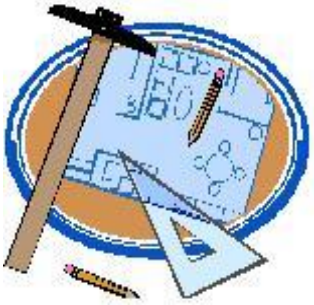
CONSTRUCTION PLAN APPROVAL PROCEDURES FOR FOOD FACILITIES

County of Marin
Community Development Agency

Department of Environmental Health Services
3501 Civic Center Drive, Room 236
San Rafael, CA 94903
415-473-6907



August 1, 2018

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TABLE OF CONTENTS

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County of Marin
Department of Environmental Health Services

California Retail Food Code
Public Restroom Access Requirements
Section 114250 and 114276

Beginning January 1, 2004, any building that is constructed that provides space for the consumption of food on the premises shall provide clean toilet facilities, in good repair, for patrons, guests, or invitees. Patrons, guests or invitees shall not pass through the food preparation, food storage or utensil washing area.

Any building that is constructed before January 1, 2004, that has a food facility that provides space for the consumption of food on the premises shall "either" provide clean toilet facilities in good repair for patrons, guests, or invitees on property used in connection with, or in, the food facility "or" prominently post a sign within the food facility in a public area stating that toilet facilities are not provided.

A food facility with more than 20,000 square feet of floor space shall provide at least one separate toilet facility for men and women.

Food facilities located within amusement parks, stadiums, arenas, food courts, fairgrounds, and similar premises shall not be required to provide toilet facilities for employee use within each food facility if approved toilet facilities are located "within 200 feet" in travel distance.

Also, per California Plumbing Code, CPC 413.6, food facilities with an occupant load of one hundred (100) or more shall provide separate toilet facilities for employees only. The number of restrooms and fixtures shall be determined by your local Building Official.

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PLAN APPROVAL PROCEDURE FOR CONSTRUCTION OR REMODELING OF A FOOD ESTABLISHMENT

1. Allow at least 20 *working* days for Environmental Health to complete the plan review.

2. This application packet contains detailed information on what is to be included in the plans. Read it carefully! The plans are to show exactly how the food facility will be constructed. If all the information required is not included, the plans will be rejected.

3. Complete all sections of the enclosed Application and the Plan Submittal Checklist. Keep the Plan Check Guide and the Inspection Checklist! Your contractor needs to review the approval letter and the Guide prior to construction. The Inspection Checklist will help the contractor prepare for inspections.

4. Initially, submit one (1) set of plans. Plans shall be submitted to a scale of 1/4 inch to one foot. You will be notified when the plans are approved or rejected, within twenty working days. Provide three (3) sets of corrected, amended plans for final review once you have received your written notification. Two sets will be returned to you and one set will be kept on file. Submit your two approved sets directly to the Chief Building Official for review and approval. Approved plans and the Building Permit Card must be on the jobsite at all times!

5. Complete the Plan Check List enclosed in this packet and submit with the application. On the lines in the left column, identify the page numbers of the plan sheets or write "N/A" for the items not shown on the plans.

6. At the time of submittal, pay the required fee for the plan review and construction inspections. See the cover page for current fee schedule. The fee shall be made payable to County of Marin. Plans will not be accepted without payment of fees. Time spent for excessive plan review or construction inspections will be billed at the current hourly rate.

7. Check with the appropriate local jurisdiction for other requirements (i.e., Business License, Building, Alcohol and Beverage Control, Planning and Zoning Administration., etc.)

8. If any changes occur after plans have been stamped and approved, you must resubmit your revisions and pay an additional fee for review time, and fill out a new Application.

9. Before you can open for business, a Final Inspection report must be issued by Environmental Health Services. The Permit to Operate will be mailed after the Permit Application is completed and the fee is paid. The fee is determined by our office fee schedule which is approved by the Board of Supervisors. This fee and the Permit to Operate are non-transferable and non-refundable. This is an entirely different fee from the plan review fee. Additionally, by state law, a separate penalty fee shall be charged, up to three (3) times the current permit fee, if a food facility operates without a valid health permit.

10. Do not order any food until a preliminary and final construction inspections are performed and after you receive written permission. You will be ordered to destroy any contaminated food, and cited.

11. Call (415) 473-6907 if you have any questions.

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PLAN SUBMISSION CHECKLIST

Complete this form as you prepare the plans, the application and any additional information for submission. On the lines in the left column, *identify the page numbers of the plan sheets* where the appropriate issues are addressed on the plans or write "N/A" if items are not shown on the plans. **If any of the information below is incomplete, the plans will not be accepted for review.**

_____ Submit one (1) set of plans. Plans shall be submitted to a minimum scale of 1/4 inch to one foot.

_____ Attach your food and drink menu.

_____ Include manufacturer specification sheets for all equipment (existing AND new equipment). Cross-key these specs with the equipment list on plans.

_____ Include a letter from the Sanitary District which details the size of the grease trap/interceptor or an exemption letter from this requirement. Plans will not be accepted without this letter.

OR

_____ Approval from Environmental Health Land Use for the required grease trap/interceptor if you are on a sewage disposal system.

_____ Submit the Hood Exhaust Data Sheet *(Attachment VI of the EHS Plan Check Guide)*. The Hood Exhaust Data Sheet must be completed by a Mechanical Engineer or Mechanical Contractor.

_____ Submit Cooking Equipment Exhaust Ventilation Exemption Application- This application must be completed for any cooking or warming equipment that will not be placed under a complete hood exhaust ventilation system.

Page # _____ A detailed site plan. This plan must show the cross streets and the layout of the center. This plan shall also show the proposed exterior rubbish and food waste storage receptacle, including hose bibs and approved drainage. Include the north arrow.

Page # _____ Floor plan of the entire food facility, i.e., food preparation, serving and seating areas, restrooms, office, employee change room, janitorial area, storage, garbage, and trash areas. Include all interior and exterior doors. Include the total square footage of the facility and the seating capacity.

Page # _____ Complete the equipment layout to include:

- elevations and dimensions of the equipment
- clearly numbered equipment list that is cross-keyed with the equipment layout
- manufacturer make and model numbers must be included on the equipment list
- The equipment list and the equipment layout shall be on the same page for reference.

Page # _____ Complete plumbing layout showing sewer lines, cleanouts, floor drains, floor sinks, vents, grease trap or grease interceptor, hot and cold water lines, and direction of flow to sanitary sewer.

Page # _____ Complete electrical layout including the location of transformers, electrical and phone panels.

Page # _____ Complete exhaust ventilation layout including location of hood and make up air returns and ducts. Submit manufacturer specification sheets for filters, exhaust fan and make up air fan.

Page # _____ Lighting plan, indicating the exact footcandles for each area, per CalCode.

Page # _____ Reflected ceiling plan indicating the location of required exhaust and supply air vents. Show exact CFM for each exhaust and supply air vent. Indicate the type of required comfort cooling in the facility, i.e., refrigerated air conditioning or evaporative cooling. Include a drawing legend for each room.

Page # _____ Room finish schedule showing floor, base cove, wall and ceilings for each area shown on the plans. Label the exact material on the schedule and cross-key with each material sample provided. Material samples must be provided for initial review on a material sample board. (See Flooring and Wall and Ceiling Handouts for required finishes.) **Keep the size of the material sample board to no larger than 11" x 17".**

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INSPECTION CHECKLIST

1. PRELIMINARY CONSTRUCTION INSPECTION

When construction is approximately 75% to 80% complete, with plumbing, rough ventilation, and finishes installed, and prior to equipment installation, you must contact the Plan Check Specialist to schedule a preliminary construction inspection. Requests should be made at least five (5) working days in advance. A preliminary inspection should be scheduled for no less than two weeks prior to the proposed opening of the food establishment. The preliminary inspection is an important, first look at the facility and how the construction is progressing. If any changes are required, this is the best time to make corrections to avoid delays in the opening of your food facility. Ensure that your contractor is made aware of the requirements for Marin County when calling for inspections.

