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12	SI.1	GENERAL STRUCTURAL NOTES AND DETAILS
13		STRUCTURAL ROOF FRAMING PLAN

*Design
Consultants*

MECHANICAL, PLUMBING AND
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KITCHEN SERVICE
ATLAS KITCHEN CONCEPTS
CHRIS THOMPSON
858-336-4480
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Building Codes

2019 CALIFORNIA FIRE CODE
2019 CALIFORNIA BUILDING CODE
2019 CALIFORNIA PLUMBING CODE
2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA ELECTRICAL CODE
2019 CALIFORNIA CALGREEN CODE
2019 CALIFORNIA ENERGY STANDARDS
2019 CALIFORNIA RESIDENTIAL CODE
CITY OF WATSONVILLE AMENDMENTS AND STATE
REGULATORY REQUIREMENTS.

Project Description

EXISTING BUILDING:
9500 SF NON-COMBUSTABLE, STEEL INDUSTRIAL BUILDING. THE EXISTING USE IS COMPRISED OF WORKSHOP/MECHANIC SPACES, OFFICES, EMPLOYEE BREAK ROOM AND STORAGE. THERE IS NO CHANGE OF USE.

PROPOSED NEW USE:
A NEW COMMERCIAL KITCHEN FOR CATERING PURPOSES. INCLUDING KITCHEN AREA, OFFICES, STORAGE, BREAK ROOMS AND NEW HC ACCESSIBLE BATHROOM.

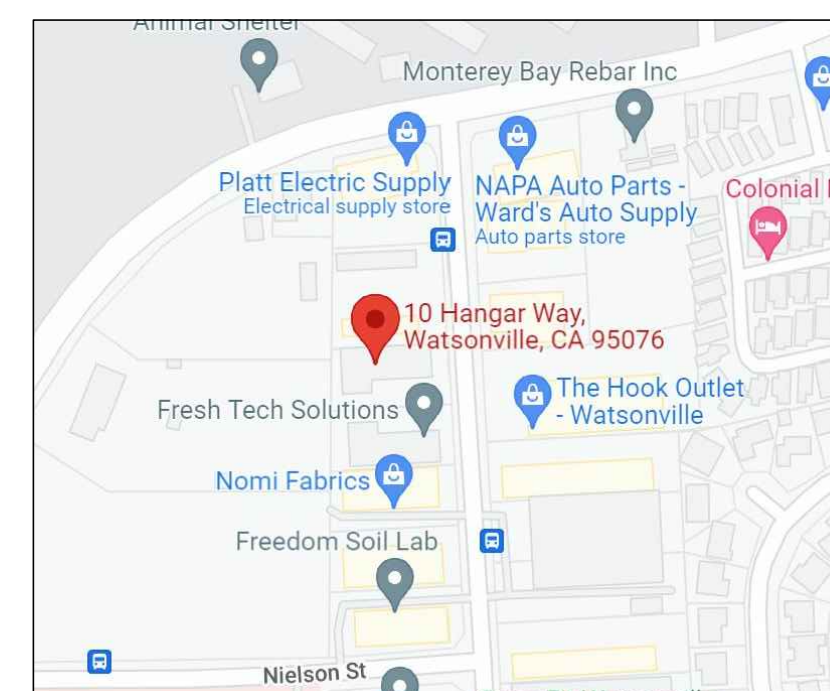
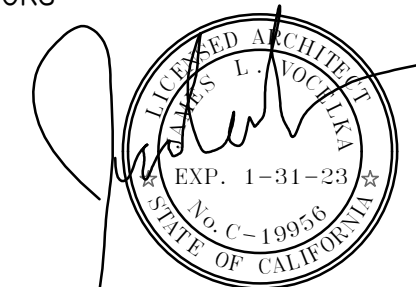
1. INSTALL NEW COMMERCIAL KITCHEN HOODS
2. INSTALL NEW WALK-IN REFRIGERATORS/FREEZER
3. INSTALL NEW KITCHEN EQUIPMENT
4. INSTALL NEW PLUMBING FOR NEW FLOOR DRAINS AND FLOOR SINKS, NEW GREASE INTERCEPTOR, NEW WATER HEATERS AND WATER LINES
5. CONSTRUCT NEW PARTITION WALLS PER PLAN.
6. INSTALL NEW FINISHES PER THE HEALTH DEPT., LEVEL EXISTING CONCRETE FLOOR AND EPOXY/SEAL IT, 6" COVERED EPOXY BASE, NEW FRP ON EXISTING WALLS, CONSTRUCT NEW VINYL T-BAR CEILING,
7. NEW ELECTRICAL TO ALL NEW EQUIPMENT AND NEW LIGHTING
8. REMOVE TWO ROLL-UP DOORS AND INSTALL NEW "INFILL" WALL WITH NEW 6068 DOUBLE DOORS
9. RESTRIPE EXISTING PARKING LOT WITH NEW HC ACCESSIBLE PARKING SPACE.

Project Data

OCCUPANT LOAD: FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	AREA THIS PROJECT	OCCUPANTS
KITCHENS	290	3505	18
STORAGE AREAS:	300	2017	7
OFFICES:	150	2818	19
BATHROOMS, CIRCULATION	0	707	0
TOTAL OCCUPANCY			44

EXISTING FLOOR AREA:
(E) GROUND FLOOR AREA 8515 S.F.
(E) EXISTING SECOND FLOOR AREA: 4548 S.F.
TOTAL BUILDING AREA: 13,063 S.F.

WORK UNDER THIS PERMIT DOES NOT INCLUDE A
SEPARATE TENANT SPACE: 4016 SF
THIS TENANT SPACE TO BE 9047 SF
AREA OF REMODEL IN THIS SPACE: 4767 SF
AREA OF THIS TENANT SPACE TO REMAIN AS EXISTING: 4280 SF
PERCENTAGE OF BUILDING REMODEL = $4767/13,063 = 36.49\%$

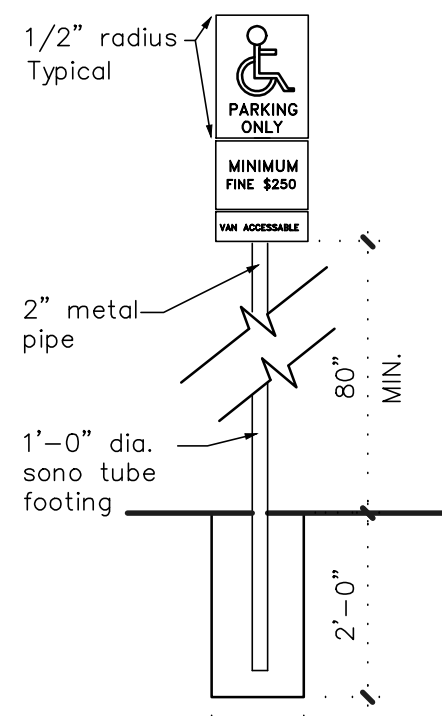


NOTE

1. PERMANENT, REFLECTING, PORCELAIN ENAMELED STEEL SIGN W/ INTERNATIONAL SYMBOL OF ACCESS IN WHITE ON BLUE BACKGROUND, COLOR #15090 IN FED. STD. 5952 MOUNTED ON BUILDING 60" MIN. HEIGHT.
2. MINIMUM OF ONE INTERNATIONAL SYMBOL OF ACCESS AT EACH ACCESSIBLE ENTRY.
3. PLACE PLAQUE AT EACH ACCESSIBLE RESTROOM



② Accessible SYMBOL

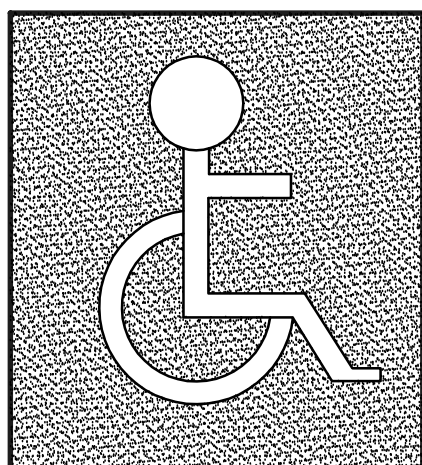


Area of sign to be a minimum of 70 square inches

White lettering and HC symbol on blue background constructed of porcelain steel with beaded text or equal

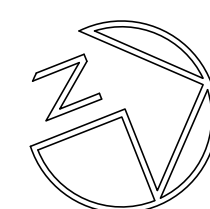
Sign to be centered at the interior end of parking space

③ Parking Space Signage



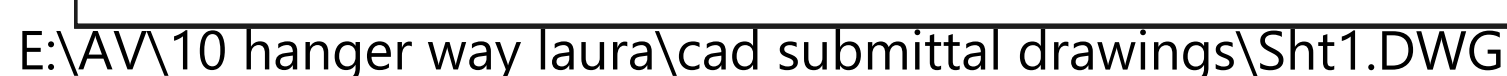
1. Symbol shall be white on blue background. The blue shall be equal to color #15090 in federal standard 595a.
2. All building entrances shall be identified with at least one standard sign. The signs shall be visible to persons along approaching walks.
3. The background of decal shall be matt or non-glare finish.

4 Accessible DECAL



SITE PLAN

10 HANGER WAY



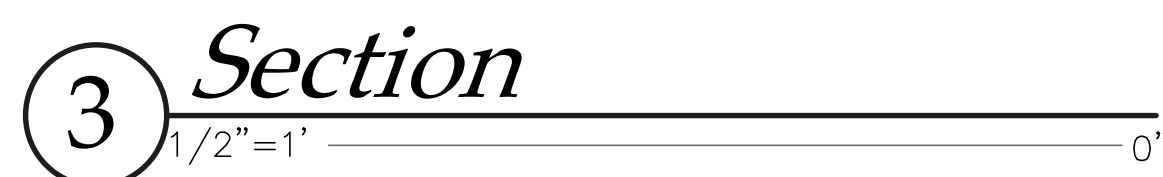
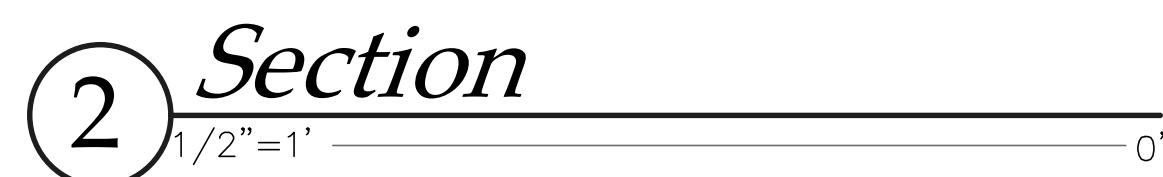
THE USE OF THESE PLANS
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AND SPECIFICATIONS RE-
MAINS WITH THE ARCHITECT.
CONSTITUTES NO PRIMA FACIE
EVIDENCE OF THE ACCEPTANCE
OF THESE RESTRICTIONS.

JAMES "JIM" VOCELKA
ARCHITECT
19020 KAREN DR.
SALINAS, CALIFORNIA 93007
PHONE: 831-663-6644
FAX: 831-663-6640
LICENSE NUMBER: C-19956

Required
Notes
Details
—

Five Star Catering
10 Hanger Way
Watsonville, CA
A.P. # 015-111-42 PHONE: (

SCALE	AS NOTED
DRAWN	CADD
JOB	—
SHEET	1 A
OF 10	SHEETS





SCALE	AS NOTED
DRAWN	CADD
JOB	—
SHEET	2
OF	10 SHEETS



REVISION	DATE	KEY
PLAN CHECK	6-11-22	1
DRAWING DATE:	3-15-22	
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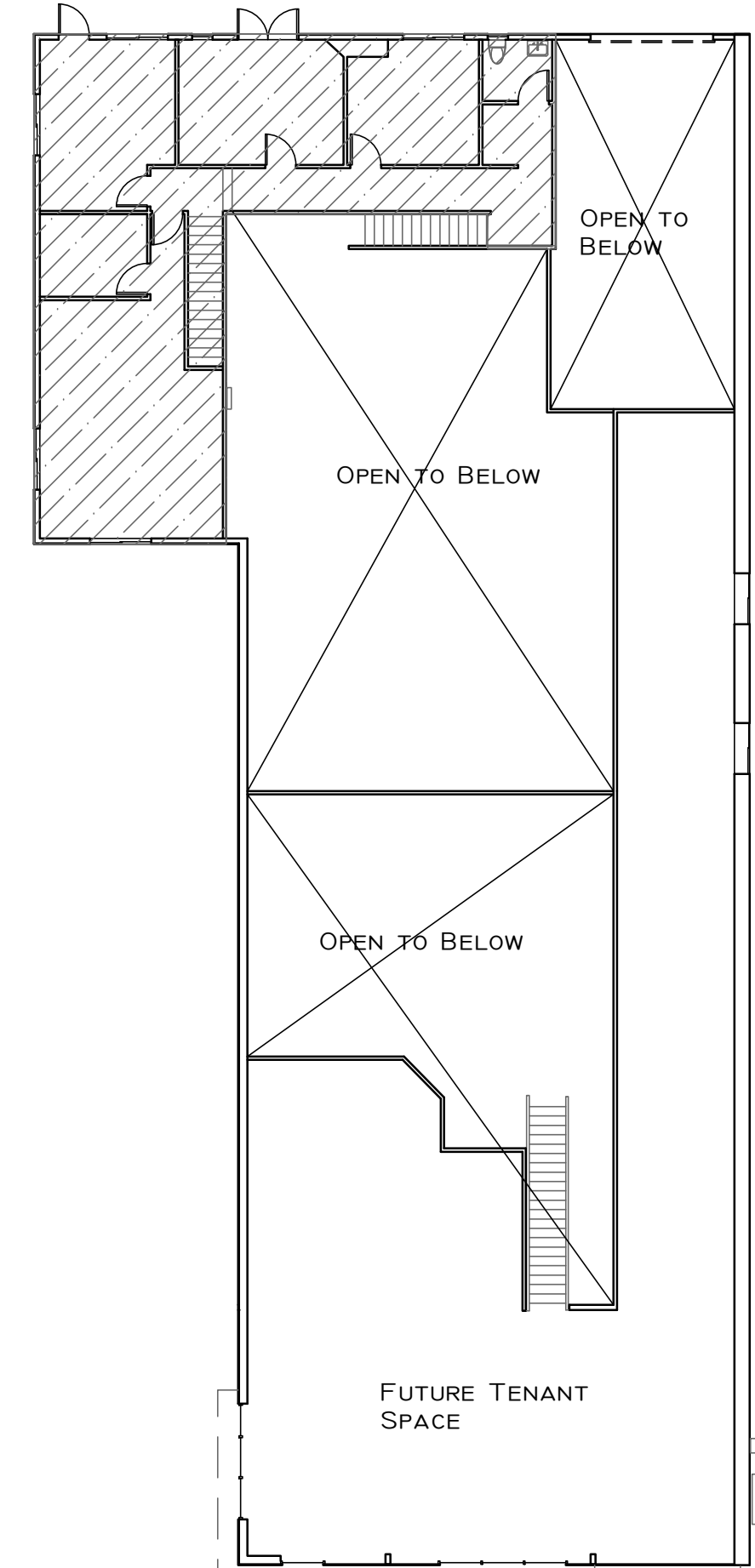
JAMES "JM" VOCELKA
ARCHITECT
19020 KAREN DR.
DANFORTH, CA 94507
PHONE: 831-663-6644
FAX: 831-663-6640
LICENSE NUMBER: C-19956

Ability
CONSTRUCTORS INC.

SHEET TITLE
Proposed Floor Plans Notes Details Occupancy

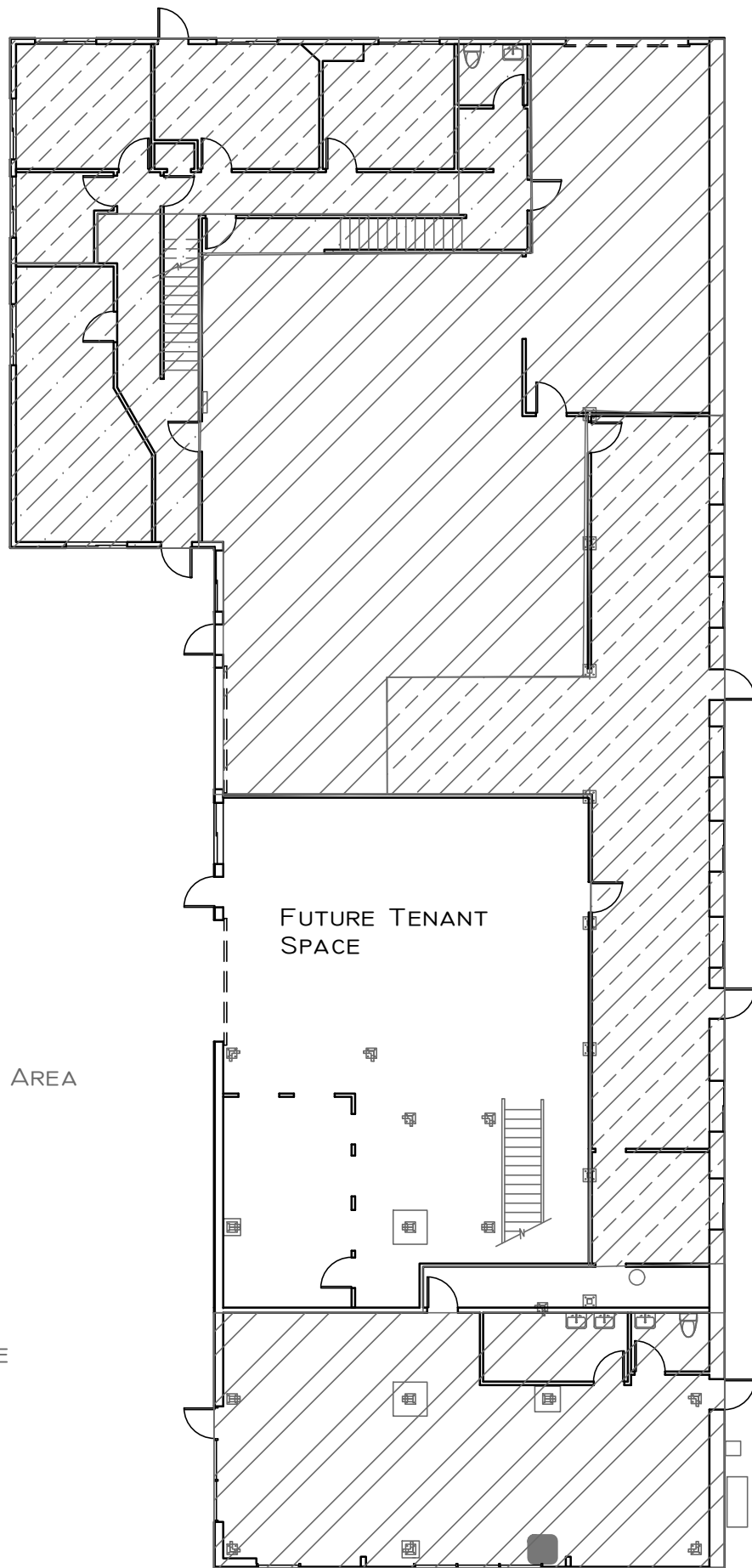
PROJECT New tenant improvement for: Five Star Catering 10 Hanger Way Watsonville, CA A.P. # 015-111-42 PHONE: (831)-251-1563
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SCALE AS NOTED
DRAWN CADD
JOB -
SHEET 3 OF 10 SHEETS



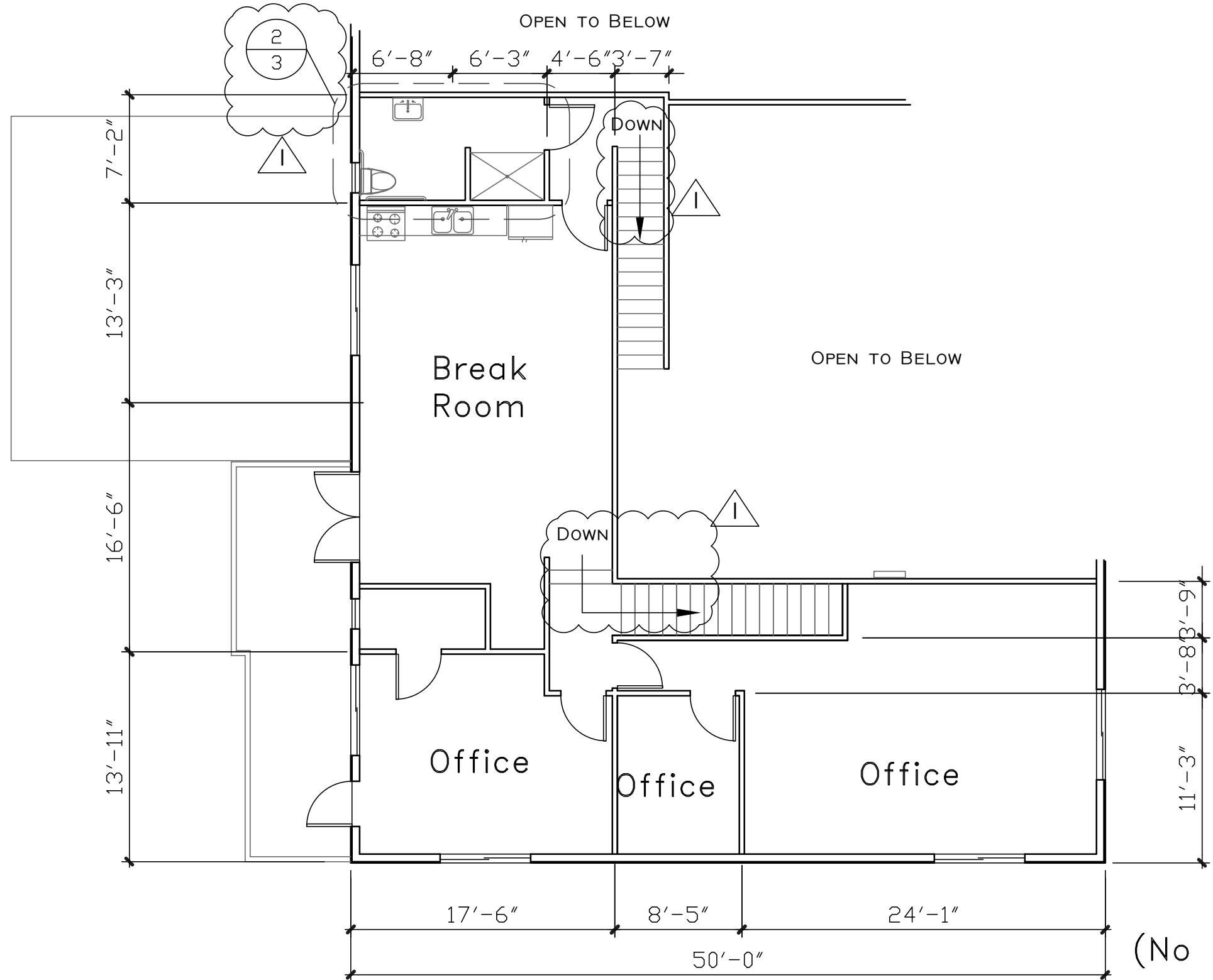
Occupancy Areas

1" = 16' 0"



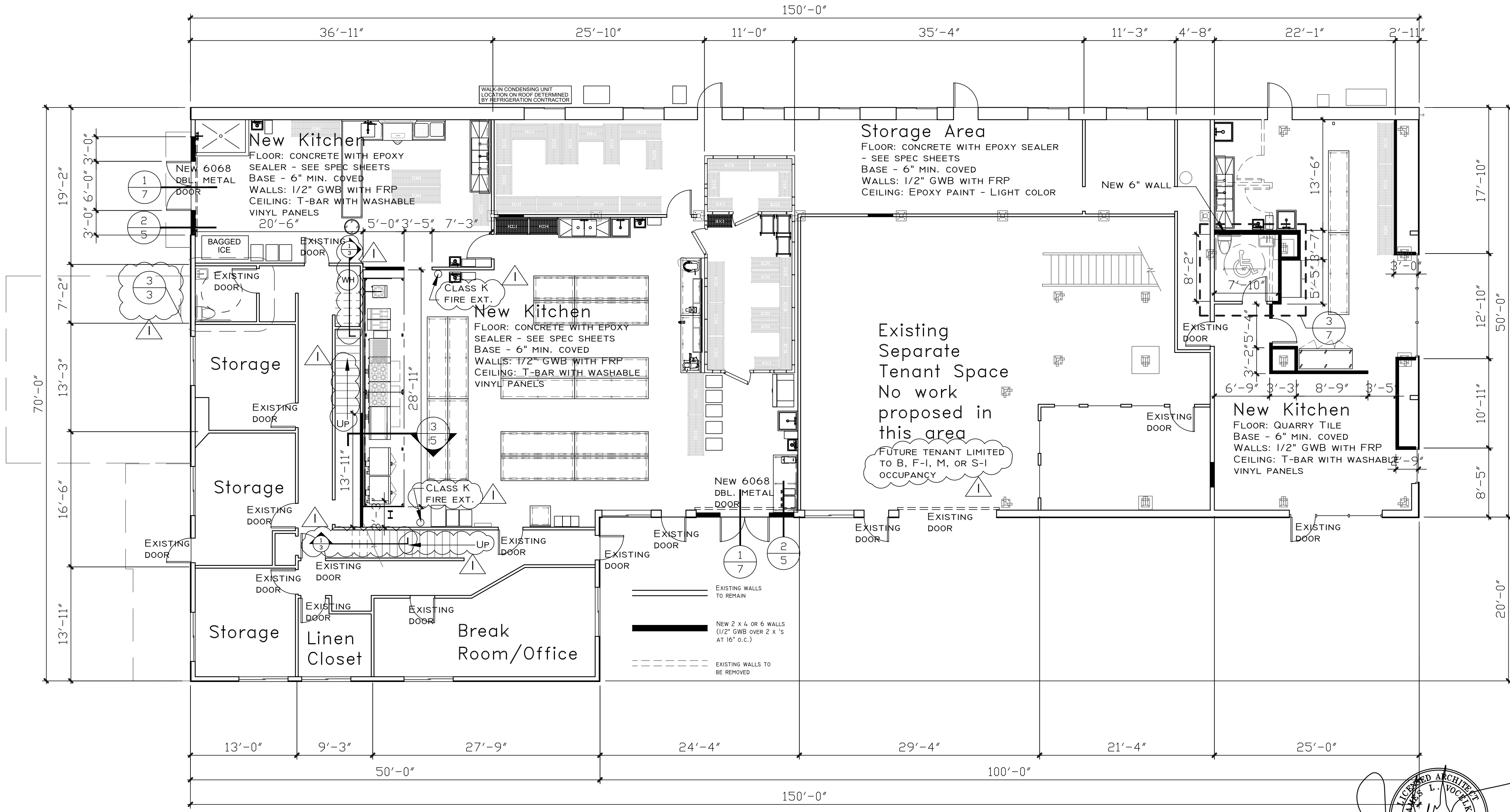
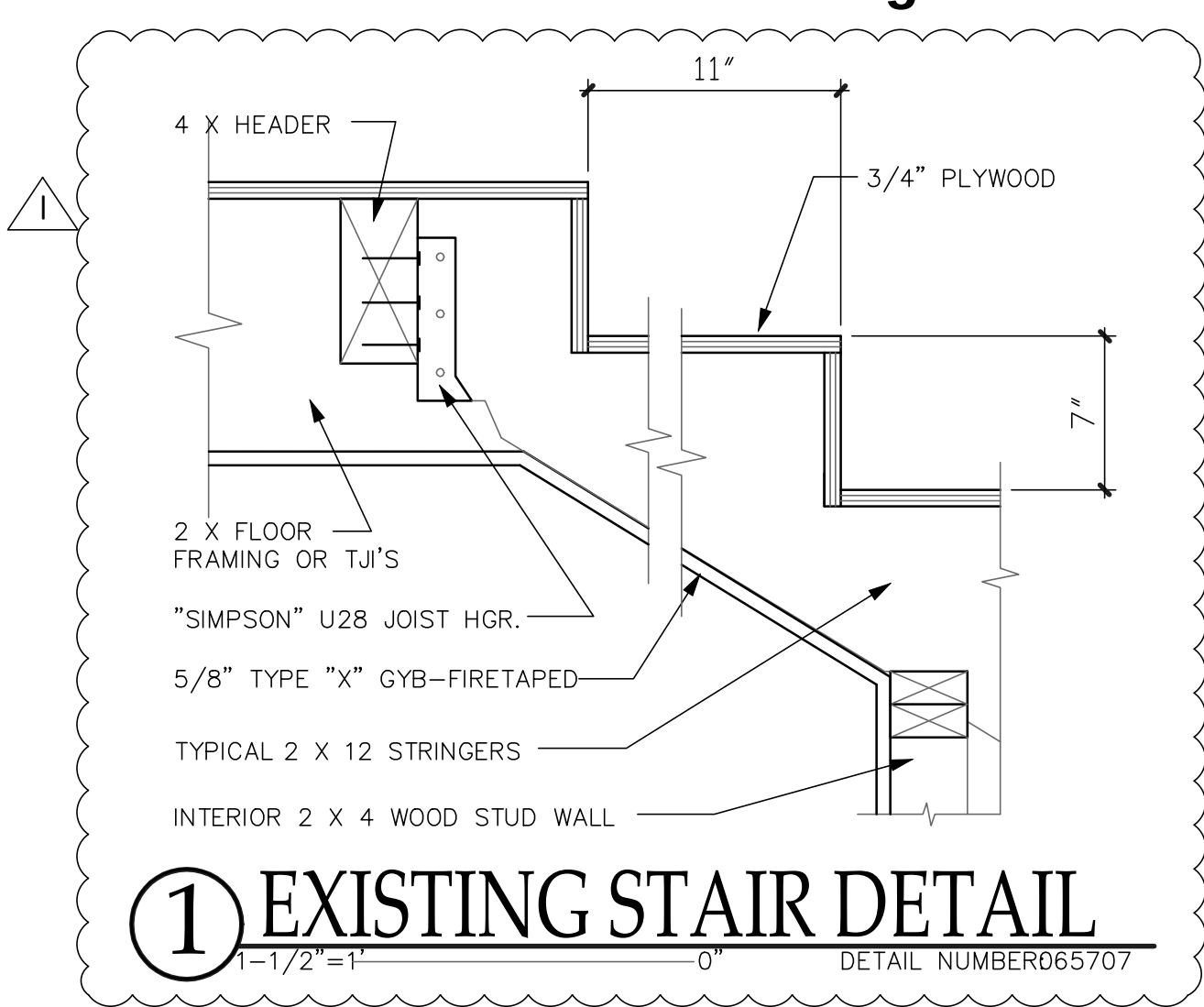
Occupancy Areas

1" = 16' 0"



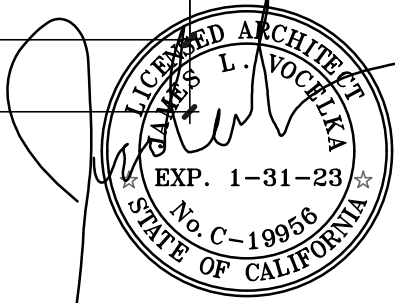
Proposed Second Floor Plan

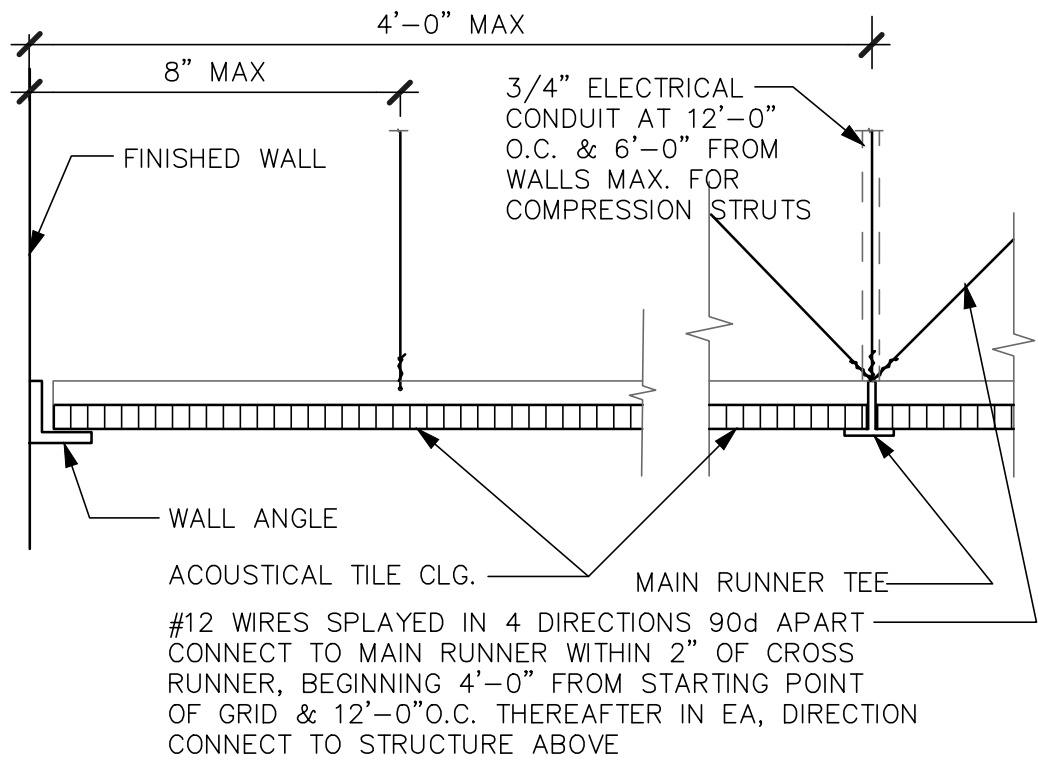
1" = 8' 0"



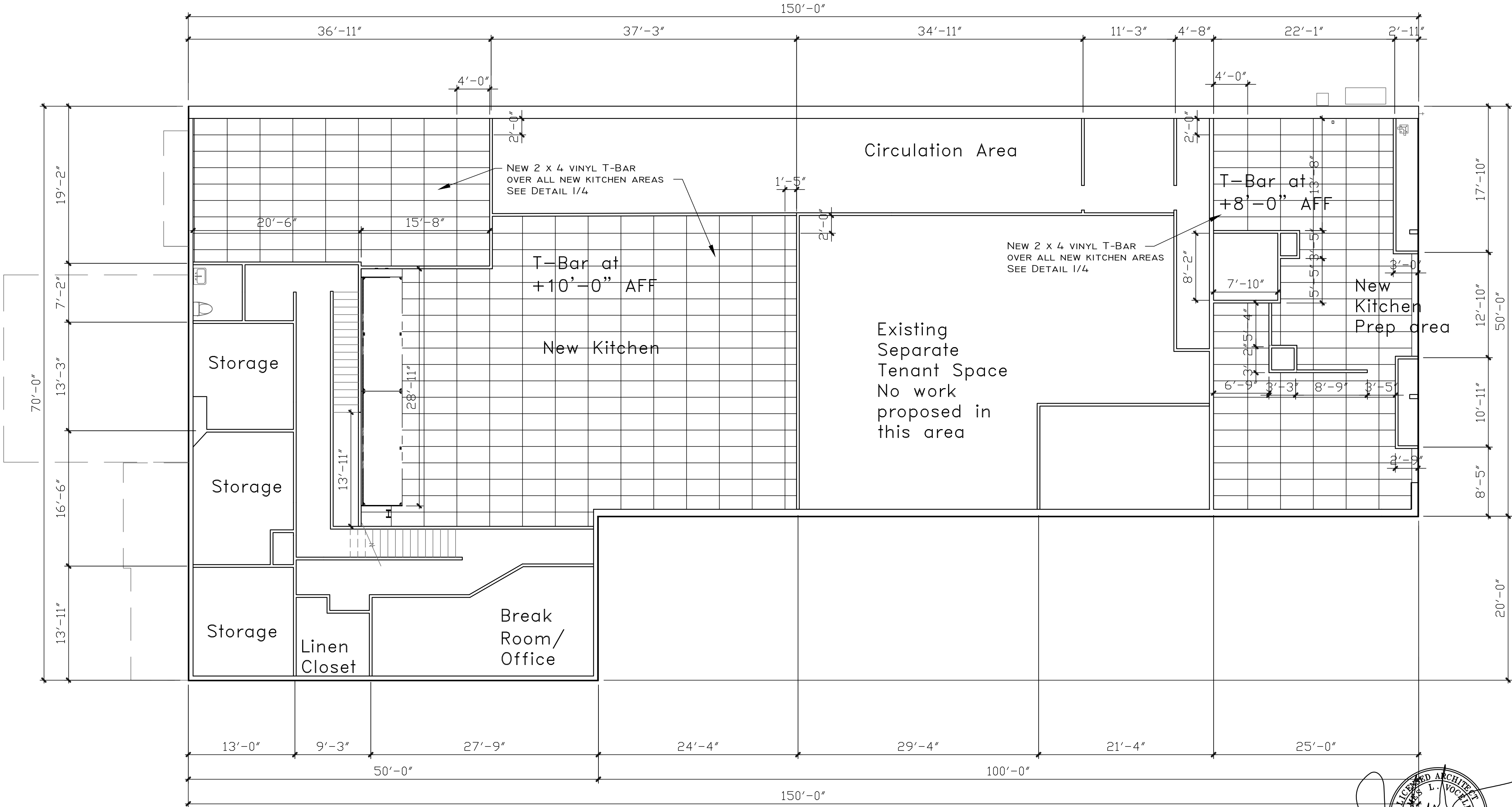
Proposed First Floor Plan

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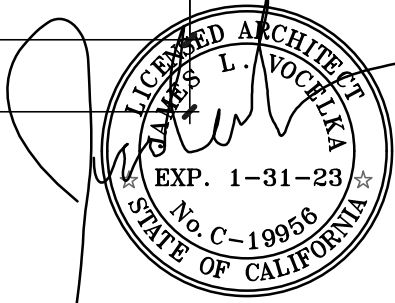
① SUSP. CEILING DETAIL
3"=1' 0" DETAIL NUMBER:092301

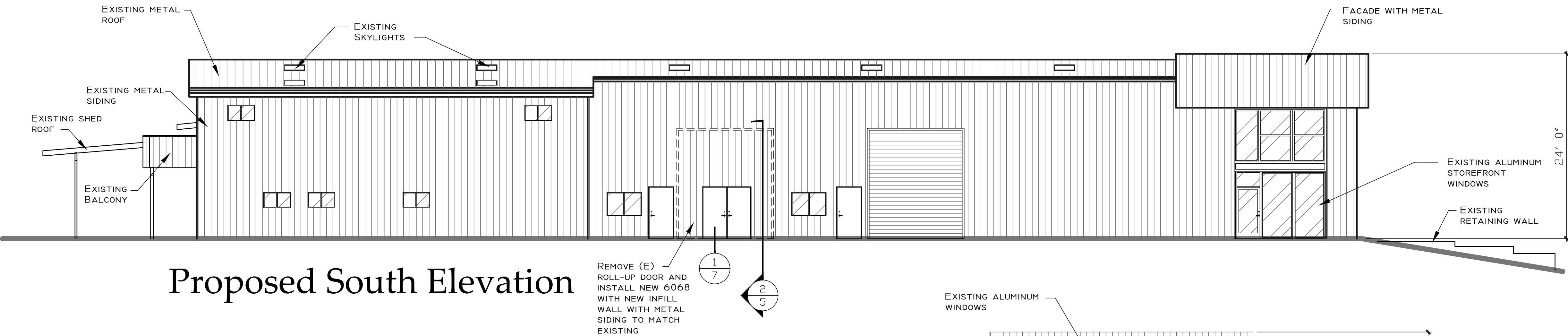


Reflected Ceiling Plan

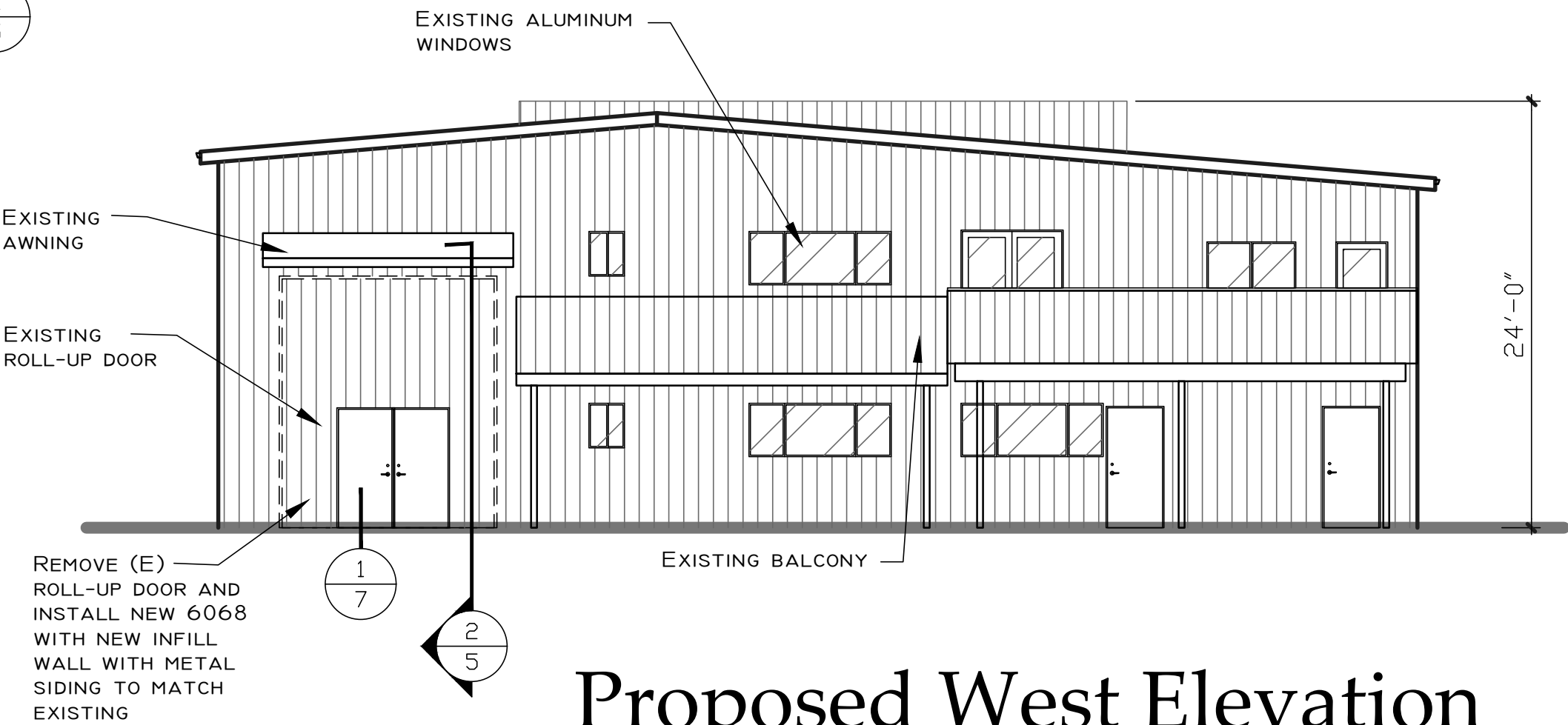
1" = 8' 0"

