM PANEL
	MOTION DETECTOR - INFRARED TYPE UNLESS OTHERWISE NOTED
	BREAK GLASS SENSOR
	ALARM BELL

SYMBOLS LEGEND - GENERAL	
SYMBOL	DESCRIPTION
	CONDUIT CONCEALED IN CEILING SPACE OR IN WALL. PROVIDE MINIMUM 3/4" WITH #12 AWG CONDUCTORS AND DEDICATED NEUTRAL EACH CIRCUIT UNLESS OTHERWISE NOTED ON PLAN. PROVIDE EQUIPMENT GROUNDING CONDUCTORS SIZED PER NFPA 70.
	FLEXIBLE METAL CONDUIT
	CONDUIT - CONCEALED IN OR UNDER FLOOR
	CONDUIT - ROUTED UNDERGROUND
	LOW-VOLTAGE WIRING (CLASS B)
	CONDUIT OR CABLE VERTICAL DOWN
	CONDUIT OR CABLE VERTICAL UP
	CONDUIT STUB - TERMINATE WITH BUSHING OR CAP IF UNDERGROUND
	BREAK LINE
	CONDUIT SEAL
	EXPANSION FITTING
	CABLE TRAY
	BRANCH CIRCUIT NUMBERS
	PANEL DESIGNATION
	HOME RUN TO SOURCE OF SUPPLY
	CONDUCTORS - CONNECTED
	CONDUCTORS - NOT CONNECTED
	JUNCTION BOX
	PULLBOX - SIZE AS INDICATED OR AS REQUIRED BY CODE
	HANDHOLE
	MANHOLE

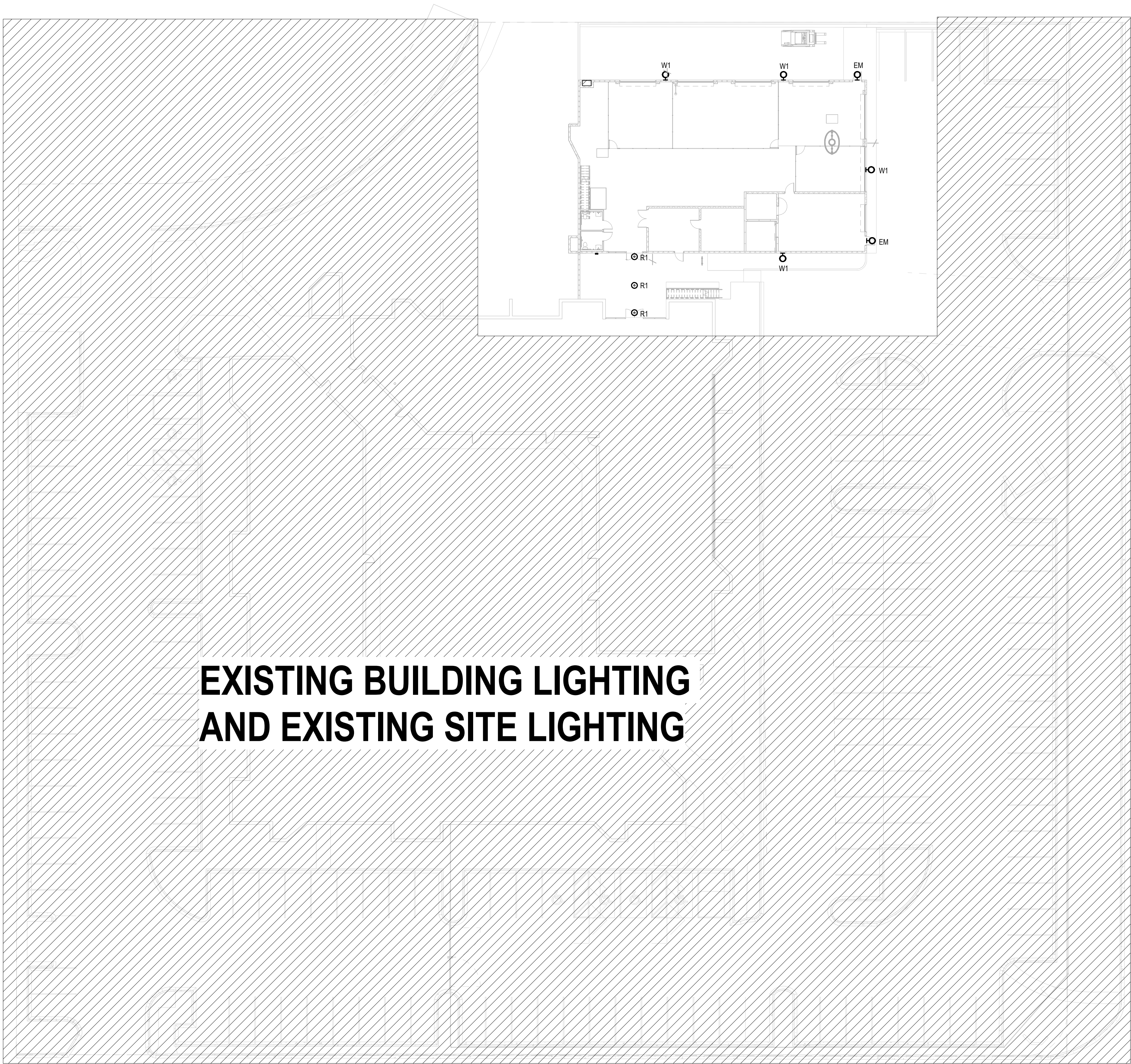
SYMBOLS LEGEND - POWER	
SYMBOL	DESCRIPTION
	480Y/277V, 3Ø, 4W PANELBOARD
	208Y/120V, 3Ø, 4W PANELBOARD
	EQUIPMENT CABINET - TYPE AS NOTED
	PANELBOARD
	TRANSFER SWITCH (AUTO)
	AMPERES SHORT CIRCUIT AVAILABLE (SYMMETRICAL)
	FEEDER TAG - REFER TO FEEDER SCHEDULE

