



787 Sprackels Ave., Manteca, CA 95336
Phone (209) 828-1921 - Fax (209) 825-7018
www.americanmodular.com

INTELLECTUAL PROPERTY & PROPRIETARY RIGHTS STATEMENT
COPYRIGHT © AMERICAN MODULAR SYSTEMS (AMS)
AND ALL RIGHTS RESERVED. ALL PATENTABLE MATERIALS CONTAINED
HEREIN, INCLUDING BUT NOT LIMITED TO, THE DESIGN, CONSTRUCTION,
SPECIFICATIONS, PRINTS, APPARATUS, OR PARTS THEREOF, ARE
THE PROPERTY OF AMS. THESE DRAWINGS, SPECIFICATIONS, AND THE
CONTAINED HEREIN MAY NOT BE REPRODUCED, TRANSMITTED, COPIED,
DISTRIBUTED, REPRODUCED, OR OTHERWISE USED IN ANY MANNER
AND MAY NOT BE USED (IN WHOLE OR IN PART) TO ASSIST IN THE
CONSTRUCTION, DESIGN, OR OTHER WORKING DRAWINGS, DRAWINGS,
SPECIFICATIONS, PRINTS, APPARATUS, OR PARTS THEREOF, EXCEPT AS
EXPRESSLY PERMITTED BY WRITTEN CONSENT OF AMS. A WRITTEN AGREEMENT
WITH AMS SUBMITTAL OR DISTRIBUTION TO MEET OFFICIAL REGULATORY
REQUIREMENTS WILL NOT BE CONSIDERED AS PUBLICATION OR DISCLOSURE OF
AMS'S COPYRIGHT OR OTHER INTELLECTUAL PROPERTY OR PROPRIETARY RIGHTS.

PRE-CHECKED SET NAME

24'x40' THRU 120'x40'
HIGH PITCH MODULAR
BUILDINGS

SITE SPECIFIC PROJECT NAME

TYPICAL
ELECTRICAL PLAN

MANUFACTURER PROFESSIONAL OF RECORD ON PC



PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
02-117846
AC. W. FLS. SS. JT
DATE AUG 7 2019

