LEGEND AND ABBREVIATIONS 4-HOUR BY PASS TIMER DRAIN DRY BULB THERMOSTAT DOOR LOUVER RECTANGULAR DUCT W/SIZE DOWN OF SIDE SHOWN INDICATED FIRST DOWN THRU ROOF SECTION THRU RECTANGULAR SUPPLY DUCT EXHAUST AIR **EXISTING** (E) SECTION THRU RECTANGULAR RETURN DUCT EXH GRILLE SECTION THRU RECTANGULAR EXHAUST DUCT ENTERING FLEXIBLE CONNECTION, (F.C.) EXHAUST DUCT RISE IN DIRECTION OF FLOW FACE AREA DUCT DROP IN DIRECTION OF FLOW FAHRENHEIT FULL LOAD AMPS CEILING DIFFUSER W/DIRECTION OF THROW INDICATED, (3-WAY BLOW SHOWN) FPI FINS PER INCH MANUAL VOLUME DAMPER, (MVD) FEET PER MINUTE AUTOMATIC FIRE DAMPER, (AFD) **FLEXIBLE** FLEX ■ MODULATING DAMPER, (MOD) GALVANIZED ■ BACKDRAFT DAMPER, (BDD) GAUGE STATIC PRESSURE DAMPER +M COMBINATION FIRE/SMOKE DAMPER HORSEPOWER SOUND LINED (SL)DUCT W/INTERNAL INSULATION INCH DUCT SIZES SHOWN ARE NET INSIDE DIMENSION. **ISOLATOR** SOUND TRAP (ST) LBS POUNDS LEAVING LVG -TURNING VANES MIXED AIR FLEXIBLE DUCT TO MAXMAXIMUM CEILING DIFFUSER 1000 BTU'S PER HOUR OR REGISTER MINIMUM MODULATING DAMPER FURNISHED & INSTALLED MANUAL VOLUME DAMPER BY MECH. CONTRACTOR NOT TO SCALE FURNNISHED & INSTALLED BY ELECT. CONTRACTOR OPER. WT. OPERATING WEIGHT OPENING FURNISHED & INSTALLED BY MECH. CONTRACTOR, WIRED BY ELECT. CONTRACTOR OUTSIDE AIR OSA PRESSURE DROP INSTALLED BY MECH. CONTRACTOR WIRED BY ELECT. CONTRACTOR PHASE (cc) CLOSING COIL IN MAGNETIC STARTER PRESSURE PRESS POINT OF CONNECTION POUNDS PER SQUARE INCH RETURN AIR BRITISH THERMAL UNIT RETURN AIR REGISTER REQUIRED CEILING DIFFUSER RATED LOAD AMPS CFM CUBIC FEET PER MINUTE RPM REVOLUTIONS PER MINUTE CEILING GRILLE ROUND DUCT CONC CONCRETE SUPPLY AIR CONDENSATE STATIC PRESSURE CONNECTION SQUARE FEET CONTINUATION SWR SIDEWALL REGISTER CEILING REGISTER SOUND LINED CER CEILING EXH REGISTER TEMPERATURE

T'STAT

FIELD VERIFICATION

1. SITE INSPECTION: CONTRACTOR SHALL VISIT THE SITE OF WORK AND THOROUGHLY

CLARIFICATION PRIOR TO SUBMISSION OF HIS BID. SUBMISSION OF A BID

2. AS-BUILTS: CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILT FULL SIZE

PROJECT AND PRIOR TO FINAL ACCEPTANCE AND PAYMENT.

THE EXAMINATION.

ACKNOWLEDGES FULL RESPONSIBILITY FOR FURNISHING A COMPLETE AND FUNCTIONAL

FUNDS FOR ANY OMISSION WHICH RESULTS FROM A FAILURE TO THOROUGHLY MAKE

BLACKLINE PRINTS WITH ALL CHANGES NOTED THEREON AT THE COMPLETION OF THE

SYSTEM. NO CHANGES IN CONTRACT WILL BE MADE TO ACCOMMODATE OR ALLOW EXTRA

THERMOSTAT

UP THRU ROOF

TYPICAL

VOLT

WITH

WET BULB

EXISTING

NEW

WATER GAUGE

AIR CONDITIONING REQUIREMENTS

- 1. A. FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT AND FACILITIES NECESSARY TO FURNISH, FABRICATE, DELIVER, STORE AND INSTALL ALL WORK NOTED ON THE DRAWINGS AND/OR SPECIFIED HEREIN.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL ALL WORK NECESSARY TO MAKE A COMPLETE SYSTEM WHETHER OR NOT SUCH DETAILS ARE MENTIONED IN THESE SPECIFICATIONS OR SHOWN ON THE PLANS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE SYSTEM, EXCEPTING ONLY THOSE PORTIONS THAT ARE SPECIFICALLY MENTIONED HEREIN OR PLAINLY MARKED ON THE ACCOMPANYING DRAWINGS AS BEING INSTALLED UNDER ANOTHER SECTION OF THE SPECIFICATIONS.
- WORKMANSHIP: THE WORK SHALL BE ACCOMPLISHED IN A THOROUGH AND WORKMAN-LIKE MANNER SATISFACTORY TO AND MEETING THE APPROVAL OF THE OWNER.
- MATERIALS: ALL MATERIALS, APPLIANCES AND EQUIPMENT SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KIND, FREE FROM ALL DEFECTS AND OF THE MAKE, BRAND AND QUALITY SPECIFIED.
- SITE INSPECTION: CONTRACTOR SHALL VISIT THE SITE OF WORK PRIOR TO SUB-MISSION OF HIS BID AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS & EXACT NATURE OF THE WORK. SUBMISSION OF A BID ACKNOWLEDGES FULL RESPONSIBILITY FOR FURNISHING A COMPLETE AND FUNCTIONAL SYSTEM. NO CHANGES IN CONTRACT WILL BE MADE TO ACCOMMODATE OR ALLOW EXTRA FUNDS FOR ANY OMISSION WHICH RESULTS FROM A FAILURE TO THOROUGHLY MAKE THE EXAMINATION.
- CODES AND PERMITS: ALL MECHANICAL EQUIPMENT, INSTALLATION, ETC., SHALL CONFORM TO CALIFORNIA MECHANICAL CODE (CMC 2013) AND OTHER APPLICABLE CODES. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS. COPIES OF ALL PERMITS AND INSPECTION REPORTS SHALL BE SUBMITTED TO THE ARCHITECT
- AS-BUILTS: CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS-BUILTS TRANSPAREN-CIES WITH ALL CHANGES NOTED THEREON AT THE COMPLETION OF THE PROJECT AND PRIOR TO FINAL ACCEPTANCE.
- GUARANTEE: CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE ALL LABOR AND MATER-IALS ON ALL WORK AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR.
- SUBMITTALS: CATALOG INFORMATION AND CUTS OF ALL MECHANICAL EQUIPMENT AND DEVICES SHALL BE SUBMITTED FOR REVIEW (SIX COPIES OF EACH).
- COORDINATION: THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW SCOPE. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES TO PROVIDE BEST ARRANGEMENT OF ALL DUCTS, PIPES, CONDUIT, ETC. LOCATION OF EXISTING PIPING AND DUCTWORK SHOWN IS APPROXIMATE; CONTRACTOR SHALL VERIFY THEIR LOCATION PRIOR TO BEGINNING WORK OF THIS SECTION AND SHALL MAKE MODIFICATIONS AND ADJUSTMENTS REQUIRED TO INSTALL THE WORK OF THIS SECTION.
- 10. CUTTING AND PATCHING: ALL CUTTING AND PATCHING REQUIRED OF THE EXISTING STRUCTURE SHALL BE PROVIDED UNDER OTHER SECTIONS OF THE WORK. PROVIDE NECESSARY REQUIREMENTS TO THE PROJECT SUPERINTENDENT.
- 11. CLEANUP: UPON COMPLETION OF THE WORK UNDER THIS SECTION, THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIALS, EQUIPMENT AND DEBRIS INCIDENTAL TO THIS WORK AND LEAVE THE PREMISES CLEAN AND ORDERLY.

12. DUCTWORK:

- DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH 2013 CALIFORNIA MECHANICAL CODE AND SMACNA STANDARDS.
- DUCTWORK SHALL BE GALVANIZED STEEL.
- DOUBLE THICKNESS TURNING VANES SHALL BE USED ON ALL DUCT TURNS OF 90°
- ALL DUCT JOINTS SHALL BE SEALED AIR TIGHT WITH APPROVED SEALER & DUCT TAPE.
- FLEXIBLE DUCT USED FOR CONDITIONED AIR SHALL BE U.L. APPROVED. VINYL COATED. WIRE REINFORCED FIBERGLASS. WITH MAXIMUM CONDUCTANCE OF .30 AND A MAXIMUM LENGTH OF SEVEN FEET.
- F. FLEXIBLE DUCT SIZING SHALL BE PER DIFFUSER SCHEDULE SAME SIZE AS DIFFUSER NECK. TRANSITION AS NEEDED FROM SMALLER DIAMETER HARD DUCT TO LARGER DIAMETER FLEX DUCT.
- MANUAL VOLUME DAMPERS, U.O.N. AS OPPOSED BLADE DAMPERS, SHALL BE INSTALLED AS A MEANS TO BALANCE AIR FLOW AT ALL DIFFUSERS AND REGISTERS.

13. FILTERS:

- FILTERS SHALL BE U.L. APPROVED. SEE SCHEDULE.
- RIGID/SUPPORTED FILTER SHALL OPERATE ON THE PRINCIPLES OF IMPRINGEMENT, STRAINING, AND DIFFUSION.
- ALL FILTERS SHALL BE CERTIFIED BY THE MANUFACTURER AND INSTALLED IN COMPLIANCE WITH 2013 EDITION OF THE CMC.

14. INSULATION:

- INSULATION SHALL BE U.L. LISTED IN COMPLIANCE WITH FLAME-SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE UNIFORM BUILDING CODE. INSTALLA-TION SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA ENERGY COMMISSION REQUIREMENTS.
- ALL SUPPLY AND RETURN DUCTS SHALL BE LINED DUCTWORK. DUCT DIMENSIONS SHOWN ARE FREE INTERNAL DIMENSIONS.
- CONDENSATE PIPING SHALL BE INSULATED WITH 3/8" FOAM PLASTIC.
- COLD AIR DUCTS SHALL BE INSULATED TO PREVENT CONDENSATION PROBLEM.
- 15. PIPING:
 - PROVIDE HANGERS AND SUPPORTS AS REQUIRED. PLUMBERS TAPE AND WIRE ARE NOT ACCEPTABLE.
 - CONDENSATE PIPING SHALL BE TYPE "M" COPPER.
- 16. CONTRACTOR SHALL AFFIX A MAINTENANCE LABEL TO ALL EQUIPMENT REQUIRING ROUTINE MAINTENANCE AND SHALL PROVIDE THREE COPIES OF MAINTENANCE AND OPERATING MANUALS TO THE OWNER.
- ROUGH-IN AND CONNECT EQUIPMENT PROVIDED UNDER OTHER SECTIONS OF THE WORK.
- 18. THE CONTRACTOR SHALL BE RESPONSIBILE FOR VERIFYING AVAILABLE SPACE FOR INSTALLATION OF NEW WORK.
- 19. HIGH VOLTAGE CONDUIT AND WIRE AND LOW VOLTAGE CONDUIT SHALL BE UNDER ELECTRICAL SECTION OF THE WORK. LOW VOLTAGE WIRING SHALL BE UNDER THIS SECTION OF THE WORK.
- BALANCING AND ADJUSTING: ALL AIR SYSTEMS SHALL BE ADJUSTED BY AN INDEPEN-DENT BALANCING CONTRACTOR THAT IS A MEMBER OF THE AABC'S NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE (6TH ED.). SUBMIT BALANCE REPORT TO OWNER ADDITIONAL BALANCING DAMPERS AND/OR PULLEY CHANGES SHALL BE PROVIDED AS REQUIRED TO BALANCE SYSTEMS, AT NO INCREASE IN CONTRACT PRICE.
- BEFORE STARTING ANY WORK. THE CONTRACTOR FOR THIS SECTION OF THE WORK SHALL EXAMINE A COMPLETE SET OF DRAWINGS FOR ALL TRADES, INCLUDING ARCHITECTURAL. HVAC, ELECTRICAL, FIRE PROTECTION AND PLUMBING. DIMENSIONS, SPACE REQUIRE— MENTS AND POINTS OF CONNECTION TO ALL EQUIPMENT SHALL BE VERIFIED, AND ANY MINOR ADJUSTMENTS NECESSARY TO AVOID CONFLICT WITH THE BUILDING STRUCTURE AND THE WORK OF THE OTHER TRADES SHALL BE MADE.
- 22. PERMANENT ACCESS TO ALL EQUIPMENT INCLUDING FIRE DAMPERS & SMOKE FIRE DAMPERS SHALL BE PROVIDED.
- 23. EQUIPMENT SHALL BE SECURELY FASTENED TO VIBRATION ISOLATORS AND EARTHQUAKE RESTRAINTS PER BUILDING CODE REQUIREMENTS.
- 24. EACH PIECE OF EQUIPMENT AND ALL SYSTEMS SHALL BE ADJUSTED AND RE-ADJUSTED TO INSURE PROPER FUNCTION OF ALL CONTROLS, MAINTENANCE OF TEMPERATURE, ELIMINATION OF NOISE AND VIBRATION, AND SHALL BE LEFT IN PROPER OPERATING CONDITION.
- 25. NO COMBUSTIBLE MATERIALS SHALL BE INSTALLED IN RETURN AIR PLENUMS.
- 26. ACCESS DOORS: WHERE NECESSARY IN DUCTWORK OR CASINGS. SUITABLE ACCESS DOORS AND FRAMES TO PERMIT INSPECTION, OPERATION AND MAINTENANCE OF ALL CONTROLS, MOTOR BEARINGS, OR OTHER APPARATUS CONCEALED BEHIND THE SHEET METAL WORK SHALL BE PROVIDED. ACCESS DOORS IN DUCTS MAY BE OF SINGLE PANEL CONSTRUCTION OF NOT LESS THAN NO. 18 GAUGE, GALVANIZED, AND SHALL HAVE SPONGE RUBBER GASKETS WITH HINGES AND LATCHES.
- 27. A MINIMUM OF 30" CLEAR WORKING SPACE IN FRONT OF ACCESS PANELS TO THE COMPRESSOR, BLOWER ASSEMBLY AND AIR FILTER SECTION SHALL BE PROVIDED.

- 28. ALL VENT PIPING SHALL TERMINATE NOT LESS THAN TEN (10) FEET FROM ANY AIR INTAKE OR VENT SHAFT.
- 29. ANCHORAGE AND SUPPORTING STRUCTURAL ELEMENTS FOR AIR DUCTS SHALL BE DESIGNED TO WITHSTAND THE LATERAL FORCES AS REQUIRED BY THE CALIFORNIA BUILDING CODE.
- 30. PROVIDE AUTOMATIC SHUT OFF BY DETECTION OF SMOKE IN MAIN SUPPLY AIR DUCT AS REQUIRED BY 2013 CMC 609.0.
- PRIOR TO MECHANICAL FINAL INSPECTION, A SMOKE DETECTOR SHUT-OFF TEST WILL BE REQUIRED PER 2013 CMC.
- CENTRAL AIR HANDLING SYSTEMS SHALL BE MAINTAINED IN CLEAN CONDITION DURING CONSTRUCTION AND SHALL BE CLEANED AS NECESSARY PRIOR TO REPLACEMENT OF TEMPORARY FILTER USED DURING CONSTRUCTION TO ENSURE THAT CLEAN AIR WILL BE DELIVERED TO THE OCCUPIED SPACE.
- 33. ANCHORAGE AND SUPPORTING STRUCTURAL ELEMENTS FOR AIR DUCTS SHALL BE DESIGNED TO WITHSTAND THE LATERAL FORCE AS REQUIRED BY THE 2013 CALIFORNIA BUILDING CODE.
- 34. FLEXIBLE DUCT NO MORE THAN 10 FEET IN LENGTH MAY BE USED TO CONNECT SUPPLY, RETURN OR EXHAUST AIR TEMINAL DEVICES TO RIGID DUCT SYSTEMS. 2010 CMC
- 35. A COPY OF AIR BALANCE REPORT SHALL BE PROVIDED TO MECHANICAL SECTION FOR FINAL REVIEW BEFORE CLINIC CERTIFICATION.
- VENTILATION SYSTEM SHALL BE BALANCED IN ACCORDANCE WITH THE LATEST EDITION OF STANDARDS PUBLISHED BY THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB)
- OUTDOOR AIR INTAKES SHALL BE LOCATED AT LEAST 10 FEET FROM EXHAUST OUTLETS OF VENTILATING SYSTEMS, COMBUSTION EQUIPMENT STACKS, MEDICAL—SURGICAL VACUUM SYSTEMS, COOLING TOWERS AND AREAS THAT MAY COLLECT VEHICULAR EXHAUST OR OTHER NOXIOUS FUMES. THE BOTTOM OF OUTDOOR AIR INTAKES SHALL BE LOCATED NOT LESS THAN 10 FEET ABOVE GROUND LEVEL OR 18 INCHES ABOVE ROOF LEVEL.
- 38. EXHAUST OUTLETS SHALL BE LOCATED A MINIMUM OF 10 FEET ABOVE ADJOINING GRADE AND 10 FEET FROM DOORS, OCCUPIED AREAS AND OPERABLE WINDOWS.
- 39. ALL WORK TO COMPLY WITH 2013 CALIFORNIA MECHANICAL CODE
- 40. PROVIDE AIR BALANCE REPORT TO VERIFY THE PROPER AMOUNT OF OUTSIDE AIR TO COMPLY WITH THE TITLE 24 CALCULATIONS, BEFORE THE APPROVAL OF THIS PROJECT.
- AIR HANDLING DUCT SYSTEMS SHALL BE CONSTRUCTED, INSTALLED AND INSULATED AS PROVIDED IN 2013 CMC.
- 42. A 7 DAY, 24-HOUR TIME CLOCK OR A PROGRAMMABLE THERMOSTAT SHALL BE PROVIDED ON HVAC UNIT THAT AUTOMATICALLY SHUT DOWN DURING PERIODS OF NON-USE. THERMOSTAT SHALL BE MOUNTED BETWEEN 3 AND 4 FEET ABOVE FINISHED FLOOR.
- 43. ALL NEW DUCTS AND OTHER NEW RELATED AIR DISTRIBUTION COMPONENTS OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEETMETAL UNTIL THE FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT.
- 44. AN AIR BALANCE TEST WILL BE REQUIRED TO VERIFY THE MINIMUM VOLUME OF OUTSIDE AIR TO COMPLY WITH THE T-24 CALCULATIONS, BEFORE THE FINAL APPROVAL OF THIS PROJECT.
- 45. ONLY CO2 SENSORS THAT DIRECTLY TRACK THE CO2 LEVEL IN THE BREATHING ZONE ARE PERMITTED BY CEC FOR USE IN THE DEMAND CONTROLLED VENTILATION REQUIREMENT FOR T-24 COMPLIANCE.