SYMBOLS LEGEND - GROUNDING	
SYMBOL	DESCRIPTION
	GROUND CONNECTION
	GROUND ROD
	GROUND WELL
	AIR TERMINAL

SYMBOLS LEGEND - WIRING DEVICES	
SYMBOL	DESCRIPTION
	SINGLE-POLE WALL SWITCH MOUNT SWITCHES AT 48" AFF. TO TOP, UON.
	WALL SWITCH - SUBSCRIPT 2 = 2-POLE 3 = 3-WAY 4 = 4-WAY K = KEYED LV = LOW VOLTAGE OS = OCCUPANCY SENSOR TYPE OP = OCCUPANCY/PHOTOELECTRIC TYPE WP = WEATHERPROOF LOWER CASE LETTER INDICATES SWITCHING GROUP MOUNT SWITCHES AT +48" AFF. TO TOP, UON. ANY COMBINATION OF SWITCH TYPES CAN BE USED (IE. 3K = 3-WAY KEYED SWITCH) SPECIAL PURPOSE RECEPTACLE TYPE AS SHOWN ON PLANS
	SINGLE SERVICE OR COMBINATION FLUSH MOUNTED FLOOR BOX. REFER TO FLOOR PLANS FOR DEVICES.
	SINGLE SERVICE OR COMBINATION FLUSH FLOOR POKE THRU. REFER TO FLOOR PLANS FOR DEVICES.
	POWER/COMM POLE - FLOOR TO CEILING.
	SURFACE MOUNTED FLOOR BOX (PEDESTAL TYPE).
	PUSH BUTTON
	SIMPLEX RECEPTACLE NEMA 5-20R, +18" AFF UON
	NEMA 5-20R, +18" AFF UON
	TAMPER RESISTANT, NEMA 5-20R, +18" AFF UON
	SWITCHED RECEPTACLE, NEMA 5-20R, +18" AFF UON
	ISOLATED GROUND, NEMA 5-20R, +18" AFF UON
	NEMA 5-20R W/ GROUND FAULT CIRCUIT INTERRUPTER, +18" AFF UON
	SPLIT WIRED, NEMA 5-20R, +18" AFF UON
	CONTROLLED, NEMA 5-20R, +18" AFF UON
	NEMA 5-20R, ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER, ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	TAMPER RESISTANT, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER, ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	NEMA 5-20R, CONNECTED TO EMERGENCY CIRCUIT, +18" AFF UON
	NEMA 5-20R ON EMERGENCY CIRCUIT MOUNTED ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	CEILING-MOUNTED, NEMA 5-20R
	NEMA 5-20R WITH USB CHARGER - (2) TYPE A USB PORTS
	TAMPER RESISTANT, NEMA 5-20R WITH USB CHARGER - (2) TYPE A USB PORTS