If you have not called for a preliminary inspection and are calling for a final inspection, your "first" inspection will still be considered a "first, preliminary" inspection. Construction projects require more than one inspection.

It is highly recommended that, for most projects, more than one preliminary inspection is performed.

2. PLAN REVISIONS OR "AS BUILT" WORK

If the construction does not reflect the last approved set of plans by this Department, you will be required to "stop" all ongoing work and resubmit your revised drawings. A new application and plan check fee will be required, as well as lost time incurred at your facility. All projects must be built to best construction standards, and that includes approved plans from all agencies. "As Built" drawings will not be accepted in lieu of providing revised plans once the non-approved construction has been identified. To avoid "any" delays in your own process, you must ensure that all agencies are working from the same set of plans at all times. It is your responsibility to submit all revisions and equipment changes through your process.

3. FINAL CONSTRUCTION INSPECTION

Upon completion of all of the construction, including all finishing work and corrections provided to you during preliminary inspections, you must contact the Plan Check Specialist to arrange for a final construction inspection. You will not be approved to operate or issued a Permit to Operate until the facility passes a final inspection. In no case should a final inspection be requested less than five (5) working days prior to the proposed opening of the establishment. The hood and make up air performance test must be submitted for review prior to calling for a final inspection. Final construction must be approved by this Department (EHS) prior to opening for business or use of remodeled areas.

The Building "Job Card" must be kept on site for final signature at the time of the final inspection. Your occupancy from the Building Department will not be granted until all signatures have been secured on your Job Card. Plans must be on site at all times.

GENERAL CONSTRUCTION AND EQUIPMENT REQUIREMENTS

The plans must show and specify in detail the following:

1. FLOORS:

NOTE: Lists of accepted floor, wall, and ceiling materials are available at the Marin County Department of Environmental Health office.

a. Floors in food establishments (except for dining and sales areas) shall be durable, smooth, impervious to water, grease, and acid, and of easily cleanable construction, e.g., quarry or ceramic tile, industrial/commercial grade sheet vinyl (vinyl tiles are not acceptable). Floor surfaces in all areas where food is prepared, packaged, dispensed or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and handwashing areas and in employee change and storage areas, shall be an approved type that continues up the wall partitions, toe-kicks, or stationary cabinetry at least four (4) inches, forming a 3/8 inch minimum radius cove as an integral unit. (Sealed concrete floor, wood or vinyl base cove are not approved. Black, dark blue, or chocolate brown color tiles or sheet vinyl are not approved.)

b. Waitress stations, bussing stations, food and beverage serving areas shall have a continuous, integral coved floor throughout the area and extend a minimum of thirty-six (36) inches beyond the equipment in all directions.

c. Floor drains are required in floors that are water-flushed for cleaning, and/or where pressure spray methods for cleaning equipment are used. Where floor drains are utilized, the floor surface shall be sloped 1:50 (1/4 inch per foot) to the floor drains.

d. Flooring under equipment and on the coved bases shall be completely smooth. Floor surfaces which contain non-skid agents shall be restricted to traffic areas only.

e. High pressure cleaning systems are required in addition to floor drains if the degree of roughness of the non-skid agent is deemed excessive upon evaluation by this Department.

2. WALLS:

a. The walls and ceilings of all rooms shall be of a durable, smooth, nonabsorbent, and easily cleanable surface. (Note: Brick, concrete block, rough concrete, rough plaster, grooved paneling, wall paper or vinyl wall covering are not acceptable.)

b. Waitress stations, bussing stations, food and beverage serving areas shall have smooth, easily cleanable walls throughout the area.

c. Wall surface materials are subject to evaluation and require submission of samples.

d. All wall surfaces shall be covered with a gloss or semi gloss enamel, epoxy, FRP, ceramic tile or other approved materials.

e. All walls behind sinks and warewashers must be protected with at least an eight (8) foot high water resistant material measured from the top of the cove base up to eight feet. (i.e., FRP, stainless steel, ceramic tile or other approved material).

f. Counter cabinets and cabinetry shall be light colored and finished inside and outside) and constructed of durable, non-absorbent material which is smooth and easily cleanable (i.e., formica, laminate, etc.) FRP, sealed or stained pressed board or wood are not approved.

g. Walls adjacent to floor mounted mop sinks shall be covered with a durable waterproof material (i.e., FRP, ceramic tile, etc.) extending from the top of the sink to eight (8) feet high above the floor.

h. Provide a durable, cleanable, smooth, noncorrodible and nonflammable material (i.e., stainless steel, ceramic tile, etc.) behind the cookline and any side walls adjacent or in close proximity to cooking equipment. This includes large baking ovens, steamers, etc. that are normally under a Type II hood also.

3. CEILINGS:

a. Ceilings in all areas (except dining and sales) shall be durable, smooth and nonabsorbent, and easily cleanable. (Blown acoustical type ceiling, perforations, grate type, and parabolic lens covers or rough surfaces are not acceptable).

b. Ceiling panels may be acceptable if they comply with the preceding requirements and if approved by this Department (DEH).

NOTE: Waitress and bussing stations, salad bars, food serving or self-service beverage areas and open food or drink counters, or other similar stations located immediately adjacent to or in dining areas, must comply with floor, wall and ceiling requirements.

4. CONDUIT:

a. All plumbing, electrical, and gas lines, soda runs, shall be concealed within the building structure to as great an extent as possible or encased in an approved sealed container. Where this is not possible, all runs shall be at least 1/2 inch away from the walls or ceiling and six (6) inches minimum off the floor surfaces.

b. Where conduit or pipe lines enter a wall, ceiling or floor, the opening around the line shall be tightly sealed.

c. Conduit or pipe lines shall not be installed across any aisle, traffic area or door opening.

5. EXHAUST HOODS AND DUCTS:

a. Mechanical exhaust ventilation shall be required at or above all commercial deep fat fryers, broilers, fry gills, panini grills, tandoor ovens, gyros units, rethermalizers, steam jacketed kettles, ranges, ovens, griddles, barbecues, rotisseries, high temperature warewashing machines, baking or convection ovens, conveyor ovens, panini grills, steamers or similar equipment to effectively remove grease, smoke, steam, vapors, heat or odors.

A Type I Hood is a kitchen hood for collecting and removing grease and smoke. They shall be equipped with approved grease filters or grease extractors designed for that specific purpose.

A Type II Hood is a general kitchen hood for collecting and removing steam, vapors, heat or odors.

b. All hoods, ducts, and exhaust outlets shall be installed in accordance with the current edition of the Uniform Mechanical Code as adopted by the local building department. (Galvanized metal is not an accepted material).

Include the UL listing card, number and manufacturer if the exhaust hood system is UL approved.

c. Detailed Requirements: Provide an illustration sheet showing hood exhaust data. (see Attachment III), including front and side elevations of the exhaust hood and duct details to the roof fans (both exhaust and make up air). In addition, a Hood Exhaust Data sheet must be completed by a Mechanical Engineer or Mechanical Contractor at the time of plan submittal.

d. All joints and seams shall be sealed, welded or soldered for ease of cleaning.

e. Canopy-Type Hoods: Canopy-type hoods shall not be more than seven (7) feet above the floor and shall not be more than 4 feet above the cooking surface. The hood shall overhang or extend a horizontal distance not less than six (6) inches beyond the outer edges of the cooking equipment to the inner lip of the hood on all open sides. It shall have grease troughs or drip pans that are easily cleanable.