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M	IECHANICAL SHEET INDEX
SHEET NUMBER	DESCRIPTION
M-1	LEGENDS, NOTES, SCHEDULES & DETAILS
M-2	FLOOR PLAN
M-3	ROOF PLAN
M-4	DETAILS

0112 11101 20110111 001111111101011 0111112 1112 0112 01 1101111 1110 1110 01121	
FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS AND EXACT NATURE OF THE WORK	
PRIOR TO SUBMISSION OF HIS BID. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND	
CONDITIONS. SHOULD ANY CONDITION ARISE WHERE THE INTENT OF THE DRAWING IS IN	\ \left\ \ \left\ \ \left\ \ \left\ \ \left\ \ \ \left\ \ \ \left\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
DOUBT OR WHERE THERE IS A DISCREPANCY BETWEEN THE DRAWINGS AND FIELD	\ 1
CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING FOR	
CLARIFICATION PRIOR TO SURMISSION OF HIS RID SURMISSION OF A RID	

LOREN COOK CEILING EXHAUST FAN MODEL GEMINI GC—186. 100 CFM @ 1"SP., 208V-1PH-60 HZ, 50 WATTS, OPER. WT.=16 LBS.

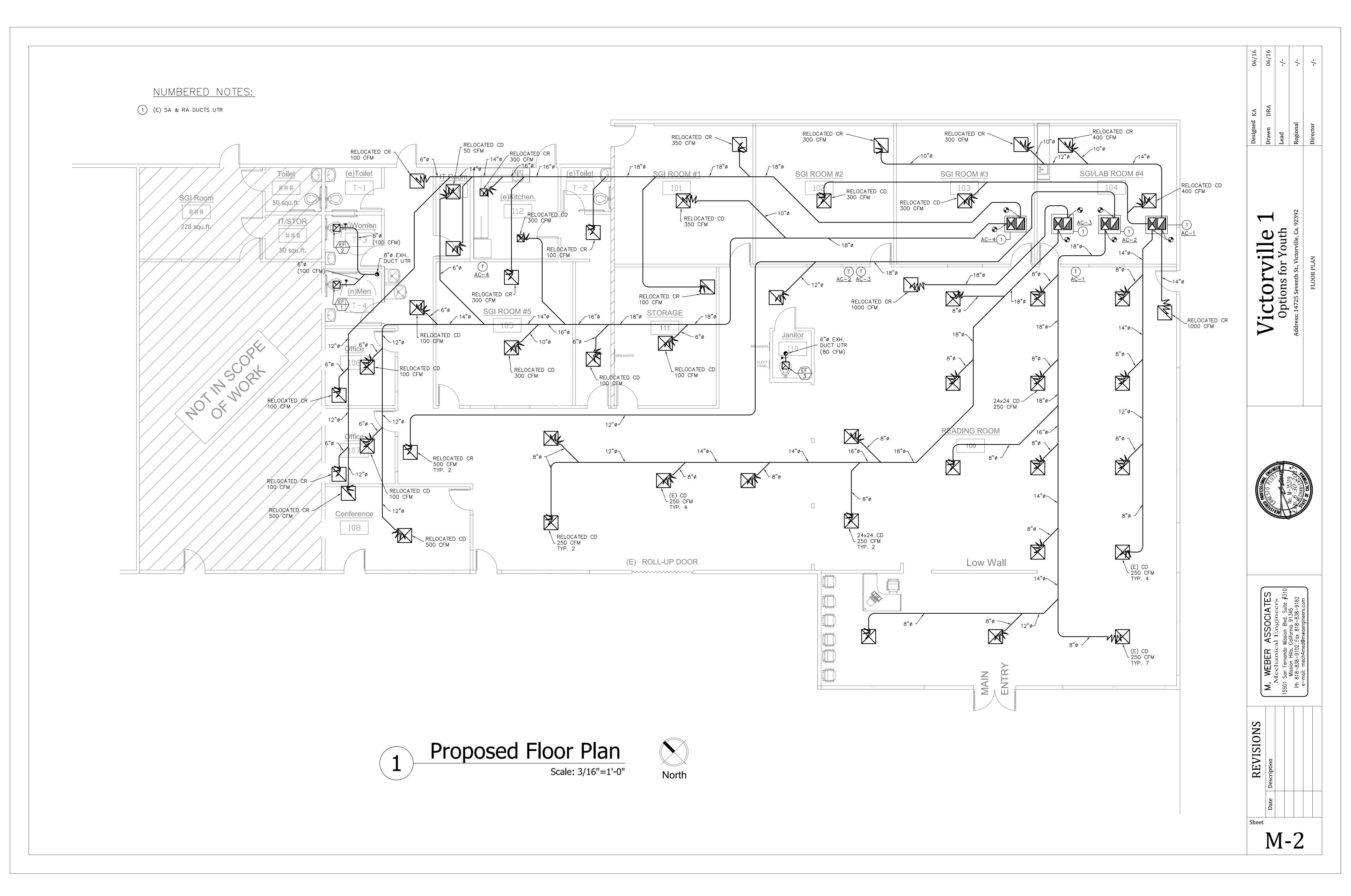


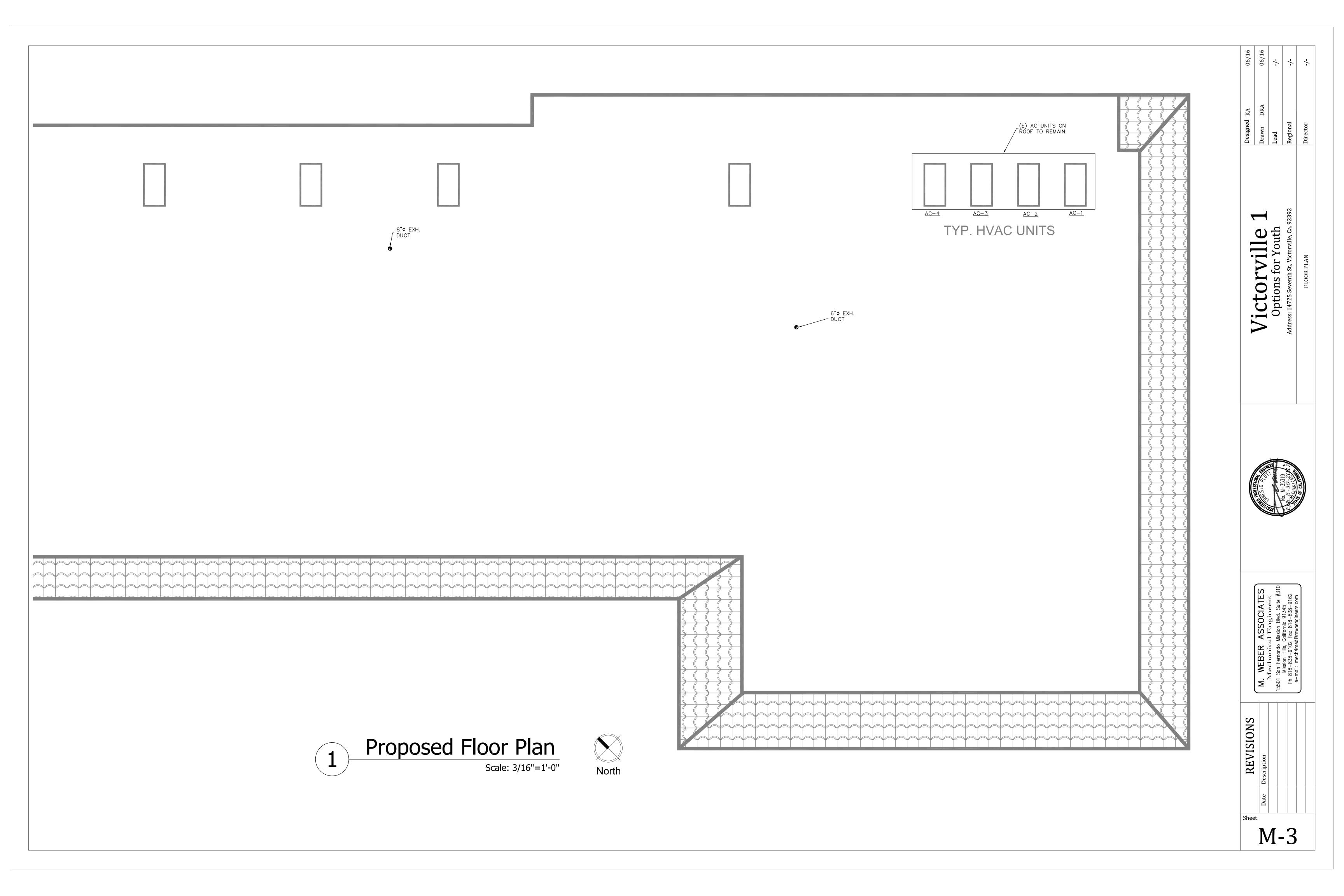
LOREN COOK CEILING EXHAUST FAN MODEL GEMINI GC-186, 80 CFM @ 1" SP., 208V-1PH-60 HZ, 40 WATTS, OPER. WT.=16 LBS.

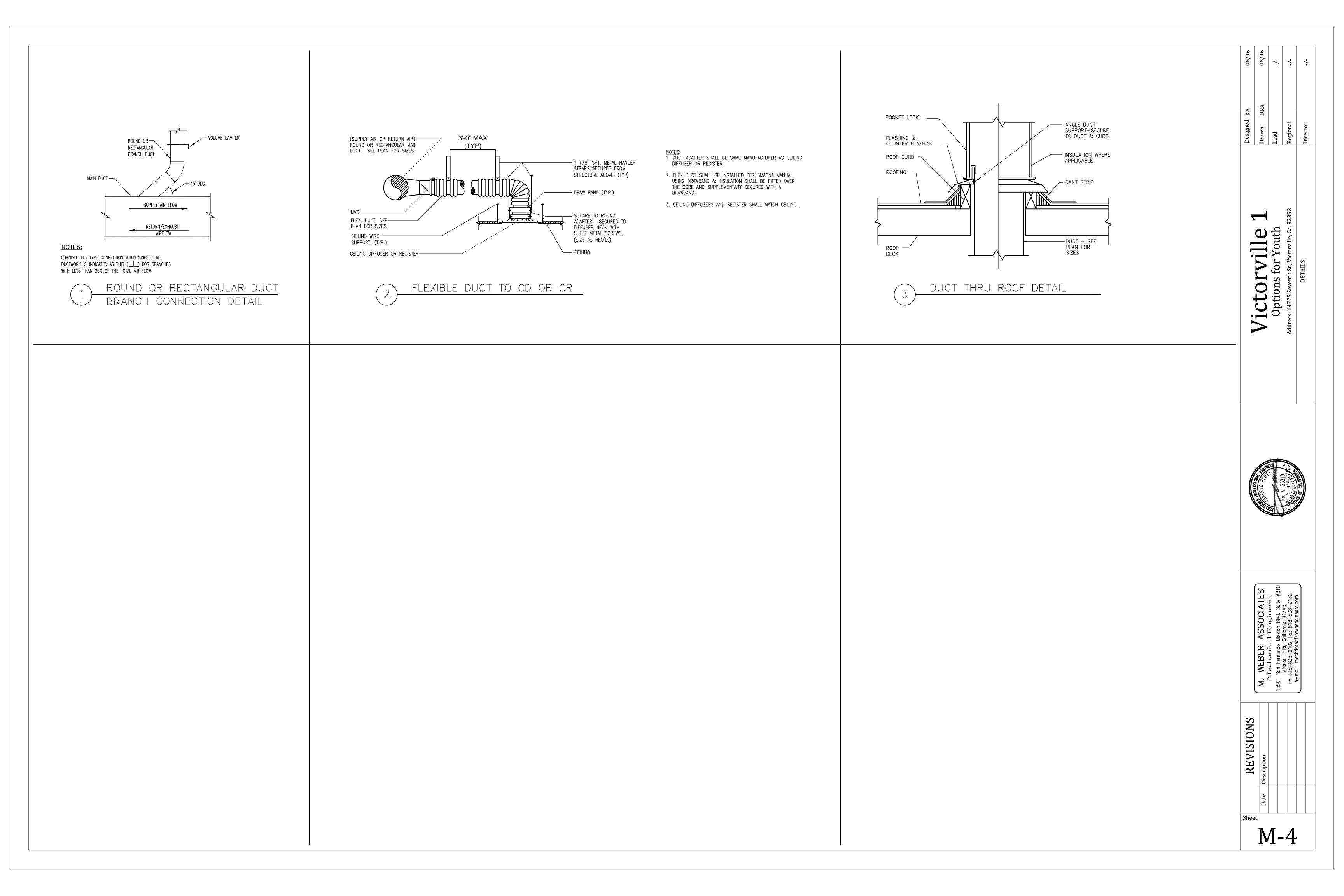
ASSOCIATES
al Engineers
Mission Bivd. Suite #310
California 91345
2 Fax 818-838-9162 WEBER
Mechanics
San Fernando I
Mission Hills, (
818-838-9102
mail: mech4mec M. M. 15501 S Ph. 8

REVISIONS	Description			
	Date			

M-1







GENERAL NOTES

- 1. THIS CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL REQUIRED PERMITS AND INSPECTIONS REQUIRED FOR THIS PORTION OF THE WORK.
- 2. VERIFY ALL INVERTS, ELEVATIONS, DIMENSIONS AND LOCATIONS PRIOR TO STARTING THIS PORTION OF THE WORK.
- 3. REVIEW ALL DRAWINGS IN THIS SET PRIOR TO STARTING WORK. NOTIFY THE GENERAL CONTRACTOR OF ANY FURRING OR SLEEVING REQUIREMENTS.
- 4. IT SHALL BE THE GENERAL CONTRACTORS RESPONSIBILITY TO ARBITRATE ANY CONFLICTS WITH THE STRUCTURE AND/OR BETWEEN THE TRADES.
- 5. PROVIDE TRAP PRIMERS, VACUUM BREAKERS AND BACKFLOW DEVICES AS REQUIRED BY THE OWNER THE LOCAL CODE OR AUTHORITY HAVING JURISDICTION.
- 6. ALL WORKMANSHIP, EQUIPMENT FURNISHED, MATERIALS SYSTEM PROVIDED BY THIS CONTRACTOR SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF ONE FULL YEAR FROM DATE OF FINAL ACCEPTANCE
- 7. INSULATE FIXTURE TRAPS AND HOT WATER RISERS TO MEET WITH ADA CODE REQUIREMENTS.
- 8. DOMESTIC WATER HEATER SHALL BE CALIFORNIA ENERGY COMMISSION (CEC) LISTED.
- 9. PROVIDE LOW FLOW WATER CLOSETS (1.6 GPF) AND URINALS (1.0 GPF).
- 10. PROVIDE VACUUM BREAKERS ON ALL HOSE BIBBS.
- 11. CONTRACTOR SHALL PROVIDE THE NECESSARY MATERIALS FOR BUILDING SETTLEMENT FOR ALL PIPING.
- 12. CONTRACTOR SHALL MAINTAIN A CLEARANCE OF 8'-2" AT HANDICAPPED PARKING AREAS AND OTHER AREAS THAT ARE INVOLVED. (SEE ARCHITECTURAL DRAWINGS FOR HANDICAPPED REQUIREMENTS).
- 13. CONTRACTOR SHALL COORDINATE HEAD-OUTS OF JOIST WITH CARPENTER AND OTHER TRADES.
- 14. CONTRACTOR SHALL ROUTE VENTS THRU ROOF AS NEEDED, AND SHALL MAKE ALL NECESSARY OFFSETS AS REQUIRED FOR INSTALLATION OF VENTS THRU ROOF AT BACK OF HOUSE ONLY.