SYMBOLS LEGEND - LIGHTING	
SYMBOL	DESCRIPTION
	L1 - LIGHT FIXTURE IDENTIFIER - REFER TO LUMINAIRE SCHEDULE A-1 - PANEL NAME - CIRCUIT NUMBER Z-XXX-1 - SWITCH DESIGNATION - MIDDLE DIGITS REFER TO ROOM NUMBER - END DIGITS REFER TO SWITCH LEG SUBSCRIPT (IF APPLICABLE) * IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: RL1 / A-1 a / NL
	SHADING INDICATES LUMINAIRE ON EMERGENCY CIRCUIT OR WITH BATTERY BACKUP
	2x4 LUMINAIRE
	1x4 LUMINAIRE
	2x2 LUMINAIRE
	LINEAR LUMINAIRE
	WALL WASH LUMINAIRE
	WALL MOUNTED LUMINAIRE
	UNDER-CABINET LUMINAIRE
	STRIP LUMINAIRE
	DOWNLIGHT
	WALL WASH DOWNLIGHT LUMINAIRE
	WALL MOUNTED LUMINAIRE
	WALL MOUNTED DIRECTIONAL LUMINAIRE
	PENDANT MOUNTED LUMINAIRE
	TRACK LIGHT - LENGTH AS INDICATED ON PLANS NUMBER OF LUMINAIRES AS SHOWN
	POLE-MOUNTED LUMINAIRE - NUMBER OF LUMINAIRES AS SHOWN ON PLANS
	STREET LIGHT
	IN-GROUND LANDSCAPE LUMINAIRE
	ILLUMINATED EXIT SIGN - SINGLE FACE ARROW INDICATES DIRECTION OF EGRESS, UNIVERSAL MOUNT
	ILLUMINATED EXIT SIGN - DOUBLE FACE ARROW INDICATES DIRECTION OF EGRESS, UNIVERSAL MOUNT
	BATTERY-POWERED EMERGENCY WALLPACK
	COMBINATION BATTERY POWERED EMERGENCY WALLPACK AND ILLUMINATED EXIT SIGN
	TIME CLOCK - TYPE AS NOTED
	LIGHTING CONTROL SYSTEM POWER PACK
	SWITCH BYPASS DEVICE
	ILLUMINATION CONTROL STATION
	OCCUPANCY SENSOR CEILING MOUNTED WITH POWER PACK - DUAL TECHNOLOGY TYPE UNLESS NOTED: U = ULTRASONIC P = PASSIVE INFRARED
	OCCUPANCY SENSOR WALL MOUNTED
	PHOTOELECTRIC CONTROL CEILING MOUNTED
	PHOTOELECTRIC CONTROL WALL MOUNTED