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JAMES "JM" VOCELKA ARCHITECT 19020 KAREN DR. SAN JOSE, CA 95007 PHONE: 831-663-6644 FAX: 831-663-6640 LICENSE NUMBER: C-19956 Ability VINYL FLOORS INC.	
SHEET TITLE Reflected Ceiling Plans Notes Details 1	
PROJECT New tenant improvement for: Five Star Catering 10 Hanger Way Watsonville, CA A.P. # 015-111-42 PHONE: (831)-251-1563	
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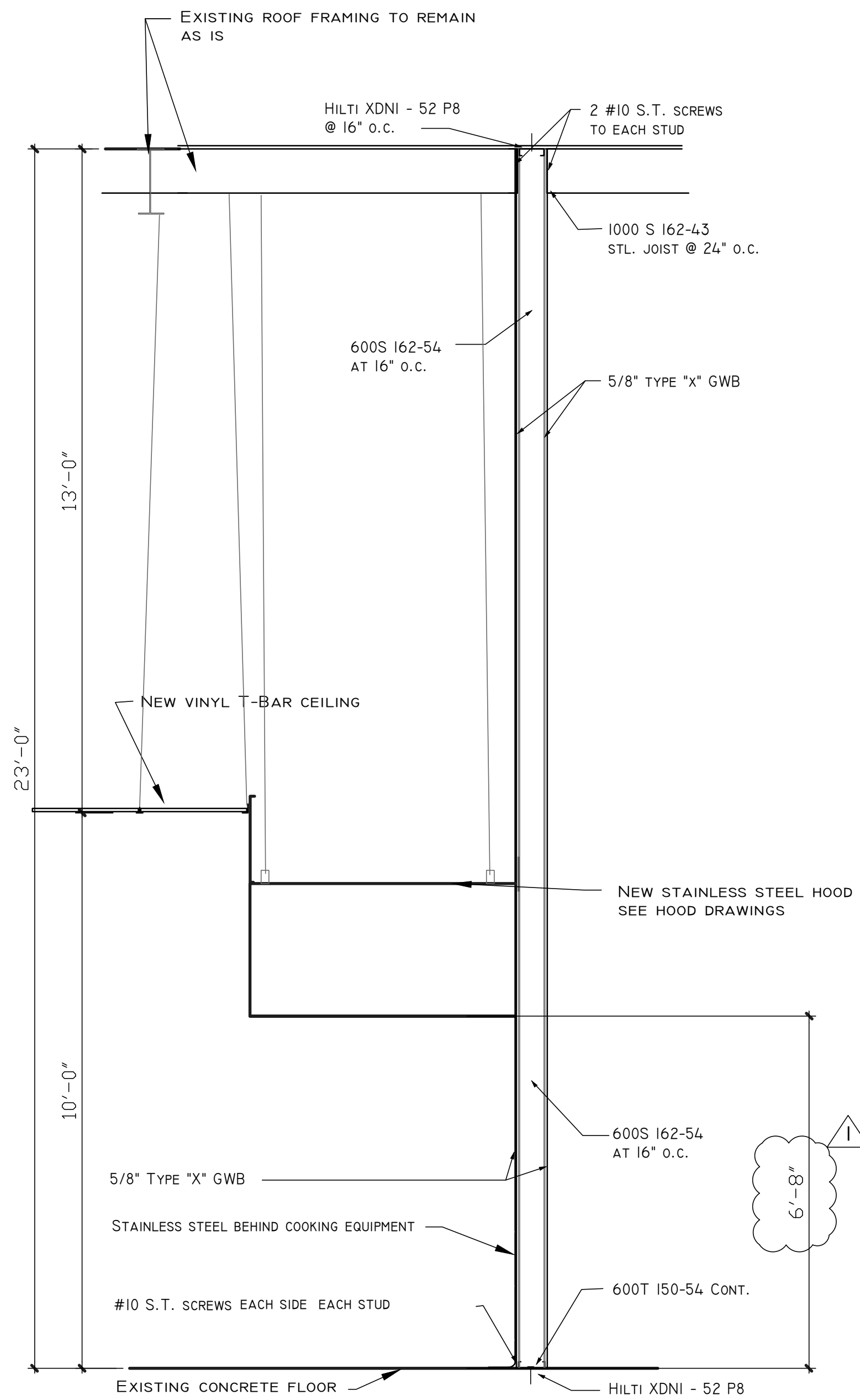




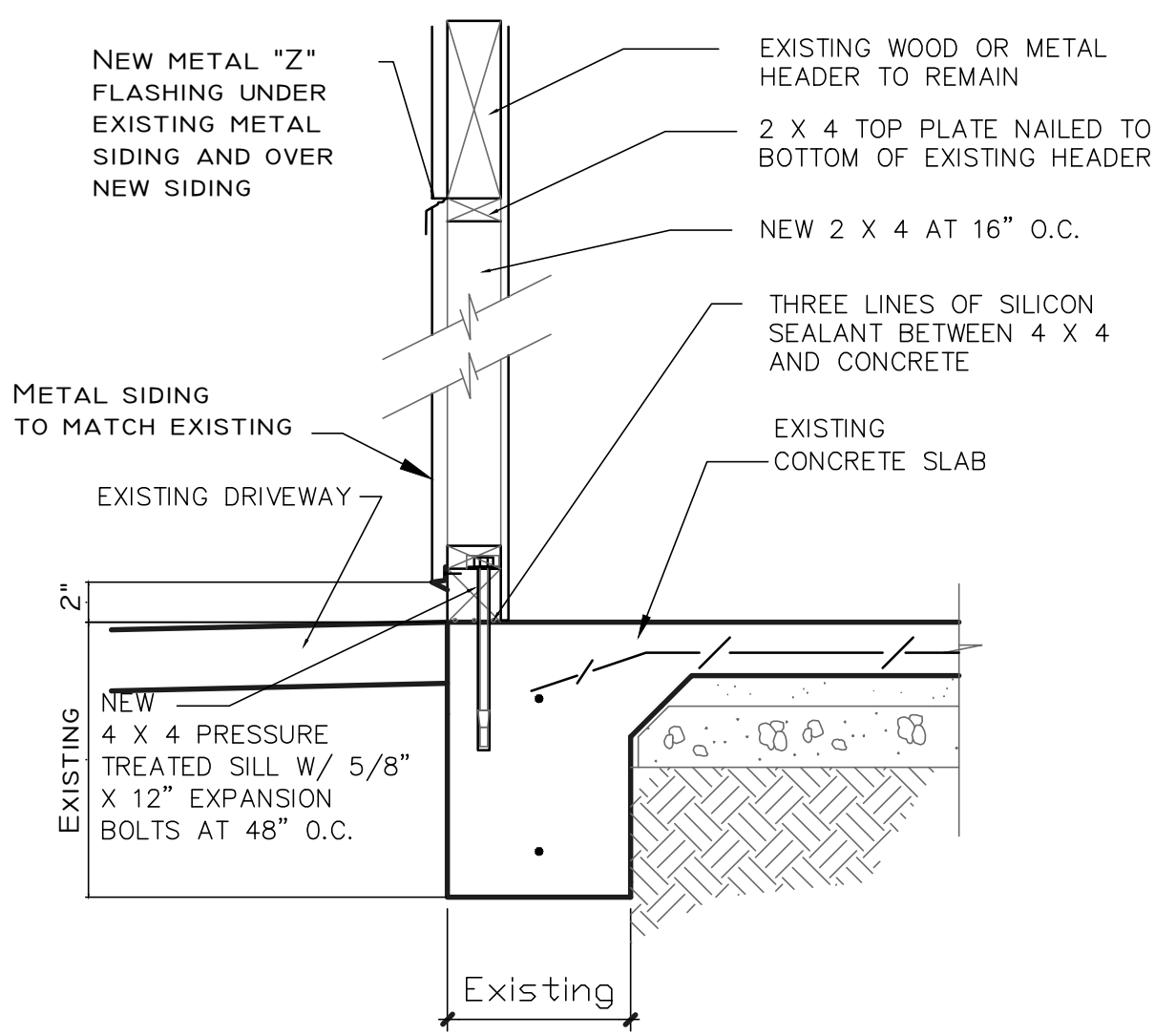
Proposed South Elevation



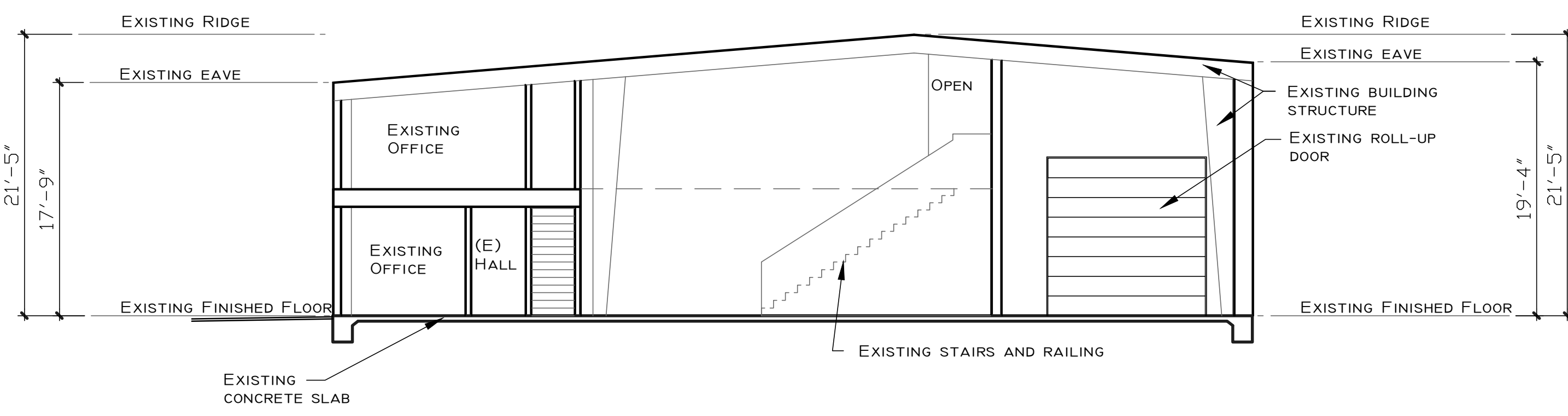
Proposed West Elevation



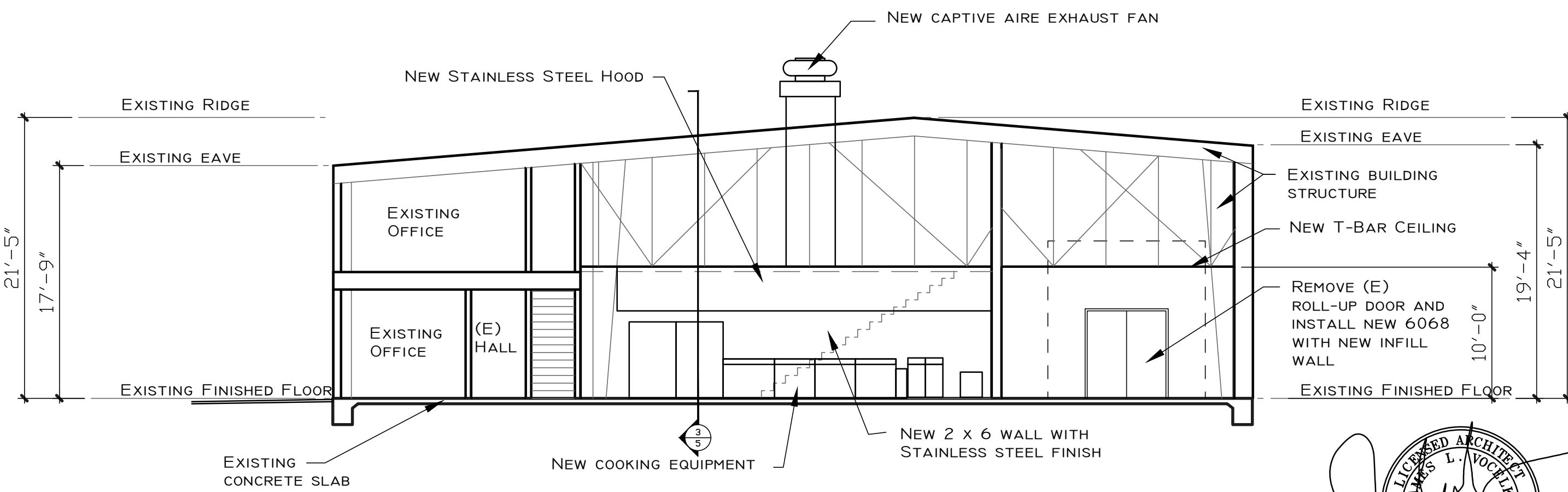
3 Wall Section



2 WALL REPLACING G.D.

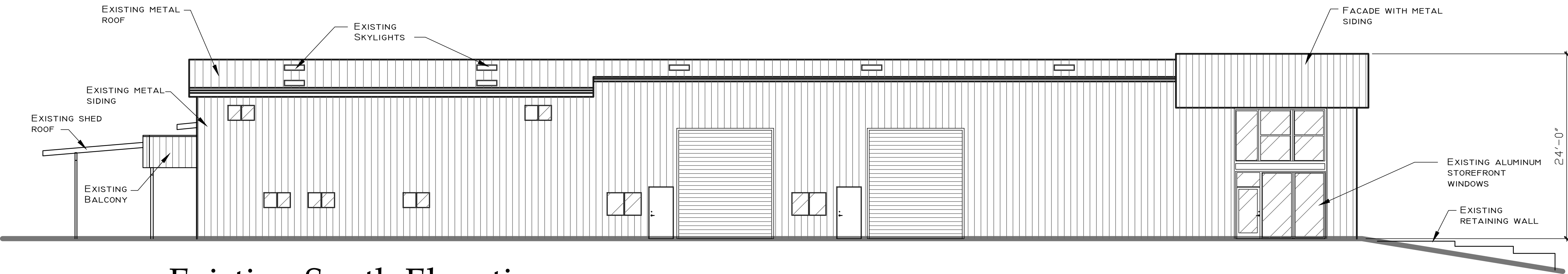


Existing Building Section A-A

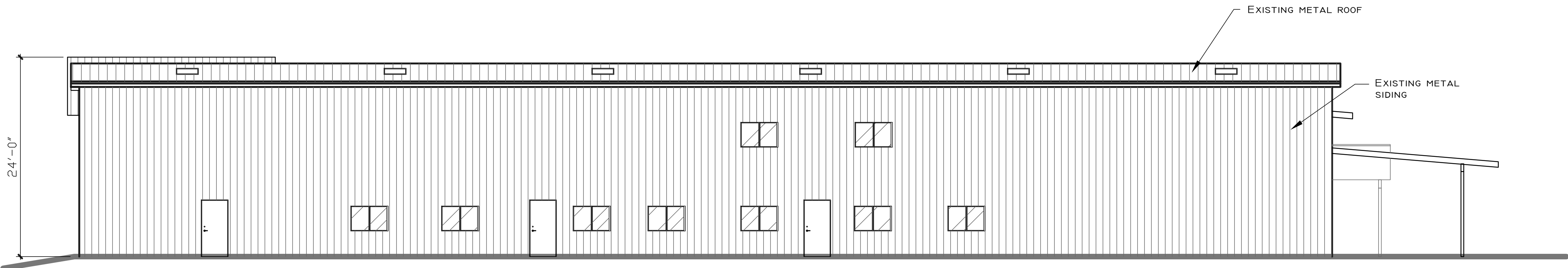


Proposed Building Section A-A

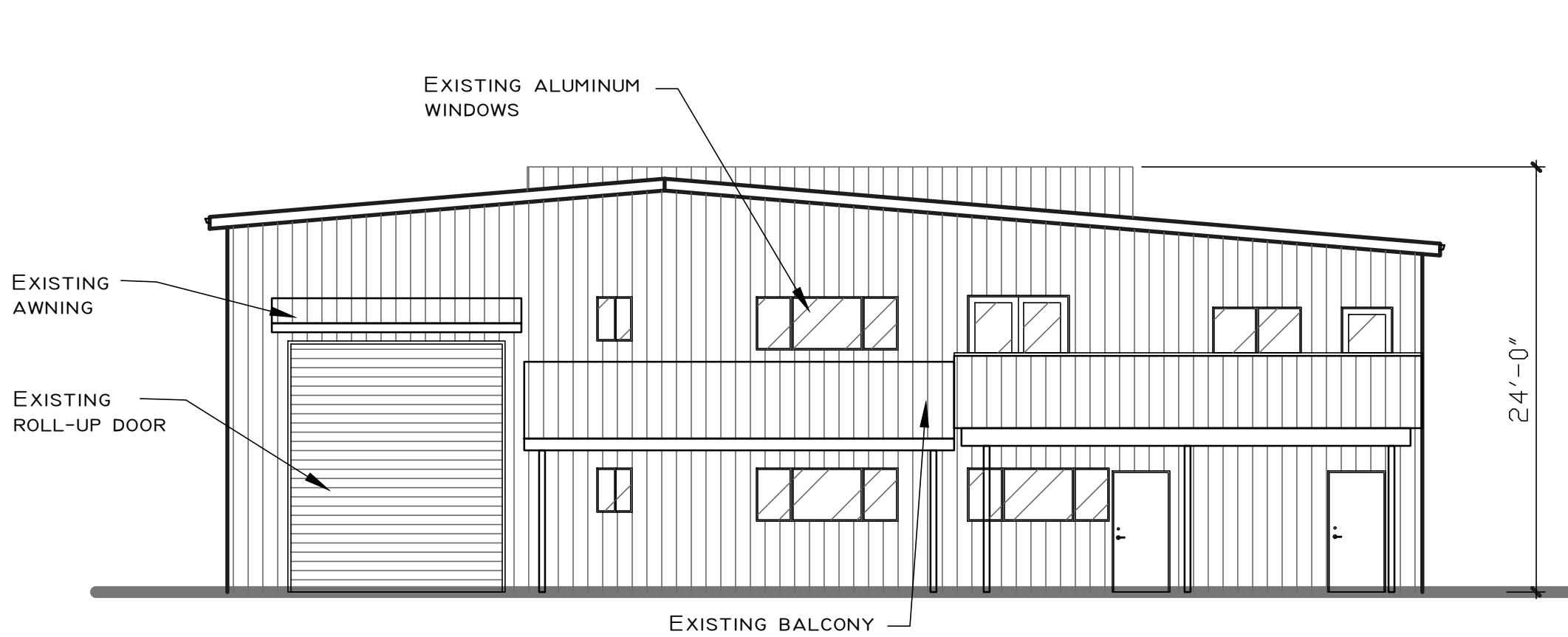
REVISION DATE	KEY
PLAN CHECK 6-11-22	1
DRAWING DATE: 3-15-22	
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SHEET TITLE Exterior Elevations Notes Details Building Section	
PROJECT New tenant improvement for: Five Star Catering 10 Hanger Way Watsonville, CA A.P. # 015-111-42 PHONE: (831)-251-1563	
SCALE AS NOTED	
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JOB -	
SHEET 5	
OF 10 SHEETS	



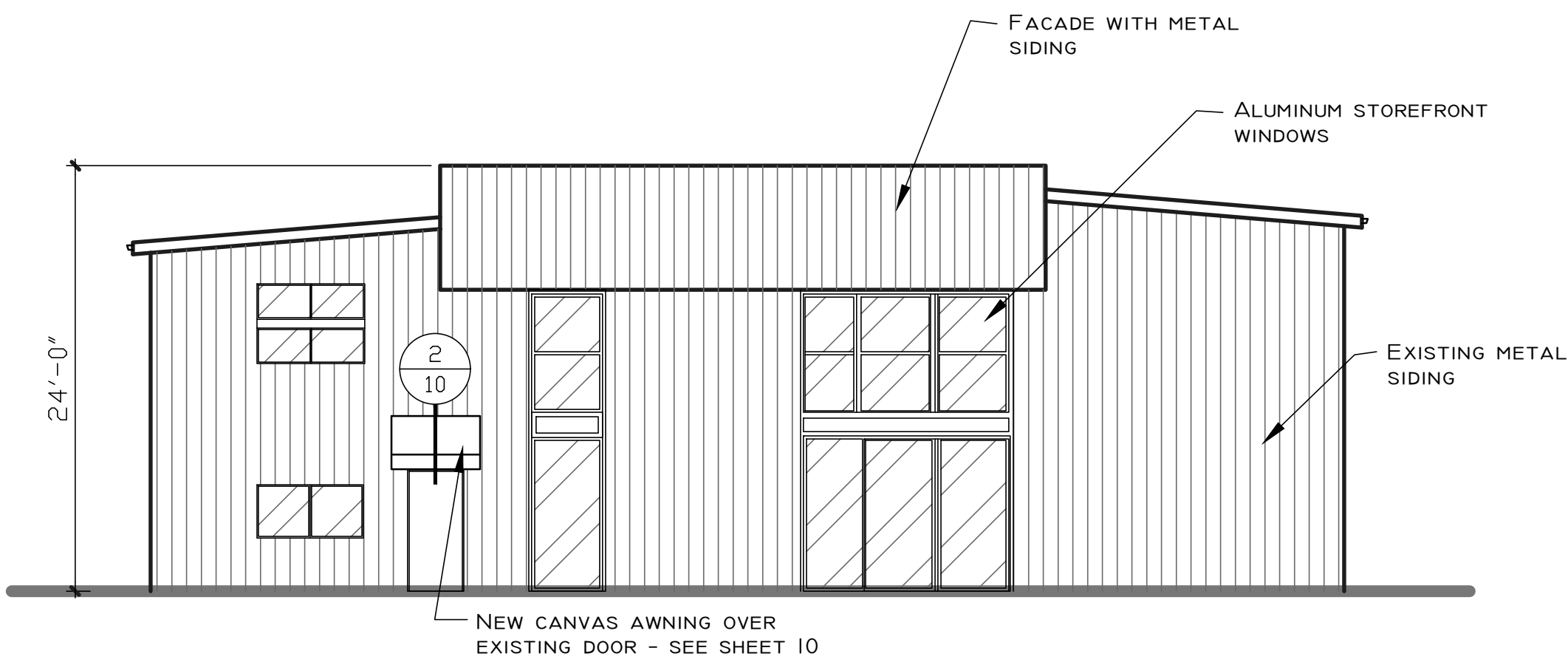
Existing South Elevation



Existing and Proposed North Elevation



Existing West Elevation



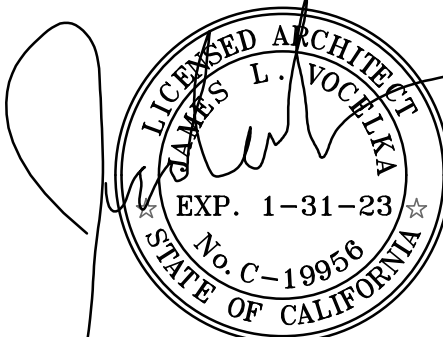
Existing and Proposed East Elevation

Existing Exterior Elevations

1" = 8'

0"

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DRAWING DATE: 3-15-22			
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JAMES L. VOCELKA ARCHITECT 19020 KAREN DR. WATSONVILLE, CA 95077 PHONE: 831-563-6644 FAX: 831-563-6640 LICENSE NUMBER: C-19956			
Ability ENV. RES. INC.			
SHEET TITLE Exterior Elevations Notes Details I			
PROJECT New tenant improvement for: Five Star Catering 10 Hanger Way Watsonville, CA A.P. # 015-111-42 PHONE: (831)-251-1563			
SCALE AS NOTED			
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GENERAL HEALTH REQUIREMENTS

Accessibility REQUIREMENTS

GREASE TRAP LIDS AND FLOOR SINKS MUST BE INSTALLED 1" ABOVE FINISHED FLOOR.

IF WALLPAPER IS USED IN THE RESTROOM AND SERVICE AREA MUST BE A SOLID VINYL PRODUCT WITH NO PAPER BACKING. PROVIDE SAMPLE.

INSTALL A MINIMUM FIVE (5) FOOT HIGH SMOOTH, WASHABLE, NONABSORBENT AND LIGHT COLORED WALL OR PARTITION, AS MEASURED FROM THE FLOOR, BETWEEN THE JANITORIAL MOP SINK AND THE FOOD PREP SINK. THE WALL OR PARTITION MUST HAVE AN ACCEPTABLE MOISTURE RESISTANT FINISH ON THE SIDE FACING THE MOP SINK, SUCH AS FRP, STAINLESS STEEL OR CERAMIC TILE.

AT LEAST 144 SQUARE FEET OF DRY STORAGE IS PROVIDED IN 5-TIER WIRE SHELVING AND UNDER AND OVER SHELVING.

NON NSF COUNTERS/CABINETS WILL HAVE PLASTIC LAMINATION INSIDE AND OUT, AND THE FLOOR MATERIAL WILL HAVE A CONTINUOUS COVE BASE ON THE EMPLOYEE SIDE.

SNEEZE GUARD PROTECTION WILL BE NEEDED IF ANY OPEN FOOD PRODUCTS ARE HANDLED AND DISPLAYED THERE.

CONCRETE FLOORS ARE TO BE SEALED WITH A PENETRATING SEALER THAT IS GREASE, OIL, ACID AND MOISTURE RESISTANT AND APPROVED FOR COMMERCIAL USE.

WHERE A SEALED CONCRETE FLOOR IS PROPOSED, AN APPROVED INTEGRAL COVE BASE (SUCH AS AN APPROVED QUARRY OR CERMAIC TILE COVED BASE) MUST BE "KEYED-IN" TO THE FLOOR SURFACE. TO "KEY-IN", THE FLOOR IS SAW-CUT AT THE WALL/FLOOR JUNCTURE AND AN APPROVED COVED BAE IS INSERTED AND GROUTED IN SO AS TO BE FLUSH, INTEGRAL, AND CONTINUOUS WITH THE FLOOR SURFACE.

THE WALL SURFACES ADJACENT TO THE UTENSIL SINK AND FOOD PREPARATION SINKS SHALL BE COVERED WITH FIBERGLASS REINFORCED POLYESTER PANELS (FRP), STAINLESS STEEL, CERAMIC TILE, OR EQUIVALENT DURABLE WATERPROOF MATERIAL EXTENDING FROM THE TOP OF THE COVED BASE TO A HEIGHT OF AT LEAST ONE (1) FOOT ABOVE THE BACKSPASH.

THE WALL SURFACES AT LOW, FLOOR-TYPE MOP BASINS SHALL BE COVERED WITH FIBERGLASS REINFORCE POLYESTER PANELS (FRP), STAINLESS STEEL, CERAMIC TILE OR EQUIVALENT DURABLE WATERPROOF MATERIAL TO A MINIMUM HEIGHT OF FOUR (4) FEET ABOVE THE FLOOR.

Equipment and installation shall meet all requirements as listed in Senate Bill Chapter 256 as stated in Chapter 4 of California Uniform Retail Food Facilities Law which will be in effect 1/1/85 for California projects in addition to local and county codes.

All food service and related equipment shall be National Sanitation Foundation (NSF) approved and in conformity with local health regulations. Installations of equipment shall meet same requirements. Although health requirements will be reviewed during Building Dept. authorization, the owner will have to take out separate Health Permit.

All adjoining equipment and counters shall be sealed together to prevent the entrance of moisture. All equipment, including shelving shall be smoothly sealed to the wall to prevent the entrance of splash and debris. All portable or freestanding units shall be removable and easily accessible for cleaning.

All working surfaces shall be smooth and impervious.

Adequate sneeze guard protection must be provided where unwrapped food is displayed or customer's self service of food is proposed. Sneeze guard must be constructed of approved design. Maximum opening below sneeze guard is 12". A portable sneeze guard may be used if size and positioning is approved by the Health Dept. during construction.

All cutting boards shall be of non-wood construction and N.S.F. approval.

All refrigeration equipment and equipment for hot storage shall have thermometers which are easily readable in proper working conditions and accurate within range of plus or minus two degrees.

Storage shelving must be specified as having smooth, non-absorbent finish. The lowest shelf should be 6" above floor.

Exhaust hoods must meet all mechanical code requirements. Canopy hoods shall extend 6" beyond all sides of cooking equipment as measured from inside edge of the grease trough. Adequate mechanical make-up air must be provided to produce a balance system. (M/O air shall equal exhausted air.)

Toilet and dressing rooms shall be mechanically ventilated by exhaust fan to the outside premises. The exhaust fan within each toilet room shall be activated by the switch to the light fixture located therein and capable of 12 air changes per hour.

CASTERS FOR ALL FLOOR-MOUNTED EQUIPMENT, INSTALLATION ON 6-INCH LEGS OR COMPLETELY SEALED IN POSITION ON AT LEAST A 4 INCH HIGH CONTINUOUSLY COVED BASE OR CONCRETE CURB.

If a hot water (180 degrees F.) sanitizing rinse dishwashing machine is installed it will require a Type 2 vapor hood with mechanical exhaust.

Atmospheric vacuum breakers or other approved backflow prevention devices required at water supply lines to sinks with threaded spigots, dishwasher, garbage disposal flush lines, steam equipment, urinals, toilets, beverage dispensers, ice machine, landscape irrigation systems, and other fixture where required.

At least one sink or one sink compartment shall be available for food preparation. Food prep sinks shall have an indirect sewer connection, i.e., fixed inn-line air gap or drain to a floor sink through an approved air gap.

A separate wall-mounted hand wash basin is required within or adjacent to the food prep and packaging area. Provide permanently mounted single service soap and paper towel dispensers.

All sinks to be provided with adequate hot and cold water from mixing faucets.

Building shall be insect and rodent proof. Exterior doors shall be self-closing and must come within 1/2" of floor. All vents and other openings to outside need to be sealed or screened. 16-mesh screening is required on any operable windows.

Refuse container shall be moisture and vermin proof with tight fitting lids.

Any trash and garbage storage area receiving food waste or food containers must have a water bib to facilitate cleaning. Floor, walls and ceiling must be smooth and cleanable. recommended hot and cold water bib is available for cleaning. Wastewater from many cleaning operations must be disposed of as sewage through a floor drain in the trash enclosure or equivalent.

Provide a mop or broom rack and cleaning solution storage shelving away from food preparation and storage areas.

Employee garment change area, separate from restroom, is required. Cabinets or lockers must be installed in this area.

Equipment shall meet or be equal to applicable N.S.F. standards or in the absence of applicable N.S.F. The enforcement officer shall approve standards. Submit documentation of written verification that only approved commercial equipment shall be used.

PROVIDE A SPACE OF AT LEAST 1" BETWEEN UTENSIL SINK AND ADJACENT WALL TO AVOID CAULKED CREVICES, WHICH COLLECT WATER AND DEBRIS.

Walls and ceilings of all rooms except bars, where food is stored in unopened containers, and dining areas shall be durable, smooth, non-absorbent and washable. Walls and ceilings shall be light colored. See drawings for schedules.

Each metal sink compartment must be large enough to hold the largest utensils to be washed in the sink. Every utensil sink must have 2 metal drainboards. Each drainboard must be integral and should be at least as one sink compartment.

All exposed conduit, plumbing, etc, must be installed at least 6" off the floor and 1" from walls. All exposed flex conduits is to be sealtight or equivalent.

The juncture at the floor and the wall must have a coved base with at least 3/8" radius and extending at least 6" up the wall. Stationary fixtures or built-in equipment can be sealed on a 4" high 3/6 radius concrete curb or covered-in position on the floor it must be covered with an approved material.

Concrete floor must be sealed with an approved granite and acid resistant sealer. Specifications must be provided prior to application. Paint of any kind is not an acceptable sealant. Do not paint the floor. If any damage or excavation or repair work has been done to the concrete floor it must be covered with an approved material.

Twenty-foot candles of light shall be provided for all food preparation areas. Min of 5 candles of light in storage areas. Adequate lighting shall be used over bar sinks and available for cleanup of general premises.

Light fixtures in areas where food is prepared or where open food is stored or where utensils are cleaned must have shatter proof shields and shall be readily cleanable.

Provide automatic door closures on all entry, delivery, restroom and change room doors.

Approved air curtains are required over all delivery doors. The air device shall be installed in such a way that it will automatically operate when door opens.

Equipment or utensils used in the preparation, sale, service and display of food shall be made on non-toxic, non-corrosive materials and shall be made to be easily installed and cleaned.

All areas must have sufficient ventilation to facilitate proper food storage and to provide a reasonable condition of comfort for any employee; consistent with the job performed by the employee.

CLEAR FLOOR OR GROUND SPACE FOR WHEELCHAIRS

1. THE MINIMUM CLEAR FLOOR OR GROUND SPACE REQUIRED TO ACCOMMODATE A SINGLE STATIONARY WHEELCHAIR AND OCCUPANT IS 30 INCHES X 48 INCHES. THE MINIMUM CLEAR FLOOR OR GROUND SPACE FOR WHEELCHAIRS MAY BE POSITIONED FOR FORWARD OR PARALLEL APPROACH TO AN OBJECT, CLEAR FLOOR OR GROUND SPACE FOR WHEELCHAIRS MAY BE PART OF THE KNEE SPACE REQUIRED UNDER SOME OBJECTS.
2. PROVIDE AN ADDITIONAL 12 INCHES WIDTH ON ONE SIDE FOR ALCOVES GREATER THAN 15 INCHES DEEP AND DESIGNED FOR SIDE APPROACH.
3. PROVIDE AN ADDITIONAL 6 INCHES WIDTH ON ONE SIDE FOR ALCOVES GREATER THAN 24 INCHES DEEP AND DESIGNED FOR FRONTAL APPROACH.

HAZARDS AND PROTRUDING OBJECTS

1. OBJECTS PROJECTING FROM WALLS WITH THEIR LEADING EDGES BETWEEN 27 INCHES AND 80 INCHES ABOVE THE FINISHED FLOOR SHALL PROTRUDE NO MORE THAN 4 INCHES INTO WALKS, HALLS, CORRIDORS, PASSAGEWAYS, OR AISLES.
2. OBJECTS MOUNTED WITH THEIR LEADING EDGES AT OR BELOW 27 INCHES ABOVE THE FINISHED FLOOR MAY PROTRUDE ANY AMOUNT.
3. FREE- STANDING OBJECTS MOUNTED ON POSTS OR PLYLONS MAY OVERHAND 12 INCHES MAXIMUM FROM 27 INCHES TO 80 INCHES ABOVE THE GROUND OR FINISHED FLOOR.
4. PROTRUDING OBJECTS SHALL NOT REDUCE THE REQUIRED CLEAR WIDTH OF AN ACCESSIBLE ROUTE OR MANUEVERING SPACE.
5. ANY OBSTRUCTION OVERHANGING A PEDESTRIAN WAY SHALL BE A MINIMUM OF 80 INCHES ABOVE THE WALKING SURFACE AS MEASURED TO THE BOTTOM OF THE OBSTRUCTION.

PARKING

1. SURFACE SLOPES OF PARKING SPACE FOR THE PHYSICALLY DISABLED SHALL NOT EXCEED 1/4 INCH PER FOOT(2%GRADIENT) IN ANY DIRECTION.
2. ACCESSIBLE PARKING SPACE SHALL BE DESIGNATED AS RESERVED BY SHOWING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY
3. ONE IN EVERY EIGHT REQUIRED ACCESSIBLE SPACES, BUT NOT LESS THAN ONE SHALL BE SERVED BY AN ACCESS AISLE OF 96" WIDE MIN. AND SHALL HAVE AN ADDITIONAL SIGN "VAN ACCESSIBLE" MOUNTED BELOW THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SUCH A SIGN SHALL BE LOCATED SO IT CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.

ACCESSIBLE ROUTE/SIDEWALK/HALLS/CORRIDOR/AND AISLES

1. AT LEAST ONE ACCESSIBLE ROUTE COMPLYING WITH ADA43 SHALL CONNECT ACCESSIBLE BUILDING OR FACILITY ENTRANCES WITH ALL ACCESSIBLE SPACES AND ELEMENTS WITHIN THE BUILDING.
2. ACCESSIBLE ROUTE SHALL HAVE A CONTINUOUS COMMON SURFACE NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2 INCHES. CHANGE IN LEVEL UP TO A 1/2" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT.CHANGE IN LEVEL BETWEEN 1/2" AND 1" SHALL BE BEVELED WITH NO SLOPE GREATER THAN 1:2 AND SHALL BE A MINIMUM OF 36 INCHES IN WIDTH EXCEPT AT DOOR.
3. SURFACE CROSS SLOPES OF ACCESSABLE ROUTE SHALL NOT EXCEED 1:50.
4. IF AN ACCESSIBLE ROUTE HAS LESS THAN 60" CLEAR WIDTH, AT LEAST 60" X 60" PASSING SPACE SHALL BE LOCATED AT REASONABLE INTERVAL NOT TO EXCEED 200 FT., T- INTERSECTION OF 2 CORRIDORS OR WALKS IS AN ACCEPTABLE PASSING SPACE.
5. WALKS, SIDEWALKS, AND PEDESTRIAN WAYS SHALL BE FREE OF GRATING WHENEVER POSSIBLE. GRID OPENINGS WITHIN GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS SHALL BE LIMITED TO 1" INCH IN THE DIRECTION OF THE TRAFFIC FLOW.
6. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 VERTICAL TO 20 HORIZONTAL, IT SHALL COMPLY WITH THE PROVISIONS OF PEDESTRIAN RAMPS.
7. AREA OF RESCUE ASSISTANCE TO COMPLY WITH PROVISIONS SET FORTH IN ADA4.3.11.

ENTRANCES/DOORS

1. ALL ACCESSIBLE ENTRANCES SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS.
2. EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 36 INCHES IN WIDTH, AND NOT LESS THAN 80 INCHES IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32 INCHES.
3. LATCHING AND LOCKING: DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
4. HARDWARE REQUIRED FOR ACCESSIBILITY DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48 INCHES ABOVE FINISHED FLOOR.

THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2" INCH LOWER THAN THE THRESHOLD OF THE DOORWAY, CHANGES IN LEVEL BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.

THE MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8-1/2 LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS. SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY NOT EXCEED 15 LBS.

MINIMUM MANUEVERING CLEARANCES AT DOORS THAT ARE NOT AUTOMATIC OR POWER- ASSISTED SHALL COMPLY WITH ADA4.13.6. THE FLOOR OR GROUND AREA WITHIN THE REQUIRED CLEARANCES SHALL BE LEVEL AND CLEAR.

1. THE UPPER APPROACH AND THE LOWER TREAD OF EACH INTERIOR STAIR SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2 INCHES WIDE AND PLACED PARALLEL TO AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP- RESISTANT AS THE TREADS OF THE STAIR.

WHERE STAIRWAYS OCCUR OUTSIDE A BUILDING, THE UPPER APPROACH AND ALL TREADS SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2 INCHES WIDE AND PLACED PARALLEL TO, AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP OF LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AS SLIP- RESISTANT AS THE TREADS OF THE STAIR. A PAINTED STRIPE SHALL BE ACCEPTABLE.

ALL STAIR TREAD SURFACES SHALL BE SLIP- RESISTANT.

HANDRAILS

1. TOP OF HANDRAILS GRIPPING SURFACES AT SHALL BE 34 INCHES TO 38 INCHES ABOVE THE NOSING OF THE STAIR TREADS, OR THE RAMP SURFACE.
2. HANDRAILS AT STAIRWAYS SHALL EXTEND A MINIMUM OF 12 INCHES BEYOND THE TOP NOSING AND 12 INCHES PLUS THE TREAD WIDTH BEYOND THE BOTTOM NOSING.
3. HANDRAILS AT RAMPS SHALL RUN ALONG BOTH SIDES OF A RAMP, BE CONTINUOUS THE FULL LENGTH, EXTEND AT LEAST 12 INCHES BEYOND THE TOP AND BOTTOM OF THE RAMP.
4. WHERE THE EXTENSION OF THE HANDRAIL IN THE DIRECTION OF THE STAIR RUN WOULD CREATE A HAZARD, THE EXTENSION SHALL BE MADE AT RIGHT ANGLES, ON THE FACE OF A RETURNING WALL, WHERE THE STAIRS ARE CONTINUOUS FROM LANDING TO LANDING, THE INNER RAIL SHALL BE CONTINUOUS AND NEED NOT EXTEND OUT INTO THE LANDING.
5. HANDRAILS SHALL BE CONTINUOUS ALONG BOTH SIDES OF STAIRS. THE INSIDE HANDRAIL ON SWITCHBACK OR DOGLEG STAIRS SHALL ALWAYS BE CONTINUOUS.
6. THE HANDRAIL GRIPPING SURFACES SHALL BE UNINTERRUPTED BY NEWEL POSTS OR OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.
7. HANDRAIL ENDS SHALL BE ROUNDED OR RETURNED SMOOTHLY TO NEWEL POSTS, FLOOR, WALL, OR SAFETY TERMINALS AND SHALL NOT ROTATE WITHIN THEIR FITTINGS.
8. HANDRAILS PROJECTED FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.
9. THE HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1-1/4 INCH NOR MORE THAN 1-1/2 INCH IN CROSS-SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AND EQUIVALENT SMOOTH GRIPPING SURFACE WITH NO SHARP CORNERS.