 VENTS SHALL TERMINATE NOT LESS THAN 10 FEET FROM, OR AT LEAST 3 FEET ABOVE ANY OPERABLE WINDOW, DOOR, OPENING, AIR INTAKE, OR VENT SHAFT, NOR LESS THAN 3 FEET IN EVERY DIRECTION FROM ANY LOT LINE. PER 1994 UNIFORM PLUMBING CODE SECTION 906.2.
- 15. CONTRACTOR SHALL PROVIDE WATER AT TRASH SHUTES WITH SHUT OFF VALVE SHOWER HEADS.
- 16. PLUMBING DRAWINGS ARE DIAGRAMATIC AND DO NOT SHOW ROUGH-IN HEIGHTS AND LOCATIONS.
- 17. INSTALL ALL PLUMBING IN CONFORMANCE WITH THE 1994 EDITION OF THE "UNIFORM PLUMBING CODE".
- 18. PROVIDE WATER AND SHUT OFF VALVE AT ALL REFRIGERATORS FOR ICE MAKER CONNECTION. (FINAL CONNECTION BY OTHERS).
- 19. ISOLATE ALL WATER PIPING FROM STRUCTURE WITH FELT PADS OR TRISOLATORS.
- 20. CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS FOR SUDS RELIEF PER 1994 UNIFORM PLUMBING CODE SECTION 711.
- 21. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES AND DRAINS.
- 22. SEE ARCHITECTURAL DRAWINGS FOR ALL HANDICAP REQUIREMENTS.
- 23. ALL HOT WATER AND HOT WATER RETURN PIPING SHALL BE INSULATED IN ACCORDANCE WITH THE LATEST EDITION OF THE ENERGY EFFICIENCY STANDARDS TABLE 1—G.
- 24. BACKFLOW PREVENTION DEVICES FOR CROSS CONNECTION CONTROL SHALL BE INSTALLED TO COMPLY WITH SECTION 603 AND TABLE 6-1. THE PREMISE OWNER, OR OTHER RESPONSIBLE PERSON, SHALL HAVE THE DEVICE TESTED BY THE CERTIFIED ASSEMBLY TESTER AT INSTALLATION, REPAIR OR RELOCATION AND ON AN ANNUAL BASIS THEREAFTER, PER SECTION 603.2.2.
- 25. PROVIDE CLEANOUTS PER 1994 UNIFORM PLUMBING CODE SECTION 707.4.
- 26. SLOPE ALL WASTE PIPING AT 2% (1/4" PER FOOT) UNLESS IT IS IMPRACTICAL DUE TO THE DEPTH OF THE STREET SEWER OR BUILDING STRUCTURAL IMPEDIMENTS. PRIOR APPROVAL FROM THE BUILDING OFFICIAL MUST BE OBTAINED TO REDUCE SLOPE TO 1% (1/8" PER FOOT) FOR 4" DIAMETER AND LARGER PIPE. SEE SECTION 708, 1994 UNIFORM PLUMBING CODE.

MANDATORY REQUIREMENT NOTES

- 1. WATER HEATING SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC TEMPERATURE CONTROLS CAPABLE OF ADJUSTMENT FROM THE LOWEST TO THE HIGHEST ACCEPTABLE TEMPERATURE SETTINGS FOR THE INTENDED USE AS LISTED IN TABLE 3, CHAPTER 54 OF THE 1987 ASHRAE HANDBOOK, HVAC SYSTEMS & APPLICATIONS VOLUME. SECTION 113(a)2
- 2. LAVATORIES IN PUBLIC RESTROOMS SHALL HAVE HOT WATER CONTROLS THAT COMPLY WITH THE FOLLOWING
 - a. MAXIMUM FLOW RATE (GPM): 0.5 OR 0.75 (WITH A DEVICE THAT LIMITS THE PERIOD OF WATER DISCHARGE i.e. FOOT SWITCH OR OCCUPANCY SENSOR).
 - b. FLOW RATE (GAL. CYCLE) FOR SELF CLOSING VALVES: 0.25 (CIRCULATING); OR 0.5 (NON-CIRCULATING); OR 0.75 (WITH A DEVICE THAT LIMITS THE PERIOD OF WATER DISCHARGE i.e. FOOT SWITCH OR OCCUPANCY
- c. MAXIMUM OUTLET TEMPERATURE : 110 DEGREE F.

SECTION 113(b)3

- 3. CIRCULATING SERVICE WATER HEATING SYSTEM SHALL HAVE A CONTROL CAPABLE OF AUTOMATICALLY TURNING OFF THE CIRCULATING PUMP WHEN HOT WATER IS NOT REQUIRED. SECTION 113(b)2
- 4. THE PIPING FOR ALL SPACE CONDITIONING AND SERVICE WATER HEATING SYSTEMS SHALL BE INSULATED IN ACCORDANCE WITH TABLE 1-G.

PIPING MATERIALS

WASTE, VENT AND STORM DRAINAGE PIPING:

DOMESTIC AND INDUSTRIAL WATER PIPING:

NATURAL GAS PIPING:

NATURAL GAS PIPING: CONDENSATE DRAIN PIPING: CAST IRON.

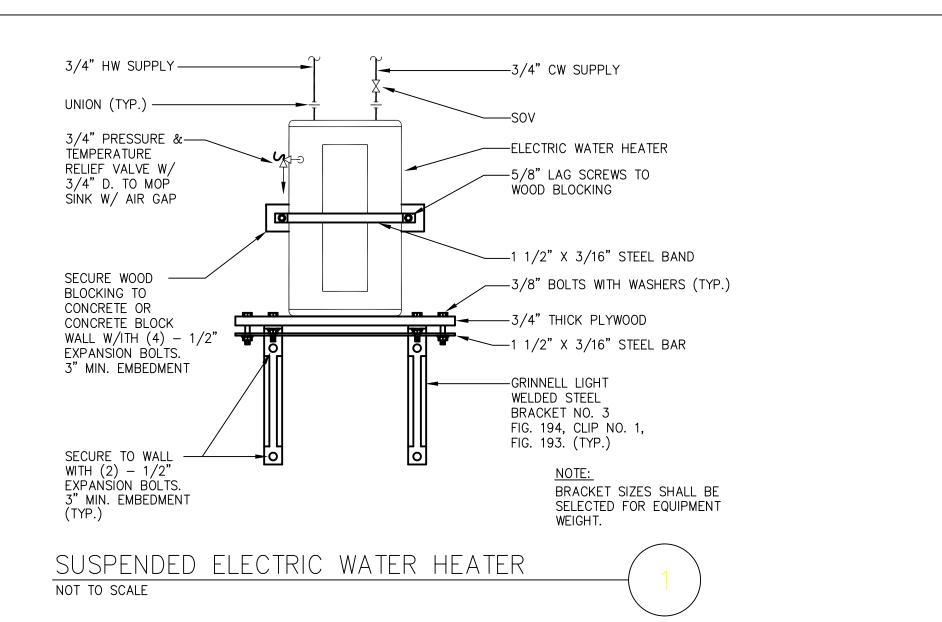
TYPE "L" COPPER PIPE.

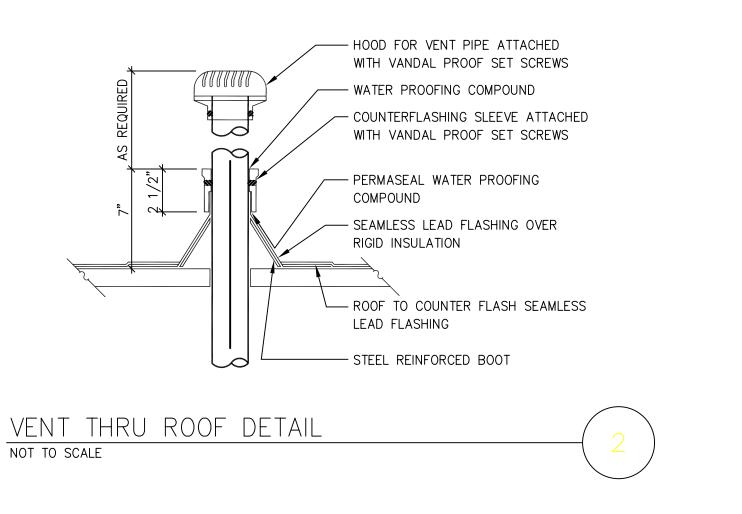
SCHEDULE 40 BLACK STEEL.

TYPE "M" COPPER PIPE.

		PLUN	ABING FIX	KTUR	E SC	CHEDU	JLE
FIX ID	FIXTURE	DD AIN		TON SIZES		ПОТ	COMMENTS
L-1	LAVATORY	DRAIN 2"	TRAP 1-1/4" X 1-1/2"	VENT 1-1/2"	1/2"	1/2"	
WC-1	WATER CLOSET	4"	INTEGRAL	2"	3/4"	_	
DF-1	DRINKING FOUNTAIN	2"	1-1/2"	1-1/2"	3/4"	_	WALL MOUNTED HI-LO DRINKING FOUNTAIN
JS-3	JANITOR SINK	3"	3"	1-1/2"	3/4"	3/4"	

		WA	ATER HE	ATER	SCHED	JLE	
HEATER ID	DESCRIPTION	MANUFACTURER	MODEL No.	kW INPUT	STORAGE CAPACITY	RECOVERY RATE IN GPH	REMARKS
EWH-1	ELECTRIC WATER HEATER	A.O. SMITH	DSE-10	6	10 GAL.	49 GAL @ 50 DEGREE RISE	208V-3PH-60HZ & WEIGHS 116 LBS.



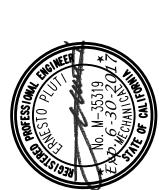


	UMBING S	
SYMBOL	ABBREV.	DESCRIPTION
	W	WASTE ABOVE FLOOR
	W	WASTE BELOW FLOOR
——— SD ———	SD	STORM DRAIN ABOVE FLOOR
OD	OD	OVERFLOW DRAIN ABOVE GRADE
—— SD ——	SD	STORM DRAIN BELOW FLOOR
	V	VENT
	CW	COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN
—— G ——	G	GAS
ICW	ICW	INDUSTRIAL COLD WATER
——— CD ———	CD	CONDENSATE DRAIN
—— D ——	D	RISER DRAIN
– (E) ———	(E)	EXISTING PIPING WITH SERVICE INDICATED
	SOV	SHUT OFF VALVE
	CV	CHECK VALVE
1	СО	CLEANOUT
φ	FCO	FLOOR CLEANOUT
		PIPE DROP UNLESS OTHER WISE NOTED
\bigcirc		PIPE-UP UNLESS OTHER WISE NOTED
		DROP OR RISE
	POC	POINT OF CONNECTION
	ABV	ABOVE
	BEL	BELOW
	BV	BALANCING VALVE
	CLG	CEILING
	DN	DOWN
	(E), EXIST	EXISTING
	ELEV	ELEVATION
	FT	FOOT, FEET
	FU	FIXTURE UNITS
	FV	FLUSH VALVE
	HDCP	HANDICAP
	MTD	MOUNTED
	REQ	REQUIRED
	SGL	SINGLE
	ST STL	STAINLESS STEEL
	TYP	TYPICAL
	VB	VACUUM BREAKER
	W/	WITH

P	LUMBING SHEET INDEX
SHEET NUMBER	DESCRIPTION
P-1	LEGENDS, NOTES, & SCHEDULES
P-2	WASTE & VENT FLOOR PLAN
P-3	CW & HW FLOOR PLAN
P-4	RISER DIAGRAM

Designed KA		06/16	
Drawn	DRA	06/16	
Lead		-/-	
Regional		-/-	
Director		-/-	

Victorville 1
Options for Youth
Address: 14725 Seventh St., Victorville, Ca. 92392