SYMBOLS LEGEND - FIRE ALARM	
SYMBOL	DESCRIPTION
	FIRE ALARM SYSTEM CONTROL PANEL ESR - ELEVATOR STATUS/RECALL FAC - FIRE ALARM COMMUNICATOR FACP - FIRE ALARM CONTROL PANEL FAA OR FARA - FIRE ALARM ANNUNCIATOR HVA - HVAC OR EXHAUST STAIRWELL PRESSURIZATION LCD - FIRE ALARM LCD ANNUNCIATOR
	FIRE ALARM FLOW SWITCH
	HI/LO AIR PRESSURE SWITCH
	HI/LO AIR PRESSURE SWITCH
	VALVE SUPERVISORY SWITCH
	POST INDICATOR VALVE SUPERVISORY SWITCH
	FIRE ALARM PULL STATION
	FIRE/SMOKE DAMPER
	SMOKE DAMPER
	FIRE ALARM HORN ONLY
	FIRE ALARM HORN STROBE, XX = CANDELA RATING
	FIRE ALARM SPEAKER ONLY
	FIRE ALARM SPEAKER STROBE, XX = CANDELA RATING
	FIRE ALARM STROBE ONLY - WALL, XX = CANDELA RATING
	FIRE ALARM STROBE ONLY - CEILING, XX = CANDELA RATING
	FIRE ALARM BELL
	FIRE FIGHTER PHONE JACK
	HEAT DETECTOR, RATE OF RISE AND FIXED TEMPERATURE UON F - FIXED TEMPERATURE R - RATE OF RISE ONLY R/C - RATE COMPENSATION
	SMOKE DETECTOR, PHOTOELECTRIC UON BT - BEAM TRANSMITTER BR - BEAM RECEIVER I - IONIZATION
	FIRE ALARM DUCT SMOKE DETECTOR WITH SAMPLING TUBE
	FLAME DETECTOR
	GAS DETECTOR
	ADDRESSABLE INPUT MODULE
	ADDRESSABLE OUTPUT MODULE
	ISOLATION MODULE
	FIRE ALARM EQUIPMENT CONNECTION
	RELAY BLOCK



EXISTING BUILDING LIGHTING
AND EXISTING SITE LIGHTING

 **ELECTRICAL - SITE PLAN**
1" = 20'-0"

SÄZÄN
GROUP
311 E. Veterans Way, Ste. 102
Tempe, AZ 85281
Tel 480.530.9101
Fax 480.530.9130
SAZAN# 882-22002

WESTERN TECHNOLOGIES WAREHOUSE

1395 N Hayden Rd
Scottsdale, AZ 85257

Registration:



