

NOT USED 6 **NOT USED** 5

ELECTRICAL PANEL									
WALL MOUNTED HVAC					ELECTRICAL PANEL				
PANEL: "A"					PANEL: "A"				
FEED: REAR					FEED: REAR				
LOCATION: INTERIOR ACCESS					LOCATION: INTERIOR ACCESS				
MOUNTING: FLUSH					MOUNTING: FLUSH				
LOAD					LOAD				
LOAD	QTY	WATTS	AMPS	PHASE	LOAD	QTY	WATTS	AMPS	PHASE
RECEPTABLES	6	900	20	1	RECEPTABLES	6	900	20	1
RECEPTABLES/CLOCK	6	900	20	1	RECEPTABLES/CLOCK	6	900	20	1
INTERIOR/EXTERIOR LIGHTING	10	1000	20	1	INTERIOR/EXTERIOR LIGHTING	10	1000	20	1
WALL RECEPTABLE (GF)	1	180	20	1	WALL RECEPTABLE (GF)	1	180	20	1
A = 2046 WATTS / PHASE		2046	1000		A = 2046 WATTS / PHASE		2046	1000	
TOTAL = 17,280 WATTS		70	AMPS	120/208	VOLTS	1 Ø	3	WIRE	

SCHOOL EQUIPMENT ANCHORAGE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DCA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2010 CBC, SECTIONS 1916A.1.2 THROUGH 1916A.1.22 AND ASCE 7-05 CHAPTER 6 AND 12.

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
- MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 6 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE ATTACHMENT OF THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.

- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 30 POUNDS, OR IN THE CASE OF DEFRIGERATED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HANG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DCA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

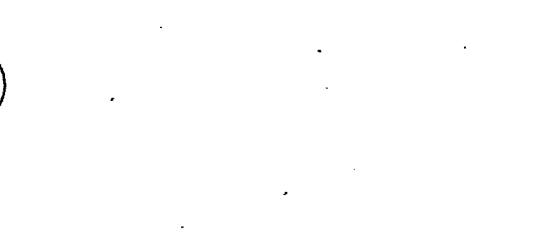
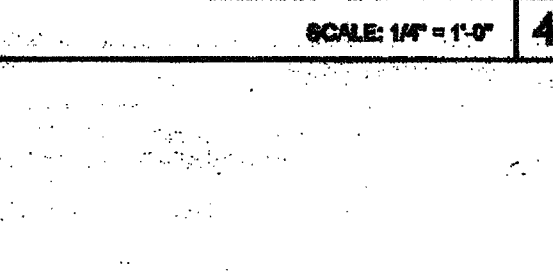
PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-05 SECTION 13.3 AS DEFINED IN ASCE 7-05 SECTION 13.3.3, 13.3.4, 13.3.5 AND 2010 CBC SECTIONS 1916A.1.20, 1916A.1.21 AND 1916A.1.22.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE SEVERAL PRE-APPROVED (PPA) S.E.A.B. MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO THE START OF HANGING OR BRACING OF THE PIPE, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.



CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/TW/CP. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTORS PERMITTED
(INCH)	(SQ. IN.)	(INCH)	(INCH)
#12	2.04	THHN	10 10 10 10
#10	2.64	THHN	8 8 8 8 8
#8	3.44	THHN	6 6 6 6 6 6
#6	4.44	THHN	4 4 4 4 4 4 4
#4	5.64	THHN	3 3 3 3 3 3 3 3

JUNCTION BOX SIZE TABLE

BOX SIZE	CU. IN.	MAX. NO. OF CONDUCTORS
4x4	128	10 10 10 10 10 10
4x6	192	12 12 12 12 12 12 12
6x6	288	16 16 16 16 16 16 16 16
6x8	384	20 20 20 20 20 20 20 20 20
8x8	512	24 24 24 24 24 24 24 24 24 24
8x10	640	30 30 30 30 30 30 30 30 30 30 30
10x10	1000	40 40 40 40 40 40 40 40 40 40 40 40