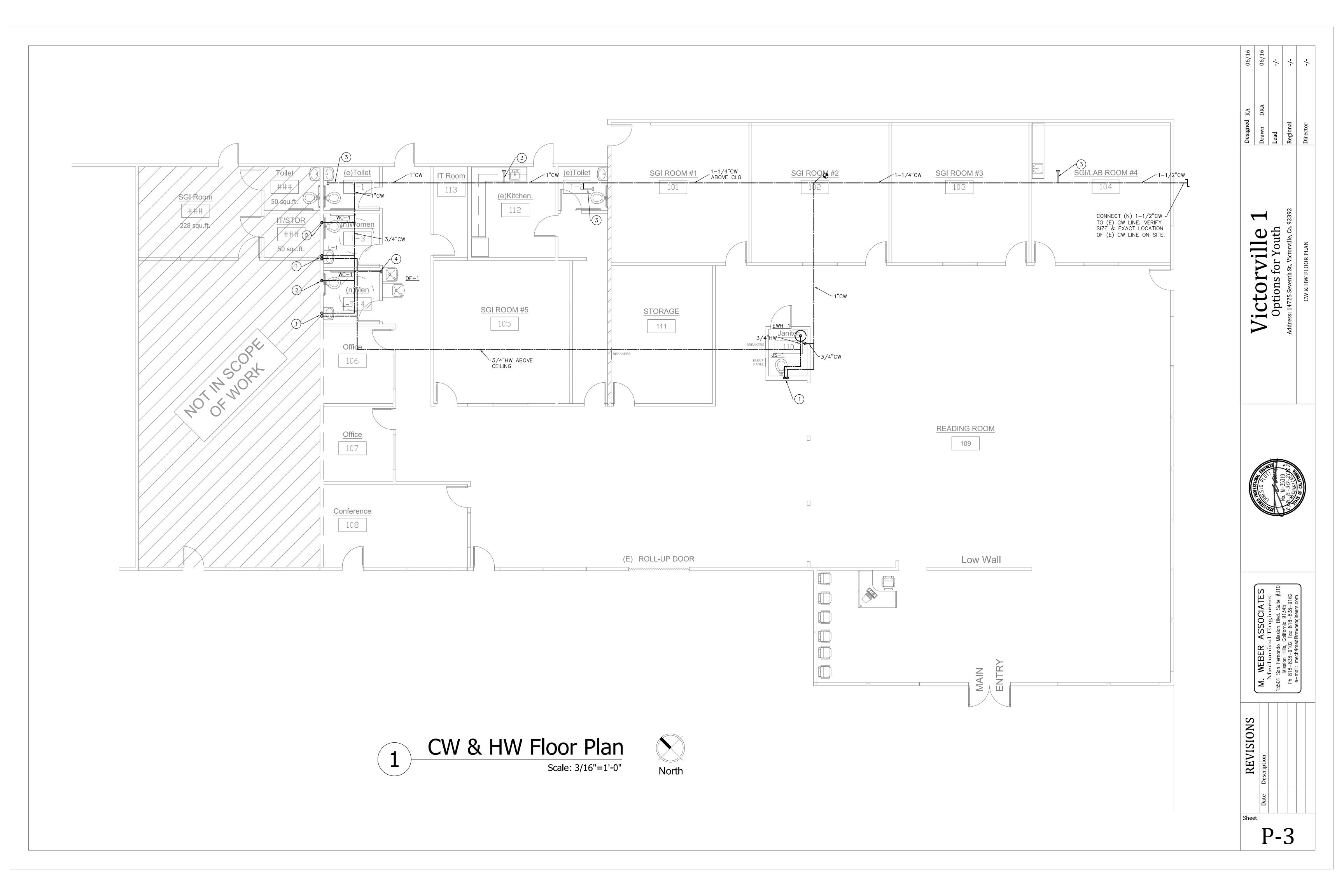
M. WEBER ASSOCIATES

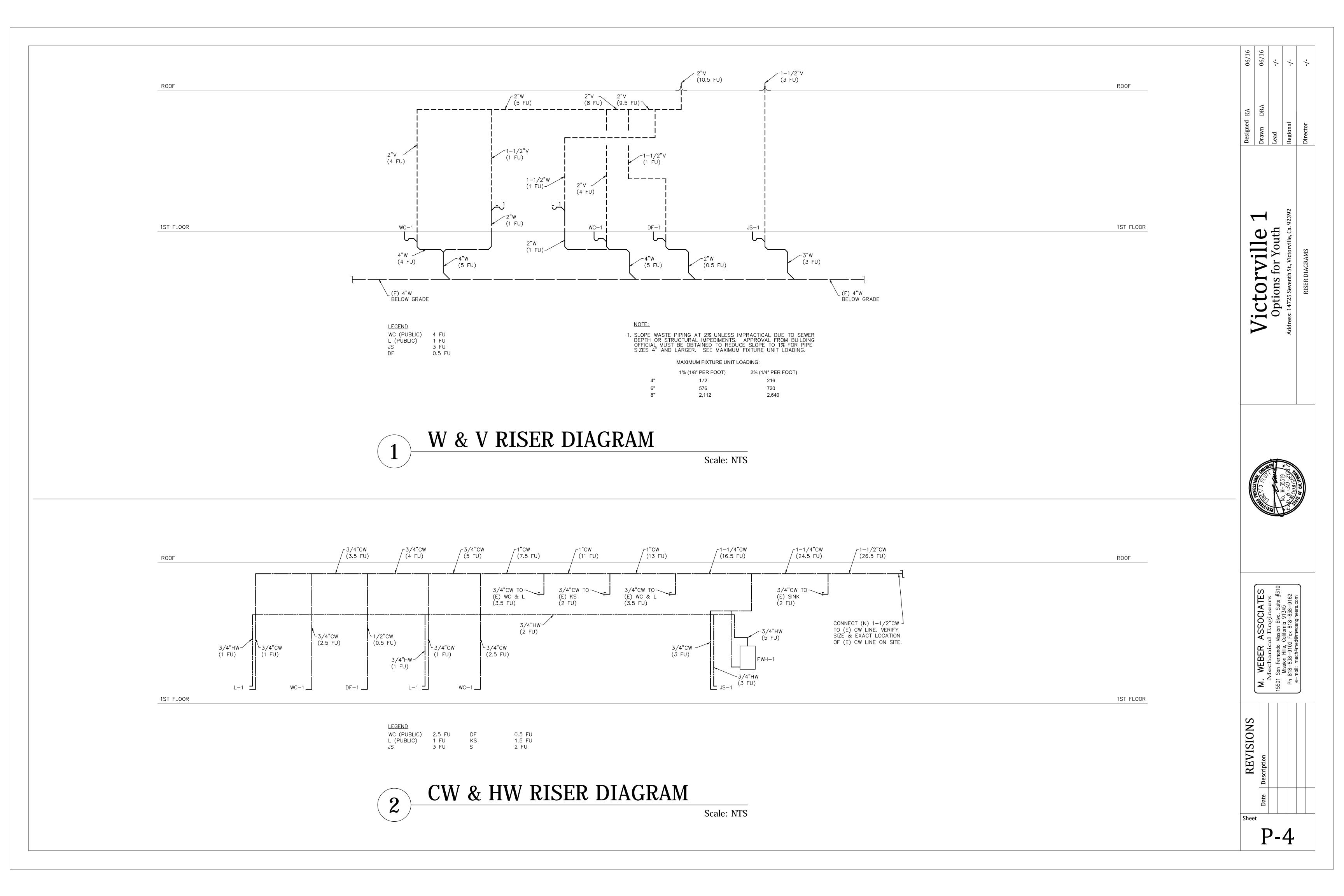
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REVISIONS	Description				
	Date				
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Sheet P_1







