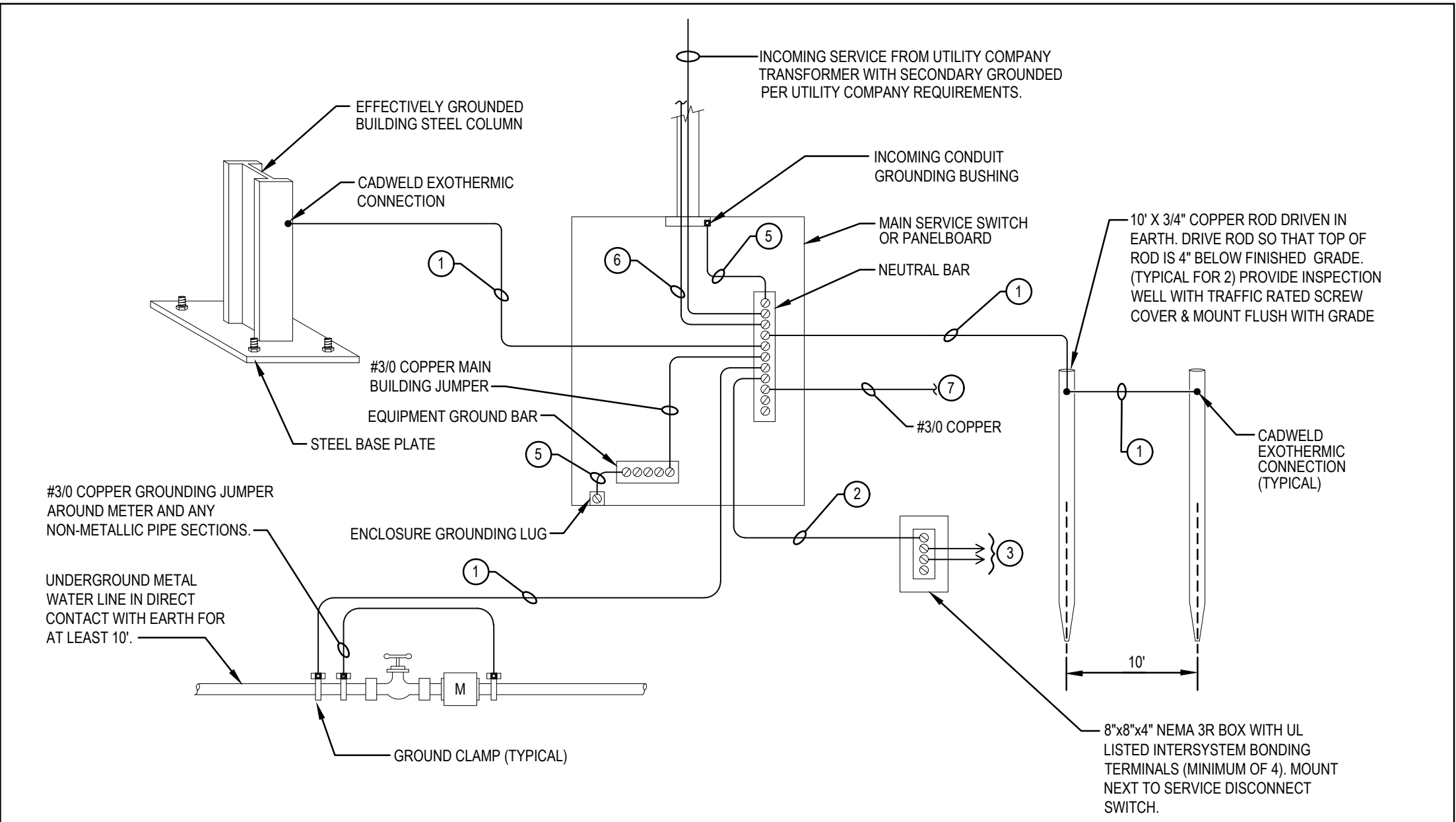


ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	HOMERUN TO PANEL "A" INDICATING CIRCUIT NUMBER(S) - ALL WIRING SHALL BE #12 WITH EQUIPMENT GROUND WIRE UON (INCREASE TO #10 FOR CIRCUITS OVER 100 FT.) - ALL HOMERUNS ARE TO A 20 AMPERE, 1 POLE CIRCUIT BREAKER U.O.N. - QUANTITY OF CONDUCTORS AS NECESSARY TO ACCOMMODATE CIRCUITS AND CONTROL INDICATED. CROSS HATCHES INDICATE REQUIRED LIGHTING CONTROL U.O.N.
	CONDUIT RUN IN OR UNDER FLOOR SLAB (1" C. MINIMUM, UON)
	SCHEDULE 40 PVC CONDUIT RUN AT 36" BELOW FINISHED GRADE. CONTRACTOR SHALL BORE BELOW STREET, COORDINATE WITH CITY. TRANSITION TO HEAVYWALL RIGID STEEL CONDUIT 2 FEET BELOW GRADE WHEN CONDUIT IS TO RISE ABOVE GRADE.
	SWITCH - 20 AMPERE, 120/277 VOLT, SINGLE POLE - MTD AT 48" AFF UON ("a"=DENOTES SWITCHING, "K" = KEY OPERATED, "P" = PILOT LIGHT, "L" = ILLUMINATED TOGGLE, "3" = THREE-WAY, "4" = FOUR-WAY, "M" = MANUAL MOTOR STARTER, "D" = DIMMER SWITCH ("LUTRON NOVA SERIES")
	DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT - MOUNTED AT 15" AFF UON (TO BOTTOM), SUBSCRIPT "T" DENOTES TAMPER RESISTANT. C=WHITE RECEPTACLE & COVER MOUNTED FLUSH IN CEILING. IF CEILING IS MORE THEN 15" ABOVE TOP OF WINDOW MOUNT RECEPTACLES 12" ABOVE TOP OF WINDOW. IG= ISOLATED GROUND TYPE. TVSS= SURGE PROTECTED TYPE. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT LABELED "WR".
	DOUBLE DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT - MOUNTED AT 15" AFF UON (TO BOTTOM)
	DUPLEX RECEPTACLE MOUNTED IN A FLUSH FLOOR BOX. PROVIDE ALUMINIUM DUAL FLIP LID ACTIVATION KIT.
	JUNCTION BOX - MOUNTING HEIGHT AND SIZE AS REQUIRED BY CODE OR AS NOTED ON DRAWINGS
	JUNCTION BOX - FOR SIGN. PROVIDE LOCAL DISCONNECT & COORDINATE LOCATION & MOUNTING HEIGHT WITH SIGN CONTRACTOR IN THE FIELD.
	HEAVY DUTY NON FUSIBLE DISCONNECT SWITCH.
	HEAVY DUTY FUSIBLE DISCONNECT SWITCH. FUSE SIZE TO BE DETERMINED FROM EQUIPMENT TO BE SERVED NAMEPLATE DATA