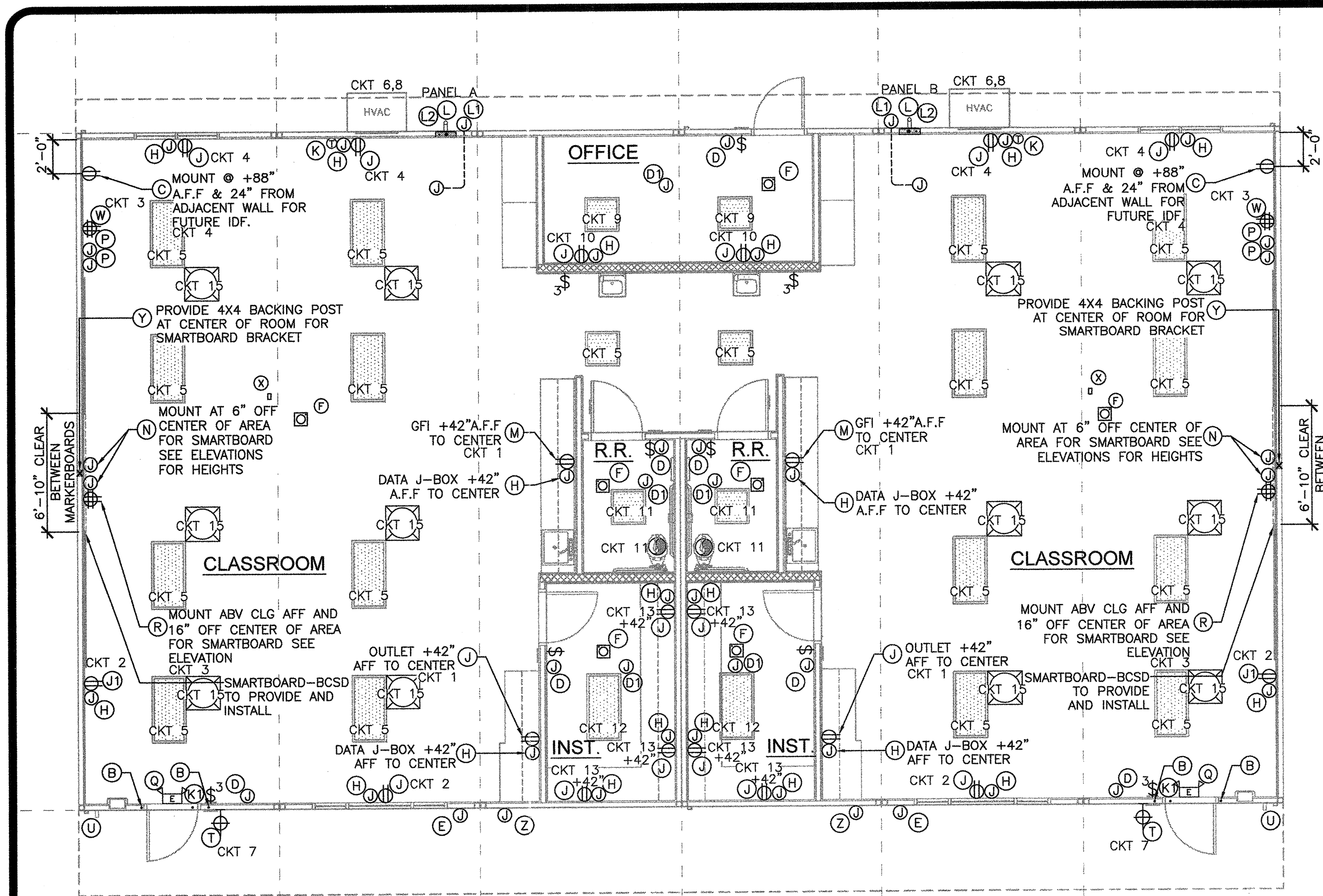
ORIGINAL PC STATE AGENCY APPROVAL

BASED ON PC# 02-115726
PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR
CONSTRUCTION IS REQUIRED.