RAMPS

1. ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 SHALL BE CONSIDERED A RAMP AND SHALL COMPLY WITH PROVISIONS SET FORTH IN ADA4.8
2. HANDRAILS ARE REQUIRED ON BOTH SIDES OF A RAMP, IF A RAMP RUN HAS A RISE GREATER THAN 6" OR HORIZ. PROJECTION GREATER THAN 72".
3. PEDESTRIAN RAMPS SERVING PRIMARY ENTRANCES TO A BUILDING SHALL HAVE A MINIMUM WIDTH OF 36 INCHES.
4. ALL RAMPS IN AREAS ACCESSIBLE TO PERSONS WITH DISABILITIES ON A PATH OF TRAVEL OR SERVING EXITS SHALL HAVE A 1:52 MAXIMUM SLOPE WITH CROSS SLOPES NO GREATER THAN 1:50. THE MAXIMUM RISE FOR ANY RUN SHALL BE 30 INCHES.
5. THE LANDING WIDTH SHALL BE AT LEAST AS WIDE AS THE RAMP RUN LEADING TO IT.
6. THE LANDING LENGTH SHALL BE A MINIMUM OF 60 INCHES CLEAR. IF RAMP CHANGE DIRECTION AT LANDINGS, THE MINIMUM LANDING SIZE SHALL BE 60"x60".
7. IF A DOORWAY IS LOCATED AT A LANDING, THEN THE AREA IN FRONT OF THE DOORWAY SHALL COMPLY WITH PROVISIONS SET BE FORTH IN ADA4.13.6.

TELEPHONES

1. PERMANLY INSTALLED TELEPHONES IN ALL ACCESSIBLE UNITS SHALL HAVE VOLUME CONTROL COMPLYING WITH PROVISIONS SET FORTH IN ADA4.31.5 AND AN ACCESSIBLE ELECTRICAL OUTLET WITHIN 4 FEET OF A TELEPHONE CONNECTION SHALL BE PROVIDED TO FACILITATE THE USE OF A TEXT TELEPHONE.

BUILDING SIGNAGE

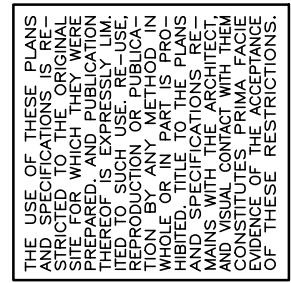
1. SIGNS WHICH DESIGNATE PERMANENT ROOMS AND SPACES SHALL COMPLY WITH ADA 4.301,4.302,4.303,AND 4.306.
2. OTHER SIGNS WHICH PROVIDE DIRECTION TO OR INFORMATION ABOUT FUNCTIONAL SPACES OF THE BUILDING SHALL COMPLY WITH ADA4.301, 4.302,4.303,AND4.305 EXCEPTON: BUILDING DIRECTORIES MENUS, AND ALL OTHER SIGNS WHICH ARE TEMPORARY ARE NOT REQUIRED TO COMPLY.

ADDITIONAL REQUIREMENTS & INFORMATION

1. THE CENTER OF RECEPTACLE OUTLETS SHALL BE NOT LESS THAN 15 INCHES ABOVE THE FLOOR OR WORKING PLATFORM.
2. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE NOT LESS THAN 36 INCH NOR MORE THAN 48 INCHES ABOVE THE FLOOR OR WORKING PLATFORM.
3. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED 48 INCHES ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE, OR SIDEWALK.
4. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO AND USABLE BY PHYSICALLY DISABLED PERSONS. THE SYMBOL SPECIFIED ABOVE SHALL CONSIST OF A WHITE FIGURE ON BLUE BACKGROUND. THE BLUE SHALL BE EQUAL TO COLOR NO.15999 IN FEDERAL STANDARD 595A.
5. PROVIDE AUXILIARY VISUAL ALARM IN COMPLIANCE WITH ADA4.28.4 IN ALL ACCESSIBLE UNIT.
6. PROVIDE VISUAL NOTIFICATION DEVICES TO ALERT ROOM OCCUPANTS OF INCOMING TELEPHONE CALLS AND DOOR KNOCK OR BELL, SUCH DEVICES SHALL NOT BE CONNECTED TO AUXILIARY VISUAL ALARM SIGNAL APPLIANCES.
7. HW HEATER TEMPERATURE PRESSURE RELIEF PIPE SHALL RUN TO THE OUTSIDE OF BUILDING PER UMC SECTION L04L.
8. PROVIDE METAL OVERFLOW COLLECTION PAN.

REVISION DATE	KEY
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DRAWING DATE:
3-15-22



JAMES "JIM" VOCELA
ARCHITECT
19020 KAREN DR.
DANFORTH, CA 94607
PHONE: 831-663-6644
FAX: 831-663-6640
LICENSE NUMBER: C-19956

Ability

DESIGN • CONSTRUCTION • INTERIORS

VENTURES INC.

PROJECT
New tenant improvement for:
Five Star Catering
10 Hanger Way
Watsonville, CA
A.P. # 015-111-42 PHONE: (831)-251-1563

SHEET TITLE

General Notes
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SCALE AS NOTED

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OF 10 SHEETS

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GENERAL NOTES AND SPECIFICATIONS

--OCCUPANCY CLASSIFICATION IS B, BUILDING CONSTRUCTION TYPE IS V-B

--DO NOT SCALE THESE DRAWINGS. USE THE WRITTEN DIMENSIONS AND VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

--THESE DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND ARE NOT TO BE USED IN PART OR IN WHOLE FOR ANY WORK OTHER THAN THE LOCATION SHOWN HEREIN.

--THE GENERAL CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, DIMENSIONS, AND INFORMATION IN THE DRAWINGS BEFORE STARTING WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR STARTING THE WORK.

--THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR ANY SAFETY PRECAUTIONS OR PROGRAMS IN CONNECTION WITH THE WORK.

--THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE PERFORMANCE OF PRODUCTS OR MATERIALS NOT SPECIFIED IN THESE DRAWINGS.

--CONTRACTOR SHALL VERIFY ALL PROPERTY LINES AND EASEMENTS (PUBLIC OR PRIVATE) INCLUDING BUT NOT LIMITED TO; SEWER, WATER, ELECTRICAL, TELEPHONE, CABLE T.V., AND GAS PRIOR TO STARTING CONSTRUCTION.

--CONTRACTOR TO VERIFY ALL EXISTING DIMENSIONS, FLOOR ELEVATIONS, FRAMING SIZES AND OTHER CONDITIONS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH AFFECT THE DESIGN OR INTENT AS SHOWN IN THESE DRAWINGS.

--VERIFY ALL UTILITY DATA AND LOCATIONS PRIOR TO ANY WORK. ONSITE UTILITIES SHALL BE COORDINATED WITH THE APPROPRIATE AGENCY OR UTILITY COMPANY.

--ALL IRREGULAR STRUCTURAL CONDITIONS SHALL BE REVIEWED AND APPROVED BY A CERTIFIED ENGINEER.

--THE CONTRACTOR SHALL SCHEDULE AND COORDINATE ALL INSPECTIONS AND AT THE END OF THE WORK PROVIDE THE OWNER WITH ALL THE ORIGINAL SIGNED DOCUMENTS FROM THE INSPECTING ENTITY.

DEMOLITION NOTES

--VERIFY WITH OWNER ABOUT ANY MATERIALS, EQUIPMENT, ETC. WHICH IS TO BE SALVAGED AND KEPT BY OWNER.

--ALL DISCARDED MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY CONTRACTOR.

--THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE AGAINST DAMAGE TO EXISTING WORK TO REMAIN IN PLACE OR TO BE REUSED.

--THE CONTRACTOR SHALL CAREFULLY CONSTRUCT AND MAINTAIN SHORING, BRACING, AND SUPPORTS AS REQUIRED.

--THE CONTRACTOR SHALL INSURE THAT STRUCTURAL SUPPORTS ARE NOT OVERLOADED AND BE RESPONSIBLE FOR INCREASING THE SIZE OF STRUCTURAL MEMBERS OR ADDING NEW MEMBERS AS MAY BE REQUIRED AS A RESULT OF ANY CUTTING, REMOVAL, OR DEMOLITION WORK PERFORMED UNDER ANY PART OF THIS CONTRACT.

CONSTRUCTION NOTES

--No WOOD TO BE CLOSER THAN 6" TO EARTH.

--NAILING AS PER C.B.C TABLE 2304.10.1

--ALL HEADERS OVER OPENINGS IN BEARING WALLS SHALL CONSIST OF A SOLID MEMBER THE WIDTH OF THE STUDS BY THE MINIMUM NOMINAL DEPTH AS GIVEN BELOW UNLESS OTHERWISE NOTED.

MAXIMUM SPAN	MINIMUM NOMINAL DEPTH
4'-0"	4"
6'-0"	6"
8'-0"	8"
10'-0"	10"
12'-0"	12"

--GLASS AND GLAZING TO COMPLY WITH C.B.C. CHAPTER 24. GLASS AND GLAZING SUBJECT TO HUMAN IMPACT SHALL BE TEMPERED AND SHALL COMPLY WITH C.B.C. SECTION 2406.

--TOILETS SHALL HAVE A MAXIMUM OF 1.28 GALLONS PER FLUSH. ALL LAV. AND SINK FAUCETS SHALL NOT EXCEED .5 GALLONS PER MINUTE, AND ALL HOT WATER FAUCETS THAT HAVE MORE THAN TEN FEET OF PIPE BETWEEN THE FAUCET AND THE HOT WATER HEATER SERVING SUCH FAUCET SHALL BE EQUIPPED WITH A HOT WATER RECIRCULATING SYSTEM. WATER PRESSURE IN BUILDING SHALL BE LIMITED TO 60 PSI OR LESS.

METALS

--BOLTS SHALL CONFORM TO ASTM A307. IRON WASHERS SHALL BE USED ON ALL BOLTS WHERE NUTS ARE IN CONTACT WITH WOOD. BOLT HOLES IN WOOD SHALL BE 1/16" OVERSIZE, MAXIMUM. ALL NUTS SHALL BE TIGHTENED WHEN PLACED AND RETIGHTENED AT COMPLETION OF JOB OR IMMEDIATELY BEFORE FINISHING CONSTRUCTION WORK WHICH WILL MAKE THEM INACCESSIBLE.

--FRAMING HARDWARE SHALL BE "SIMPSON Co.", "STRONG TIE" CONNECTORS, AS INDICATED ON THE DRAWINGS, OR EQUAL.

--ALL BOLTS, NUTS, WASHERS, NAILS, AND FRAMING HARDWARE SHALL BE GALVANIZED WHERE EXPOSED TO WEATHER.

--CONCRETE ANCHORS WHERE SPECIFIED OR REQUIRED SHALL BE "PHILLIPS" "REDHEAD" OR APPROVED EQUAL.

--POWDER DRIVEN ANCHORS SHALL BE "HILTI" OR EQUAL.

CARPENTRY

--WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED DOUGLAS FIR CONFORMING TO C.B.C. LATEST EDITION.

--ALL WOOD IN CONTACT WITH EARTH SHALL BE PRESSURE TREATED.

--ALL JOISTS, BEAMS, POSTS, PLATES, AND LEDGERS SHALL BE D.F. #2 U.O.N. BEAMS AND POSTS 6X OR LARGER SHALL BE D.F. #1 U.O.N. ALL STUDS, BLOCKING, AND 4 x 4 POSTS SHALL BE D.F. STANDARD OR BETTER ALL SILLS SHALL BE PRESSURE TREATED D.F. #2 OR BETTER.

--ALL NAILING TO BE IN COMPLIANCE WITH C.B.C. TABLE 2304.10.1

--HORIZONTAL BLOCKING SHALL BE INSTALLED IN ALL WALLS AND PARTITIONS WHERE STUDS ARE GREATER THAN TEN FEET IN HEIGHT. STUD WALLS SUPPORTING BEAMS SHALL HAVE POSTS UNDER BEARINGS U.O.N.

--THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS MUST BE ONSITE DURING INSPECTIONS.

REVISION
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PLAN CHECK
6-11-22

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DRAWING DATE:
3-15-22

USE THESE NOTES IN CONJUNCTION WITH THE DRAWINGS. THESE NOTES ARE NOT TO BE USED IN ISOLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

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LICENSE NUMBER: C-19956

Ability
VENDOR RES INC.

SHEET TITLE

General Notes
Notes
Details
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PROJECT

New tenant improvement for:
Five Star Catering
10 Hanger Way
Watsonville, CA
A.P. # 015-111-42 PHONE: (831)-251-1563

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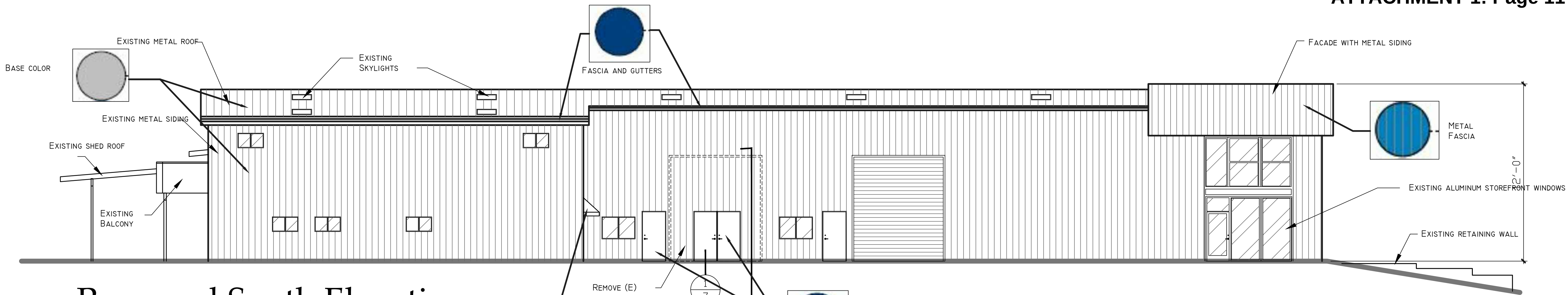
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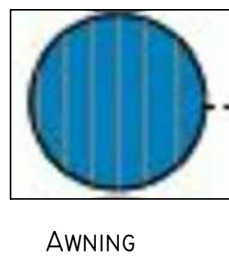
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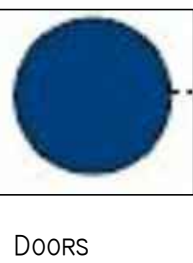
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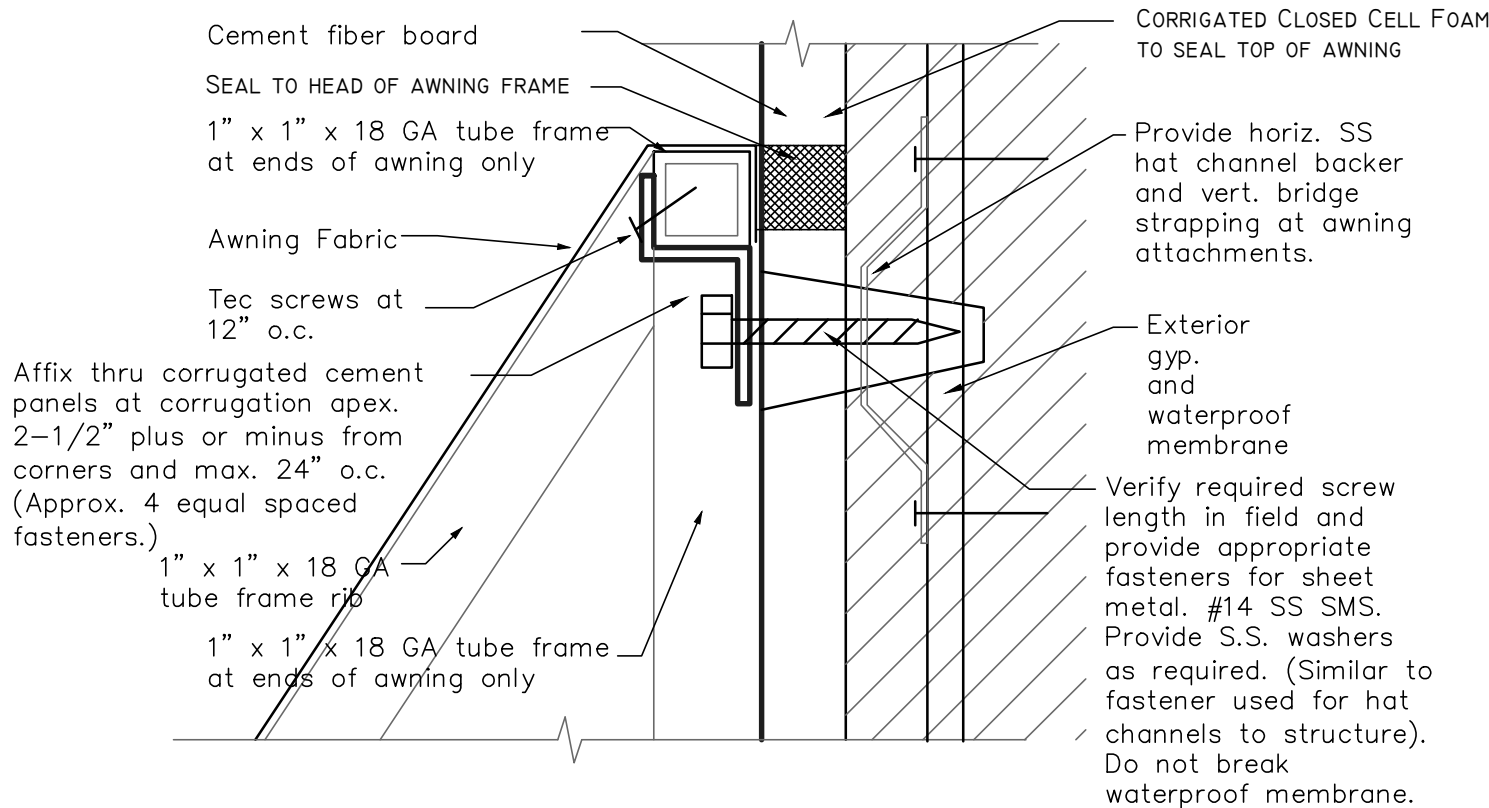
Proposed South Elevation



AWNING



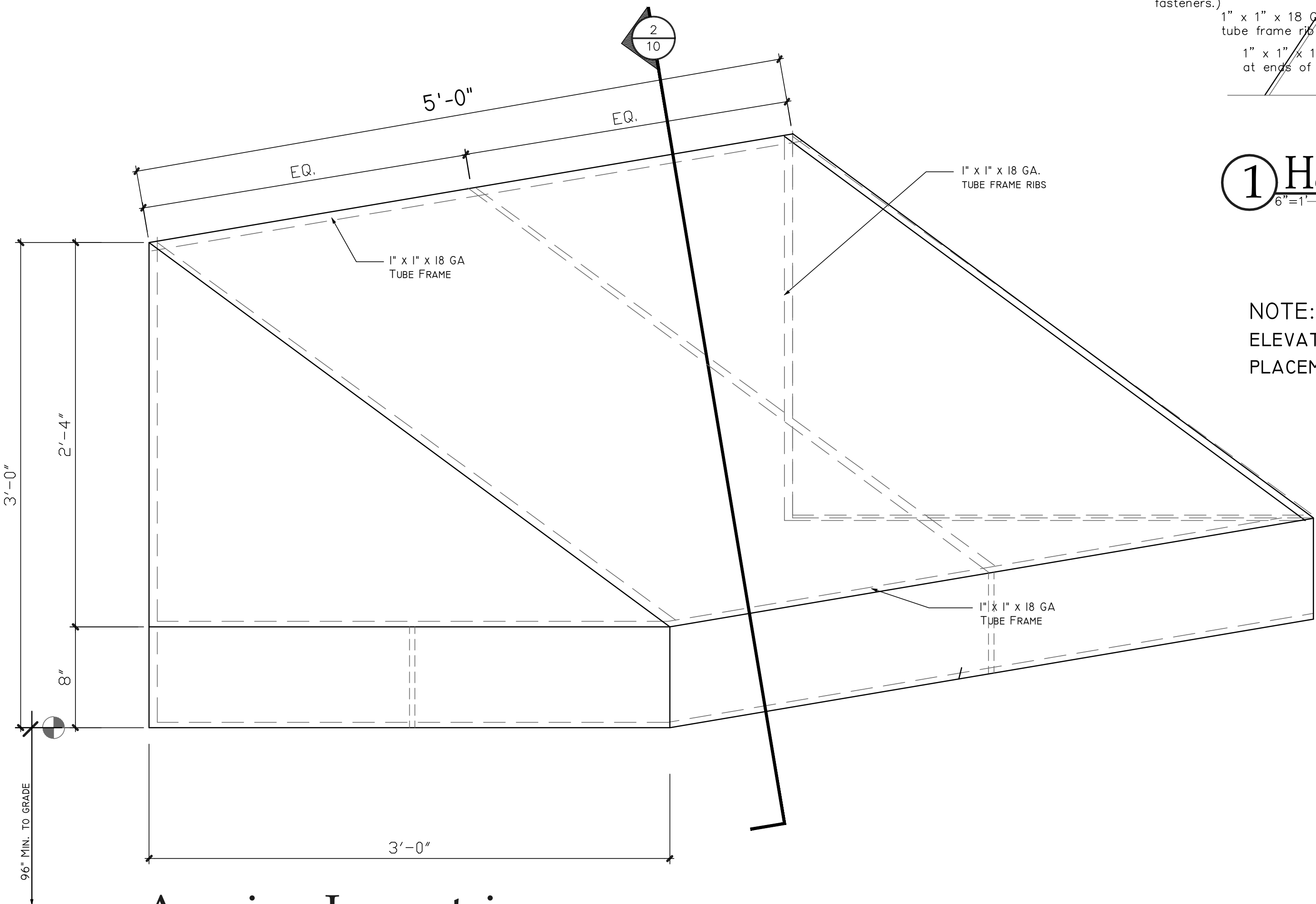
DOORS



1 Hanging Clip

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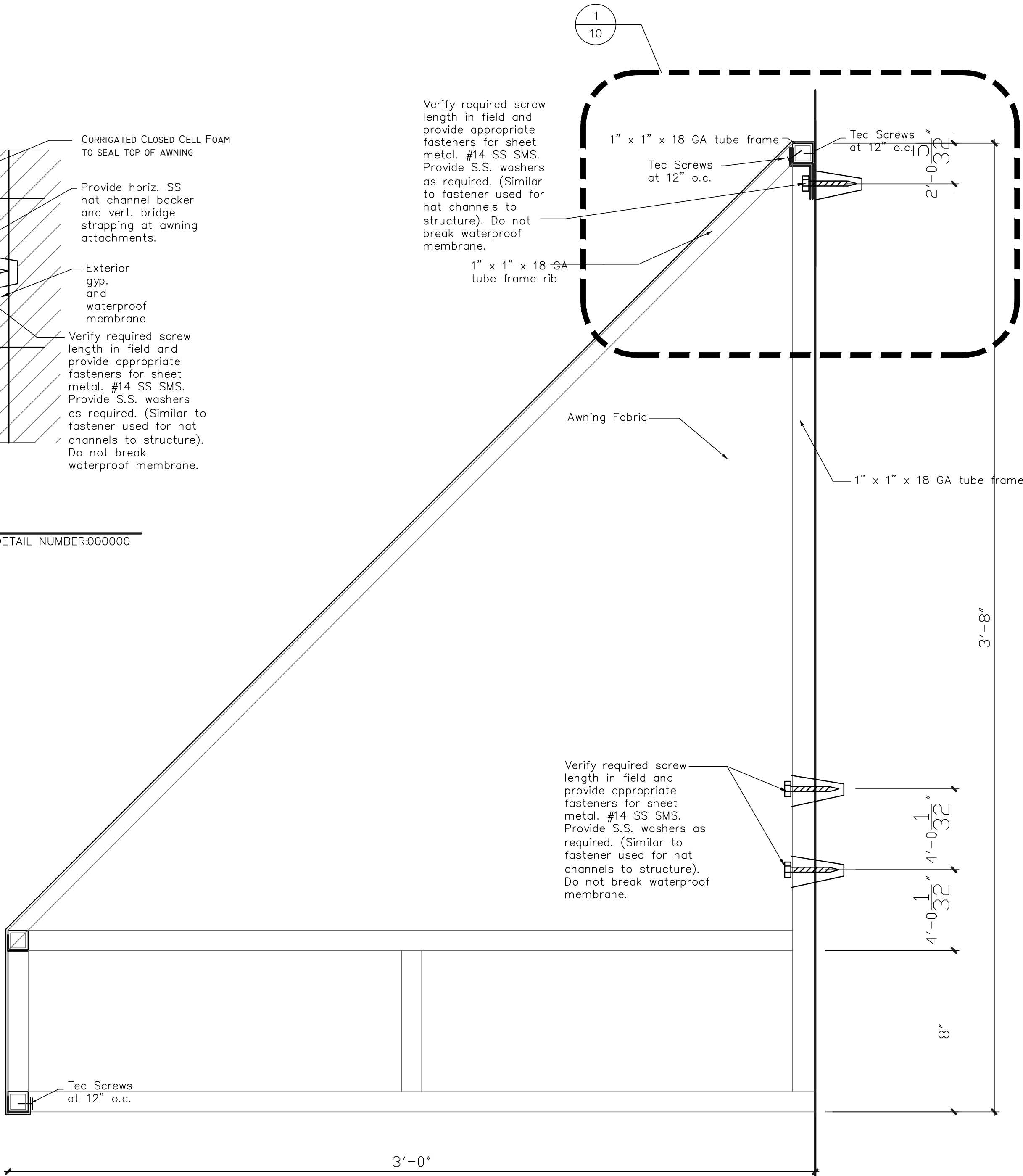
NOTE: SEE ARCHITECTURAL ELEVATIONS FOR EXACT AWNING PLACEMENT



Awning Isometric

N.T.S.

0"



2 Section Thru Awning

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REVISION	
DATE	KEY
DRAWING DATE: 3-15-22	
THESE DRAWINGS ARE PREPARED BY JAMES "JM" VOCELKA ARCHITECT, INC. FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. THEY ARE NOT TO BE USED FOR ANY OTHER PROJECT OR SITE WITHOUT THE WRITTEN CONSENT OF JAMES "JM" VOCELKA ARCHITECT, INC. ANY REUSE OR MODIFICATION OF THESE DRAWINGS WITHOUT THE WRITTEN CONSENT OF JAMES "JM" VOCELKA ARCHITECT, INC. IS PROHIBITED.	
JAMES "JM" VOCELKA ARCHITECT 19020 KAREN DR. DUBLIN, CA 94568 PHONE: 831-663-6644 FAX: 831-663-6640 LICENSE NUMBER: C-19956	
SHEET TITLE Awning Notes Details Colors	
PROJECT New tenant improvement for: Five Star Catering 10 Hanger Way Watsonville, CA A.P. # 015-111-42	PHONE: (831)-251-1563
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OF 10 SHEETS	

GENERAL STRUCTURAL NOTES

1.0 GOVERNING BUILDING CODE

- a. 2019 CALIFORNIA BUILDING CODE

2.0 DESIGN LOADS

- A. LIVE LOADS:
- a. ROOF: 20 PSF
- b. FLOOR: 40 PSF
- B. WIND:
- a. ULTIMATE WIND SPEED: 92 MPH - EXPOSURE 'C' (3 SECOND GUST)
- b. RISK CATEGORY: II
- c. INTERNAL PRESSURE: +0.18, -0.18 (ENCLOSED BUILDING)
- C. SEISMIC:
- a. RISK CATEGORY: II
- b. SEISMIC IMPORTANCE FACTOR: 1.0
- c. S_s : 0.949g
- d. S_{D1} : 2.476g
- e. F_a : 1.2
- f. SITE CLASS: D
- g. S_{D2} : 1.981g
- h. SEISMIC DESIGN CATEGORY: E
- i. SFRS: NONSTRUCTURAL COMPONENTS PER ASCE 7 CHAPTER 13
- j. F_p : 0.95W
- k. a_p : 1.0
- l. R_p : 2.5

3.0 GENERAL

- A. THESE STRUCTURAL DOCUMENTS ILLUSTRATE THE COMPLETED STRUCTURE WITH ELEMENTS IN THEIR FINAL POSITIONS, PROPERLY BRACED AND SUPPORTED. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE BRACING AND SHORING AS REQUIRED DURING CONSTRUCTION TO WITHSTAND ALL LOADS, STOCKPILES OF MATERIALS AND EQUIPMENT. SUCH BRACING SHALL BE LEFT IN PLACE UNTIL THE CONSTRUCTION OF THE STRUCTURE IS COMPLETED.
- B. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF PEOPLE AND PROPERTY EITHER ON OR ADJACENT TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE OR LOSS DURING CONSTRUCTION.
- C. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH WORK. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- D. WHERE PERIODIC OR CONTINUOUS SPECIAL INSPECTIONS AND/OR TESTING ARE REQUIRED BY THESE DOCUMENTS, THE GOVERNING BUILDING CODE OR BUILDING OFFICIAL, THE E.O.R. OR AN INDEPENDENT INSPECTION AGENCY SHALL BE RETAINED BY THE OWNER TO PERFORM REQUIRED SPECIAL INSPECTIONS AND/OR TESTING.
- E. THE CONTRACTOR SHALL INFORM THE ENGINEER CLEARLY IN WRITING AND PROVIDE SUPPLEMENTAL DOCUMENTATION FOR THE REVIEW OF ANY SUBSTITUTIONS, CHANGES, OR DEVIATIONS OF THE CONTRACT DOCUMENTS.
- F. THESE PLANS HAVE BEEN ENGINEERED FOR CONSTRUCTION AT ONE SPECIFIC BUILDING SITE.
- G. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE. PLANS AND DETAILS ARE TO SCALE UNLESS NOTED OTHERWISE. WHILE DRAWING SCALE IS BELIEVED TO BE RELIABLE, THE ACCURACY AND COMPLETENESS IS NOT GUARANTEED. CONSULT THE ARCHITECT OR ENGINEER FOR DIMENSION VERIFICATION. NOTIFY ARCHITECT OR ENGINEER OF ANY DISCREPANCIES IN DIMENSIONS BETWEEN THE ARCHITECTURAL AND STRUCTURAL DOCUMENTS BEFORE PROCEEDING WITH THE WORK.
- H. NO STRUCTURAL MEMBERS SHALL BE CUT, NOTCHED OR PENETRATED UNLESS ALLOWED BY MANUFACTURER, SPECIFICALLY SHOWN ON THESE DOCUMENTS OR APPROVED BY THE E.O.R.
- I. SECTIONS OR DETAILS SHOWN OR NOTED APPLY TO SIMILAR CONDITIONS ELSEWHERE NOT SPECIFICALLY SHOWN OR NOTED.

4.0 STRUCTURAL STEEL

- A. STRUCTURAL STEEL SHALL BE OF THE GRADES NOTED BELOW:
- a. WIDE FLANGE SHAPES, CHANNELS AND TEES: ASTM A992 (FY=50 KSI).
- b. OTHER ROLLED SHAPES (ANGLES, PLATES AND BARS): ASTM A36 (FY=36 KSI).
- c. STEEL RODS AND MISCELLANEOUS: ASTM A36 (FY=36KSI)
- d. STEEL PIPE: ASTM A53, GRADE B (FY=35 KSI).
- e. STRUCTURAL TUBE SECTIONS (TS AND HSS): ASTM A500, GR. B (FY=46 KSI).
- B. STRUCTURAL STEEL DESIGN IS BASED ON THE LATEST EDITION OF THE AISC 360.
- C. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE LATEST EDITION OF THE AISC CODE OF STANDARD PRACTICE.
- D. BOLTS:
- a. ASTM A325 FOR ALL STEEL-TO-STEEL CONNECTIONS.
- b. ASTM A307 FOR ANCHOR BOLTS FOR TIMBER CONNECTIONS AND MISC.
- E. WELD MATERIAL: E70XX ELECTRODES, WELDING MUST ONLY BE PERFORMED BY AWS CERTIFIED WELDERS.
- F. NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AFTER ONE DAY AND 7000 PSI AFTER 28 DAYS. IT SHALL BE NON-CORROSIVE, NON-METALLIC AND NON-STAINING CONTAINING SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AND WATER REDUCING AGENTS.
- G. ALL STRUCTURAL STEEL IS TO BE PRIMED PRIOR TO SHIPMENT AND TOUCHED-UP AFTER ERECTION.

5.0 COLD FORMED FRAMING

- A. METAL STUDS AND TRACKS ARE 18 GAGE TYPE XC STUDS AS SPECIFIED BY THE STEEL STUD MANUFACTURER'S ASSOCIATION, (SSMA), UNLESS SPECIFICALLY NOTED OTHERWISE STANDARD TRACK SHALL HAVE 1 1/4" LEGS. MATERIAL STRENGTHS SHALL BE AS FOLLOWS:
- a. 16 GAGE MEMBERS (AND HEAVIER): Fy = 50 ksi., E = 29,000 ksi.
- b. 18 GAGE MEMBERS (AND LIGHTER): Fy = 33 ksi., E = 29,000 ksi
- B. FRAMING MEMBERS SHALL HAVE THE MINIMUM PHYSICAL PROPERTIES AS GIVEN BY THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA).
- C. FOLLOW ADDITIONAL RECOMMENDATIONS AND REQUIREMENTS GIVEN BY THE LATEST ADDITION OF THE AISI STANDARD - STANDARD FOR COLD-FORMED STEEL FRAMING AND THE STEEL STUD MANUFACTURER'S ASSOCIATION UNLESS NOTED OTHERWISE ON THESE DOCUMENTS.
- D. UNLESS SPECIFICALLY NOTED OTHERWISE, PROVIDE SAME GAGE TRACK AS STUD GAGE. SPACE STUDS NOT MORE THAN 16" o.c. STUDS SHALL BE PLUMBED, ALIGNED AND TIGHTLY NESTED IN BOTH UPPER AND LOWER TRACKS WITH SECURE ATTACHMENT TO THE FLANGES OF EA. TRACK. w/ (1) #10 SELF DRILLING SCREW PER STUD FLANGE)
- E. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR AS REQUIRED FOR AN ANGULAR FIT AGAINST ABUTTING MEMBERS.
- F. FASTEN STUD TRACK TO CONCRETE SURFACE BELOW w/ POWDER ACTUATED FASTENERS, (PAF's) @ 12" o.c. STAGGERED, TYPICAL UNLESS NOTED OTHERWISE.
- G. DO NOT SPLICE STUDS UNLESS SPECIFICALLY DETAILED, ABUTTING LENGTHS OF TRACK SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT, BUTT-WELDED OR SPLICED.
- H. LOCATE 16 GA. 1 1/2" COLD ROLLED CHANNEL BRIDGING AT MID-SPAN OF STUDS LESS THAN OR EQUAL TO 10'-0" IN LENGTH AND AT 4'-0" o.c. MAXIMUM AT OTHER LENGTHS OF STUDS OR RAFTERS. WELD BRIDGING TO EA. STUD w/ 1" OF 1/8" FILLET WELD, MIN.
- I. HEAD AND SILL TO BE UNPUNCHED TRACK SAME GAGE AS STUDS, UNLESS NOTED OTHERWISE.
- J. FASTENERS:
- a. SCREWS: #10 "TRAXX" SELF DRILLING FASTENERS AS MANUFACTURED BY THE ITW BUILDEX COMPANY OR APPROVED EQUAL. MATCH REQUIRED DRILL POINT TYPE WITH MATERIAL THICKNESS. SPACING AND EDGE DISTANCE SHALL NOT BE LESS THAN 0.570". PROVIDE PAN HEAD SCREWS AT LOCATIONS TO RECEIVE SHEATHING.
- b. POWDER ACTUATED FASTENERS INTO CONCRETE: RAWL 0.143" SMOOTH SHANK, 0.300" HEAD DRIVE PIN, 1 1/4" EMBEDMENT, OR APPROVED EQUAL. SPACING & EDGE DISTANCE SHALL NOT BE LESS THAN 3".

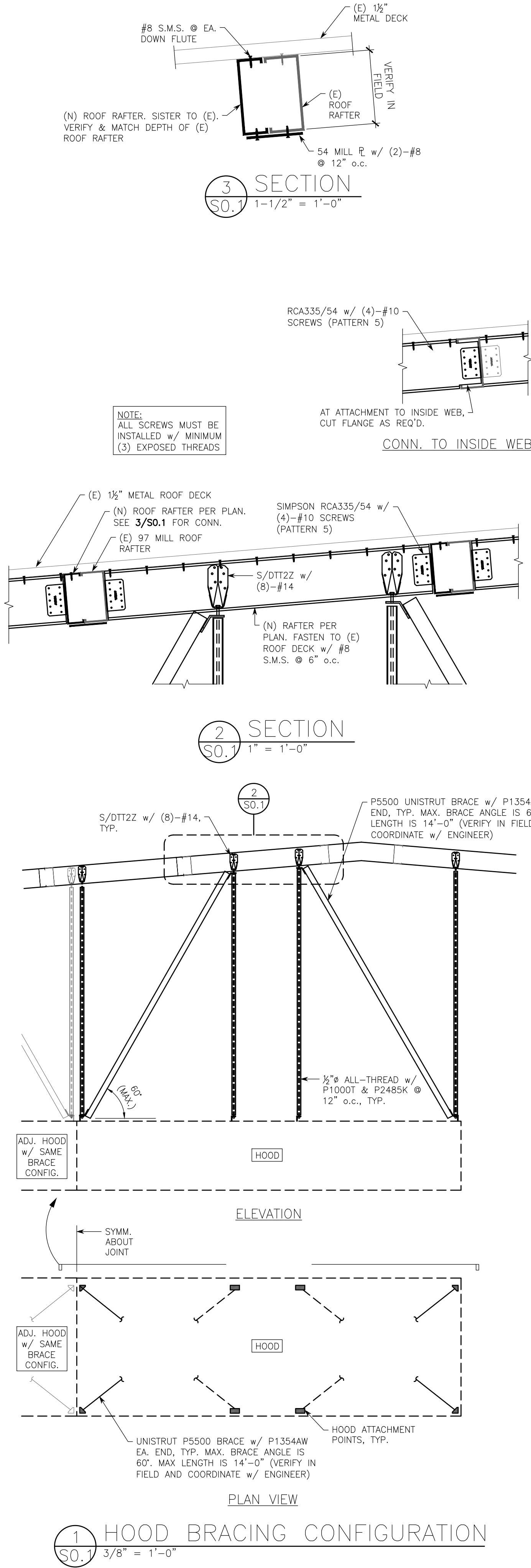
6.0 SHOP SUBMITTALS

- A. THE FOLLOWING SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION:

7.0 REQUIRED SPECIAL INSPECTIONS

- A. THE OWNER SHALL EMPLOY SPECIAL INSPECTORS FOR THE FOLLOWING TYPES OF CONSTRUCTION PER CALIFORNIA BUILDING CODE SECTION 1701. THE SPECIAL INSPECTORS SHALL SUBMIT A SIGNED FINAL REPORT TO THE BUILDING DEPARTMENT.