AND INSTALLED SHALL BE IN COMPLIANCE WITH THE LATEST RULES AND REGULATIONS OF THE CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 3 "CALIFORNIA ELECTRICAL CODE" THE NATIONAL ELECTRICAL CODE; AND OTHER APPLICABLE STATE— AND LOCAL—LAWS AND REGULATIONS. PROTECTION AND CLEANING: ALL PARTS OF EQUIPMENT AND MATERIALS SHALL BE THOROUGHLY CLEANED. PROTECT ALL WORK, MATERIALS AND EQUIPMENT FROM DAMAGE FROM ANY CAUSE AND PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING THE WORK UNTIL FINAL ACCEPTANCE BY THE OWNER; REPLACE ALL DAMAGED OR DEFECTIVE. WORK UNTIL FINAL ACCEPTANCE BY EQUIPMENT PRIOR TO REQUESTING FINAL ACCEPTANCE. PROVIDE AND MAINTAIN SUITABLE BARRIERS, WARNING SIGNS, LIGHTS, ETC. WHERE REQUIRED FOR PROTECTION OF THE PUBLIC AND OCCUPANTS ABOUT THE SITE. AT THE CONCLUSION OF EACH WORKDAY, THE PREMISES SHALL BE LEFT FREE FROM DEBRIS INCIDENTAL TO THE WORK, AND IN A CONDITION ACCEPTABLE TO THE OWNER OR TENANT. WORK OF SUPPORTS, VERIFY THE ITEMS. FINISH AND INSTALL ALL CONDUITS, WIRES, BOXES, SWITCHES, LIGHT FIXTURES(WITH LAMPS), RECEPTACLES, SERVICE DEVICES, SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, AND ALL RELATED ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. MATERIALS FURNISHED SHALL BE STANDARD PRODUCTS OF THE MANUFACTURER REGULARLY ENGAGED IN MANUFACTURING OF SUCH PRODUCT. USE LATEST DESIGN THAT COMPLIES WITH THE SPECIFICATION REQUIREMENTS WITH AT LEAST 12 MONTH OF SUCCESSFUL RECORD. FURNISH AND INSTALL CONDUIT AND CONDUCTORS FOR CABLE TV, TELEPHONE, DATA SYSTEMS, AND SECURITY SYSTEM AS OUTLINED IN PLANS. ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF NATIONAL ELECTRIC CODE AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL CODES. WHERE THE PLANS SHOW MORE RESTRICTIVE REQUIREMENTS, THE PLANS SHALL GOVERN BUT NOTHING ON THESE PLANS SHALL BE INTERPRETED AS AUTHORITY TO VIOLATE ANY CODE OR REGULATION. THE CONTRACTOR SHALL EXAMINE THE SITE AND THE AREA WHERE THE WORK IS TO BE PERFORMED. BY SUBMITTING A BID ON THE WORK, HE SHALL BE DEEMED TO HAVE ACCEPTED THE SITE CONDITION. ALL MATERIAL SHALL BE NEW AND OF THE HIGHEST QUALITY, AND SHALL MEET THE FULL APPROVAL OF OWNER OR ENGINEER. COORDINATION: PROVIDE NECESSARY COORDINATION WITH SERVING UTILITY COMPANIES TO ESTABLISH SERVICE ENTRANCE FACILITIES, AND TO MEET OTHER REQUIREMENTS FOR COMPLETE AND OPERABLE INSTALLATION. VERIFY SIZE AND ORIENTATION OF EQUIPMENT TO BE ENSURE ADEQUATE WORKING CLEARANCE AND VENTILATION. COORDINATE THE OF OTHER TRADES, VERIFYING REQUIRED WORKING. CLEARANCES, SLEEVES, OROTS, DOOR SWINGS, AND OTHER ITEMS AFFECTING THE WORK OF THIS SECTION. OF OTHER TRADES, VERIFYING REQUIRED WORKING. CLEARANCES, SLEEVES, OROTS, DOOR SWINGS, AND OTHER ITEMS AFFECTING THE WORK OF THIS SECTION. OPERATIONS AND MAINTENANCE MANUALS: THREE COPIES OF OPERATING AND MAINTENANCE DATA FOR ALL ELECTRICAL EQUIPMENT, BOUND IN A HARDCOVER THREE—RING PLASTIC BINDER WITH A TABLE OF CONTENT. SUBSTITUTIONS: MANUFACTURER AND CATALOG NUMBERS INDICATED ARE FOR THE PURPOSES OF ESTABLISHING STANDARDS OF QUALITY, ALLOWABLE SIZE OF COMPONENTS, AND THE TYPE OF MATERIALS TO BE USED, PRODUCTS BY OTHER MANUFACTURERS WILL BE CONSIDERED IF THE SUBMITTAL ASSOCIATED WITH THAT IS CLEARLY MARKED "THIS ITEM IS A SUBSTITUTION" AND IT COMPLIES WITH THE FOLLOWING: (1) QUALITY AND CAPACITY ARE EQUAL TO OR BETTER THAN SPECIFIED ITEM, AND (2) COMPONENTS FIT IN ALLOWED SPACES AND ARE SIMILAR IN APPEARANCE. NO SUBSTITUTION ITEMS MAY BE FURNISHED OR INSTALLED WITHOUT WRITTEN APPROVAL OF THE OWNER. LOCATIONS SHOWN ON THE INTERIOR AND MECHANICAL DRAWINGS TAKE PRECEDENCE OVER THOSE SHOWN ON THE ELECTRICAL DRAWINGS. REFER TO MECHANICAL, PLUMBING AND HEAT/AC DRAWINGS FOR THE EXACT LOCATIONS, RATINGS, TYPE, CONNECTIONS, WIRING DIAGRAM AND AUXILIARY DEVICES. NO EXTRA WORK SHALL BE UNDERTAKEN WITHOUT WRITTEN APPROVAL OF THE OWNER OR HIS REPRESENTATIVE. PROVIDE ALL LABOR, MATERIALS, APPLIANCES, TOOLS, EQUIPMENT, FACILITIES, TRANSPORTATION, AND SERVICES NECESSARY FOR AND INCIDENTAL TO PERFORMING ALL OPERATIONS IN CONNECTION WITH FURNISHING, INSTALLATION, AND MAKING FULLY OPERATIONAL THE WORK OF THIS DIVISION, COMPLETE, AND AS SHOWN AND/OR SPECIFIED HEREIN. EXCEPT SUCH MATERIAL OR EQUIPMENT SPECIFICALLY INDICATED PROVIDED BY THE OWNER OR BY OTHERS. CONTRACTOR SHALL MAINTAIN, ON THE JOB, A SET OF PRINTS OF WHICH ALL DAILY CHANGES IN LOCATION OR RUNS SHALL BE CAREFULLY INDICATED. THESE PRINTS SHALL BE DELIVERED TO THE OWNER AT THE CONCLUSION OF THE PROJECT, INDICATING 'AS BUILT' CONDITION. SUBMIT THREE (3) SETS OF SHOP DRAWINGS FOR APPROVAL TO ENGINEER FOR ALL PANELBOARDS. DRAWINGS SHALL BE PICTORIAL AND INDICATE ALL MATERIAL RATINGS, DIMENSIONS AND FINISHES. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT ONLY WITH PULL ROPE FOR LOW VOLTAGE CONTROL WIRING FOR THE A/C EQUIPMENT. CONTROL WIRING FROM THERMOSTATS AND OVERRIDES TO A/C UNITS IS BY THE MECHANICAL CONTRACTOR. ALL WORK AND MATERIALS OF THIS CONTRACT SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE. LIGHTING FIXTURES BALLASTS SHALL BE GUARANTEED FOR TWO(2) YEARS. BATTERY PACKS SHALL BE GUARANTEED FOR FIVE YEARS. ROUGH- AND FURNISHED-CONCRETE WORK REQUIRED SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE SPECIFICATIONS. CUTTING, DRILLING, AND PATCHING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE SPECIFICATIONS. THE ELECTRICAL CONTRACTOR IN COOPERATION WITH THE MECHANICAL CONTRACTOR SHALL DEMONSTRATE THAT ALL EQUIPMENT IS IN PERFECT WORKING ORDER. THE ELECTRICAL CONTRACTOR SHALL MAKE ALL POWER CONNECTIONS OVER 100V TO A/C EQUIPMENT. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE DESIRED LOCATIONS OR ARRANGEMENT OF CONDUIT RUNS ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. PROPER JUDGMENT MUST BE EXERCISED IN EXECUTING THE WORK AS TO SERVE THE POSSIBLE INSTALLATION IN THE AVAILABLE SPACE AND TO OVERCOME LOCAL DIFFICULTIES DUE TO SPACE LIMITATIONS OR INTERFERENCE OF STRUCTURAL CONDITIONS ENCOUNTERED. N THE EVENT OF CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS AND/OR SPECIFICATIONS, THE PLAN, NOTE OR SPECIFICATION WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR THE HIGHER STANDARD SHALL PREVAIL. CLEAN UP ALL TRASH AND DEBRIS BY THE WORK DAILY. THE CONTRACTOR MAY USE TEMPORARY POWER AND WATER AVAILABLE FOR ING SMALL TOOLS. TOILET FACILITIES ON SITE MAY BE USED BY CONTRACTOR THE GENERAL CONDITIONS OF THE CONTRACT APPLY TO ALL WORK HEREIN SPECIFIED. ACCOMPLISH ALL TEST NECESSARY TO DEMONSTRATE TO THE SATISFACTION OF THE OWNER THAT ALL EQUIPMENT IS IN PROPER WORKING ORDER AND IS IN COMPLIANCE WITH THE PLANS. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. REFER TO THE REFLECTED CEILING PLAN AND THE INFERIOR FLOOR PLANS FOR EXACT LOCATIONS OF LIGHTING FIXTURES AND DEVICES. VERIFY LOCATION OF LIGHTS WITH EXPOSED DUCTWORK AND PIPING. CONTRACTOR SHALL OBTAIN AND PAY FOR PERMIT AND INSPECTIONS REQUIRED. LL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BEAR THE JNDERWRITERS' LABEL (UL) AND SHALL BE INSTALLED IN THE MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED. SMALL TOOLS. PERSONNEL. GENERAL NOTES Ņ 21. DISCONNECT SWITCHES: NEMA KS 1, UL 98, UL 198C AND 198E. RATED AS SHOWN, HEAVY DUTY TYPE, EXTERNALLY-OPERATED, QUICK-MAKE QUICK-BREAK TYPE, THREE-POLE EXCEPT AS OTHERWISE SHOWN. FOR FUSIBLE TYPE, PROVIDE DUAL-ELEMENT TIME-DELAY CLASS RK-1 CURRENT -LIMITING FUSES. FOR EXTERIOR LOCATIONS, AND WHERE INDICATED, PROVIDE NEMA 3R ENCLOSURES. SQUARE-D, OR EQUAL BY GE OR WESTINGHOUSE. 16. PANELBOARDS MAY BE PLUG-IN CIRCUIT BREAKER TYPE. DEAD FRONT IN BEAKERS SHALL BE RATED AS INDICATED ON PLANS, NEMA 1 ENCLOSURE FOR INTERIOR PANELS. 13. PHOTOELECTRIC CONTROLLERS: RATED FOR CONNECTED LOAD, 20A MINII PARAGON, TORK, SANGANMO, OR EQUAL. 24. TELEPHONE SYSTEM: A. TELEPHONE SYSTEM: A. TELEPHONE SYSTEM: A. TELEPHONE SYSTEM: A. TELEPHONE SYSTEM AS FOLLOWS, EXCEPT AS OTHERWISE SHOWN: B. S. ENTRANCE FACILITY: PROVIDE WALL-MOUNTED 3/4" x 4" x 8" (OR SIZE INDICATED) PLYWOOD "MAIN TELEPHONE BACKBOARD" AT THE LOCATION SI (1) A DEDICATED 20A/120V BRANCH CIRCUIT /QUADRAPLEX POWER RECEP (2) A GROUNDING ELECTRODE PIGTAIL (\$6 AWG BARE STRANDED COPPER IN 1" CONDUIT DIRECTLY TO FACILITY GROUNDING ELECTRODE AND CONNECTHEREON), AT THE TELEPHONE BACKBOARD LOCATION. C. VOICE DROPS PATHWAYS: PROVIDE FLUSH MOUNTED 4" SQUAREBOX/WALLPLATE WITH TELEPHONE TELEPHONE BACKBOARD LOCATION AT THE SERVICE IN FACILITY. TELEPHONE BACKBOARD LOCATION AT THE SERVICE IN FACILITY. TELEPHONE BACKBOARD LOCATION AT THE SERVICE IN TELEPHONE BACKS SHALL BE PROVIDED AS SPECIFIED BY OWNER AND ENTRANCE FACILITY TELEPHONE EQUIPMENT/CROSS—CONNECT FACILITY TELEPHONE BACKBOARD BY OWNER RTER, FUSIBLE C. () AL BY SQUARE-D, CONDUITS OUTSIDE THE BUILDING SHALL BE RIGID STEEL STANDARD WEIGHT HOT DIPPED GALVANIZED THREADED AT BOTH ENDS OR EMT WHERE APPLICABLE. SWITCHES: TOGGLE TYPE, NUMBER OF POLES AS SHOWN, QUIET TYPE, RATED 20A AT 120/277V. HUBBELL HBL 12XX-SERIES, OR EQUAL FROM PASS & SEYMOUR OR LEVITON. RECEPTACLES: DUPLEX, THREE-WIRE GROUNDING TYPE, RATED 20A AT 125V, NEMA CONFIGURATION 5-20R. PROVIDE GFCI (SELF-CONTAINED) TYPE AT LOCATIONS SHOWN. FOR EXTERIOR LOCATIONS, PROVIDE WITH WEATHERPROOF BOX, AND ALUMINUM GASKETED SPRING-SHUT COVER. HUBBELL 53XX-SERIES, OR EQUAL FROM PASS & SEYMOUR OR LEWITON. MOTOR CONTROLLERS: A. NEMA ICS 2/ICS 6/250/AB 1/FU 1/KS 1; UL 98/198C/198E/489/508. PROVIDE MANUAL MOTOR CONTROLLERS FOR LE-PHASE MOTORS RATED BELOW 2 HP, AND COMBINATION MOTOR ROLLERS AS SHOWN. B. MANUAL MOTOR CONTROLLERS: MANUAL MOTOR CONTROLLERS: MANUAL MOTOR ROTTER WITH INTEGRAL THERMAL TYPE OVERLOAD PROTECTION, TOGGLE ROTTPE, ALLEN-BRADLEY BULLETIN 609, OR EQUAL BY SQUARE-D, GE OR TYPE, ALLEN-BRADLEY BULLETIN 509, OR EQUAL BY SQUARE-D, GE OR TYPE, FUSIBLE DISCONNECT SWITCH TYPE, ALLEN-BRADLEY BULLETIN 512, OR LEY SQUARE-D, GE OR WESTINGHOUSE. LIGHTING FIXTURES SHALL BE FURNISHED COMPLETE WITH ALL COMPONENTS, LAMPS AND MOUNTING ACCESSORIES. ALSO SEE FIXTURE SCHEDULE. FURNISH ALL RELAYS, TIME CLOCKS, CONTROL TRANSFORMERS, ETC., INSTALLATION. SWITCHBOARDS (SEE SINGLE LINE DIAGRAM): NEMA PB 2; UL 891. CU/AL BUS. SIEMENS, CUTLER HAMMER, OR EQUAL BY SQUARE-D THREE (3) SPARE FUSES OF EACH TYPE SHALL BE PROVIDED TO THE OWNER. FUSES SHALL BE DUAL ELEMENT, TIME DELAY, HIGH INTERRUPTING TYPE, UL APPROVED. FUSE SIZES IN SMITCHES FOR HVAC EQUIPMENT SHALL BE AS SPECIFIED BY EQUIPMENT MANUFACTURER. DISCONNECT SWITCHES FUSED OR UNFUSED SHALL BE HEAVY DUTY TYPE, SIZED FOR LOAD NOTED ON THE PLANS, UL LISTED AND HORSEPOWER RATED, WITH PROVISIONS TO PAD LOCK HANDLE IN "ON" OR "OFF" POSITION. ENCLOSURE SHALL BE NEMA 3R FOR OUTSIDE OR NEMA 1 FOR INSIDE. OUTLET BOXES, EXTENSION RINGS AND COVERS SHALL BE PRESSED STEEL, GALVANIZED, KNOCKOUT TYPE OR PLASTIC AS LOCAL JURISDICTION PERMITS. BOX SIZES SHALL BE AS REQUIRED BY CODE FOR THE NUMBER OF WIRES ENTERING BOX. PLASTER RINGS SHALL BE PROVIDED FOR FLUSH MOUNTING. ELECTRICAL TAPES USED FOR ELECTRICAL INSULATION AND OTHER PURPOSES IN WIRE AND CABLE SPLICES, TERMINATIONS, REPAIRS, AND MISCELLANEOUS PURPOSES SHALL CONFORM TO THE REQUIREMENT OF UL STANDARD 510. CONNECTORS AND TERMINALS CONFORMING TO UL 486 SHALL BE DESI USE WITH THE SPECIFIC ASSOCIATED CONDUCTOR MATERIAL, AND SHALL UNIFORM COMPRESSION OVER THE ENTIRE CONTACT SURFACE. TERMIN SHALL BE USED ON ALL STRANDED CONDUCTORS. GROUNDING CONDUCTORS SHALL BE SOFT DRAWN INSULATED COPPER WIRE AS INDICATED WITH GREEN COLORED INSULATION OR GREEN PLASTIC IDENTIFICATION BENDS. GROUNDING AND BONDING OF EQUIPMENT SHALL CONFORM TO UL 467. CONDUCTORS SHALL BE COPPER WITH THHN/THWN INSULATION. INSUI AND CABLES MANUFACTURED MORE THAN SIX (6) MONTH PRIOR TO D. DELIVERY TO THE SITE SHALL NOT BE USED. ALL WIRE SHALL BE UL FOR 600 VOLTS, NO 12 MINIMUM SIZE EXCEPT FOR CONTROLS OR OTH NOTED. ALL DEVICES INSTALLED OUTSIDE OR IN DAMP LOCATIONS SHALL BE APPROVED WEATHERPROOF. FLEXIBLE LIQUID TIGHT METAL CONDUITS SHALL BE USED FOR FINAL CONNECTION TO ROTATING EQUIPMENT, CONDENSING UNITS. EXHAUST FAN AND FAN COILS. A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FLEXIBLE METALLIC CONDUIT RUNS. THE WIRING CAN BE ROMEX WHERE PERMITTED BY LOCAL JURISDICTION. ALL OTHER CONDUITS INSIDE THE BUILDING SHALL BE ELECTRICAL METALLIC TUBING (EMT) OR MC CABLE UNLESS IF SUBJECT TO DAMAGE. CONDUITS SUBJECT TO PHYSICAL DAMAGE SHALL BE RIGID GALVANIZED STEEL CONDUIT. WRES SHALL BE SPLICED WITH AN INSULATED CONNECTOR. SPLICES OF WIRES NO. 8 AWG AND LARGER SHALL BE MADE WITH APPROVED SOLDERLESS CONNECTORS AND THEN SHALL BE COVERED NEATLY WITH INSULATING TAPES, HOT MOLDED COMPOSITION COVERS, OR OTHER APPROVED EQUIVALENT TO THE CONDUCTOR INSULATION. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAT THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH IT MAY BE SUBJECTED. UNDERGROUND CONDUITS IF ANY SHALL BE PVC SCHEDULE 40. 1. THE OUTDOOR LIGHTING SYSTEMS SHALL BE DESIGNED AND INSTALLED TO COMPLY WITH ALL THE FOLLOWING: 1.1. THE MINIMUM REQUIREMENTS IN CALIFORNIA ENERGY CODE F. 1.2. BACKLIGHT, UPLIGHT AND GLARE(BUG) RATING AS DEFINED II IESNA TM-15-11. 1.3. ALLOWABLE BUG RATINGS NOT EXCEEDING THOSE SHOWN IN TABLES 5.106.8. NEW RESIDENTIAL GRADE EQUIPMENT AND APPLIANCES PROVIDED AND INSTALLED SHALL BE ENERGY STAR LABELED IF ENERGY STAR IS APPLICABLE TO THAT EQUIPMENT OR APPLIANCE GREEN MATERIAL BLDG. NOTE Z A MINIMUM. A. PROVIDE B. SERVICE C. SIZE AS TION SHOWN WITH RECEPTACLE AND C. CABLE ROUTED RATED AS SHOWN. OR GE. SIGNATED FOR ALL PROVIDE A INATION LUGS REQUIRED FOR JLATED WIRES DATE OF LISTED, RATED HERWISE AS S PULLROPE) ENTRANCE R. CABLING FRAMES/NETWORK S AND CABLING LEPHONE 17. 19. RECEPT. THE CONTRACTOR SHALL INSTALL ALL CONDUITS AND WIRES WITH A MINIMUM NUMBER OF BENDS AND IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE. AVOID OBSTRUCTIONS, PRESERVE HEAD ROOM, KEEP OPENINGS AND PASSAGE WAYS CLEAR AND MEET ALL STRUCTURAL CODE REQUIREMENTS. CODE—SIZED PULL BOXES SHALL INSTALLED IN RUNS OF OVER 100 FEET OR MORE THAN 4 BENDS. ALL TESTS TO BE PERFORMED IN PRESENCE OF ORTS TO THE ENGINEER FOR REVIEW. PROVIDE FIRE PROOFING FOR PENETRATIONS THROUGH RATED WALLS AND FLOORS. ALL CUTTING AND PATCHING REQUIRED FOR INSTALLATION OF THE ELECTRICAL WORK SHALL BE DONE BY THIS CONTRACTOR. DO NOT CUT OR DRILL STRUCTURAL MEMBERS WITHOUT WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER. ALL CUTTING AND PATCHING SHALL BE NEAT, AND PATCHING SHALL MATCH ADJACENT SURFACE AS TO TEXTURE AND FINISH. ALL SURFACE SHALL BE REPLACED IN KIND. ALL PULL BOXES AND ALL JUNCTION BOXES MUST BE ACCESSIBLE AFTER THE STRUCTION IS COMPLETE, ESPECIALLY IN CONCEALED CONDUIT INSTALLATIONS. FINISH FOR ALL EXPOSED J-BOXES AND PULL BOXES SHALL BE PER INTERIOR DESIGN. SUPPLY AND INSTALL ALL SUPPORTS AND BRACING NECESSARY FOR THE PROPER INSTALLATION OD THE EQUIPMENT. NAMEPLATES SHALL BE BLACK-ON-WHITE LAMINATED PLASTIC, ATTACHED WITH MACHINE SCREWS. LETTERING SHALL BE 1/4" HIGH MINIMUM, CORRESPONDING TO THE DESIGNATION (OR ADDITIONAL INFORMATION) SHOWN. COLOR CODE ALL WIRE WITH INSULATION/JACKET (FACTORY-APPLIEDO COLOR FOR PHASE IDENTIFICATION (CONTINUOUS FOR CIRCUIT FROM OUTLET-TO OUTLET, PULL BOX, OR CABINET) AS FOLLOWS: INCLUDE A GREEN-WIRE SIZED AS REQUIRED BY NATIONAL ELECTRICAL CODE IN ALL CONDUIT RUN D FOR EQUIPMENT GROUND AND GREEN-YELLOW STRIPE WIRE FOR ISOLATED GROUND AS SHOWN ON PARTICULAR CONDUIT RUNS ALONG WITH THE GREEN WIRE. SAME APPLIES TO FLEXIBLE CONDUITS EVEN IF UL LABELED FOR GROUND, UNLESS USED IN LIGHTING CIRCUITS. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS SHOWN AND AS REQUIRED BY ALL APPLICABLE CODES AND THE SERVING UTILITY. NO CONDUIT SHALL BE USED AS A GROUND, EXCEPT FOR LIGHTING CIRCUIT. ALL CONDUITS ARE SIZED TO MEET THE REQUIREMENT OF CEC TABLE 3A, "MAXIMUM NUMBER OD CONDUCTORS IN TRADE SIZES OF CONDUIT OR TUBING". CONTRACTOR SHALL CONSIDER THESE SIZES AS A MINIMUM REQUIREMENT AND INCREASE THE CONDUIT SIZE IF NECESSARY TO FACILITATE HIS CABLE PULLING. ALL EXPOSED CONDUIT SHALL BE INSTALLED AT RIGHT ANGLE TO ROOM OR STRUCTURE OR ALONG EXPOSED BEAMS. CONDUITS SHALL BE SUPPORTED FROM BUILDING STRUCTURE WITH APPROVED PIPE HANGERS. CHECK VOLTAGE AMPLITUDE AND BALANCE BETWEEN PHASES FOR LOADED AND UNLOADED CONDITIONS. LIGHT FIXTURE IN CONTACT WITH INSULATION TO BE U.L. LISTED FOR THERMAL BARRIER OR PROVIDE 3" MINIMUM CLEARANCE. DIMENSIONS SHOWN ON OUTLET BOXES SHALL BE FROM THE FINISHED FLOOR TO THE CENTER OF THE BOX. BACK TO BACK INSTALLATION OF OUTLET IS NOT PERMITTED IN ROOMS INSULATED FOR SOUND, BECAUSE OF SOUND TRANSFERENCE THROUGH OUTLETS. SEAL SUCH OUTLETS AIR TIGHT. ELECTRICAL IDENTIFICATION: PROVIDE NAMEPLATES FOR SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, CONTACTORS/RELAYS, and TERMINALCABINET/BACKBOADS, MOTOR CONTROLLERS, INDIVIDUALLY—MOUNTED ANY OTHER CONTROL DEVICE OR MAJOR ITEMS OF ELECTRICAL EQUIPMENT. INSTALL BLANK PLATES AS REQUIRED TO CLOSE OPENINGS IN SWITCHBOARDS OR PANELS WHERE EQUIPMENT HAS BEEN REMOVED. PROVIDE A MANUAL DISCONNECTING MEANS AT MOTOR FOR ALL MOTORS NOT WITHIN SIGHT OF THE SERVING PANEL OR THEIR DISCONNECT. FLUORESCENT FIXTURES SHALL BE SUPPORTED FROM STRUCTURE ABOVE. W.P. COVER OF OUTLETS TO COMPLY WITH SECT. 406.8(B)(1), CEC. PANEL CIRCUIT DIRECTORY TO COMPLY WITH SECT. 408.4, CEC. CHECK AND CORRECT THE ROTATION OF ALL MOTORS. CHECKS WITH THE CONTRACTOR RESPONSIBLE FOR DRIVEN EQUIPMENT. SET THE OVERLOAD HEATERS OF INDIVIDUAL MOTORS ACCORDING TO SERVICE, CODE AND MANUFACTURER'S REQUIREMENT. ALL PENETRATION THROUGH ROOF SHALL BE FLASHED AND COUNTER FLASHED TO MAKE WATER-TIGHT, DEMONSTRATE THAT THE EQUIPMENT OPERATES IN ACCORDANCE WITH THE REQUIREMENTS OF THESE DRAWINGS. DEMONSTRATE THAT PROTECTIVE FUNCTIONS ARE OPERATING PROPERLY AND INCORPORATED IN THE CONTROL SYSTEM CIRCUIT BREAKER, AND MOTOR CONTROL CENTER CIRCUITRY. TEST THE ENTIRE WIRING SYSTEM FOR SHORT CIRCUITS, GROUNDS AND INSULATION RESISTANCE BETWEEN CONDUCTORS AND TO GROUND. INSTALLATION START-UP PHASE A B C C NEUTRAL GROUND MOUNTING 208Y/120 BLACK RED BLUE WHITE GREEN SWITCHES, RECEP OUTLINERMOSTAT, ETC... **HEIGHT** 20. 7. METHOD OF GROUNDING OF ALL TRANSFORMERS SHALL OWNTH CEC, ART.250-30. GROUND FAULT PROTECTION @ SERVICES SHALL BE PROVIDED PER CEC, ART.230-95. GROUNDING ELECTRODE CONDUCTOR CONNECTION TO THE ELECTRODE SHALL COMPLY WITH CEC 250-70. CONDUIT BURIAL DEPTH PER CEC TABLE 300-5 COMPLY WITH CEC ART 670 FOR INSTALLATION OF INDUSTRIAL MACHINERY GROUNDING ELECTRODE CONDUCTOR ENCLOSURE SHALL (WITH CEC, ART.250-64(E) PROVIDE A GROUNDING SYSTEM FOR A SEPARATE STRUCTURE PER CEC PROVIDE WORKING CLEARANCES @ NEW & EXISTING EQUIPMENT. GROUNDING ELECTRODE CONDUCTOR INSTALLATION SHALL CEC ART.250-64. BREAKERS USED AS SWITCHES IN LIGHTING SYSTEMS SH MARKED"SWD" PER CEC, ART.240-83(D). 25. ELECTRIC PREPARE CONDUITS AND BACK BOXES, SUPPORT, I SYSTEM INSTALLATION. A 125V RECEPTACLE (GFCI PROTECTED & WP) IS REQUIRED WITHIN 25 OF ROOF MOUNTED EQUIPMENT. CEC, ART.210-63, ART. 210-8(B). THE CONTRACTOR SHALL PROVIDE TO THE CITY THE AIC VALUE AND THE NOMINAL CIRCUIT VOLTAGE SUPPLIED TO THE SERVICE BY THE ELECTRICAL UTILITY IN THE FORM OF LETTER THAT SHALL BE WRITTEN UPON THE ELECTRICAL UTILITY'S LETTERHEAD. A COPY OF THIS SHALL BE PLACED ON THE PLAN. GROUNDING ELECTRODE SYSTEM SHALL COMPLY WITH CEC, ART.250-50. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR FOR ALL CIRCUITS PER CEC, ART.250—110 AND ART.250—118. ALL EQUIPMENT SHALL BE LISTED & LABELED BY AN APPROVED ING AGENCY. TESTING BY AN APPROVED TESTING LABORATORY BE REQUIRED BEFORE FINAL APPROVAL IS GRANTED. TORQUEING OF TERMINATIONS SHALL BE IN ACCORDANCE EQUIPMENT LABEL AND PRIOR OF TORQUE IS REQUIRED FINAL. CEC, ART.110-3(B). BONDING FOR CIRCUITS OF OVER 250 VOLTS TO GROUND SHALL PLY WITH CEC, ART.250-97. NOTE THAT STANDARD LOCK NUTS ARE NOT PERMITTED IN THE INSTALLATION OF THE RACEWAY. COMMUNICATION & DATA CONDUCTORS RUN IN CONDUIT OR OTHER RACEWAYS SHALL HAVE A BUSHING, OR OTHER TERMINAL FITTING, WITH AN INTEGRAL BUSHED OPENING @ THE END OF THE CONDUIT OR RACEWAY. CEC, ART.300-4. DURATION OF CONDUCTORS WILL APPLY PER CEC, ART.310—15(B) (2) (A) PERMIT. ALARM SYSTEMS AND ELECTRIC SIGNS SHALL BE ON A AND ART.210-19(A). BONDING SHALL COMPLY WITH CEC 250, PART E. ISOLATED GROUNDING CONDUCTORS SHALL TERMINATE AT THE SERVICE. CEC, ART.250-96(B). A NEUTRAL FAULT TEST IS REQUIRED PRIOR TO FINAL. ART.250–24(A) (5). THE ELECTRICAL EQUIPMENT SHALL BE RATED FOR THE AVAILABLE FAULT CURRENT AS SPECIFIED IN THE SINGLE LINE DIAGRAM NOTES PER CEC, ART.110—9. ADJ.STC . : U.0.N. COND B.C WSTC ₩PP SC 8 OG PB NTS N C LTG H.P. GFCI FLA 옷 기 C.O. ද WPTC JHA Z A/c ELECTRICAL **ABBREVIATIO** 1.12 X STC EQUIPMENT GROUNDING CONDUCTOR AMPERES CONDUIT WATTS AT STANDARD TEST CONDITIONS LIGHTING WATTS AT PV USA CONDITIONS CIRCUIT POLE NATIONAL ELECTRICAL BARE COPPER OPERATING CURRENT SHORT CIRCUIT CURRENT OPEN CIRCUIT VOLTAGE UNDERGROUND UNLESS OTHERWISE UNDERGROUND PULL BOX UNSWITCHED NIGHT LIGHT NOT TO SCALE NOT IN CONTRACT HORSEPOWER GROUND FAULT FULL LOAD AMPERE CONDUIT ONLY AUTHORITY HAVING JURSTICTION VERIFY LOCATION AIR CONDITIONING WEATHER PROOF 0 HALL BE CONTRACTOR TO ETC. FOR FIRE ALARM SEPARATE CEC, E WITH THE PRIOR TO OTED 00 COMPLY S CEC ¥ H П ART. 110-26. 250-32(B). \boxtimes **P P** S3 S D3 **€** 8 ₹ EGEND **PROJECT** DESCRIPTION LIGHT OUTLET A-FIXTURE DESIGNATION a-SWITCH DESIGNATION 3- CIRC. NO. (SEE PANEL) JUNTE ALL SWITCHES (36" MIN TO SINGLE GROUND SMOKE DETECTOR SMOKE FIRE DAMPER PANEL MOUNTED CIRCUIT BREAKER CONDUIT RUN EXPOSED CONDUIT RUN CONCEALED IN WALL OR CEILING. CROSS LINES INDICATE NO. OF #12 COPPER WIRES EXCLUDING GROUND CONDUCTORS WHERE REQ'D (1/2" CONDUIT U.O.N) DATA (CAT 6) FLR. DATA (CAT 6) CLG. DATA (CAT 6) FLOOR MOUNTED J-BOX SIMPLEX CEILING MOUNTED RECEPTACLE FLOOR MOUNTED RECEPTACLE DEDICATED ARC FAULT CIRCUIT INTRRUPTER RECEPTACLE GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE QUAD RECEPTACLE GROUND DUPLEX RECEPTACLE ALL RECEPTACLES AT 15" MIN TO 48" MINIMUM DIMENSION IS MEASURED FROM THBOTTOM OF THE BOX AND MAXIMUM IS MEASURED FROM THE TOP OF THE BOX. PUSH BUTTON **PANELBOARD** MAGNETIC MOTOR DISCONNECT SWITCH, NON DISCONNECT SWITCH, DIMMER SWITCH CONDUIT STUB OUT WITH GROUND CONNECTION SMOKE DETECTOR/CARBON INTERCOM OUTLET JUNCTION BOX CONDUIT RUN IN FLOOR TELEPHONE FLOOR MOUNTED TELEPHONE CLG. MOUNTED TRANSFORMER SWITCHBOARD TELEPHONE OUTLET (+18 U.O.N.) TELEPHONE BACKBOARD WAY SWITCH TELEVISION WAY MOUNTED FAULT CIRCUIT INTERRUPTER DOUBLE DUPLEX RECEPTACLE RECEPTACLE RECEPTACLE SWITCH 48" MAX SWITCH **OUTLET (+18"** 9 F FUSED STARTER MOUNTED OUTLET **SWITCH** FUSED (20A) AFF, SYMBOLS SCOPE MONOXIDE DETECTOR OUTLET SWITCH OR U.G CAP U.O.N.) OUTLET SEE (15A) NOTE1) **PROJECT** REV. DATE BY **DESCRIPTION**