	FLUSH COMMUNICATIONS OUTLET WITH TWO GANG BOX SINGLE GANG EXTENSION RING, MOUNTED AT 15" AFF U.O.H. (TO BOTTOM) AND 1" CONDUIT, STUBBED TO NEAREST ACCESSIBLE CEILING. PROVIDE BLANK COVER. W=MOUNTED 54" AFF.
	COMMUNICATION OUTLET MOUNTED IN A FLUSH FLOOR BOX. PROVIDE (4) JACKS AND AN ALUMINIUM DUAL FLIP LID ACTIVATION KIT.
	SPECIAL NEMA CONFIGURED OUTLET MOUNTED AS REQUIRED TO SERVE APPLIANCE. VERIFY CONFIGURATION PRIOR TO ROUGH-IN AND ADJUST WIRING AND CIRCUIT BREAKER SIZE AS REQUIRED.
	GROUND ROD- 3/4" X 10' COPPER CLAD
	WIRE LEGEND TAG (12= CONDUCTOR SIZE, 4= QUANTITY OF CONDUCTORS.)
	DUCT MOUNTED SMOKE DETECTOR. SEE DETAIL THIS SHEET.
	ABOVE FINISHED FLOOR
	INDICATES DEVICE MOUNTED AT 8" ABOVE COUNTER
	ELECTRICAL CONTRACTOR
	GROUND FAULT CIRCUIT INTERRUPTER TYPE
	UNLESS OTHERWISE NOTED
	ISOLATED GROUND
	EXISTING TO REMAIN
	NIGHT LIGHT
	WALL MOUNTED MULTI TECHNOLOGY DUAL CIRCUIT VACANCY SENSOR WITH WHITE FINISH HUBBEL # LHDCMTDZ-WH
	WALL MOUNTED MULTI TECHNOLOGY SINGLE CIRCUIT OCCUPANCY SENSOR WITH WHITE FINISH HUBBEL # LHMTS1WH
	CEILING MOUNTED OCCUPANCY SENSOR HUBBELL #DOMINDT1000-LVPP
	20A 120 VOLT RECEPTACLE MOUNTED AT 15" AFF U.O.N. CONTROLLED BY LOCAL OCCUPANCY SENSOR. PROVIDE COVERPLATE WITH BLACK SCREENED LETTERS "SWITCHED".
	FIXTURE MOUNTED OCCUPANCY SENSOR. INSTALL LOW MOUNT LENS FOR FIXTURES MOUNTED AT 16" AND LOWER. CAP INTEGRAL PHOTOCELL CONTROL WIRES. SET TIMED OFF TO 20 MINUTES. HUBBELL # VSP-EM4UNV-(L360, L180, OR LA)
	LED DIMMER SWITCH FOR MANUAL CONTROL OF SALES FLOOR AND SALES REPLENISHMENT LIGHTING. PROVIDED BY E.C. FOR SIEMENS EMS SYSTEM. 0-10V DIMMER EATON #SF16P-W.
	WALL MOUNTED DUAL TECHNOLOGY VACANCY SENSOR WITH INTEGRAL PHOTOCELL & 0-10V DIMMER. HUBBELL #LHDMMTS-2NWH.
	PHOTO SENSOR FOR SIEMENS EMS SYSTEM. WIRED AND INSTALLED BY EMS VENDOR.
	30A-2P HEAVY DUTY ELECTRICALLY HELD ELECTRICALLY OPERATED RELAY. MATCH COIL VOLTAGE WITH LIGHTING SYSTEM VOLTAGE.