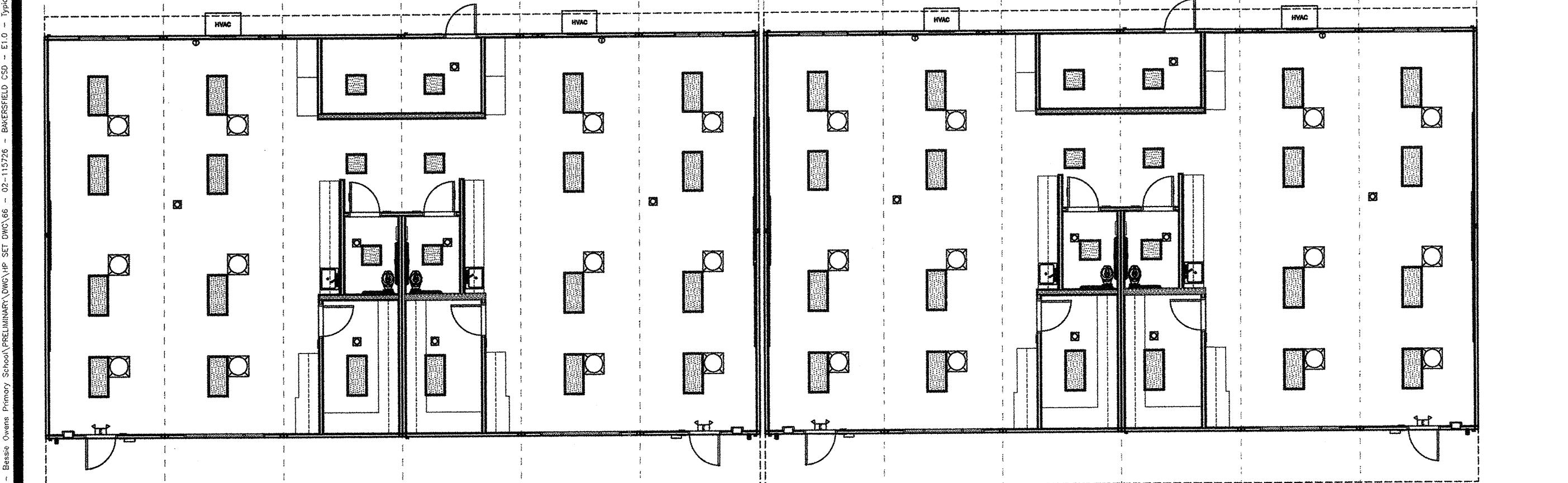
REVISIONS

DRAWN BY: AH
SCALE: AS NOTED
DATE: 06/20/19
SHEET NUMBER

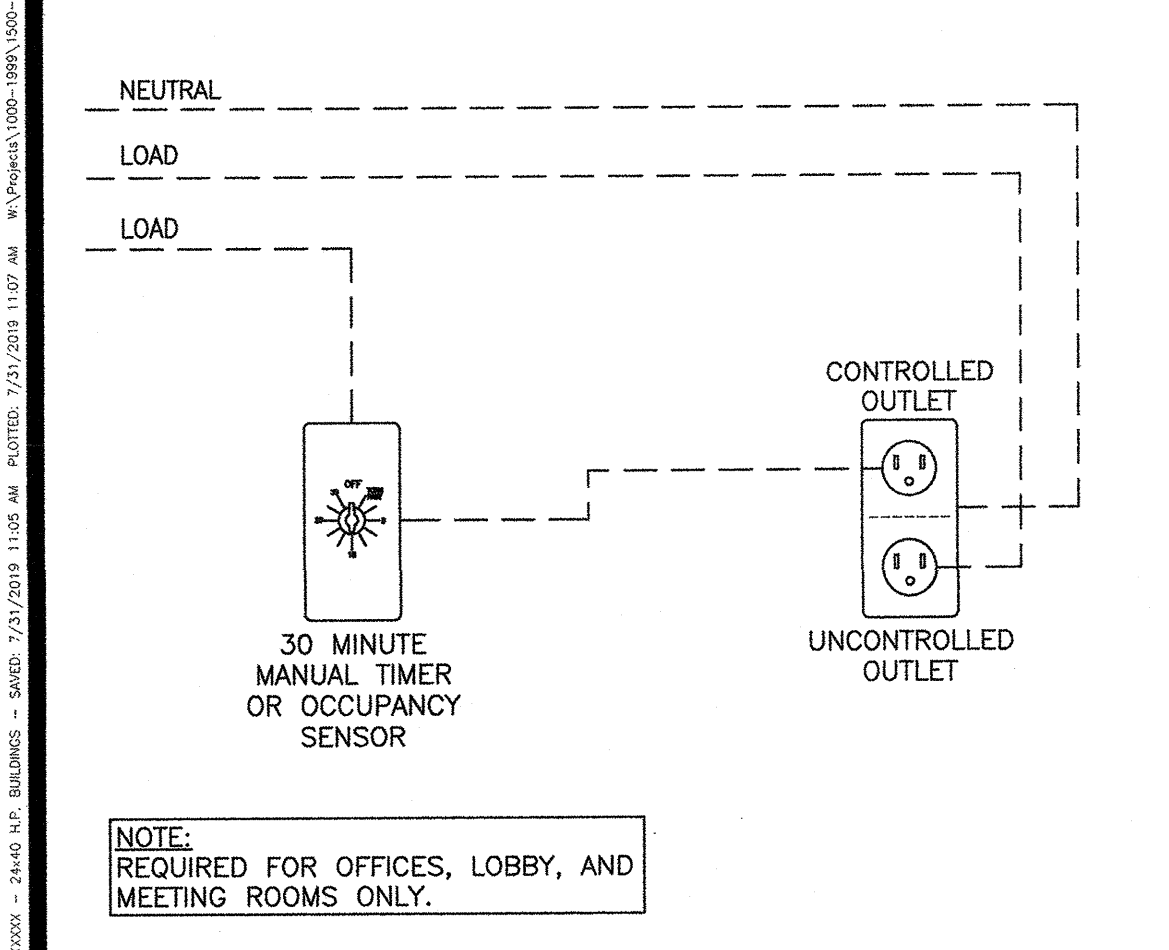
E1.0A-02



TYPICAL KINDER CLASSROOM ELECTRICAL PLAN SCALE: 3/16" = 1'-0" 1



KINDER BUILDING 1 AND 2 FLOOR PLANS SCALE: 3/32" = 1'-0" 3



TYPICAL CONTROLLED/UNCONTROLLED RECEPTACLE WIRING DIAGRAM SCALE: 1/4" = 1'-0" 2

ENERGY CONTROLS

- AUTOMATIC DAYLIGHTING CONTROLS:**
NOT REQUIRED IN ROOMS WHERE COMBINED INSTALLED LIGHTING POWER IN COMBINED SKYLIT & PRIMARY DAYLIT ZONES ARE <120 WATTS. INSTALLED WATTAGE IN PRIMARY SIDELIT DAY LIT ZONE IS 80 WATTS (2x 40w, AS SHOWN IN THE SHADED AREAS). THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE ONLY REQUIRED WHEN "SOLATUBES" ARE INSTALLED. SEE A1 CONTROLS ARE ONLY REQUIRED WHEN "SOLATUBES" ARE INSTALLED. SEE A1.
- ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) CONNECTIONS:**
PER TITLE 24 CODE, AN EMCS MAY BE INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ONE OR MORE LIGHTING CONTROLS IF IT MEETS THE MINIMUM REQUIREMENTS. PC MAY CONTAIN OCCUPANCY SENSORS AND PHOTOCELL CONTROL LIGHTING, IN THAT CASE, AN EMCS IS NOT REQUIRED FOR THIS PC.
- SOLAR-READY ZONE REQUIREMENTS:**
REQUIREMENTS & TABLE CAN BE FOUND ON SHEET A2.0

NOTE: ANY MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THE BASE PC.