Canopy-Type Hoods shall be flashed with metal to the ceiling and adjacent walls.

f. Walls at exhaust hood installations shall be paneled with stainless steel or ceramic tile from the top of the cove base to the underside of the exhaust hood.

g. Non-canopy-Type (High Velocity) Hoods: Non-canopy-type hoods will be approved providing they are constructed to be easily cleanable and they comply with the minimum exhaust air velocity

requirements. Shielding at the ends of the hood may be necessary to prevent interference from cross drafts. The volume or air exhausting through a non-canopy hood shall not be less than 300 cubic feet per minute.

h. Make-Up Air: Make-up air supply shall be provided at least equal to that amount which is mechanically exhausted and inter-connected by a single control switch. Windows and doors shall not be used for the purpose of providing make-up air.

i. Food heating or warming devices, cheese melters, etc., that are installed above other equipment beneath an exhaust hood may create an air flow obstruction to proper ventilation of the basic equipment for which the hood ventilation system is designed. The design, construction and installation of such warming devices under a hood are subject to evaluation and approval by this Department prior to installation.

j. Fire Extinguishing Systems: Fire extinguishing systems may be required by local fire department codes. They shall be installed so as to allow easy cleanability of the hood and duct systems.

k. The use of hood exempt equipment is no longer approved or recognized by Marin County.

l. The Hood Exhaust Performance Test must be completed and submitted to EHS upon installation of the hood system.

6. REFRIGERATION:

a. All refrigeration units shall be adequate in capacity to meet the needs of the proposed operation and shall comply with the following requirements:

1. Be specifically constructed for commercial use, NSF 7 rated. Domestic refrigeration or freezer units will not be accepted.

2. Be provided with an accurate, readily visible thermometer.

3. Have shelving that is nonabsorbent and easily cleanable, NSF approved. (Wood is not acceptable.)

4. Open into an approved food handling area of the building. Storage of refrigeration units outside of the food preparation area is not approved.

5. Be specifically designed to maintain internal food temperatures, not refrigeration temperature, at or below 41 degrees F.

5. Have smooth, nonabsorbent and easily cleanable surfaces. All joints must be sealed.

6. Condensate waste from reach-in refrigeration units must be drained into a floor sink via legal air gap. The use of a pump or an evaporator pan is not approved.

b. Walk-in Refrigeration Units shall also:

1. Have an integrally coved base with a radius of at least 3/8 inch at the floor/wall juncture, both inside and outside the unit. The floor material shall extend up to a height of at least four (4) inches on the walls. A four (4) inch approved metal base cove with a minimum 3/8 inch radius is acceptable against metal wall surfaces of walk-in refrigeration units. (Wood is not an acceptable interior finish.)

2. Have NSF shelving that is at least six (6) inches off the floor with smooth, round, metal legs, or cantilevered from the wall, for ease of cleaning. Small, easily movable, castered dollies may be used in place of a lower shelf inside a walk-in refrigeration unit. (Wooden shelves, rough surfaces, wood pallets, metal shelving that is not rust-proof is not approved.)

3. Have condensate waste drained into a floor sink via legal air gap. Floor sinks, floor drains or trench drains are not permitted inside the walk-in refrigeration units. The use of an evapotranspiration pan or waste pump device is not approved.

4. Walk-ins shall be flashed tightly to ceiling and wall surfaces.

5. Walk-ins are to be installed with remote compressors or an exhaust fan in the motor space will be required to remove heat.

6. Walk-in refrigeration units shall open into the food facility.

7. ICE MACHINES:

All ice machines shall be located inside the food establishment in a well ventilated area with approved finishes, and shall be drained to a floor sink via legal air gap. The waste lines shall be plumbed separately. The use of a waste pump is not approved. The installation of a roof mounted compressor is highly recommended.

8. FLOOR SINKS:

a. All condensate and similar liquid waste shall be drained by means of indirect waste pipes into a floor sink via legal air gap, 1" minimum above the rim of the floor sink.

b. Floor sinks shall be installed flush with the finished floor surface, and have easily removable safety grates when not protected by overhead equipment.

c. Horizontal runs of drain lines shall be offset at least 1/2 inch from the wall with easily cleanable brackets and shall be six (6) inches off the floor and shall terminate at least one (1) inch above the overflow rim of the floor sink.

d. Floor sinks shall be located so that they are readily accessible for inspection, cleaning and repair. A cut out shall be required around the back side of half-exposed floor sinks to prevent any wastewater backflow under the equipment e.g., storage cabinets, display refrigerators, etc. The approved base cove shall be installed up the toe kick of the cut out for a clean installation.

e. The floor sink must be located within 15 feet of the drain opening of the equipment served to provide the required slope for drainage.

f. Waste lines may not cross any aisle, traffic area or door opening.

9. THREE-COMPARTMENT SINKS:

a. Provide a three-compartment, stainless steel sink with dual integral stainless steel drainboards, NSF approved. The three-compartment sink must drain direct to the sanitary sewer with a floor drain installed across and upstream from the sink fixture (CPC Section 704.3)

b. The minimum compartment size shall be at least 18" x 18" x 12" deep with a minimum of 18" x 18" drainboards. <u>However, the sink must otherwise be capable of accommodating the largest utensil to be washed and the drainboards shall be as large as the largest sink compartment.</u>

c. When a sink is installed next to a wall, a metal "backsplash" extending up the wall at least eight (8) inches shall be formed as an integral part of the sink, and sealed to the wall.

d. Sink installations must not have exposed screws or bolts.

e. Provide a water-proof seal between sink backsplash and wall, using approved sealers. (FDA approved food-grade silicone)

f. An additional, three-compartment sink must be installed within each separate section of a large food establishment which handles unpackaged foods, i.e., deli, meat, bakery, sushi bars, oyster bars, liquor bars, etc.

g. A three-compartment sink is not required if the facility is 100% pre-packaged, i.e.: No food or drink preparation or serving; no coffee service; no beverage vending machines; no ice packing; no unpackaged snacks, candy, beef jerky; no beer taps; no beverage dispensing, etc. (See 100% Pre-Packaged Guidelines)

h. Provide sanitizing testing equipment and materials to adequately measure the applicable chemical sanitizer used at three compartment sinks for sanitizing utensils.

10. FOOD/VEGETABLE PREPARATION SINKS:

a. Food facilities conducting food preparation such as thawing, washing, etc., shall have at least a one compartment food preparation sink that drains indirect to a floor sink.

b. The minimum compartment size shall be 18" x 18" x 12" deep with <u>at least</u> one integral drainboard, minimum of 18" x 18".

c. A handwash sink must be installed in each food preparation area.

d. An additional service sink is required in all espresso preparation areas.

11. BAR SINKS:

a. Bar sinks shall have a minimum compartment size of 10" x 14" x 10" deep (or a minimum of 140 square inches in surface size), with dual integral drain boards, a minimum of 18" long. Bar sinks shall have a quick drain or a 4th sink compartment for disposal of drink/ice waste. Bar sinks shall drain indirect to a floor sink.

b. When a sink is installed next to a wall, a metal "backsplash" extending up the wall at least eight (8) inches shall be formed as an integral part of the sink and sealed to the wall.

c. Provide sanitizing testing equipment and materials to adequately measure the applicable chemical sanitizer at bar sinks for sanitizing multi-use utensils or glasses.