OPTIONS FOR YOUTH

14725 7TH ST.,

VICTORVILLE, CA 92392

ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY ABRARI AND ASSOCIATES AND WERE CREATED AN DEVELOPED FOR USE AND IN CONNECTION WITH THE SPECIFIED PROJECT. NONE OF THE IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN AUTHORIZATION OF ABRARI AND ASSOCIATES INC

SYMBOLS

NONE

NOTES &

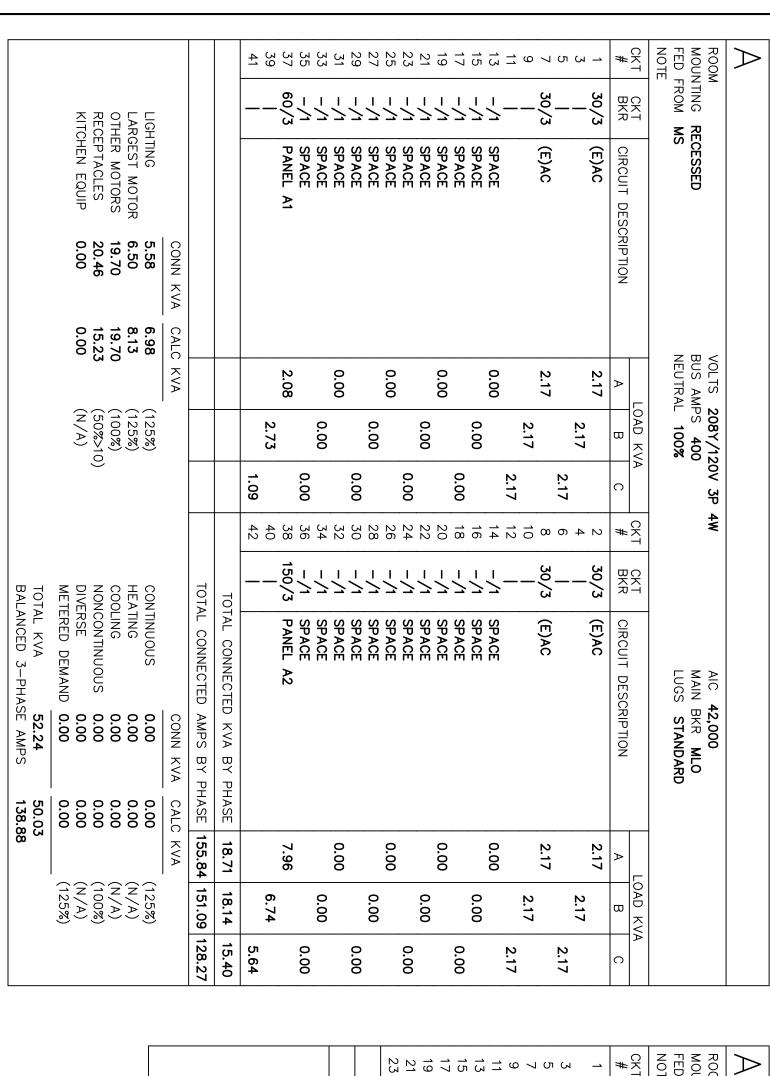
ABRARI ASSOCIATES ELECTRICAL ENGINEERS

 \triangle

<u>A</u>

1713 STANDARD GLENDALE, CA (

818.956.1 AIL@ABRARI.C



LIGHTING
LARGEST MOTOR
OTHER MOTORS
RECEPTACLES
KITCHEN EQUIP

5.58 0.05 0.15 0.12 0.00

CALC 6.98 0.06 0.15 0.12

(125%) (125%) (100%) (50%>10) (N/A)

CONTINUOUS
HEATING
COOLING
COOLING
NONCONTINUOUS
NONCONTINUOUS
NOTAL KVA
BALANCED 3-PHASE AMPS

0.00 0.00 0.00 0.00 0.00 0.00 7.31 20.30

(125%) (N/A) (N/A) (100%) (N/A) (125%)

KVA

0.00 1.09 9.10

0.00

0.00

0.00

CONN KVA

KVA

FEEDE	EDER SCHEDULE		
ID	FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
(1)	60	1"C,3#6,#6N,#10G	A1
2	150	1-1/2"C,3#1/0,#1/0N,#6G	A2
SIZING METH	HOD: COPPER	SIZING METHOD: COPPER, 75%dC #12 AND ABOVE	

VOLT,	VOLTAGE DROP SCHEDULE	SCHE	DULE		
DEVICE	FEEDER	2	BRANCH CIRCUIT	П	TOTAL VOLTAGE
	VOLTAGE DROP	WIRE SIZE	MAX VOLTAGE DROP	WIRE SIZE	באכת
Α	0%	#600kcmil	#600kcmil 1.49% (CKT 1,3,5)	#10	1.49%
A1	0.02%	#6	2.87% (CKT 4)	#12	2.88%
A2	0.02%	#1/0	2.05% (CKT 9)	#12	2.07%

NOOM			VOLTS 208Y/120V 3P 4W	208Y/12	OV 3P	4₩		AIC 42,000		
ED A	ED FROM A	RECESSED A	BUS AMPS 60 NEUTRAL 100%	100%				MAIN BKR MLO Lugs standard		
JE 01										
즤	CKT			LOAD KVA	II.	<u> </u>	CKT			LOAD KV
#	BKR	CIRCUIT DESCRIPTION	A	В	С	#	BKR	CIRCUIT DESCRIPTION	Α	В
1	20/1	OFFICE & BATHROOM FAN,	1.18			2	20/1	BUSINESS AREA LTG.	0.90	
<u>З</u>	20/1	SGI ROOMS LTG.		1.23		4	20/1	BUSINESS AREA LTG.		1.50
<u></u>	20/1	BUSINESS AREA LTG.			1.09	<u>ი</u>	-/1	SPACE		
7	-/1	SPACE	0.00			∞	-/1	SPACE	0.00	
9	-/1	SPACE		0.00		10	-/1	SPACE		0.00
	_/	SPACE			0.00	12	/	SPACE		
13		SPACE	0.00	8		1 4		SPACE	0.00)
15		SPACE		0.00	0	3 6		SPACE SPACE	•	0.00
19		SPACE	0.00			20		SPACE	0.00	
21 -	-/1	SPACE		0.00		22	-/1	SPACE		0.00
23	-/1	SPACE			0.00	24	-/1	SPACE		
							101	TOTAL CONNECTED KVA BY PHASE	2.08	2.73
							TOTA	TOTAL CONNECTED AMPS BY PHASE	17.34	22.76

		•	15.17	20.34	AL KVA	TOTAL									
	(125%)		0.00	0.00	ME EKED DEMAND	<u>M</u>									
		. ~	0.00	0.00		DIVERS			(N/A)	_	0.00	0.00	KITCHEN EQUIP	XI T	
	(100%)		0.00	0.00	NONCONTINUOUS	NON		\leq	(50%>10)	7	4 15.17	20.34	RECEPTACLES	REC	
	(N/A)		0.00	0.00	COOLING	COC			(100%)	_	0.00	0.00	OTHER MOTORS	OT-	
	(N/A)	_	0.00	0.00	HEATING	HEA			(N/A)		0.00	0.00	LARGEST MOTOR	LAR	
	(125%)		0.00	0.00	CONTINUOUS	CON			(125%)	-	0.00	0.00	LIGHTING	LIG	
		KVA	KVA CALC	CONN						C KVA	N KVA CALC	CONN			
47.00	56.17	66.33	BY PHASE	AMPS E	AL CONNECTED	TOTAL									
5.64	6.74	7.96	BY PHASE	XVA	TOTAL CONNECTED	OT									
0.00					SPACE	-/1	42	0.00					SPACE	-/1	41
	0.00	9			SPACE		40		0.00	Ç			SPACE		39
0.00		2			SD A CE		38 00	0.00		8			SDACE	 	ر در در در
8	0.00				SPACE		34	3	0.00				SPACE		33
		0.00			SPACE		32			0.00			SPACE		31
0.00					SPACE	_/1	30	0.00					SPACE		29
	0.00				SPACE		28		0.36			GFCI	(E)KITCHEN	20/1	27
0		0.00			SPACE	_ 	26			0.54		GFCI	(E)KITCHEN	20/1	25
0.00	(•	SPACE	- /1	24	1.50		•		MAKER	(E)COFFEE MAKER	20/1	23
	0 5 4	0.90		ς:	(E)ROOF REC	20/1	2 6) 20 20			RATOR	(E)REFERIGERATOR	20/1	2 -
0.54		8		EA REC.	BUSINESS AREA	20/1	3 0	0.90		3	KEC.	& SIG. REC.	SG RM 1 &	20/1	10 /
)	0.72					20/1	5 6)	1.26				R	20/1	15
		0.72		EA REC.	USINESS	20/1	14			1.08	:′	& 3 REC.	RM 2	20/1	13
0.72				;′	STORAGE REC.	20/1	12	0.90			:′	& 4 REC.	RM 3	20/1	<u></u>
	0.72			``	STORAGE REC.	20/1	10		0.90	-		REC.	4	20/1	9
		0.36		•	ROOM	20/1	00			1.26		ÆC.	RM 5	20/1	7
0.36	0			•	IT ROOM REC.	20/1	თ -	0.72	-		CORRIDOR REC.	٠ ج	ĕ į́	20/1	υ (
	92 0	1.00		TAIN	WATER FOUNTAIN	20/1	<u> </u>		2	0.90		, ;,	OFFICE REC.	20/1	۷ →
C	В	Þ		DESCRIPTION	CIRCUIT DESC	BKR	#	0	В	Þ	Z	DESCRIPTION	CIRCUIT DE	BKR	#
Þ	OAD KVA					CK1	ST	À	LOAD KVA					CKT	CKT
														. '''	NOTE
			ARD	STANDARD	LUGS				L 100%	NEUTRAL			A 20000	ROM	FED
			0	42,000	AIC .		4W	3P	m	VOLTS 20			E CE CCED		ROOM
														$ \mathcal{N} $	
)	•

ORIGINATES (210.4, 240.15(B)(1))	UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT	PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL	ORIGINATE FROM THE SAME PANELBOARD. THE BRANCH CIRCUIT SHALL BE	22. CONDUCTORS OF A MULTI-WIRE BRANCH CIRCUIT SHALL CONSPICUOUS	

20. CIRCUIT BREAKERS USED AS SWITCHES IN 120 AND 277 VOLT FLUORESCENT LIGHTING CIRCUITS SHALL BE LISTED AND MARKED AS "SWD" OR "HID". PROVIDE A LABEL STATING "EV CAPABLE" IS A CONSPICUOUS PLACE AT THE SERVICE PANEL OR SUBPANEL AND NEXT TO THE RACEWAY TERMINATION POINT.

PROVIDE SEISMIC ANCHORING STANDING SECTIONS. AND BRACING FOR MAIN SWITCHBOARD AND AL THE GROUNDING CONDUCTOR SHALL (GROUNDING ELECTRODE) WITHIN 5' BUILDING.

BE CONNECTED TO WATER PIPE FROM THE POINT OF ENTRANCE INTO THE

THE ELECTRICAL ROOM DOOR SHALL OPEN OUTWARD AND SHALL EQUIPPED WITH PANIC HARDWARE. TERMINALS/LUGS SHALL BE DUAL RATED 60'/75"

NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE.

FEEDER LENGTHS NOTED ON DRAWINGS ARE FOR VOLTAGE DROP AND SHORT CIRCUIT CALCULATIONS ONLY AND ARE NOT TO BE USED FOR ESTIMATE OR MATERIAL TAKE-OFF.

PANEL "A1"

PANEL "A2" (N)

 \bigcirc

PANEL PANEL

60A,2P 150A,3P

SINGLE LINE DIAGRAM
SCALE: NONE

ALL CONDUCTORS SHALL BE COPPER WITH TYPE "THWN/THHN" INSULATION RATED FOR 600 VOLTS.

A. "RK-1" - U.L. CLASS "RK-1" CURRENT LIMITING "BUSSMANN" LOW-PEAK TYPE LPN-RK_SP.
B. "RK5" - U.L. CLASS "RK5" CURRENT LIMITING, DIFUSES, "BUSSMANN" LOW-PEAK TYPE LPN-RK_SP. FUSES,

EQUIP ALL DISTRIBUTION FUSIBLE SWITCHES WITH REJECTION FOR USE WITH CURRENT LIMITING, U.L. CLASS "R" FUSES. MANUFACTURER OF THE FOLLOWING

FURNISH ELECTRICAL EQUIPMENT OF THE SAME TYPE OR CLASS FROM ONE MANUFACTURER.