ENERGY NOTES 3

PANEL 'A' KINDERGARTEN

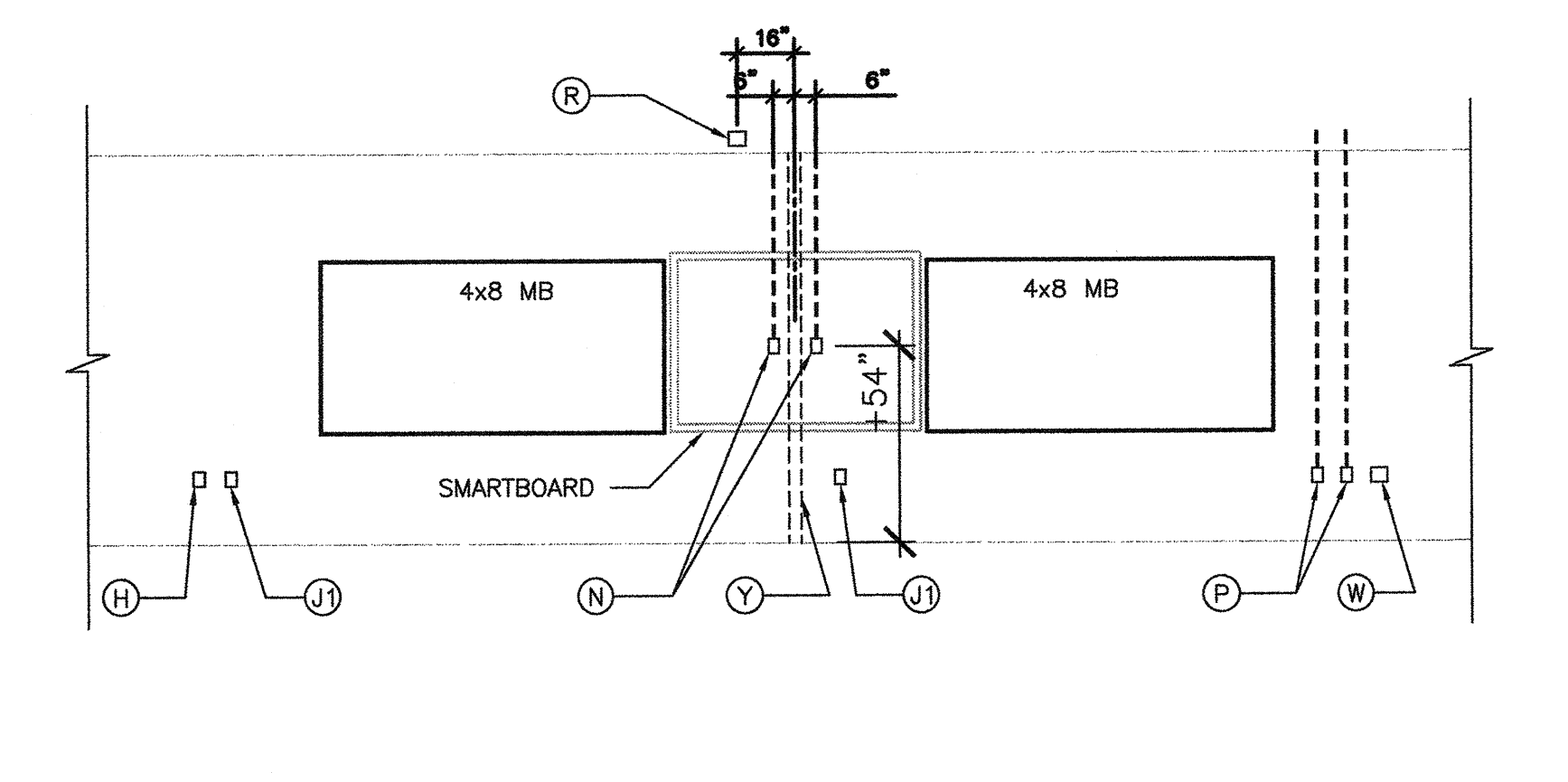
| OBJECT DESCRIPTION | WATTS | VOLTS: | | BUS: | MAIN: | LOCATION: | | FEED: | | MOUNTING: | | | |
|----------------------|-------|--------|------|------|----------|-----------|----------|----------|------|-----------|-----|---------|----------------|
| | | A | B | | | INTERIOR | EXTERIOR | RECESSED | | | | | |
| RECEPTS | 180 | 2 | 360 | 20 | 1 #12 1 | 2 | #12 1 | 20 | 360 | 2 | 180 | RECEPTS | |
| INTERIOR LIGHTS | 50 | 9 | 450 | 20 | 1 #12 5 | 6 | #4 2 | 80 | 7680 | X | 1 | 7680 | 5 TOW AC |
| EXTERIOR LIGHT | 100 | 1 | 100 | 20 | 1 #12 3 | 4 | #12 1 | 20 | 360 | X | 1 | 7680 | 5 TOW AC |
| OFFICE LIGHTS | 2 | 50 | 100 | 20 | 1 #12 9 | 10 | #12 1 | 20 | 360 | X | 2 | 180 | OFFICE RECEPTS |
| R.R. LIGHTS/FAN | 194 | 1 | 194 | 20 | 1 #12 11 | 12 | #12 1 | 20 | 360 | X | 1 | 50 | INST. LIGHT |
| INST. RECEPTS | 180 | 3 | 540 | 20 | 1 #12 13 | 14 | #12 1 | 20 | 360 | X | 1 | 50 | SPARE |
| SOLATUBES | 240 | 9 | 2160 | 20 | 1 #12 15 | 16 | | | | | | | |
| FIRE ALARM | 1500 | 1 | 1500 | 20 | 1 #12 19 | 20 | | | | | | | |
| LEG TOTALS | 3770 | 4854 | | | 21 | 22 | | | 8207 | 8270 | | | |
| LCL=3840+24895=28735 | | | | | | | | | | | | | |
| TOTAL WATTS=28735 | | | | | | | | | | | | | |