Project No: 1395
Date: 4/22/2022
Drawn By: JWN
Reviewed By: Checker

No:	Revision	Date
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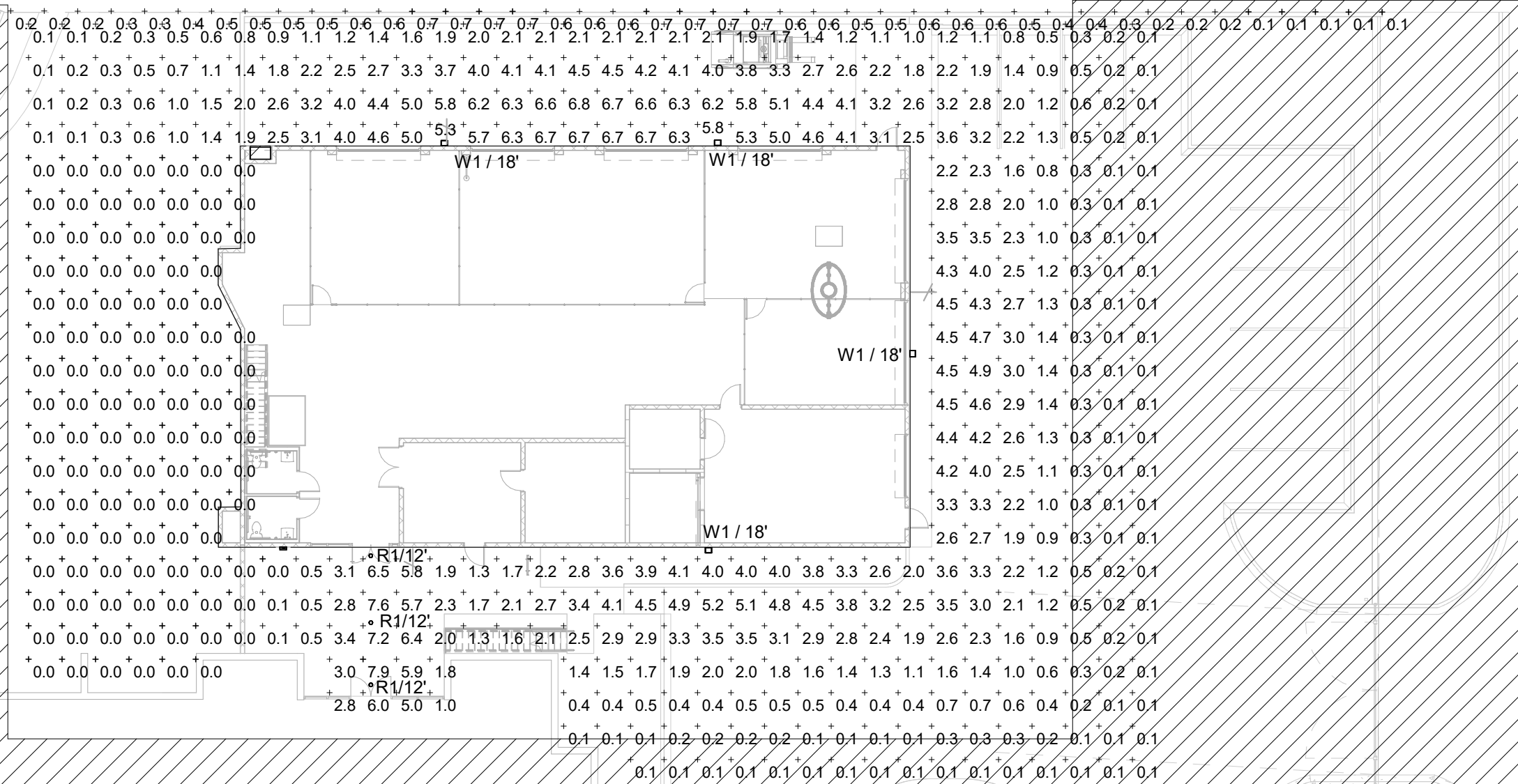
1	City Comments	04/22/2022
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Sheet Title:
**ELECTRICAL - SITE
PLAN**

Sheet No:

E0.02

EXISTING BUILDING LIGHTING
AND EXISTING SITE LIGHTING



Schedule								
Symbol	Label	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	W1	Lithonia Lighting	DSX1 LED P1 30K T1S MVOLT	DSX1 LED P1 30K T1S MVOLT	1	6457	1	54
	R1	Lithonia Lighting	LDN6 30/10 LO6AR LSS	6IN LDN, 3000K, 1000LM, CLEAR, SEMI-SPECULAR REFLECTOR, CRI80	1	938	0.9	10.44

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.6 fc	7.9 fc	0.0 fc	N/A	N/A
Property line	+	0.5 fc	0.7 fc	0.1 fc	7.0:1	5.0:1



Registration:



Project No: 1388
Date: 4/22/2022
Drawn By: JVN
Reviewed By: Checker
No: Revision Date

1 City Comments 04/22/2022

SÄZÄN
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Tempe, AZ 85281

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SAAZAN# 882-22002

Sheet Title:
LIGHTING SCHEDULE
AND CUT-SHEETS

Sheet No:

E2.00

LUMINAIRE SCHEDULE SITE

TYPE MARK	DESCRIPTION	FIXTURE WATTAGE	VOLTAGE	MANUFACTURER
EM	WALL MOUNTED EMERGENCY LIGHT FIXTURE AT 9'-0"	5 W	120 V	LITHONIA LIGHTING *AFF PEL UVOLT SDRT WT *
R1	6" DOWNLIGHT AT 12'-0"	10 W	120 V	LITHONIA LIGHTING - LDN6-30/10-LO6AR-LSS
W1	WALL MOUNTED AT 18'-0"	54 W	120 V	LITHONIA LIGHTING - DSX1 LED P1 30K T1S MVOLT WBA