12. AUTOMATIC WAREWASHERS:

<u>NOTE:</u> A minimum of a (3) three-compartment stainless steel kitchen sink with dual integral drainboards is required in addition to any warewashing machine proposed. The minimum compartment size shall be 18" x 18" x 12" with a minimum of 18" x 18" drainboards.

a. All automatic warewashers must be listed by the National Sanitation Foundation (NSF) Standard No. 3, and must drain to a floor sink or other approved method via legal air gap.

b. All spray type warewashers which are designed for a hot water bactericidal rinse shall be provided with a booster heater that meets the requirements of Standard No. 5 of the National Sanitation Foundation, (NSF) or be connected to an approved recirculating water system which is capable of

maintaining the rinse water at not less than 160 F. High temperature units require an approved Type II exhaust hood.

c. The warewasher must also be provided with thermometers and pressure gauges to indicate the proper water flow pressures, and temperatures.

d. If a warewasher in a bar is proposed, it must have stainless steel drainboards at least 18" long and the drainboards shall be sloped and drained to an approved waste receptor. A minimum of a three compartment sink with dual integral drainboards is required in addition to any warewashing machine

e. All spray type warewashing machines which are designed for a chemical bactericidal rinse shall be capable of maintaining the rinse water at a temperature in accordance with its NSF listing. (NSF Standard No. 3 and as designated on the data plate placard).

f. Provide sanitizing testing equipment and materials to adequately measure applicable chemical sanitizer at all warewashing machines (kitchen and bar).

13. GARBAGE DISPOSALS:

Garbage disposals, if proposed, must be installed in drainboards and the drainboard must be lengthened to accommodate the disposal unit in addition to the minimum 18" required drainboard size. Garbage disposals shall not be placed in or under any sink compartment.

14. JANITORIAL SINK AND SUPPLIES:

a. A janitorial sink shall be located in a separate room or area as not to contaminate any food preparation, food storage, warewashing areas, utensils or equipment. The janitorial area shall be equipped with a mop and broom rack and a shelf or cabinet for the storage of cleaning equipment and supplies. After use, mops shall be placed in a position that allows them to air-dry without soiling walls, equipment or supplies.

b. A one compartment, floor or wall-mounted janitorial sink or a curbed area properly sloped to a drain, that is provided with hot and cold running water through a mixing faucet, with an approved backflow prevention device, shall be installed for general cleanup activities. All curbed area surfaces shall be of smooth, impervious, and easily cleanable construction. Where floor mats are used in the food establishment, a curbed area with a drain is required for cleaning.

c. Exhaust and make-up ventilation shall be provided in the janitorial room.

15. HANDWASHING SINKS:

a. Handwashing sinks shall be provided in each food preparation area and in each warewashing area. Hand sinks shall be sufficient in number and conveniently located so as to be easily accessible at all times for use.

b. Handwashing sinks shall be equipped to provide warm water (100 degrees F.) under pressure for a minimum of 15 seconds through a mixing valve or combination faucet.

c. Soap and sanitary towels or hot air blowers shall be provided in single-service, permanently installed dispensers at the hand sinks.

d. Provide 12" high metal splash guards to separate hand sinks from other equipment.

e. A separate, approved handsink must be installed within each section of a food establishment which handles unpackaged food (i.e., deli, meat, bakery, sushi bars, oyster bars, liquor bars, service areas, waitress stations, etc.).

16. GENERAL PURPOSE WATER:

a. An adequate, protected, pressurized, potable supply of water at least 120 degrees F. and cold water shall be provided. The water supply shall be from a water system approved by the Health Officer or the State Health Department.

b. For hot water, provide a storage tank type water heater which is capable of constantly supplying water at a temperature of at least 120 F to all sinks, hand lavatories and other cleanup facilities. In sizing the water heater, the peak hourly demands for all sinks, etc., are added together to determine the minimum required recovery rate. On demand electric units are not approved.

b. Install the hot water heater on four (4) inch high integral coved platform or curb; or on at least six (6) inch high round metal legs; or cantilevered from the wall with a minimum six (6) inches of clear space below.

b. All sinks shall be provided with hot and cold running water from a mixing faucet.

17. DIPPER WELL:

A running water dipper well must be provided if scoops or other reusable serving utensils are used for dipping ice cream, butter, etc. The dipper well shall be drained indirect to a floor sink. The ice cream dipper well must be attached to the ice cream cabinet or in very close proximity to the cabinet.

18. WINDOW SCREENS:

a. All openable windows, such as restroom windows, shall be screened with not less than 16 mesh screening.

b. If open air dining is proposed (via open exterior doors and/or windows), all food preparation areas, food storage areas and utensil washing areas must be completely enclosed.

19. SERVICE OF UNPACKAGED FOODS/UTENSILS DIRECTLY TO OR BY THE CUSTOMER:

Displays of unpackaged foods or utensils shall be shielded so as to intercept a direct line between the customer's mouth and the food or utensils being displayed, or shall be dispensed from approved self-service containers.

a. Cafeteria, buffet and salad bar self-service; exhibition areas, food preparation equipment and food preparation areas etc., shall be protected by approved sneeze guards. (See Sneeze Guard Guidelines) The height of the guard shall be at least 4 ½ to 5 feet from the finished floor, including the counter or wall area.

b. Cleaned and sanitized glasses and stemware that are displayed or stored in bar areas over customer service counters shall be protected by approved sneeze guards.

c. Approved self-service containers shall have close-fitting individual covers and, if opened by the customer, shall be self-closing.

d. Disposable beverage cups, straws or utensils on display for public self-service must be stored for use in sanitary dispensers.

20. BACKUP DRY FOOD AND BEVERAGE STORAGE:

a. Adequate and suitable floor space shall be provided for the storage of food, beverages, and related products. In addition to working storage and refrigeration storage, back up storage must be provided. Working storage is considered to be cabinets over and under food handling equipment; wall mounted shelves which are located in and used in conjunction with food preparation areas; racks used to store utensils; bun racks; bag in the box (syrup) units; and walk-in cooler and freezer racks. Do not include working storage in the calculations for back up food storage.

1. The floor space required for backup dry food storage shall be a space equal to 25% of the total food preparation areas.

2. At least ninety-six linear feet (96) of eighteen (18) inch deep shelving is required. Additional shelving may be required for larger food facilities with bar areas. Facilities with an extensive menu or less frequent ordering schedules may also require additional shelving.

3. Shelving units shall be a minimum of 18 inches in depth and at least three tiers high, NSF approved.

b. Shelving shall be constructed in an easily cleanable design of smooth metal or plastic. All shelves located below a counter or work surface shall be set back at least two (2) inches from the drip line of the surface above.

All storage shelving and counters must have smooth and easily cleanable surfaces (with no gaps). Shelves shall be a minimum of one 1" away from the wall or sealed to the wall. Bottom shelves must be at least 6 inches above the floor with a clear unobstructed area below or be the upper surface of a completely sealed continuously coved 4" high curb. Any legs used for support shall be smooth round metal equipment legs. (Wood shelving is not acceptable.)

c. Electrical panels, compressors, transformers, large fire prevention system components or similar wall-mounted equipment shall not be installed in food storage rooms unless adequate approved provision is made to compensate for the space required for the installation.

d. Each department in a grocery store which handles unpackaged food, (i.e. deli, meat, produce, bakery, etc.), must provide its own backup dry food storage space within each area.

e. When a bar is located within a food establishment, the backup storage requirement for the bar must be provided in addition to the required backup dry food storage.

f. Back up storage rooms shall open into the food facility.

g. Liquor storage rooms must also have approved floors, walls and ceilings.