ATTACHMENT 1: Page 12 of 37

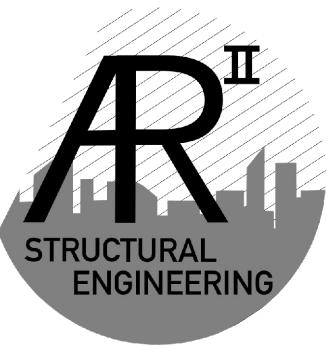


A.B.	ANCHOR BOLT	HDR.	HEADER
ALT.	ALTERNATIVE	H.S.	HIGH STRENGTH
ARCH.	ARCHITECTURAL	INT.	INTERIOR
B.LDG.	BUILDING	LOC.	LOCATION
BM.	BEAM	M.B.	MACHINE BOLT
B.N.	BOUNDARY NAILING (DIAPH.)	MAX.	MAXIMUM
B.O.F.	BOTTOM OF FOOTING	MF	MOMENT FRAME
B.O.W.	BOTTOM OF WALL	MIN.	MINIMUM
C.	CENTERLINE	MISC.	MISCELLANEOUS
C.E.	CANTILEVER END	N.T.S.	NOT TO SCALE
CLG.	CEILING	O.C.	ON CENTER
CLR.	CLEAR	O.H.	OPPOSITE HAND
COND.	CONDITION	O.F.	OUTSIDE FACE
CONT.	CONTINUOUS	P.T.	PRESSURE TREATED
DBL.	DOUBLE	PL.	PLATE
DEC.	DEGREES	REF.	REFERENCE
DET.	DETAIL	REINF.	REINFORCEMENT
Ø	DIAMETER	REQ'D	REQUIRED
DIAG.	DIAGONAL	S.A.D.	SEE ARCH. DRAWINGS
DIM.	DIMENSION	SEC.	SECTION
EA.	EACH	SIM.	SIMILAR
DEC.	EACH FACE	S.O.G.	SLAB ON GRADE
EMBED.	EMBEDMENT	SPECS.	SPECIFICATIONS
E.N.	EDGE NAILING (SHEARWALL)	SQ.	SQUARE
E.S.	EACH SIDE	STD.	STANDARD
E.W.	EACH WAY	STR.	STRENGTH
EXT.	EXTERIOR	SYM.	SYMMETRICAL
FDN.	FOUNDATION	T&B	TOP AND BOTTOM
FTG.	FOOTING	T.O.W.	TOP OF WALL
F.F.	FINISH FLOOR	T.O.S.	TOP OF STEEL
F.G.	FINISH GRADE	TYP.	TYPICAL
FLR.	FLOOR	U.N.O.	UNLESS NOTED OTHERWISE
FTG.	FOOTING	VERT.	VERTICAL
GLAV.	GALVANIZED	V.I.F.	VERIFY IN FIELD
H.D.	HOLD DOWN	w/	WITH

ABBREVIATIONS

STUD DESIGNATION

HOOD BRACING CONFIGURATION



P.O. Box 22061
Carmel, CA 93922
www.ar2struc.com
831.261.7416

ISSUE NO.	DATE	DESCRIPTION
1	6.9.22	FOR PERMIT

ROOF FRAMING PLAN

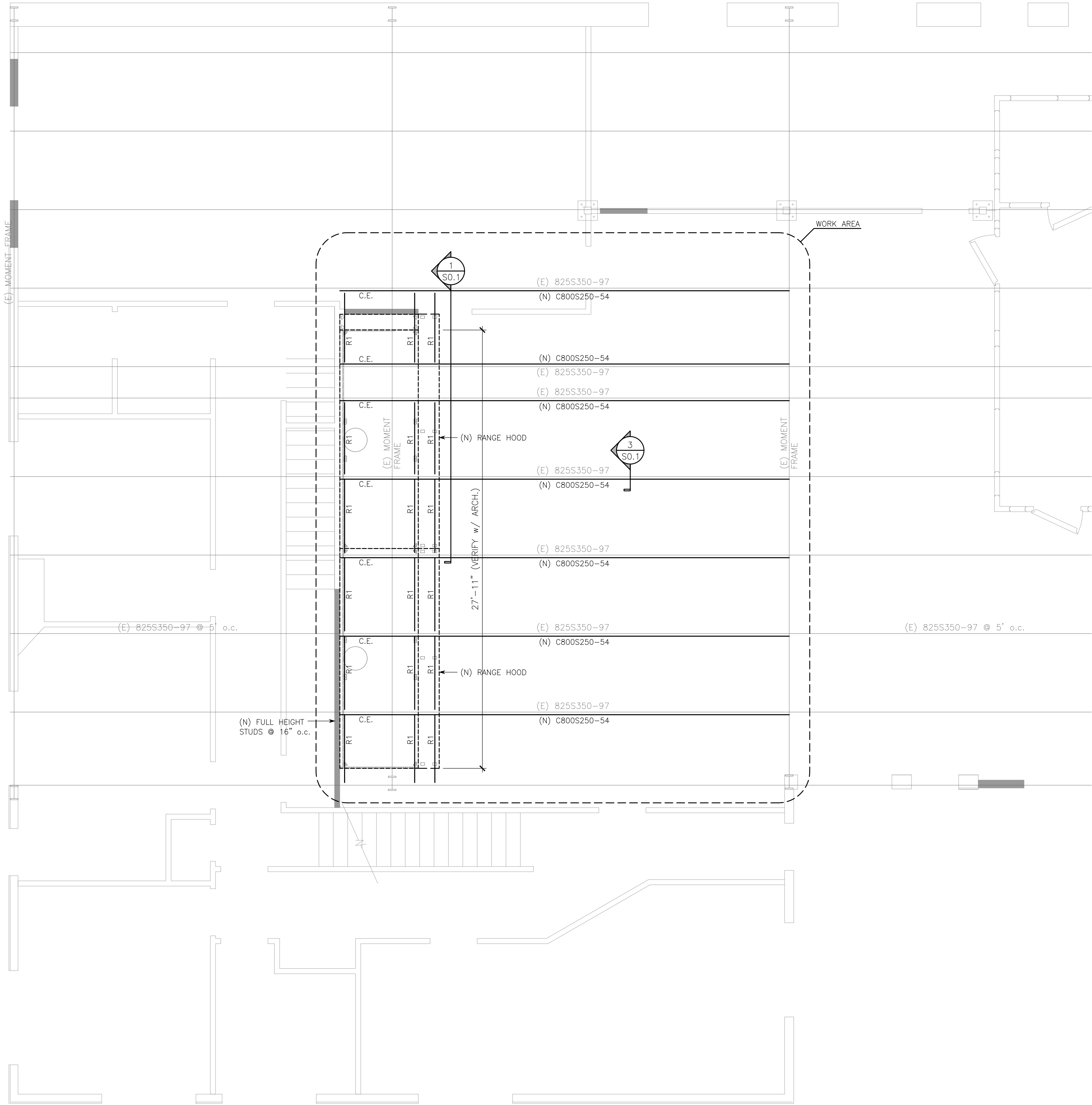
scale: 1/4" = 1'-0"

PLAN NOTES:

- SEE SHEET S0.1 FOR TYPICAL DETAILS AND GENERAL NOTES
- R1 INDICATES C800S250-54
- CONFIRM ALL DIMENSIONS AND ELEVATIONS WITH ARCH. PLANS
- PLANS SHOW FRAMING ON WALLS BELOW
- MECHANICAL, ELECTRICAL AND SHAFT OPENINGS PER DRAWINGS OTHER THAN STRUCTURAL
- FOR DRAINAGE DETAILS, WATERPROOFING, UTILITIES, ETC., SEE DRAWINGS OTHER THAN STRUCTURAL

NOTES:

- CONTRACTOR SHALL VERIFY ALL ASSUMED FRAMING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WORK
- IN ADDITION TO THE REQUIREMENTS SET FORTH IN THESE DRAWINGS, CONTRACTOR SHALL INSTALL PER ALL MANUFACTURER'S RECOMMENDATIONS.



Roof Framing Plan

NEW TENANT IMPROVEMENT FOR:
FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA



PROJECT #:
0523

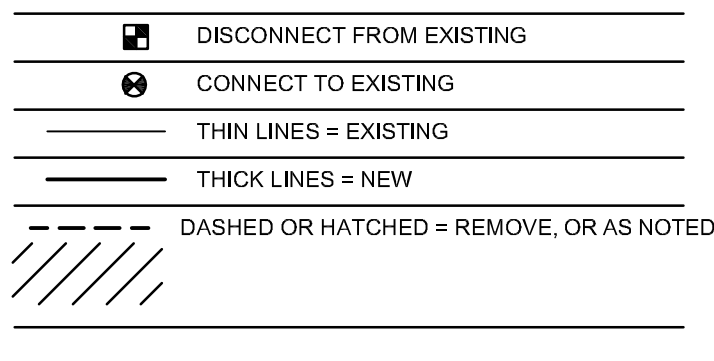
S1.0

SHEET 2 OF 2

MECHANICAL SPECIFICATIONS

1. Fire Suppression and Fire Alarm designs shall be by design-build-PE, or NICET 3 licensed technicians. Contractor shall submit to Building Department as DEFERRED SUBMITTALS. Any related information shown on the MEP plans is for general guidance only.
2. Controls, security, data, telecom, audio-visual, WFI, access control, etc. shall be by design-build-PE. Same gas carrier pipe, but add: PVC or epoxy-bonded, UPC Listed, Schedule 40 steel wrapped and sealed with PVC outdoor-listed pipe protection tape at joints and wherever coating is damaged. Min. 18" cover.
3. These notes accompany all other specification sections, manuals, and notes across all divisions. Subcontractors are bound with the general contractor to all parts of the construction contract. See specifications, plans and other divisions for additional information required for coordination. If a conflict is discovered, submit a request for interpretation.
4. These plans and their referenced specifications function together as engineering design intent and depend upon all other parts of the design documents from all other parties (architecture, structure, civil, fire protection, data, etc.). These plans and specifications must therefore be used in whole, and in conjunction with all other plans and specifications. No sheet, page or part may be used individually.
5. Sugarpine Engineering shall have no responsibility for deviations from these plans and specifications, unless such deviations are authorized in advance, in writing, by Sugarpine Engineering. If deviations are made without authorization, then the party who authorized or made the deviations assumes all responsibility for the deviations. In the case of a Contractor making deviations, then that contractor shall be the Designer of Record and in responsible charge of those deviations, including for all effects, costs, or delays related to them.
6. This project is a remodel or renovation of an existing building. The mechanical plans indicate existing items to the extent that information and prior plans were available. Verify all field conditions and notify engineer of any necessary deviations or issues.
7. Contractor shall include a 15% cost contingency for unforeseen conditions for each MEP trade (fire, plumbing, HVAC, controls, lighting, power, data, etc.).
8. Coordinate with general (prime) contractor (GC) for what items are to be provided and connected by which subcontractor.
9. Do not scale mechanical drawings. Verify and coordinate light fixtures, conduits, framing, structure, furnishings, etc., in field and across other divisions prior to procurement or commencement of work. Architectural and structural drawings shall govern all dimensions.
10. All contractors shall be licensed and experienced with the systems, performance levels, and construction types indicated in the plans and specifications prior to bidding.
11. All Contractors and Subcontractors shall be thoroughly knowledgeable in their part of the construction and shall perform in a responsible manner with customary construction sequence, shall recognize the priority of the construction documents, and shall notify the general contractor in writing of potential problems when the construction documents are unclear or inconsistent.
12. Subcontractors shall be responsible to notify the prime contractor of discrepancies or conflicts in the construction documents or as-built conditions discovered during bidding and/or prior to performing the work.
13. Items not indicated on the plans or specifications, including but not limited to some designs and details for fire suppression, plumbing, HVAC, hose bibbs, drains, bracing, hangers, attachments, controls, junctions, panels, and other items necessary for the project, shall be designed and provided by the licensed contractors installing their own work per State laws.
14. All equipment shall meet or exceed the 2019 Title 24 Part 6 Prescriptive and Mandatory efficiencies and requirements. All other portions of the work shall be designed and installed to comply with all the parts of the 2019 Title 24 code series.
15. All products shall be selected and capable of performance at project altitude: 6,000'.
16. All products shall be provided, braced and installed to comply with CBC Chapter 16 seismic requirements.
17. Sugarpine Engineering's designs, specifications, observations, or by any other means, guarantee the prevention, reduction or elimination of microorganisms, legionella, chemicals, particles, molecules or debris (collectively substances) in air, water or other building systems, or control potential risk factors for human health. Additionally, SPE cannot guarantee security of the project, including but not limited to entry, forced entry, filtration, air quality, equipment reliability, frost protection, or other means of protection, exploit or implied.
18. Examination of bidding documents.
- A. GC shall make the entire set of bid documents available to every subcontractor and vendor during the bidding period. Every subcontractor shall examine the bidding documents carefully, and not later than seven (7) days prior to bid submission, GC shall make written request to the owner for interpretation or correction of any discrepancies, ambiguities, inconsistencies, or errors thereon which he may discover. The owner or architect will issue any interpretation or correction as an addendum. Only a written interpretation or correction by addendum shall be binding. No bidder shall rely upon interpretations or corrections given by any other method. If discrepancies, ambiguities, inconsistencies, or errors are not presented by the contractors in writing, contractor shall include in his bid, labor materials and methods of construction to provide the highest cost option in question. After award of contract, no allowance or extra compensation will be made on behalf of the contractor due to his failure to make the written requests described above.
- B. Failure to request clarification during the bid period of any inadequacy, omission, or conflict will not relieve the contractor of his responsibilities. The signing of the contract implicitly denotes that the contractor has a thorough comprehension of the full intent and scope of the construction contract drawings and specifications.
19. Provide base bid with basis-of-design or listed equivalent products. Make and model named on any schedule or note is the basis-of-design. Other manufacturers listed (if any) are considered equivalents subject to matching the features and specifications of the basis-of-design.
20. Manufacturers not listed by name are considered substitutions and must be submitted with a "substitution request" highlighting variances from the basis-of-design and indicating the reasons. Substitution design fees to review and/or accommodate substitutions.
21. Substitutions will be considered only after bid award and will be considered only if there is a proposed schedule or cost savings. Contractor assumes all responsibility for delays and costs incurred due to review and/or accommodation of substitutions.
22. Contractor is responsible for all coordination of equivalents and substitutions, in addition to review and/or redesign fees. Where contract documents permit selection from several equivalents, or where substitutions become authorized, coordinate clearance and interface requirements with all divisions.
- A. Provide necessary additional items so that selected or substituted item operates equivalent to the basis-of-design and properly fits in the space allocated for the basis-of-design.
- B. Provide all features which are standard on the basis-of-design plus any specified options.
- C. Be responsible for assuring that piping, conduit, duct, flue, and other service locations for equivalents or substitutions do not cause access, service, or operational difficulties any greater that would be encountered with the basis-of-design.
23. Work shall be performed in a workmanlike manner to the satisfaction of the architect, owner, and engineer.
24. Materials, minor details, and/or equipment not scheduled on plans shall be identified by the subcontractor with sufficient time to allow selection, purchase, and delivery to maintain construction schedule.
25. All work of all trades shall meet or exceed the minimum materials, means and methods requirements of the applicable Building Codes, Mechanical Code, Plumbing Code, Fire Code, Fuel Gas Code, National Electrical Code, and other applicable codes and standards.
26. Manufacturer's installation recommendations. Perform diligent review of these requirements prior to bidding. If a conflict between these publications and/or the construction documents exists, the most expensive requirement shall be included in base bid, and a written request for clarification shall be submitted.
27. Pay for and secure all required permits and inspections. Coordinate with GC. Provide all documentation to owner at project completion, prior to final pay application.
28. All materials and/or equipment, unless noted otherwise on plans, shall be new and shall be handled and installed per manufacturer's specifications and recommendations.
29. Temporary heat/cold shall be furnished by the general contractor. Use of the permanent heating/cooling systems will not be allowed during construction.
30. See architectural reflected ceiling plans for all ceiling dimensions, device locations, ceiling types, penetrations, light fixtures, beams, and air device locations. Do not scale mechanical drawings. Verify and coordinate light fixtures, conduits, framing, structure, furnishings, etc., in field and across other divisions prior to procurement or commencement of work. Architectural and structural drawings shall govern all dimensions.
31. See architectural floor plans for flooring materials, Provide drains and penetrations compatible with floor assemblies and railings. All drains must be installed so floors slope to drains. Coordinate finished floor and drain body elevations with GC prior to drain installation and floor finishing.
32. Coordinate and overlay civil, architectural, structural, mechanical, fire protection, electrical, landscaping, and drain installation design drawings prior to installation.
33. Provide equipment to match electrical voltages, phase, breakers, controls, and capacities scheduled and/or available. Any deviation is considered a substitution subject to fees and terms above.
34. Field-verify exact locations of existing and new aboveground and underground utilities, piping, and roadway systems prior to trenching. Notify engineer immediately upon discovery of any deviation from the plans.
35. Provide necessary trenching, backfill, excavation, supports, saw cutting and patching, concrete/paving, etc., as required. Backfill trenches in 6" layers and to 90% compaction and patch to match grade.
36. Submittals:
- A. Number of copies: per Division 01, or 5 copies if not specified. Alternate: PDF.
- B. Submit all mechanical shop drawings and product data at one time. Submittals shall each be bound and indexed according to major system/type: dry HVAC, wet HVAC, plumbing, controls, fire protection, etc. Partial submittals will be rejected. Submittals shall include, but not be limited to: boilers, furnaces, pumps, fans, fixtures, insulation, diffusers, piping, valves, controls, and fire protection.
- C. Failure to submit, order, or release order for materials and/or equipment will not be accepted as a reason to substitute materials, equipment, or installation methods.
37. Submit record documents (as-built) to architect. Documents shall include all addenda, instructions, directives, approved change orders, alterations, re-views, etc.
38. Warranties:
- A. Guarantee the installation against defects in materials and workmanship. Labor warranty shall be for a period of one year, superseded by Division 01, if any. Equipment and material warranties shall be the full duration of each manufacturer's factory warranty. Provide all documentation to owner at project completion, prior to final pay application.
- B. All warranties shall commence on the day of owner's acceptance. Defects shall be promptly remedied without cost to the owner.
39. Field observations may be periodically conducted by SPE, for the sole purpose of reviewing progress and quality of work completed by the Contractor which falls within SPE's scope of design services. Observation is not intended to be an exhaustive check or a detailed inspection of the Contractor's work but rather to allow SPE to become generally familiar with work in progress and to determine, in general, if the work is proceeding in accordance with the Contract Documents. SPE assumes no responsibility for concealed work, construction means, methods, techniques, quality, sequences or procedures utilized by the Contractor, nor for the Contractor's safety precautions or programs, nor for acts or omissions of the Contractor, nor for the Contractor's failure to perform work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.
40. Systems shall be complete, operable, and ready for continuous operation prior to acceptance by the owner.
41. Offset piping, ductwork, etc., as necessary to accommodate structure, beams, columns and equipment. Record and submit all field changes.
42. Mount all operator controls (thermostats, dials, etc.) so top-of-box is 48" AFF in "accessible" areas, 54" AFF in other areas. Provide boxes for all devices, mounting to drywall not allowed. Coordinate location and tiepoint with wall finish. Avoid casework, moldings, trim, furniture, heat sources, sunlit and exterior walls. Notify engineer of any conflicts prior to beginning box rough-in.
43. Unless noted otherwise on plans, provide 4" high concrete equipment pads beneath floor mounted mechanical equipment, in addition to any base assemblies required or recommended by the manufacturer.
44. Fire stopping requirements. Penetrations through rated walls and floors shall be sealed with a material capable of preventing the passage of flames and hot gasses when subjected to the requirements of the test standard specific for fire stops ASTM-E-814. Acceptable materials include: Dow Corning RTV fire stop foam for bare pipe, metal conduit, and electrical cable; 3M fire 150 caulk for bare pipe, metal conduit, and building construction gaps; 3M CP-25 caulk and FS-195 intumescent strips for insulated pipes, plastic pipe or conduit, and electrical cable. Submit UL Listed application data for each type of penetration encountered. Select and apply all fire-stopping materials in strict accordance with the manufacturer's written instructions and UL listings.
45. Roof Penetrations:
- A. Ducts, piping, and conduits penetrating through roof shall have roof flashing compatible with the roofing system. See architectural drawings.
- B. In the absence of roof flashing for base bids: Provide sheet lead type welded flashing for plumbing vents in built-up roofs, sealed tall cone with EPDM boot for pipe and conduit in EPDM membrane roofs, and curved roof penetrations for all ducts. Installation shall be sealed with silicone or other engineered to be watertight.
- C. Provide min 20-gauge steel snow splitter for any roof penetration more than 3' from the roof peak. Provide engineered curb with cricket system for any roof penetration more than 6' from the roof peak.
46. Refer to food service and other drawings for exact locations and additional mechanical requirements. Provide duct temperature hot water, cold water, steam, ductwork, gas, power, interlocks, controls, etc., as required by food service equipment and other suppliers.
47. Refer to all other drawings across all divisions for exact locations and additional mechanical requirements. Provide duct temperature hot water, cold water, steam, ductwork, gas, power, interlocks, controls, etc., as required by other suppliers.
48. Make final connections to all kitchen equipment. Pipe indirect waste from equipment to floor drains and floor sinks. Refer to kitchen plans for exact location of rough-ins and indirect waste piping requirements.
49. Systems shall be tested for proper operation. Perform a minimum all code required tests or systems. If tests of work are defective, contractor shall make corrections necessary at no additional cost to owner.
50. Test-Air-Balance (TAB):
- A. Provide certified AABC TAB as part of base bid. Contractor shall be accredited by AABC. Balancing procedures shall be in accordance with AABC guidelines for proportional balancing. Submit TAB report on standard AABC forms or equivalent forms with same data.
- B. Initiate TAB only after systems are installed, operational, and controlled.
- C. Measure after initial adjustment, and after final adjustment.
- D. Measurements shall include all that apply: all motor ampere and voltage readings; motor and fan RPM; static pressure at inlet and outlet of all packaged equipment, fans, coils, and filters; plot tube measurement of supply, exhaust, return, and outside air main ducts, at minimum outside air (OA), and at 100% (economizer) OA; velocity distribution across the face of filters; air inlet and outlets; water flow at all inlet measurement stations; inlet and outlet pressure at pumps with flow calculated from the pump curve; water flow, temperature drop, and pressure drop at all coils.
- E. Adjust VFDs, ECMs, controls, valves, and programming as necessary. Fully coordinate with controls contractors.
- F. Provide belts and sheaves as required for drive changes to adjust fan speed.
- G. Adjust flows to within 10% of listed quantity. If any flow is more than 10% low, investigate cause, attempt to rectify and notify engineer of cause. Submit of balance report with less than required flows without explanation is cause for rejection.
51. Pipe materials:
- A. All pipes, fittings, and plumbing fixtures in contact with the potable water supply shall be listed as NSF-61 lead-free.
- B. Gas pipe with building above grade: Schedule 40 black steel pipe, 150 lb. malleable iron threaded fittings. Welded fitting on all pipes larger than 4".
52. Gas pipe below grade outdoors: SDR11 or higher, ASTM-D2513 PE gas pipe with heat-fusion or mechanical fittings listed for the application. Include 12-gauge tracer wire (HMWPE or HDPE jacket) listed for direct-burial, OR detectable marking tape listed and labeled for the application. THHN not allowed. Join all fittings per pipe mfr's instructions. Min. 18" cover.
53. Gas pipe below grade outdoors (short lengths): PVC or epoxy-bonded, UPC Listed, Schedule 40 steel listed for direct burial. Completely wrapped and sealed with PVC outdoor-listed pipe protection tape at joints and wherever coating is damaged. Min. 18" cover.
54. Gas pipe below grade indoors: Schedule 40 steel listed for direct burial. Completely wrapped and sealed with PVC outdoor-listed pipe protection tape at joints and wherever coating is damaged. Min. 18" cover.
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DEMOLITION & REMODEL SYMBOLS



MECHANICAL INSTALLATION NOTES

1. Provide duct balancing damper at every takeoff. OBDs on grilles are not sufficient.
2. Provide OBD remote actuator where access is not available, MAT RT-100 RT-150 or equal with actuator end bracket in register face, or external actuator with end near fan coil access panel, or provide mini ceiling cup at nearest closet.
3. Unless otherwise noted, provide 1" internal liner on all rectangular ducts for sound control. See specifications.
4. All ducts shall be sealed with duct sealant. Submit cost savings if PEX is proposed. Note that Sugarpine Engineering does not recommend substituting PEX for hot or recirculating potable water due to potential health concerns.
5. All exposed pipes, ducts and materials shall be metallic or shall be suitably wrapped to meet applicable flame spread requirements. No exposed plastic pipe, insulation, duct or wiring is allowed.
6. All ducts shall be sealed with duct sealant. Tape not suitable.
7. Appliance flues shall be UL Listed for the application.
8. Floor-mounted equipment shall be on concrete housekeeping pads.
9. Coordinate with GC and all other trades prior to all installations.
10. If equipment connection is smaller than duct or pipe size indicated, then duct or pipe shall be full size to within 6" of equipment connection. All elbows and fittings shall be the full size.
11. Not all expansion loops, guides and anchors are shown on drawings. Contractor shall be responsible to provide all expansion piping loops not shown, as defined by the specifications and other project documentation.
12. Ceiling space is extremely limited. Fully coordinate all work in all ceiling spaces with all trades prior to proceeding or installing any equipment or materials. Notify GC of any adjustments between trades.
13. At the time of rough installation all duct and other related air distribution component openings shall be covered to reduce the amount of dust or debris which may collect in the system.
14. Provide a cleanout under each lavatory, WCO at each bathtub, WCO at base of each waste stack. Round paintable wall cover for each WCO.

DOCUMENT OWNERSHIP AND USE

1. These plans and specifications are professional instruments of Service (Original Work) and shall remain the Intellectual Property of Sugarpine Engineering, Inc. (SPE) whether or not the project is executed.
2. No changes, alterations, additions, or deletions shall be made without the express written consent of SPE.
3. Instruments of Service shall not be used or reproduced, in whole or in part, by anyone for other projects, for additions to this project, or for completion of this project by other means, without the express written consent of SPE.
4. Submission or distribution to meet regulatory requirements, or for other purposes in connection with this project, shall not be construed as publication in derogation of the rights of Sugarpine Engineering, Inc.
5. See specifications for additional information.
6. These plans intend to describe only Mechanical parts of the work, shown as thick lines, and as noted. They do not intend to describe or convey information about any other work or parts of the project. Other work is shown for reference only as thin lines. Refer to other drawings for complete information.
7. All control wiring shall be in metallic (EMT) raceways. Raceways by EC, wiring by MC, MC responsible to coordinate this requirement to the EC and GC for base bid.
8. All stand-alone, factory, and equipment-provided controls are considered part of the controls system for the project. Each device shall have its programming and settings adjusted by the Controls Contractor, and shall be integrated with the building's overall controls, if applicable. See control sequences for more information.
9. Sugarpine Engineering is available (for additional fees) to assist with the contractor's wiring and component diagrams, controls configurations, selection of components, shop drawings, or similar detailing.
10. Contractor shall be responsible for unauthorized deviations from the designs and information indicated in these plans and specifications, and shall request approval from SPE in writing before any deviation is made. Lack of SPE's approval shall result in the Contractor assuming responsibility as the designer-of-record for the deviation and its related impacts.
11. Contractor shall include Acceptance Test Technician services in base bid.
12. Project Altitude: 6,000'

PENETRATION COORDINATION

1. Each pipe or duct penetration of the pan deck shall be coordinated and blocked-out in advance, or core-drilled by the Contractor. Not all penetrations are shown on plans, and the contractor has reasonable and customary authority to perform minor routing adjustments in the field.
2. Contractor may elect to oversize blockouts if necessary to accommodate field adjustments. Maintain all fire rated assemblies if oversized penetrations are used.
3. These plans are not shop or coordination drawings. Submit dimensional Coordination Drawings indicating all proposed penetrations after GC has overlaid the work of all trades. GC shall coordinate and overlay all trades before design team review.
4. See Specifications manuals for more information on Shop and Coordination Drawings.
5. These plans intend that the pan decks are not post- or pre-tensioned and can be drilled. Refer to Structural and Architectural plans for assemblies and additional requirements.

PLUMBING FIXTURES

1. All domestic fixtures used on this project shall be low-flow EPA WaterSense compliant. All domestic fixtures and devices in contact with potable water shall be NSF 61 lead-free. Each plumbing fixture on this project shall comply with the applicable ASSE, UPC, USC, and other applicable codes and standards. Pin placement per manufacturer's data sheet.
2. Coordinate with Interior Designer prior to any substitutions, if any specified fixture is not compliant with all requirements.
3. There shall be no water connection between any condominium unit and another.
4. After performing final water piping flush, clean every strainer on every showerhead and lavatory sink faucet immediately prior to building turnover.
5. All products and systems shall be UL Listed, and installed to comply with their UL listings.
6. Controls under 50 Volts: Raceways by EC, wiring by MC. MC responsible to coordinate this requirement to the EC and GC for base bid.
7. All systems over 50 Volts: Raceways and wiring by EC.
8. Refer to the submitted and approved Title 24 Part 6 Certificates of Compliance, hereby incorporated by reference.
9. Prior to rough mechanical inspections, Contractor shall complete and provide all applicable Title 24 Certificates of Installation (NRCI).
10. Prior to final mechanical inspections, Contractor shall complete and provide all applicable Title 24 Certificates of Acceptance (NRCAC). Provide Acceptance Test Technician services in base bid.
11. Comply with and provide all required HERS Rater testing indicated in the Title 24 energy compliance documents. Provide HERS Rater services in base bid.

ABBREVIATIONS & ACRONYMS

(E) Existing	DRU Drainage Fixture Unit	IE Invert Elevation (Bottom of Pipe)	RP Reduced Pressure
(N) New	DHW Domestic Hot Water	ISO Isolation, Isolator	RBPFP Reduced Pressure Backflow Preventer
A Amperes, Amps	DIA Diagram	JT Joint Trench	RPM Revolutions per Minute
ABS Acrylonitrile Butadiene Styrene	DN Down	EA Exhaust Air	RTN Return
ADA Americans with Disabilities Act	DT Differential Temperature	ES Exhaust Air	SA Supply Air
ADJ Adjustable	DX Direct Expansion Refrigerant	EA Exhaust Air	SEER Seasonal Energy Efficiency Ratio
AFF Above Finished Floor	EA Exhaust Air	ES Exhaust Air	SF Square Feet
AFG Above Finished Grade	EAT Entering Air Temperature	ES Exhaust Air	SL Sea Level
AFUE Annual Fuel Utilization Efficiency	EC Electrical Contractor	ES Exhaust Air	SS Sanitary Sewer
AGF Air Gap Filling	ECC Electrically Commutated Motor	ES Exhaust Air	SUP Supply
ALT Altitude	ED Electrical Division	ES Exhaust Air	T24 Title 24 (California)
APD Air Pressure Drop	EER Energy Efficiency Ratio	ES Exhaust Air	TEMP Temporary, Temperature
ASSE American Society of Sanitary Engineering	EFF Efficiency	ES Exhaust Air	TFR Transfer
ATD Air Temperature Differential	EPA Environmental Protection Agency, US	ES Exhaust Air	THERM 100,000 Btu
BAS Building Automation System	EWT Entering Water Temperature	ES Exhaust Air	TPV Trap Primer Valve
BDD Backdraft Damper	EXH Exhaust	ES Exhaust Air	TYP Typical
BFF Below Finished Floor	FBO Furnished By Others/Owner	ES Exhaust Air	UL Underwriters Laboratory
BFG Below Finished Grade	FC Fan Coil	ES Exhaust Air	UNO Unless Noted Otherwise
BFP Backflow Preventer	FCO Floor Cleanout	ES Exhaust Air	UPC Uniform Plumbing Code
BHP Brake Horsepower	FD Floor Drain	ES Exhaust Air	V Volts
BMS Building Management System	FI Fixture	ES Exhaust Air	VAR Variable
BMS Building Management/Automation System	FLA Full Load Amps	ES Exhaust Air	VFD Variable Frequency Drive
BTUH Btu/Hour	FS Floor Sink, Fire/Smoke	ES Exhaust Air	VIB Vibration
CA Combustion Air	FT Feet	ES Exhaust Air	VOC Volatile Organic Compound
CFH Cubic Feet per Hour	GA Gauge	ES Exhaust Air	VSD Variable Speed Drive
CGC Gas Control Valve	GC General/Prime Contractor	ES Exhaust Air	VTF Vertical Thrift of Roof
CIRC Circuit	GEO Geothermal, Geosynchronous, Earth	ES Exhaust Air	W Waste, Waits
CLG Ceiling	CO Cleanout	ES Exhaust Air	W With
CO Cleanout	COMB Combustion, Combination	ES Exhaust Air	WCO Wall Cleanout
CONC Concrete, Concrete	CONC Concrete, Concrete	ES Exhaust Air	WSPU Water Supply Fixture Unit
COF Coefficient of Performance	COF Coefficient of Performance	ES Exhaust Air	WTD Water Temperature Differential
COTG Cleanout To/At Grade	HOA Hand-Off-Auto	ES Exhaust Air	WWHP Water to Water Heat Pump
CW Cold Water	HP Heat Pump, Horsepower	ES Exhaust Air	
DDC Direct Digital Control	RA Return Air	ES Exhaust Air	
	HWC Domestic Hot Water Recirculation	ES Exhaust Air	
	Hertz	ES Exhaust Air	

PIPE SYMBOLS, DEVICES & PLAN TAGS

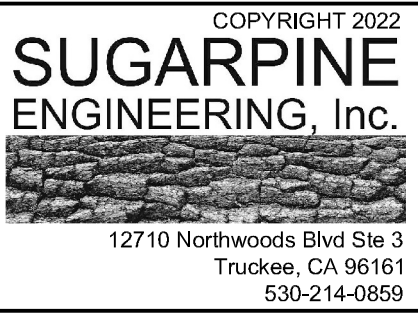
SM SNOWMELT SUPPLY	PW PRESSURIZED WASTE	REDUCED PRESSURE BACKFLOW PREVENTER
SMR SNOWMELT RETURN	ST STORM DRAIN	PIPE ANCHOR
HWS HEATING WATER SUPPLY	ST(OF) STORM DRAIN OVERFLOW	PIPE EXPANSION JOINT
HWR HEATING WATER RETURN	SO SAND AND OIL WASTE	FLEXIBLE CONNECTOR
SHR SOLAR HEATING WATER SUPPLY	BUTTERFLY VALVE	SAFETY RELIEF VALVE
SHR SOLAR HEATING WATER RETURN	SHUT OFF VALVE (BALL, BUTTERFLY)	AIR VENT
G STD PRESSURE GAS	GLOBE VALVE	PRESSURE - TEMP. TAP
MG MEDIUM PRESSURE 2 PSI GAS	CHECK VALVE	PRESSURE GAUGE W/ EXTENSION & COCK
D DRAIN (NON SEWER)	FLOW CONTROL VALVE	THERMOMETER
PC PUMPED CONDENSATE	BALL VALVE	VACUUM BREAKER
GF GLYCOL FEED	PLUG OR BALANCING VALVE	FLOOR/GRATE CLEANOUT
RFS RADIANT FLOOR SUPPLY	FLOW BALANCING VALVE	CLEANOUT CAP
RFR RADIANT FLOOR RETURN	PLUG VALVE IN RISER	FLOOR DRAIN
RS REFRIGERANT SUCTIION	BALL OR GLOBE VALVE IN RISER	FLOOR SINK, FULL/HALF GRATE
RL REFRIGERANT LIQUID	BALL DRAIN VALVE W/ HOSE END	ROOF DRAIN
-- CW DOMESTIC COLD WATER	TEMPERATURE CONTROL VALVE	STRAINER W/ BLOW-OFF VALVE
-- HW DOMESTIC HOT WATER	PRESSURE REDUCING VALVE	SHOCK ARRESTOR
--- HWC DOMESTIC HOT WATER CIRCULATION	VENTURI/FLOW INDICATOR	FLOW SWITCH
F FIRE LINE	SOLENOID VALVE	HOSE BIBB
W WASTE PIPE	PUMP & EQUIPMENT CONNECTOR	WALL HYDRANT
V PLUMBING VENT PIPE	PIPE UNION	RADIANT MANIFOLD

GENERAL NOTES

1. See specifications for additional information.
2. These plans intend to describe only Mechanical parts of the work, shown as thick lines, and as noted. They do not intend to describe or convey information about any other work or parts of the project. Other work is shown for reference only as thin lines. Refer to other drawings for complete information.
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7. Contractor shall include Acceptance Test Technician services in base bid.
8. Project Altitude: 6,000'

DUCT SYMBOLS

COMBINATION FIRE/SMOKE DAMPER	SUPPLY D
-------------------------------	----------



FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA



REVISIONS
03-28-2022 FOR PERMIT
05-13-2022 PLAN CHECK COMMENTS

DATE 05-13-2022
ISSUE FOR PERMIT
SCALE See Plan
SHEET NAME

WATER HEATER COMPLIANCE FORMS

SHEET NO.

M1.2

STATE OF CALIFORNIA

Domestic Water Heating System

NRCC-PLB-E (Created 10/20)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-PLB-E

This document is used to demonstrate compliance for nonresidential occupancies with requirements in §110.1, §110.3, §120.3, and §140.5, and with requirements in §141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements in §110.3, §110.3, §120.3, §150.0 and §150.1(c)8, and with requirements in §150.2 for additions and alterations.

Project Name: Five Star Catering

Report Page: Page 1 of 6

Project Address: 10 Hangar Way, Watsonville

Date Prepared: 2022-03-28

A. GENERAL INFORMATION

01 Project Location (city) Watsonville

02 Climate Zone

3

03 Occupancy Types Within Project (select all that apply):

☒ Nonresidential

☐ High-Rise Residential

☐ Hotel/ Motel

☐ State Building

☐ Healthcare Facility

☐ Other (Write In):

B. PROJECT SCOPE

Table Instructions: Include any domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in §140.5, §150.1(c)8, and §141.0(a), or §141.0(b)(2)(i) for additions or alterations. Solar water heating systems should be documented on the NRCC-SRA compliance document. Combined domestic water heating systems should be documented on the NRCC-MCH compliance document.

01

02

03

My project consists of (check all that apply):

System Type^{1,2}

System Components

☐ New System (DHW system being installed for the first time in newly constructed building)

☐ Equipment

☐ Distribution

☐ Controls

☒ System Alteration (equipment, distribution or controls)

Central System (serving nonresidential spaces)

☒ Equipment

☒ Distribution

☒ Controls

¹ FOOTNOTE: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.

² Dwelling units refers to hotel/ motel guest rooms and units in a high-rise residential occupancy.

C. COMPLIANCE RESULTS

Table Instructions: Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, or the table indicated as not compliant for guidance.

01

02

03

04

Domestic Hot Water Equipment

Distribution Systems

Controls

(See Table F)

(See Table G)

(See Table H)

Compliance Results

Yes

Yes

Yes

COMPLIES

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> October 2020

STATE OF CALIFORNIA

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CERTIFICATE OF COMPLIANCE

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Project Name: Five Star Catering

Report Page: Page 2 of 6

Project Address: 10 Hangar Way, Watsonville

Date Prepared: 2022-03-28

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

No exceptional conditions apply to this project.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

Table Instructions: Complete the following table to demonstrate compliance with mandatory equipment requirements in §110.1 and §110.3. For high-rise residential and hotel/ motel occupancies, compliance with prescriptive requirements in §150.1(c)8 must also be demonstrated and with §150.2 for addition and alteration scopes.

Equipment Schedule: Central Systems

07

08

09

10

11

12

13

14

15

Name or Item Tag

Equipment Type

Volume (gal)

Rated Input Capacity (Btu/h)

Rated Efficiency (%)

Minimum Efficiency Required (%)

Efficiency Unit

Designed Standby Loss¹

Maximum Standby Loss¹

WH-1

Gas Storage Water Heater

50

199,000

93

80

Et

2,998.75

¹ FOOTNOTE: For gas water heaters/ boilers, standby loss is in BTUH. For electric storage water heaters, standby loss is in %/hr.

Water Heating Equipment All Occupancies

Yes

No

Not Applicable

Requirement

18

Unfired storage tank insulation shall have Internal + External ≥ R-16 OR External ≥ R-12. Label required per §110.3(c)3

19

New state buildings 60% of energy for service water heating from site solar energy or recovered energy per §110.3(c)5

20

Isolation valves for instantaneous water heater with input rating > 6.8 KBTUH or 2 kW has been specified per §110.3(c)6

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

Table Instructions: Complete the following table to demonstrate compliance for nonresidential occupancies with distribution requirements in §120.3 and §140.5. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements in §110.3(c), §120.3, §150.0, §150.1, and §150.2 for additions and alterations.

Recirculation Loops in Central Systems Serving Dwelling Units or Nonresidential Spaces

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> October 2020

STATE OF CALIFORNIA

Domestic Water Heating System

NRCC-PLB-E (Created 10/20)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-PLB-E

Project Name: Five Star Catering

Report Page: Page 3 of 6

Project Address: 10 Hangar Way, Watsonville

Date Prepared: 2022-03-28

Table Continued

Yes

No

Not Applicable

Requirement

01

Air release valve or vertical pump installation per §110.3(c)4A

02

Check valve or similar located between recirculation pump and water heating equipment to prevent backflow per §110.3(c)4B

03

Hose bibb installed between pump and equipment and isolation valve between hose bibb and equipment per §110.3(c)4C

04

Isolation valves on both sides of the pump per §110.3(c)4D

05

Cold water and recirculation loop piping shall not be connected to the hot water storage tank drain port per §110.3(c)4E

06

Check valve installed on cold water supply between hot water system and next closest tee on cold water supply per §110.3(c)4F

07

For central systems serving multiple dwelling units, design includes two or more recirculation loops serving separate dwelling units per §150.1(c)8B unless building has ≤ 8 dwelling units.

Mandatory Pipe Insulation All Occupancies

12

☒

For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per §120.3:
- Recirculating system piping, including supply and return piping of the water heater
- The first 8 ft of hot and cold outlet piping for a nonrecirculating storage system
- Pipes that are externally heated

13

☒

Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per §120.3(b) and §150.0(i)3

TABLE 120.3-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)

Conductivity Range (Btu-in per hour per ft² per °F)

Insulation Mean Rating Temp (°F)

Nominal Pipe Diameter (in)

<1

1 to < 1.5

1.5 to < 4

Minimum Insulation Required

105-140

0.22-0.28

100

1.0 in or R-7.7

1.5 in or R-12.5

1.5 in or R-11

H. DOMESTIC HOT WATER SYSTEM CONTROLS

Table Instructions: Complete the following table to demonstrate compliance with controls requirements in §110.3 for all occupancies. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements in §150.1(c)8.

Yes

No

Not Applicable

Requirement

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> October 2020

STATE OF CALIFORNIA

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CERTIFICATE OF COMPLIANCE

NRCC-PLB-E

Project Name: Five Star Catering

Report Page: Page 4 of 6

Project Address: 10 Hangar Way, Watsonville

Date Prepared: 2022-03-28

Table Continued

01

Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per §110.3(a)

02

Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per §110.3(c)1 unless covered by California Plumbing Code Section 613.0

03

Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless system serves healthcare facility.

04

For recirculation systems serving multiple dwelling units, design includes automatic pump controls per §150.1(c)8Bii, or §150.2 for additions or alterations

05

For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA 4.4.9 per §150.1(c)8.

06

For replacement single heat pump water heaters serving individual dwelling units in climate zones 1-15, design includes communication interface that meets demand responsive control requirements of §110.12(a) per §150.2(b)1Hiii.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

YES

NO

Form/Title

Field Inspector

Pass

Fail

NRCI-PLB-01-E - Must be submitted for all buildings

NRCI-PLB-02-E - Must be submitted for high-rise residential and hotel/ motel central hot water distribution systems to be recognized for compliance.

NRCI-PLB-03-E - Must be submitted for high-rise residential and hotel/ motel single dwelling unit hot water distribution systems to be recognized for compliance.

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no Certificates of Acceptance applicable to service water heating requirements.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> October 2020

STATE OF CALIFORNIA

Domestic Water Heating System

NRCC-PLB-E (Created 10/20)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-PLB-E

Project Name: Five Star Catering

Report Page: Page 5 of 6

Project Address: 10 Hangar Way, Watsonville

Date Prepared: 2022-03-28

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCV/

YES

NO

Form/Title

Field Inspector

Pass

Fail

NRCV-PLB-21-H High-rise Residential Central Hot Water Distribution HERS Verification

NRCV-PLB-22-H High-rise Residential Individual Dwelling Unit Hot Water Distribution HERS Verification

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> October 2020

STATE OF CALIFORNIA

Domestic Water Heating System

NRCC-PLB-E (Created 10/20)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-PLB-E

Project Name: Five Star Catering

Report Page: Page 6 of 6

Project Address: 10 Hangar Way, Watsonville

Date Prepared: 2022-03-28

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name: Weld Fickel

Documentation Author Signature:

Company: Sugarpine Engineering Inc

Signature Date: 3-28-22

Address: 12710 Northwoods Blvd. #3

CEA/ HERS Certification Identification (if applicable):

City/State/Zip: Truckee/CA/96161

Phone: (530)214-0859

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.

2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)

3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.