PROVIDE SEISMIC BRACING FOR ALL SERVICE EQUIPMENT, SWITCHBOARDS AND OTHER FLOOR STANDING EQUIPMENT BY INSTALLING APPROVED ANCHORS TO THE BUILDING STRUCTURE FROM EACH EQUIPMENT ENCLOSURE.

ELECTRICAL EQUIPMENT SHALL BE LISTED BY A CITY OF LOS ANGELES RECOGNIZED ELECTRICAL TESTING LABORATORY OR UL. ALL ELECTRICAL EQUIPMENT, SWITCHBOARDS, ETC. TO WITHSTAND AVAILABLE FAULT CURRENT. VERIFY WITH SERVING UTILITY COMPANY.

WORK SHALL BE PERFORMED PER 2013 CALIFORNIA ELECTRICAL CODE. EQUIPMENT AND SWITCHBOARDS SHALL BE FULLY RATED.

SINGLE LINE DIAGRAM NOTES:

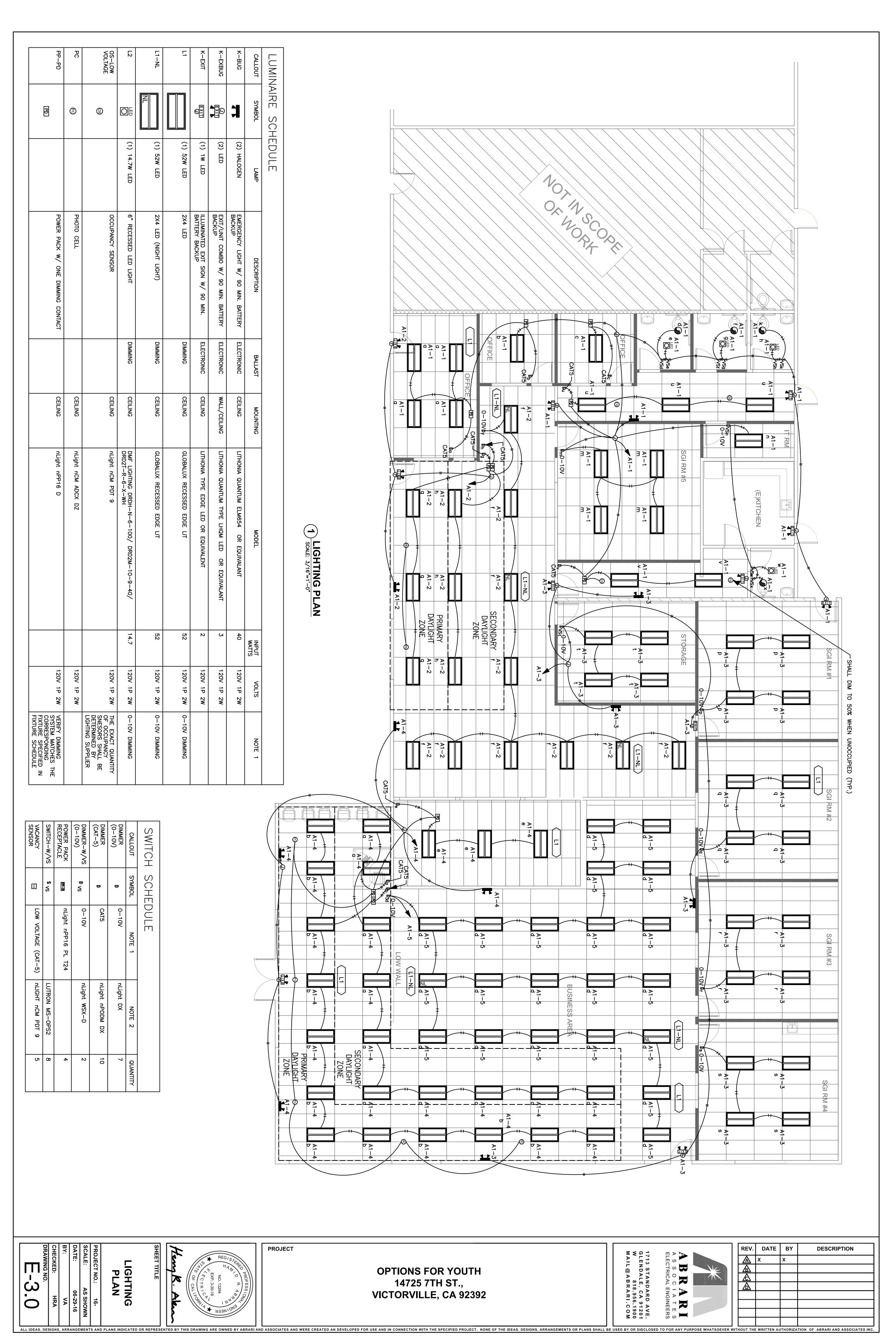
EXISTING MAIN SWITCHBOARD

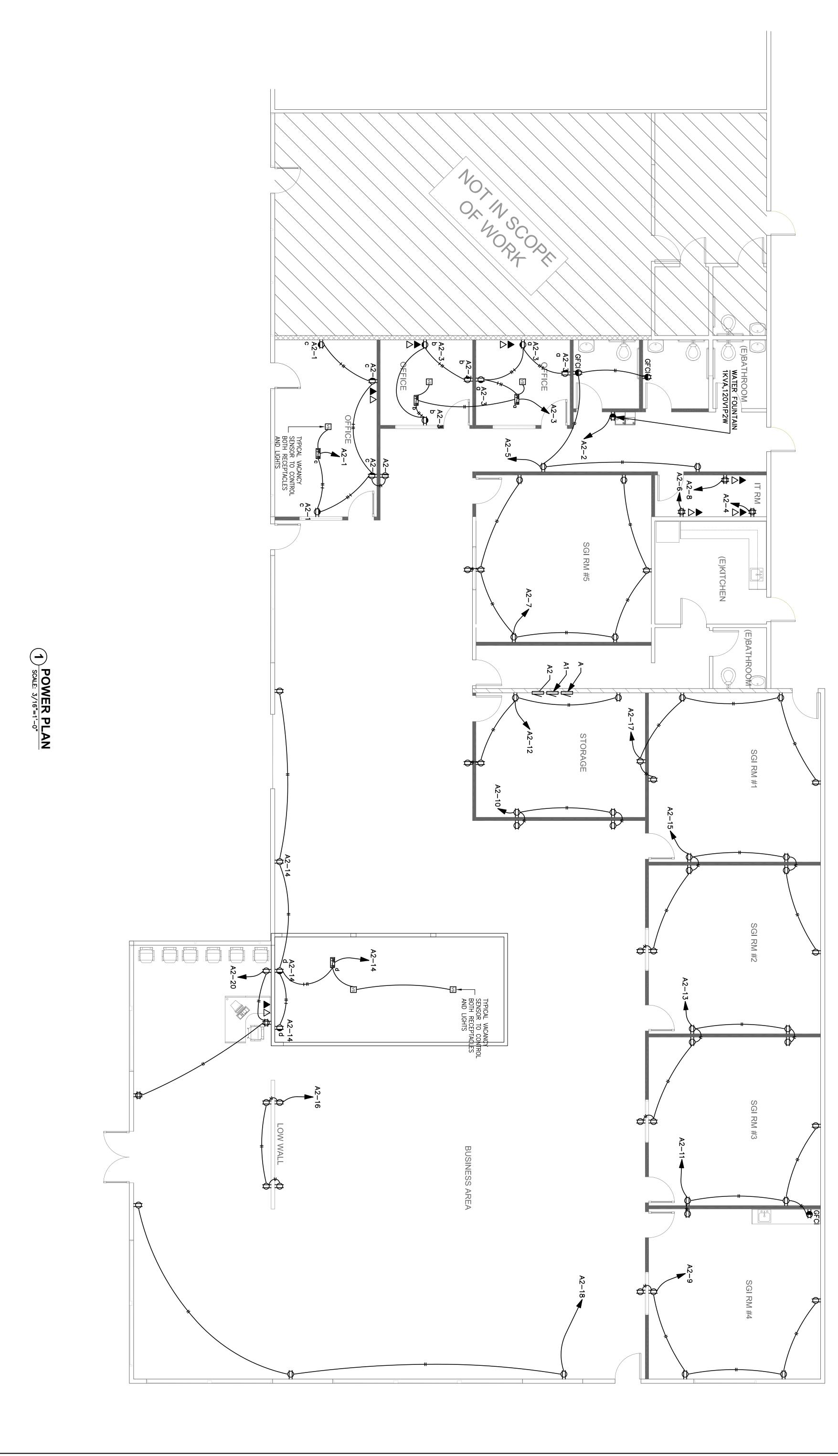
400A, 208Y/120V,

3ø,

4WIRE

) 400A) 3P





SHEET TITLE

PROJECT NO.: 16SCALE: AS SHOWN

DATE: 06-29-16
BY: VA

CHECKED: HRA

DRAWING NO.

EXPORESS / ON A BOWN

PROJECT NO.: 16SCALE: AS SHOWN

DATE: 06-29-16
BY: VA

CHECKED: HRA

DRAWING NO.

PROJECT

OPTIONS FOR YOUTH 14725 7TH ST., VICTORVILLE, CA 92392

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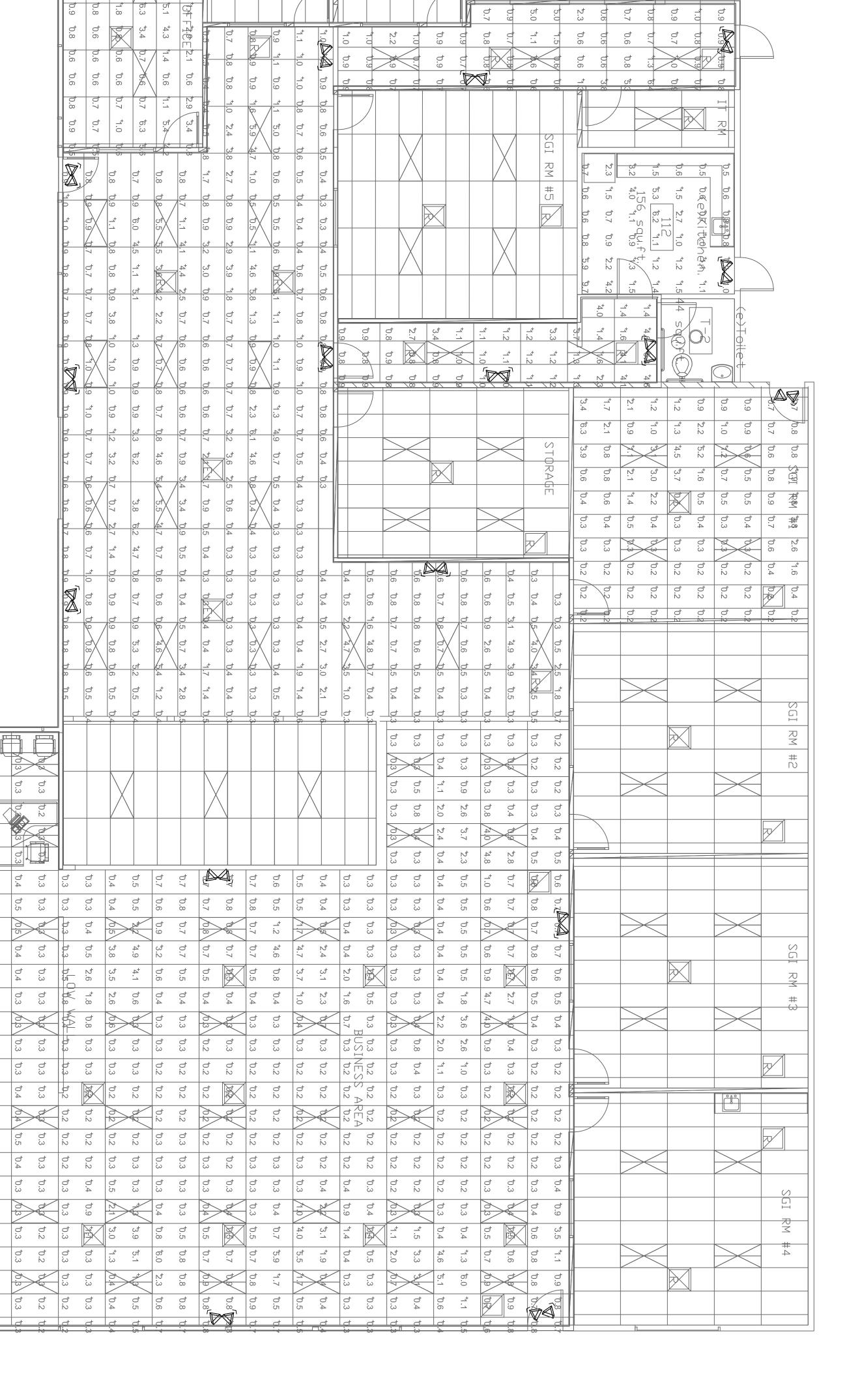
ABRARI.COM

REV.	DATE	BA	DESCRIPTION
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1 PHOTOMETRIC PLAN SCALE: 3/16"=1'-0"

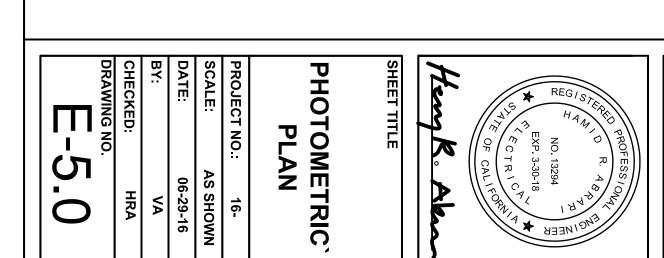
STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.2 fc	6.4 fc	0.6 fc	10.7:1	2.0:1
Calc Zone #2	+	1.8 fc	6.8 fc	0.8 fc	8.5:1	2.3:1
Calc Zone #3	+	1.0 fc	6.2 fc	0.2 fc	31.0:1	5.0:1
Calc Zone #4	+	1.8 fc	9.7 fc	0.5 fc	19.4:1	3.6:1
Calc Zone #5	+	1.0 fc	6.3 fc	0.2 fc	31.5:1	5.0:1
Calc Zone #6	+	1.7 fc	6.3 fc	0.5 fc	12.6:1	3.4:1

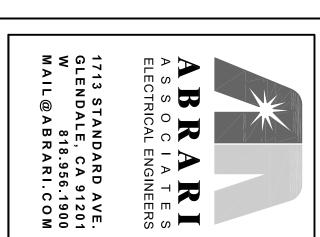
0.9



⁴.0

0.6





CA Building Energy Efficiency standards -	CA Build	Alignet 2015	Διια						פחתב	al Compl	onresidenci	CA Ruilding Energy Efficiency standards - 2013 Nonresidencial Compliance
				Page 1			r office:	are foot pe	atts per squ	an 0.3 w	re greater th	Total installed portable luminaire watts that are greater than 0.3 watts per square foot per office:
		-LTI- 01-E:	into NRCC	Enter sum total of all pages into NRCC-LTI- 01-E:				•				
		7	7									
		2	7									
		7	7									
		7	7									
		2	7									
						(000-0.5)	G05)	Squa	(G02 x G03)			
6" RECESSED	12			luminaires are installed		if G06 > 0.3,	(G04/		watts in	Num umi	Luminaire	direct/indirect)
2X4 LED	П	Fail	Pass	which these portable	G05 x G07	enter zero;	foot	et o	luminaire	ber	Watts per	(i.e., LED, under cabinet, furniture mounted
+3218, one dimmable	Name (7	Identify Office area in		If F ≤ 0.3,	Watts per	of this	Installed			Complete Luminaire Description
fluorescen	or It	0	10	9	8	7	6	5	4	3	2	1
Complete Luminaire De	tem	ector	Field Inspector	Office Location		Foot	Office Installed Portable Luminaire Watts Per Square Foot	aire Watts	table Lumin	alled Po	Office Inst	Office Portable Luminaire Schedule
	Tag					2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(ems.	ighting syst	not be traded between offices having different lighting systems.
8	Þ	e shall	allowance	ay be grouped together. This	ole lighting) ma	eral and portab	the same gen	d (having	at are typica	offices th	ffice. Small o	Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall
Luminaire Schedul						ffice	ned for any of	ng is planr	rtable lighti	tts of po	than 0.3 wa	☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
OR LIGHTING SCHEDULE and FIELD	H. INDO											compliance form.
CONDITIONED SPACE UNI	CON	e of this	n next page	ires shall be documented o	ortable lumina	ther planned po	100.1). All o	efined in §	offices (As c	aires in	rtable lumir	This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this
te Lighting Schedule Must Be Fill	A separc).6(a)	ction 14	eption to Se	G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)
ame:	Project Name:	0/16	06/30/16	**	Date Prepared:		표)	S FOR YOUT	TENANT IMPROVEMENT (OPTIONS FOR YOUTH)	PROVEM	TENANT IM	Project Name:
ighting	Indoor Lighting	(Page 4 of 6)	(Pa									Indoor Lighting
CERTIFICATE OF COMPLIANCE	CERTIFIC	NRCC-LTI-01-E	NRC									CERTIFICATE OF COMPLIANCE
CEC- NRCC-LTI-01-E (Revised 08/15)	CEC- NRC	NOISSIMM	NERGY CON	CALIFORNIA ENERGY COMMISSION								CEC- NRCC-LTI-01-E (Revised 08/15)
INDOOR LIGHTING	INDO											INDOOR LIGHTING
STATE OF CALIFORNIA	STATE O											STATE OF CALIFORNIA