21. RESTROOMS:

a. A permanent food facility shall provide clean toilet facilities in good repair for use by employees.

b. The requirements on the number of toilet facilities and handicapped/ADA requirements shall be in accordance with local Building and Plumbing ordinances.

c. The floors, walls and ceilings shall have surfaces that are durable, smooth, nonabsorbent, and easily cleanable.

c. Handwashing sinks shall be provided within the toilet rooms. The handwashing sinks shall be provided with hot and cold running water from a mixing valve faucet. Soap and sanitary towels in single-service, permanently installed dispensers, or hot air blowers shall be provided at the handwashing sinks.

e. Toilet tissue shall be provided in a permanently installed dispenser at each toilet.

f. Toilet facilities shall be in a location where patrons, guests and invitees do not pass through food preparation, food storage, or utensil washing areas.

g. The restrooms shall be provided with tight-fitting, self-closing doors.

h. Toilet rooms shall be vented to the outside air by means of an operable screened window, an air shaft or a light switch activated exhaust fan.

i. A food facility with more than 20,000 square feet of floor space shall provide at least one separate toilet facility for men and women.

22. CLOTHING CHANGE ROOMS/AREAS:

a. Areas designated for employees to eat and drink shall be located so that food, equipment, linens, and single-use articles are protected from contamination

b. Lockers or other suitable facilities shall be located in a designated room or area where contamination of food, equipment, utensils, linens, and single-use articles cannot occur.

c. Lockers or other suitable facilities shall be provided and used for the orderly storage of employee clothing and other possessions. Dressing rooms or dressing areas shall be provided and used by employees if the employees regularly change their clothes in the facility.

d.. Clothing change rooms/areas shall not be used as an office or other food establishment activities.

23. OFFICE SPACE:

A minimum of 4 linear feet may be set aside for an office area. It shall not be part of the back up food storage space.

24. PASS-THROUGH WINDOWS:

a. When food is passed through a window to a customer on the outside of the building, the size of the window opening may not exceed 432 square inches.

b. Food service pass-through window openings exceeding 216 square inches shall be equipped with an air curtain mounted on the outside of the facility. The air curtain will produce an air flow eight inches thick at the discharge opening and with an air velocity of not less than 600 FPM (feet per minute) across the entire opening at a point three feet below the air curtain. The air curtain shall turn on automatically when the window is opened.

c. Food service pass-through window openings shall be equipped with a vertical self-closing screen or window.

d. Pass through windows shall only be opened when employees are distributing food/beverages to customers. An air curtain device is not a substitute device to allow the window to remain open.

e. The minimum distance between the openings may not be less than 18 inches.

f. The counter surface of the pass-through window must be smooth, free of channels and crevices, and be easily cleanable.

25. DELIVERY DOORS:

a. All delivery doors leading to the outside shall open outward, be self-closing, and shall be provided with an overhead air curtain. The air curtain, when installed inside the building, must produce a downward outward air flow not less than three inches thick at the nozzle with an air velocity of not less than 1600 FPM (feet per minute) across the entire opening at a point three feet above the floor. When installed outside the building, the same velocity of air must be directed straight down over the entire door opening. The air curtain shall turn on automatically when the door is opened .

b. Customer entrance doors used for deliveries shall be protected by an overhead air curtain generating an eight (8) inch thick (at nozzle) air flow with a velocity not less than 600 FPM across entire doorway, measured 3 feet above the ground.

c. Air curtains shall be hard-wired and microswitch activated. (On/off or high/low toggle switches are not approved.)

d. Large cargo-type doors shall not open directly into a food preparation area. Cargo-type doors that open into any food warehouse or food facility may only be open during deliveries. A high velocity air curtain is required in cargo door applications.

e. An air curtain is not a substitute device to permit a door to remain open.

f. Installation heights shall be in accordance with manufacturer's specifications.

26. CUSTOMER ENTRANCE DOORS:

All entrance doors leading to the outside shall be tight fitting, open outward and be self-closing with no gaps exceeding 1/16 inch in width to effectively prevent the entrance of flies and rodents.

27. GARBAGE AND TRASH AREA:

a. An area shall be provided for the storage and cleaning of garbage and trash containers.

b. The walls, floor and ceiling of this room or outside area shall be constructed so as to be smooth, impervious and easily cleanable. (Wooden slats, porous block or brick surfaces are not acceptable.) Floors and wall/ceilings shall be sealed and painted with an epoxy or acrylic based paint.

c. Inside trash storage areas shall properly slope to a floor drain that terminates in the sanitary sewer. Approved finishes are required. The

room or enclosure shall be well ventilated. A hose bib for cleaning, with a backflow prevention device, shall be provided.

d. Outside trash storage areas shall properly drain so as not to create a nuisance or terminate into storm drains.

e. Outside trash storage areas should be situated as far away from delivery doors as possible.

f. Trash compactors are not allowed within the food facility. An opening to the outside trash compactor may be installed in the rear delivery area. The opening must be air tight, and insect and rodent proofed. The opening must be paneled with FRP, extending 4 feet to each side and the top. The underside of the opening must be covered with FRP to the top of the cove base or floor.

28. LIGHTING:

a. At least 10-foot candles at a distance of 30 inches above the floor, in walk-in refrigeration units and dry food storage areas.

b. At least 20-foot candles for the following:

-At a surface where food is provided for consumer self-service or where fresh produce or prepackaged foods are sold or offered for consumption.

-Inside equipment such as reach-in and under-counter refrigerators.

-At a distance of 30 inches above the floor in areas used for handwashing, warewashing and equipment and utensil storage, and in toilet rooms.

c. At least 50-foot candles at a surface where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employee safety is a factor and in other areas and rooms during periods of cleaning.

d. Light fixtures in areas where food is prepared, open food is stored or displayed, or utensils are cleaned shall be of shatterproof construction or shall be protected with shatterproof shields. Parabolic lens covers or similar covers are <u>not</u> approved shields.

29. VENTILATION:

a. Provide adequate exhaust ventilation to remove gases, odors, steam, heat, grease, vapors or smoke from all rooms in the facility including: food preparation, warewashing, toilet, janitorial, storage, garbage and change rooms and similar rooms.

b. Adequate ventilation shall be provided to maintain the comfort level of employees and ensure reasonable shelf life of the food in storage.

30. EQUIPMENT:

a. All new and replacement equipment shall meet or be equivalent to applicable National Sanitation Foundation (NSF) standards. Equipment design, construction and installation are subject to approval by the enforcement officer.

b. All show and display cases, counters, shelves, tables, refrigeration equipment, shelving, warewashing machines, sinks and other equipment used in connection with the preparation, sale, service and display of food, shall be made of non-toxic, noncorrodible materials and so constructed, installed and maintained to be easily cleanable.

c. All floor mounted equipment shall be placed on casters which are NSF approved, NSF approved six (6) inch high legs or completely sealed in position on top of a curb at lest four (4) inches high. The approved floor and base cove shall continue up the toe kick of the curb.

31. BACKFLOW PROTECTION:

An approved backflow preventer shall be properly installed upstream of any potential hazard between the potable water system and a source of contamination, i.e., all threaded water outlets, janitorial sinks, sprayers, dishwashers, coffee makers, espresso machines, etc.

32. SEWAGE DISPOSAL/GREASE INTERCEPTORS:

NOTE Appropriate interceptor sizing information, in the form of a letter, shall be received by this Department prior to release of plans.

a. All liquid waste, including sewage, generated by a food establishment, shall be disposed of in an approved manner into either a public sewer system or to an approved on-site sewage disposal system.