4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Aaron Lubrano

Responsible Designer Signature:

Company: Sugarpine Engineering Inc

Date Signed: 5/13/2022

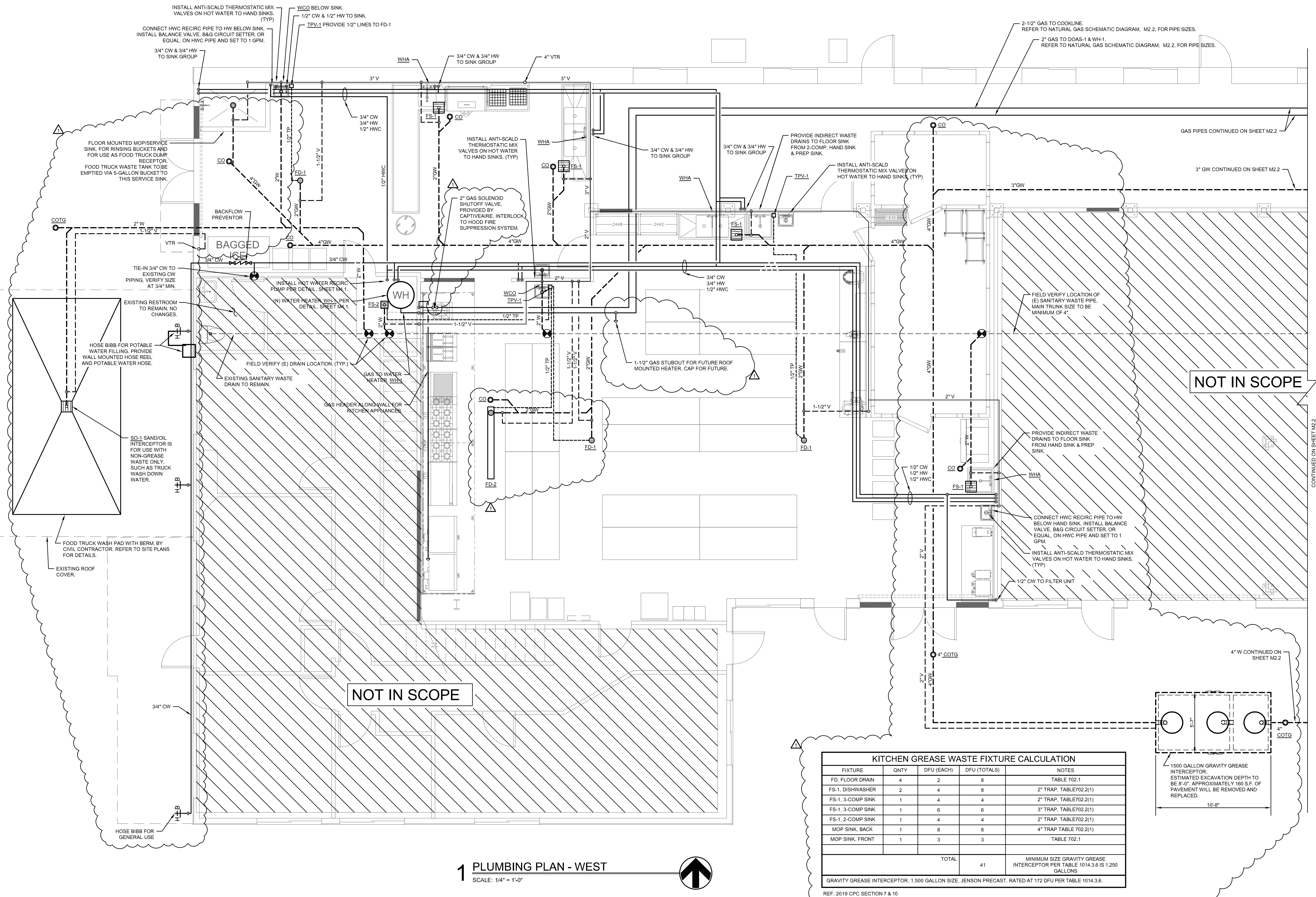
Address: 12710 Northwoods Blvd. #3

License: M33865

City/State/Zip: Truckee/CA/96161

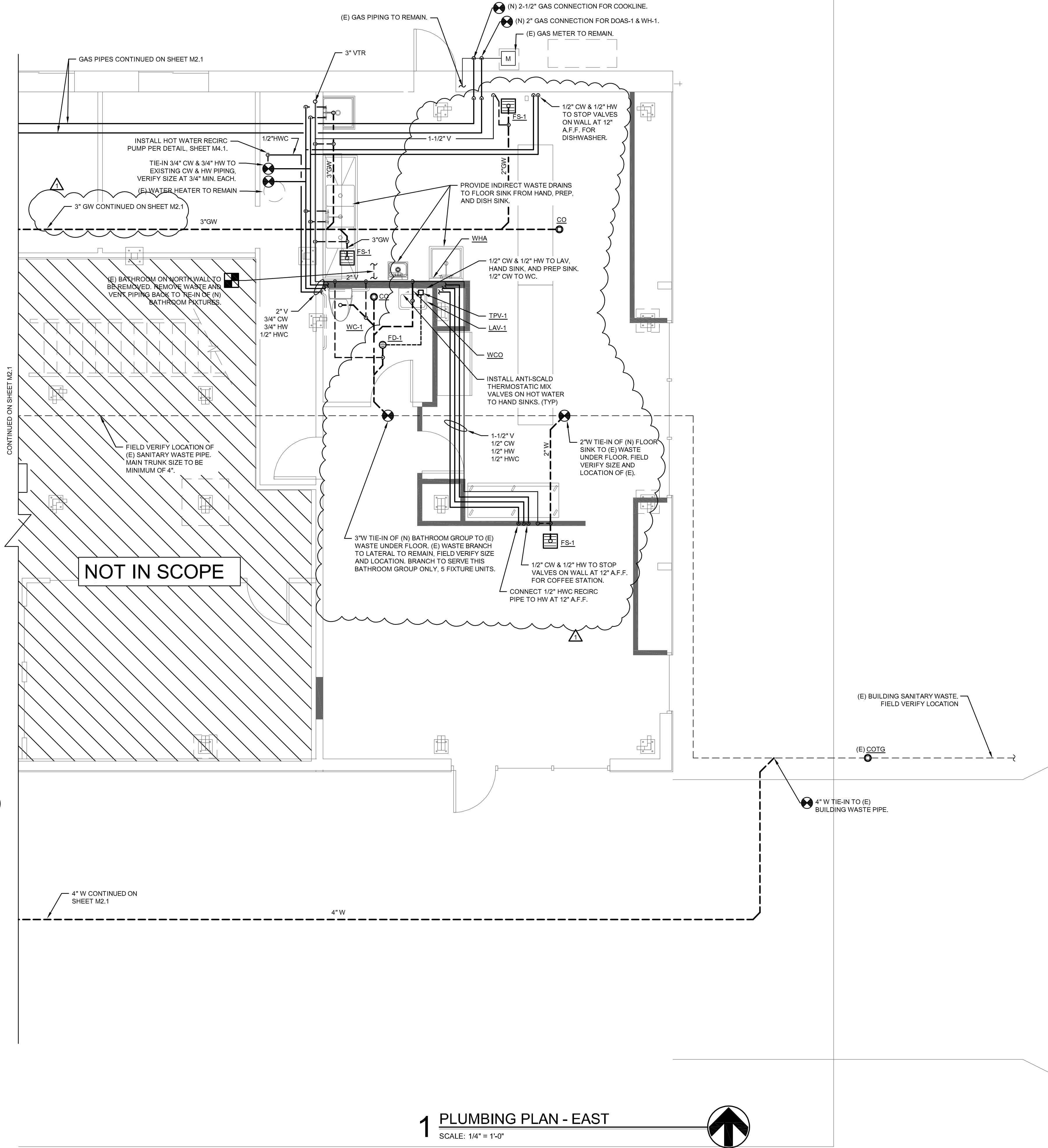
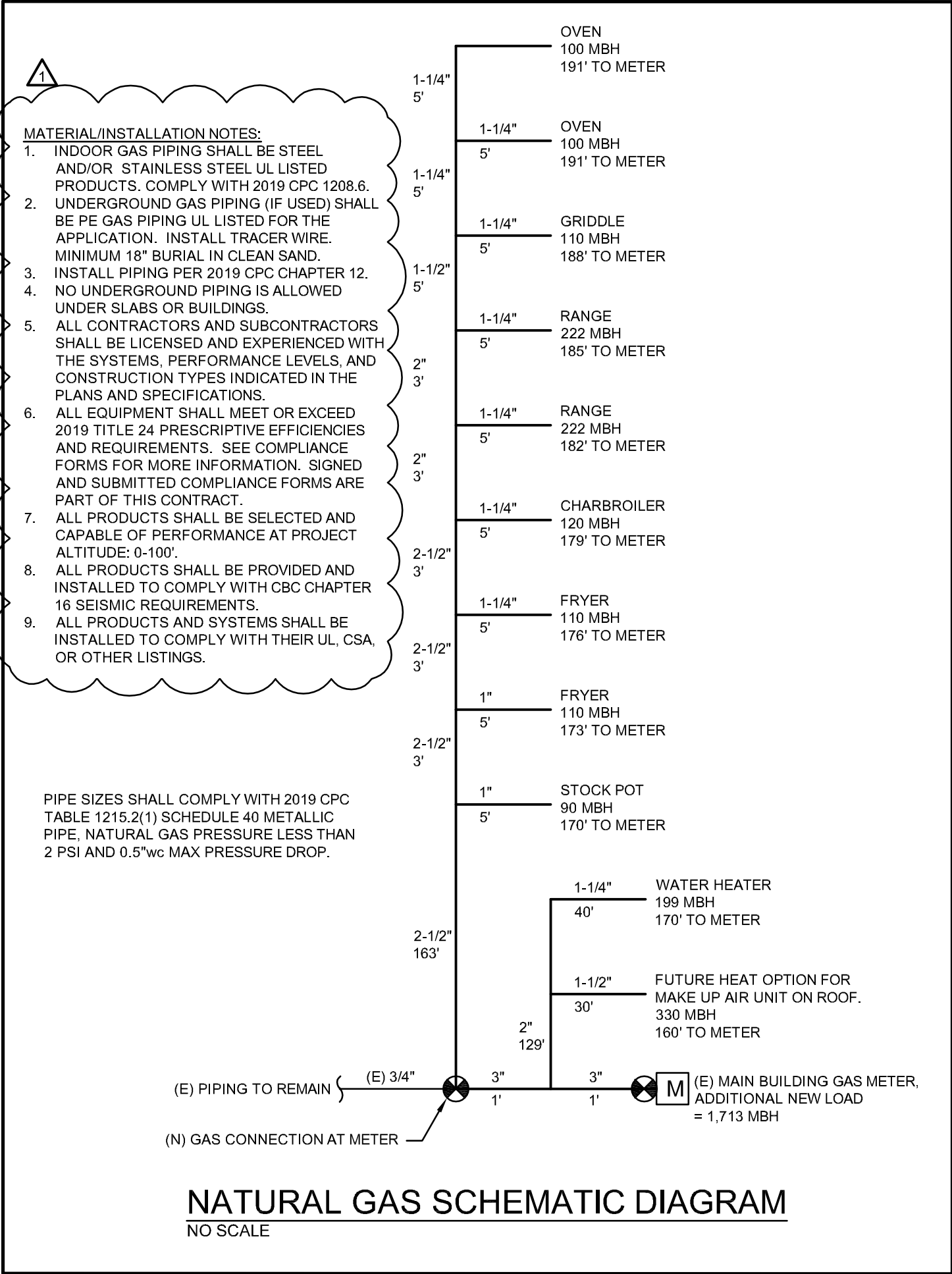
Phone: (530)214-0859

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards> October 2020



KITCHEN GREASE WASTE FIXTURE CALCULATION				
FIXTURE	QNTY	DFU (EACH)	DFU (TOTALS)	NOTES
FD, FLOOR DRAIN	4	2	8	TABLE 702.1
FS-1, DISHWASHER	2	4		2" TRAP, TABLE 702.2(1)
FS-1, 3-COMP SINK	1	4	4	2" TRAP, TABLE 702.2(1)
FS-1, 3-COMP SINK	1	6	6	3" TRAP, TABLE 702.2(1)
FS-1, 2-COMP SINK	1	4	4	2" TRAP, TABLE 702.2(1)
MOP SINK, BACK	1	8	8	4" TRAP TABLE 702.2(1)
MOP SINK, FRONT	1	3	3	TABLE 702.1
TOTAL			41	MINIMUM SIZE GRAVITY GREASE INTERCEPTOR PER TABLE 1014.3.6 IS 1,250 GALLONS
GRAVITY GREASE INTERCEPTOR, 1,500 GALLON SIZE, JENSON PRECAST, RATED AT 172 DFU PER TABLE 1014.3.6.				

REF. 2019 CPC SECTION 7 & 10



PLUMBING EQUIPMENT SCHEDULE								
TAG	TYPE	A.D.A.	FINISH	MANUFACTURER* & MODEL #	FAUCET TRIM MFR.* & MODEL #	ACCESSORIES	RATINGS	REMARKS
CO	CLEANOUT	N/A	STAINLESS COVER	ZURN, Z1400-NH-ZS	-	POLISHED STAINLESS STEEL TOP		NO-HUB CONNECTION, SEE PLAN FOR SIZE.
FD-1	FLOOR DRAIN	N/A	STAINLESS GRATE	ZURN, E21-5	-	TRAP PRIMER CONNECTION		5" ROUND STAINLESS STEEL STRAINER, NO-HUB CONNECTION, SEE PLAN FOR SIZE.
FD-2	FLOOR DRAIN, TRENCH	N/A	STAINLESS GRATE	ZURN ZS890	-	END CAP, 2" NO-HUB BOTTOM OUTLET, SLOTTED SS COVER, & TRAP PRIMER CONNECTION		7" REVEAL TRENCH DRAIN, FOOD SERVICE RATED, 80" LONG.
FS-1	FLOOR SINK	N/A	PORCELAIN ENAMEL	ZURN FD2375-MHx-H	-	STRAINER BASKET, 1/2 GRATE.		12"x12", 6" DEPTH. DRAIN CONNECTION SIZE PER PLAN.
FS-2	FLOOR SINK	N/A	PORCELAIN ENAMEL	ZURN FD2378-NHx-H + Z1023-NHx	-	STRAINER BASKET, 1/2 GRATE. TRAP PRIMER CONNECTION WHERE NOTED ON PLANS.		8"x8", 6" DEPTH. DRAIN CONNECTION SIZE PER PLAN.
LAV-1	WALL HUNG LAVATORY SINK	YES	WHITE	PER ARCHITECT	PER ARCHITECT	GRID DRAIN, QUARTER-TURN STOPS, WALL MOUNT SINK.	GREEN BUILDING CODE COMPLIANT 0.5 GPM MAX.	LEAD-FREE FAUCET, STOPS, AND PIPING SYSTEM, WALL MOUNT SINK.
SO-1	SMALL SAND OIL INTERCEPTOR	NA	-	ZURN, Z1189 SIZE 12	-	-	12 LBS CAPACITY, 2" OUTLET SIZE.	OIL/SEDIMENT INTERCEPTOR WITH HEAVY-DUTY GRATE.
TP-1	TRAP PRIMER VALVE	N/A	-	SIoux CHIEF, 695-01 + 695-D432F	-	DISTRIBUTION UNIT AS REQUIRED		AUTOMATIC TRAP PRIMER, 1/2" INLET CONNECTION.
WC-1	GRAVITY TANK TYPE WATER CLOSET	YES	WHITE	PER ARCHITECT	PER ARCHITECT	WITH SEAT	GREEN BUILDING CODE COMPLIANT 1.28 GPF MAX.	
WH-1	CONDENSING GAS DIRECT VENT	N/A	-	A.O. SMITH,	-	CONDENSATE NEUTRALIZER KIT, CONCENTRIC VENT KIT.	199,000 BTUH INPUT. 0.93 UEF. 120V, 0.75A.	COMMERCIAL GAS WATER HEATER WITH CONTROLLER, VENTING COMPATIBLE WITH PVC, CPVC, & CAT. IV VENT PIPE.
WHA	COMMERCIAL WATER HAMMER ARRESTER	N/A	-	SIoux CHIEF, 653-B	-	-	3/4" MIP CONNECTION	NO-LEAD COMPLIANT.
MANUFACTURERS:								
FIXTURE: AMERICAN STANDARD, KOHLER, ELKAY, FIAT, JUST								
FAUCET: SPEAKMAN, KOHLER, AMERICAN STANDARD, CHICAGO, JUST, DELTA COMMERCIAL								
DRAIN: ZURN, JR SMITH, JOSAM, WADE, MIFAB COMMERCIAL								
GENERAL NOTES:								
A:								
B:								

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SUGARPINE ENGINEERING, Inc.

12710 Northwoods Blvd Ste 3
Truckee, CA 96161
530-214-0859

FIVE STAR CATERING

10 HANGER WAY
WATSONVILLE, CA

SEAL

REGISTERED PROFESSIONAL ENGINEER
No. M33889
Exp. 12/31/2023
MECHANICAL
STATE OF CALIFORNIA

05-13-2022

REVISIONS

03-28-2022 FOR PERMIT

05-13-2022 PLAN CHECK COMMENTS

DATE

05-13-2022

ISSUE

FOR PERMIT

SCALE

See Plan

SHEET NAME

PLUMBING PLAN - EAST

SHEET NO.

M2.2

FIVE STAR CATERING

10 HANGER WAY
WATSONVILLE, CA



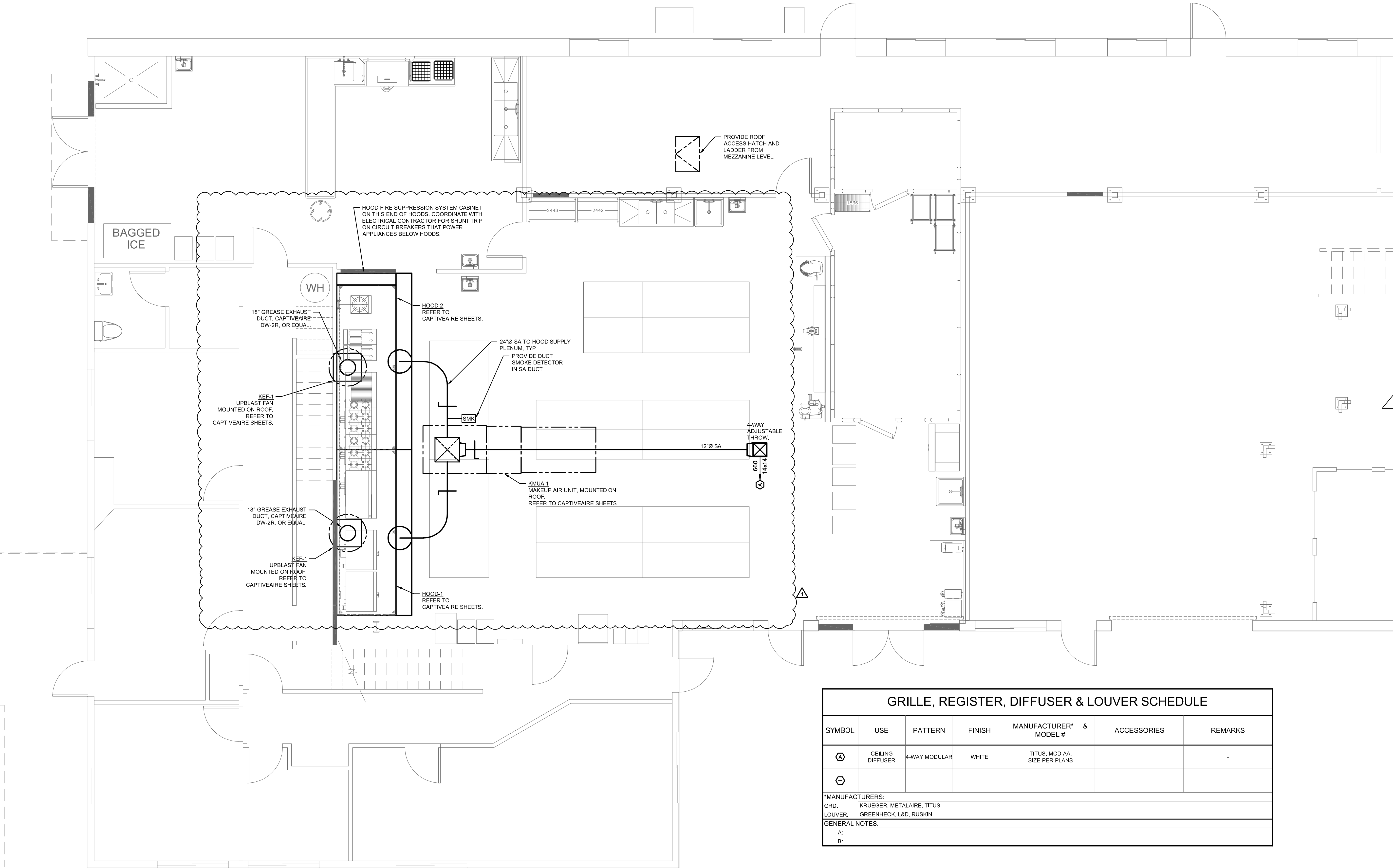
REVISIONS
03-28-2022 FOR PERMIT
05-13-2022 PLAN CHECK COMMENTS

DATE	05-13-2022
ISSUE	FOR PERMIT
SCALE	See Plan
SHEET NAME	

HVAC PLAN - WEST

SHEET NO.

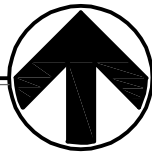
M3.1



GRILLE, REGISTER, DIFFUSER & LOUVER SCHEDULE						
SYMBOL	USE	PATTERN	FINISH	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
⬡	CEILING DIFFUSER	4-WAY MODULAR	WHITE	TITUS, MCD-AA, SIZE PER PLANS		
⬢						
*MANUFACTURERS: GRD: KRUEGER, METALARE, TITUS LOUVER: GREENHECK, L&D, RUSKIN						
GENERAL NOTES: A: B:						

1 HVAC PLAN - WEST

SCALE: 1/4" = 1'-0"



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FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA

SEAL

REGISTERED PROFESSIONAL ENGINEER

MECHANICAL

STATE OF CALIFORNIA

NO. M33895

EXPIRATION DATE 05-13-2022

05-13-2022

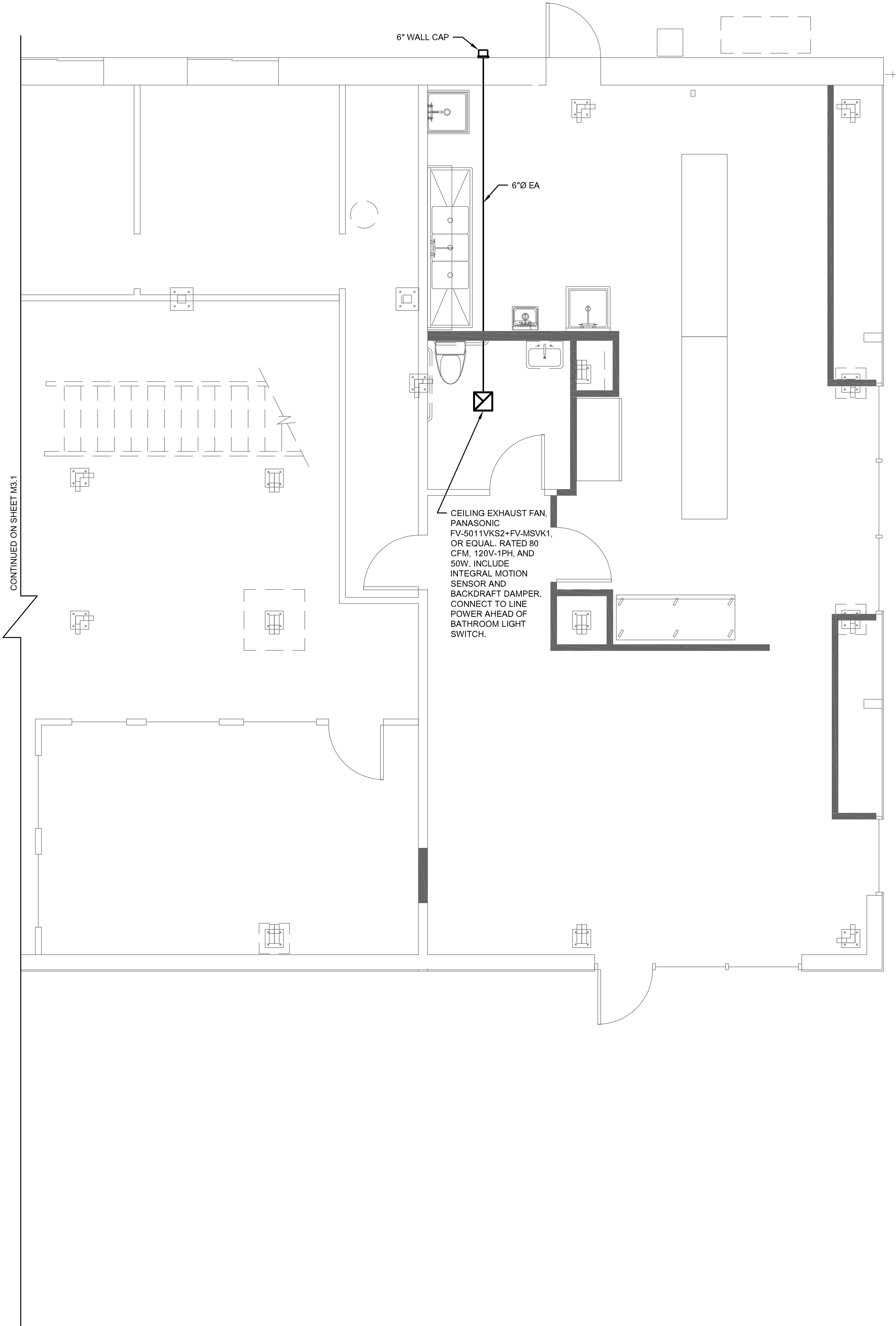
REVISIONS
03-28-2022 FOR PERMIT
05-13-2022 PLAN CHECK COMMENTS

DATE	05-13-2022
ISSUE	FOR PERMIT
SCALE	See Plan
SHEET NAME	

HVAC PLAN - EAST

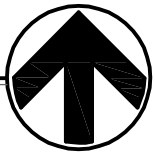
SHEET NO.

M3.2



2 HVAC PLAN - EAST

SCALE: 1/4" = 1'-0"



HOT WATER DEMANDS

(E) WATER HEATER
FRONT ROOM

ESTABLISHMENT Five Star Catering

ADDRESS 10 Hunger Way, Watsonville, CA

DATE _____

5-13-2022

Fixtures	No. Units	X	GPHI	=	Total GPHI
3-comp sink, (3) @ 18"x12"x12"	1	X	51	=	51
Hand sink	2	X	5	=	10
Prep sink	1	X	5	=	5
Mop sink	1	X	15	=	15
Lavatory	1	X	5	=	5
Dishwasher	1	X	2	=	2
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	

TOTAL GPHI = 88

COMPUTING THE BTU INPUT (Gas Water Heaters):

68 TOTAL GPH x 80 % (See Sizing requirements below) = 70.4 GPH required.

88 GPH required x 60° rise x .11 = 46,464 BTU input of water heater.

FORMULA FOR ELECTRIC WATER HEATER:

 GPH required x .149 = KW input.

SIZING REQUIREMENTS FOR STORAGE WATER TANKERS

See next page for Instantaneous, ice, tankless water heaters

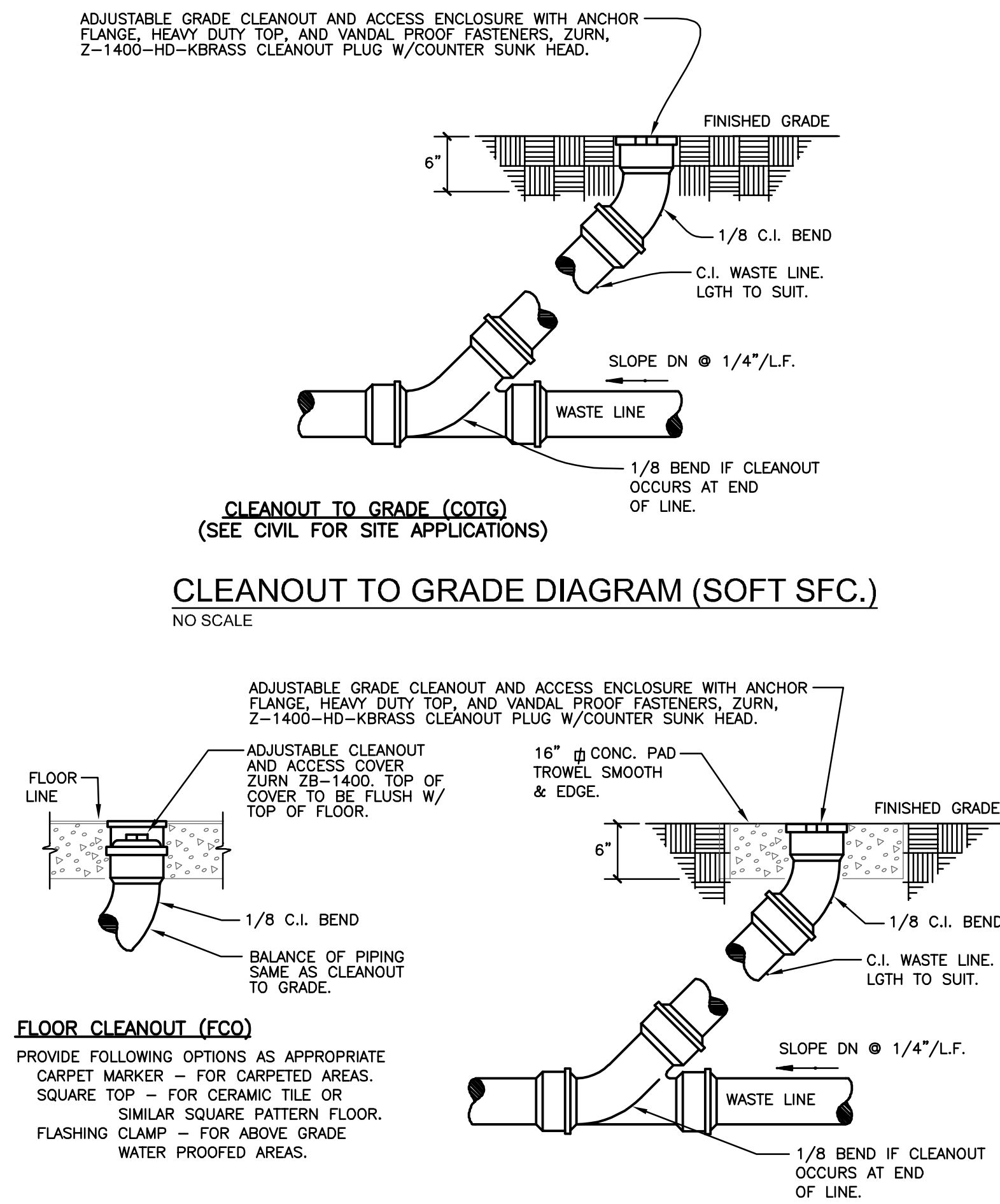
Food facilities with multi service eating utensils, heavy use (serving 3 meals a day): 100% GPH required

Food facilities with multi service eating utensils, moderate use: 90% GPH required

Food facilities with only single-service eating utensils or don't use utensils at all: 80% GPH required

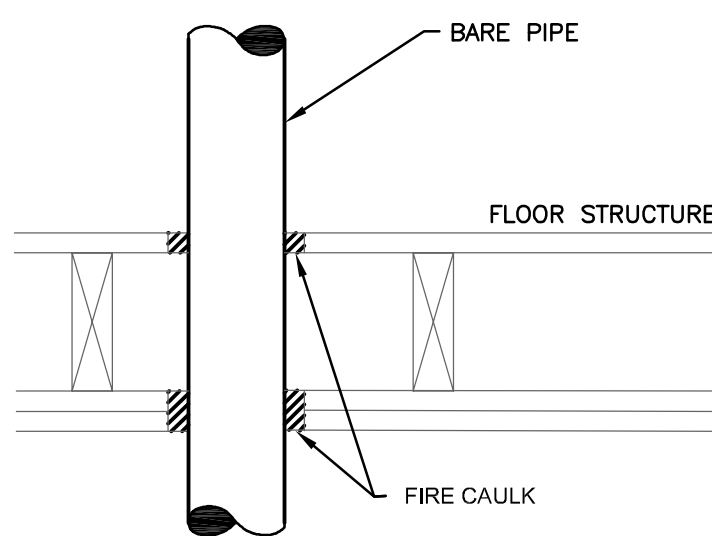
Food facilities that sell only prepackaged foods, a water heater with a minimum storage capacity of 10 gallons must be provided.

WATER HEATER SIZE CALCULATION



PROVIDE FOLLOWING OPTIONS AS APPROPRIATE
CARPET MARKER - FOR CARPETED AREAS.
SQUARE TOP - FOR CERAMIC TILE OR
SIMILAR SQUARE PATTERN FLOOR.
FLASHING CLAMP - FOR ABOVE GRADE
WATER PROOFED AREAS.

CLEANOUT TO GRADE (COTG)



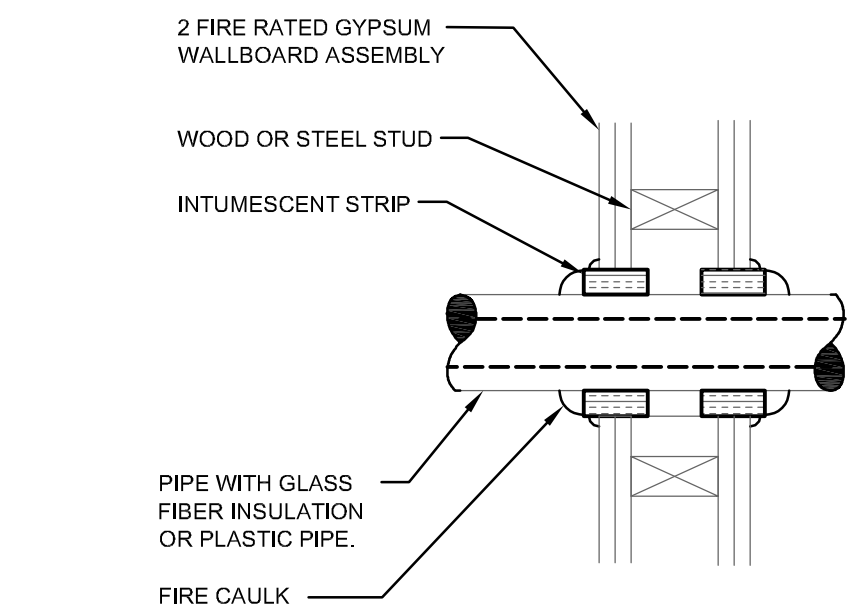
CONCRETE FORMED OR CMU WALL (1 OR 2-HOUR)

FIRE CAULK

BARE PIPE
METAL CONDUIT OR ELECTRICAL CABLE

A cross-sectional diagram showing a vertical pipe passing through a horizontal floor structure. The pipe is labeled 'BARE PIPE' at the top. A 'PIPE SLEEVE IF PRESENT' is shown as a vertical channel around the pipe. The floor structure is labeled 'FLOOR STRUCTURE' and is depicted with a stippled texture. 'FIRE CAULK' is applied to the gap between the pipe/sleeve and the floor structure on both the top and bottom surfaces.

Diagram illustrating the installation of a fire hose clamp on a vertical pipe. The diagram shows a cross-section of a wall with a vertical pipe passing through it. The pipe is labeled "PIPE WITH GLASS FIBER INSULATION OR PLASTIC PIPE." and "PIPE SLEEVE IF PRESENT". The wall is labeled "FLOOR STRUCTURE". The fire hose clamp is labeled "FIRE CAULK", "STEEL HOSE CLAMP", and "INTUMESCENT STRIP".



A cross-sectional diagram of a fire-rated wall assembly. The wall is composed of two layers of fire-rated gypsum wallboard, with a wood or steel stud in between. A fire-rated penetration is shown, consisting of a fire-rated sleeve and a fire-rated sealant. The sleeve is installed around the penetration, and the sealant is applied to the joint between the sleeve and the wall. The sleeve is shown with a cross-hatch pattern, indicating it is a fire-rated component. The sealant is shown as a thick, dark material. The diagram is labeled with the following components:

- FIRE RATED GYPSUM WALLBOARD ASSEMBLY
- WOOD OR STEEL STUD
- FIRE CAULK
- BARE PIPE
- METAL CONDUIT OR ELECTRICAL CABLE

DRAIN MUST BE SUPPORTED BY ITS FLANGE. NOTCH FLOOR AS NECESSARY.

CLAMP WATERPROOF FLOORING INTO FLANGE. SILICONE CAULK ALL AROUND.

UNDERLAYMENT

SUBFLOOR OVER CONCRETE/SLAB OR TWIN DECK

FIRE CAULK PER OTHER DIAGRAMS FOR FLOOR

NOTE: SAME BOTH SIDES.

Diagram illustrating a fireproofing assembly for a pipe passing through a concrete wall. The assembly consists of the following components:

- CONCRETE FORMED OR CMU WALL (1-HOUR)
- INTUMESCENT STRIP WITH STEEL HOSE CLAMP.
- PIPE WITH GLASS FIBER INSULATION OR PLASTIC PIPE.
- FIRE CAULK

Diagram illustrating the components and installation requirements for a trap primer valve assembly:

- TAKE-OFF FROM TOP OF CW PIPE
- BALL VALVE
- 1/2"
- TRAP PRIMER VALVE, SIOUX CHIEF PRIME PERFECT OR EQUAL
- DISTRIBUTION UNIT (FOR MULTIPLE DRAINS)
- 1/2" TYPE K SOFT COPPER LINE(S) TO FLOOR DRAIN(S). QUANTITY AS REQUIRED, SEE PLANS
- NO JOINTS BELOW GATE
- MIN. HEIGHT PER MFR.
- FLOOR

HOT WATER TO FIXTURES

THERMOSTATIC MIXING VALVE, ASSE 1017, LEAD-FREE. SET TO 125°F FOR KITCHEN FIXTURES.

FLEXIBLE COPPER PIPE CONNECTION, TYP.

DIELECTRIC NIPPLE OR UNION, TYP.

RELIEF DRAIN, ROUTE TO OUTDOORS AND TERMINATE AT APPROVED LOCATION. ALT.: ROUTE TO FLOOR SINK WITH 1" AIR GAP.

2" x 18 GAUGE SEISMIC BRACING STRAPS TOP & BOTTOM 1/3. C-CHANNEL AT WALL. CPC 770.2. ANCHOR TO WALL BLOCKING. COORD WITH G.C.

SHUTOFF VALVE

4" SEDIMENT TRAP U.L. LISTED FLEXIBLE GAS LINE

SET TANK TEMP TO 140 DEG. F.

T&P RELIEF VALVE

COLD WATER SUPPLY

4-GAL. LEAD-FREE POTABLE EXPANSION TANK AMTR ST-12 OR EQUIV.

LEAD-FREE RECIRC PUMP, AQUASTAT AND TIMER, UP15-10SUP7-TLC, OR EQUIV. INSTALL BELOW TANK W/ F.D.

HOT WATER RECIRC FROM FARTHEST FIXTURE, TYP.

ROUTE 3/4" D TO FLOOR, DRAIN OR FLOOR SINK. PROVIDE MIN. 1" AIRGAP.

NOTES:

1. SEE PLANS FOR PIPE SIZES. MIN 3/4".
2. PROVIDE RAISED BASE PAD FOR SUP.
3. PROVIDE ANTI-SCALD TMV AT EVERY FIXTURE. SET TO 110 DEG.F. MAX.

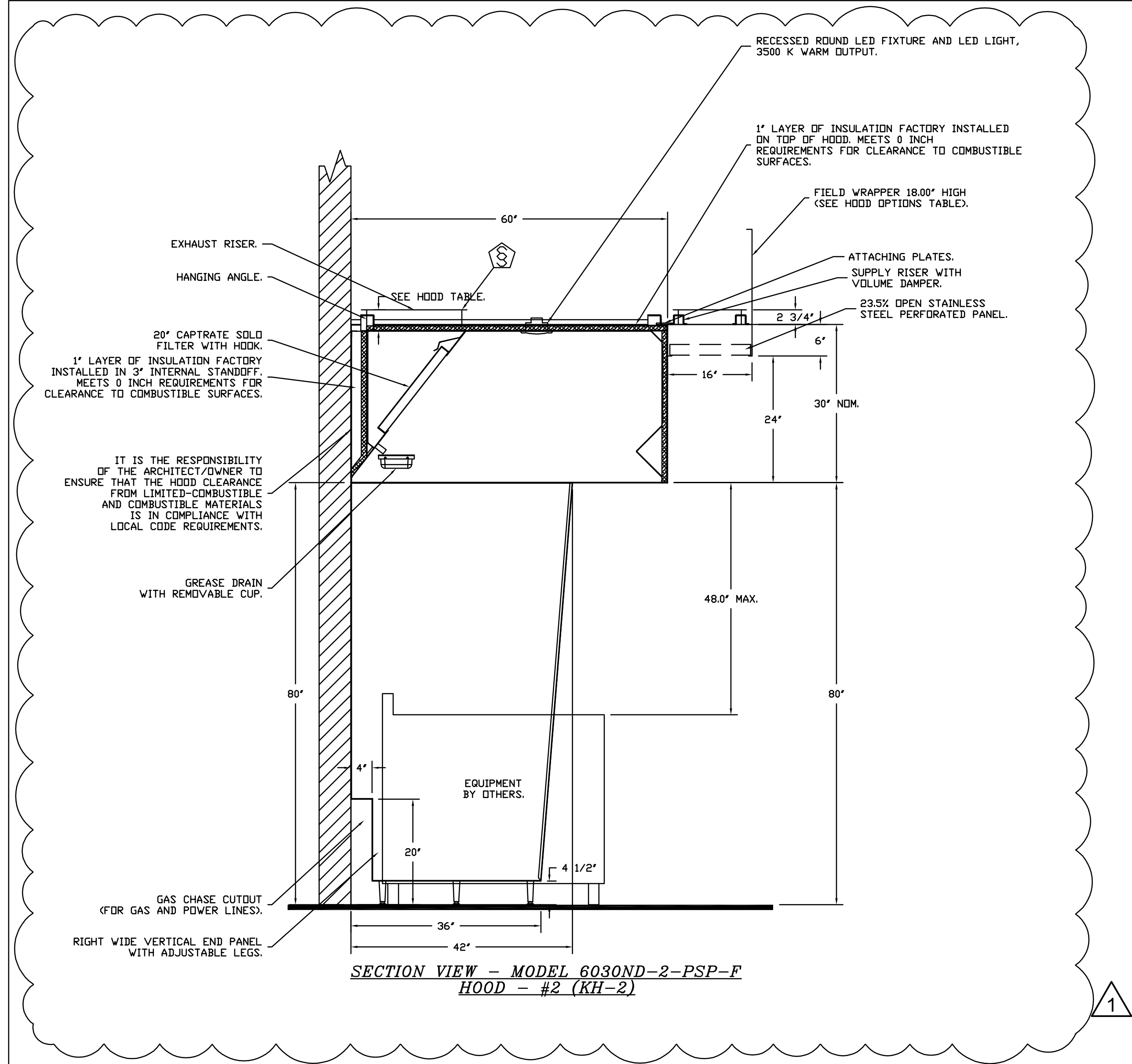
F.D.