KINDER CLASSROOM LOAD PANEL A CALCULATIONS

PANEL 'B' KINDERGARTEN

| OBJECT DESCRIPTION | WATTS | VOLTS: | | BUS: | MAIN: | LOCATION: | | FEED: | | MOUNTING: | | | |
|----------------------|-------|--------|------|------|----------|-----------|----------|----------|------|-----------|-----|---------|----------------|
| | | A | B | | | INTERIOR | EXTERIOR | RECESSED | | | | | |
| RECEPTS | 180 | 2 | 360 | 20 | 1 #12 1 | 2 | #12 1 | 20 | 360 | 2 | 180 | RECEPTS | |
| INTERIOR LIGHTS | 50 | 9 | 450 | 20 | 1 #12 5 | 6 | #4 2 | 80 | 7680 | X | 1 | 7680 | 5 TOW AC |
| EXTERIOR LIGHT | 100 | 1 | 100 | 20 | 1 #12 3 | 4 | #12 1 | 20 | 360 | X | 1 | 7680 | 5 TOW AC |
| OFFICE LIGHTS | 2 | 50 | 100 | 20 | 1 #12 9 | 10 | #12 1 | 20 | 360 | X | 2 | 180 | OFFICE RECEPTS |
| R.R. LIGHTS/FAN | 194 | 1 | 194 | 20 | 1 #12 11 | 12 | #12 1 | 20 | 360 | X | 1 | 50 | INST. LIGHT |
| INST. RECEPTS | 180 | 3 | 540 | 20 | 1 #12 13 | 14 | #12 1 | 20 | 360 | X | 1 | 50 | SPARE |
| SOLATUBES | 240 | 9 | 2160 | 20 | 1 #12 15 | 16 | | | | | | | |
| FIRE ALARM | 1500 | 1 | 1500 | 20 | 1 #12 19 | 20 | | | | | | | |
| LEG TOTALS | 3450 | 4854 | | | 21 | 22 | | | 8207 | 8270 | | | |
| LCL=3840+24799=28639 | | | | | | | | | | | | | |
| TOTAL WATTS=28639 | | | | | | | | | | | | | |