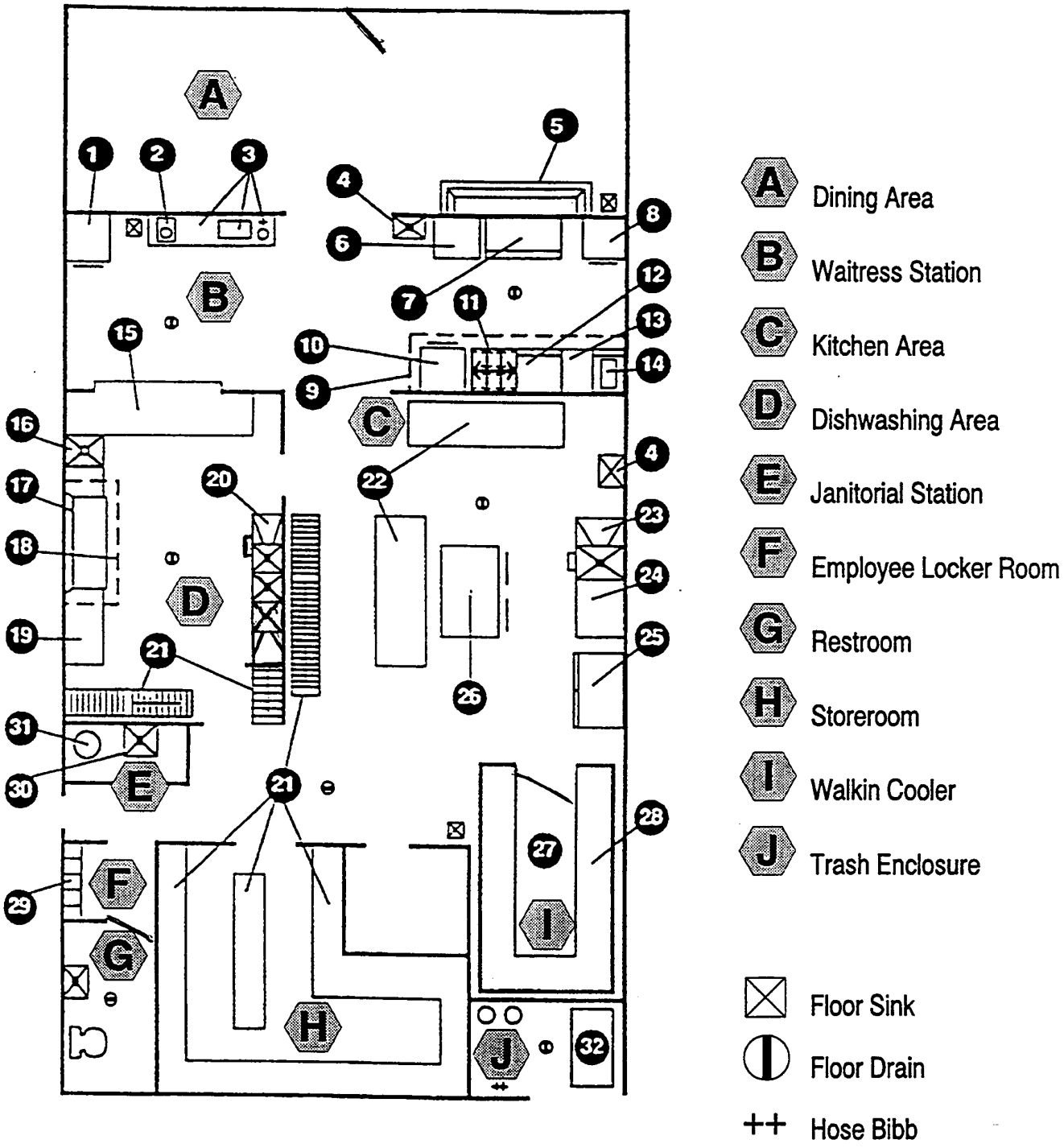
b. The sewer district is responsible for sizing the grease interceptor. A letter from the District shall be provided to this Department (DEH) which details the size of the grease interceptor required, or that the grease interceptor requirement is being waived. This letter must be received by this Department prior to releasing the approved plans.

c. On subsurface sewage disposal systems this Department (DEH) will determine the need and size of the grease interceptor letter must be received prior to releasing the approved plans.

Additional guidelines are available regarding the following:

A. Approved Flooring
B. Wall and Ceiling Handout
C. 100% Prepackaged Food Facilities

ATTACHMENT I



Each piece of equipment is numbered to correspond with the equipment checklist in ATTACHMENT II

ATTACHMENT II

EQUIPMENT CHECKLIST

PLAN NUMBER

DATE / /

PAGE OF

Item Number	ITEM	MANUFACTURER	MODEL NUMBER	NSF	SPECIALLY FABRICATED	GAS	ELECTRICAL	HOT WATER	COLD WATER	DIRECT WASTE	INDIRECT WASTE	COMMENTS
1	Ice Maker			●					●		●	FLOOR SINK
2	Coffee Maker			●					●			
3	Counter with water & Ice Bin				●				●		●	FLOOR SINK
4	Employee hand sink			●				●	●	●		
5	Salad Bar				●						●	SEE DETAIL SHEET
6	Work table s/s			●								
7	Refrigerated Prep. unit			●			●					SELF CONTAINED
8	Reach-in freezer	ALL MANUFACTURERS	AND MODEL	●			●					SELF CONTAINED
9	Exhaust hood (Type I)	NUMBERS MUST BE	LISTED	●	●							SEE MECH. DRAWINGS
10	Convection oven/stand			●		●						
11	Six (6) burner range/oven			●		●						
12	Grill			●		●						
13	Fryer dump station s/s			●	●							
14	Deep fat fryer			●			●					
15	Soiled dishtable s/s			●	●							
16	Scrap sink with pre-rinse & garbage disposal			●	●			●	●	●		
17	High temperature dishwasher			●			●	●	●		●	SEE HOOD DETAILS
18	Exhaust Hood (Type II)			●	●							
19	Clean dishtable s/s			●	●							
20	3-compartment utensil sink			●				●	●		●	FLOOR SINK & SPLASHGUARDS
21	Storage shelving			●								32 LINEAR FEET
22	Worktables s/s			●	●							
23	Food preparation sink			●	●			●	●		●	FLOOR SINK
24	Worktable s/s			●	●							
25	Reach-in freezer			●			●					

ATTACHMENT II

EQUIPMENT CHECKLIST

PLAN NUMBER

DATE / /

PAGE OF

Item Number	ITEM	MANUFACTURER	MODEL NUMBER	N S F	SPECIALLY FABRICATED	GAS	ELECTRICAL	HOT WATER	COLD WATER	DIRECT WASTE	INDIRECT WASTE	COMMENTS
26	Refrigerated prep. unit			●								
27	Walk-in Cooler					●						
28	Walk-in Cooler shelving s/s						●					
29	Employee lockers										●	SELF CONTAINED
30	Janitorial sink	ALL MANUFACTURERS	AND MODEL									FLOOR SINK
31	Water heater	NUMBERS MUST BE	LISTED						●	●		
32	Garbage dumpster								●		●	
33	Air curtain			●			●					