WATER HEATER DIAGRAM

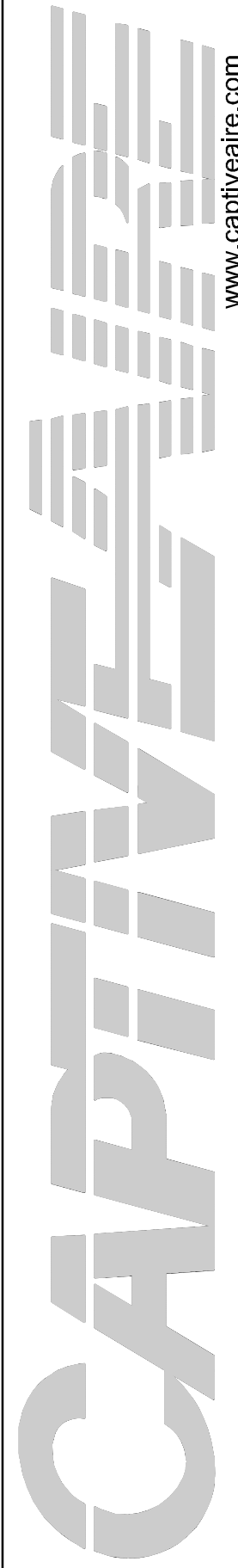
TWO-WAY CLEANOUT TO GRADE DIAGRAMS

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Five Star Catering.MECH PLANS.dwg Printed By: Wald Fickel May 13, 2022 - 4:29pm



REVISIONS	
DESCRIPTION	DATE:
△	
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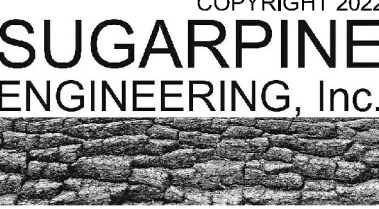


www.captiveaire.com

Northern Nevada Mechanical

P.O. Box 17489 Reno, NV 89511 PHONE: (775) 236-5843 FAX: (919) 516-8720 EMAIL: reg113@captiveaire.com

Five Star Catering ALT R1
10 Hangar Way,
Watsonville, CA, 95076
DATE: 5/11/2022
DWG.#: 5469334
DRAWN BY: Region 113
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 3

 COPYRIGHT 2022 12710 Northwoods Blvd Ste 3 Truckee, CA 96161 530-214-0859	
FIVE STAR CATERING 10 HANGER WAY WATSONVILLE, CA	
SEAL	 05-13-2022
REVISIONS	
03-28-2022 FOR PERMIT	
△	05-13-2022 PLAN CHECK COMMENTS
DATE	05-13-2022
ISSUE	FOR PERMIT
SCALE	See Plan
SHEET NAME	KITCHEN HOOD EXHAUST AND MAKEUP AIR
SHEET NO.	M5.3

SPECIFICATIONS
TAG: Commercial Kitchen Ventilation Hoods, Listed Commercial Kitchen
Hoods

1.1 SUMMARY

- A. The ND2 series is a Type I, wall canopy hood for use over 600°F cooking surface temperatures. The aerodynamic design includes a mechanical baffle and performance enhancing lip for exceptional capture and containment.
- B. The hood shall have the size, shape, and performance specified on drawings.

1.2 SUBMITTALS

- A. The manufacturer assumes no liability for the use or results of use from this document. Specifications are to be reviewed by the engineer to confirm the project's requirements and meet Federal, State, and Local codes and regulations.
- B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.
- C. The manufacturer shall supply complete computer generated submittal drawings, including hood section view(s) and hood plan view(s). These drawings must be available to the engineer, architect, and owner for their use in construction, operation, and maintenance.

1.3 QUALITY ASSURANCE

- A. This hood is ETL-listed to standard UL710, ULC710, and ULC-S646 when installed in accordance with these installation instructions and National Fire Protection Association Standard NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations."
- B. Built-in compliance with NSF/ANSI Standard 2.
- C. The hood shall be ETL Listed as:
 - 1. Exhaust Hood Without Exhaust Damper."
 - 2. ETL Sanitation Listed and built in accordance with NFPA 96.
 - 3. The ETL label shall list temperature rating(s) and minimum CFM/ft rating(s).

1.4 WARRANTY

- A. All units shall be provided with the following standard warranty:
1. This equipment is warranted to be free from defects in materials and workmanship, under normal use and service, for a period of 2-years from date of shipment.
 - B. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 2-year warranty period, upon examination by the manufacturer, such part will be repaired or replaced by manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization, and all returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.
 - C. Refer to Manufacturer's Operation, Installation, and Maintenance (OIM) Manual for detailed descriptions of what is/is not covered and contact information for warranty claims.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints, and penetrations of the hood enclosure to the lower outermost perimeter, which directs and captures grease-laden vapor and exhaust gases, shall have a liquid-tight continuous external weld in accordance with NFPA 96.

- B. Duct sizes, CFM, and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

2.2 CONSTRUCTION

- A. Construction shall be type 430 stainless steel.
- B. Double wall insulated front to eliminate condensation and increase rigidity on wide sizes. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A and 90B.
- C. Hood shall be equipped with a minimum of four connections for hanger rods. Hood lengths greater than 12' will have added hangers.
- D. Exhaust duct collar to be 4" high with flange.
- E. The grease drain system shall be an enclosed integral part of the hood back and have slopes with an exposed, removable 1/2" grease cup to facilitate cleaning.
- F. An integral baffle to direct grease laden vapors toward the exhaust filter bank.
- G. Hood shall be furnished with UL classified filters, supplied in size and quantity as required by ventilator.
- H. All seams shall be welded and have stainless steel on exposed surfaces.

2.3 LIGHTING

- A. Recessed round LED fixture and LED light, 3500K Warm output.

2.4 FILTERS

- A. Stainless Steel Captrate Solo filter with hook, ETL Listed.
Particulate capture efficiency: 85% efficient at 9 microns, 76% efficient at 5 microns.

2.5 OPTIONS

- A. Fire Suppression System: UL 300 fire suppression system.
- B. Optional perforated supply plenum shall provide make-up air discharged below the cooking equipment.
 - 1. Perforated diffuser plates shall be included in the design to provide even air distribution.
 - 2. Unexposed surfaces shall be constructed of aluminized steel. Plenum shall be insulated to prevent condensation.
 - 3. Perforated Supply Plenum (PSP)
- C. Hood and/or Wall Mounted Utility Cabinet - Cabinet can store listed fire suppression system, listed components, pre-wired electrical controls.

2.6 ACCESSORIES

- A. End Panel(s) maximize hood performance and eliminate the effects of cross drafts in the kitchen. Units constructed of stainless steel and sized according to hood width and cooking equipment. Exposed edges hemmed for safety and rigidity. Selected panels:
 - 1. Wall as End Panel
 - 2. Wide Vertical End Panel
- B. Splash panel(s) selected:
 - 1. Backsplash
 - 2. Backsplash - Inside Corner
 - 3. Left Sidesplash
 - 4. Right Sidesplash
- C. Standoff(s) selected:
 - 1. Left End Standoff
- D. Wrapper(s) may be installed from the factory or field installed. Wrapper(s) selected:
 - 1. Wrapper

- E. Miscellaneous option(s) selected:
1. Insulation for Top of Hood -Fully insulated top of hood.
 2. Insulation for Back of Hood -Backside of hood is fully insulated.
 3. Structural Front Panel -Front panel made with 18 gauge material.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions under which the system is installed. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual, and all applicable building codes.

[illegible]

FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA

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100

KITCHEN HOOD EXHAUST AND MAKEUP AIR

SHEET NO.

M5.4

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FIRE SYSTEM INFORMATION – JOB#5469334

FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1	FSS-1	TANK FS	4.0/4.0/4.0/4.0	67	FIRE CABINET RIGHT	RIGHT, HOOD 2

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1	FSS-1	SC ELECTRICAL	2.000	CAPTIVEAIRE SYSTEMS

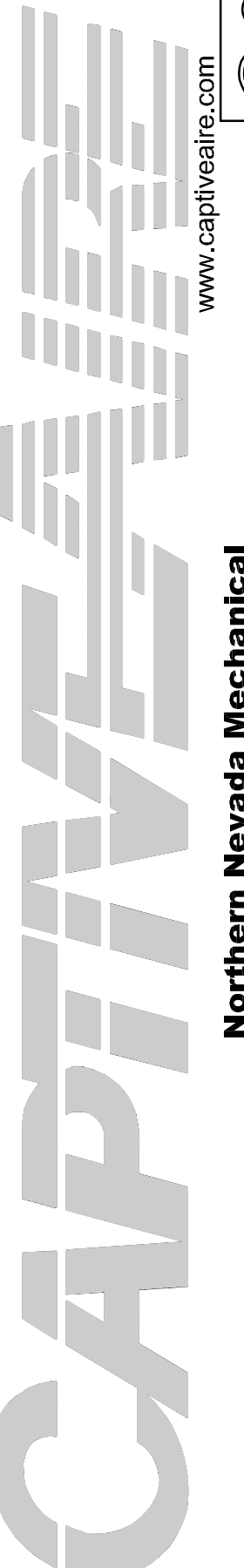
FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER – PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
1	FSS-1	0 – 0 – 12-F28021-32144-0T-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO, CLOSE ON TEMP RISE AT 360°F.	2	0
		0 – 0 – 361091 3/8" BRASS PLUG.	3	0
		0 – 0 – 79425 3/8" NPT FEMALE TO 1/2" MALE PROPPRESS ADAPTER.	3	0
		0 – 0 – 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) – SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	3	0
		0 – 0 – 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5' BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	3	0
		0 – 0 – 87-300001-001 TANK – PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	4	0
		0 – 0 – 87-300030-001 PRIMARY ACTUATOR KIT (PAK) – ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 – 0 – 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	16	0
		0 – 0 – 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	13	0
		0 – 0 – 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD.	14	0
		0 – 0 – 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	8	0
		0 – 0 – A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 – 0 – B1145 3/8" BLACK IRON 90 ELL.	6	0
		0 – 0 – DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	4	0
		0 – 0 – SLPDCN-03FT SUPERVISED LOOP CONNECTION KIT. CONTAINS THE PARTS NEEDED TO CONNECT THE SUPERVISED LOOP BETWEEN END TO END HOODS WITH LESS THAN A 2' GAP. KIT CONTAINS 5 FEET OF BLACK MG WIRE, 5 FEET OF TAN MG WIRE, 3 FEET OF FLEXIBLE CONDUIT, AND TWO 7/8" CONNECTORS.	2	0
		0 – 0 – SLPDCN-30FT SUPERVISED LOOP CONNECTION KIT. CONTAINS THE PARTS NEEDED TO CONNECT THE SUPERVISED LOOP BETWEEN HOODS WITH UPTO 29' GAP. KIT CONTAINS 32 FEET OF BLACK MG WIRE, 32 FEET OF TAN MG WIRE, 30 FEET OF FLEXIBLE CONDUIT, AND TWO 7/8" CONNECTORS.	1	0
		0 – 0 – TANK STRAP TANK STRAP – USED FOR TANK FIRE SUPPRESSION.	12	0
		0 – 0 – TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	4	0
		0 – 0 – WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	4	0
		16 – 16 – 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	15	0
		16 – 16 – DL-F NOZZLE – TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE)- 4 FLOW POINTS.	15	0
		26 – 26 – GSA-3/8 QUIK SEAL – 3/8" (UL).	15	0
		34 – 34 – A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0

1

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Five Star Catering ALT R1

10 Hangar Way,

Watsonville, CA, 95076

DATE: 5/11/2022

DWG.#: 5469334

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SHEET NAME: KITCHEN HOOD EXHAUST AND MAKEUP AIR

SHEET NO.

M5.5

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SECTION 21 23 00
WET- CHEMICAL FIRE-EXTINGUISHING SYSTEMS
TAG: TANK Fire Suppression

PART 1- GENERAL

1.1 SUMMARY

A. TANK Fire Suppression is a pre-engineered, stored-pressure wet chemical solution extinguishing system.

1.2 SUBMITTALS

A. The manufacturer assumes no liability for the use or results of use from this document. Specifications are to be reviewed by the engineer to confirm the requirements of the project and meet Federal, State, and Local codes.

B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.

1.3 QUALITY ASSURANCE

A. TANK Fire Suppression System shall be UL & ULC listed in accordance with UL300, UL1254, ULCDRD-C1254.6.

B. Microprocessor-based control board shall be ETL Listed to UL Standard 864 and CAN/ ULC-S527-11.

C. TANK Fire Suppression System intended for installation and for use in accordance with the National Fire Protection Association Standards:

1. Wet Chemical Extinguishing Systems, NFPA 17A

2. National Electrical Code, NFPA 70

3. National Fire Alarm & Signaling Code, NFPA 72

D. New York City and FDNY approved under CDA# 5870.

E. California State Fire Marshal (CFSM), Listing No. 7085-2199:0502.

1.4 WARRANTY

A. All units shall be provided with the following standard warranties:

1. TANK Fire Suppression System is warranted to be free from defects in materials and workmanship, under normal use and service, for a period of 60-months from date of shipment.

B. Warranty does not cover consumable products such as batteries and nitrogen.

C. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 60-month warranty period, upon examination by the manufacturer, such part will be repaired or replaced by manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization, and all returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.

D. Refer to Manufacturer's Operation, Installation, and Maintenance (OIM) Manual for detailed descriptions of what is/is not covered and contact information for warranty claims.

PART 2- PRODUCTS

2.1 GENERAL

A. A pre-engineered, fixed pipe, automatic wet chemical agent fire suppression system for protection of all hazard areas associated with cooking operations, including exhaust hoods, plenums, ductwork, and cooking appliances.

2.2 COMPONENTS

A. Exhaust hood fire system components to be factory installed.

B. Cylinder and Valve Assembly

1. The cylinders shall have a tin-nickel alloy plated brass valve with pressure gauge.

2. Wet chemical agent shall be contained in one or more stored pressure DOT/TC rated steel cylinder and valve assemblies.

3. Each cylinder is factory-filled with liquid fire suppressant and pressurized to 200 PSIG at 70°F.

C. Distribution Nozzles

1. Nozzles shall be located to protect the exhaust ducts, plenums, and all cooking appliances requiring protection.

2. All nozzles shall be equipped with a metal blow off cap. The cap prevents contamination from entering the pipe network and is designed to pop-off upon system discharge, allowing agent to flow to the protected hazard area.

3. All nozzles shall incorporate a stamped part number to easily identify nozzle type.

D. Distribution System

1. The distribution system shall consist of Copper, Schedule 40 black iron, chrome-plated or stainless-steel pipe and fittings. All exposed piping and fittings must be chrome-plated or stainless

steel.

2. Fittings shall be minimum class 150. Galvanized fittings shall not be used.

E. Suppression System

1. The system control equipment shall be capable of all functions associated with automatically and manually discharging the wet chemical agent from all cylinder and valve assemblies, including automatic shutdown of the heat source or fuel and electrical power to all protected areas upon system discharge.

2. Liquid Fire Suppressant shall be Aqueous Potassium Carbonate (APC).

3. All mechanical components of the actuator kit shall be enclosed.

4. The actuator kit shall be capable of automatic or manual activation means.

5. Supervisory Pressure Switch added to monitor operating system pressure.

6. For manual activation, an electrically operated manual release shall be used to actuate the system manually.

7. For automatic activation, the system will be activated by a Firestat (heat) detector.

F. Electrical

1. Electrical Division to provide shunt trip breakers at main power panel, or disconnects, as designated by the Electrical Engineer; interconnection provided at hood control panel for the signal to shut down all electricity in and under the exhaust hood. Shunt trips/disconnects to accomplish shut off of electricity in the event of fire system activation by others.

2. Printed circuit board with microprocessor-based controller that provides all the necessary monitoring, timing, and supervision functions required for the reliable operation of the fire system.

3. Independent supervised loops incorporate redundancy and fault detection.

4. Real-time cloud-based monitoring connection provided with system by ownership.

5. Primary power supply, with battery backup for power loss.

6. All wiring must be in accordance to NFPA 70 and the Authority Having Jurisdiction (AHJ).

7. Electric gas valve provided for equipment below exhaust hood. Coordinate size and installation with Plumbing Division.

8. All wiring is to be in accordance with the applicable manufacturer's instructions for the fire alarm control panel, gas shut-off valve, manual reset relay, and contractor supplied shut-off devices.

PART 3- EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions under which the system is installed. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

3.2 APPLICATION

A. Wet chemical-based fire suppression system for use in commercial kitchens. It can be mounted in the integral cabinet located at the end of the hood or offered as a wall mount package.

3.3 INSTALLATION

A. As part of this item, provide wall mounted type K handheld portable fire extinguisher, placard, and mounting bracket as required in the immediate vicinity of each cooking area, per NFPA-96 and NFPA-10. Additional fire extinguishers as required in the kitchen area are to be specified by the Architect and provided by the General Contractor.

B. Install in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual, and all applicable building codes.

C. Six-month and twelve-month inspections, servicing, and replacement of components as per NFPA 96 to be provided by the General Contractor or Owner.

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SHEET NAME: KITCHEN HOOD EXHAUST AND MAKEUP AIR

SHEET NO. M5.7

EXHAUST FAN INFORMATION - JOB#5469334

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	KEF-1	1	DUI80HFA	CAPTIVEAIRE	3131	1.250	1265	ODP,PREMIUM	2.000	1.4480	3	208	8.3	723 FPM	200	18.8
2	KEF-2	1	DU200HFA	CAPTIVEAIRE	3479	1.600	1263	ODP,PREMIUM	5.000	2.0660	3	208	15.0	846 FPM	230	23

MUA FAN INFORMATION - JOB#5469334

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	WEIGHT (LBS)	SONES
3	KMAU-1	1	A4-30D	30MF-4-MDD	A4	6000	6610	0.500	753	ODP,PREMIUM	5.000	1.4020	3	208	15.8	19.8A	35A	1055	12.7

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KEF-1	1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	EXHAUST FAN HEAT BAFFLE
		1	UNIT MOUNTED VFD FOR USE WITH ECPM03
		1	VFD MOUNTING BRACKET FOR DU/DR 180 - 200
2	KEF-2	1	2 YEAR PARTS WARRANTY
		1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	UNIT MOUNTED VFD FOR USE WITH ECPM03
		1	VFD MOUNTING BRACKET FOR DU/DR 180 - 200
3	KMAU-1	1	EXHAUST FAN HEAT BAFFLE
		1	2 YEAR PARTS WARRANTY
		1	SIZE 4 UNTEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
		1	INSULATION OPTION FOR VBANK FILTER SECTION
		1	INSULATED BLOWER SECTION SIZE 4 COMMERCIAL MODULAR
		1	2 YEAR PARTS WARRANTY

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST				SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT	
1	KEF-1	YES							
2	KEF-2	YES							
3	KMAU-1								

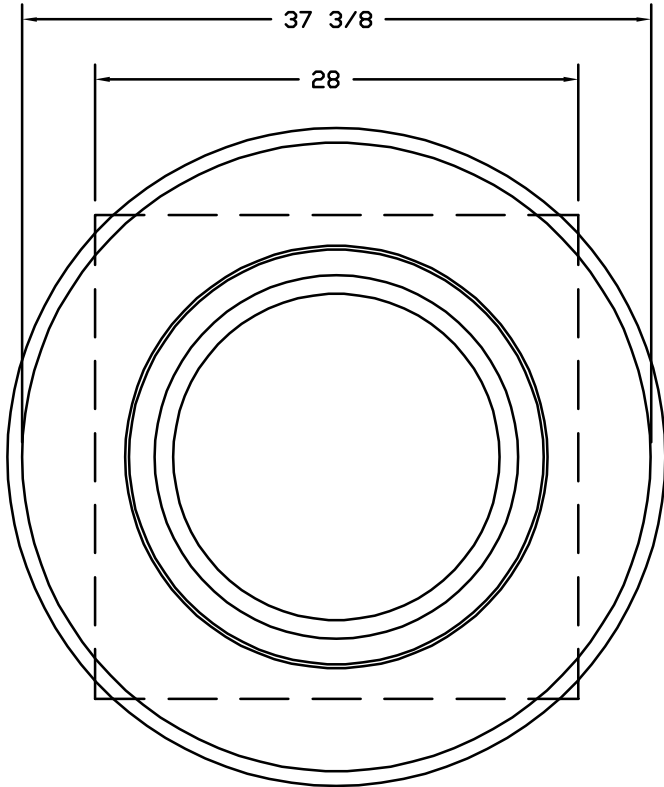
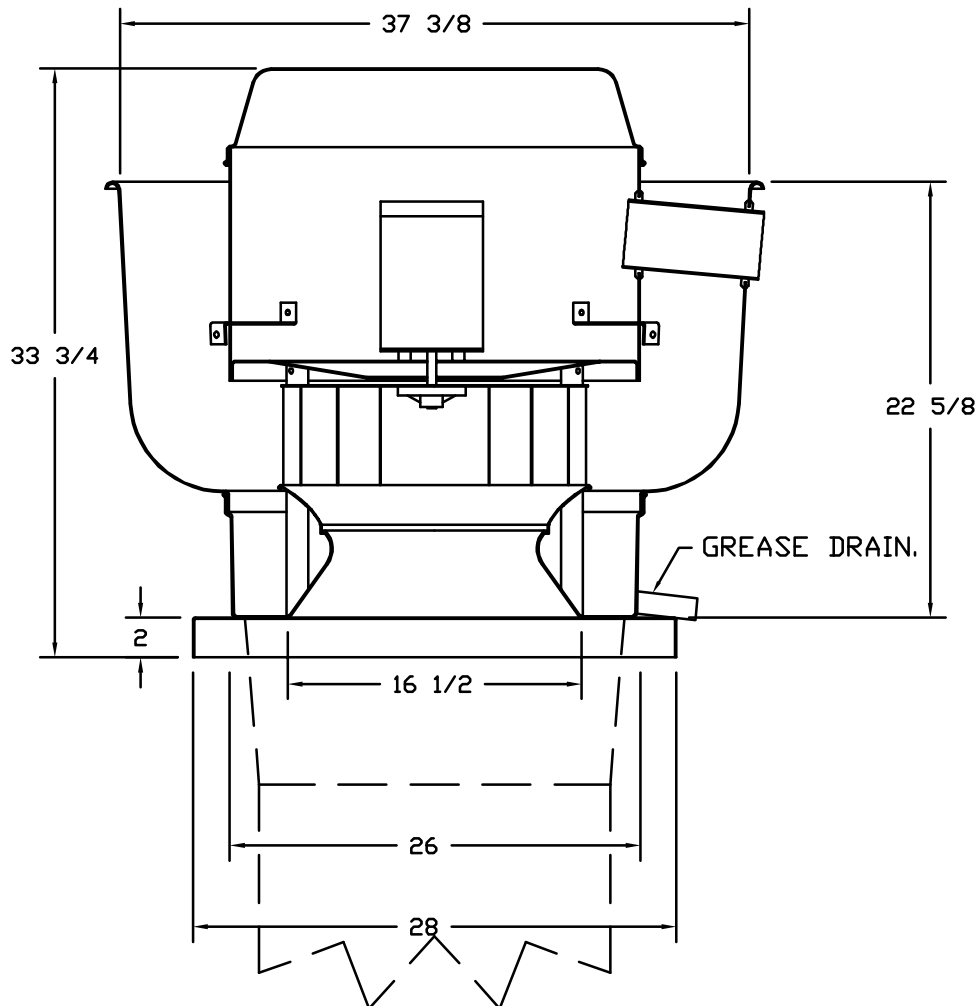
CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	37 LBS	CURB	26.500"W X 26.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
2	# 2	KEF-2	37 LBS	CURB	26.500"W X 26.500"L X 20.000"H ALONG LENGTH, RIGHT VENTED HINGED.
3	# 3	KMAU-1	68 LBS	CURB	42.000"W X 42.000"L X 20.000"H ALONG LENGTH, RIGHT.
	# 3			RAIL	4.000"W X 4.000"L X 36.000"H RIGHT.

AIR BALANCE CALCULATION FOR HOOD EXHAUST AND DOAS-1 MAKEUP AIR:
EXHAUST = KEF-1 + KEF-2 = 3131 + 3479 = 6,610 CFM.
MAKEUP AIR = KMAU-1 = 6,610 CFM

NOTE: MECHANICAL CONTRACTOR TO PERFORM FINAL BALANCE ADJUSTMENT OF MAKEUP AIR.

FAN #1 DUI80HFA - EXHAUST FAN (KEF-1)



TOP VIEW

FEATURES:

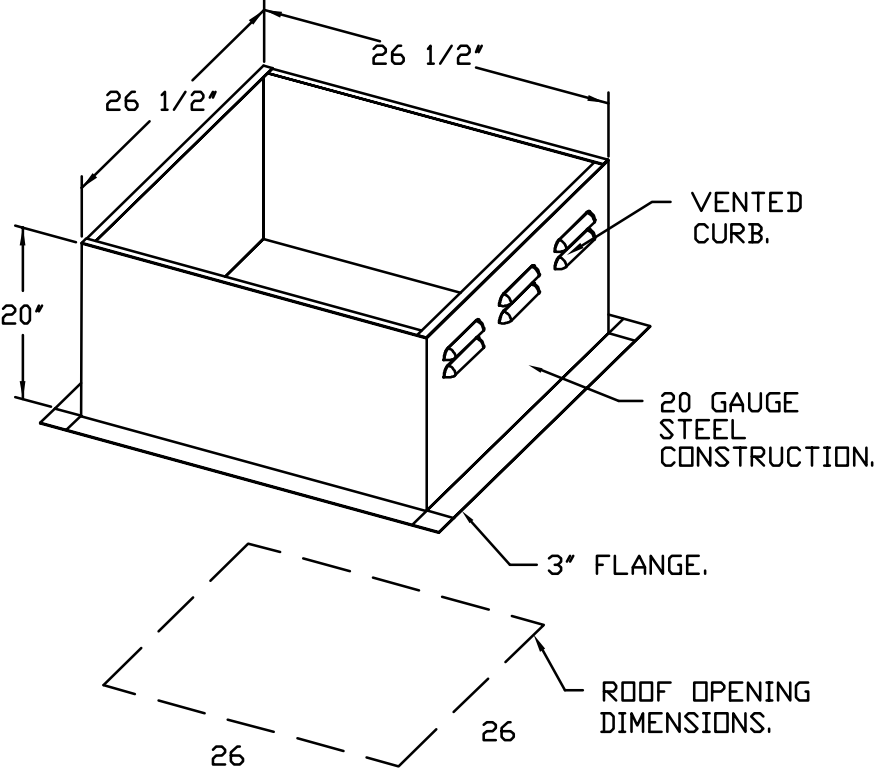
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

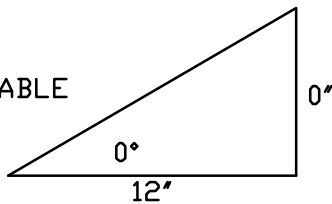
OPTIONS

GREASE BOX.
FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
EXHAUST FAN HEAT BAFFLE.
UNIT MOUNTED VFD FOR USE WITH ECPM03.
VFD MOUNTING BRACKET FOR DU/DR 180 - 200.
2 YEAR PARTS WARRANTY.



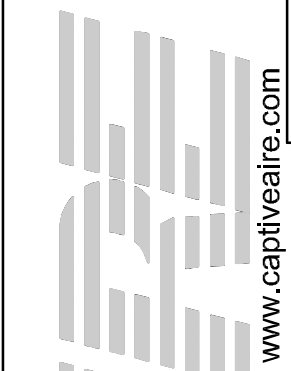
PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE.



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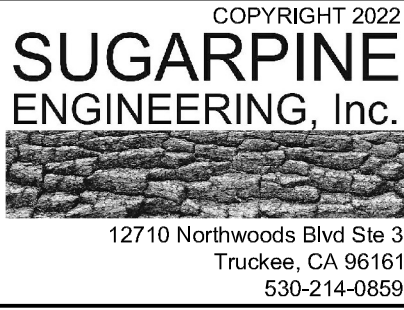
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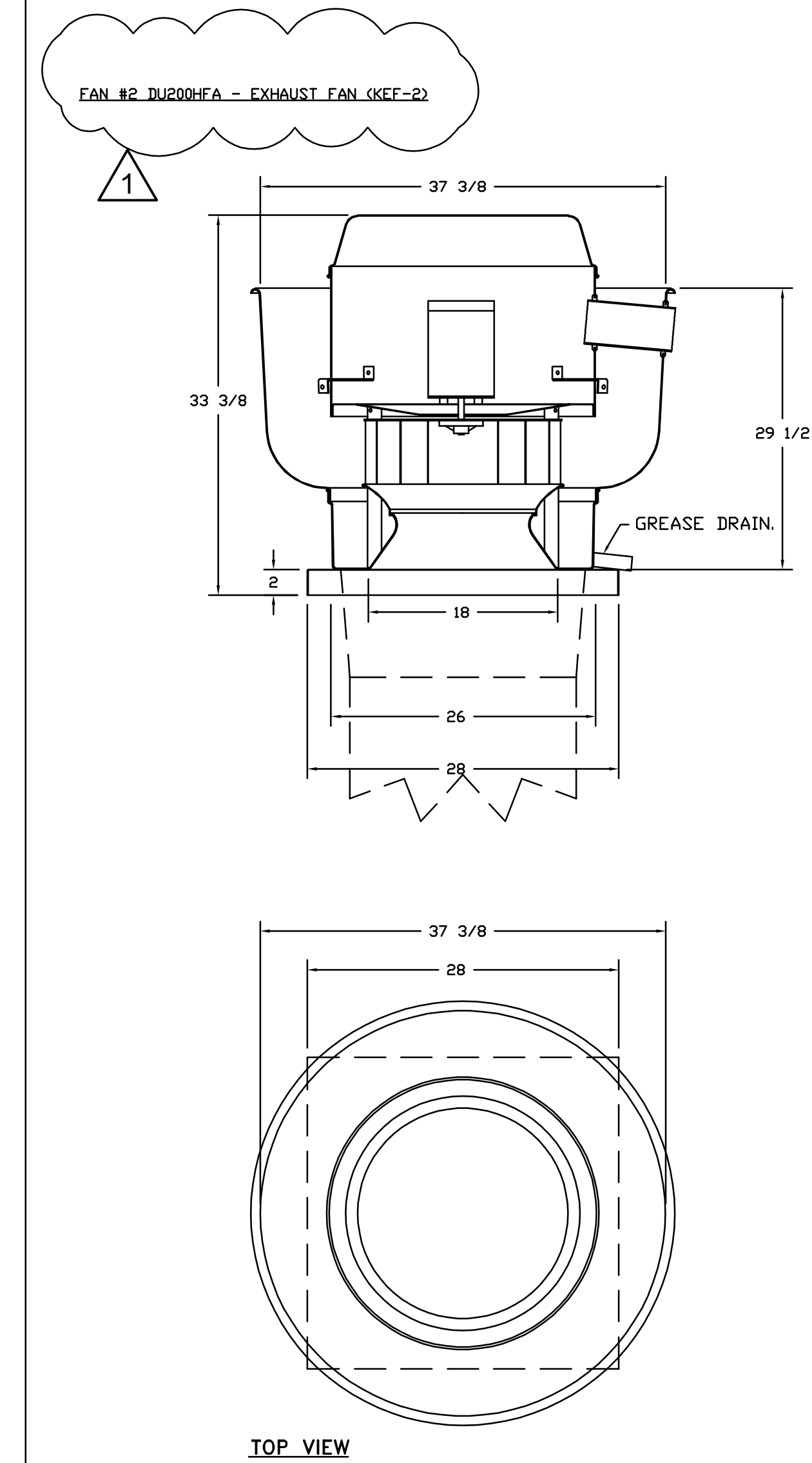
KITCHEN HOOD EXHAUST
AND MAKEUP AIR

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M5.8

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FEATURES:

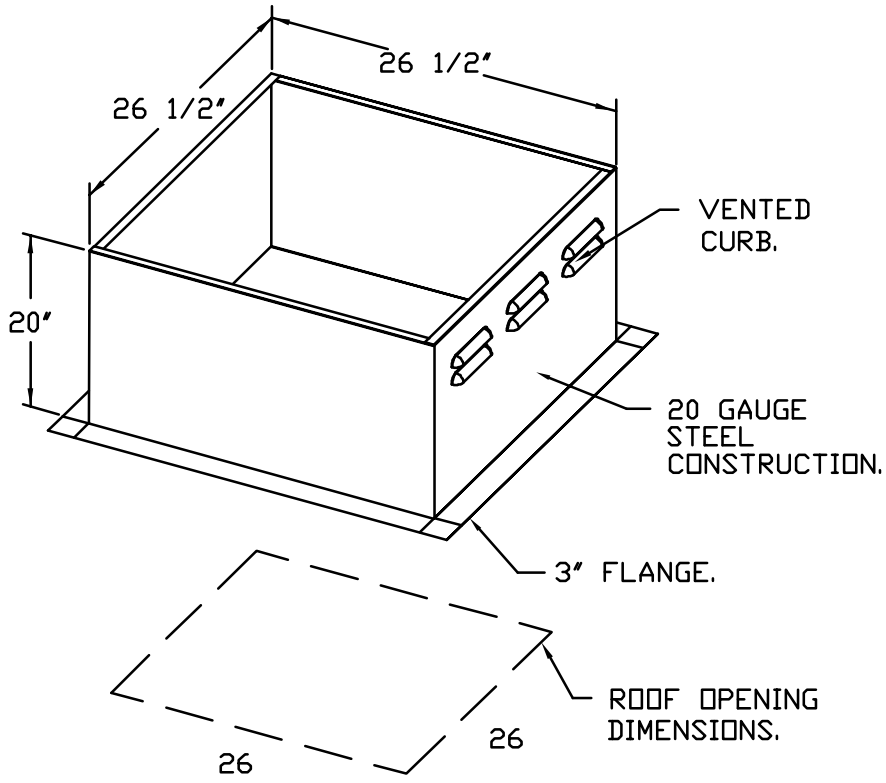
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- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
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- GREASE CLASSIFICATION TESTING.
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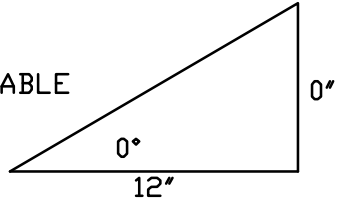
OPTIONS

GREASE BOX.
FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS.
UNIT MOUNTED VFD FOR USE WITH ECPM03.
VFD MOUNTING BRACKET FOR DU/DR 180 - 200.
EXHAUST FAN HEAT BAFFLE.
2 YEAR PARTS WARRANTY.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

SPECIFY PITCH:
EXAMPLE: 7/12 PITCH = 30° SLOPE.



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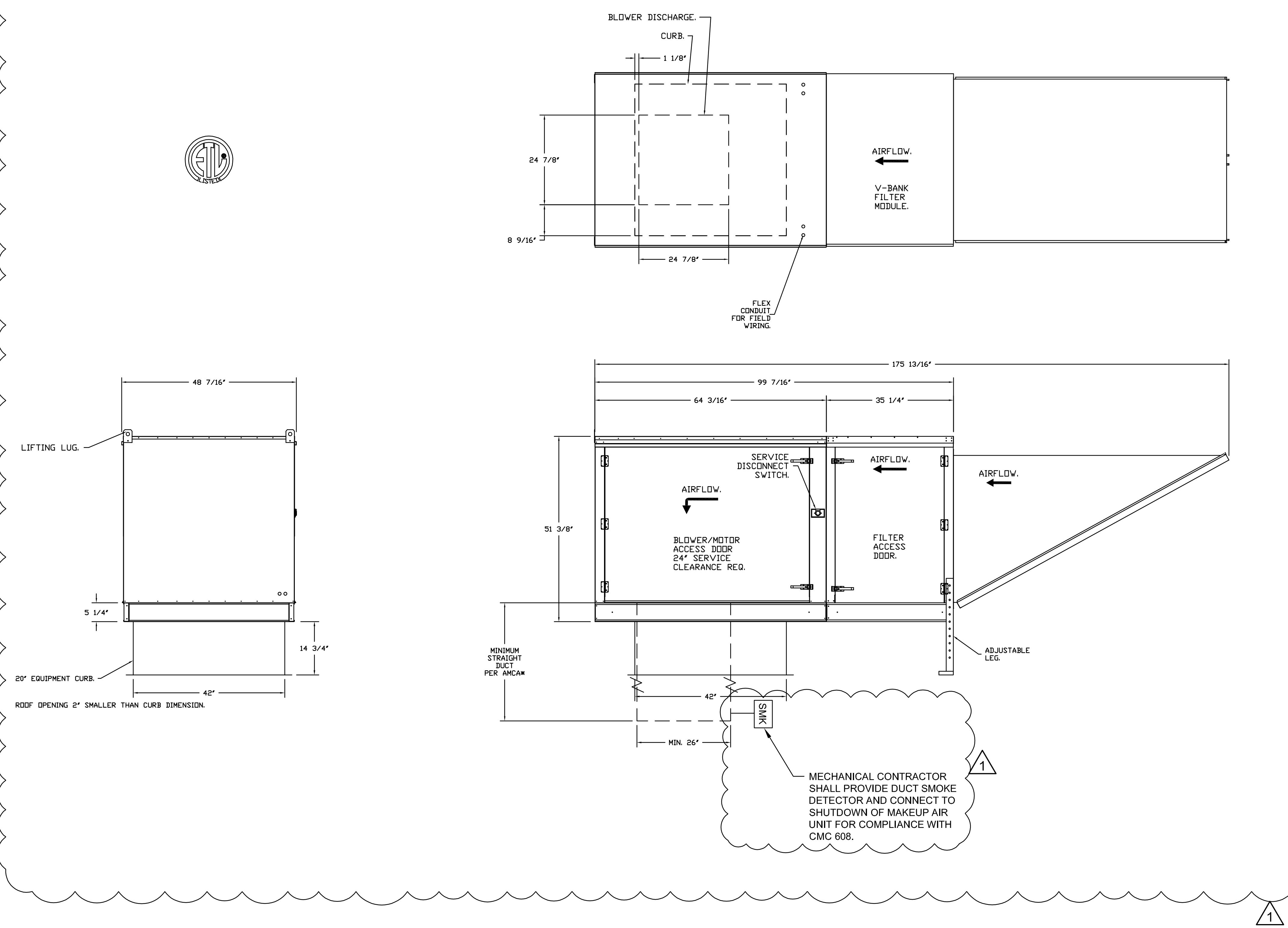
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- FAN #3 A4-300 - SUPPLY FAN (GMAU-1)
1. UNTEMPERED SUPPLY UNIT WITH 30" MIXED FLOW DIRECT DRIVE FAN IN SIZE #4 HOUSING.
2. V-BANK TA FILTERS W/INTAKE HOOD WITH EZ FILTERS - OUTDOOR.
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
4. DOWN DISCHARGE CONSTRUCTION FOR SIZE 4 UNTEMPERED DIRECT DRIVE AHUS.
5. "INSULATION" FOR V-BANK INTAKE OPTION.
6. INSULATED BLOWER HOUSING SIZE 4 COMMERCIAL MODULAR.
7. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION).
8. 2 YEAR PARTS WARRANTY

*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 26" x 26".



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DESCRIPTION	DATE:
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www.captiveaire.com

Northern Nevada Mechanical

P.O. Box 17489 Reno, NV, 89511 PHONE: (775) 236-5843 FAX: (919) 516-8720 EMAIL: reg113@captiveaire.com

Five Star Catering ALT R1	Five Star Catering ALT R1
10 Hangar Way,	10 Hangar Way,
Watsonville, CA, 95076	Watsonville, CA, 95076

DATE: 5/11/2022	DWG.#: 5469334
DRAWN BY: Region 113	SCALE: 3/4" = 1'-0"
MASTER DRAWING	SHEET NO. 13

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SUGARPINE ENGINEERING, Inc.