		Enter sum total of all pages into	5154.8 Enter	GE TOTAL:	INSTALLED WATTS PAGE TOTAL:	INSTALLED	220			
2	?									
2	2									
7	7									
7	7									
2	?									
7	?									I .
2	2									Т
7	?	BATHROOMS	58.8	4	<		14.7	6" RECESSED LED LIGHT	12	_
7	?	ICE, CLASSROOM & BUSINESS	5096 OFFICE,	98	<		52	2X4 LED LIGHT	П	
Fail	Pass	Primary Function area in which these luminaires are installed	Total Installed Watts in this area (H03 x H05)	Number Luminaires	According to §130.0(c)	CEC Default from NA8 med determined	Watts per Luminaire	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Name or Item Tag	
Ī		G	 	Е	D		C	8	Þ	1
or	Field Inspector	Location			Installed Watts	=		Luminaire Schedule		1
				74			HECKLIST	H. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST	. INDOOR I	ΙΞ
		Installed Lighting Power listed on this Lighting Schedule is only for:	ower listed on the	d Lighting I	1	ioned Spac	d Unconditi	A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. CONDITIONED SPACE UNCONDITIONED SPACE	Separate L	₹
06/30/16	06/3	Date Prepared:	8	FOR YOUTH	TENANT IMPROVEMENT (OPTIONS FOR YOUTH)	PROVEMEN	TENANT IMI	me:	Project Name:	P
(Page 5 of 6)								hting	Indoor Lighting	I -
NRCC-LTI-01-E	Z							CERTIFICATE OF COMPLIANCE	ERTIFICATE	0
CALIFORNIA ENERGY COMMISSION	A ENERGY	CALIFORNI						CEC- NRCC-LTI-01-E (Revised 08/15)	EC- NRCC-LT	Ω
								INDOOR LIGHTING	NDOOR	=
								STATE OF CALIFORNIA	TATE OF CA	S
										1
August 2015	Aug							ilding Energy Efficiency standards - 2013 Nonresidencial Compliance	Energy Effic	Iding
		or Brield Inspector	to be recognized fo	ing studio t	o conferenc	d in a video	ge installed	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.		
		☐ Field Inspector	nce.	for complia	recognized	AF) to be r	ent Factor (P	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.		
		nce room, Brield Inspector	center, a conference	convention	ditorium, a	ving an auc	ystems serv compliance	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a a multipurpose room, or a theater to be recognized for compliance.		
		rcurrent Brield Inspector	upplementary ove	ompliance.	arrent limite	integral cu to be reco	ck lighting i ck lighting,	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.		
		to be 🛽 Field Inspector	ol System (EMCS),	ment Contro	rgy Manage	for an Ene	system, or	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.		

INDOOR LIGHTING
CEC- NRCC-LTI-01-E (Revised 08/15)
CERTIFICATE OF COMPLIANCE
Indoor Lighting
Project Name: TENA

Dject Name:

TENANT IMPROVEMENT (

COUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documents

Coumentation Author Name: HENRY R. ABRARI

mpany: ABRARI & ASSOCIATES

Idress: 1713 STANDARD AVE.

ty/State/Zip: GLENDALE, CA 91201

Hay K.

INDOOR LIGHTING

CEC- NRCC-LTI-01-E (Revised CERTIFICATE OF COMPLIANU Indoor Lighting

Project Name:

C. Summary of Allowed Lightin Conditioned and Unconditioned and Unconditioned Indoor Lighting Power for Conditioned Indoor Lighting Indoor L D. Declaration of Required Installation Certificates

Declare by selecting yes for all Installation Certificates that will be submitted for all buildings

NRCI-LTI-01-E - Must be submitted for all buildings Installed Lighting NRCC-LTI-01-E, page PORTABLE ONLY FOR OFFICES NRCC-LTI-01-E, page 3 Minus Lighting Control Credits NRCC-LTI-02-E, page 2 TENANT IMPROVEMENT (OPTIONS FOR YOUTH)
Illowed Lighting Power
Id Unconditioned space Lighting must not be combined for ower for Conditioned Spaces (Retain copies and verify forms are completed and signed.) nstalled Lighting NRCC-LTI-01-E, page 4 -LTI-02-E, page

Climate Zone: 9

Conditioned Floor Area: 8102

Unconditioned Floor Area: 8102

Unconditioned Floor Area: 9

Felocatable Public Schools 9

Relocatable Public Schools 9

Relocatable Public Schools 9

Project 14725 7TH ST., VICTORVILLE, CA 92392

B. Lighting Compliance Documents (select yes for each document included)

 vactions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy

 NO
 FORM
 TITLE

 NRCC-LTI-01-E
 Certificate of Compliance. All Pages required on plans for all submittals.

 NRCC-LTI-02-E
 Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.

 NRCC-LTI-03-E
 Indoor Lighting Power Allowance

 NRCC-LTI-04-E
 Tailored Method Worksheets

 NRCC-LTI-05-E
 Line Voltage Track Lighting Worksheets

Certificate of Compliance. All Pages required on plans for all submittals.

Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals Indoor Lighting Power Allowance

Tailored Method Worksheets

Line Voltage Track Lighting Worksheets

August 2015

INDOOR LIGHTING

CEC- NRCC-LTI-01-E (Revised 08/15)

CERTIFICATE OF COMPLIANCE

Indoor Lighting

Project Name: TENANT IMPROVEMENT (OPTIONS FOR YOUTH)

A. General Information

Climate Zone: 9

Conditioned

Date Prepared:

SHEET TITLE	REGISTER OF CALIFORNIA STATE OF CALIFORNIA STA

CALCULATIONS

PROJECT

OPTIONS FOR YOUTH 14725 7TH ST., **VICTORVILLE, CA 92392**

ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY ABRARI AND ASSOCIATES AND WERE CREATED AN DEVELOPED FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN AUTHORIZATION OF ABRARI AND ASSOCIATES INC.

1713 STANDARD AVE. GLENDALE, CA 91201 W 818.956.1900 MAIL@ABRARI.COM R

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CALIFORNIA ENERGY COMMISSION

NRCC-LTI-01-E

(Page 3 of 6)

STATE OF CALIFORNIA
INDOOR LIGHTING

CEC- NRCC-LTI-01-E (Revised 08/15)
CERTIFICATE OF COMPLIANCE

NRCA-LTI-02-A

NRCA-LTI-03-A

NRCA-LTI-03-A

NRCA-LTI-04-A

A separate Lighting Schedule Must Be Fill

CONDITIONED SPACE

NRCA-LTI-04-A

NRCA-LTI-04-A

NRCA-LTI-02-A

NRCA-LTI-02-A

NRCA-LTI-02-A

NRCA-LTI-02-A

NRCA-LTI-02-A

NRCA-LTI-03-A

NRCA-LTI-03-A

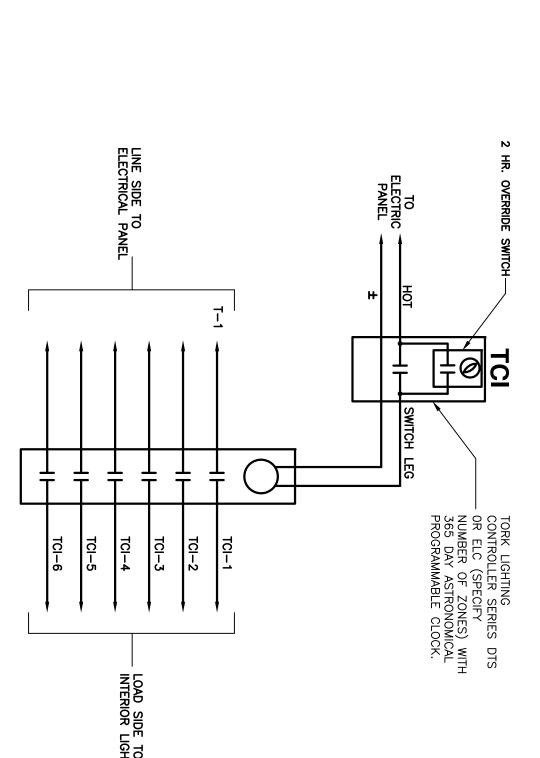
NRCA-LTI-03-A

CA Building Energy Efficiency stand

spection Energy Checklist
wer listed on this page and on the next page includes all installed permanent and planned portable lighting systems hod is used for compliance, list each different type of luminaire on separate lines.
or Tailored Method is used for compliance, list each different type of luminaire by each different function area on se schedule, and submit the track lighting compliance form (NRCC-LTI-05-E) when line-voltage track lighting is installed

t function area on sep k lighting is installed.

INTERIOR LIGHTING CONTROL SCHEMATIC



CALCULATIONS

NONE

ENERGY

TITLE 24

	STATE OF CALL COMMA			
	INDOOR LIGHTING - LIGHTING CONTROLS	ITING CONTROLS		
NERGY COMMISSION	CEC- NRCC-LTI-03-E (Revised 05/15))		CALIFORNIA ENERGY C
NRCC-LTI-03-E	CERTIFICATE OF COMPLIANCE			NR
(Page 2 of 4)	Certificate of Compliance - Indoor Lighting Power Allowance	r Lighting Power Allowa	nce	
06/30/16	Project Name:	TENANT IMPROVEMENT	Date Prepared:	06/30/16
	DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	ARATION STATEMENT		
	1. I certify that this Certificate of Compliance documentation is accurate and complete	Compliance documenta	tion is accurate and complete.	
B OF NECC IT! Of E	Documentation Author Name:	HENRY R. ABRARI	Documentation Author Signature:	Hempe Alex
DOLINACC-FIL-OT-E:	Company:	ABRARI & ASSOCIATES	Signature Date:	06/30/16
D	Address:	1713 STANDARD AVE.	CEA Certification Identification (if applicable):	
ALLOWED WATTS	City/State/Zip:	GLENDALE, CA 91201	Phone:	(818) 956-1900
	RESPONSIBLE PERSON'S DECLARATION STATEMENT	ON STATEMENT	•	
591	I certify the following under penalty of perjury, under the laws of the State	alty of perjury, under the	_	
477	 I am eligible under Division 3 of the Business and Professions Code to 	3 of the Business and I	Tam eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system	e building design or system
2515.2	e	ompliance (responsible)	ntified on this Certificate of Compliance (responsible designer). The energy features and performance specifications, materials, components, and manufactured devices for the building design	vices for the building desig
2802	system design identified on this	Certificate of Complian	system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California	1 and Part 6 of the Californi
888.8	90			
0	4. Ine building design reatures provided on other applicable cor	s or system design feat npliance documents, w	4. The building design reatures or system design reatures identified on this Certificate of Compliance are consistent with the in provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforce	e are consistent with the in
	agency for approval with this building permit application.	Iding permit application	n.	le with the building normit
	for the building, and made avail	able to the enforcemen	or the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed sign for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed sign for the building and made available to the enforcement agency for all applicable inspections. I understand that a completed sign for the building and made available to the enforcement agency for all applicable inspections. I understand that a completed sign for the building and made available with the building and made available to the enforcement agency for all applicable inspections. I understand that a completed sign for the building and made available with the building permitted and the building and the	stand that a completed sign
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	responsible pesigner value.	ADDADL & ASSOCIATION	nesponsible pesigner signature.	7 cm To The
			c	
	Address:	1713 STANDARD AVE.	License:	13294
	City/State/Zip:	GLENDALE, CA 91201	Phone:	(818) 956-1900
	CA Building Energy Efficiency star	dards 2013 Nonrosido	poid Compliance	
7274	conditions the system of the state of the st	Idaids - ZOTS MOIITESIDE	incial comprisance	
WATTS				

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WATTS					C
7274 7274	8102 form)	s compliance f	1-03-E (thi	TOTALS Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance form)	Enter sum total Area Categor
	п	>			
0		<			7
8.888	808	1.1		WAITING AREA	WAITING AREA/RECEPTION
2802	3736	0.75	0	OFFICE>250	BUSINESS AREA
2515.2	2096	1.2		CLASSROOM	CLASSROOMS
477	477	1.0		OFFICE <250	OFFICE
591	985	0.6		SUPPORT	CORRIDOR, BATHROOM & STORAGE
2 m	7112	AAD 10 LEW (162)		Primary Function Area per Table 140.6-C	
ALLOWED WATTS	ABEA (f+2)	DEB (f+3)	MATTS	AREA CATEGORY (From §140.6 Table 140.6-C)	AREA CATEGORY
D	С	В		A	
only in section B of NRCC-LTI-01-E		of the Standard	ffices sha	C-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE Do not include portable lighting for offices. Portable lighting for offices shall be documented separately list lighting for each primary function area as defined in §100.1 of the Standards.	C-2 AREA CATEGORY METHOD Do not include portable Separately list lighting
	nly for:	This page is only for:	Spaces.	A separate page must be filled out for Conditioned and Unconditioned Spaces. CONDITIONED spaces UNCONDITIONED spaces	A separate page must be fill CONDITIONED spaces
06/30/16	pared:	Date Prepared:	(HI	TENANT IMPROVEMENT (OPTIONS FOR YOUTH)	Project Name:
(Page 2 of				Certificate of Compliance - Indoor Lighting Power Allowance	Certificate of Compliance - In
NRCC-LTI-03					CERTIFICATE OF COMPLIANCE
CALIFORNIA ENERGY COMMISSIO	CALIFORNIA			5/15)	CEC- NRCC-LTI-03-E (Revised 05/15)
				HTING CONTROLS	INDOOR LIGHTING - LIGHTING CONTROLS
					STATE OF CALIFORNIA

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:

CONDITIONED spaces

UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.

If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance Column (b) as the total allowed building watts.

Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)
 Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)
 Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E
 TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1
 Check here if building contains both conditioned and unconditioned areas.

(a)

(a)

CA Building Energy Efficiency standards - 2013 Nonresidencial Compliance

May 2015

Total Watts. Enter Total Watts into section A, row 1 (Above on this page)

C-1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES (D plus E)

TYPE OF BUILDING (From §140.6 Table 140.6-B)

WATTS PER (ft)

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ALLOWED WATTS

STATE OF CALIFORNIA

INDOOR LIGHTING - LIGHTING CONTROLS

CFC- NRCC-LTI-03-E (Revised 05/15)

CALIFORNIA ENERGY COMMISSION

NRCC-LTI-03-E

(Page 1 of 4)

CALIFORNIA ENERGY COMMISSION
NRCC-LTI-02-E
(Page 1 of 3)
06/30/16 INDOOR LIGHTING - LIGHTING CONTROLS

CEC- NRCC-LTI-02-E (Revised 05/15)

CERTIFICATE OF COMPLIANCE
Indoor Lighting - Lighting Controls

Project Name:

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used o

CONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandato installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
 Check Table 140.6·A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spout, signed, and submitted. B ation in Building **Lighting Control Schedule** SWITCH W/ VACANCY SENSOR
OCCUPANCY SNESOR
PHOTO SENSOR
DIMMER W/ VANCANCY SENSOR
VANCANCY SNESOR # of Units (a)1.0518 Standar (all that app (d)0.0E1&

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The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi level lighting control requirements in accordance with Section 130.1(b).

All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).

130.1(d) and daylit zor

General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, omamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.

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Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).

Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

August 2015

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lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficienc Regulations in accordance with Section 110.9.

Lighting shall be controlled by a lighting control a system or energy management control system in accordance with \$110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).

One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with \$110.9 and \$130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).

A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.

All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1.

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INDOOR LIGHTING - LIGHTING CONTROLS

CEC- NRCC-LTI-02-E (Revised 05/15)

CERTIFICATE OF COMPLIANCE:
Indoor Lighting- Lighting controls

Project Name: | TENANT IMPROVEMENT (OPTIONS FOR YOUTH)

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to th

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

Date Prepared:

Hengk. Aka	SALIFORNIA A	REG/STURED R. A. O. R

PROJECT

14725 7TH ST., **VICTORVILLE, CA 92392** REV. DATE BY **DESCRIPTION**

ABRARI
ASSOCIATES
ELECTRICAL ENGINEERS

713 STANDARD LENDALE, CA S

OPTIONS FOR YOUTH

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