SERVICE GROUNDING ELECTRODE SYSTEM WIRING DIAGRAM ④

SCALE: NOT TO SCALE

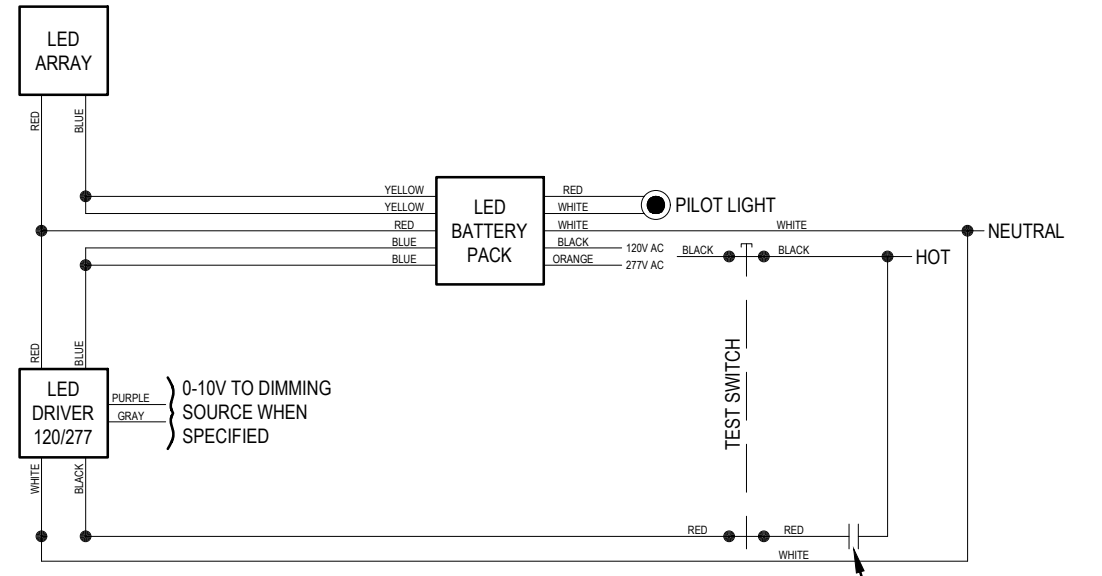
GROUNDING DIAGRAM NOTES:

- ① THE GROUNDING ELECTRODE CONDUCTORS SHALL BE 3/0 COPPER.
- ② #2 AWG FOR INTERSYSTEM BONDING.
- ③ MINIMUM #6 AWG TO OTHER SYSTEMS (TELECOMMUNICATIONS, GAS, ETC.) FOR INTERSYSTEM BONDING PER NEC 250.94.
- ④ ALL WIRING & CONNECTIONS SHALL MEET THE NATIONAL ELECTRICAL CODE ARTICLE 250 & BE UL LISTED TO UL STANDARD 467.
- ⑤ #3/0 AWG BONDING JUMPER.
- ⑥ #3/0 SUPPLY SIDE BONDING JUMPER TO UTILITY METER (IF ALLOWED), METALLIC WIREWAYS OR PULL BOXES.
- ⑦ PROVIDE A 12"x3"x16" GROUNDING ELECTRODE BUS BAR MOUNTED IN A 24"x24" NEMA 3R BOX & CONNECT TO NEUTRAL BAR WITH #3/0 COPPER. MOUNT BUS BAR ON ISOLATORS & BOND TO BOX. CONNECT GROUNDING ELECTRODE CONDUCTORS TO GROUNDING BUS BAR WHERE NEUTRAL BAR WILL NOT ACCOMMODATE CONNECTIONS OR WHEN REQUIRED BY A.H.J.

LIGHTING SCHEDULE					INTERIOR SIGN	
	PARKING LOT / NON SECURITY BUILDING FIXTURES	EXTERIOR SIGNS / SECURITY BUILDING FIXTURES	INDOOR LIGHTS (MON.-SAT.)	INDOOR LIGHTS (SUNDAY)	MON-SAT	SUNDAY
ON	DUSK (BY PHOTOCELL)	DUSK TO DAWN PHOTOCCELL (ALWAYS ON DURING DARK)	7:00 AM	8:00 AM	STORE OPEN	STORE OPEN
OFF	10:15 PM	DURING THE DAY	10:00 PM	8:00 PM	9:00 PM	6:00 PM
LIGHTING CONTROL ZONE	GROUP 4	GROUP 3	GROUP 1	GROUP 1	GROUP 2	GROUP 2
NOTES:	THE SYSTEM CAN BE OVERRIDDEN BY THE SECURITY KEYPAD. THE TOUCH SCREEN CONTROLLER SHALL BE CAPABLE OF MANUALLY TURNING OFF GROUP 2 LIGHTING CONTACTORS. COORDINATE ON/OFF TIMES WITH HARBOR FREIGHT PRIOR TO PROGRAMMING.					