12710 Northwoods Blvd Ste 3
Truckee, CA 96161
530-214-0859

FIVE STAR CATERING

10 HANGER WAY
WATSONVILLE, CA

SEAL

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA
Exp: 12/31/2023
05-13-2022

REVISIONS

03-28-2022 FOR PERMIT
05-13-2022 PLAN CHECK COMMENTS

DATE: 05-13-2022
ISSUE: FOR PERMIT
SCALE: See Plan
SHEET NAME: KITCHEN HOOD EXHAUST AND MAKEUP AIR
SHEET NO.:

M5.10

ELECTRICAL SPECIFICATIONS

1. Refer to Architect's Cover Sheet and Division 01 specifications for additional information about deferred submittals, codes, design-build details, seismic and wind criteria, submittals, closeout requirements, etc.
2. Fire Suppression and Fire Alarm designs shall be by design-build FPE or NICET- 3 licensed technicians. Contractor shall submit to Building Department as DEFERRED SUBMITTALS. Contractor shall include all fees for designing and permitting of these systems. Any related information shown on the MEP plans is for general guidance only.
3. Lighting controls, security, data, telecom, audio-visual, WIFI, access controls, and similar low-voltage (less than 50V) designs shall be by the Contractor. Contractor shall submit to Building Department as DEFERRED SUBMITTALS if requested by building department or its designate. Contractor shall include all fees for designing and permitting of these systems. Any related information shown on the MEP plans indicates design intent but is for general guidance only.
4. Seismic Bracing and Attachments shall be designed by the Contractor. Contractor shall submit to Building Department as DEFERRED SUBMITTALS if requested by building department or its designate. Contractor shall include all fees for designing of these systems. Any related information shown on the MEP plans is for general guidance only. Consult Structural Engineer for more information.
5. These notes accompany all other specification sections, manuals, and notes across all divisions. Subcontractors are bound with the general contractor to all parts of the construction contract. See specifications, plans and other divisions for additional information required for coordination. If a conflict is discovered, submit a request for interpretation.
6. These plans and their referenced specifications function together as engineering design intent, and depend upon all other parts of the design documents from all other parties (architecture, structure, civil, fire protection, data, etc.). These plans and specifications must therefore be used in whole, and in conjunction with all other plans and specifications. No sheet, page or part may be used individually.
7. Sugarpine Engineering shall have no responsibility for deviations from these plans and specifications, unless such deviations are authorized in advance, in writing, by Sugarpine Engineering. If deviations are made without authorization, then the party who authorized or made the deviations assumes all responsibility for the deviations. In the case of a Contractor making deviations, then that contractor shall be the Designer of Record and in responsible charge of those deviations, including for all effects, costs, or delays related to them.
8. This project is a remodel or renovation of an existing building. The electrical plans indicate existing items to the extent that information and prior plans were available. Verify all field conditions, and notify engineer of any necessary deviations or issues.
9. Unless otherwise specified in Division 01, Contractor shall include a 15% cost contingency for unforeseen conditions for each MEP trade (fire alarm, controls, lighting, power, data, etc.).
10. Coordinate with general (prime) contractor (GC) for what items are to be provided and connected by which subcontractor.
11. Do not scale electrical controls, lighting fixtures, conduits, framing, structure, furnishings, etc., in field and across other divisions prior to procurement or commencement of work. Architectural and structural drawings shall govern all dimensions.
12. All contractors shall be licensed and experienced with the systems, performance levels, and construction types indicated in the plans and specifications prior to bidding.
13. All Contractors and Subcontractors shall be licensed, experienced, and thoroughly knowledgeable in their part of the construction and shall perform in a responsible manner with customary construction sequence, shall recognize the priority of the construction documents, and shall notify the general contractor in writing of potential problems when the construction documents are unclear or inconsistent.
14. Subcontractors shall be responsible to notify the prime contractor of discrepancies or conflicts in the construction documents or as-built conditions discovered during bidding and/or prior to performing the work.
15. Fire suppression and alarm designs shall be by design-build FPE or NICET 3 licensed technician.
16. Items not indicated on the plans or specifications, including but not limited to some details and details for alarms, controls, bracing, hangers, attachments, conduit, splicing, junctions, and other items necessary for the project, shall be designed and provided by the licensed contractors installing their own work per State laws.
17. All equipment shall meet or exceed 2019 Title 24 Part 6 Prescriptive and Mandatory efficiencies and requirements. All other portions of the work shall be designed and installed to comply with the 2019 Title 24 code rules.
18. All products, devices, or material shall be provided, braced, and installed to comply with CBC Chapter 16 seismic requirements. No equipment, device, or material shall contact any building component or other material during a seismic event.
19. Provide seismic bracing, hanger rods, hanger rod stiffeners, etc., to prevent more than 1" lateral motion of any conduit during a seismic event. Equipment shall remain attached and fully operational. Basis-of-design intent is Mason Industries OSHPD preapproved "OPA" materials, means and methods.
20. Conduits and boxes shall not be capable of impacting any adjacent item. Conduits, fittings, and boxes shall not disconnect or compromise sealing during/after a seismic event. Refer to CBC Chapter 16 and Mason Industries design manuals. Consult Structural Engineer for seismic zone information.
21. All vibrating, sustaining, or flexibly mounted equipment shall be connected with MC cable or liquid-tight PVC flexible conduit subject to NEC and other sections.
22. Sugarpine Engineering (SPE) cannot, through its designs, specifications, observations, or by any other means, guarantee the prevention, reduction or elimination of microseismicity, geiondria, cavitational, cavitation, particles, molecules or debris (collectively substances) in air, water or other building systems, or control potential risk factors for human health. Additionally, SPE cannot guarantee security of the project, including but not limited to entry, forced entry, filtration, air quality, equipment reliability, frost protection, or other means of protection, explicit or implied.
23. Examination of bidding documents:
- a. GC shall make the entire set of bid documents available to every subcontractor and vendor during the bidding period. Every subcontractor shall examine the bidding documents carefully, and not later than seven (7) days prior to bid submission. GC shall make written request to the owner for interpretation or correction of any discrepancies, ambiguities, inconsistencies, or errors therein which he may discover; the owner or architect will issue any interpretation or correction as an addendum. Only a written interpretation or correction by addendum shall be binding. No bidder shall rely upon interpretations or corrections given by any other method. If discrepancies, ambiguities, inconsistencies, or errors are not presented by the contractors in writing, contractor shall include in his bid, labor materials and methods of construction to provide the highest cost option in question. After award of contract, no allowance or extra compensation will be made on behalf of the contractor due to his failure to make the written requests described above.
- b. Failure to request clarification during the bid period of any inadequacy, omission, or conflict will not relieve the contractor of his responsibilities. The signing of the contract implicitly denotes that the contractor has a thorough comprehension of the full intent and scope of the contract contract drawings and specifications.
24. Provide base bid with basis-of-design or listed equivalent products. Make and model named on any schedule or note is the basis-of-design. Other manufacturers listed (if any) are considered equivalents subject to matching the features and specifications of the basis-of-design.
25. Manufacturers not listed by name are considered substitutions, and must be submitted with a "substitution request" highlighting variances from the basis-of-design, and indicating cost or schedule savings. Substitutions may require additional design fees to review and/or accommodate. Substitutions will be considered only after bid award, and will be considered only if there is a proposed schedule or cost savings. Contractor assumes all responsibility for delays and costs incurred due to review and/or accommodation of substitutions.
26. Contractor is responsible for all coordination of equivalents and substitutions, in addition to review and/or redesign fees. Where contract documents permit selection from several equivalents, or where substitutions become authorized, coordinate clearance and interface requirements with all divisions.
- a. Provide necessary additional items so that selected or substituted item operates equivalent to the basis-of-design and properly fits in the space allocated for the basis-of-design.
- b. Provide all features which are standard on the basis-of-design plus any specified options.
- c. Be responsible for assuring that piping, conduit, duct, flue, and other service locations for equivalents or substitutions do not cause access, service, or operational difficulties any greater than would be encountered with the basis-of-design.
27. Work shall be performed in a workmanlike manner to the satisfaction of the architect, owner, and engineer.
28. Materials and/or equipment not scheduled on plans shall be identified by the subcontractor with sufficient time to allow selection, purchase, and delivery to maintain construction schedule.
29. All work of all trades shall meet or exceed the minimum materials, means and methods requirements of the 2019 Title 24 California Building Code Series, National Electrical Code, most current NFPA, all local ordinances and amendments and manufacturer's installation recommendations. Perform diligent review of these requirements prior to bidding. If a conflict between these publications and/or the construction documents exists, the most expensive requirement shall be included in base bid, and a written request for clarification shall be submitted.
30. Pay for and secure all required permits and inspections. Coordinate with GC. Provide all documentation to owner at project completion, prior to final pay application.
31. Provide Arc Flash and Shock Hazard, and Appropriate PPE Required labeling per NFPA 70E on all switchboards, panelboards, industrial control panels, motor control centers, production line equipment, and disconnect switches. Electrical contractor shall provide all required calculations needed to properly label the equipment. All labeling shall be permanently affixed to the equipment.
32. All materials and/or equipment shall be new, and shall be handled and installed per manufacturer's specifications and recommendations.
33. Temporary heat/cold shall be furnished by the general contractor. Use of the permanent heating/cooling systems will not be allowed during construction.
34. See architectural reflected ceiling plans for all ceiling penetrations, light fixtures and air device locations. Do not scale electrical drawings. Where dimensions do not exist, coordinate with architect and/or interior designer.
35. See architectural floor plans for flooring materials; provide penetrations compatible with floor assemblies.
36. Coordinate and overlay civil, architectural, structural, mechanical, fire protection, electrical, landscaping, and interior design drawings prior to installation.
37. Provide equipment to match electrical voltages, phase, breakers, controls, and capacities scheduled and/or available, prior to procurement. Any deviation is considered a substitution subject to fees and terms above.
38. Field-verify exact locations of existing and new aboveground and underground utilities, piping, and raceway systems prior to trenching. Notify engineer immediately upon discovery of any discrepancy from the plans.
39. Provide necessary trenching, backfill, excavation, sloping, secutting and patching, concrete/paving, etc., as required. Backfill trenches in 6" layers and to 90% compaction and patch to match grade.
40. Submittals:
- a. Number of copies: per Division 01, or 5 copies if not specified. Alternate: PDF.
- b. Submit all mechanical shop drawings and product data at one time. Submittals shall each be bound and indexed according to major system/type: Power, lighting, controls, communications, data, fire alarm, etc. Partial submittals will be rejected. Submittals shall include, but not be limited to: raceways, boxes, fittings, pull strings, conductors, transformers, panels, switchgear, metering, controls, communications, and fire alarm.
- c. Failure to submit, order, or release order for materials and/or equipment will not be accepted as a reason to substitute materials, equipment, or installation methods.
- d. Submit record documents (as-builts) to architect. Documents shall include all addenda, instructions, directives, approved change orders, alterations, re-routings, etc.
41. Warranties
- a. Guarantee the installation against defects in materials and workmanship. Labor warranty shall be for a period of one year, superseded by Division 01, if any. Equipment and material warranties shall be the full duration of each mfr's factory warranty. Provide all documentation to owner at project completion, prior to final pay application.
- b. All warranties shall commence at the date of owner's acceptance. Defects shall be promptly remedied without cost to the owner.
42. Field observations may be periodically conducted by SPE, for the sole purpose of reviewing progress and quality of work completed by the Contractor which falls within SPE's scope of design services. Observation is not intended to be an exhaustive check or a detailed inspection of the Contractor's work but rather to allow SPE to become generally familiar with the work in progress and to determine, in general, if the work is proceeding in accordance with the Contract Documents. SPE assumes no responsibility for concealed work, construction means, methods, techniques, quality, sequences or procedures utilized by the Contractor, nor for the Contractor's safety precautions or programs, nor for acts or omissions of the Contractor, nor for the Contractor's failure to perform work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.
43. Systems shall be complete, operable, and ready for continuous operation prior to acceptance by the owner.
44. Offset raceways, panels, etc., as necessary to accommodate structure, beams, columns and equipment. Record and submit all field changes.
45. Mount all operator controls (stats, dials, etc) so top-to-box is 48" AFF in "accessible" areas, 54" AFF in other areas. Provide boxes for all devices, mounting to drywall not allowed. Coordinate location and type/trim with wall finish. Avoid casework, moldings, trim, furniture, heat sources, sunlit and exterior walls. Notify engineer of any conflicts prior to beginning box rough-in.
46. Provide 4" high concrete equipment pads beneath floor mounted electrical equipment, in addition to any base assemblies required or recommended by the manufacturer. Where a 4" high equipment pad causes the equipment to violate utility or CEC maximum height requirements, provide the maximum pad height that will allow the equipment to stay within acceptable height constraints. Pad height shall not be less than 2". Contractor shall provide equipment that is compatible with a 2" - 4" equipment pad.
47. Smoke and Carbon Monoxide detectors shall be interconnected. Devices shown in this plan shall be combination smoke/co detectors. Primary power by building electrical system, refer to panel schedule for crouling. Secondary power by integrated battery backup. Install per manufacturer requirements. Detectors shall be located at least 3 ft away from any air current source, including but not limited to supply/return duct terminations, fan coils, and ceiling fans.
48. Fire stopping requirement. Penetrations through rated walls and floors shall be sealed with a material capable of preventing the passage of flames and hot gasses when subjected to the requirements of the test standard specific for fire stops ASTM-E-814. Acceptable materials include: Dow Corning RTV fire stop foam for bare pipe, metal conduit, and electrical cable; 3M fire dam 150 caulk for bare pipe, metal conduit, and building construction gaps; 3M CP-25 caulk and FS-195 intumescent strips for insulated pipes, plastic pipe or conduit, and electrical cable. Submit data sheet applications for each type of penetration encountered. Select and apply all fire-stopping materials in strict accordance with the mfr's written instructions and UL listings.
49. Electrical boxes installed in fire rated assemblies shall be UL listed steel boxes with 16 square inches max. cross sectional area per box. Total electrical box cross sectional area shall not exceed 100 square inches per 100 square feet of wall. Electrical boxes shall be separated by a minimum of 34 inches on opposite sides of the wall.
50. Conduits penetrating through roof shall have roof flashing compatible with the roofing system. See architectural drawings. In the absence of any other requirements, provide tall cone with EPDM boot for conduit in single ply membrane roofs, and curved roof penetrations in all types of roof. Installation shall be watertight.
51. Refer to food service for food service equipment and additional electrical requirements. Provide power, interlocks, controls, etc., as required by food service equipment and other suppliers.
52. Refer to all other drawings across all divisions for exact locations and additional requirements. Provide power, interlocks, controls, etc., as required by other suppliers.
53. Make final connections to all kitchen equipment. Refer to kitchen plans for exact location of rough-ins.
54. Support each transformer on Mason Industries or equivalent neoprene restrained vibration isolators.
55. Systems shall be tested for proper operation. Perform at a minimum all code required tests or systems. If tests of work are defective, contractor shall make corrections necessary at no additional cost to owner.
56. Visit site prior to bid and verify that conditions are as indicated. Contractor shall include in his bid costs required to make his work meet existing conditions.
57. System outages shall be permitted only at times approved by owner - in writing. Work which could result in an accidental outage (beyond branch circuit breakers) shall be performed by the maintenance personnel advised of such work.
58. Provide electrical acceptance testing as indicated on T24 forms.
59. Contractor's failure to order or release order for materials and/or equipment will not be accepted as a reason to substitute alternate materials, equipment, or installation methods.
60. Field verify existing equipment or circuits that are remaining to be reconnected to new or existing switchboards, panels, or panel boards. Provide switches, receptacles, conduit, wire, etc. As required, to restore continuity of circuits).
61. Existing systems and conditions shown on drawings are for guidance only. The electrical contractor shall field check all existing conditions prior to bidding and to include in his bid an allowance for removal and/or relocation of existing conduits, wires, devices, fixtures, or other equipment as indicated on the plans or as required to coordinate and adapt new and existing electrical system to all other work as required.
62. Verify exact location of equipment to be furnished by others prior to rough-in.
63. Review architectural and mechanical drawings and provide lights, switches, controls, receptacles, telecomm outlets, equipment connections, etc. And associated crouling in new and remodeled areas.
64. Install all materials in accordance with the manufacturer's recommendations. Any deviations shall be brought to the architect/engineer's attention prior to installation.
65. Final connections to equipment shall be in accordance with manufacturer's approved wiring diagrams, details, and instructions. It shall be the contractor's responsibility to provide materials and equipment compatible with equipment actually supplied.
66. Contractor shall be responsible for replacing equipment which is damaged due to incorrect field wiring provided under this section, or factory wiring in equipment provided under this section.
67. All electrical systems components shall be listed or labeled by UL or other recognized testing facility.
68. Wiring devices shall be specification grade and rated at 20 amperes for light switches, and 20 amperes for duplex receptacles. The color of the devices and cover plates shall be as directed by architect.
69. All wiring shall be installed in listed metallic raceways. EMT fittings shall be malleable iron or steel. Connectors shall be insulated throat type. Minimum conduit size is 1/2". Follow NEC/NEC for maximum number of conductors per conduit. Conduit shall be of sufficient size and conductor quantity shall be limited to eliminate the need to de-rate conductors. Metal clad cable is permitted in concealed locations.
70. All empty raceway systems shall have a 200lb nylon pull string or equal, and shall be identified at all junction, pull and termination points, using permanent metallic tags. Tag shall include intended use of conduit origination, and termination points of each individual conduit.
71. Wire shall be copper, 75 degree Celsius rated for general use. Wiring within 3 inches of fluorescent ballasts wire shall be copper, minimum 90 degree Celsius rated. Sizes indicated are for installation in a maximum 30 degree Celsius ambient. Conductor ampacity shall be de-rated for higher ambient installations.
72. Provide new updated panelboard directories for existing and new circuits which will be utilized for completion of project.
73. Final connections to motors and other vibrating equipment shall be Seal Tite Flex and approved fittings. Do not secure conduits, disconnects, or devices to ductwork or mechanical equipment.
74. All outlets to be labeled (with clear tape and black text) with panel and pole designation.
75. Lighting ballasts for fluorescent lamps shall be electronic, programmed start type with less than 10% total harmonic distortion rating, minimum 0.88 ballast factor and minimum 0.95 power factor.
76. All lighting sources (unless only for decorative use) shall have a color rendering index (CRI) of 80 or higher.
77. SPE shall have no responsibility for the photometrics, color rendering, appearance, quality, lifetime, reliability, or performance of lighting fixtures selected by others.
78. Systems shall be tested for proper operation. If tests show that work is defective, contractor shall make corrections necessary at no cost to owner.
79. Guarantee the installation against defects in materials and workmanship which may occur under normal usage for a period of one year after owner's acceptance. Defects shall be promptly remedied without cost to the owner.
80. Systems shall be complete, operable, and ready for continuous operation. Lights, switches, receptacles, motors, etc. Shall be connected and operable.
81. Maintain a current set of as-built record drawings which shall be available for review during engineer's site observations. Upon completion, provide record drawings to architect. Drawings shall include all addendum items, change orders, alterations, re-routings, etc.
82. Provide Heat Trace cable and outdoor thermostat controls for every pipe subject to freezing and as indicated or noted on Mechanical plans and specifications.
83. Provide Heat Trace cable and outdoor thermostat controls for all roof valleys, parapet overflows, roof drains, gutters, and downspouts. See Architectural plans and specifications.
84. All buried conductors shall be in raceways.
85. All buried electrical raceways and components shall be Schedule 80 PVC NMC, solvent welded fittings and sweeps.
86. All exposed outdoor raceways shall be RMC with metallic weathertight boxes, mechanical fittings and sweeps.
87. All buried raceways shall be at least 18" below grade. Comply with NEC Table 300.5 for trench depth requirements.
88. Comply with serving utility requirements for clearances between buried items, joint trench limitations, and undisturbed soil requirements. Notify engineer of any conflicts prior to starting trenching.
89. Coordinate with Site Contractor and GC for relocations of all work.
90. Prior to rough electrical inspections, Contractor shall complete and provide all applicable Title 24 Certificates of Installation (NICI).
91. Prior to final electrical inspections and/or final payment application, Contractor shall complete and provide all applicable Title 24 Certificates of Acceptance (NRCA). Provide Acceptance Test Technician services in base bid.

ABBREVIATIONS

AFC -	ABOVE FINISHED CEILING
AFF -	ABOVE FINISHED FLOOR
AFG -	ABOVE FINISHED GRADE
AHJ -	AUTHORITY HAVING JURISDICTION
AL -	ALUMINUM
AP -	ACCESS POINT
AWG -	AMERICAN WIRE GUIDE
BFG -	BELOW FINISHED GRADE
BMS -	BUILDING MANAGEMENT SYSTEM
C -	CONDUIT
CATV -	COMMUNITY (CABLE) ANTENNA TELEVISION SYSTEM
CCTV -	CLOSED CIRCUIT TELEVISION
CKT -	CIRCUIT
CPU -	CENTRAL PROCESSING UNIT
CT -	CURRENT TRANSFORMER
DISP -	GARBAGE DISPOSAL
DW -	DISHWASHER
EM -	EMERGENCY
EW -	ELECTRIC WATER COOLER
(E) -	EXISTING
FA -	FIRE ALARM
FACP -	FIRE ALARM CONTROL PANEL
FBO -	FURNISHED BY OTHERS
GC -	GENERAL CONTRACTOR
GFI -	GROUND FAULT CIRCUIT INTERRUPTER
GRD -	GROUND
IAW -	IN ACCORDANCE WITH
IC -	INTERMEDIATE CROSS-CONNECT
IDF -	INTERMEDIATE DISTRIBUTION FRAME
IG -	ISOLATED GROUND
IR -	INFARED
LAN -	LOCAL AREA NETWORK
MDF -	MAIN DISTRIBUTION FRAME
NIC -	NOT IN CONTRACT
NL -	NIGHT LIGHT
NTS -	NOT TO SCALE
PA -	PUBLIC ADDRESS
OC -	ON CENTER
REF -	REFRIGERATOR
TTB -	TELEVISION TERMINAL BOARD
TVSS -	TRANSIENT VOLTAGE SURGE SUPPRESSOR
UG -	UNDERGROUND
UNO -	UNLESS NOTED OTHERWISE
V -	VOLT
W -	WATT
WAN -	WIDE AREA NETWORK
WLAN -	WIRELESS LOCAL AREA NETWORK
WP -	WEATHER PROOF
XP -	EXPLOSION PROOF
+18" -	MOUNTING HEIGHT TO CENTERLINE OF DEVICE ABOVE FINISHED FLOOR
—	IN THIS VIEW
- - -	BELOW OR BEHIND
⊙	SECTION CUT

LIGHTING FIXTURE SYMBOLS

○	RECESSED LIGHTING FIXTURE
⊙	DIRECTIONAL/ADJUSTABLE RECESSED LIGHTING FIXTURE
⊗	SURFACE MOUNTED LIGHT
⊕	PENDANT MOUNTED OR SUSPENDED LIGHT
⊖	WALL MOUNTED LIGHT
⊖	WALL MOUNTED UP-LIGHT
⊖	MONO-POINT LIGHTING FIXTURE
⊖	RECESSED STEP LIGHT
⊖	FLUORESCENT OR LED LINEAR LIGHT
⊖	WALL MOUNTED LINEAR FLUORESCENT OR LED LIGHT
⊖	RECESSED OR SURFACE FLUORESCENT OR LED TROFFER
⊖	● FIXTURE WITH EMERGENCY BACKUP OR ON EM CIRCUIT
⊖	⊕ CEILING MOUNTED EXIT SIGN WITH FACES & ARROWS AS SHOWN
⊖	⊖ WALL MOUNTED EXIT SIGN WITH FACES & ARROWS AS SHOWN
⊖	EMERGENCY LIGHTS
⊖	⊖ EXTERIOR POLE MOUNTED LIGHT
⊖	⊖ EXTERIOR POST (BOLLARD) MOUNTED LIGHT

LIGHTING CONTROL SYMBOLS

S	SWITCH
S ₃	THREE-WAY SWITCH
S ₄	FOUR WAY SWITCH
S _J	DOOR JAMB SWITCH
S _T	THERMAL OVERLOAD SWITCH
S _V	VARIABLE SPEED SWITCH
S _K	KEY SWITCH SWITCH
D	DIMMER
D ³	THREE-WAY DIMMER
LV	LOW VOLTAGE
⊙	WALL OCCUPANCY SENSOR/SWITCH
⊙	SMALL ROOM OCCUPANCY SENSOR
⊙	LARGE ROOM OCCUPANCY SENSOR
⊙	CORRIDOR OCCUPANCY SENSOR
⊙	DAYLIGHT PHOTO SENSOR

DEMOLITION & REMODEL SYMBOLS

⊖	DISCONNECT FROM EXISTING
⊕	CONNECT TO EXISTING
—	THIN LINES = EXISTING
—	THICK LINES = NEW
---	DASHED OR HATCHED = REMOVE, OR AS NOTED

ELECTRICAL INSTALLATION NOTES

- All cabling shall be EMT or MC. See specifications.
- All exposed pipes, ducts and materials shall be metallic or shall be suitably wrapped to meet applicable flame spread requirements. No exposed plastic pipe, insulation, duct or wiring is allowed.
- All materials shall be UL Listed for the application.
- All transformers and devices which connect to any system with more than 50 Volts shall be UL Listed.
- Floor-mounted equipment shall be on concrete housekeeping pads.
- Conduits and boxes shall be located and adjusted to accommodate structure, piping, and duct systems. Coordinate with GC and all other trades prior to all installations.

DOCUMENT OWNERSHIP AND USE

- These plans and specifications are professional Instruments of Service (Original Work) and shall remain the Intellectual Property of Sugarpine Engineering, Inc. (SPE) whether or not the project is executed.
- No changes, alterations, additions, or deletions shall be made without the express written consent of SPE.
- Instruments of Service shall not be used or reproduced, in whole or in part, by anyone for other projects, for additions to this project, or for completion of this project by others, without the express written consent of SPE.
- Submission or distribution to meet regulatory requirements, or for other purposes in connection with this project, shall not be construed as publication in derogation of the rights of Sugarpine Engineering, Inc.

GENERAL NOTES

- See specifications for additional information.
- These plans intend to describe only Electrical parts of the work, shown as thick lines, and as noted. They do not intend to describe or convey information about any other work or parts of the project. Other work is shown for reference only as thin & light lines. Refer to applicable civil, architectural, structural, mechanical, etc (Other Divisions) for designs and information related to those other items or systems.
- All products and systems shall be installed to comply with their UL listings.
- All control wiring shall be in metallic (EMT) raceways. Raceways by EC, wiring by MC, EC responsible to coordinate this requirement to the MC and GC for base bid.
- All empty conduits shall be provided with a pull string listed for the application.
- All standalone, factory, and equipment-provided controls are considered part of the controls system for the project. Each device shall have its programming and settings adjusted by the Controls Contractor, and shall be integrated with the building's overall controls, if applicable. See control sequences for more information.
- Contractor shall be responsible for unauthorized deviations from the designs and information indicated in these plans and specifications, and shall request approval from SPE in writing before any deviation is made. Lack of SPE's approval shall result in the Contractor assuming responsibility as the designer-of-record for the deviation and its related impacts.
- Contractor shall include Acceptance Test Technician services in base bid.

POWER SYMBOLS

⊖	SINGLE RECEPTACLE
⊖	DUPLEX RECEPTACLE
⊖	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
⊖	DOUBLE DUPLEX RECEPTACLE
⊖	GFCI DUPLEX RECEPTACLE
⊖	DUPLEX RECEPTACLE: HALF SWITCHED
⊖	ISOLATED GROUND DUPLEX RECEPTACLE
⊖	MULTI-OUTLET PLUG STRIP
⊖	FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE
⊖	FLUSH FLOOR MOUNTED DOUBLE DUPLEX RECEPTACLE
⊖	FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE: HALF SWITCHED
⊖	FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE & TELECOM
⊖	WALL MOUNTED SPECIAL CONNECTION AS NOTED
⊖	SPECIAL CONNECTION AS NOTED
⊖	JUNCTION BOX
⊖	WALL MOUNTED JUNCTION BOX
⊖	FLOOR MOUNTED JUNCTION BOX
⊖	MECHANICAL EQUIPMENT POWER CONNECTION

⊖	TIMER SWITCH
⊖	FUSED DISCONNECT
⊖	NON-FUSED DISCONNECT
⊖	MOTOR STARTER
⊖	ENCLOSED CIRCUIT BREAKER
⊖	PULL BOX
⊖	PUSH BUTTON
⊖	TIME CLOCK
⊖	PHOTO-CELL
⊖	TRANSFORMER
⊖	PANELBOARD OR LOAD CENTER
⊖	CONTRACTOR
⊖	ELECTRIC MOTOR
⊖	METER
⊖	THERMOSTAT
⊖	AUTOMATIC TRANSFER SWITCH
⊖	CIRCUIT HOMERUN

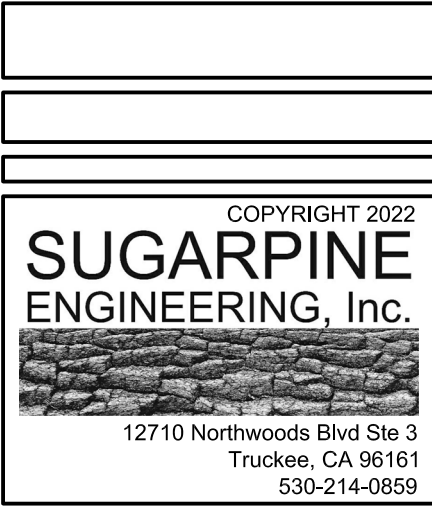
—	CONDUIT RUN
—	CONDUIT RUN BELOW GRADE
—	CONDUIT UP
—	CONDUIT DOWN
S	SWITCH
S _T	THERMAL OVERLOAD SWITCH
S _V	VARIABLE SPEED SWITCH
S _K	KEY SWITCH

ONE-LINE DIAGRAM

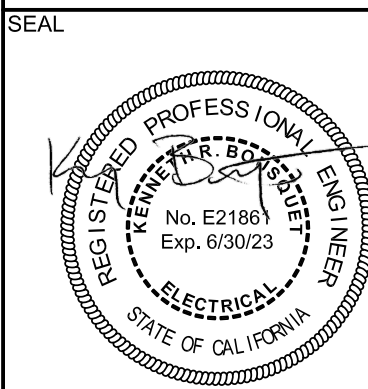
—	DISCONNECT SWITCH
⊖	FUSE
⊖	CIRCUIT BREAKER
⊖	CURRENT TRANSFORMER
⊖	POTENTIAL TRANSFORMER
⊖	METER
⊖	VOLT-METER
⊖	AMP-METER
⊖	SURGE SUPPRESSION DEVICE
⊖	SELECTOR SWITCH
⊖	GROUND FAULT PROTECTION
⊖	SHUNT TRIP
⊖	NORMALLY OPEN CONTACT
⊖	NORMALLY CLOSED CONTACT
⊖	GROUND
⊖	COLD WATER GROUND CONNECTION
⊖	BUILDING STEEL GROUND CONNECTION

FIRE ALARM SYMBOLS

FACP	FIRE ALARM CONTROL PANEL
ANN	REMOTE ANNUNCIATOR PANEL
SD	SMOKE DETECTOR
HD	HEAT DETECTOR
SDH	COMBO SMOKE/HEAT DETECTOR
SD	DUCT SMOKE DETECTOR
F	FIRE ALARM PULL STATION
H	FIRE ALARM HORN
⊖	FIRE ALARM STROBE
⊖	FIRE ALARM COMBO HORN/STROBE
⊖	FIRE ALARM SPEAKER
⊖	FIRE ALARM COMBO SPEAKER/STROBE
☛	FIREMAN'S PHONE JACK
FF	SPRINKLER SYSTEM FLOW SWITCH
FT	SPRINKLER SYSTEM TAMPER SWITCH
FSD	FIRE/SMOKE DAMPER



FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA



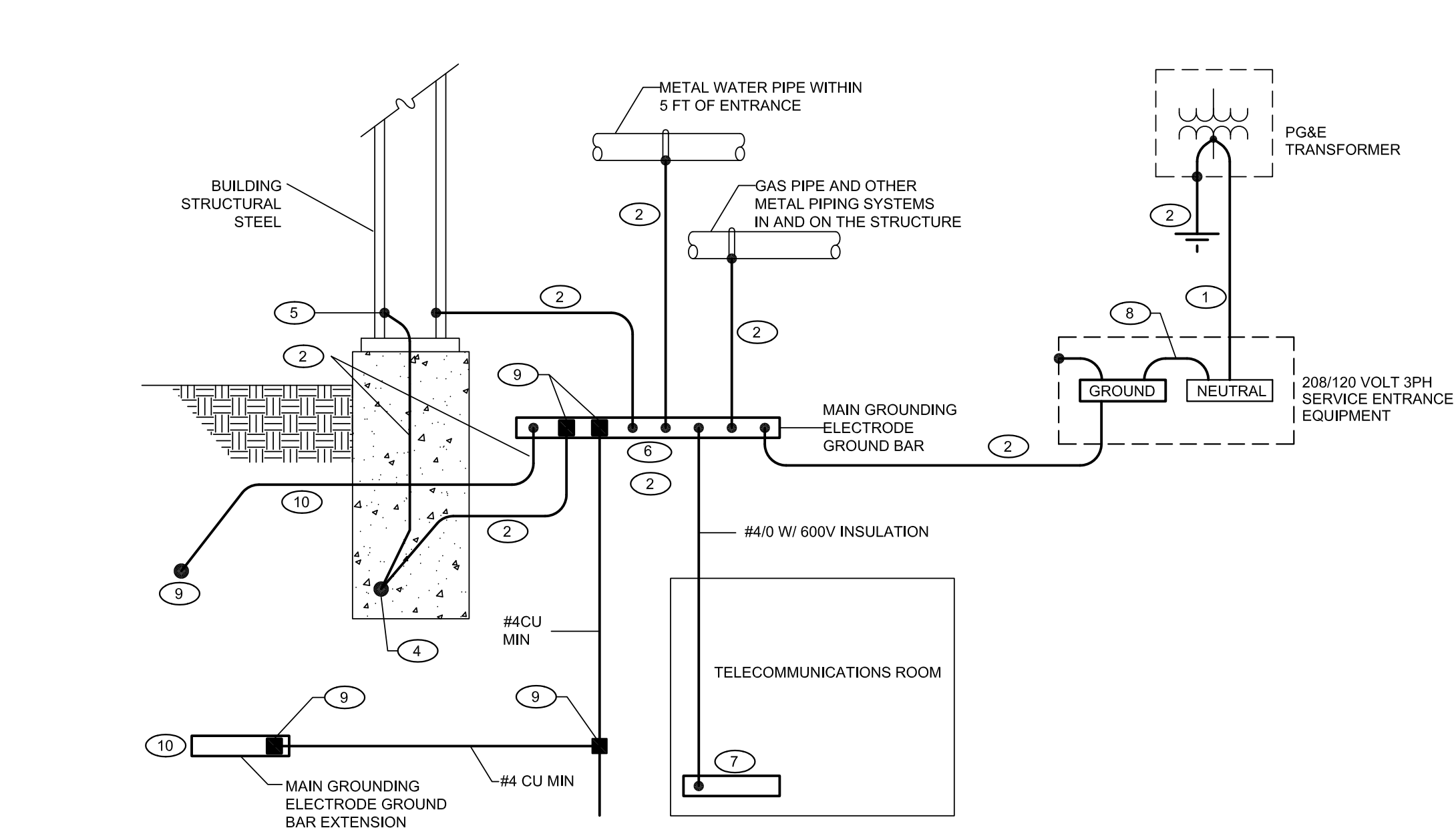
REVISIONS
03-28-2022 FOR PERMIT
05-13-2022 PLAN CHECK COMMENTS

DATE
05-13-2022
ISSUE
FOR PERMIT
SCALE
See Plan
SHEET NAME

ELECTRICAL
LEGENDS, NOTES

SHEET NO.

E1.1



KEYED NOTES

1. INSTALL GROUNDED (NEUTRAL) CONDUCTOR SAME SIZE AS THE LARGEST PHASE CONDUCTOR.
2. INSTALL GROUNDING ELECTRODE CONDUCTOR, SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE PHASE CONDUCTOR SIZE, BUT NOT SMALLER THAN NO 4.
3. INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250-122 USING THE FEEDER OVERCURRENT DEVICE SIZE.
4. INSTALL A CONCRETE-ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION AROUND THE PERIMETER OF THE BUILDING EMBEDD AT LEAST 20' OF ELECTRODE IN THE BOTTOM 1/3 OF THE FOUNDATION WITH AT LEAST 3 INCHES OF CONCRETE COVER. USE EITHER OF THE FOLLOWING MATERIALS FOR THE ELECTRODE:
BARE COPPER CABLE NOT SMALLER THAN THE GROUNDING ELECTRODE CONDUCTOR REQUIRED BY THE NEC AND NOT SMALLER THAN NO 4.

BARE OR GALVANIZED REBARS THAT ARE MADE ELECTRICALLY CONTINUOUS USING COPPER JUMPERS NOT SMALLER THAN THE NEC REQUIRED GROUNDING ELECTRODE CONDUCTOR AND NOT SMALLER THAN NO 4. USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON THE TOTAL LENGTH OF THE INTERCONNECTED AND PARALLELED REBARS:

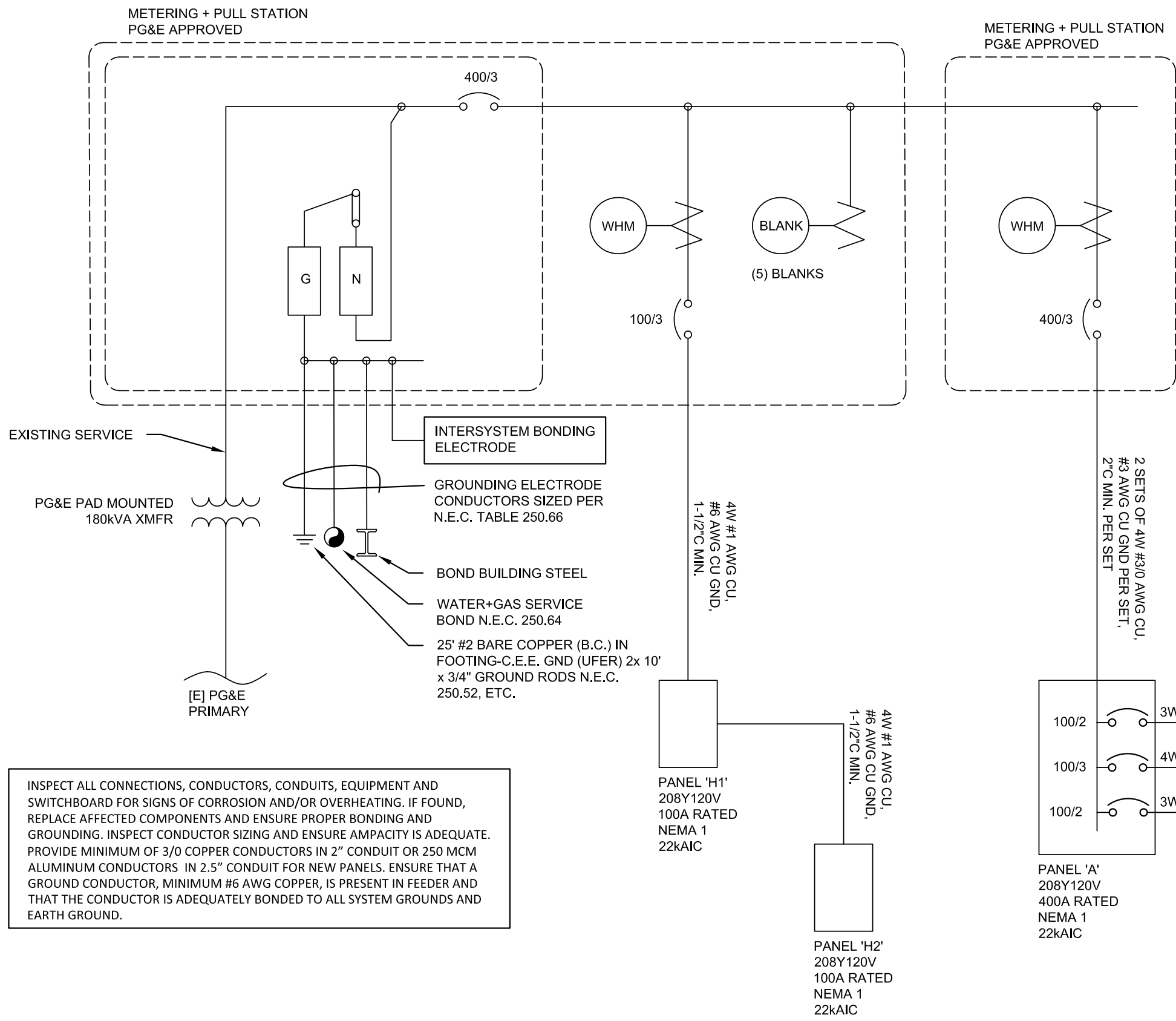
TOTAL LENGTH	MINIMUM REBAR SIZE
112 FT	1 3/8" (#11 BAR)
150 FT	1" (#8 BAR)
192 FT	3/4" (#6 BAR)
223 FT	5/8" (#5 BAR)
268 FT	1/2" (#4 BAR)

5. BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE-ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTORS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.
6. INSTALL A 'MAIN GROUND ELECTRODE GROUND BAR' FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE CONNECTIONS TO THE GROUND ELECTRODE CONDUCTOR USING IRREVERSIBLE CONNECTORS OR EXOTHERMIC WELDS. MAKE OTHER CONNECTIONS TO THE GROUND BAR USING TWO-HOLE COMPRESSION SPADE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION TO THE GROUND BAR.

7. INSTALL A COPPER GROUNDING BAR IN EACH TELECOMMUNICATIONS ROOM. CONNECT TO THE 'MAIN GROUNDING ELECTRODE GROUND BAR' USING 600V INSULATED #4/0 COPPER CABLE AND COMPRESSION SPADE LUGS.
8. INSTALL BONDING JUMPER WIRE THAT IS SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE OR SEPARATELY-DERIVED SYSTEM PHASE CONDUCTOR SIZE.
9. INSTALL IRREVERSIBLE COMPRESSION CONNECTOR WITH TAMPER-PROOF HARDWARE OR INSTALL EXOTHERMIC WELD.
10. AUXILIARY GND BUSES IN PANELS, GENSET, ETC. SIZE CONDUCTOR PER NEC 250.122, #4 CU MINIMUM.

GENERAL NOTES

1. CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES REQUIRED BY NEC.
2. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
3. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-66 USING THE SERVICE PHASE CONDUCTOR SIZE.
4. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250-122 USING THE FEEDER CIRCUIT OVERCURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVERCURRENT DEVICE SIZE.
5. BOND HOT AND COLD WATER PIPING SYSTEMS.
6. WHERE BONDING MAY BE VISIBLE AFTER THE COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL NOTIFY BOTH ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO THE INSTALLATION OF CONCRETE OR OTHER FINISH WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ANY WORK RELATED TO CONCEALING GROUNDING AND BONDING COMPONENTS WHERE COMPONENTS ARE VISIBLE AFTER CONSTRUCTION AND WERE NOT COORDINATED AND APPROVED IN ADVANCE BY THE ARCHITECT AND ENGINEER.