EM

W1

R1



FEATURES & SPECIFICATIONS

INTENDED USE — Ideal for applications requiring low profile, attractive emergency lighting with optional normally-off or normally-on with photocell control. Provides a minimum of 90 minutes of illumination both indoors and outdoors upon loss of AC power. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic/Polycarbonate Compatibility table for suitable uses.**

CONSTRUCTION — Compact, low-profile, architectural design with die-cast aluminum housing. Finishes are textured powder coat paint for dark bronze, white, black and non-textured for natural aluminum. Test switch indicator light and remote enabled are located on the bottom of the housing and are easily accessible and visible from the floor.

OPTICS — LED with 7,040/55,000 hours. Delivers 65 lumens in Normal On and Emergency operation. Optional field configurable for wide and forward throw distribution (**US Patent Pending**). Outdoor wide throw distribution: 70° (3 path of egress) at a 7.5' mounting height with 1 FC Average, 4,000K correlated color temperature (CCT).

70 CR

ELECTRICAL — UVOLT (120 thru 347V, 50/60Hz). Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers Certified in the CA Title 20 Appliance Efficiency Database.

Short-circuit protection — current-limiting charge circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages.

Prevents over/undercharging that shortens battery life and reduces capacity. Filtered charger input minimizes charge voltage ripple and extends battery life.

Photocell option (PEL) for normally-on product in order to discontinue illumination during periods when ambient light is present.

Remote units (DEL8) are normally off. Emergency only functionality with DC power from an external battery.

BATTERY: Sealed, maintenance-free Lithium Iron Phosphate battery.

SELF-DIAGNOSTICS AND REMOTE TEST (SDRT OPTION): Automatic 24-hour recharge after a 90-minute discharge. Advanced electrical design provides constant light output throughout the entire discharge period for non-CW batteries. For cold weather and cold temperature applications, the light may diminish through the discharge cycle. Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 80 percent nominal of 120, 220, 277 or 347. Other input voltages may vary. AC Voltage will allow battery connection before AC power is applied and prevents battery damage from deep discharge.

Self-Diagnostics: Continuously monitors AC functionality. Standard derangement monitoring will indicate disconnected battery, charger failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state charging, test activation and three-state self-diagnostics.

Self-diagnostic testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of lamps, AC to DC transfer, battery charging and condition of microprocessor. Automatic test is easily postponed for eight hours by activating manual test switch or use of remote tester (RTKIT accessory). Manual testing: Test switch and remote tester (RTKIT accessory) provides manual activation of 60-second diagnostic testing for on-demand visual inspection. No remote manual testing can be enabled by pressing the test switch again while in test mode.

INSTALLATION — Wall mount: typically meets 7.5' to 14' mounting height from ground or floor. Power supplied by either mounting directly to a 4" square or 4" octagon (y-box wall mount) and accepts rigid or flex conduit.

LISTINGS — UL wet location listed standard at 32-122°F (0-59°C). Unit with CW battery (cold weather) listed for -22°F to 122°F (-30°F to 50°C). Brown tested for -40°F to 122°F (-40°F to 50°C). Meets or exceeds all applicable requirements for 16, 20A, NFPA 101 (current life-safety code), NFPA 70 (NEC), 100M (Norma Oficial Mexicana), California Energy Commission Title 20 section 1605.3 (RHW4, FCC Title 47, Part 15, Subpart E and FCC Part 15B, List and labeled to comply with Canadian Standards C22.2 No. 141-03. Meets City of Chicago Code.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.lithonia.com/resources/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

1 Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.

Catalog Number
Notes
Type

AFFINITY® Premium Die-Cast Architectural Emergency Light



without photocell (white)



without photocell (natural aluminum)



with photocell (white)



with photocell (dark bronze)

MOUNTING

All dimensions are inches (centimeters).

Shipping weight: 3.5 lbs. (1.59 kgs.)

Length: 6 1/2 (16.51)

Depth: 3 7/8 (9.83)

Height: 10 (25.4)

Weight: 3.5 lbs (1.59kg)

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