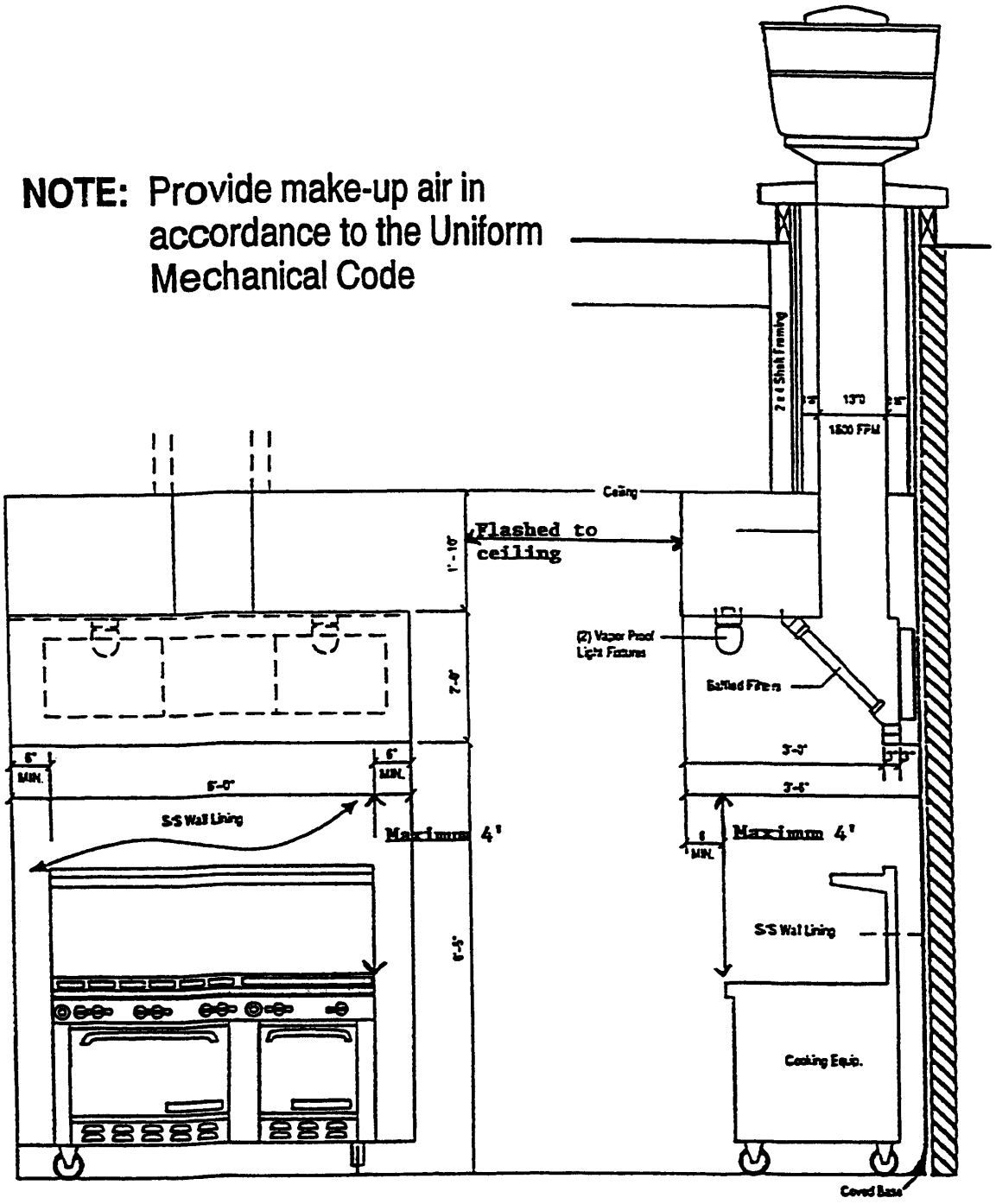
ATTACHMENT III

THIS IS AN EXAMPLE ONLY

ROOM FINISH SCHEDULE

ROOM or AREA	FLOOR	FLOOR BASE or COVE	WALLS	CEILING	REMARKS
A Dining area	Carpeting	Carpeting	Drywall with wall paper	Acoustical Ceiling panels	
B Waitress station	Ceramic Tile	Ceramic Tile, up the wall 4" with 3/8" radius cove	Light colored enamel paint	Washable, Non-absorbent lay-in ceiling panels	
C Kitchen area	Quarry Tile	Quarry Tile, up the wall 4" with 3/8" radius cove	Light colored gloss enamel painted drywall	Water-resistant drywall with white enamel paint	Traction flooring is limited to walkways
D Dishwashing area	Quarry Tile	Quarry Tile, up the wall 4" with 3/8" radius cove	F.R.P.	Water-resistant drywall with white enamel paint	
E Janitorial station	Quarry Tile	Quarry Tile, up the wall 4" with 3/8" radius cove	F.R.P.	Water-resistant drywall with white enamel paint	
F Employee locker room	Quarry Tile	Quarry Tile, up the wall 4" with 3/8" radius cove	Light colored enamel painted drywall	Water-resistant drywall with white enamel paint	
G Restroom	Ceramic Tile	Ceramic Tile, up the wall 4" with 3/8" radius cove	Water-resistant light colored, drywall, enamel painted with 4 ft. ceramic with wainscot	Water-resistant drywall with white enamel paint	
H Storeroom	Comercial grade sheet vinyl	Continuous with floor up the wall 4" with 3/8" radius	Drywall with gloss enamel	Water-resistant drywall with white enamel paint	
I Walkin cooler	Smooth concrete, sealed	Prefabricated stainless steel 3/8" radius cove	Prefabricated stainless steel	Prefabricated stainless steel	NOTE: CEMENT SEALERS FROM THE COUNTY'S APPROVED LIST
J Trash enclosure	Smooth concrete, sealed.	N/A	Smooth concrete, sealed	N/A	NOTE: CEMENT SEALERS FROM THE COUNTY'S APPROVED LIST

ATTACHMENT IV



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INSTRUCTIONS FOR COMPLETING
ATTACHMENTS
V AND VI

- Hood Performance Data Sheet (Attachment V) is to be completed by a Mechanical Engineer or Mechanical Contractor ONLY and submitted **AFTER THE HOOD IS INSTALLED**.

- Hood Exhaust Data Sheet (Attachment VI) is to be completed by a Mechanical Engineer or Mechanical Contractor only and **SUBMITTED WITH YOUR APPLICATION**. If the Hood Exhaust Data Sheet is not submitted your application will be considered incomplete and will not be processed.

- Do not make reference to any plan pages in lieu of filling in all of the required data directly on the Attachment V and VI.

- Keep a copy of the Hood Exhaust Data Sheet (Attachment VI) to provide to your Mechanical Engineer or Mechanical Contractor to prepare the Hood Performance Data Sheet (Attachment V)

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COUNTY OF MARIN
ENVIRONMENTAL HEALTH SERVICES
3501 CIVIC CENTER DRIVE, RM 236
SAN RAFAEL, CA 94903
415.473.6907/ (Fax) 415.473.4120
www.co.marin.ca.us/ehs

ATTACHMENT V

HOOD PERFORMANCE DATA SHEET

NOTE: This data sheet must be completed by a Mechanical Engineer or Mechanical Contractor ONLY.

DATE: _____

ESTABLISHMENT NAME: _____

JOB SITE ADDRESS _____

CITY: _____ ZIP: _____

MECHANICAL ENGINEER STATE LICENSE NO: _____

OR MECHANICAL CONTRACTOR: _____

PHONE: (____) _____

E-MAIL: _____ FAX: (____) _____

ADDRESS: _____

CITY: _____ ZIP: _____

PERFORMANCE TEST:

A written report of the hood and make up air performance test must be submitted before the final inspection. Only a mechanical engineer or a mechanical contractor may fill out the Performance Test form, no exceptions apply. The performance test must be submitted with the Hood Exhaust Data Sheet.