KINDER CLASSROOM LOAD PANEL B CALCULATIONS



KINDER CLASSROOM SMARTBOARD WALL ELEVATION SCALE: 1/4" = 1'-0" 4

GENERAL NOTES

- THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT & SMOKE DETECTORS, EVACS AND PULL STATIONS, AND COMPLETE FIRE ALARM SYSTEM WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3.
- ANY MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THIS BASE PC.
- PULL STATIONS ARE REQUIRED AT EVERY EXIT, AT ANY SPACE REQUIRING 2 OR MORE EXITS, PROVIDE EXIT SIGNS (CBC 1013) AND EMERGENCY EXIT ILLUMINATION (CBC 1008).
- SEE PLANS FOR LOCATIONS OF ALL DEVICES.
- STUB-OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES ARE SHOWN DIAGRAMMATICALLY ONLY. EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.
- STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT.
- THE LIGHTS FOR EACH ROOM OVER 250 SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR. WATT STOPPER W-500A, W-1000A, OR W-2000A (OR EQUIV.) BASED ON THE ROOM SIZE, IN CONJUNCTION WITH BI-LEVEL SWITCHING.
- FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.
- LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-BAR GRID LAYOUT.

DEMAND RESPONSE CONTROLS

- DEMAND RESPONSE CONTROLS ARE REQUIRED IN BUILDINGS LARGER THAN 10,000 S.F.
- DEMAND RESPONSE CONTROLS, WHERE REQUIRED, ARE TO BE PROVIDED BY OTHERS.
- DEMAND RESPONSE CONTROLS AND EQUIPMENT SHALL BE CAPABLE OF RECEIVING AND AUTOMATICALLY RESPONDING TO AT LEAST ONE STANDARD-BASED MESSAGING PROTOCOL WHICH ENABLES DEMAND RESPONSE AFTER RECEIVING A DEMAND SIGNAL.
- SITE-SPECIFIC PROJECTS WHICH REQUIRE DEMAND RESPONSE CONTROLS MUST INCLUDE THE SUBMITTAL OF FORM NRCC-ELC-01-E TO DSA (BY OTHERS).