LEGEND

- 2x4 CEILING LIGHT WITH (2) T-5 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH ELECTRONIC BALLAST
- OPTIONAL 2x4 CEILING LIGHT WITH (1) T-5 LAMP, LAY-IN FLUORESCENT LIGHT FIXTURE WITH ELECTRONIC BALLAST
- WALL MOUNTED HVAC UNIT, SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT 4'-0" AFF TO TOP OF ELECTRICAL PANEL WITH 1/2" DIA POWER STUD OUT
- DUAL CEILING OCCUPANCY SENSOR, WATTSTOPPER 07-300 OR EQUAL, SENSOR TO BE CONNECTED TO LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR OPEN ROOM OVER 100 SQ FT W/ (2) CIRCUITS
- ULTRASONIC CEILING OCCUPANCY SENSOR, WATTSTOPPER W-500 OR EQUAL, SENSOR TO BE CONNECTED TO KEYPAD SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS
- SINGLE SWITCH WALL OCCUPANCY SENSOR, WATTSTOPPER PW-100 OR EQUAL, SENSOR TO BE MOUNTED AT 4'-0" AFF AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT
- DUAL SWITCH WALL OCCUPANCY SENSOR, WATTSTOPPER PW-100 OR EQUAL, SENSOR TO BE MOUNTED AT 4'-0" AFF AND USE FOR OPEN ROOM OVER 100 SQ FT W/ (2) CIRCUITS
- LIGHT SWITCH, MOUNT AT 4'-0" AFF TO TOP OF OUTLET BOX
- 3-WAY LIGHT SWITCH, MOUNT AT 4'-0" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A-20V-3 WIRE, MOUNT AT 4'-0" AFF U.O.A.L. TO CENTERLINE OF DEVICE
- EXTERIOR WEATHER PROOF GFI RECEPTACLE AT 4'-0" AFF FOR LAV SERVICES (MAX 20' FROM UNIT)
- GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EXTERIOR LIGHT FIXTURE, MOUNT AT 4'-0" AFF
- CLOCK OUTLET AT 4'-0" AFF TO CENTERLINE OF DEVICE
- EXIT SIGN WITH BATTERY BACKUP, EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS, CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL
- 480 J-BOX FOR FIRE ALARM PULLSTATION (DEVICE BY OTHERS), MOUNT AT 4'-0" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROKE WITH PULLSTRING
- 480 J-BOX FOR FIRE ALARM STROBE (DEVICE BY OTHERS), BOTTOM OF LENS SHALL BE BETWEEN 8" TO 20" AFF WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING
- 480 J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS), MOUNT AT 4'-0" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT TO FIRE ALARM BACKBOX WITH PULLSTRING
- RECESSED 480 J-BOX W/ COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS, MOUNT 1" CO AFF TO U.O.A. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING
- 480 J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS), DETECTORS SHALL BE PLACED 8'-0" FROM THERE IS A DETECTOR WITHIN 10'-0" FROM ADJACENT WALLS, AND 2'-0" FROM ANY ROOM DIVIDING WALLS, 30" FROM ANY POINT IN ATTIC. DETECTORS SHALL BE PLACED 90° OF O.C. MAX. PROVIDE A 3/4" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION, PROVIDE 3/4" CONDUIT FROM EACH J-BOX TO FIRE ALARM BACKBOX WITH PULLSTRING (ALARM NOTE #1)
- 480 J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS), DETECTORS SHALL BE PLACED 8'-0" FROM THERE IS A DETECTOR WITHIN 10'-0" FROM ADJACENT WALLS, 30" FROM ANY POINT IN ATTIC. DETECTORS SHALL BE PLACED 90° OF O.C. MAX. PROVIDE A 3/4" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION, PROVIDE 3/4" CONDUIT FROM EACH J-BOX TO FIRE ALARM BACKBOX WITH PULLSTRING (ALARM NOTE #1)
- 480 J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING LIGHT WITH (2) T-5 LAMPS, LAY-IN FLUORESCENT LIGHT FIXTURE WITH ELECTRONIC BALLAST
- OPTIONAL LIGHTING - MODEL 24 OT 232.2 TRAE2.14K.C4 WATTAGE: 20W T8 (4x16) OR EQUAL

FIRE ALARM NOTES

- SMOKE AND HEAT DETECTOR SHALL BE CONNECTED TO FIRE ALARM SYSTEM BY OTHERS
- PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOADS ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCATED ON THE APPROVED LIGHTING DEVICE, MANAGED ROOM AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT" (PPA 72 4A1.4.2.2)

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* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

REVISIONS

NO.	DATE	DESCRIPTION
1	04/11/2015	ISSUED FOR PERMITS
2	04/11/2015	REVISED PER COMMENTS

NOTES

NOTE: SEE CCD.1.01 FOR ACTUAL BUILDING LAY-OUT

APPROVALS

DATE: FEB 26 2015

SILVER CREEK INDUSTRIES, INC.

BUILDING FOR THE NEXT GENERATION

SILVER CREEK

195 EAST MORRISON AVENUE, CALIFORNIA 95711
PHONE: 925-945-5300 FAX: 925-945-2211

PROJECT NAME: CLASS LEASING CLASSROOMS BLDG'S

SHEET TITLE: ELECTRICAL PLAN AND SCHEDULE 36' x 40'

DATE: 12/22/2011

ARCHITECT OF RECORD: [Signature]

PROJECT SPECIFIC STATE AGENCY APPROVAL: [Stamp]

ORIGINAL PC STATE AGENCY APPROVAL: [Stamp]

REVISIONS:

APPROVALS

DATE: DEC 14 2011

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