EXHAUST FLOW

Exhaust Flow (Design): _____ cfm

Exhaust Flow (Measured Total): _____ cfm

EXHAUST DUCT:

Duct Velocity (Design): _____ fpm

Duct Velocity (Calculated): _____ fpm

MUA: (**See Worksheet)**

Make-up Air Measured Total: _____ cfm

Exhaust Flow Measured Total: _____ cfm

% of Measured Exhaust Air: _____ %

SELF-COMPENSATING HOODS ONLY:

Actual Make-up Delivered Inside Hood _____ cfm

Actual Make-up Delivered to Room ONLY _____ cfm

WORKSHEET:

Exhaust Flow at Filters (Measured):

Filter 1	
Filter 2	
Filter 3	
Filter 4	
Filter 5	
Filter 6	
Filter 7	
Total=	

Total Filter Reading = _____ ÷ # of filters = _____ ave. filter velocity

Total filter area sq. ft. = _____ x _____ ave. filters velocity = _____ CFM exhaust flow total

Measured Velocity at MUA registers or HVAC:

#1	
#2	
#3	
#4	
Total=	

Total register reading = _____ # of ÷ filters = _____ ave. register velocity

Total register area sq. ft. = _____ x _____ ave. register velocity = _____ CFM MUA total

Make Up Air Total _____ ÷ Exhaust Flow Total _____ = _____ % of Measured Exhaust

Corrections, Recommendations, Comments:

COUNTY OF MARIN

Environmental Health Services
Community Development Agency
3501 Civic Center Drive, Room 236
San Rafael, CA 94903
415-473-6907

ATTACHMENT VI

HOOD EXHAUST DATA SHEET

NOTE: This data sheet must be completed by a Mechanical Engineer or Mechanical Contractor ONLY.

ESTABLISHMENT NAME: _____

JOB SITE ADDRESS _____ CITY: _____

MECHANICAL ENGINEER OR MECHANICAL CONTRACTOR: _____

PHONE: (____) _____ STATE LICENSE NO: _____

E-MAIL: _____ FAX: (____) _____

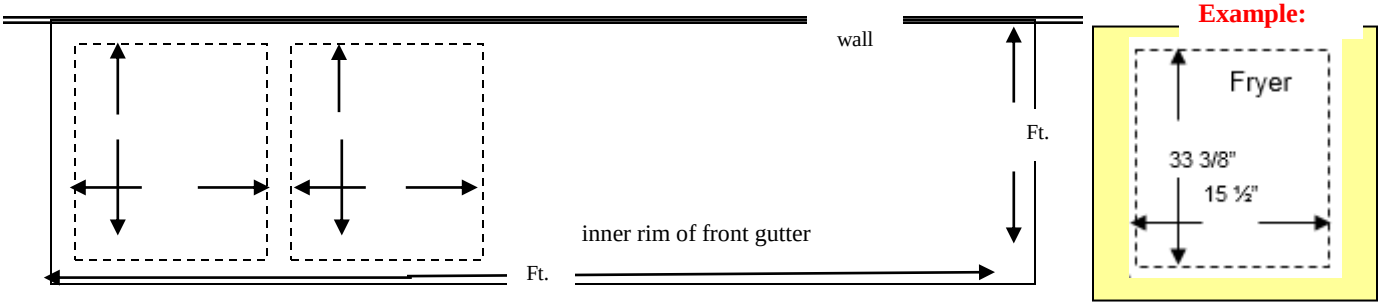
MAILING ADDRESS: _____

CITY: _____ ZIP: _____

COOKING EQUIPMENT & HOOD

Fill in cooking equipment, its dimensions & hood dimensions in feet in overhead view.

IMPORTANT: You need to verify dimensions with equipment specification.



Do not make reference to any plan pages in lieu of filling in all of the required data directly.

- Fill in cooking equipment & hood dimensions in overhead view.
- Casters & quick disconnects **strongly** recommended!

  Specified? yes__no__
- Hood long enough to allow ≥ 6" on sides of equipment? yes__no__
- Hood wide enough to allow ≥ 6" in front & back of equipment? yes__no__
- Canopy lip ≥ 6.5' above floor & ≤ 4' above cooking surface? yes__no__
- Canopy free of exposed horizontal electrical & ansul lines? yes__no__

HOOD (Check applicable categories)

- What kind of hood? Type I ____ Type II ____ Type of metal_____
- UL ____ UMC ____ Canopy____Compensating____Non-Canopy____Other _____
- **Manufacturer and model of UL listed hood:_____**
  (This submission MUST provide a copy of the UL Placard)
- Exhaust Hood size:_____ft. x _____ft = _____ total sq.ft.
- Exhaust Duct size: _____in. x _____in. ÷ 144 = _____ sq.ft.

Canopy Type Hoods NEW 2016 CMC
*CFM/Linear foot based off duty level of cooking equipment.
* CMC 508.10.1.1
see page 94-95

CFM

- Custom Hood (DMC)
  - Hood Length _____ x CFM/Linear ft._____= _____Total CFM

    Total CFM _____÷ Sq.ft. of duct _____= _____Total FPM
- UL Hood

  Hood Length _____ x CFM/Linear ft._____= _____Total CFM

  Total CFM _____ ÷ Sq.ft. of duct _____= _____Total FPM
- UMC Alternate Formula (100 PD)

  100 x hood perimeter _____ x D_____=_____Total CFM

  Total CFM _____ ÷ Sq.ft. of duct _____= _____Total FPM

FPM should ~1800; must =500-2500 (Type I)

FILTERS (Submit specification sheets for filters)

Manufacturer: _____Model: _____

Type: _____

Manufacturer's rating: _____ FPM to _____ FPM or, _____ CFM to _____CFM

Overall dimensions of filters: _____in. x ____in. (h x w)

_____in. x ____in. (h x w)

Functional area of filters*: ____in. x ____in ÷ 144 = _____ sq.ft.

____in. x ____in ÷ 144 = _____ sq.ft.

***Use manufacturer's specification if available, otherwise subtract frame borders from overall dimensions.**

Functional surface area per filter:

_____sq.ft. x number of filters: _____ = filter area: _____ sq.ft.

_____sq.ft. x number of filters: _____ = filter area: _____ sq.ft.

Total filter area: _____ sq.ft.

FILTERS (CONT'D)

Velocity at filters as designed:

CFM _____ ÷ total filter area _____ = _____ FPM

Spacers:

Number of spacers: _____ Size of spacers: _____ in. x _____in.

- Baffle filter ideal fpm = 300; should be 250-350. Is it? yes__no__
- Horizontal slot filter ideal fpm=1000; should be 800-1200. Is it? yes__no__
- Fpm can be < or > above if this is a "LISTED" hood. Is it? yes__no__
- Total of filter widths + spacers (____) must be (≤) hood length. Is it? yes__no__

STATIC PRESSURE & EXHAUST FAN (Submit specification sheets for fan)

- # of elbows = _____ Cleanout at each elbow? yes__no__
- Static Pressure ≈ _____ SP
- Exhaust Fan: Make_____

  Model #: _____ H.P. _____
- Fan is UL for grease (Type I)? yes__no__ Easily pulls CFM at SP? yes__no__

MAKE-UP AIR (Submit specifications for fan)

- _____CFM ÷ 2000 CFM = _____ Diffusers required (round up to next higher whole #)
  (Exhaust) (Max. per diffuser)
- Make-up air Static Pressure ≈ _____ SP
- Make-up air fan: Make:_____

  Model #: _____ H.P. _____
- Supplies 95-100% of exhaust CFM at SP? yes__no__
- Make-up air on roof ≥ 10 ft. from exhaust? yes__no__
- Diffusers on ceiling ≥ 10ft. from hood? yes__no__
- Exhaust & make-up air interlocked? yes__no__

  Distance between MUA diffusers and hood: _____ _____ _____ _____
  (5 ft. min. is recommended)

  Distance between MUA fan and exhaust fan: _____ (10 ft. min. is required)