INSPECT ALL CONNECTIONS, CONDUCTORS, CONDUITS, EQUIPMENT AND SWITCHBOARD FOR SIGNS OF CORROSION AND/OR OVERHEATING. IF FOUND, REPLACE AFFECTED COMPONENTS AND ENSURE PROPER BONDING AND GROUNDING. INSPECT CONDUCTOR SIZING AND ENSURE AMPACITY IS ADEQUATE. PROVIDE MINIMUM OF 3/0 COPPER CONDUCTORS IN 2" CONDUIT OR 250 MCM ALUMINUM CONDUCTORS IN 2.5" CONDUIT FOR NEW PANELS. ENSURE THAT A GROUND CONDUCTOR, MINIMUM #6 AWG COPPER, IS PRESENT IN FEEDER AND THAT THE CONDUCTOR IS ADEQUATELY BONDED TO ALL SYSTEM GROUNDS AND EARTH GROUND.

1 ONE LINE DIAGRAM

SCALE: NO SCALE

LIGHTING FIXTURE SCHEDULE

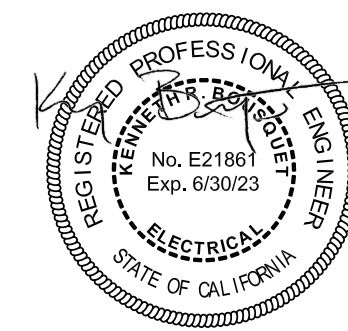
MARK	TYPE	MFR	MODEL	MOUNTING	LAMP TYPE	ACCESSORIES	REMARKS	VOLT AMPS	VOLTS
T1/T1E	TROFFER	LITHONIA	2GTL 4 48L GZ10 LP835	RECESSED	HIGH EFFICACY LED	E INDICATES E10WLCP EGRESS BATTERY PACK		36	120
T2	TROFFER	LITHONIA	2GTL 2 33L GZ10 LP835	RECESSED	HIGH EFFICACY LED			29	120
L1	LINEAR	LITHONIA	LBL4 3000LM 80CRI 35K MIN10 ZT MVOLT	SURFACE	HIGH EFFICACY LED			26	120
E1	EGRESS	LITHONIA	ELM6L UVOLT LTP SDRT	WALL	HIGH EFFICACY LED	AS REQ'D FOR INSTALLATION, "WPVS LRG W" WET SHIELD FOR EGRESS FIXTURES IN DISH WASHING AREA.	INTEGRATED 90 MIN. BATTERY BACKUP FOR EGRESS	3	120
X1	EXIT	LITHONIA	LQC 1 G EL N	SURFACE / WALL	HIGH EFFICACY LED	AS REQ'D FOR INSTALLATION	INTEGRATED 90 MIN. BATTERY BACKUP FOR EGRESS	3	120
X2	EXIT	LITHONIA	LQC 2 G EL N	SURFACE / WALL	HIGH EFFICACY LED	AS REQ'D FOR INSTALLATION	INTEGRATED 90 MIN. BATTERY BACKUP FOR EGRESS	3	120
X3	EXIT & EGRESS	LITHONIA	LHOM LED B G SD	SURFACE / WALL	HIGH EFFICACY LED	AS REQ'D FOR INSTALLATION	INTEGRATED 90 MIN. BATTERY BACKUP FOR EGRESS	3	120
MANUFACTURERS: LITHONIA, JUNO, COOPER, PHILIPS, RAB, WAC									
GENERAL NOTES:									
A: PROVIDE BID BASED ON THE BASIS-OF-DESIGN PRODUCTS. SUBMIT ALTERNATES FOR REVIEW; MAY REQUIRE ARCHITECT APPROVAL IN ADVANCE.									
B:									

2 GROUNDING & BONDING DIAGRAM

SCALE: NO SCALE

FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA

SEAL



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SHEET NAME

ELECTRICAL ONE LINE
DIAGRAM

SHEET NO.

E1.1



PANEL A 208 Y/ 120 VOLT 3PH 4 WIRE 400 AMPERE MAIN LO : 400 AMPERE BUS																				
LOCATION Equipment Highway					MOUNTING				Recessed		A.I.C. 22kA Min.									
CIRCUIT NUMBER	LOAD			CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	CIRCUIT BREAKER	BUS			CIRCUIT BREAKER	CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	LOAD			CIRCUIT NUMBER				
	LINE A	LINE B	LINE C				A	B	C				LINE A	LINE B	LINE C					
1				S	Panel B	3	100	+		20	1	A	Bagged Ice Freezer (G)	1200		2				
3				"	"	"	100	+		20	1	A	Double Dish Machine (G)		1456	4				
5				"	"	"	100	+		50	2	E	Dishmachine Booster Heater (G)			6				
7				S	Panel C	2	100	+		50	-			4170		8				
9				"	"	"	100	+		50	2	E	Electric Water Heater (G)		4160	10				
11				S	Panel D	2	100	+		50	-					12				
13				"	"	"	100	+		50	1	E	Boiler (G)	1200		14				
15		2378		E	Kitchen Makeup Air	3	125	+		20	1	E	Exhaust Fans Misc.		1688	16				
17			10417		"	"	125	+		20	1	E	Furnace			18				
19	10417				"	"	125	+		20	2	E	Office Heat Pump	1978		20				
21			1711	E	Kitchen Exh. Hood 1	2	20	+		20	-				1976	22				
23			1711	E	"	"	20	+		20	1	E	Fan Coils			24				
25	1711			E	Kitchen Exh. Hood 2	2	20	+		20	1	E	DHW Recirc. Pump (G)	250		26				
27		1711			"	"	20	+		20	1	E	Hydronic Pumps (G)		1550	28				
29			1920	E	Roll Up Door 1	1	20	+		30	1	E	Air Curtain 1			30				
31	1920			E	Roll Up Door 2	1	20	+		30	1	E	Air Curtain 2	2288		32				
33	A	800		A	Fryers (G)	1	20	+		20	1	A	Stock Pot (G)		600	34				
35	A		600	A	Gas Ranges (G)	1	20	+		20	1	A	Flat Top Grill (G)		600	36				
37	600			A	Charbroiler (G)	1	20	+		20	1	A	Standing Mixer (G)	720		38				
39		1848		A	Double Oven 1 (G)	1	20	+		20	1	A	Deli Slicer (G)		420	40				
41			1848	A	Double Oven 2 (G)	1	20	+		20	1	A	Blender (G)			42				
SUB TOTALS														11804	11850	14218				
CIRCUIT TYPE DESCRIPTION: L=LIGHTING R=RECEPTACLE M=MOTOR LM=LARGEST MOTOR E=EQUIPMENT A=APPLIANCE S=SUBFEED PANEL														26452	20097.69	30714				
NOTES: THIS PANEL IS EXISTING TO REMAIN. VERIFY EQUIPMENT LOCATION AND RATING PRIOR TO MODIFICATION. NOTIFY ENGINEER OF ANY DISCREPANCY IN EQUIPMENT LOCATION OR RATING. NEW CIRCUITS ARE INDICATED BY BOLD ITALICS . PROVIDE GFCI CIRCUIT BREAKERS FOR ALL LOADS MARKED BY '(G)'.														FEED THRU KVA TOTAL LINE KVA LINE AMPS TOTAL KVA LOAD FEEDER AMPS				26 73 56 77.3 214.5	20 31 85	

PANEL C 240 / 120_VOLT 1PH 3 WIRE 100 AMPERE MAIN LO : 100 AMPERE BUS																
LOCATION Highway				MOUNTING Surface								A.I.C. 22kA Min.				
CIRCUIT NUMBER	LOAD		CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	CIRCUIT BREAKER			BUS		CIRCUIT BREAKER		CIRCUIT TYPE LWM LME/WS	LOAD		CIRCUIT NUMBER	
	LINE A	LINE B			POLE	TRIP	A	B	POLE	TRIP	LINE A		LINE B			
1				Server	1	20	+			20	1	A	3 Door Refer	840	2	
3				Unknown	1	20	+			20	1	A	2 Door Freezer		4	
5				UPS	1	20	+			20	1	A	Merchandise (G)	360	6	
7		1500	A	Espresso	2	20	+			20	1	L	Lights	1820	8	
9	1500				-	20	+			20	1	R	Countertop Equipment (G)	1500	10	
11		1500	A	Coffee Brewer	2	20	+			20	1	R	Prep Table Recs (G)	1080	12	
13	1500				-	20	+			20	1	R			14	
15		1500	A	Coffee Grinder	1	20	+			20	1		Unknown	540	16	
17				Office 3	1	15	+			20	1		Unknown		18	
19				Office 4	1	20	+			20	1	A	Dish Machine	1440	20	
21				Space	1	20	+			20	1		Reserved for Dish Machine		22	
23				Store Lights	2	60	+						Space		24	
25				"	-	60	+						Space		26	
27				Office 2	2	40	+						Space		28	
29				"	-	40	+			20	1		Unknown		30	
31				Unknown	2	40	+						Space		32	
33				Unknown	-	40	+			20	1		Unknown		34	
35				Unknown	1	20	+						Unknown		36	
37				Unknown	1	20	+						-		38	
39				Unknown	1	20	+						-		40	
41				Unknown	1	20	+						Space		42	
SUB TOTALS														3340	5640	
CIRCUIT TYPE DESCRIPTION: L=LIGHTING R=RECEPTACLE M=MOTOR LM=LARGEST MOTOR E=EQUIPMENT, A=APPLIANCE, S=SUBFEED PANEL														6240 10140		
NOTES: THIS PANEL IS EXISTING TO REMAIN. VERIFY EQUIPMENT LOCATION AND RATING PRIOR TO MODIFICATION. NOTIFY ENGINEER OF ANY DISCREPANCY IN EQUIPMENT LOCATION OR RATING. NEW CIRCUITS ARE INDICATED BY BOLD ITALICS . PROVIDE GFCI CIRCUIT BREAKERS FOR ALL LOADS MARKED BY '(G)'.														TOTAL VAPN LINE LOAD		6240 10140
														TOTAL KVA LOAD		52 85
														FEEDER AMPS		16.4 68.3

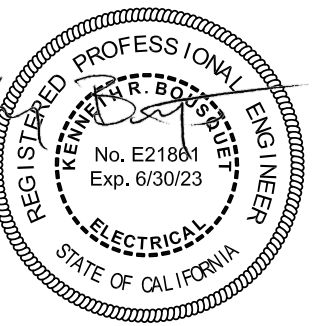
PANEL H2 208 Y/ 120 VOLT 3PH 4 WIRE 100 AMPERE MAIN CB : 100 AMPERE BUS																				
LOCATION Kitchen Area						MOUNTING Surface						A.I.C. 22kA Min.								
CIRCUIT NUMBER	LOAD			CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	CIRCUIT BREAKER			BUS			CIRCUIT BREAKER			CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	LOAD			CIRCUIT NUMBER
	LINE A	LINE B	LINE C			POLE	TRIP	A	B	C	TRIP	POLE	LINE A	LINE B			LINE C			
1					Main Disconnect	3	100	+			20	2	E	Walk-In Freezer Comp.	1080				2	
3					"	-	100	+			20	-			1080				4	
5					"	-	100	+			20	1	E	Walk-In Freezer Evap.				1040	6	
7	3000			E	AC	2	40	+			20	1		Lights					8	
9		3000			"	-	40	+			20	2	E	Air Handler				500	10	
11					Scrubber	1	20		+		20	-		"				500	12	

PANEL B 208 Y/ 120 VOLT 3PH 4 WIRE 100 AMPERE MAIN CB : 100 AMPERE BUS																				
LOCATION Highway				MOUNTING Surface				A.I.C. 22kA Min.												
CIRCUIT NUMBER	LOAD			CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	CIRCUIT BREAKER			BUS			CIRCUIT BREAKER			CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	LOAD			CIRCUIT NUMBER
	LINE A	LINE B	LINE C			POLE	TRIP	A	B	C	TRIP	POLE	POLE	TRIP			POLE	LINE A	LINE B	
1					Main Disconnect	3		+		20	1	R	Prep Table Recs (G)		1080				2	
3					-	-		+		20	1	R	Prep Table Recs (G)			1080			4	
5					-	-		+		20	1	R	Prep Table Recs (G)				1080		6	
7	800				Dish Pit Lights	1	20	+		20	1	R	Prep Table Recs (G)		1080				8	
9		1200			Kitchen Lights	1	20	+		20	1		Receptacles						10	
11			600		Walk-In Lights	1	20	+		20	1		Receptacles						12	
13	600				Other Lights	1	20	+		20	1		Receptacles						14	
15					Receptacles	1	20	+		100	2		Panel B						16	
17					Receptacles	1	20	+		100	-		-						18	
19					Space			+					Space						20	

PANEL D 240 / 120 VOLT 1PH 3 WIRE 100 AMPERE MAIN LO : 100 AMPERE BUS																
LOCATION Highway				MOUNTING Surface								A.I.C. 22kA Min.				
CIRCUIT NUMBER	LOAD		CIRCUIT TYPE LWM LME/WS	LOAD DESCRIPTION	CIRCUIT BREAKER			BUS			CIRCUIT TYPE LWM LME/WS			LOAD		CIRCUIT NUMBER
	LINE A	LINE B			POLE	TRIP	A	B	TRIP	POLE	LINE A	LINE B				
1				Space				+					Space			2
3				Space				+					Space			4
5				Space				+					Space			6
7				Space				+					Space			8
9				Space				+					Space			10
11				Space				+					Space			12
13				Space				+					Space			14
15				Space				+					Space			16
17				Space				+					Space			18
19				Space				+					Space			20
21				Space				+					Space			22
23				Space				+					Space			24
25				Space				+					Space			26
27				Space				+					Space			28
29				Space				+					Space			30
31				Space				+					Space			32
33				Space				+					Space			34
35				Space				+					Space			36
37				Space				+					Space			38
39				Space				+					Space			40
41				Space				+					Space			42
SUB TOTALS														0	0	
CIRCUIT TYPE L=LIGHTING R=RECEPTACLE M=Motor LM=LARGEST MOTOR DESCRIPTION: E=EQUIPMENT, A=APPLANCE S=SURFACE PANEL				LINE TOTALS NEC ADDER										0	0	
NOTES: THIS PANEL IS EXISTING TO REMAIN. VERIFY EQUIPMENT LOCATION AND RATING PRIOR TO MODIFICATION. NOTIFY ENGINEER OF ANY DISCREPANCY IN EQUIPMENT LOCATION OR RATINGS. NEW CIRCUITS ARE INDICATED BY BOLD ITALICS .				FEED THRU LOAD												
				TOTAL VAHP										0	0	
				TOTAL KVA LOAD										0.0		
				FEEDER AMPS										0.0		
PROVIDE GFCI CIRCUIT BREAKERS FOR ALL LOADS MARKED BY 'G'.																

FIVE STAR CATERING
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EAL



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REVISIONS

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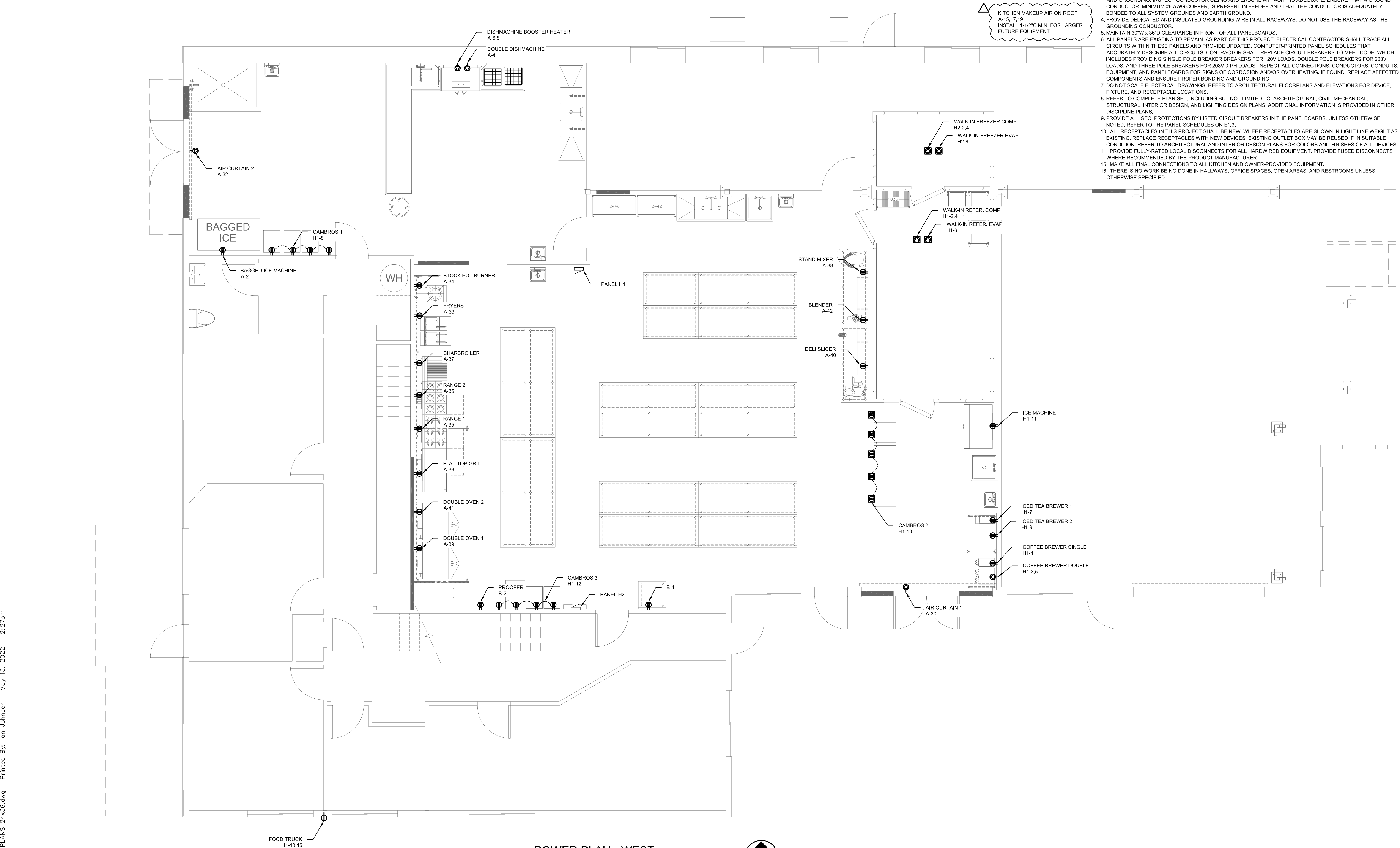
POWER PLAN - WEST

SHEET NO. _____

E2.1

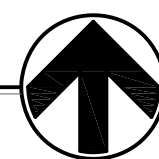
POWER NOTES:

4. THIS PROJECT IS A REMODEL OF AN EXISTING SYSTEM. THESE PLANS ARE BASED UPON SITE OBSERVATIONS AND INFORMATION RECEIVED FROM PREVIOUS PROJECTS. PRIOR TO BID, CONTRACTOR SHALL VISIT SITE AND VERIFY ALL FIELD CONDITIONS. PROVIDE A 15% CONTINGENCY FOR UNFORESEEN CONDITIONS.
5. NO CHANGES TO THE SERVICE ENTRANCE EQUIPMENT.
6. INSPECT ALL CONNECTIONS, CONDUCTORS, CONDUITS, EQUIPMENT, AND SWITCHBOARD FOR SIGNS OF CORROSION AND/OR OVERHEATING. IF FOUND, REPLACE AFFECTED COMPONENTS AND ENSURE PROPER BONDING AND GROUNDING. INSPECT CONDUCTOR SIZING AND ENSURE AMPACITY IS ADEQUATE. ENSURE THAT A GROUND CONDUCTOR, MINIMUM #6 AWG COPPER, IS PRESENT IN FEEDER AND THAT THE CONDUCTOR IS ADEQUATELY BONDED TO ALL SYSTEMS GROUNDS AND EARTH GROUND.
7. PROVIDE DECATRATED AND INSULATED GROUNDING WIRE IN ALL RACEWAYS. DO NOT USE THE RACEWAY AS THE GROUNDING CONDUCTOR.
8. MAINTAIN 30" W/ X 6" D CLEARANCE IN FRONT OF ALL PANELBOARDS.
9. ALL PANELS ARE EXISTING TO REMAIN. AS PART OF THIS PROJECT, ELECTRICAL CONTRACTOR SHALL TRACE ALL CIRCUITS WITHIN THESE PANELS AND PROVIDE UPDATED, COMPUTER-PRINTED PANEL SCHEDULES THAT CORRELATE TO THE EXISTING PANEL SCHEDULES. ALL NEW CIRCUIT BREAKERS TO MEET CODE, WHICH INCLUDES PROVIDING SINGLE POLE BREAKER BREAKERS FOR 120V LOADS, DOUBLE POLE BREAKERS FOR 208V LOADS, AND THREE POLE BREAKERS FOR 208Y 3-PH LOADS. INSPECT ALL CONNECTIONS, CONDUCTORS, CONDUITS, EQUIPMENT, AND PANELBOARDS FOR SIGNS OF CORROSION AND/OR OVERHEATING. IF FOUND, REPLACE AFFECTED COMPONENTS AND ENSURE PROPER BONDING AND GROUNDING.
10. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL FLOORPLANS AND ELEVATIONS FOR COUPLER, FITTURE, AND RECEPTACLE LOCATIONS.
11. REFER TO COMPLETE PLAN SET, INCLUDING BUT NOT LIMITED TO, ARCHITECTURAL, CIVIL, MECHANICAL, STRUCTURAL, INTERIOR DESIGN, AND LIGHTING DESIGN PLANS. ADDITIONAL INFORMATION IS PROVIDED IN OTHER DISCIPLINE PLANS.
12. PROVIDE ALL GFCI PROTECTIONS BY LISTED CIRCUIT BREAKERS IN THE PANELBOARDS, UNLESS OTHERWISE NOTED. REFER TO THE PANEL SCHEDULES ON E-1,3.
13. ALL RECEPTACLES IN THIS PROJECT SHALL BE NEW, WHERE RECEPTACLES ARE SHOWN IN LIGHT LINE WEIGHT AS EXISTING, REPLACE RECEPTABLES WITH NEW DEVICES. EXISTING OUTLET BOX MAY BE REUSED IF IN SUITABLE CONDITION. REFER TO ARCHITECTURAL AND INTERIOR DESIGN PLANS FOR COLORS AND FINISHES OF ALL DEVICES.
14. PROVIDE FULLY-RATED LOCAL DISCONNECTS FOR ALL HARDWIRED EQUIPMENT. PROVIDE FUSED DISCONNECTS WHERE RECOMMENDED BY THE PRODUCT MANUFACTURER.
15. MAKE ALL FINAL CONNECTIONS TO ALL KITCHEN AND OWNER-PROVIDED EQUIPMENT.
16. THERE IS NO WORK BEING DONE IN HALLWAYS, OFFICE SPACES, OPEN AREAS, AND RESTROOMS UNLESS OTHERWISE SPECIFIED.



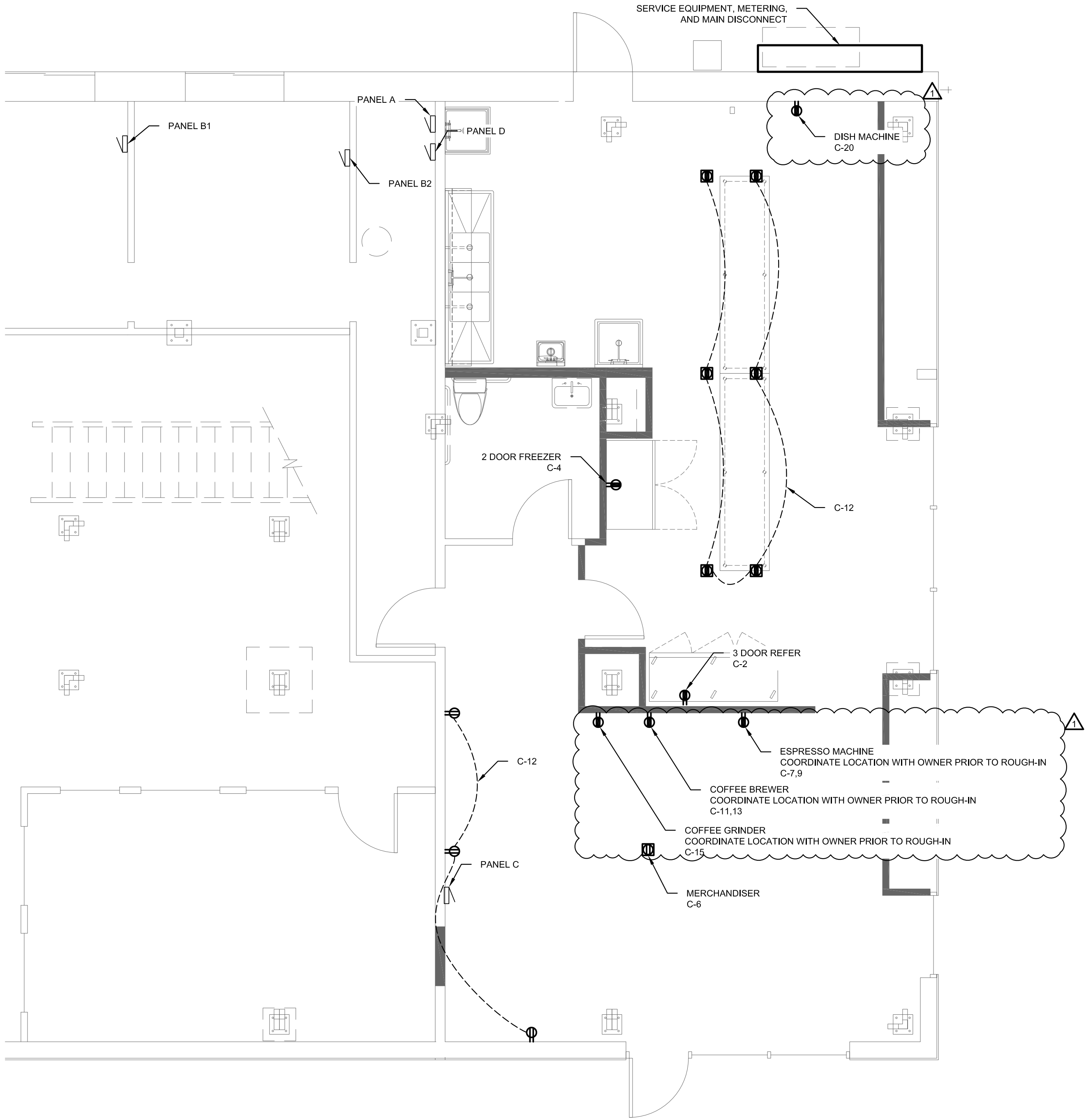
1 POWER PLAN - WEST

SCALE: 1/4" = 1'-0"



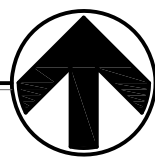
POWER NOTES:

1. THIS PROJECT IS A REMODEL OF AN EXISTING SYSTEM. THESE PLANS ARE BASED UPON SITE OBSERVATIONS AND INFORMATION RECEIVED FROM PREVIOUS PROJECTS. PRIOR TO BID, CONTRACTOR SHALL VISIT SITE AND VERIFY ALL FIELD CONDITIONS. PROVIDE A 15% CONTINGENCY FOR UNFORESEEN CONDITIONS.
2. NO CHANGES TO THE SERVICE ENTRANCE EQUIPMENT.
3. INSPECT ALL CONNECTIONS, CONDUCTORS, CONDUITS, EQUIPMENT, AND SWITCHBOARD FOR SIGNS OF CORROSION AND/OR OVERHEATING. IF FOUND, REPLACE AFFECTED COMPONENTS AND ENSURE PROPER BONDING AND GROUNDING. INSPECT CONDUCTOR SIZING AND ENSURE AMPACITY IS ADEQUATE. ENSURE THAT A GROUND CONDUCTOR, MINIMUM #6 AWG COPPER, IS PRESENT IN FEEDER AND THAT THE CONDUCTOR IS ADEQUATELY BONDED TO ALL SYSTEM GROUNDS AND EARTH GROUND.
4. PROVIDE DEDICATED AND INSULATED GROUNDING WIRE IN ALL RACEWAYS, DO NOT USE THE RACEWAY AS THE GROUNDING CONDUCTOR.
5. MAINTAIN 30"W x 36"D CLEARANCE IN FRONT OF ALL PANELBOARDS.
6. ALL PANELS ARE EXISTING TO REMAIN. AS PART OF THIS PROJECT, ELECTRICAL CONTRACTOR SHALL TRACE ALL CIRCUITS WITHIN THESE PANELS AND PROVIDE UPDATED, COMPUTER-PRINTED PANEL SCHEDULES THAT ACCURATELY DESCRIBE ALL CIRCUITS. CONTRACTOR SHALL REPLACE CIRCUIT BREAKERS TO MEET CODE, WHICH INCLUDES PROVIDING SINGLE POLE BREAKER BREAKERS FOR 120V LOADS, DOUBLE POLE BREAKERS FOR 208V LOADS, AND THREE POLE BREAKERS FOR 208V 3-PH LOADS. INSPECT ALL CONNECTIONS, CONDUCTORS, CONDUITS, EQUIPMENT, AND PANELBOARDS FOR SIGNS OF CORROSION AND/OR OVERHEATING. IF FOUND, REPLACE AFFECTED COMPONENTS AND ENSURE PROPER BONDING AND GROUNDING.
7. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL FLOORPLANS AND ELEVATIONS FOR DEVICE, FIXTURE, AND RECEPTACLE LOCATIONS.
8. REFER TO COMPLETE PLAN SET, INCLUDING BUT NOT LIMITED TO, ARCHITECTURAL, CIVIL, MECHANICAL, STRUCTURAL, INTERIOR DESIGN, AND LIGHTING DESIGN PLANS. ADDITIONAL INFORMATION IS PROVIDED IN OTHER DISCIPLINE PLANS.
9. PROVIDE ALL GFCI PROTECTIONS BY LISTED CIRCUIT BREAKERS IN THE PANELBOARDS, UNLESS OTHERWISE NOTED. REFER TO THE PANEL SCHEDULES ON E1.3.
10. ALL RECEPTACLES IN THIS PROJECT SHALL BE NEW. WHERE RECEPTACLES ARE SHOWN IN LIGHT LINE WEIGHT AS EXISTING, REPLACE RECEPTACLES WITH NEW DEVICES. EXISTING OUTLET BOX MAY BE REUSED IF IN SUITABLE CONDITION. REFER TO ARCHITECTURAL AND INTERIOR DESIGN PLANS FOR COLORS AND FINISHES OF ALL DEVICES.
11. PROVIDE FULLY-RATED LOCAL DISCONNECTS FOR ALL HARDWIRED EQUIPMENT, PROVIDE FUSED DISCONNECTS WHERE RECOMMENDED BY THE PRODUCT MANUFACTURER.
12. MAKE ALL FINAL CONNECTIONS TO ALL KITCHEN AND OWNER-PROVIDED EQUIPMENT.
13. THERE IS NO WORK BEING DONE IN HALLWAYS, OFFICE SPACES, OPEN AREAS, AND RESTROOMS UNLESS OTHERWISE SPECIFIED.



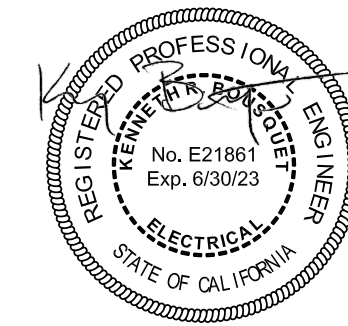
2 POWER PLAN - EAST

SCALE: 1/4" = 1'-0"



FIVE STAR CATERING
10 HANGER WAY
WATSONVILLE, CA

SEAL



05-13-2022

REVISIONS

- | | |
|------------|---------------------|
| 03-28-2022 | FOR PERMIT |
| 05-13-2022 | PLAN CHECK COMMENTS |

DATE

05-13-2022

ISSUE

FOR PERMIT

SCALE

See Plan

SHEET NAME

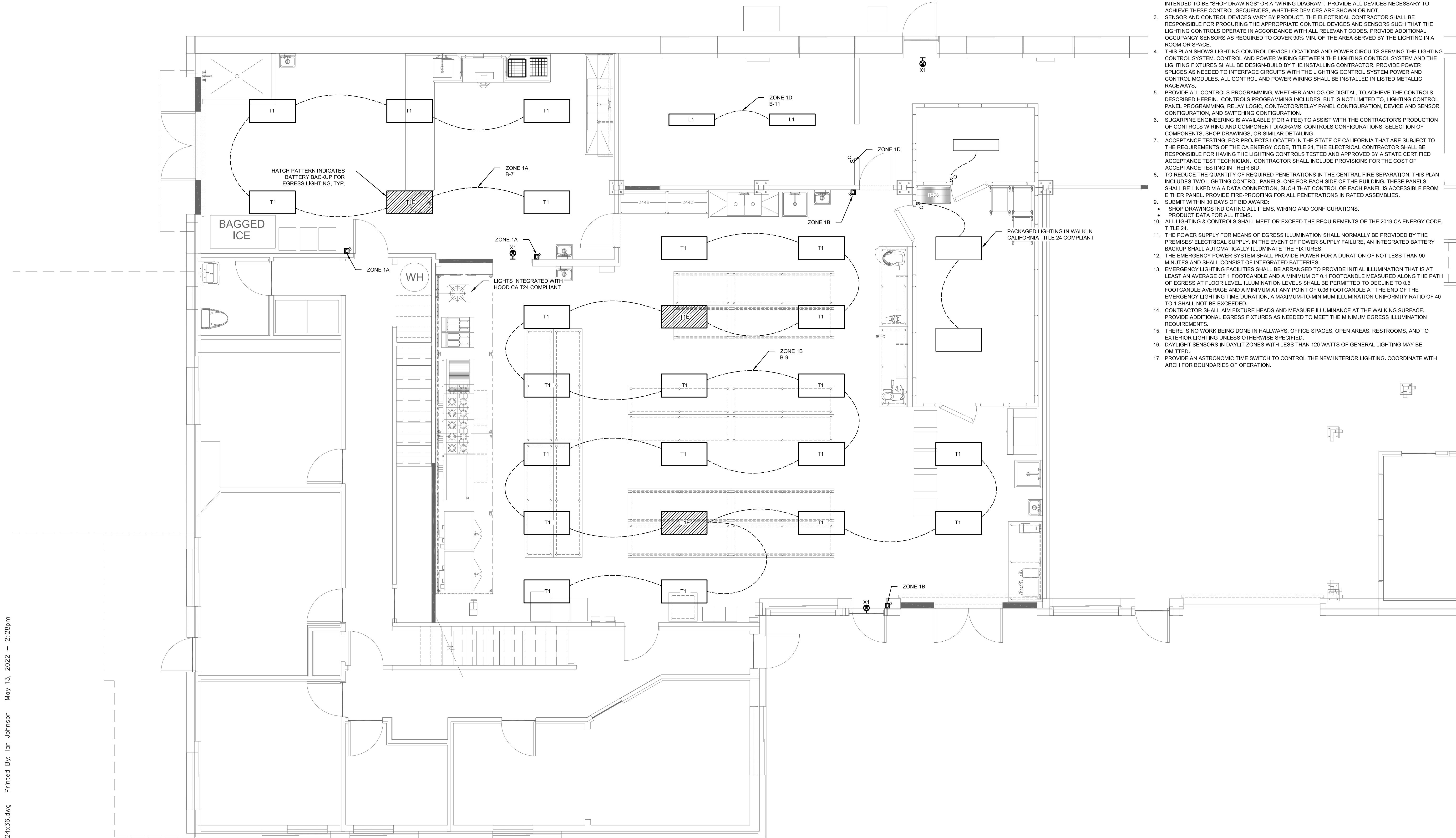
POWER PLAN - EAST

SHEET NO.

E2.2

Five Star Catering E3.0 LIGHTING PLANS 24x36.dwg May 13, 2022 2:28pm Printed By: Ian Johnson

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1 LIGHTING PLAN - WEST
SCALE: 1/4" = 1'-0"

- LIGHTING PLAN NOTES:**
- ALL LIGHTING FIXTURES SHOWN IN THIS PLAN WERE SELECTED AND LOCATED BY SUGARPINE ENGINEERING.
 - THE ENGINEER HAS MADE A REASONABLE ATTEMPT TO INDICATE PRIMARY CONTROLS COMPONENTS ON PLANS, BUT IT IS NOT POSSIBLE TO SHOW EVERY DEVICE. WIRING SHOWN IN THE ELECTRICAL PLANS ARE DRAWN SCHEMATICALLY TO CONVEY THE DESIGN INTENT. THE PLANS AND SPECIFICATIONS ARE NOT INTENDED TO BE "SHOP DRAWINGS" OR A "WIRING DIAGRAM". PROVIDE ALL DEVICES NECESSARY TO ACHIEVE THESE CONTROL SEQUENCES, WHETHER DEVICES ARE SHOWN OR NOT.
 - SENSOR AND CONTROL DEVICES VARY BY PRODUCT. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING THE APPROPRIATE CONTROL DEVICES AND SENSORS SUCH THAT THE LIGHTING CONTROLS OPERATE IN ACCORDANCE WITH ALL RELEVANT CODES. PROVIDE ADDITIONAL OCCUPANCY SENSORS AS REQUIRED TO COVER 90% MIN. OF THE AREA SERVED BY THE LIGHTING IN A ROOM OR SPACE.
 - THIS PLAN SHOWS LIGHTING CONTROL DEVICE LOCATIONS AND POWER CIRCUITS SERVING THE LIGHTING CONTROL SYSTEM. CONTROL AND POWER WIRING BETWEEN THE LIGHTING CONTROL SYSTEM AND THE LIGHTING FIXTURES SHALL BE DESIGN-BUILD BY THE INSTALLING CONTRACTOR. PROVIDE POWER SPLICES AS NEEDED TO INTERFACE CIRCUITS WITH THE LIGHTING CONTROL SYSTEM POWER AND CONTROL MODULES. ALL CONTROL AND POWER WIRING SHALL BE INSTALLED IN LISTED METALLIC RACEWAYS.
 - PROVIDE ALL CONTROLS PROGRAMMING, WHETHER ANALOG OR DIGITAL, TO ACHIEVE THE CONTROLS DESCRIBED HEREIN. CONTROLS PROGRAMMING INCLUDES, BUT IS NOT LIMITED TO, LIGHTING CONTROL PANEL PROGRAMMING, RELAY LOGIC, CONTACTOR/RELAY PANEL CONFIGURATION, DEVICE AND SENSOR CONFIGURATION, AND SWITCHING CONFIGURATION.
 - SUGARPINE ENGINEERING IS AVAILABLE (FOR A FEE) TO ASSIST WITH THE CONTRACTOR'S PRODUCTION OF CONTROLS WIRING AND COMPONENT DIAGRAMS, CONTROLS CONFIGURATIONS, SELECTION OF COMPONENTS, SHOP DRAWINGS, OR SIMILAR DETAILING.
 - ACCEPTANCE TESTING: FOR PROJECTS LOCATED IN THE STATE OF CALIFORNIA THAT ARE SUBJECT TO THE REQUIREMENTS OF THE CA ENERGY CODE, TITLE 24, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE LIGHTING CONTROLS TESTED AND APPROVED BY A STATE CERTIFIED ACCEPTANCE TEST TECHNICIAN. CONTRACTOR SHALL INCLUDE PROVISIONS FOR THE COST OF ACCEPTANCE TESTING IN THEIR BID.
 - TO REDUCE THE QUANTITY OF REQUIRED PENETRATIONS IN THE CENTRAL FIRE SEPARATION, THIS PLAN INCLUDES TWO LIGHTING CONTROL PANELS, ONE FOR EACH SIDE OF THE BUILDING. THESE PANELS SHALL BE LINKED VIA A DATA CONNECTION, SUCH THAT CONTROL OF EACH PANEL IS ACCESSIBLE FROM EITHER PANEL. PROVIDE FIRE-PROOFING FOR ALL PENETRATIONS IN RATED ASSEMBLIES.
 - SUBMIT WITHIN 30 DAYS OF BID AWARD:
 - SHOP DRAWINGS INDICATING ALL ITEMS, WIRING AND CONFIGURATIONS.
 - PRODUCT DATA FOR ALL ITEMS.
 - ALL LIGHTING & CONTROLS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE 2019 CA ENERGY CODE, TITLE 24.
 - THE POWER SUPPLY FOR MEANS OF EGRESS ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, AN INTEGRATED BATTERY BACKUP SHALL AUTOMATICALLY ILLUMINATE THE FIXTURES.
 - THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF INTEGRATED BATTERIES.
 - EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOTCANDLE AND A MINIMUM OF 0.1 FOOTCANDLE MEASURED ALONG THE PATH OF EGRESS AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 FOOTCANDLE AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 FOOTCANDLE AT THE END OF THE EMERGENCY LIGHTING TIME DURATION. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED.
 - CONTRACTOR SHALL AIM FIXTURE HEADS AND MEASURE ILLUMINANCE AT THE WALKING SURFACE. PROVIDE ADDITIONAL EGRESS FIXTURES AS NEEDED TO MEET THE MINIMUM EGRESS ILLUMINATION REQUIREMENTS.
 - THERE IS NO WORK BEING DONE IN HALLWAYS, OFFICE SPACES, OPEN AREAS, RESTROOMS, AND TO EXTERIOR LIGHTING UNLESS OTHERWISE SPECIFIED.
 - DAYLIGHT SENSORS IN DAYLIT ZONES WITH LESS THAN 120 WATTS OF GENERAL LIGHTING MAY BE OMITTED.
 - PROVIDE AN ASTRONOMIC TIME SWITCH TO CONTROL THE NEW INTERIOR LIGHTING. COORDINATE WITH ARCH FOR BOUNDARIES OF OPERATION.

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SHEET NAME

LIGHTING PLAN - WEST

SHEET NO.

E3.1