GENERAL NOTES 5

- PROVIDE 1" CONDUIT FROM ATTIC TO 6" BELOW HEADER SWEEP THROUGH KING STUD AND TRIMMER INTO VOID AREA OF DOOR JAMB FOR FUTURE DOOR LOCK CONTROLS. PROVIDE SLIGHT TURN DOWN ONCE INTO JAMB AREA.
- PROVIDE SURGE PROTECTED DUPLEX OUTLET FOR FUTURE IDF CABINET. LOCATE AS INDICATED ON PLAN. PROVIDE CIRCUIT IN ELECTRICAL PANEL AS INDICATED ON PLAN.
- J-BOX ONLY (HORN/STROBE) - INSTALL 4" SQ. J-BOX (4" SQ. x 2-1/8" DEEP) AT +8" FROM FLOOR. 3/4" CONDUIT STUBBED ABOVE CEILING. BOX SHALL BE MOUNTED FLUSH WITH INTERIOR WALL FINISH.
- J-BOX ONLY (SMOKE DETECTOR) - INSTALL 4S BOX WITH 3/0 PLASTER RING FLUSH WITH T-BAR CEILING/HARD LID SURFACE. (INSTALL PER DSA APPROVED PC PLANS)
- J-BOX ONLY (EXTERIOR FIRE HORN/SPEAKER) - INSTALL 4" SQ. J-BOX (4" SQ. x 2-1/8" DEEP) AT +90" FROM FLOOR. 3/4" CONDUIT STUBBED ABOVE CEILING. BOX SHALL BE MOUNTED FLUSH WITH EXTERIOR WALL FINISH.
- CEILING MOUNTED OCCUPANCY SENSOR, N-LITE BRAND - CAT 5 LINKED
- J-BOX ONLY (DATA OUTLET) - 4" SQ. WITH SINGLE DEVICE RING WITH 3/4" CONDUIT STUBBED ABOVE CEILING.
- STANDARD DUPLEX OUTLET LOCATION. PROVIDE CIRCUITS IN ELECTRICAL PANEL AS INDICATED ON PLAN. THESE LOCATIONS INDICATED ON THE PLANS ARE THE ONLY LOCATIONS WHERE OUTLETS ARE REQUIRED. DO NOT DEVIATE.
- J-BOX ONLY (FUTURE POWER). PROVIDE CONDUIT RACEWAY TO ELECTRICAL PANEL. NO WIRES OR OUTLET AT THIS TIME.
- J-BOX ONLY (T-STAT) 4" SQ. WITH SINGLE DEVICE RING PLACED HORIZONTALLY. BCSO WILL PROVIDE T-STAT. PLEASE NOTE THAT THE CONTROL WIRE FOR THE HVAC UNIT WILL NEED TO BE FACTORY INSTALLED FROM THE UNIT TO THE J-BOX FOR FUTURE INCLUSION OF STANDARD DISTRICT T-STATS. PROVIDE 4" SQ. J-BOX WITH SINGLE DEVICE RING. PLACE RING HORIZONTALLY AT 48" MAX. TO TOP OF BOX.
- PROVIDE TIME DELAYED HVAC SHUT DOWN DOOR SWITCH. INTENT IS TO SHUT DOWN HVAC UNIT IF DOOR IS LEFT OPEN TOO LONG.
- POWER AND GROUND ENTRANCES TO THE RELOS NEED TO BE ACCOMPLISHED BY ADDING A CONDUIT NIPPLE FOR THE GROUND AND POWER WIRES AT THE REAR OF THE PANELS THROUGH THE WALL AND FINISH.
- 4S BOX AT 18" FROM R.F. WITH DOUBLE DEVICE RING WITH 1" CONDUIT INTO ATTIC SPACE TO 4S DEEP BOX FOR FIRE ALARM CABLE.
- PROVIDE 3/4" CONDUIT FROM ELECTRICAL PANEL TO ATTIC FOR FUTURE GROUNDING PURPOSES
- G.F.I. RECEPTACLE. MOUNT AS INDICATED ON PLAN AT CABINET LOCATION. MOUNT AT STANDARD HEIGHT IN CLASSROOM AREAS. PROVIDE CIRCUIT IN ELECTRICAL PANEL AS INDICATED ON PLAN.
- SINGLE GANG DEEP MUD RING. LOCATE AT +54" ABOVE FINISH FLOOR. PROVIDE 2" CONDUIT ANCHORED TO FRAMING BETWEEN MUD RING "N" AND ABOVE DOUBLE TOP PLATE. NO HARD CONNECTIONS AT MUD RINGS. PROVIDE PULL STRING.
- SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD MOUNTING HEIGHT. PROVIDE 2" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RINGS. PROVIDE PULL STRING.
- INSTALL ELECTRIC LIGHTED EXIT SIGN WITH INTEGRAL EMERGENCY EGRESS LIGHTING WHO MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE ABOVE CEILING SMARTBOARD. PROVIDE CIRCUIT IN ELECTRICAL PANEL AS INDICATED ON PLAN
- SINGLE GANG DEEP MUD RING AT +94" ABOVE FINISH FLOOR. PROVIDE 2" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RINGS. PROVIDE PULL STRING.
- EXTERIOR LIGHT FIXTURE WITH BUILT IN PHOTO CELL. RAB LIGHTING SLIM 18 WITH PHOTOCELL AND 40 MIN. BATTERY BACKUP.
- PROVIDE AND INSTALL TRIMCO #1254 WALL MOUNTED STOP/DOOR HOLDER AT +78"
- PROVIDE ADDITIONAL RECTANGULAR OPENING AT TRANSVERSE ROOF BEAMS FOR FUTURE DATA CONDUITS
- WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD OUTLET WALL HEIGHT
- PROVIDE SINGLE GANG BOX WITH CEILING MOUNTING BRACKET AT CENTER OF ROOM IN T-BAR CEILING
- PROVIDE 4X4 BACKING POST AT CENTER OF ROOM FOR SMART BOARD BRACKET
- J-BOX ONLY (EXTERIOR PA SYSTEM SPEAKER) - 4" SQ. WITH SINGLE DEVICE RING. INSTALL AT +90" FROM FLOOR.
- SOLATUBE SWITCH MOUNT AT +48" MAX. TO TOP OF BOX