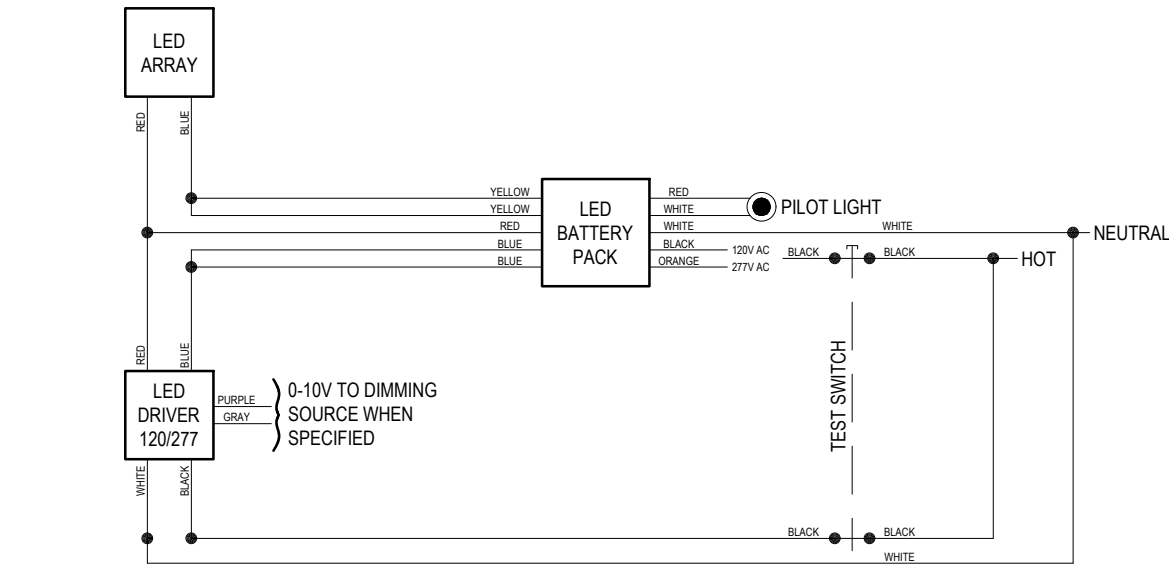
WIRE LEGEND					
Tag	Fill	Tag	Fill	Tag	Fill
No Tag	(2) #12, #12GND-3/4" C	4-4	(4) #4, #4GND-1 1/4" C	40-3	(3) #4/0, #2GND-2" C
12-3	(3) #12, #12GND-3/4" C	2-2	(2) #2, #4GND-1" C	40-4	(4) #4/0, #2GND-2 1/2" C
12-4	(4) #12, #12GND-3/4" C	2-3	(3) #2, #4GND-1 1/4" C	300-2	(2) 300KCMIL, #10GND-2" C
10-2	(2) #10, #10GND-3/4" C	2-4	(4) #2, #4GND-1 1/4" C	300-3	(3) 300KCMIL, #10GND-2 1/2" C
10-3	(3) #10, #10GND-3/4" C	1-2	(2) #1, #4GND-1 1/4" C	300-4	(4) 300KCMIL, #10GND-2 1/2" C
10-4	(4) #10, #10GND-3/4" C	1-3	(3) #1, #4GND-1 1/4" C	350-2	(2) 350KCMIL, #30GND-2" C
8-2	(2) #8, #8GND-3/4" C	1-4	(4) #1, #4GND-1 1/2" C	350-3	(3) 350KCMIL, #30GND-2 1/2" C
8-3	(3) #8, #8GND-1" C	10-2	(2) #10, #2GND-1 1/4" C	350-4	(4) 350KCMIL, #30GND-3" C
8-4	(4) #8, #8GND-1" C	10-3	(3) #10, #2GND-1 1/2" C	500-2	(2) 500KCMIL, #30GND-2 1/2" C
6-2	(2) #6, #6GND-1" C	10-4	(4) #10, #2GND-2 1/2" C	500-3	(3) 500KCMIL, #30GND-3" C
6-3	(3) #6, #6GND-1" C	30-2	(2) #30, #2GND-1 1/2" C	500-4	(4) 500KCMIL, #30GND-3 1/2" C
6-4	(4) #6, #6GND-1" C	30-3	(3) #30, #2GND-2" C	600-2	(2) 600KCMIL, #30GND-3" C
4-2	(2) #4, #4GND-1" C	30-4	(4) #30, #2GND-2" C	600-3	(3) 600KCMIL, #30GND-3 1/2" C
4-3	(3) #4, #4GND-1" C	40-2	(2) #40, #2GND-2" C	600-4	(4) 600KCMIL, #30GND-3 1/2" C

NOTE: CONDUIT SIZES ARE FOR EMT & NMC. FOR PVC & RSC INCREASE CONDUIT BY (1) TRADE SIZE. FOR FLEXIBLE CONDUIT SIZES REFER TO NEC. ALL WIRE SIZES SHOWN ON DRAWINGS ARE FOR COPPER CONDUCTORS. INCREASE CONDUIT ONE TRADE SIZE FOR ISOLATED GROUND CONDUCTOR IF REQUIRE TO ACCOMMODATE ALL CONDUCTORS



SWITCHED EMERGENCY LIGHT FIXTURE
TYPICAL WIRING SCHEMATIC

N.T.S.

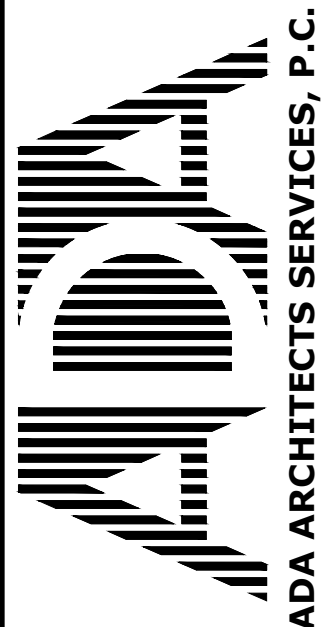


EMERGENCY NIGHT LIGHT FIXTURE
TYPICAL WIRING SCHEMATIC

N.T.S.



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ELECTRICAL
DETAILS

DATE 9/22/21

JOB NO. 20420

E2.1

SHEET NO.